

# PROJECT FILE

CN-2222E Project:

**GRADE, DRAIN & SURFACE US-69:  
FROM 12 MI. N OF BRYAN COUNTY  
LINE, EXTEND N APPROX. 2.5 MI.  
THROUGH TUSHKA**

**ATOKA COUNTY  
J/P# 30410(04)**

Prepared For:



**OKLAHOMA  
Transportation**

**OKLAHOMA DEPARTMENT OF TRANSPORTATION**

**Environmental Programs Division  
Oklahoma City, OK**

Prepared By:



**CC Environmental, LLC  
PO Box 1292  
Norman, OK 73070**



Environmental Programs Division

Office 405 521-3050

**DATE:** March 6, 2023

**TO:** Environmental Files and Distribution Below

**FROM:** Kathy Koon, Environmental Programs Division *KK* 3/8/2023

**SUBJECT:** Environmental Review for State Aid Project No. J3-0410(004), J/P No. 30410(04), Grade, Drain & Surface US-69: From 12 miles north of Bryan County line, extend north approximately 2.5 miles through Tushka, Atoka County, Oklahoma

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The referenced project does not currently have any federal funds and hence does not require any National Environmental Policy Act (NEPA) approvals. However, an environmental review has been conducted for the project. If there are any Federal funds to be used, additional coordination with the Environmental Program Division is required for completion of the NEPA Process.

Please note the following for the referenced project:

- The action may involve work in potentially jurisdictional waters. The 404 Permit has been obtained and expires 3/14/2026
- The action may require encroachment on the 100-year floodplain in accordance with Flood Insurance Rate Map 400508 0200 A, dated August 14, 1981. All work in the floodplain will conform to applicable State or local floodplain protection standards.
- Plan notes dated 2/6/2023 requiring avoidance of cultural resources in off-project areas will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2).

**Locations outside the project area in the following area must not be utilized for borrow, equipment staging, haul roads, spoil dumps or any off-site project-related activity.**

**T2S R11E:**

**Section 28:** S ½ SW ¼

**Section 32:** SE ¼

SE ¼ NW ¼ SW ¼

**Section 33:** NW ¼ NW ¼ SE ¼

NE ¼ NE ¼ SW ¼

**T3S R11E**

- Section 5:** NE ¼  
NW ¼ SE ¼ SW ¼  
NW ¼ NW ¼ SE ¼ (Tushka Cemetery)
- Section 6:** SW ¼ SE ¼
- Section 7:** SE ¼ NE ¼  
SE ¼  
SE ¼ SE ¼ SW ¼
- Section 8:** NE ¼ SW ¼ NW ¼  
NW ¼ NW ¼ SW ¼
- Section 18:** NE ¼ NE ¼ NW ¼  
NW ¼ NW ¼ NE ¼

- Plan notes dated 7/18/2022 requiring avoidance of the potential for hazardous materials remains areas will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2D(2).

<b>Station</b>	<b>OCC Fac./Case No.</b>	<b>Facility</b>
142+00 to 147+00 Rt 25 ft. from CL	0312634/064-1603	Tushka Superette
142+00 to 147+00 Lt 25 ft. from CL	0306405/064-2087	Tushka Truck Stop

**Petroleum contamination may exist at or near the referenced Underground Storage Tank (UST) sites. Based on the available information, contamination is not expected to affect construction activities, but is still possible. In the event contaminated soil or groundwater is encountered, the contractor shall adhere to ODOT’s Hazardous Materials Specification 107.15 and notify the Resident Engineer, who may then contact the Environmental Programs Division at (405) 521-3050 for assistance.**

- ABB Commitment: Minimize habitat loss by reducing the amount of ground disturbance of suitable ABB habitat within the construction footprint to only what is necessary for project construction and document in the monitoring reports to the Service. Following construction, areas of ground disturbance outside of the safety clear zone will be revegetated with native plant species where applicable and practicable. Areas where revegetation with native plant species is not practicable will be revegetated with more traditional plantings such as solid slab sodding.
- Tree Removal Minimization Commitment: In order to avoid and minimize adverse impacts to listed bat species, the removal of trees and shrubs shall 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.

- Monarch Commitment: ODOT, as a Certificate of Inclusion partner in the Nationwide Monarch Butterfly CCAA for Energy and Transportation lands, will adhere to the conservation measures, as well as minimize threats to the monarch butterfly as stipulated in this CCAA.
- ODOT Commitment: All operators, employees, and contractors will be made aware of all environmental commitments, including the following Plan Notes.
- Plan notes dated 1/24/2023 requiring avoidance or minimization of adverse effects to the American burying beetle (ABB) and migratory birds will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2D(2).

**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.**

**American Burying Beetle Note: The American Burying Beetle is a large carrion burying beetle that occurs within the project limits. Artificial lighting may be used during construction for night activities if the equipment specifications outlined in Special Provision 656-5(a-b)19 for ABB are adhered to and measures to minimize use of artificial lighting have been implemented. Carcasses and all food trash shall be removed from the permanent and temporary right-of-way throughout the duration of project activities. Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented when appropriate. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will not be stored within areas of native vegetation (i.e., outside of ABB habitat).**

**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 RCB (at STA.181+80) was observed. Painting, repair, retrofit, rehabilitation or demolition of the existing 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 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 culverts shall be conducted between September 1, and February 28 (when migratory bird nests are not occupied).

<u>Species</u>	<u>Seasonal Restriction Period</u>
Migratory Birds: Swallows and Phoebes (NESTS PRESENT)	March 1 – August 31

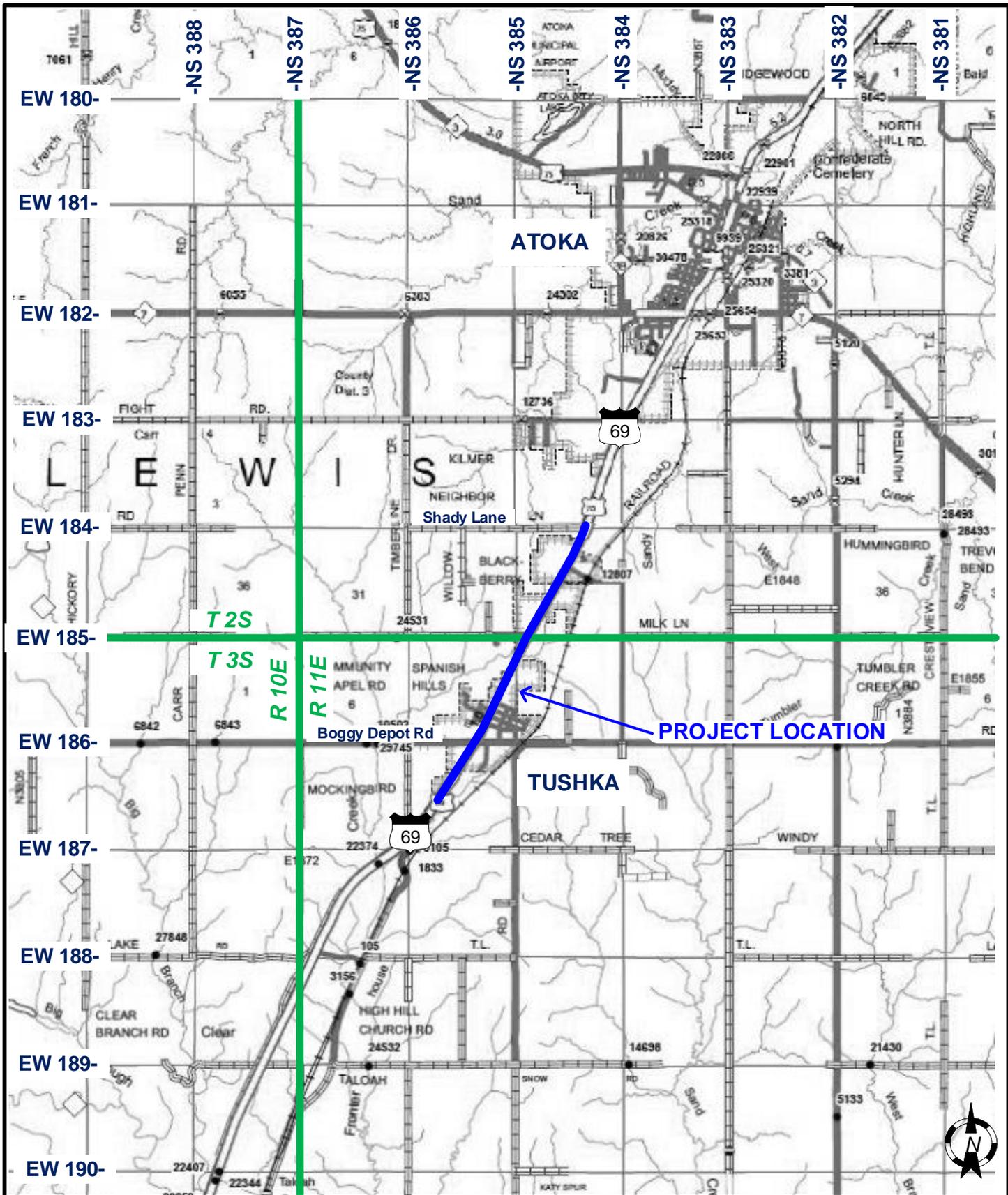
- There is an Airport/Airfield Atoka Memorial Hospital Heliport and Atoka Municipal Airport located within 4 miles of this project. This action may require notifying the Federal Aviation Administration (FAA) of proposed construction via FAA Form 7460-1 prior to construction.

The mitigation measures should be discussed at all Pre-work conferences per Policy Directive C-201-2E(1). The Designer shall provide a **copy of the final plans with the environmental notes** to Environmental Programs Division for the project Records. If you have any questions or need additional information, please contact Kathy Koon, NEPA Project Manager, at (405) 521-2676 or email [kkoon@odot.org](mailto:kkoon@odot.org).

Memo reviewed by the NEPA Program Supervisor LN 3/8/2023

Attachments: Memos with Plan Notes

Distribution: Project Management Division (Complete Document)  
 Right-of-Way Division (Memo with Plan Notes)  
 Roadway Design Division (Memo with Plan Notes)  
 District Engineer (Memo with Plan Notes)



**LOCATION MAP**

JP 30410(04)  
 Grade, Drain & Surface US-69: From 12 miles north of Bryan County line,  
 extend north approximately 2.5 miles through Tushka  
 Atoka Co, OK



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

THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT. 09-JUN-2022

PROPOSED R/W 09-JUN-2022

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED U.S. HIGHWAY

FEDERAL AID PROJECT NO. J3-0410(004) GRADE, DRAIN & SURFACE U.S. HIGHWAY 69

ATOKA COUNTY

CONTROL SECTION NO. 69-03-02 STATE JOB NO. 30410(04)

FOR SURVEY CONTROL DATA, SEE SURVEY DATA SHEETS

SHEET INDEX

Table with 2 columns: NUMBER, DESCRIPTION. Lists sheet numbers (0001, 0002-0007, R001, etc.) and their corresponding descriptions (TITLE SHEET, TYPICAL SECTIONS, ROADWAY DRAINAGE AREA MAP, etc.).

THE FOLLOWING STANDARD DRAWINGS WILL BE REQUIRED

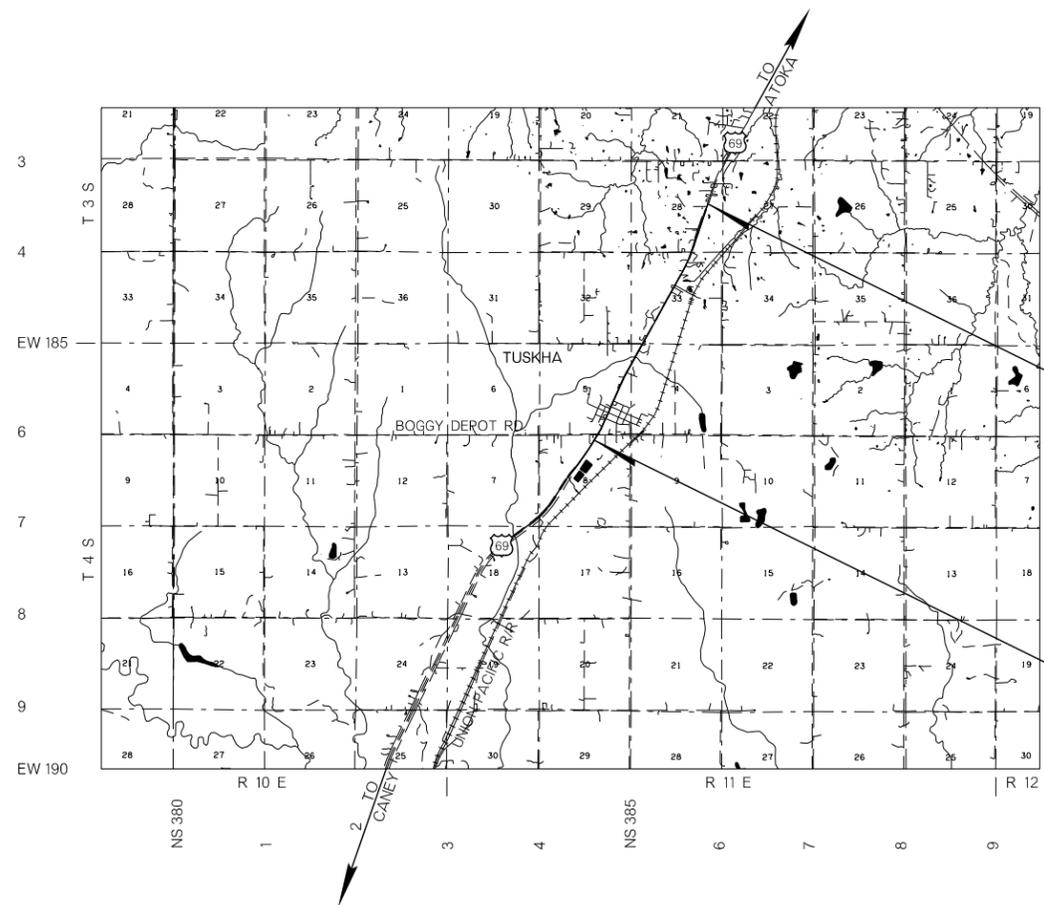
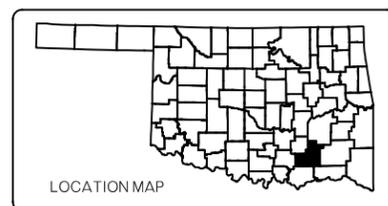
Table with 3 columns: ROADWAY, TRAFFIC, BRIDGE. Shows required drawing codes (e.g., XXXXXXXX) for each category.

DESIGN DATA table listing various parameters: ADT 2021 = 21,000, ADT 2041 = 27,300, DHV (X-WAY) = 2,100, K (DHV/ADT) = 10%, D = 55%, T (% DHV) = 26%, T (% ADT) = 28%, T^2 (% ADT) = 23%, V = 45MPH, 20 YR FLEXESALS = 32.78M.

SCALES: PLAN 1" = 50', PROFILE HOR. 1" = 50', VER. 1" = 10', LAYOUT MAP 1" = 5,280'

CONVENTIONAL SYMBOLS

- List of symbols for PROPOSED ROAD, RAILROADS, RANGE & TOWNSHIP, SECTION LINES, QUARTER SECTION LINES, EXISTING FENCE, PROPOSED FENCE, GROUND LINE, EXISTING ROADS, BASE LINE, GRADE LINES, TELEPHONE & TELEGRAPH, POWER LINES, BUILDINGS, OILWELL, DRAINAGE STRUCTURES, RIGHT-OF-WAY LINES, CONTROLLED ACCESS, and RIGHT-OF-WAY FENCE.



STA. 2509+66.11, PROJECT J/P 30410(04) END CONSTRUCTION (C SURVEY US 69) STA 249+44.39 (CRL US 69-SB)

STA. 2371+83.28, PROJECT J/P 30410(04) BEGIN CONSTRUCTION (C SURVEY US 69) STA 111+61.64 (CRL US 69-NB)

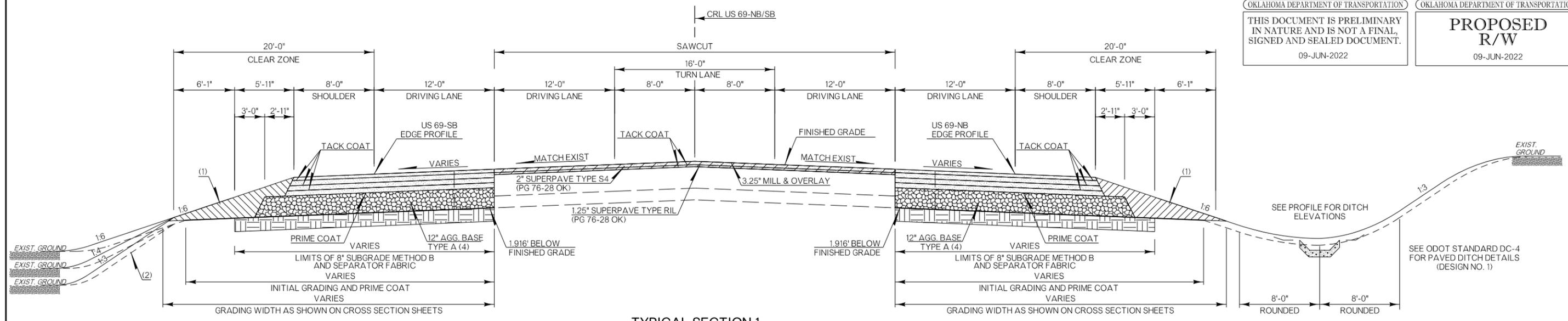
ROADWAY LENGTH 13,782.83 FT. 2.610 MI. BRIDGE LENGTH 0 FT. 0 MI. PROJECT LENGTH 2.610 MI.

EQUATIONS : NONE EXCEPTIONS : NONE

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

PLOT DATE: 09-JUN-2022 09:21 AM FILENAME: p:\p\hntb\org\p\w\CentralDiv\Documents\Oklahoma Projects\77746 US 69 through Tuskha\Production\Roadway\30410(04)-Title.dgn

Prepared and submitted by HNTB, including contact information for Marcus Geist, P.E., and approval signatures for the Chief Engineer and Division Administrator.

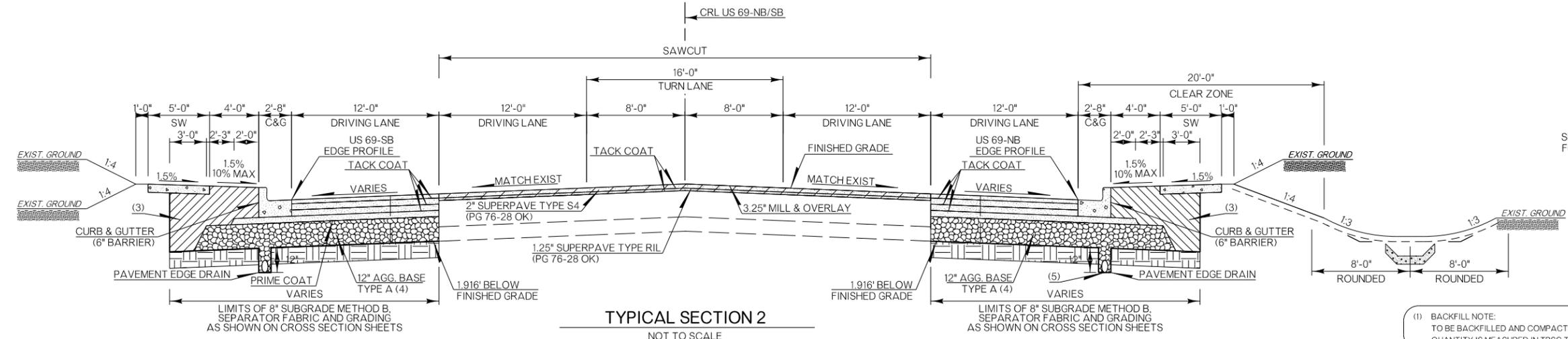


**TYPICAL SECTION 1**  
 NOT TO SCALE

CRL US 69-SB  
 STA. 116+10.00 TO STA. 118+70.00  
 STA. 118+90.00 TO STA. 123+75.00  
 STA. 173+00.00 TO STA. 188+94.00  
 STA. 207+00.00 TO STA. 241+00.00

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	8'-0" PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)

CRL US 69-NB  
 STA. 115+00.00 TO STA. 118+70.00  
 STA. 118+90.00 TO STA. 123+75.00  
 STA. 154+66.00 TO STA. 219+25.00  
 STA. 228+70.00 TO STA. 244+65.00



**TYPICAL SECTION 2**  
 NOT TO SCALE

CRL US 69-SB  
 STA. 123+75.00 TO STA. 130+00.00  
 STA. 136+05.00 TO STA. 173+00.00  
 STA. 188+94.00 TO STA. 207+00.00

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	
	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	

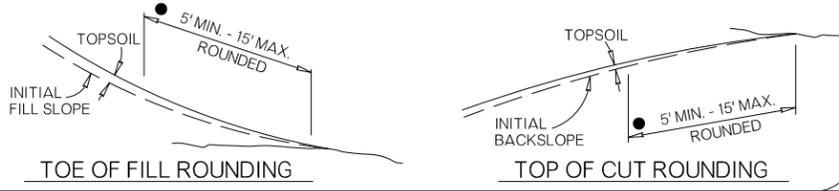
CRL US 69-NB  
 STA. 123+75.00 TO STA. 130+00.00  
 STA. 136+05.00 TO STA. 154+66.00  
 STA. 219+25.00 TO STA. 228+70.00

- (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, 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) BACKFILL NOTE:  
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
- (4) PRIME COAT ON TOP OF AGGREGATE BASE.
- (5) PAVEMENT EDGE DRAIN:  
SEE "ODOT STD. DRAWING PED-3-2"  
PROVIDE OUTLET LATERALS AT 200' ON CENTER MAXIMUM SPACING

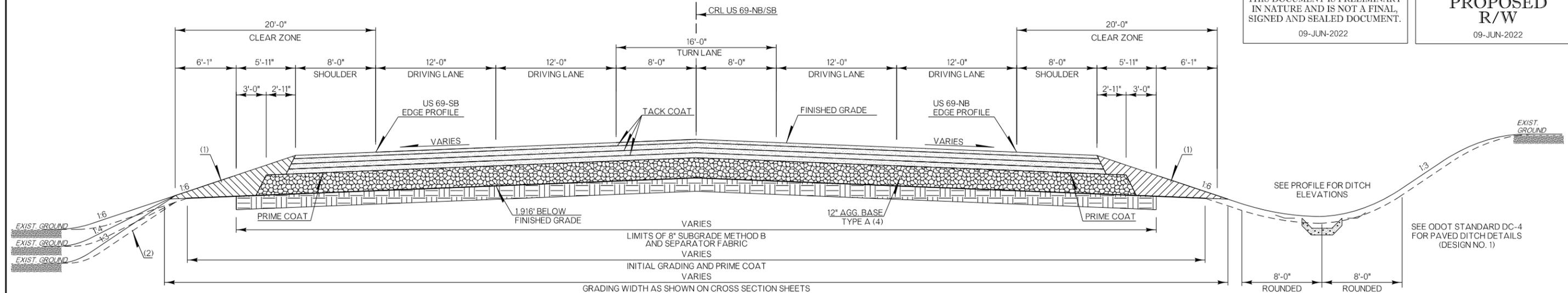
NOTE: UNLESS NOTED, STATION REFERENCE POINTS ARE BASED ON CRL US 69-NB

**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.



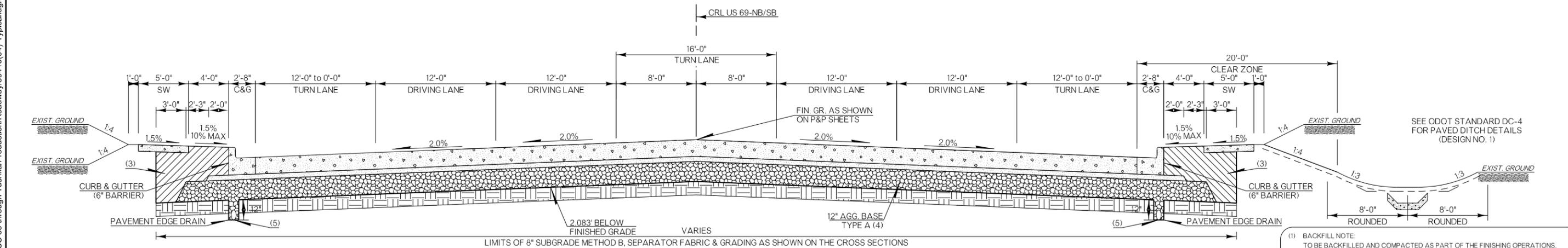
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**TYPICAL SECTION 3**

NOT TO SCALE  
STA. 118+70.00 TO STA. 118+90.00

PAVEMENT REQUIREMENT (RCB CONSTRUCTION PAVEMENT PATCH)		
PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	8'-0" PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)



**TYPICAL SECTION 4**

NOT TO SCALE  
STA. 130+00.00 TO STA. 136+05.00

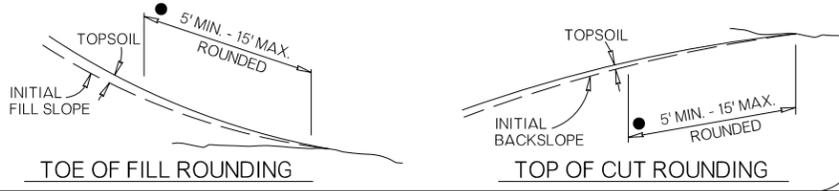
PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	12'-0" DRIVING LANES AND 16'-0" TURNING LANES
SURFACE COURSE	10" DOWEL JOINTED PC PAVEMENT
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)

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- (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) BACKFILL NOTE:  
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- (4) PRIME COAT ON TOP OF AGGREGATE BASE.
- (5) PAVEMENT EDGE DRAIN:  
SEE "ODOT STD. DRAWING PED-3-2"  
PROVIDE OUTLET LATERALS AT 200' ON CENTER MAXIMUM SPACING

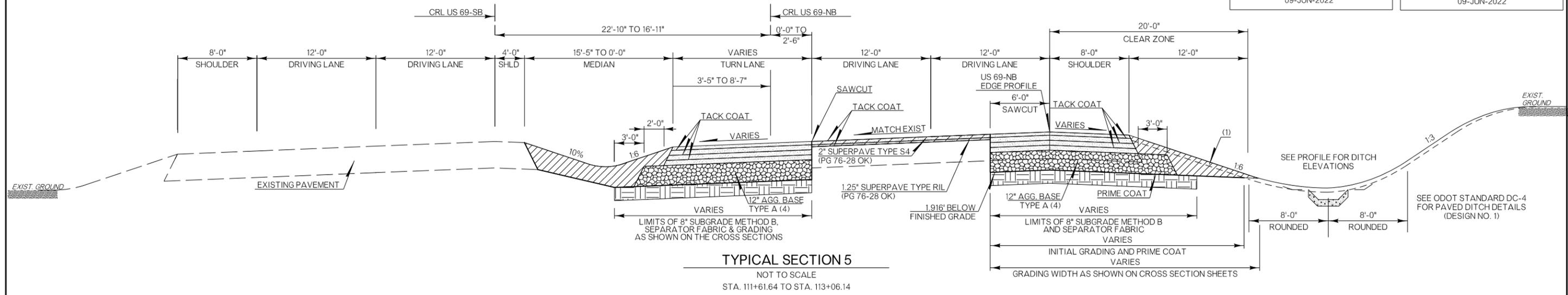
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**ROUNDING DETAIL**

● 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.

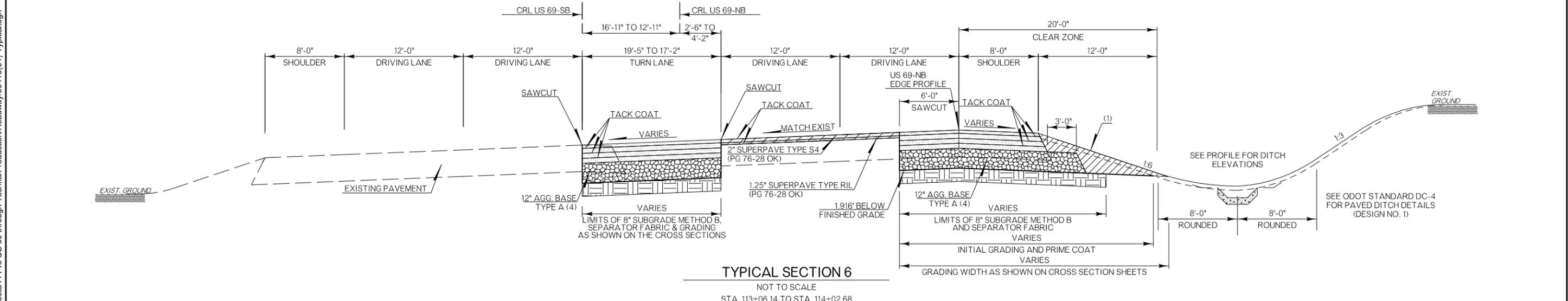


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**PAVEMENT REQUIREMENT**

PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	8'-0" PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)



**PAVEMENT REQUIREMENT**

PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	8'-0" PAVED SHOULDERS
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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.

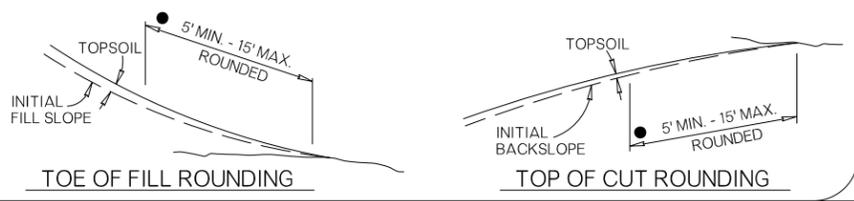
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SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(4) PRIME COAT ON TOP OF AGGREGATE BASE.

NOTE: UNLESS NOTED, STATION REFERENCE POINTS ARE BASED ON CRL US 69-NB

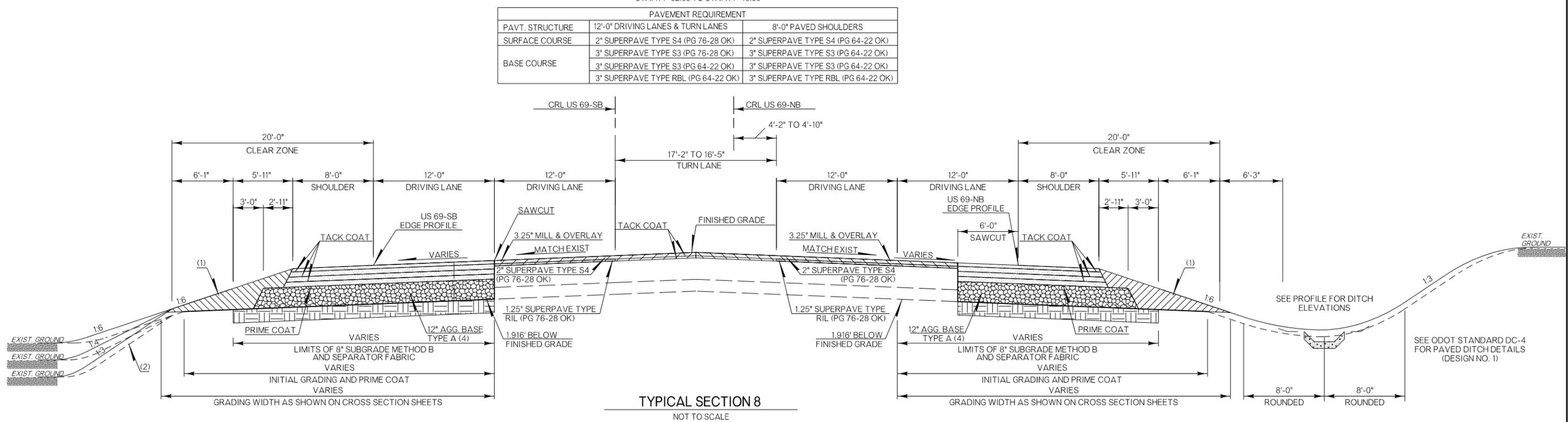
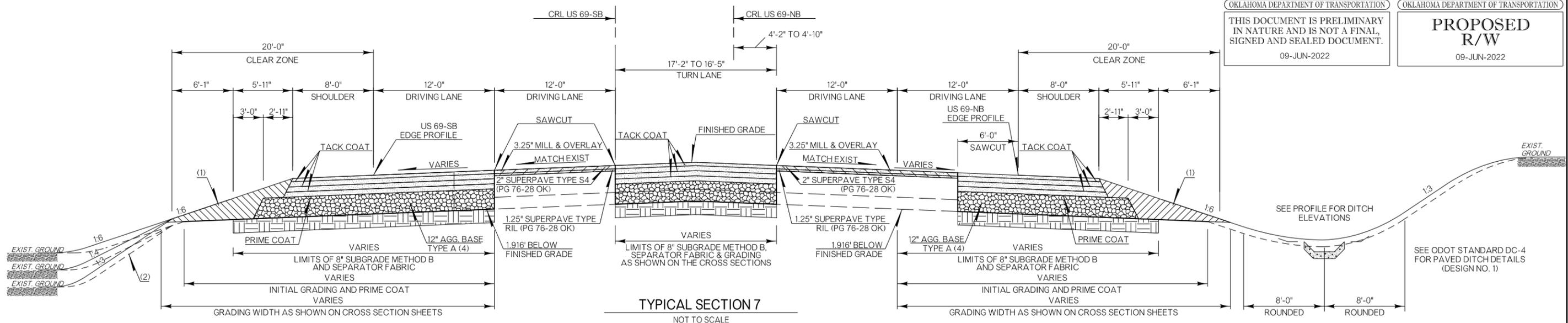
**ROUNDING DETAIL**

- 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.



DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG		<b>TYPICAL SECTIONS</b>				
CHECKED	MJG						
APPROVED							
SQUAD	<b>INTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	0004

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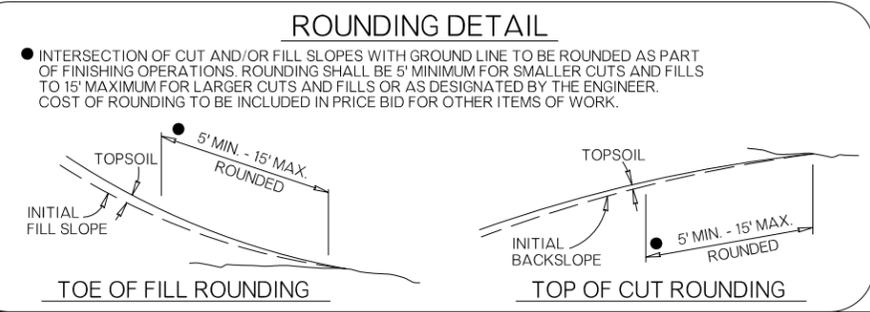
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 QUANTITY IS MEASURED IN TBSC TYPE E.

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 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.

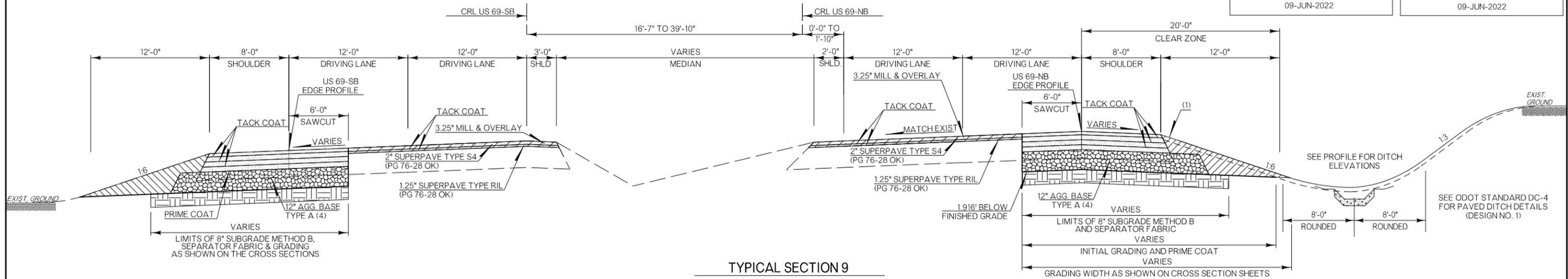
(4) PRIME COAT ON TOP OF AGGREGATE BASE.

NOTE: UNLESS NOTED, STATION REFERENCE POINTS ARE BASED ON CRL US 69-NB



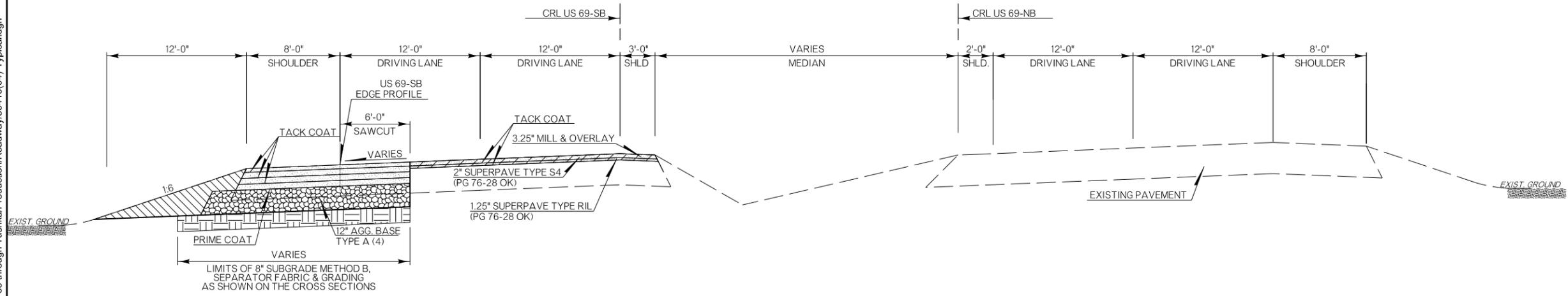
DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG		<b>TYPICAL SECTIONS</b>				
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	0005

09:21 AM  
 09-JUN-2022  
 PLOT DATE: 09-JUN-2022  
 FILENAME: p:\jpw-int\hnb.org\pww\CentralDiv\Documents\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Typical.dgn



**TYPICAL SECTION 9**  
 NOT TO SCALE  
 STA. 246+59.44 TO STA. 248+66.86

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES	8'-0" PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)



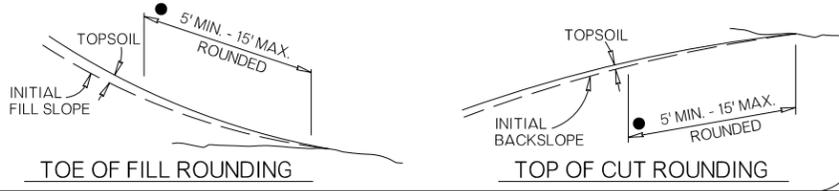
**TYPICAL SECTION 10**  
 NOT TO SCALE  
 STA. 248+66.86 TO STA. 249+44.39

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANE	8'-0" PAVED SHOULDER
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 76-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 76-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE RBL (PG 64-22 OK)	3" SUPERPAVE TYPE RBL (PG 64-22 OK)

- (1) BACKFILL NOTE:  
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
- (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.
- (4) PRIME COAT ON TOP OF AGGREGATE BASE.
- (5) PAVEMENT EDGE DRAIN:  
SEE "ODOT STD. DRAWING PED-3-2"  
PROVIDE OUTLET LATERALS AT 200' ON CENTER MAXIMUM SPACING

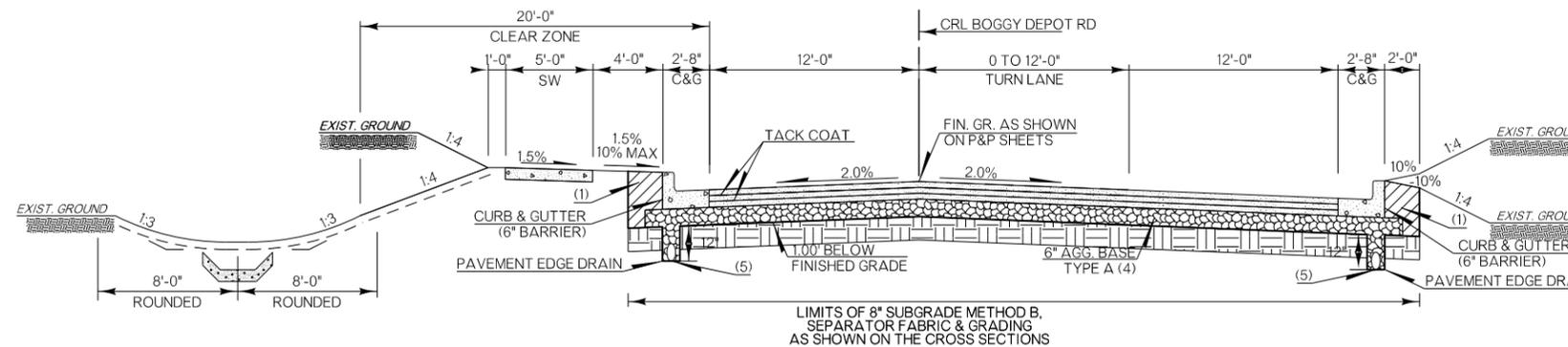
**ROUNDING DETAIL**

● 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.



09:21 AM  
 09-JUN-2022  
 PLOT DATE: 09-JUN-2022  
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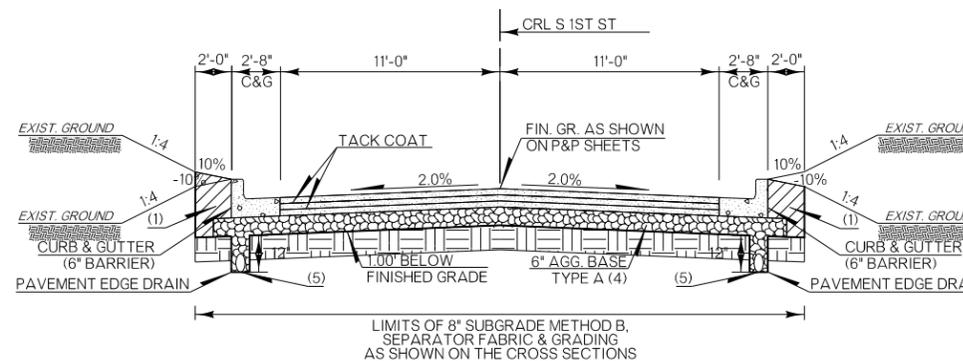
SEE ODOT STANDARD DC-4  
FOR PAVED DITCH DETAILS  
(DESIGN NO. 1)



TYPICAL SECTION 11

NOT TO SCALE  
STA. 11+97.31 TO STA. 20+71.00  
STA. 21+59.00 TO STA. 26+40.00

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	12'-0" DRIVING LANES & TURN LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION 12

NOT TO SCALE  
STA. 11+68.00 TO STA. 12+68.00  
STA. 13+32.00 TO STA. 15+00.00

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	11'-0" DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	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.

(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.

(4) PRIME COAT ON TOP OF AGGREGATE BASE.

(5) PAVEMENT EDGE DRAIN:  
SEE "ODOT STD. DRAWING PED-3-2"  
PROVIDE OUTLET LATERALS AT 200' ON CENTER MAXIMUM SPACING

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.



DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG		<h1>TYPICAL SECTIONS</h1>				
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	0007

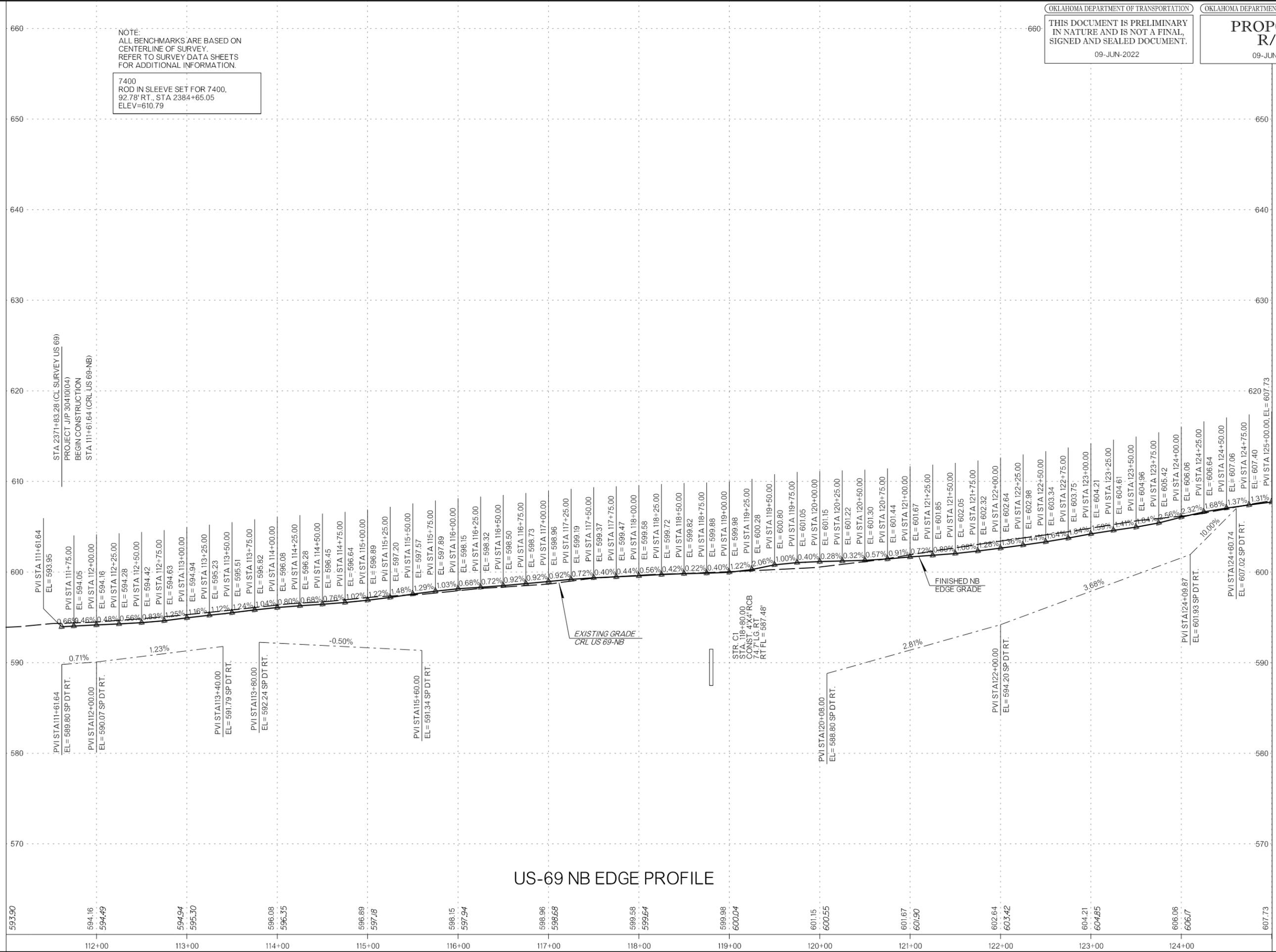


NOTE:  
 ALL BENCHMARKS ARE BASED ON  
 CENTERLINE OF SURVEY.  
 REFER TO SURVEY DATA SHEETS  
 FOR ADDITIONAL INFORMATION.

7400  
 ROD IN SLEEVE SET FOR 7400,  
 92.78' RT., STA 2384+65.05  
 ELEV=610.79

MATCHLINE - STA 111+00

MATCHLINE - STA 125+00



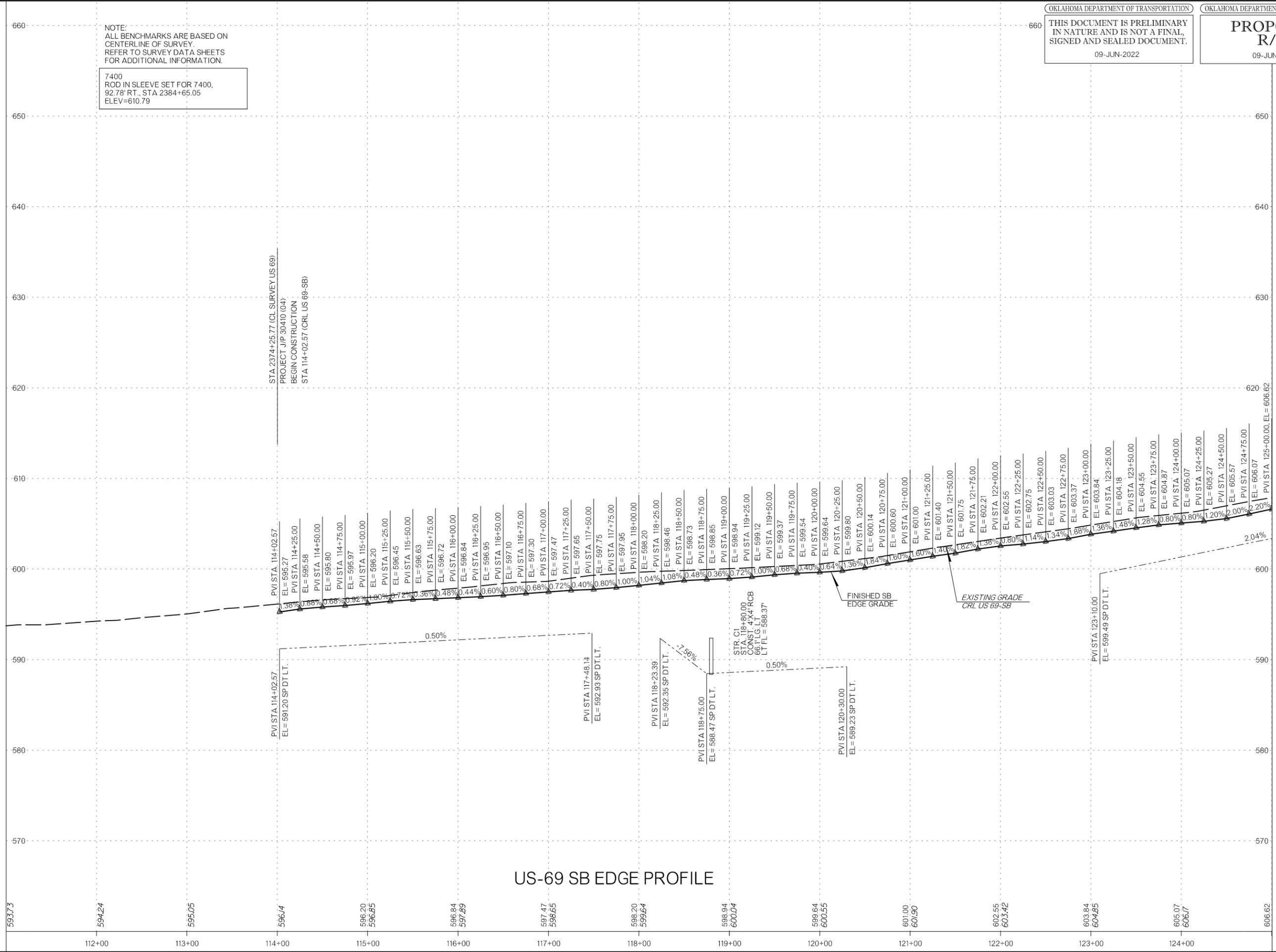
US-69 NB EDGE PROFILE

NOTE:  
 ALL BENCHMARKS ARE BASED ON  
 CENTERLINE OF SURVEY.  
 REFER TO SURVEY DATA SHEETS  
 FOR ADDITIONAL INFORMATION.

7400  
 ROD IN SLEEVE SET FOR 7400,  
 92.78' RT., STA 2384+65.05  
 ELEV=610.79

MATCHLINE - STA 111+00

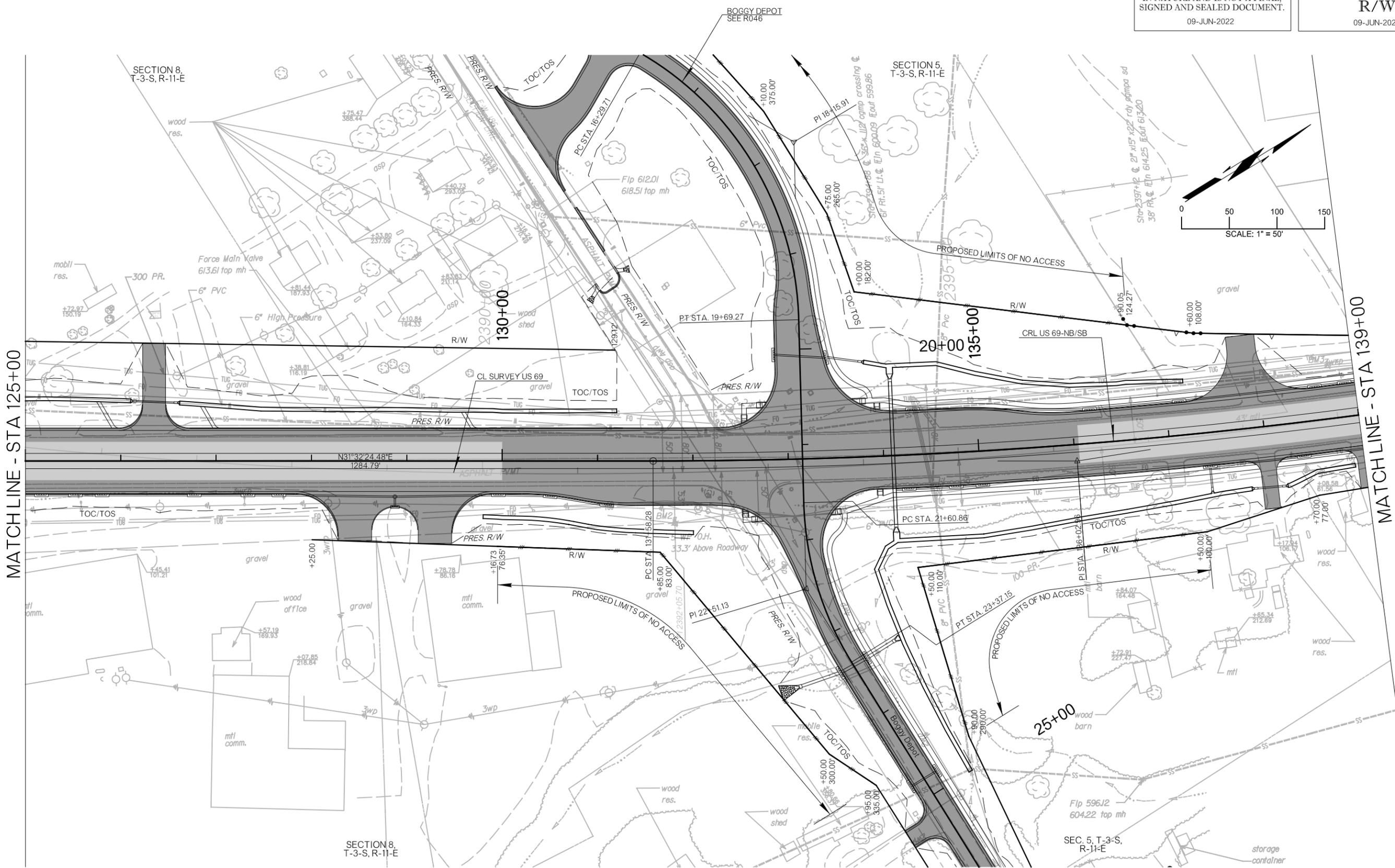
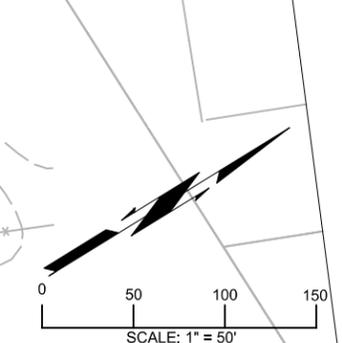
MATCHLINE - STA 125+00



US-69 SB EDGE PROFILE

THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL,  
SIGNED AND SEALED DOCUMENT.  
09-JUN-2022

PROPOSED  
R/W  
09-JUN-2022



MATCHLINE - STA 125+00

MATCHLINE - STA 139+00

PLOT DATE: 09-JUN-2022  
FILENAME: p:\pw-int\hntb.org\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Plan1.dgn

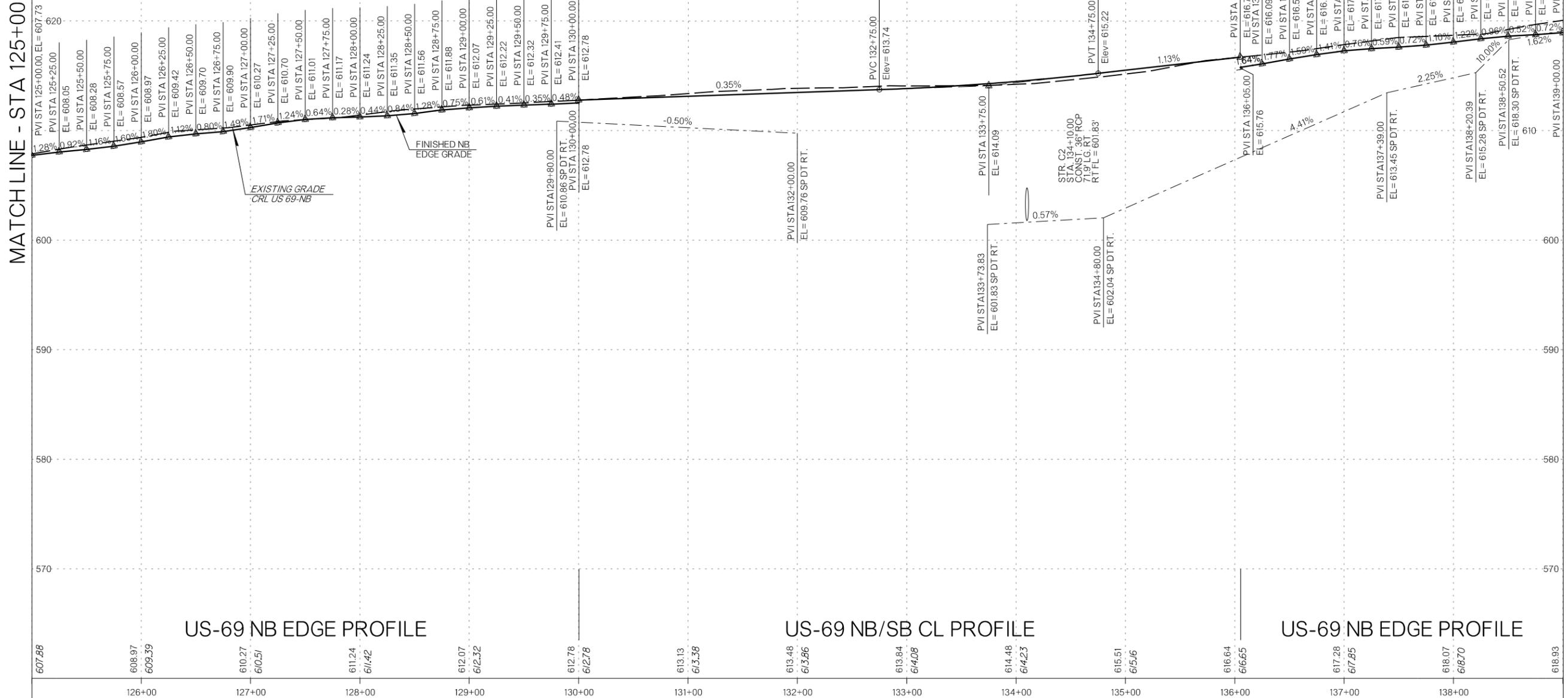
BM2  
DEL POST 51.1' RT., STA. 2392+03.70  
ELEV=610.91

BM3  
DEL POST 56.56' LT., STA. 2398+97.43  
ELEV=620.11

DESIGN	RBH
DRAWN	TGG
CHECKED	MJG
APPROVED	
SQUAD	<b>HNTB</b>

OKLAHOMA DEPARTMENT OF TRANSPORTATION  
**PLAN SHEET**  
COUNTY ATOKA HIGHWAY US 69 STATE JOB NO 30410(04) SHEET NO R016

MATCHLINE - STA 125+00



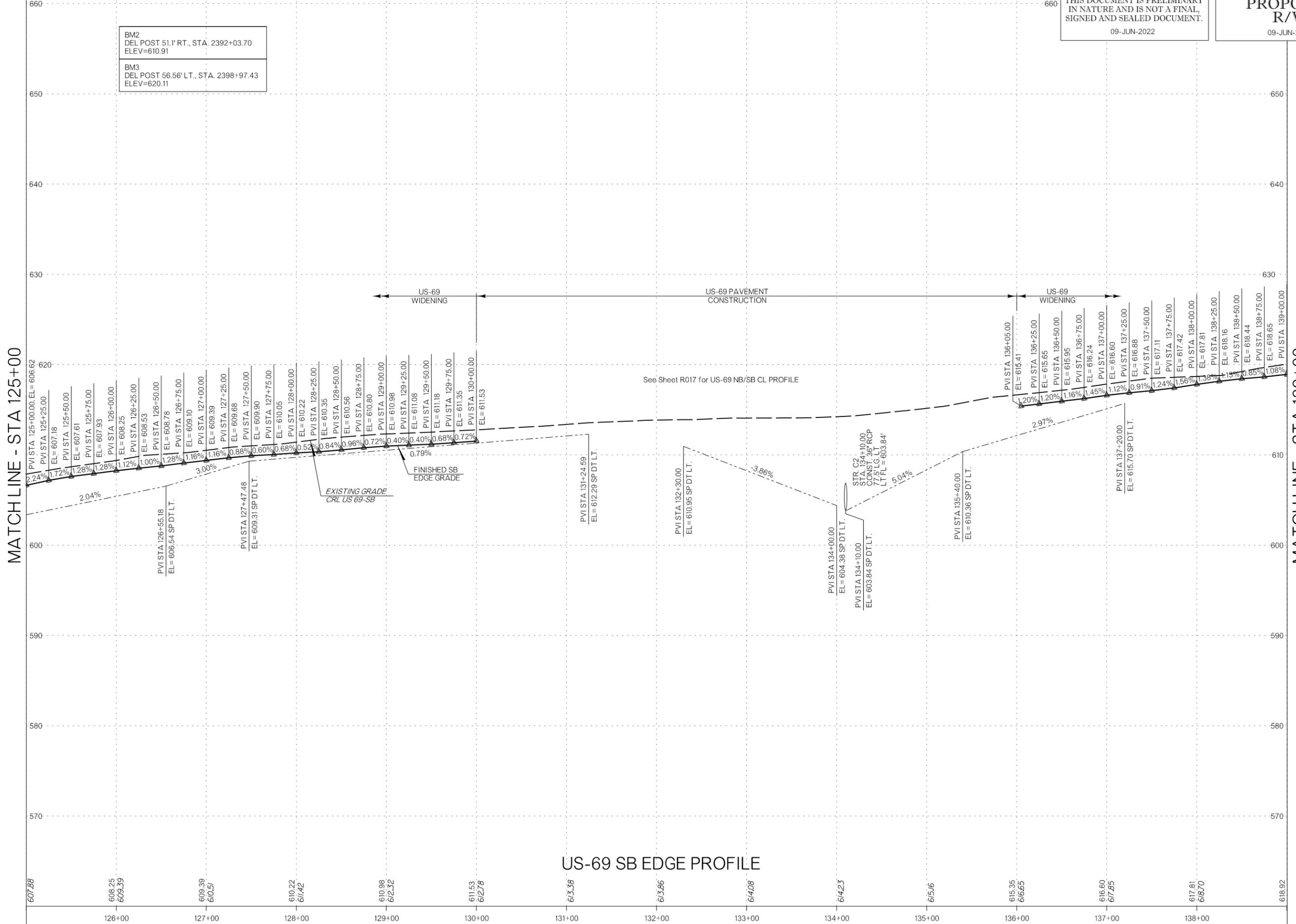
MATCHLINE - STA 139+00

US-69 NB EDGE PROFILE

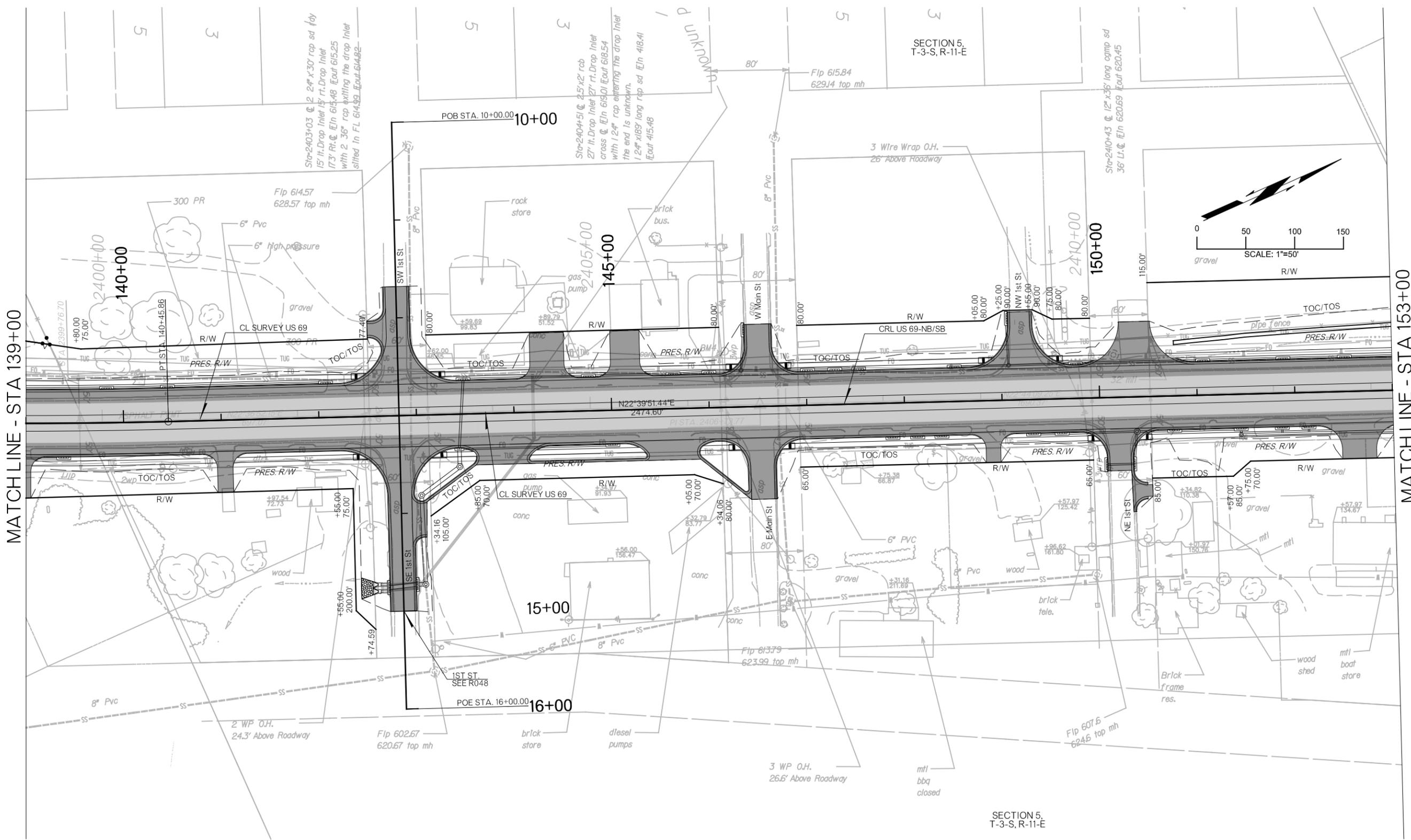
US-69 NB/SB CL PROFILE

US-69 NB EDGE PROFILE

MATCHLINE - STA 125+00

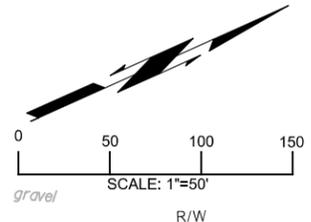


MATCHLINE - STA 139+00



MATCHLINE - STA 139+00

MATCHLINE - STA 153+00



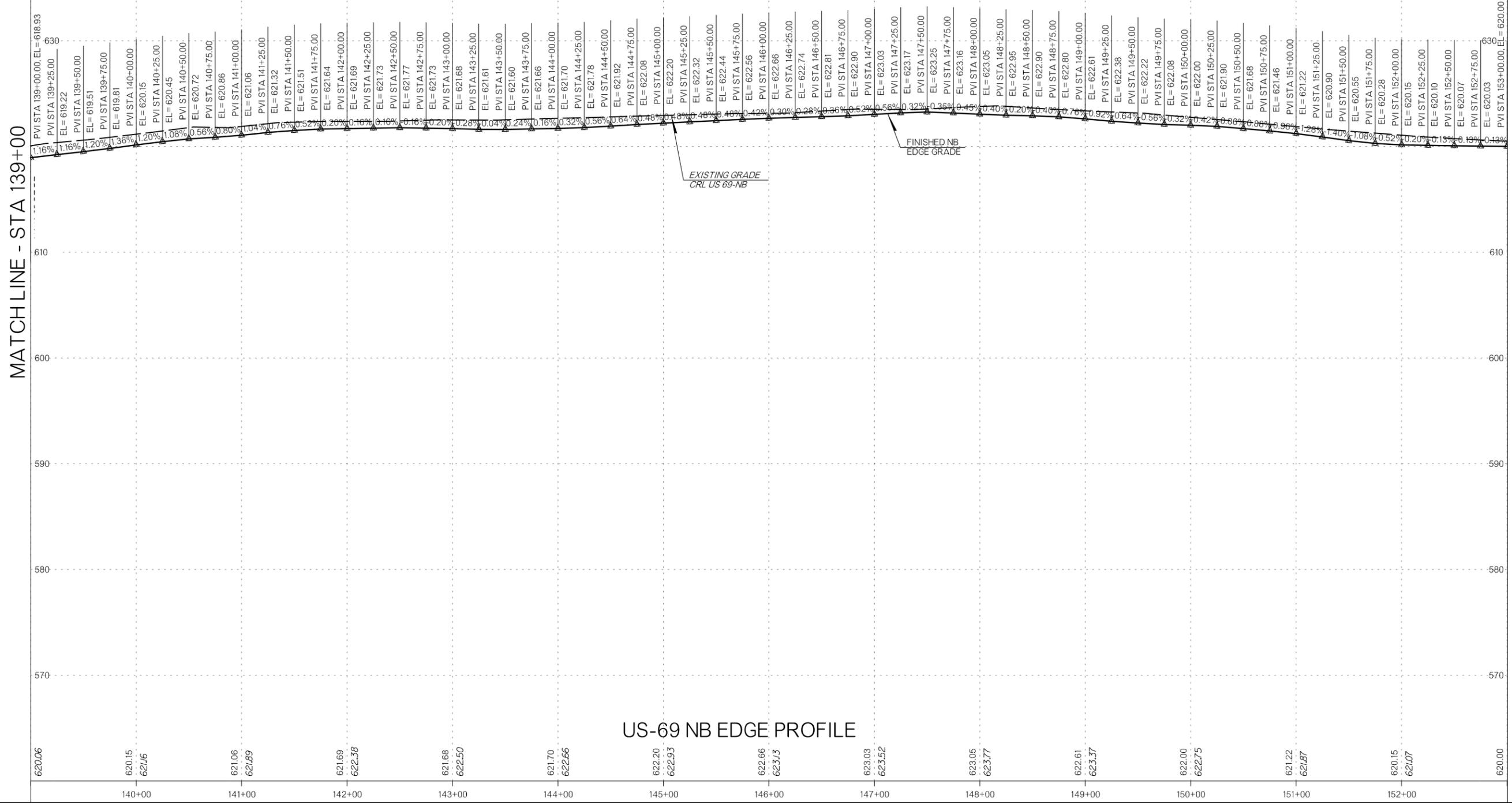
BM4  
 DEL POST 52.62' LT., STA. 2406+37.67  
 ELEV=624.90

DESIGN	RBH	OKLAHOMA DEPARTMENT OF TRANSPORTATION					
DRAWN	TGG						
CHECKED	MJG						
APPROVED							
SQUAD	<b>INTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	3041004	SHEET NO	R019

PLAN SHEET

PLOT DATE: 09-JUN-2022 09:22 AM  
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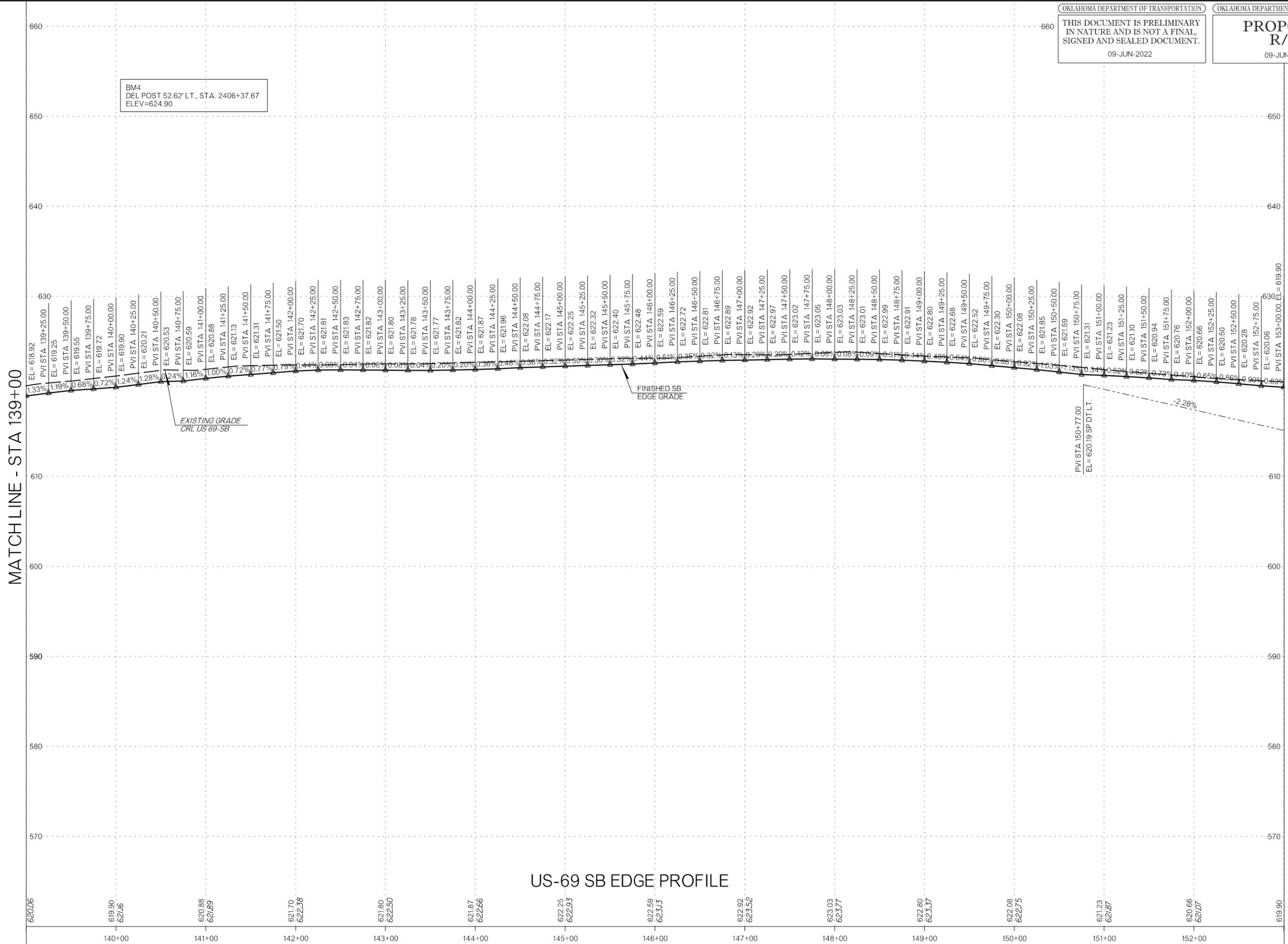
MATCHLINE - STA 139+00



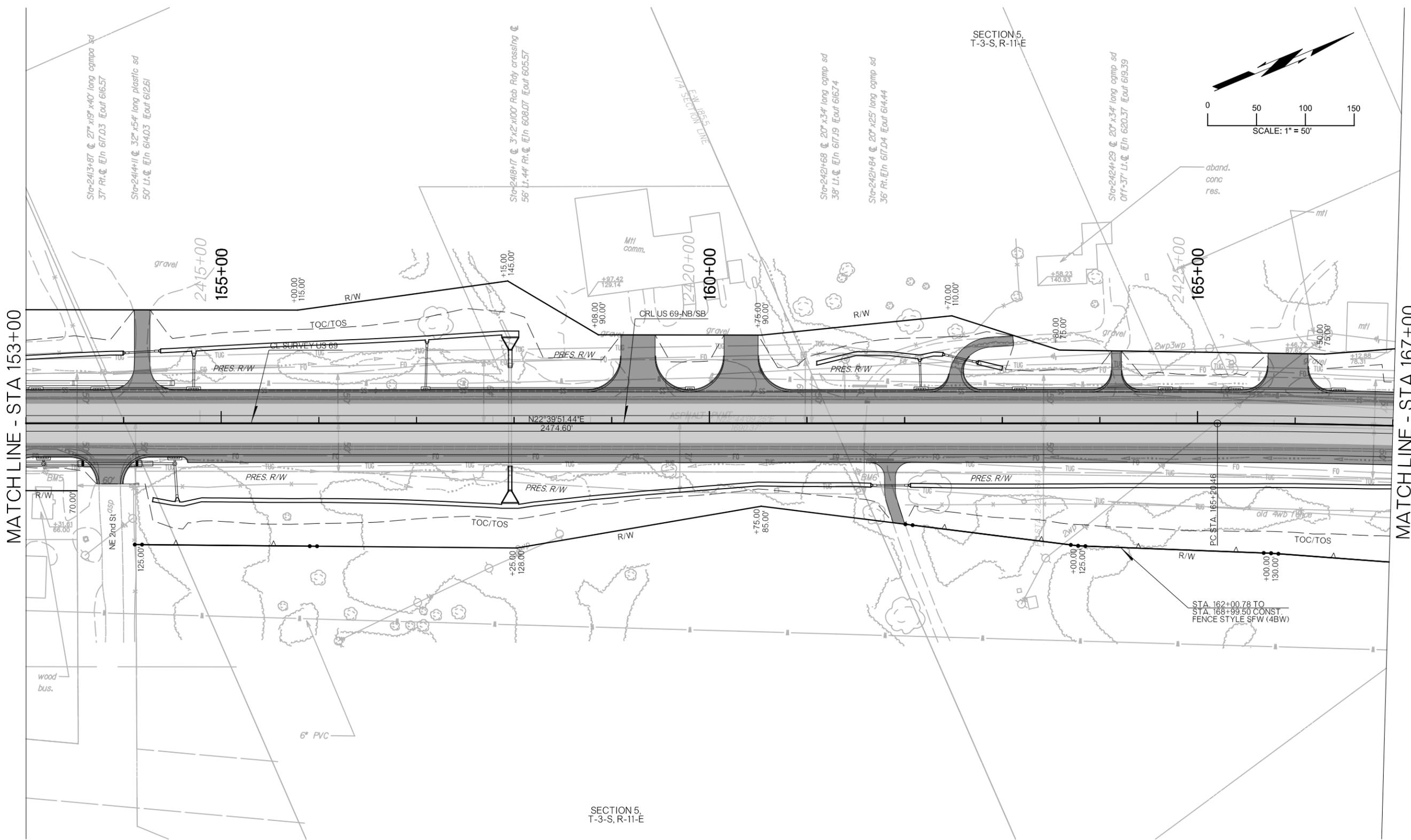
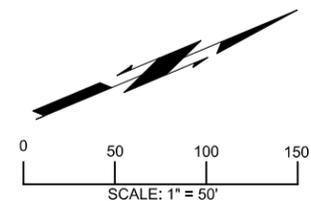
MATCHLINE - STA 153+00

US-69 NB EDGE PROFILE

MATCHLINE - STA 139+00



MATCHLINE - STA 153+00



MATCHLINE - STA 153+00

MATCHLINE - STA 167+00

SECTION 5, T-3-S, R-11-E

BM5  
DEL POST 50.45' RT., STA. 2413+41.71  
ELEV=620.92

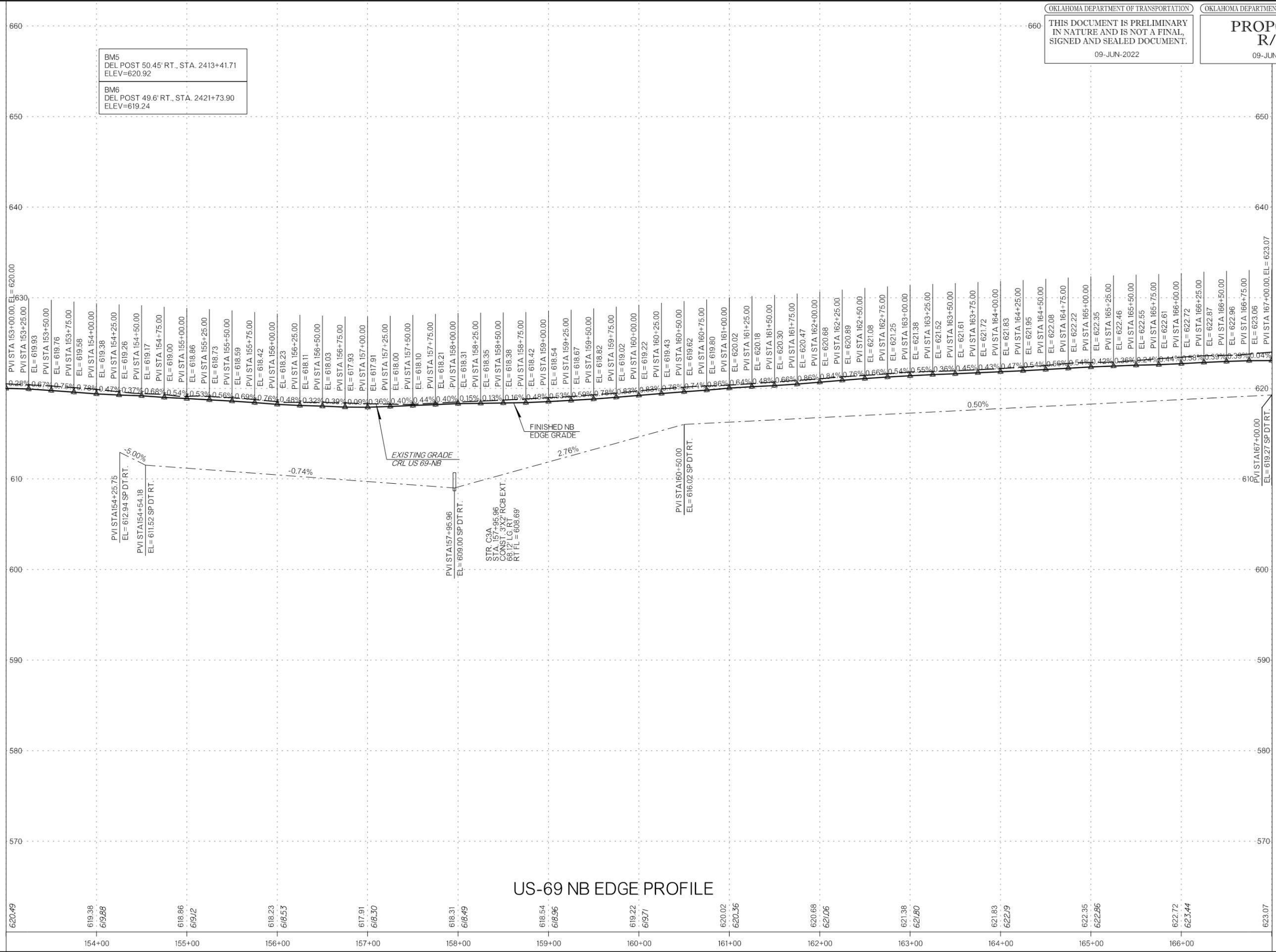
BM6  
DEL POST 49.6' RT., STA. 2421+73.90  
ELEV=619.24

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG		PLAN SHEET				
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	R022

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MATCHLINE - STA 153+00

MATCHLINE - STA 167+00



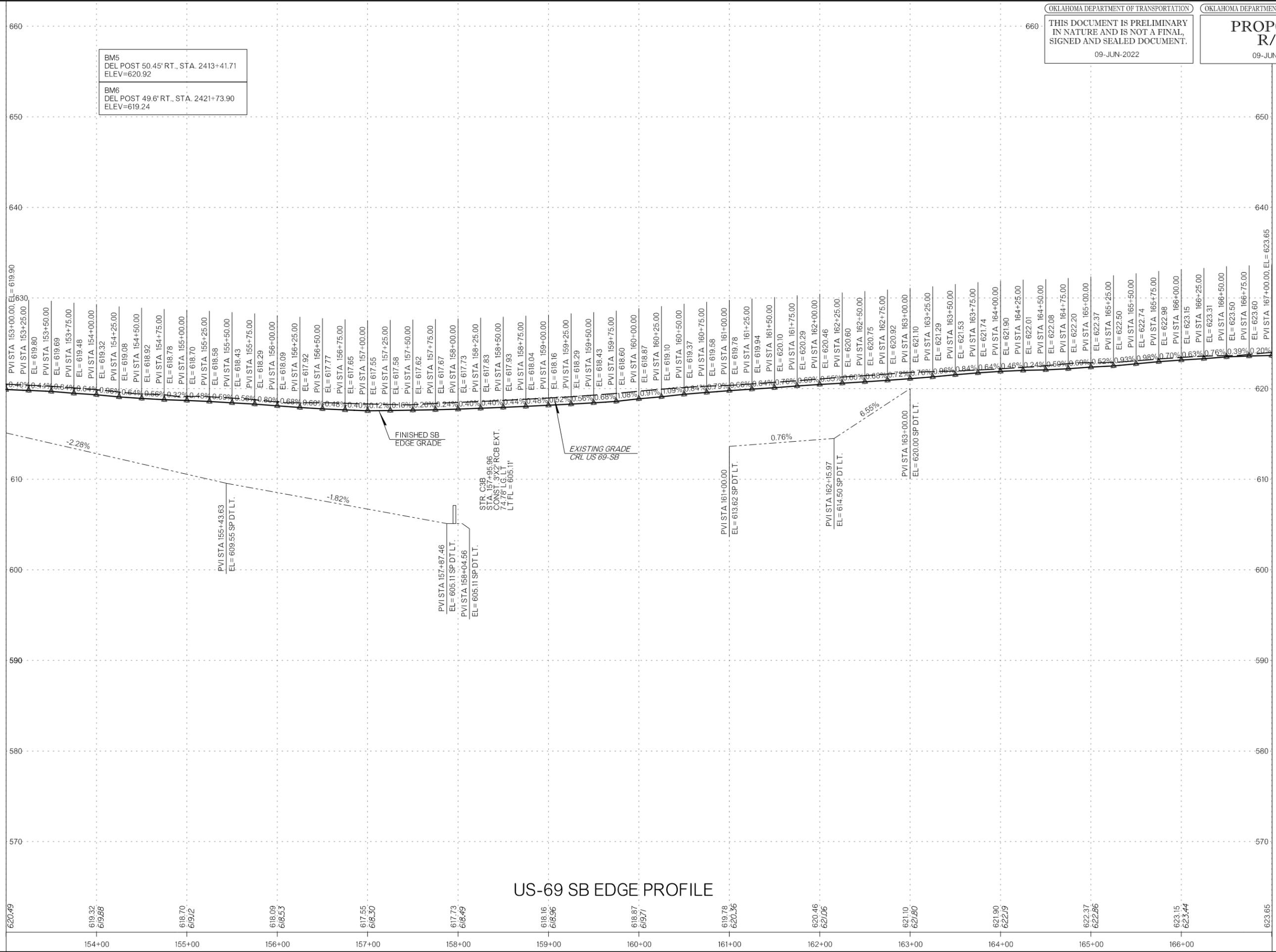
BM5  
 DEL POST 50.45' RT., STA. 2413+41.71  
 ELEV=620.92

BM6  
 DEL POST 49.6' RT., STA. 2421+73.90  
 ELEV=619.24

US-69 NB EDGE PROFILE

MATCHLINE - STA 153+00

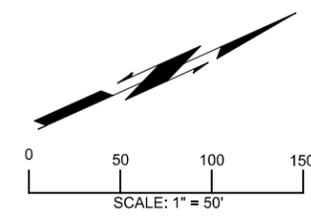
MATCHLINE - STA 167+00



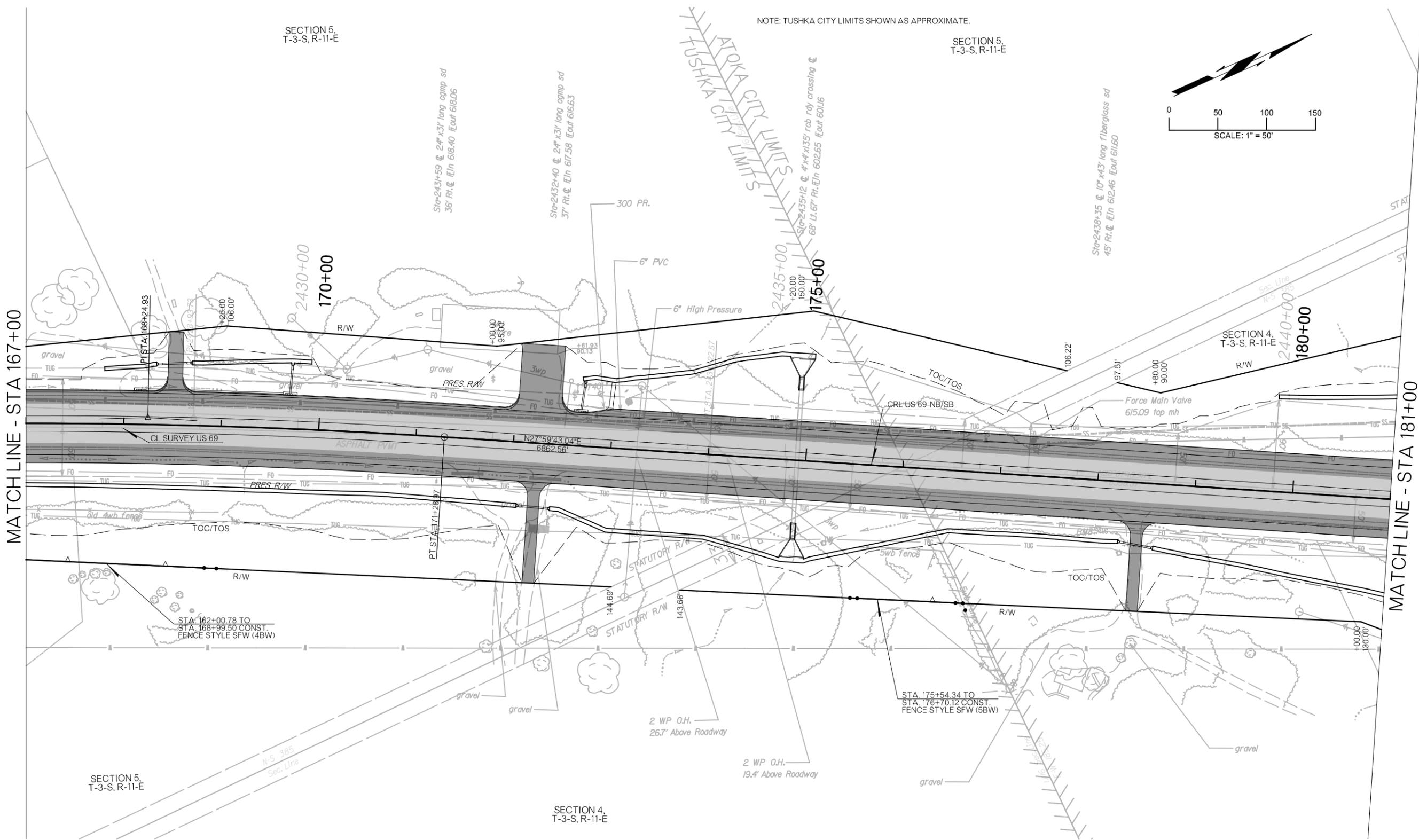
BM5  
 DEL POST 50.45' RT., STA. 2413+41.71  
 ELEV=620.92

BM6  
 DEL POST 49.6' RT., STA. 2421+73.90  
 ELEV=619.24

US-69 SB EDGE PROFILE



NOTE: TUSHKA CITY LIMITS SHOWN AS APPROXIMATE.



MATCHLINE - STA 167+00

MATCHLINE - STA 181+00

SECTION 5,  
T-3-S, R-11-E

SECTION 5,  
T-3-S, R-11-E

SECTION 5,  
T-3-S, R-11-E

SECTION 4,  
T-3-S, R-11-E

SECTION 4,  
T-3-S, R-11-E

7401  
 1/2 IP W/CAP SET FOR CP 7401  
 51.78' LT., STA. 2433+07.99  
 ELEV=619.14

BM8  
 DEL POST 52.41' RT., STA. 2438+23.68  
 ELEV=614.74

DESIGN	RBH
DRAWN	TGG
CHECKED	MJG
APPROVED	
SQUAD	<b>HNTB</b>

OKLAHOMA DEPARTMENT OF TRANSPORTATION

**PLAN SHEET**

COUNTY ATOKA HIGHWAY US 69 STATE JOB NO. 30410(04) SHEET NO. R025

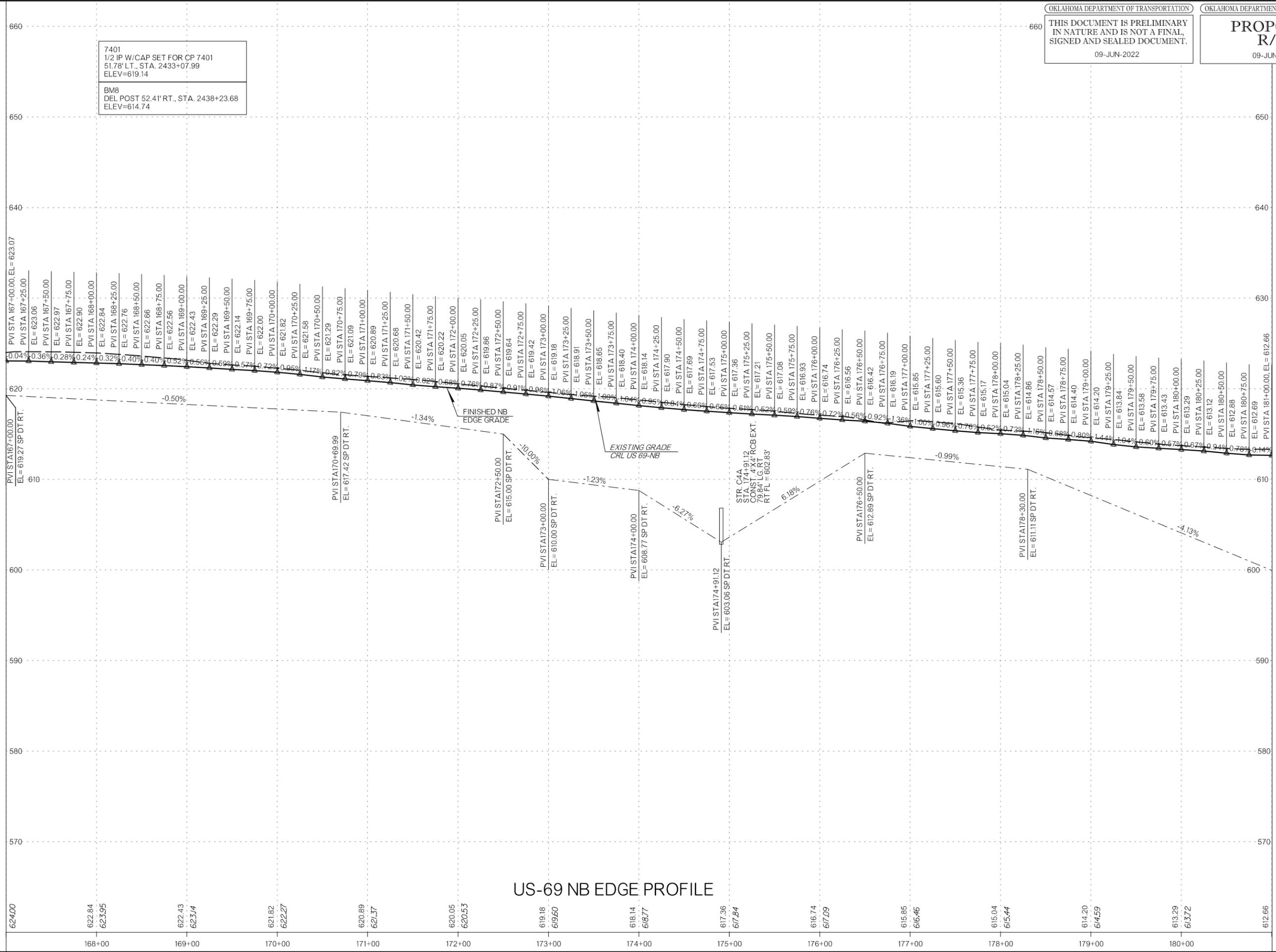
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7401  
 1/2 IP W/CAP SET FOR CP 7401  
 51.78' LT., STA. 2433+07.99  
 ELEV=619.14

BM8  
 DEL POST 52.41' RT., STA. 2438+23.68  
 ELEV=614.74

MATCHLINE - STA 167+00

MATCHLINE - STA 181+00



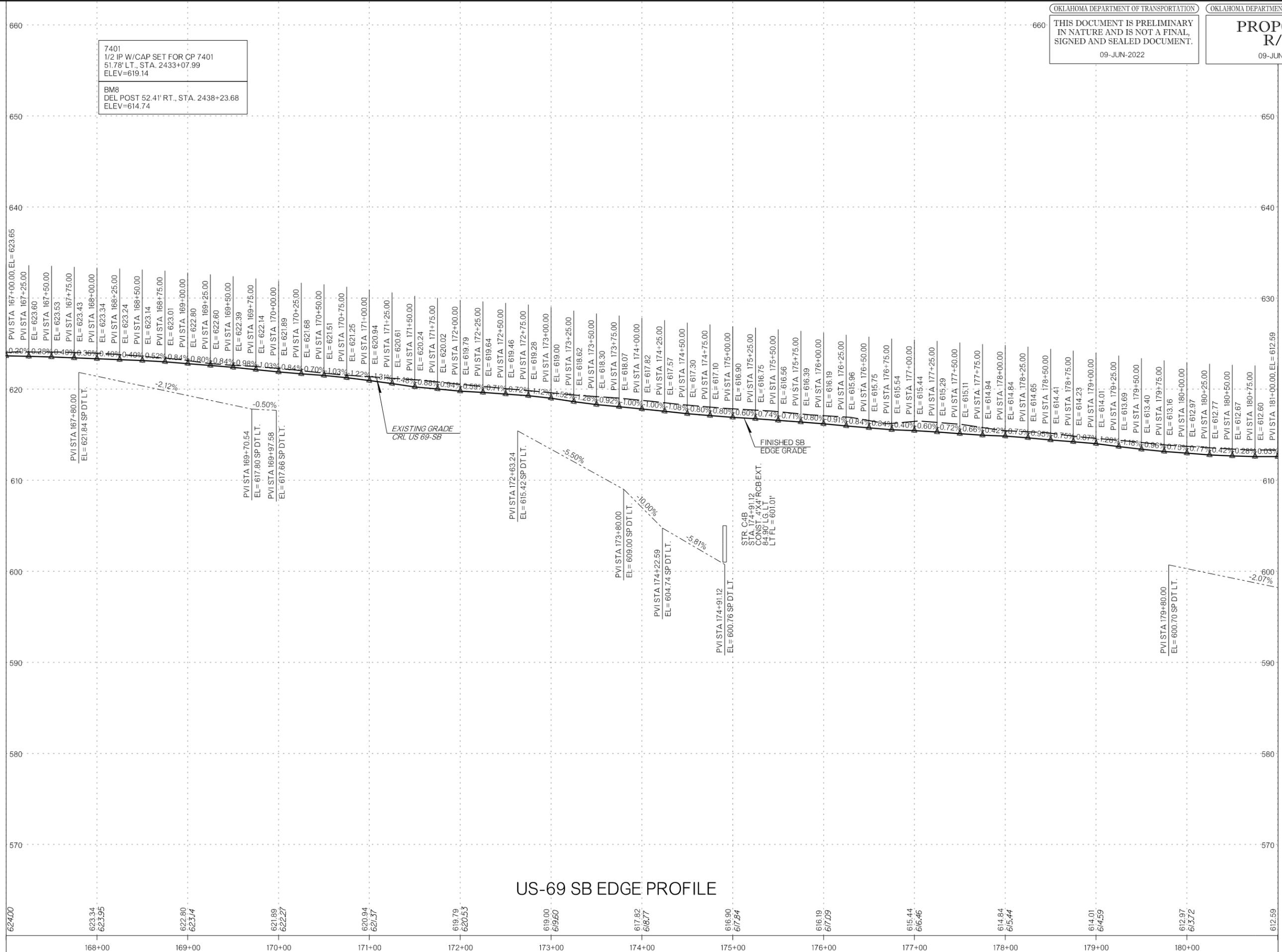
US-69 NB EDGE PROFILE

7401  
 1/2 IP W/CAP SET FOR CP 7401  
 51.78' LT., STA. 2433+07.99  
 ELEV=619.14

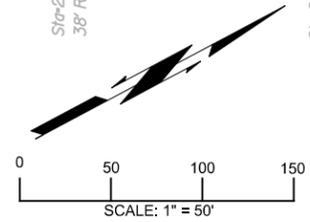
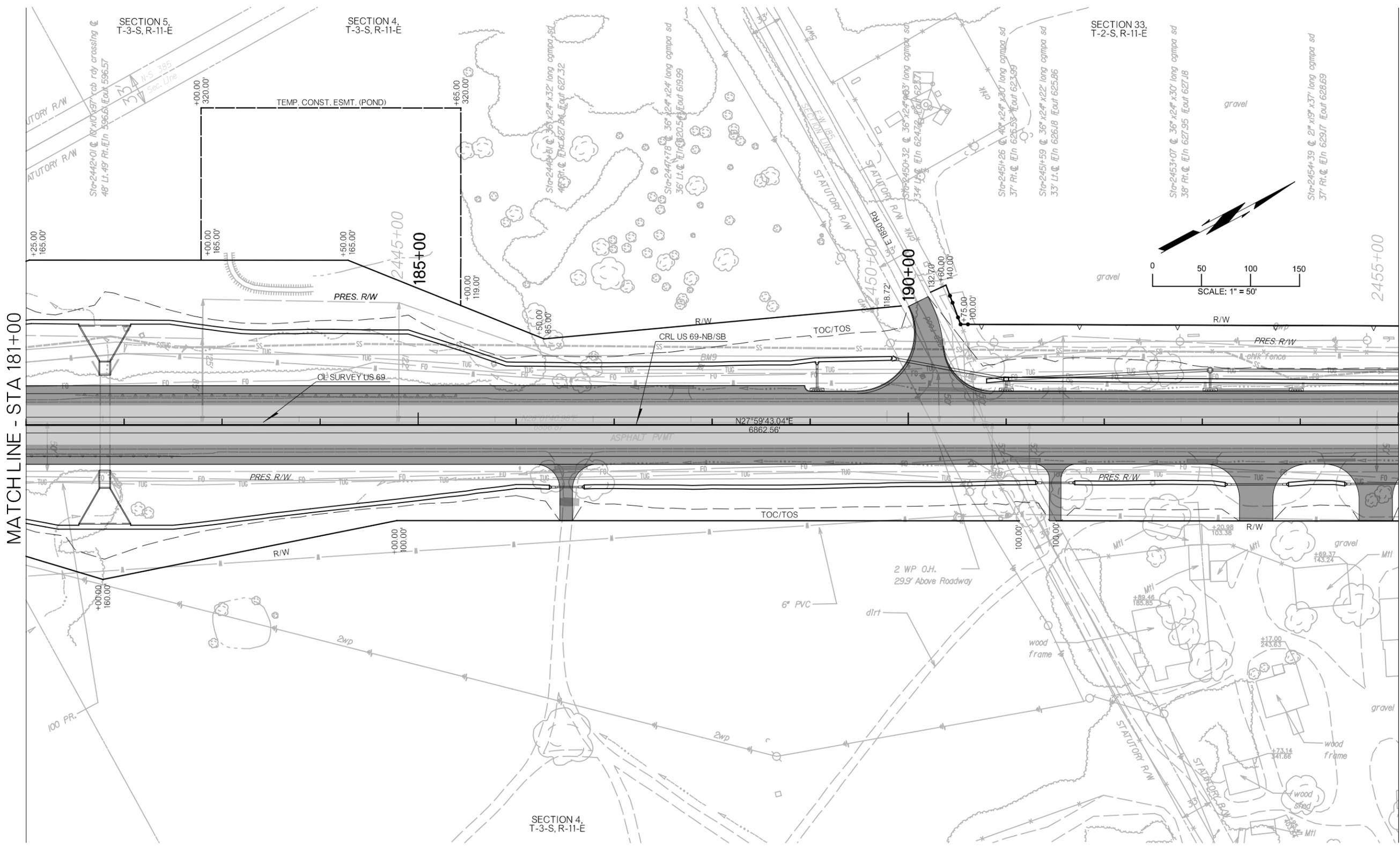
BM8  
 DEL POST 52.41' RT., STA. 2438+23.68  
 ELEV=614.74

MATCHLINE - STA 167+00

MATCHLINE - STA 181+00



US-69 SB EDGE PROFILE



BM9  
 DEL POST 57.21' LT., STA. 2448+09.79  
 ELEV=623.33

PLOT DATE: 09-JUN-2022 09:22 AM  
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DRAWN	TGG	
CHECKED	MJG	
APPROVED		
SQUAD	<b>HNTB</b>	
COUNTY		ATOKA
HIGHWAY		US 69
STATE JOB NO		30410(04)
SHEET NO		R028

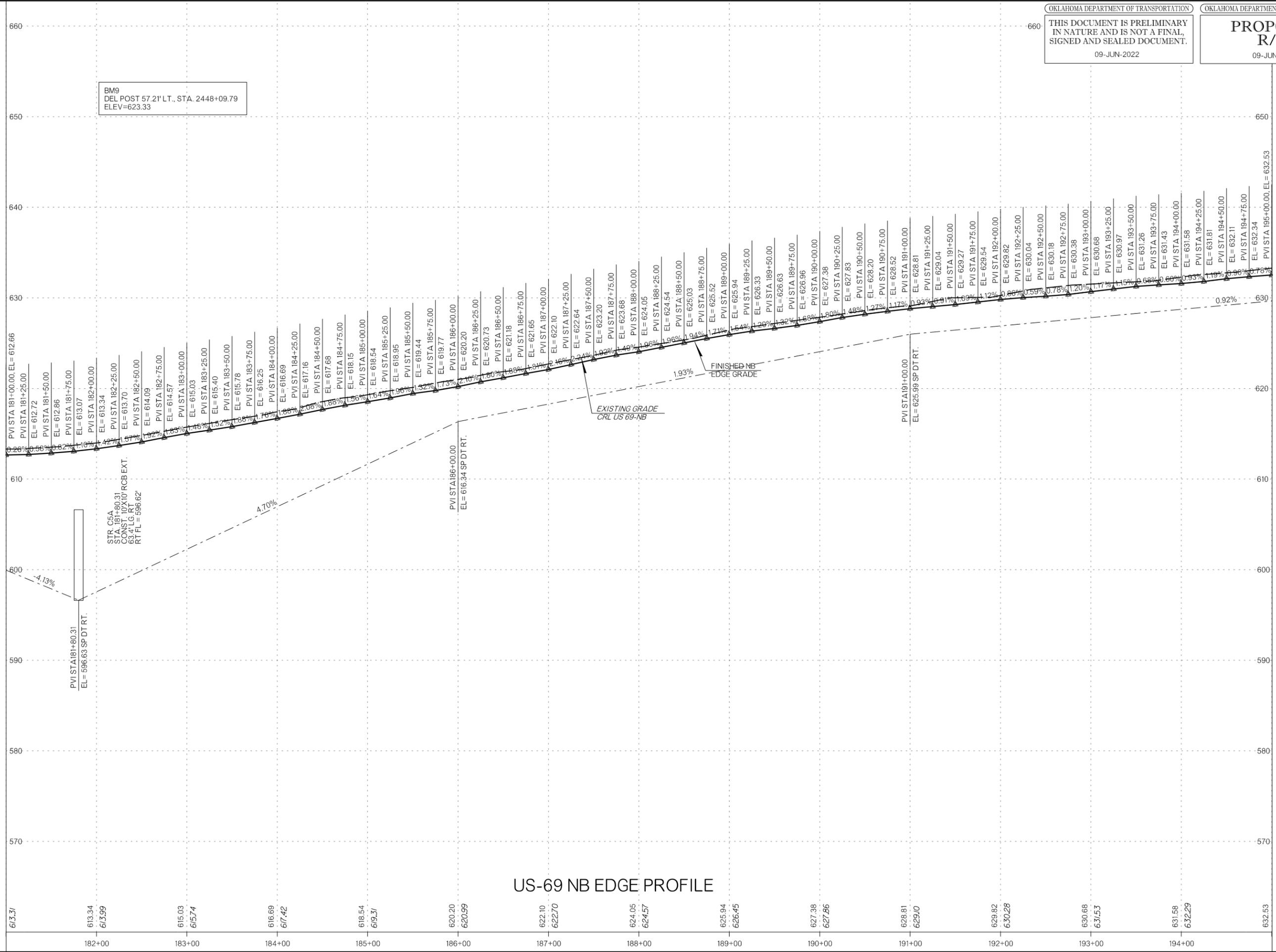
**PLAN SHEET**

MATCH LINE - STA 181+00

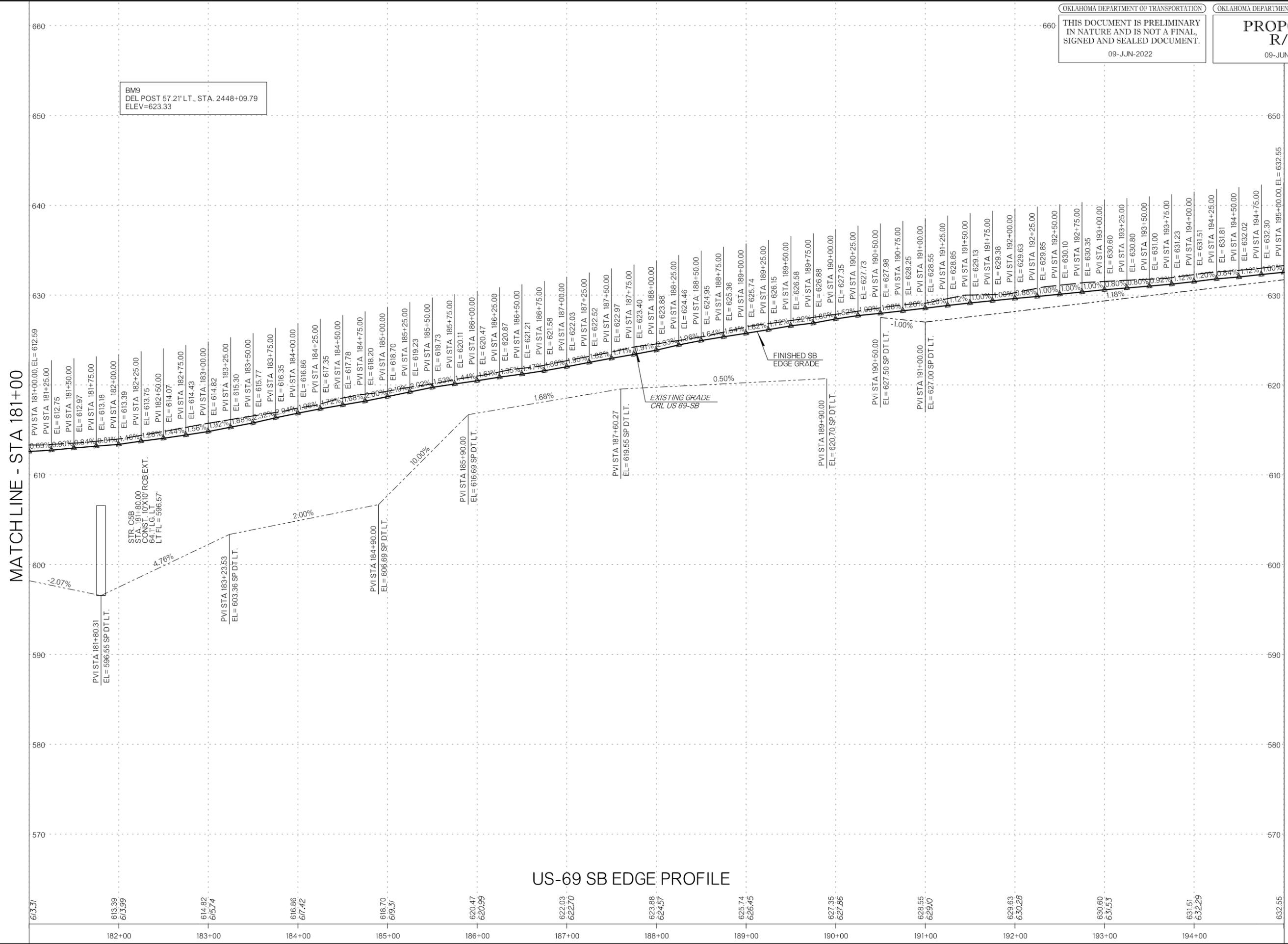
MATCH LINE - STA 195+00

MATCHLINE - STA 181+00

MATCHLINE - STA 195+00



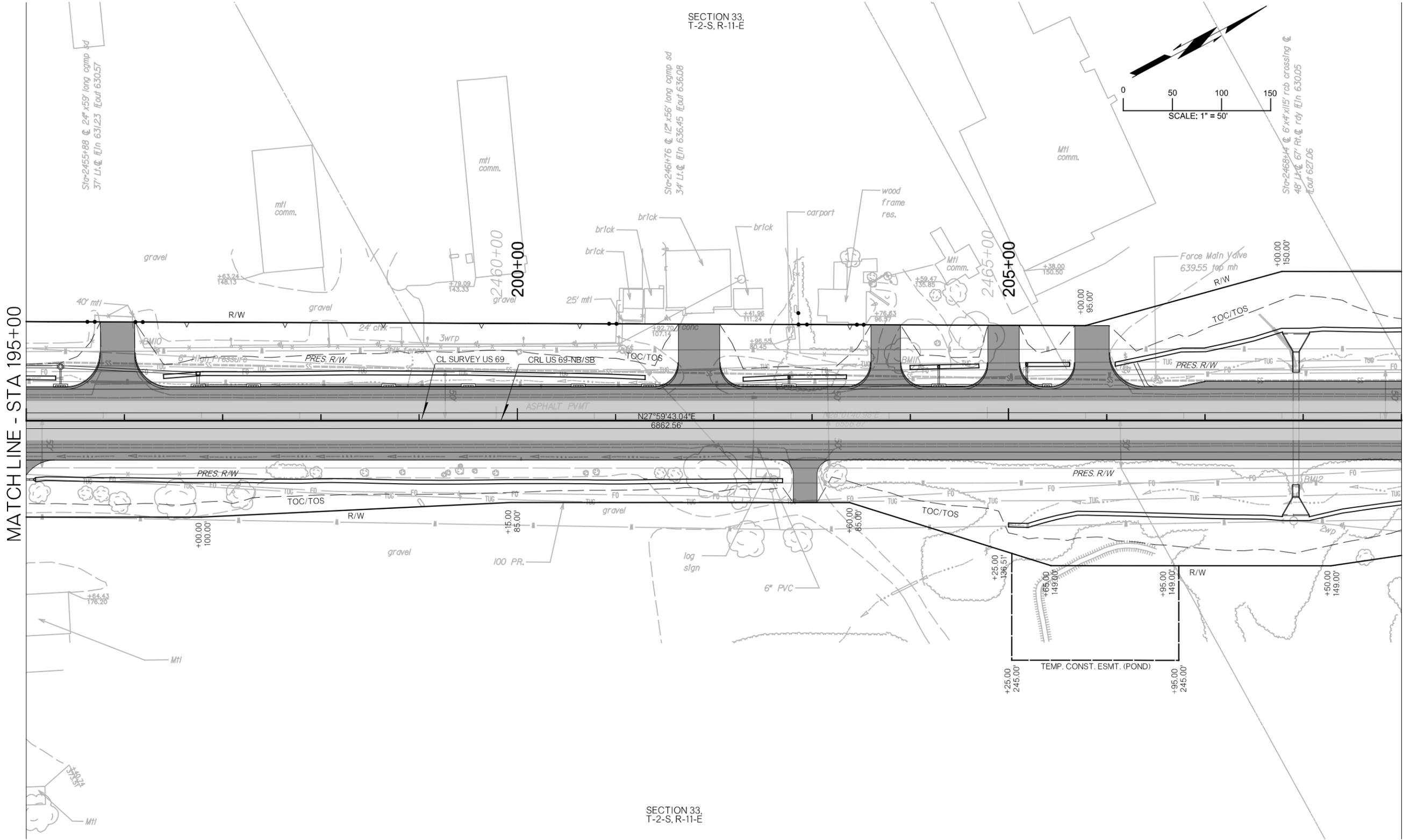
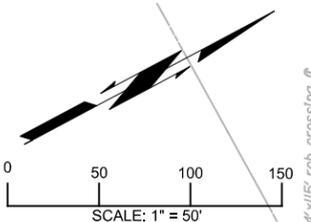
MATCHLINE - STA 181+00



MATCHLINE - STA 195+00

SECTION 33,  
 T-2-S, R-11-E

SECTION 33,  
 T-2-S, R-11-E



MATCHLINE - STA 195+00

MATCHLINE - STA 209+00

PLOT DATE: 09-JUN-2022 09:22 AM  
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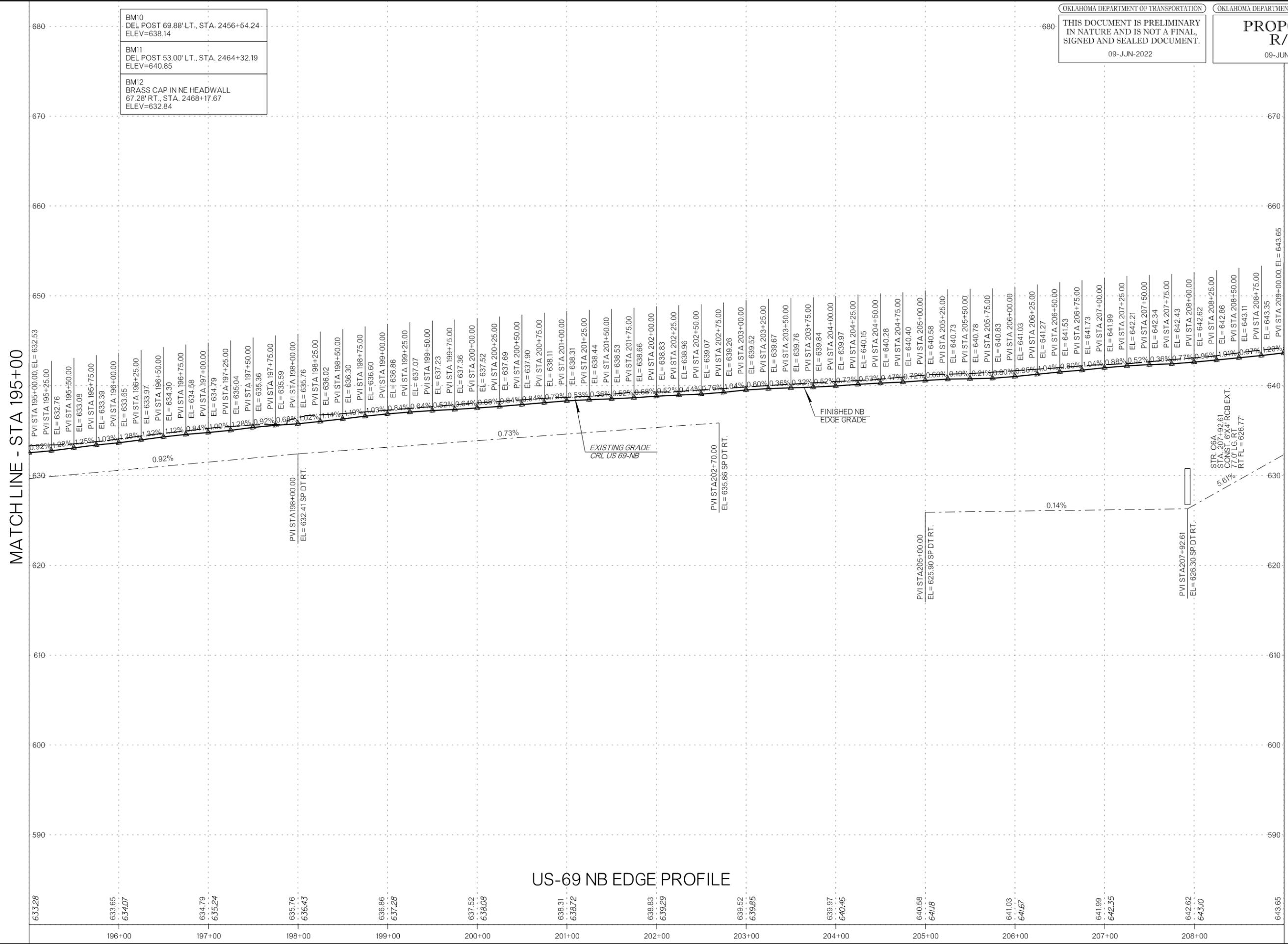
BM10  
 DEL POST 69.88' LT., STA. 2456+54.24  
 ELEV=638.14

BM11  
 DEL POST 53.00' LT., STA. 2464+32.19  
 ELEV=640.85

BM12  
 BRASS CAP IN NE HEADWALL  
 67.28' RT., STA. 2468+17.67  
 ELEV=632.84

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TGG		
CHECKED	MJG		
APPROVED			
SQUAD	<b>HNTB</b>		
COUNTY <u>ATOKA</u> HIGHWAY <u>US 69</u> STATE JOB NO <u>30410(04)</u> SHEET NO <u>R031</u>			<b>PLAN SHEET</b>

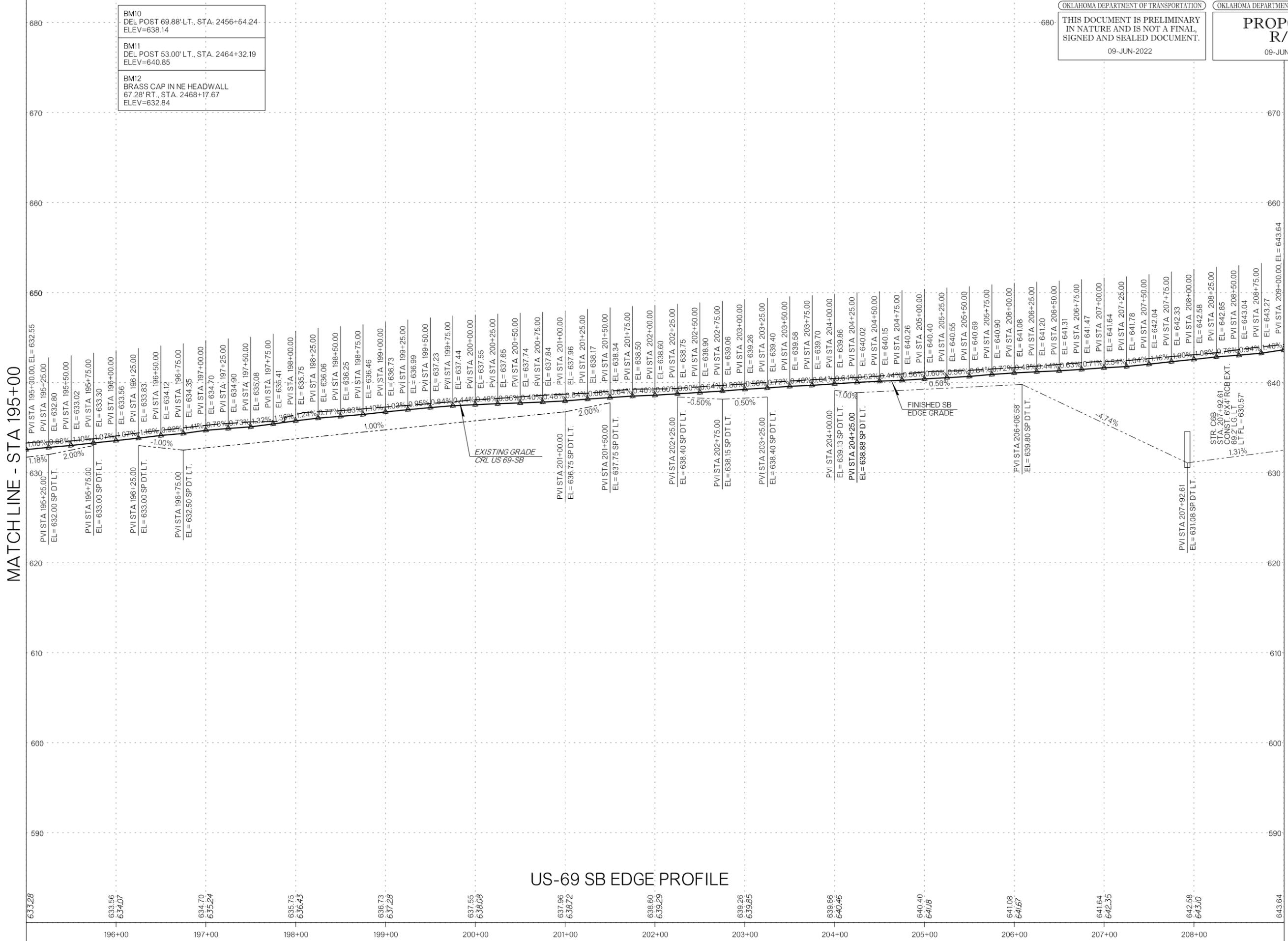
MATCHLINE - STA 195+00



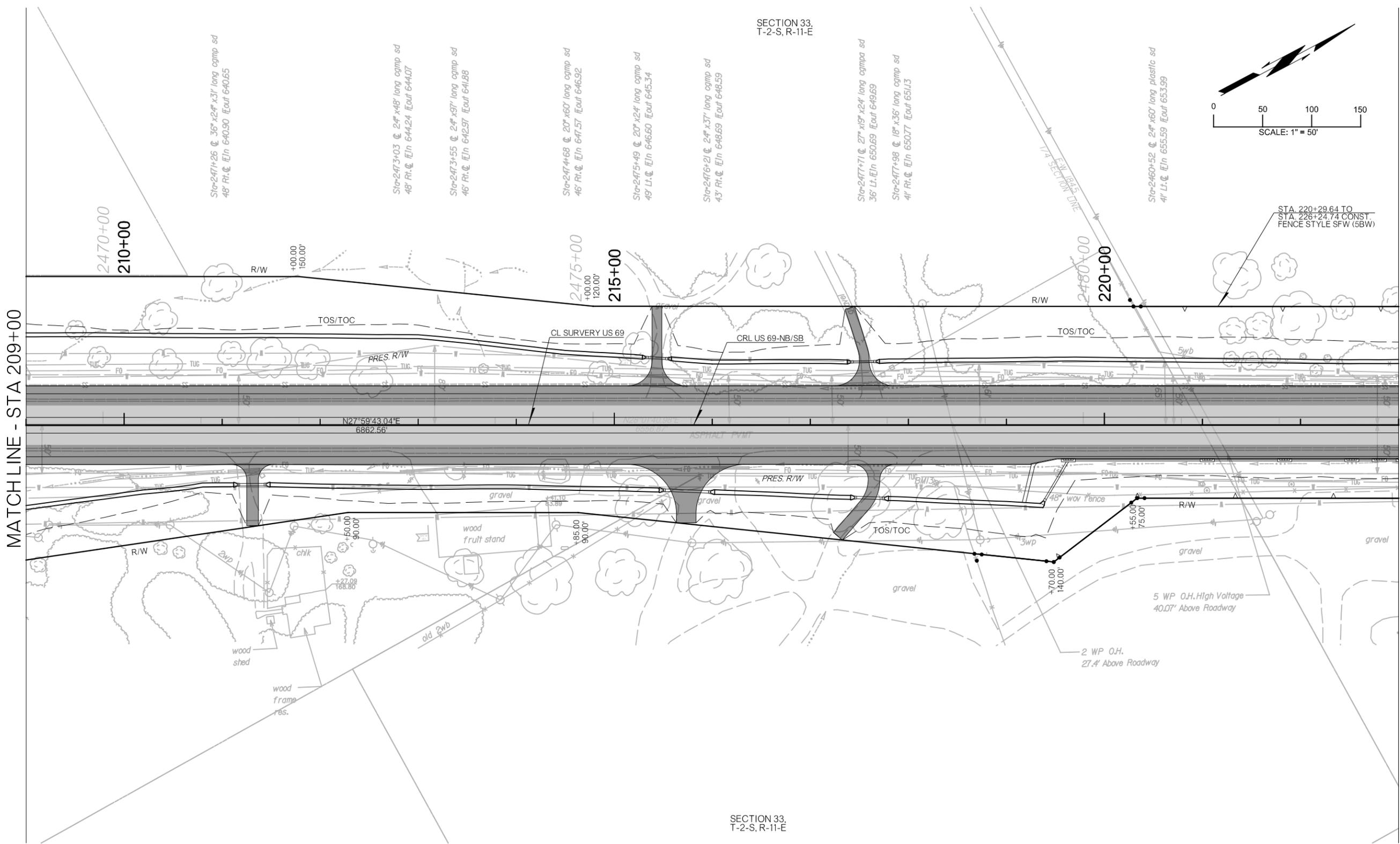
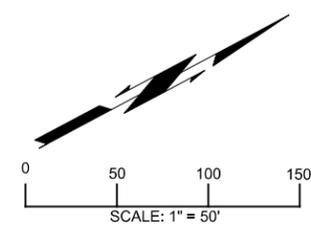
MATCHLINE - STA 209+00

US-69 NB EDGE PROFILE

MATCHLINE - STA 195+00



MATCHLINE - STA 209+00



SECTION 33,  
T-2-S, R-11-E

SECTION 33,  
T-2-S, R-11-E

BM13  
 DEL POST 59.49' RT., STA. 2478+50.12  
 ELEV=653.51

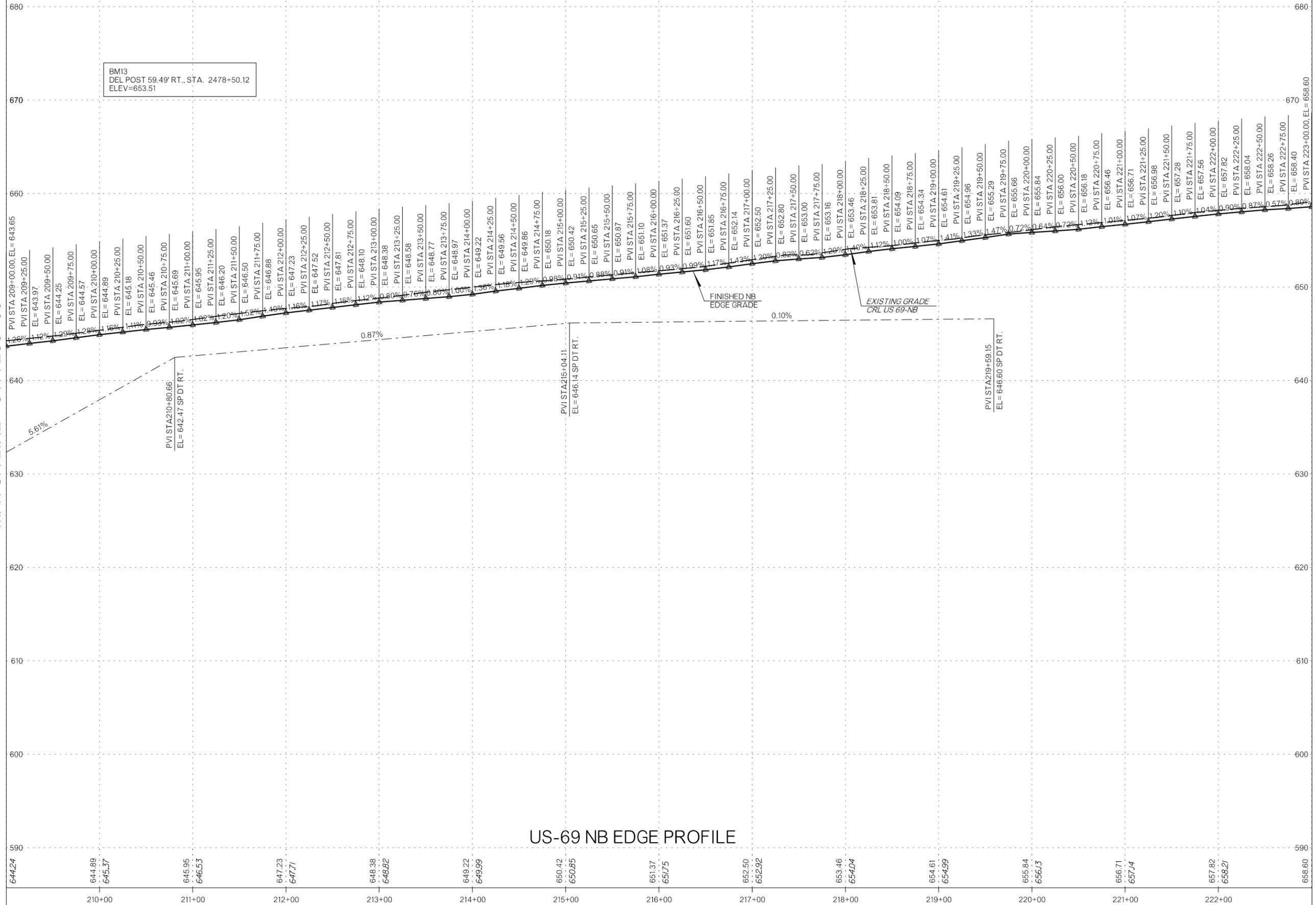
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DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG						
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	R034

PLAN SHEET

MATCHLINE - STA 209+00

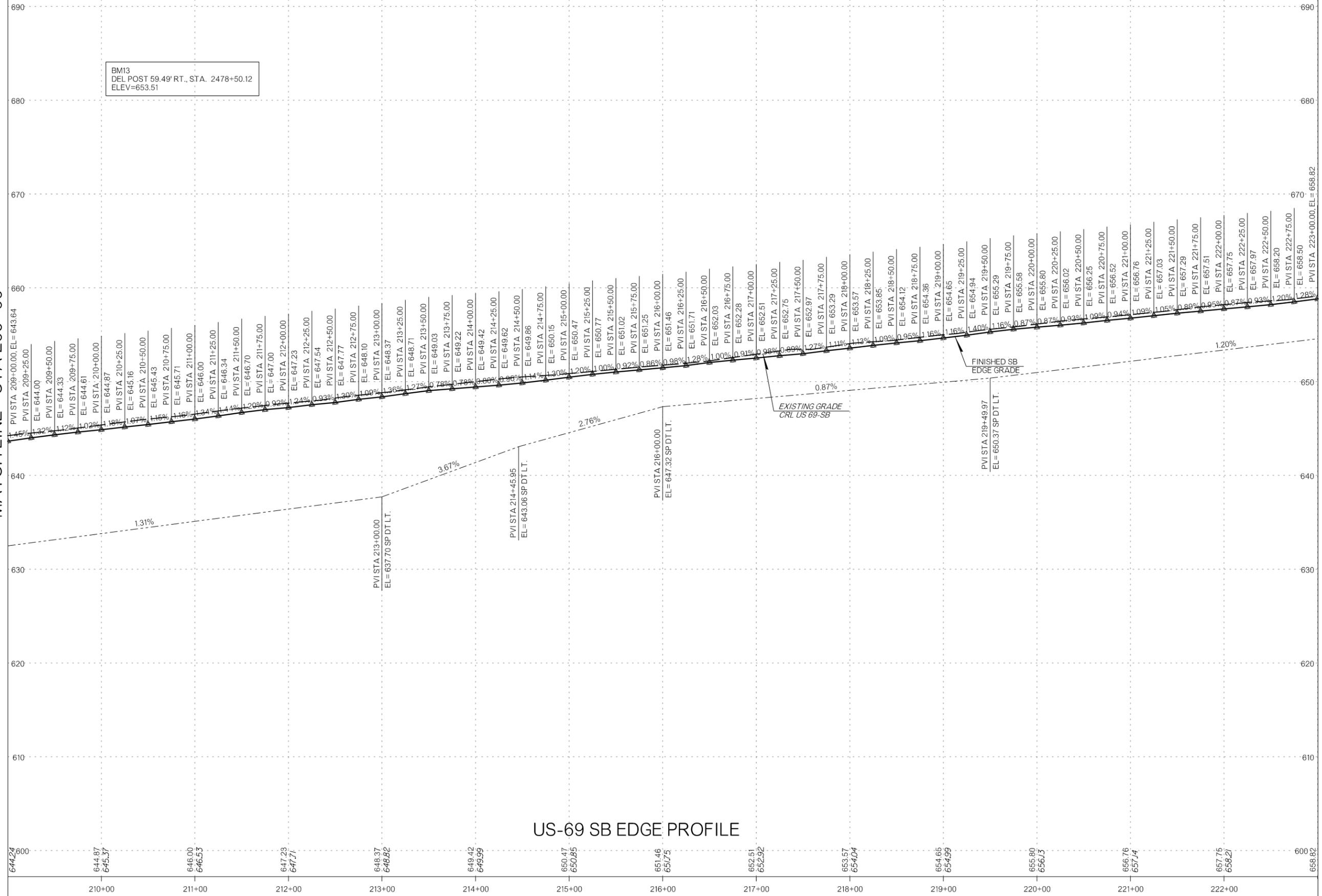
MATCHLINE - STA 223+00



US-69 NB EDGE PROFILE

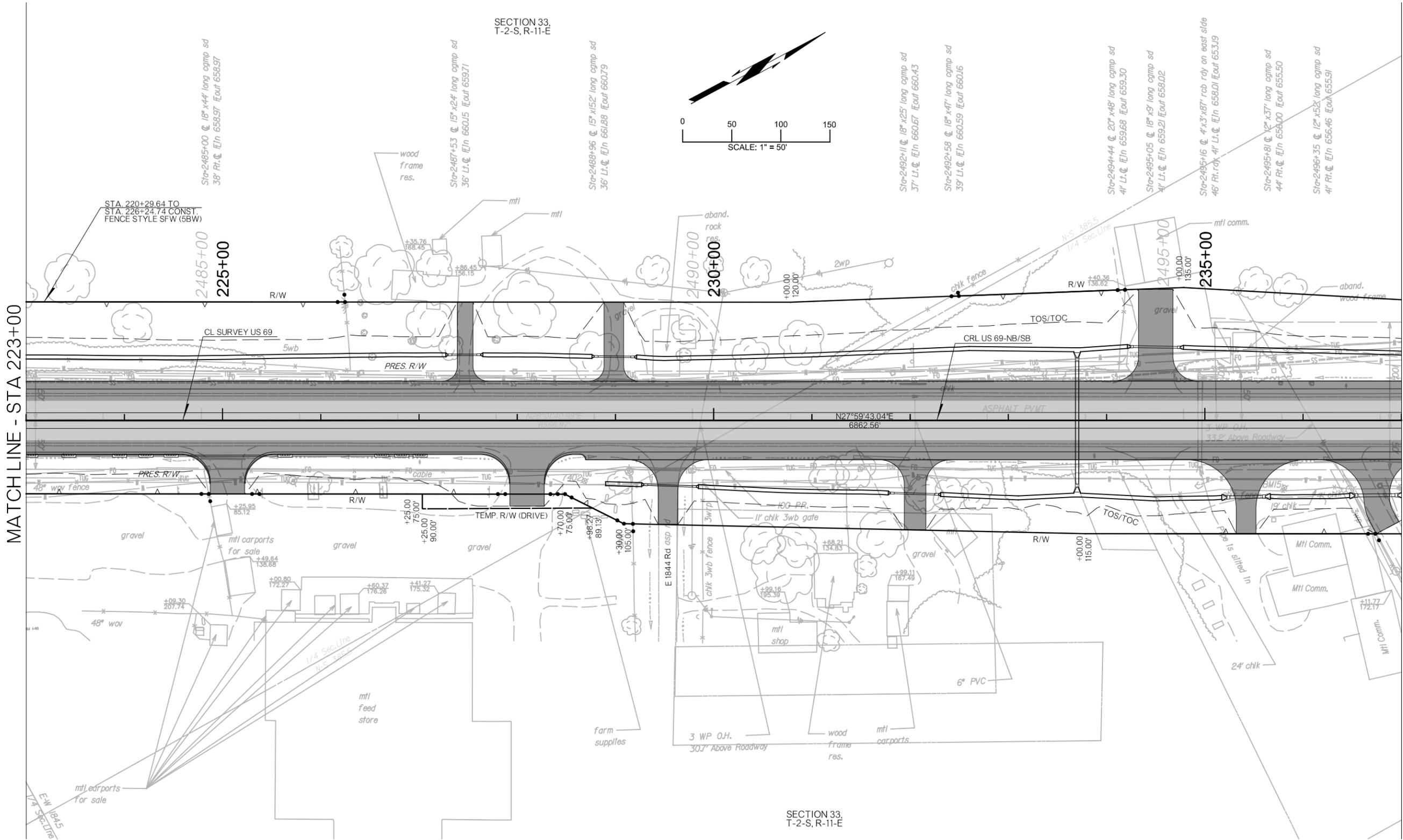
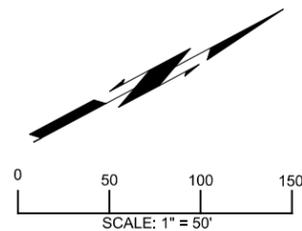
MATCHLINE - STA 209+00

MATCHLINE - STA 223+00



US-69 SB EDGE PROFILE

SECTION 33,  
T-2-S, R-11-E



MATCHLINE - STA 223+00

MATCHLINE - STA 237+00

7402  
1/2 IP W/CAP SET FOR CP 7402  
61.71' LT., STA. 2488+89.90  
ELEV=663.94

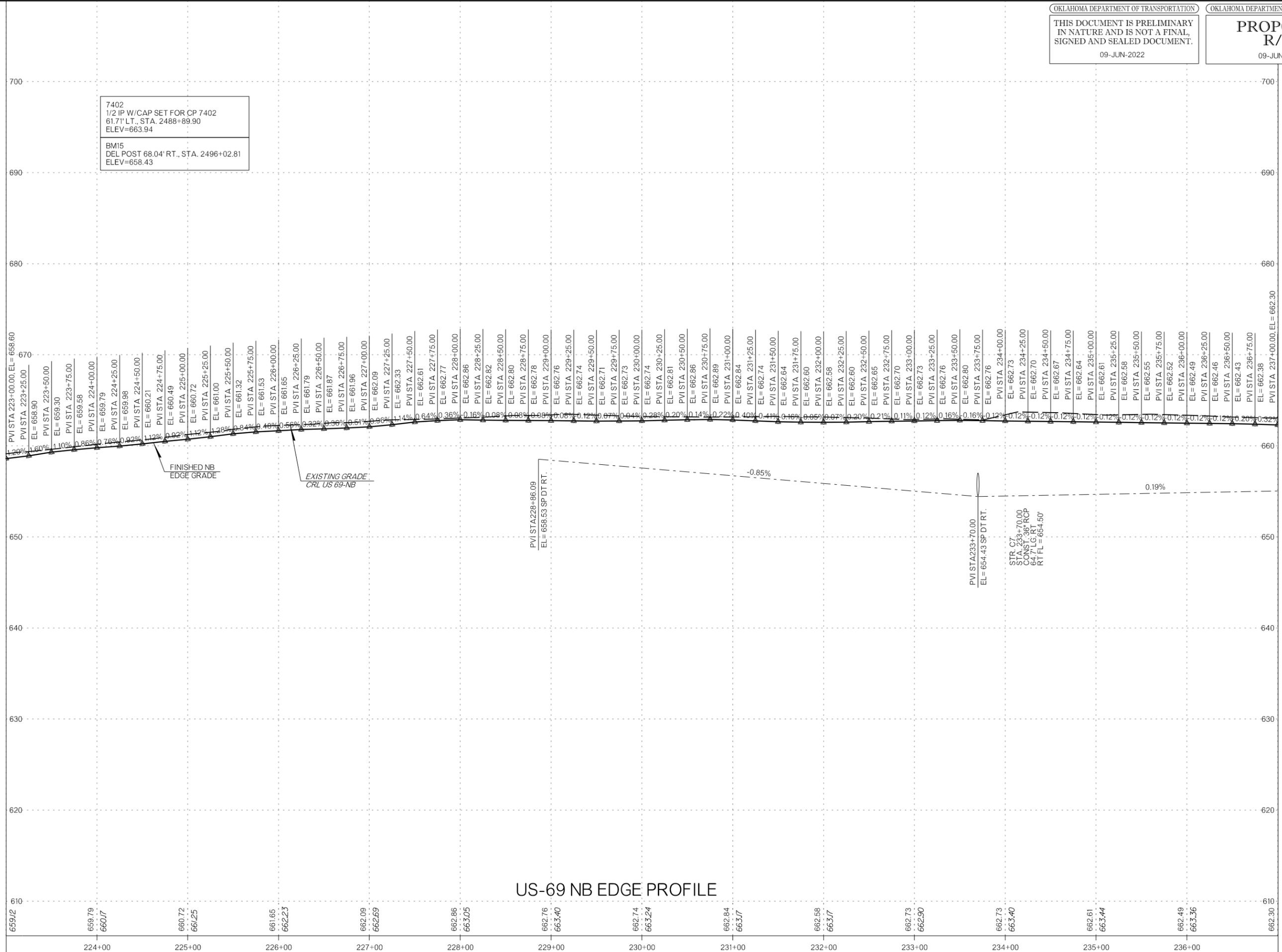
BM15  
DEL POST 68.04' RT., STA. 2496+02.81  
ELEV=658.43

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG		PLAN SHEET				
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	R037

PLOT DATE: 09-JUN-2022 09:22 AM  
FILENAME: p:\jpw-int.hntb.org\p\CentralDiv\Documents\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Plan1.dgn

MATCHLINE - STA 223+00

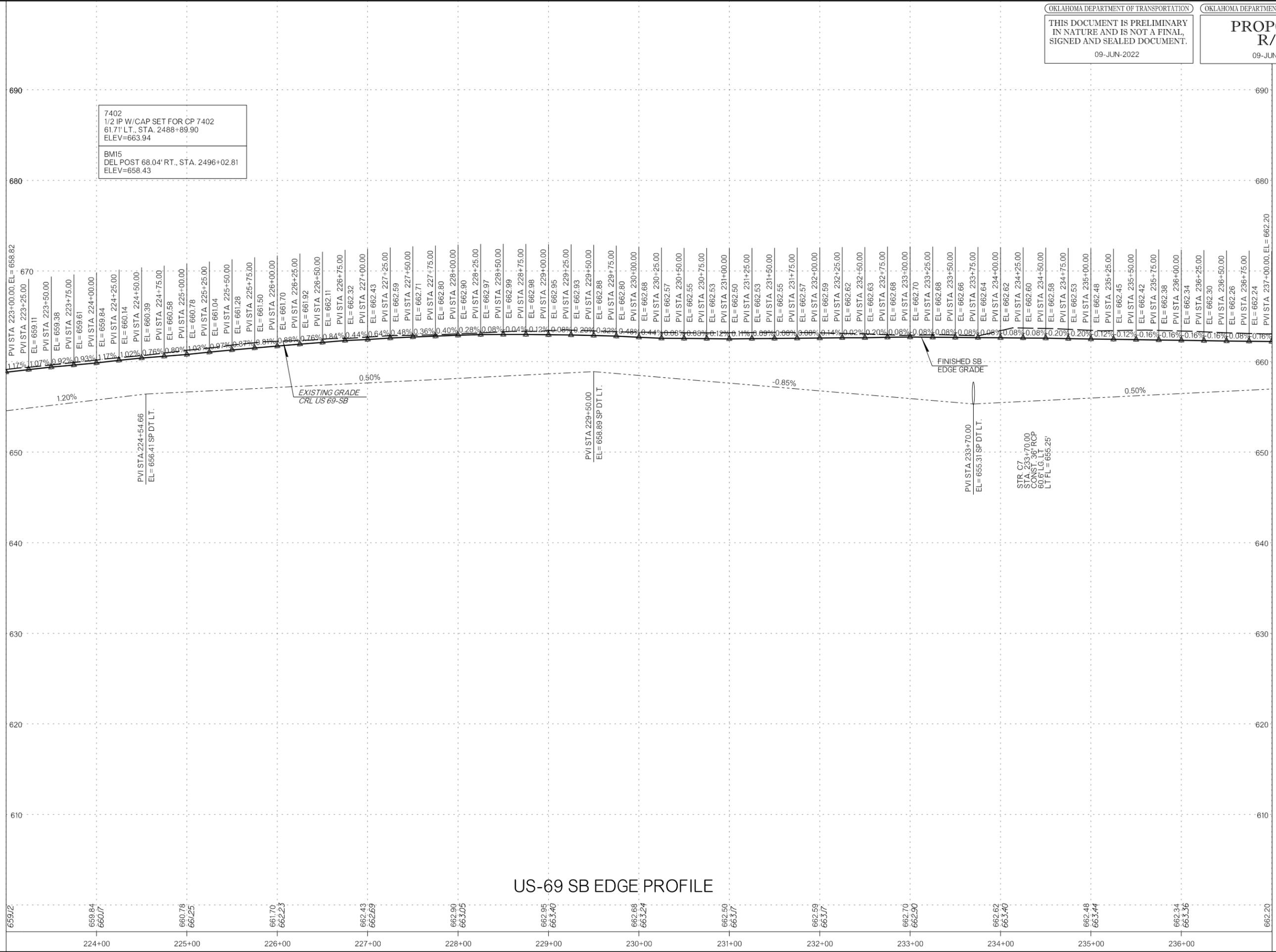
MATCHLINE - STA 237+00



US-69 NB EDGE PROFILE

MATCHLINE - STA 223+00

MATCHLINE - STA 237+00



7402  
 1/2 IP W/CAP SET FOR CP 7402  
 61.71' LT., STA. 2488+89.90  
 ELEV=663.94

BM15  
 DEL POST 68.04' RT., STA. 2496+02.81  
 ELEV=658.43

FINISHED SB  
 EDGE GRADE

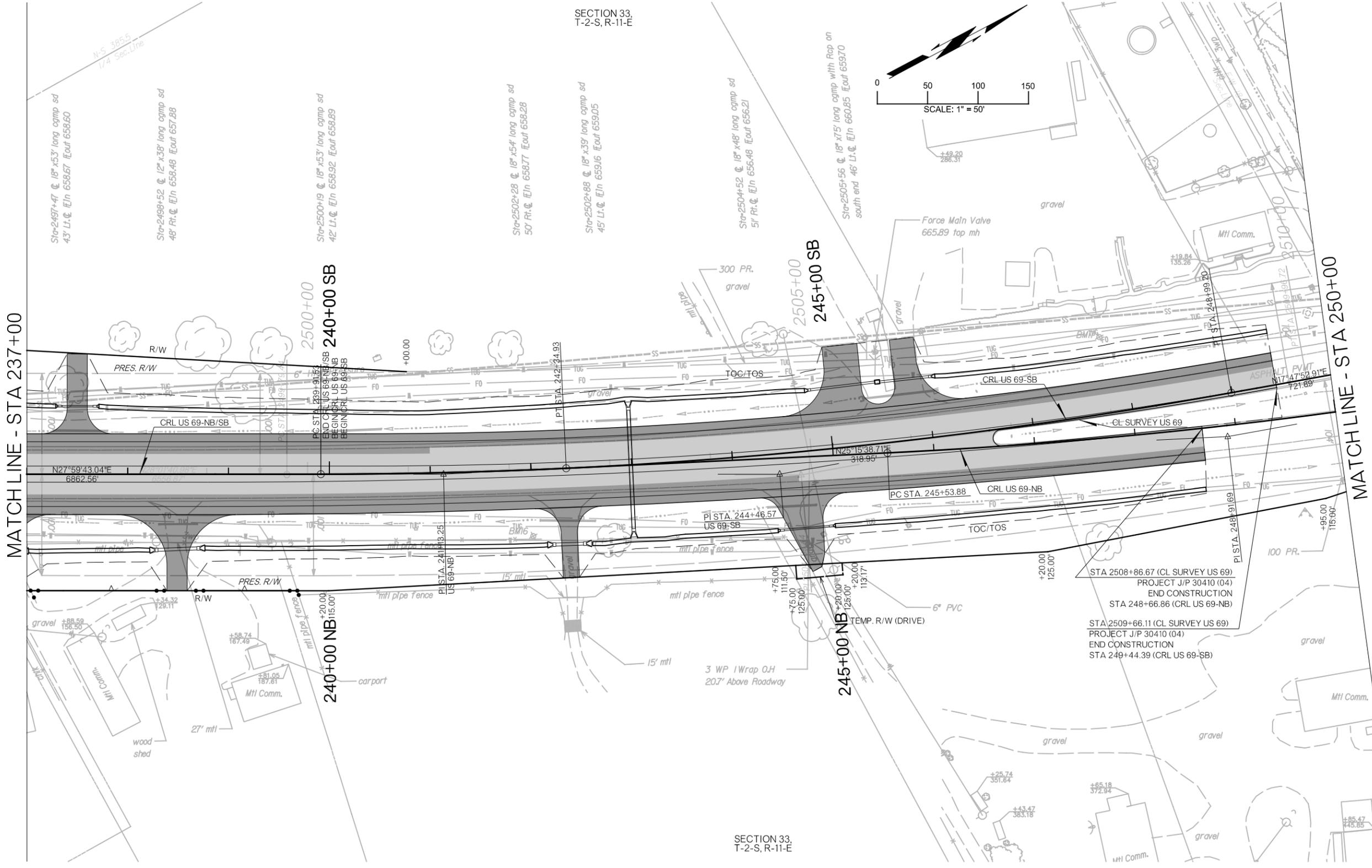
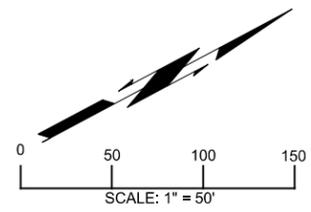
EXISTING GRADE  
 CRL US 69-SB

STA C7  
 STA 233+70.00  
 CONST 36" RCP  
 60" LG LT  
 LT FL = 655.25'

US-69 SB EDGE PROFILE

SECTION 33,  
 T-2-S, R-11-E

SECTION 33,  
 T-2-S, R-11-E



MATCHLINE - STA 237+00

MATCHLINE - STA 250+00

BM16  
 DEL POST 65.98' RT., STA. 2502+21.10  
 ELEV=658.66

BM17  
 DEL POST 78.5' LT., STA. 2507+98.81  
 ELEV=663.99

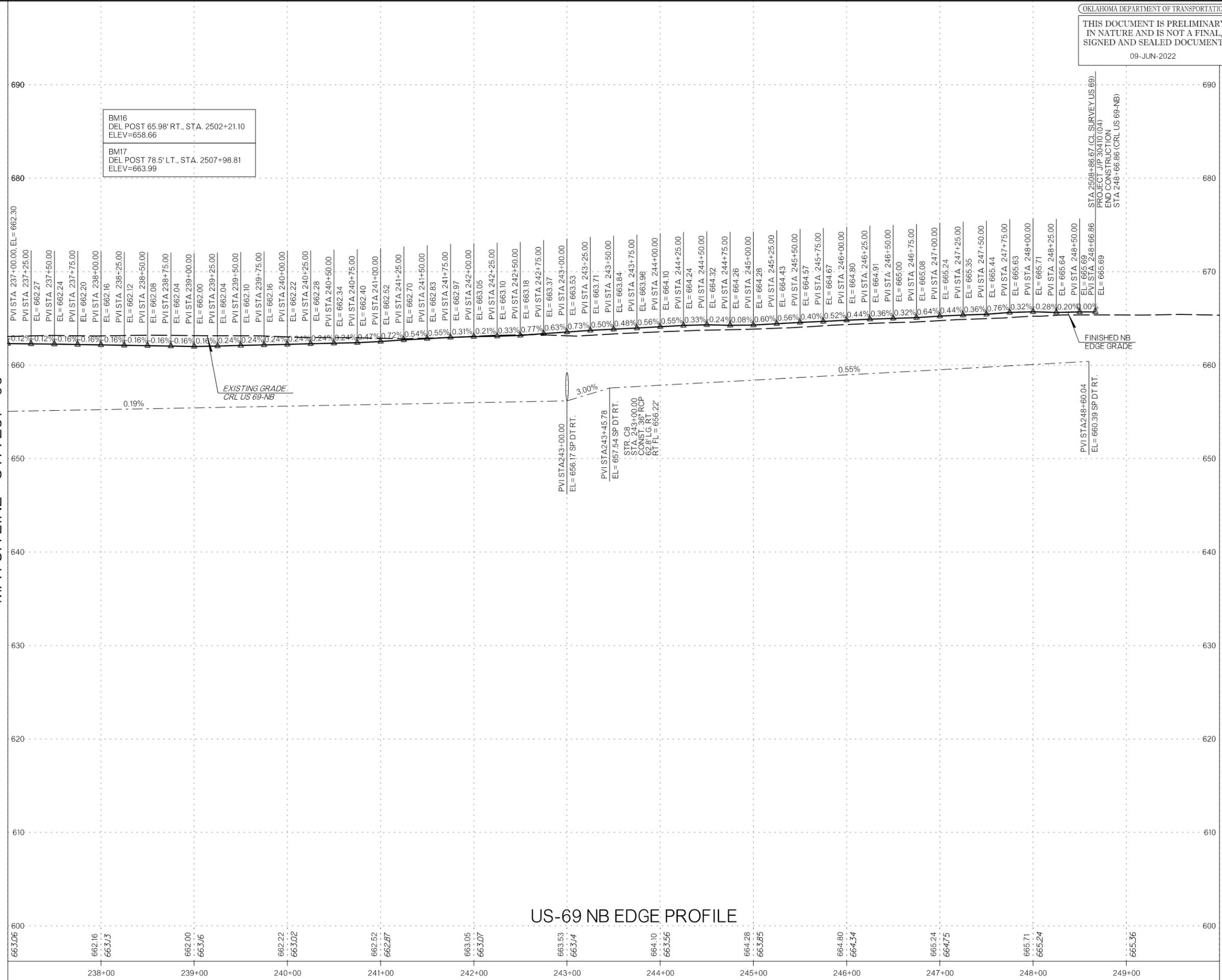
DESIGN	RBH
DRAWN	TGG
CHECKED	MJG
APPROVED	
SQUAD	<b>HNTB</b>

OKLAHOMA DEPARTMENT OF TRANSPORTATION  
**PLAN SHEET**  
 COUNTY ATOKA HIGHWAY US 69 STATE JOB NO 30410(04) SHEET NO R040

PLOT DATE: 09-JUN-2022  
 FILENAME: p:\jpw-int.hntb.org\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Plan1.dgn

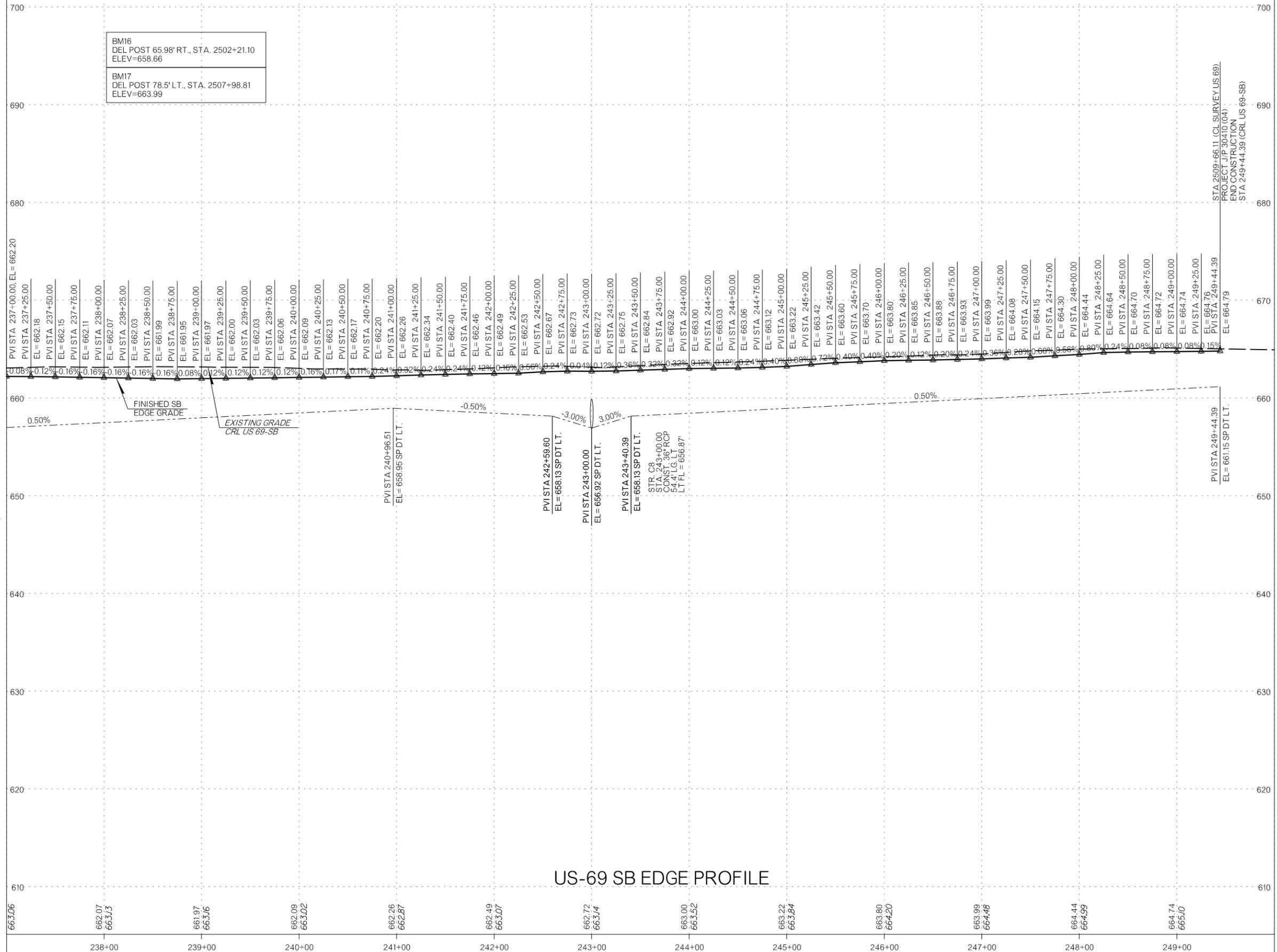
MATCHLINE - STA 237+00

MATCHLINE - STA 250+00

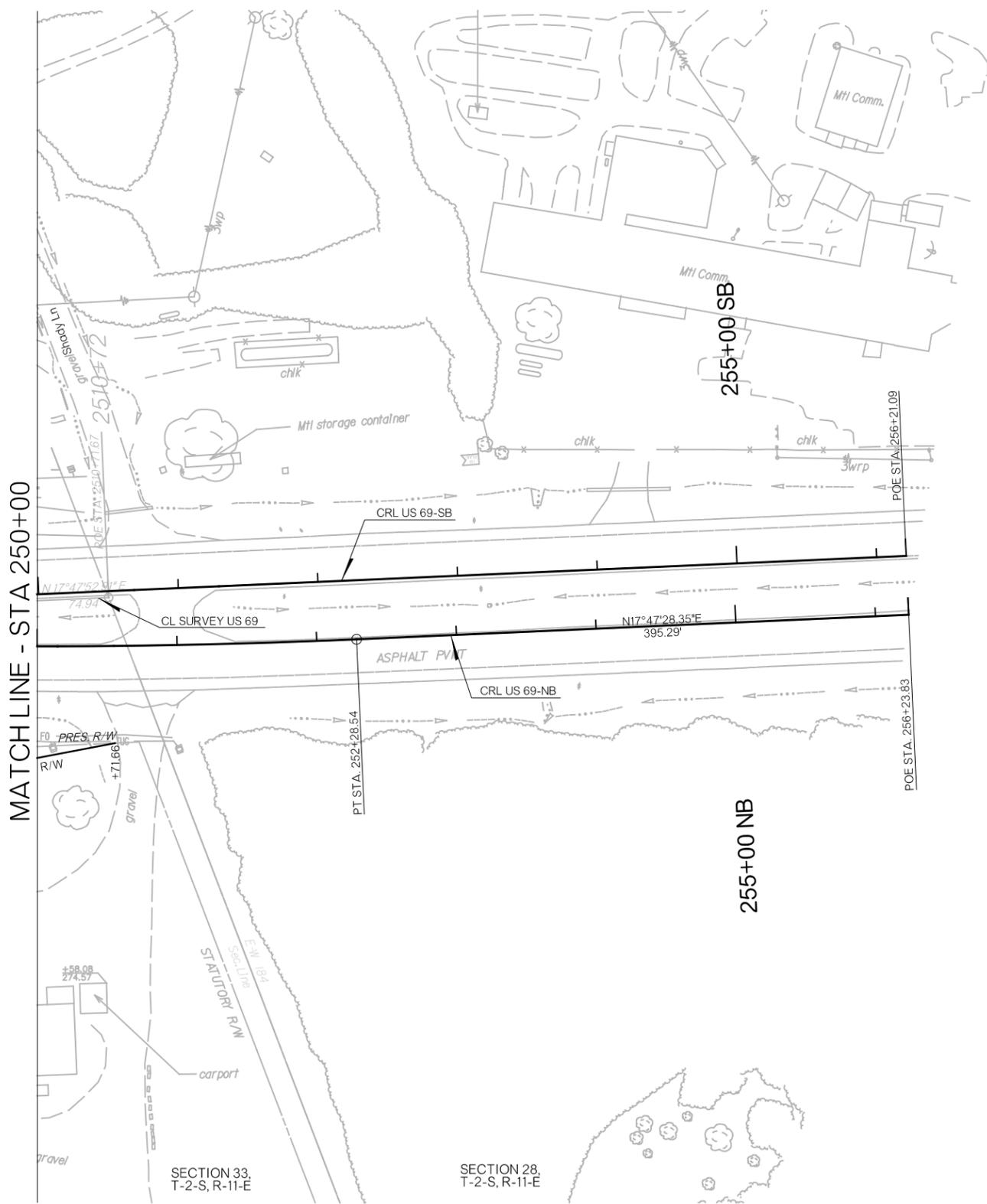


MATCHLINE - STA 237+00

MATCHLINE - STA 250+00



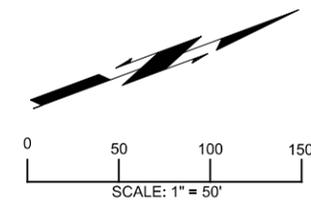
US-69 SB EDGE PROFILE



SECTION 28,  
T-2-S, R-11-E

SECTION 33,  
T-2-S, R-11-E

SECTION 28,  
T-2-S, R-11-E



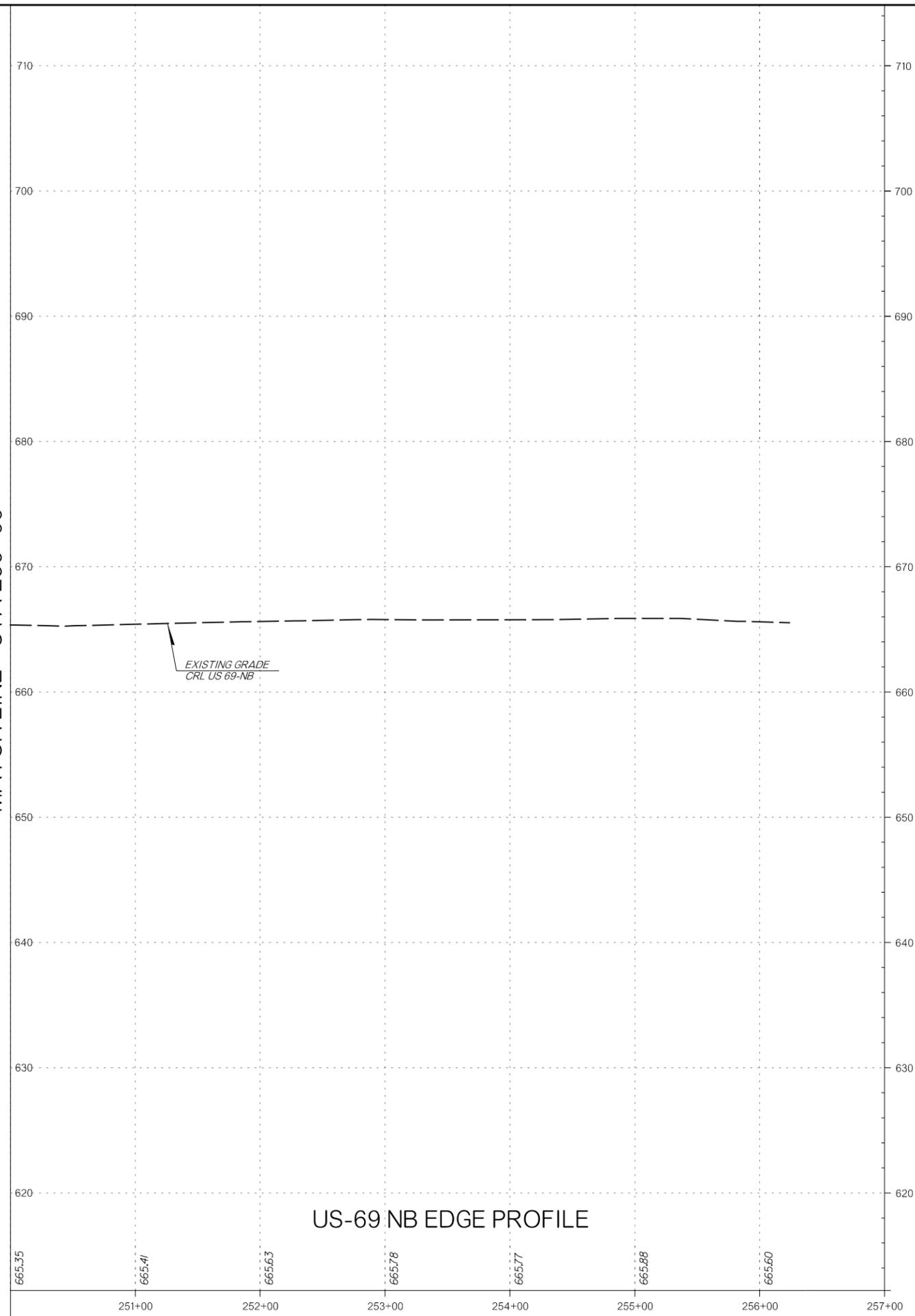
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FILENAME: p:\pw-int\hntb.org\Projects\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Plan1.dgn

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	TGG						
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTB</b>						
COUNTY	ATOKA	HIGHWAY	US 69	STATE JOB NO	30410(04)	SHEET NO	R043

PLAN SHEET

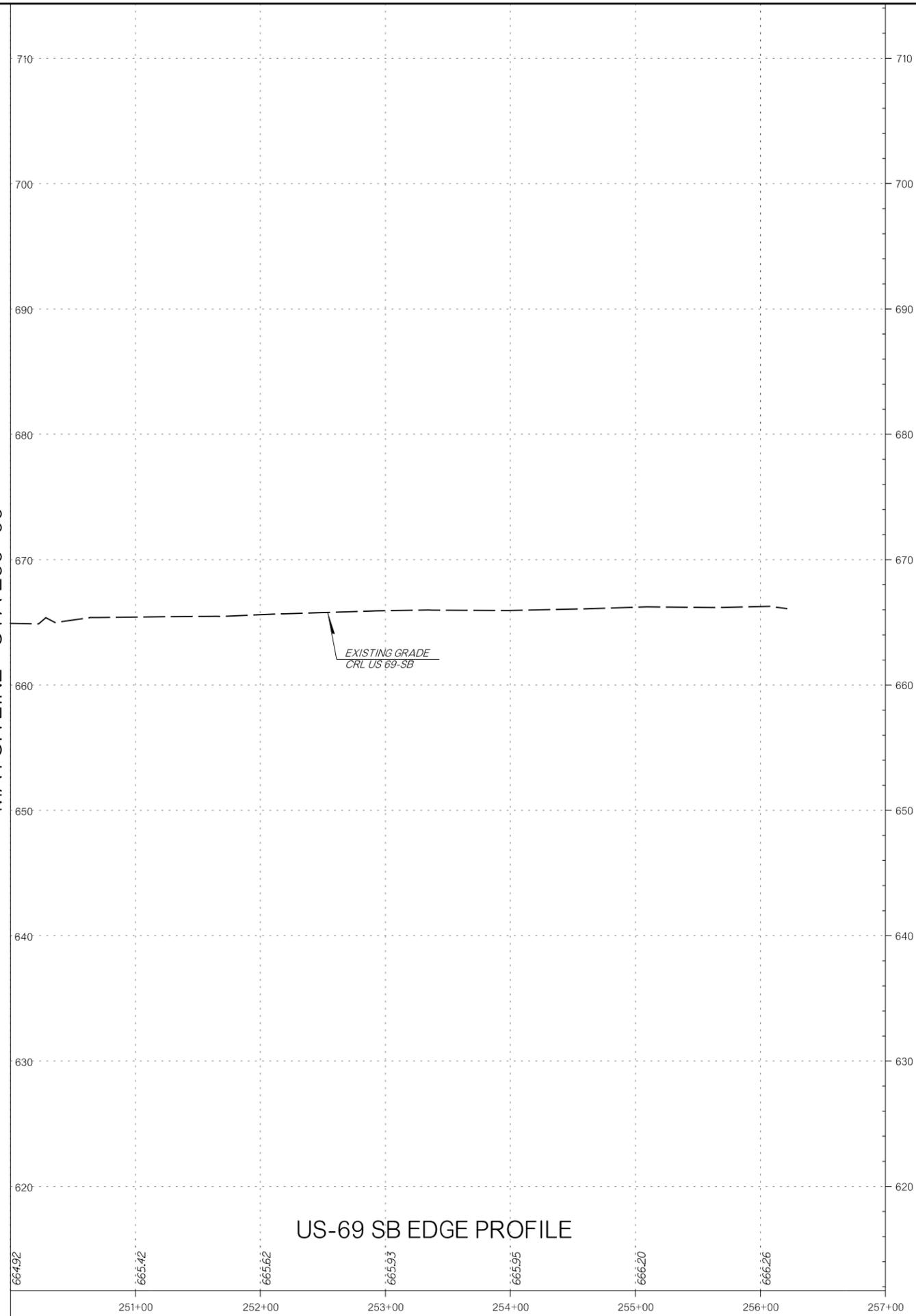
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FILENAME: p:\pw-int\hnb.org\pw\CentralDiv\Documents\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Profiles 1.dgn

MATCHLINE - STA 250+00

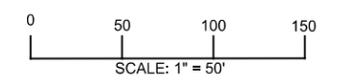


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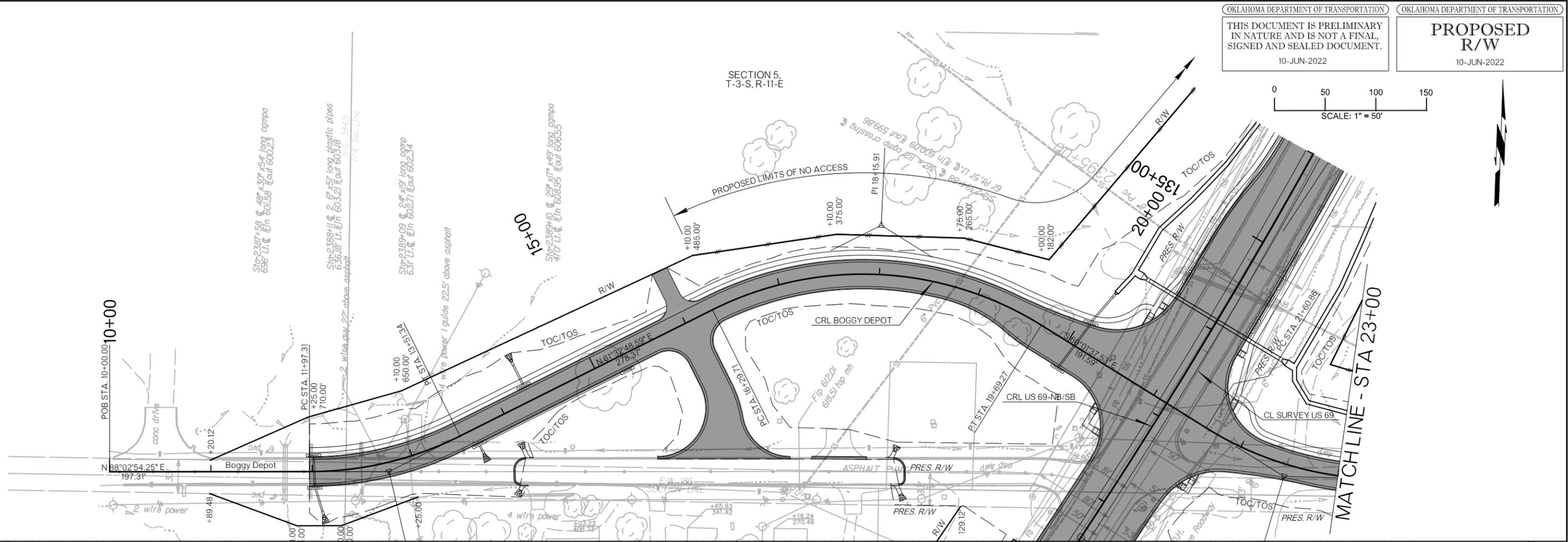
MATCHLINE - STA 250+00



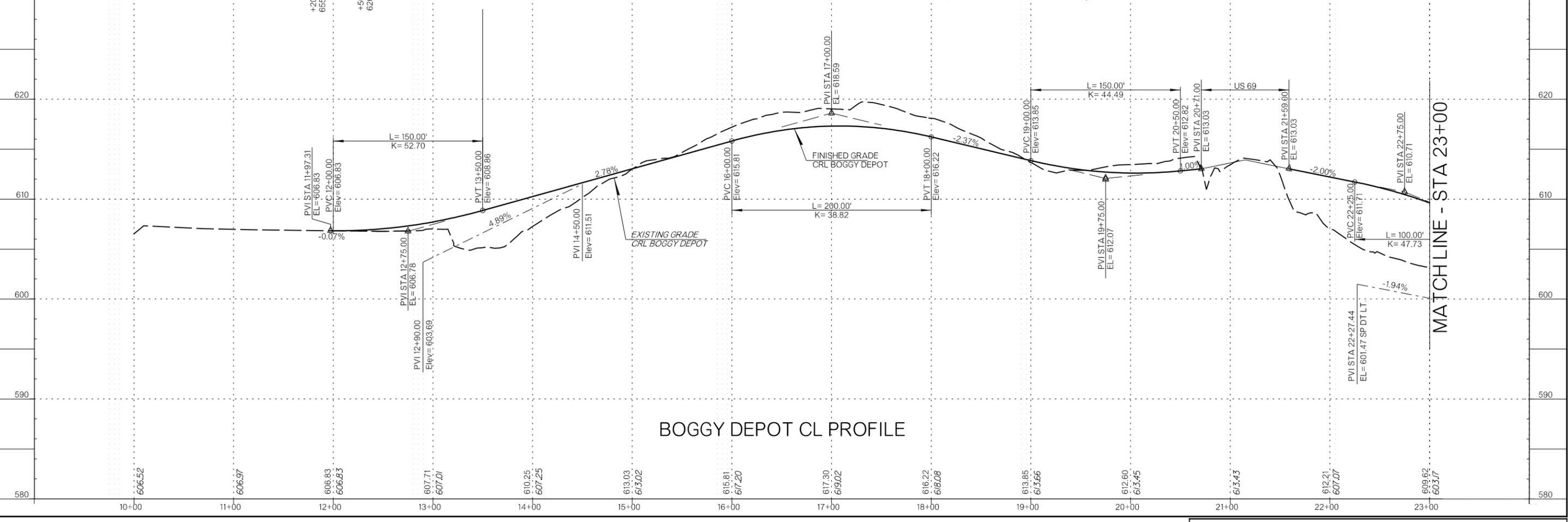
US-69 SB EDGE PROFILE



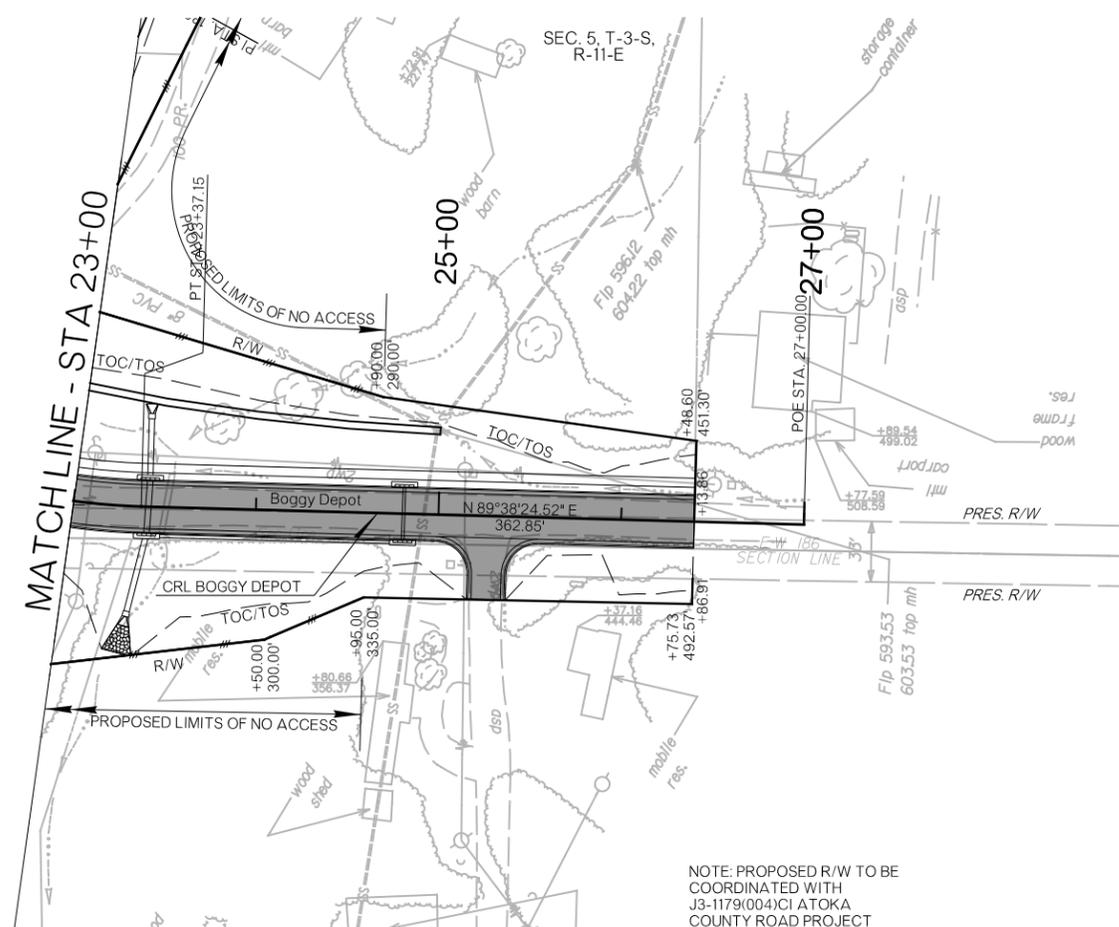
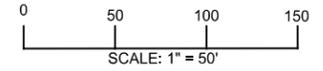
SECTION 5,  
T-3-S,R-11-E



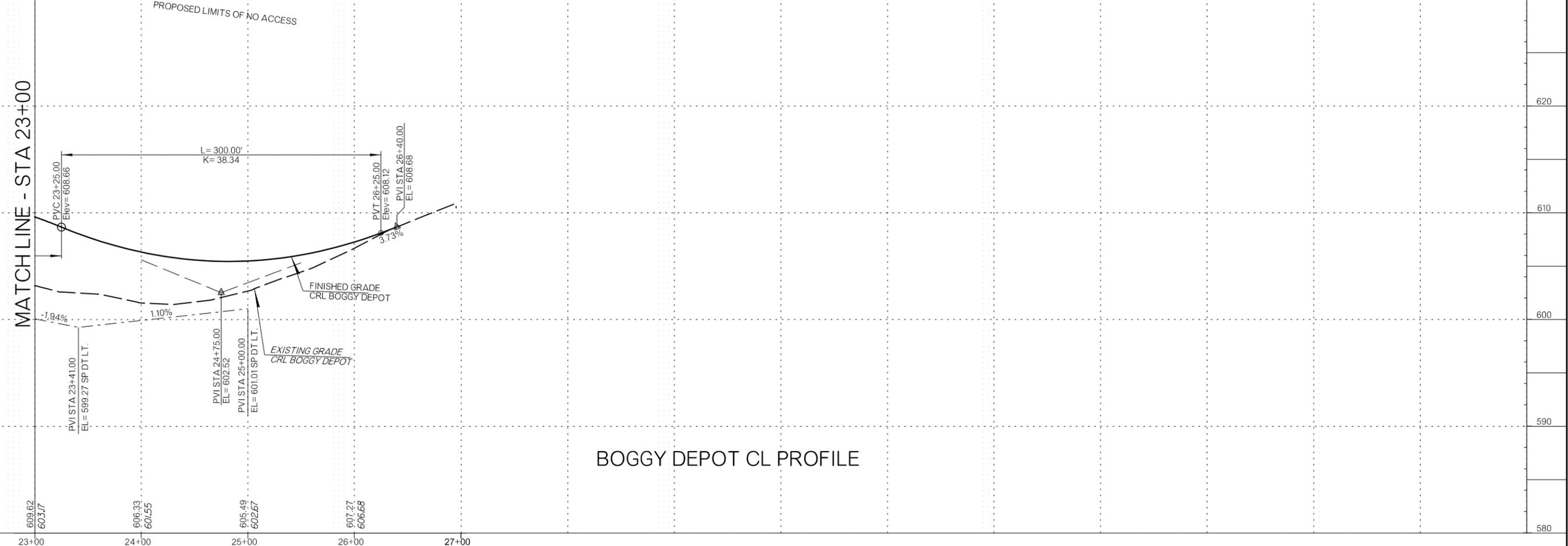
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BOGGY DEPOT CL PROFILE

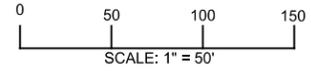


NOTE: PROPOSED R/W TO BE  
 COORDINATED WITH  
 J3-1179(004)CI ATOKA  
 COUNTY ROAD PROJECT



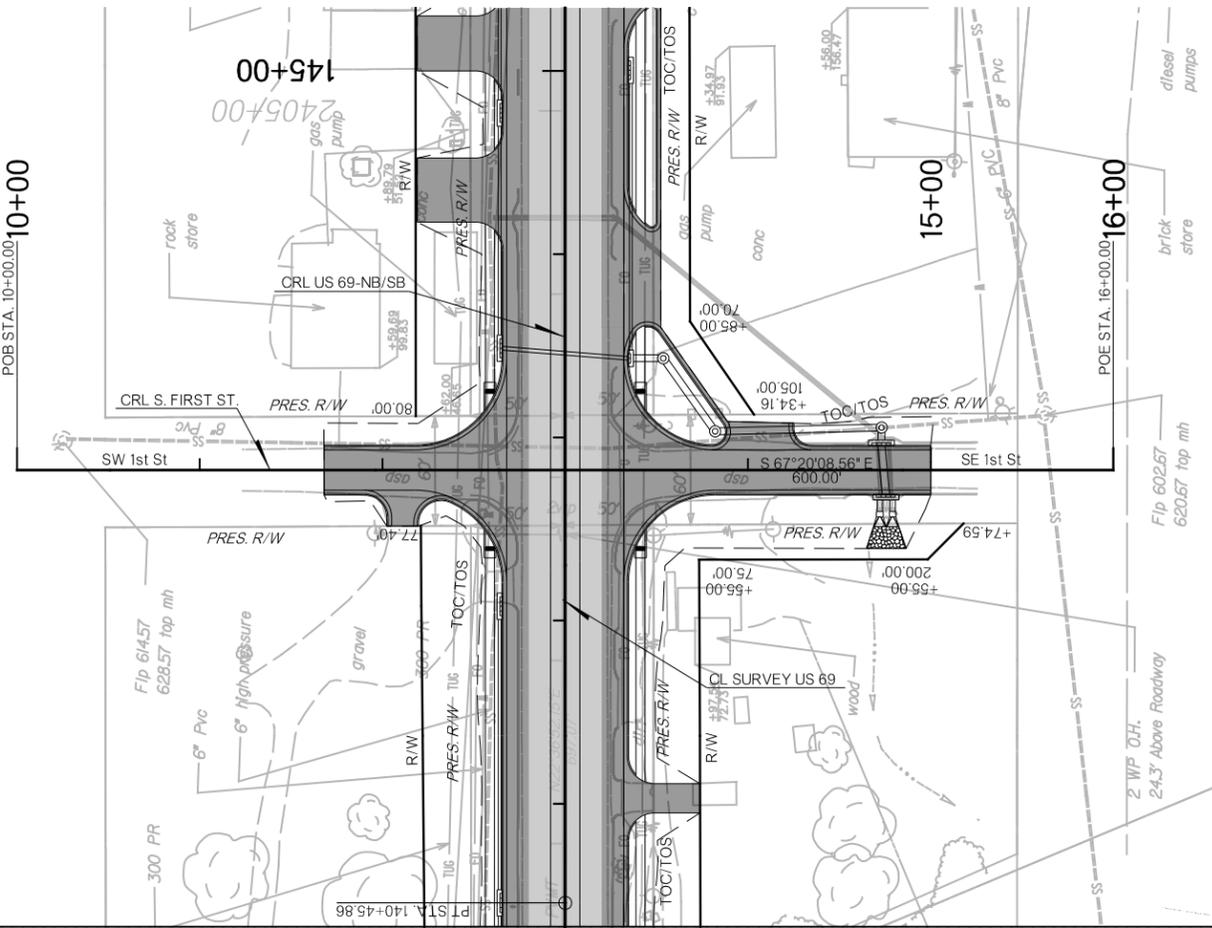
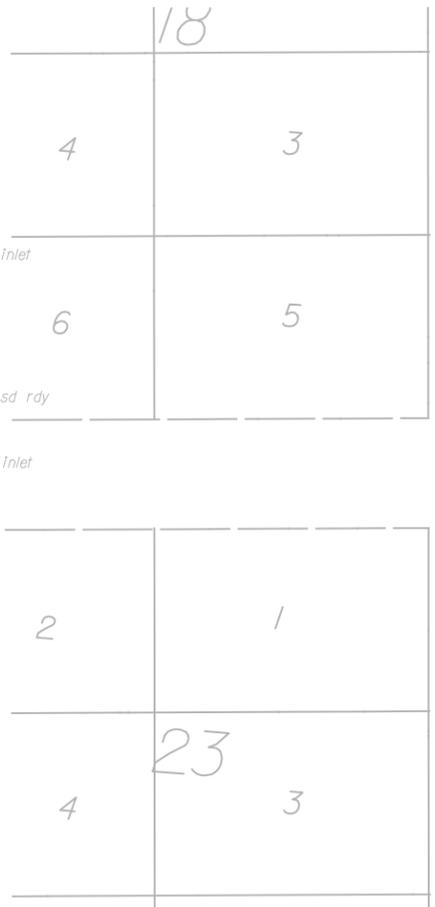
BOGGY DEPOT CL PROFILE

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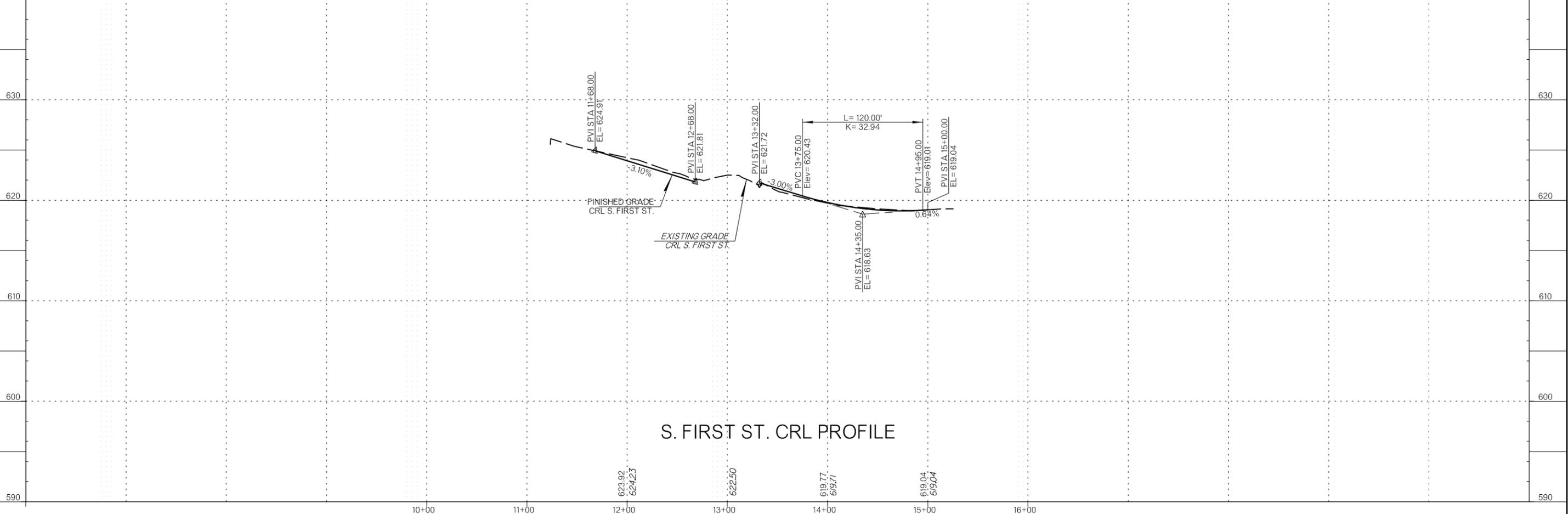


Sta=2404+51 @ 2.5'x2' rcb  
 27' lt.Drop Inlet 27' rt.Drop Inlet  
 cross @ fl in 619.01 fl out 618.54  
 with 1 24" rcp entering the drop inlet  
 the end is unknown.  
 1 24" x189' long rcp sd fl in 418.41  
 fl out 415.48

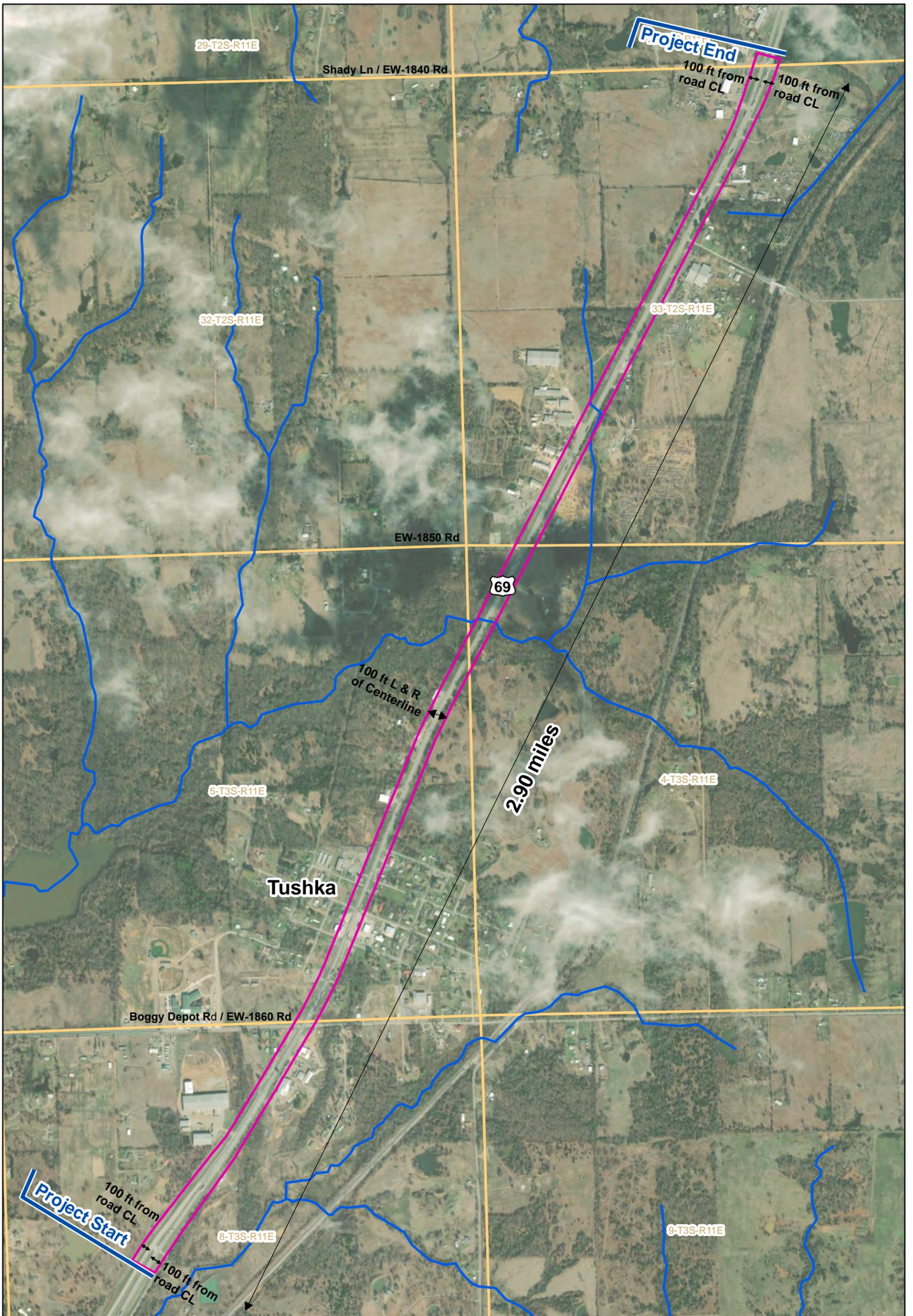
Sta=2403+03 @ 2 24" x30' rcp sd rdy  
 15' lt.Drop Inlet 15' rt.Drop Inlet  
 17.3' Rt. @ fl in 615.48 fl out 615.25  
 with 2 36" rcp exiting the drop inlet  
 silted in FL 614.99 fl out 614.82



PLOT DATE: 09-JUN-2022  
 FILENAME: p:\p\int.hntb.org\pw\CentralDiv\Documents\Oklahoma Projects\77746 US 69 through Tushka\Production\Roadway\30410(04)-Plan1.dgn



S. FIRST ST. CRL PROFILE



**COMMENTS/LEGEND**

- NEPA Study Footprint
- Mapped Streams
- Sections



**NEPA Study Area Overview**

JP 30410(04)  
 Grade, Drain & Surface US-69: From 12 miles north of Bryan County line, extend north approximately 2.5 miles through Tushka, Atoka County, OK



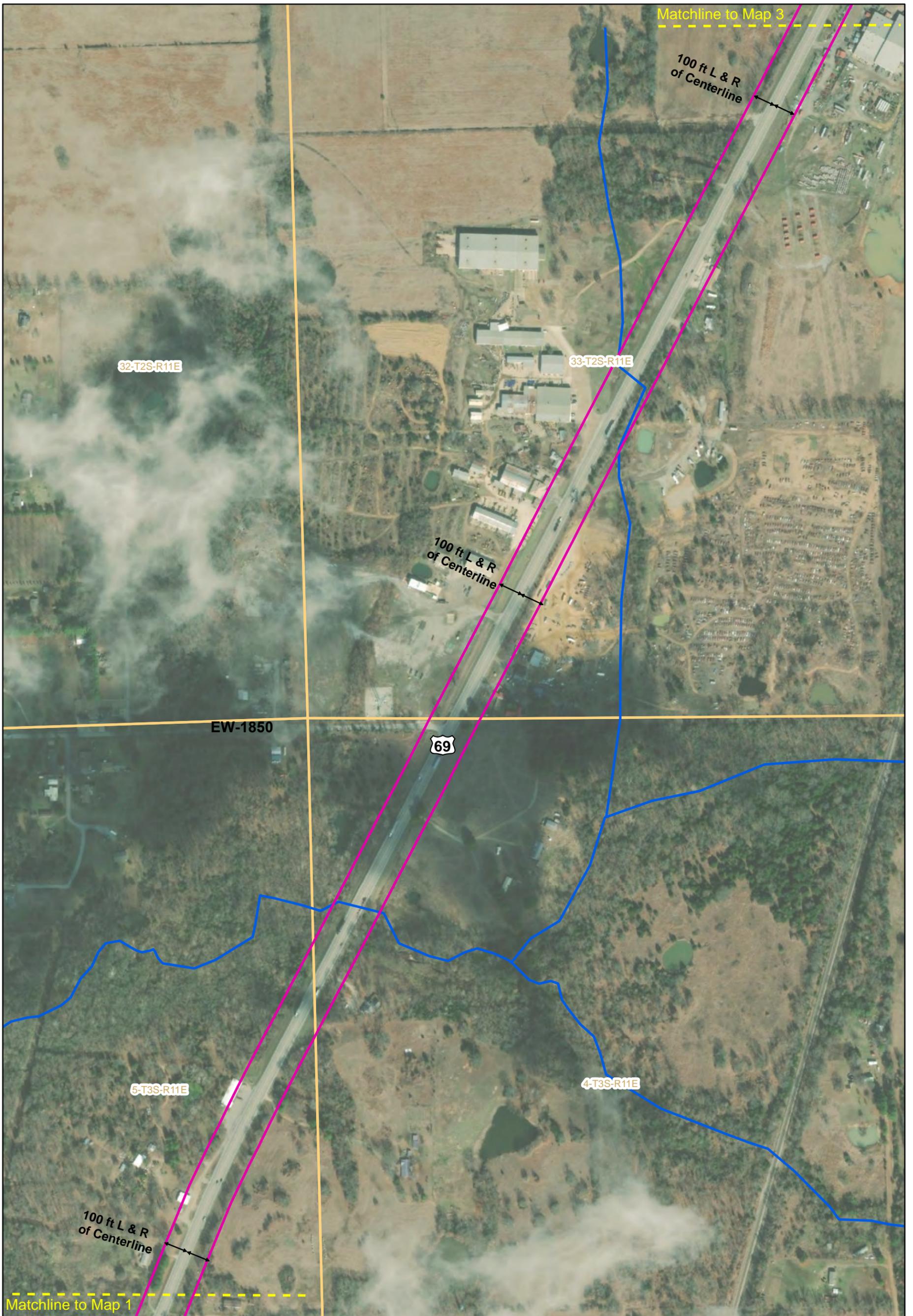
DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**DRAFT**

Date: 12/3/2020



<b>COMMENTS/LEGEND</b>		 	<b>NEPA Study Area Map</b> JP 30410(04) Grade, Drain, & Surface US-69: From 12 Miles N. of Bryan County line, Extend N. Approx. 2.5 Miles Through Tushka, Atoka County		<b>Map 1 of 3</b>
 NEPA Study Footprint	 Matchlines			 Mapped Streams	DRAWN BY: CKP APPRV BY:
 Sections					



<b>COMMENTS/LEGEND</b>			<b>NEPA Study Area Map</b> JP 30410(04) Grade, Drain, & Surface US-69: From 12 Miles N. of Bryan County line, Extend N. Approx. 2.5 Miles Through Tushka, Atoka County		<b>Map 2 of 3</b>
NEPA Study Area	Matchlines				



COMMENTS/LEGEND	
	NEPA Study Footprint
	Mapped Streams
	Matchlines
	Sections

**NEPA Study Area Map**  
 JP 30410(04)  
 Grade, Drain, & Surface US-69: From  
 12 Miles N. of Bryan County line,  
 Extend N. Approx. 2.5 Miles Through  
 Tushka, Atoka County

 **OKLAHOMA**  
 Transportation

DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Map**  
**3 of 3**

Date: 1/11/2021



# **404 PERMITTING**

**ATOKA COUNTY  
DIVISION 2**

**GRADE, DRAIN & SURFACE US-69:  
FROM 12 MI NORTH OF BRYAN C/L, EXT NORTH  
APPROX 2.5 MI THRU TUSHKA**

**J/P: 30410(04)**

**U.S. ARMY CORPS OF ENGINEERS  
IDENTIFICATION NUMBER: SWT-2022-00210  
NATIONWIDE PERMIT 14  
LINEAR TRANSPORTATION PROJECTS**

**PRE-CONSTRUCTION NOTICE REQUIRED PERMIT**

**DATE OF AUTHORIZATION: November 15, 2022  
DATE OF EXPIRATION: March 14, 2026**

**INDEX OF ATTACHMENTS  
Permittee Construction Schedule Worksheet  
Permittee Compliance Certification  
Nationwide Permit 14 General Conditions  
Section 401 Clean Water Act Water Quality Certification**



DEPARTMENT OF THE ARMY  
US. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

November 15, 2022

Regulatory Office

Mr. Joe Brutsché  
Chief, Environmental Programs Division  
Oklahoma Department of Transportation  
200 Northeast 21<sup>st</sup> Street  
Oklahoma City, OK 73105

Dear Mr. Brutsché:

Please reference your correspondence dated June 8, 2022, from Mr. Tim Vermillion, ODOT, concerning JP30410(04) that consists of two reinforced concrete boxes on US-69. The proposed project is starting at Latitude 34.32906 and Longitude -96.16204, in Atoka, Atoka County, Oklahoma. We have reviewed the submitted data relative to Section 404 of the Clean Water Act.

The placement of dredge and/or fill material that total 0.053 acre into the unnamed tributaries of Clear Boggy Creek, falls within the scope of Nationwide Permit (NWP) 14 for Linear Transportation Projects, provided the conditions therein are met.

You must access the following link to view and print the GP and State Regional Conditions <http://www.swt.usace.army.mil/Missions/Regulatory/Nationwide-Permit-Program/>. If you accept the obligations and requirements of the GP, sign and return the enclosed PERMITTEE CONSTRUCTION SCHEDULE (PCS). The GP will be valid when the signed PCS is returned to this office.

The following Activity-Specific Conditions have been incorporated into this permit to ensure the activity does not have more than minimal individual or cumulative adverse effects on the environment:

a. Erosion Control Measures (ECM): The permittee shall ensure execution and compliance with proper ECM installation and use for the duration of the project. ECM shall be inspected and maintained on a daily basis. Barriers shall remain in place and effective until sufficient vegetation coverage on exposed areas is established. All exposed earthen areas, disturbed or newly created by the construction, shall be seeded immediately, replanted, or provided equivalent protection against subsequent erosion within 24 hours.

b. ESA Consultation: You shall implement the U.S. Fish and Wildlife Services, Special Conditions from the FHWA Programmatic formal Consultation for the Northern Long-Eared Bat and American Burying Beetle, and their measures are outlined in the 2016 FHWA Formal Consultation Programmatic or Final 4(d) rule, for NLEB and ABB Activities Excepted from Take Prohibitions. The Service effect determination for the ABB must follow the pre-construction survey as outlined in the FHWA ABB PBO.

Following completion of your activity, you must return the enclosed "PERMITTEE COMPLIANCE CERTIFICATION" form. (Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with these requirements, you are subject to permit suspension, modification, or revocation.)

In reviewing this proposed activity, we have determined that authorizing this permit will have no known effect on Federally-listed endangered or threatened species or habitat critical for the survival of such species.

The NWP verification for this project is based on the proposed impacts to aquatic resources. No approved jurisdictional determination (AJD) is necessary unless jurisdictional questions arise. Should jurisdictional questions arise, you may request an AJD. Only an AJD, which may be appealed, may make a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a parcel. Unless an AJD has been issued which identified applicable aquatic resources to be non-jurisdictional, undertaking any activity in reliance on any form of Corps permit authorization constitutes agreement that all aquatic resources in the review area, affected in any way by that activity, will be treated as jurisdictional.

This NWP is scheduled to expire on March 14, 2026. It is incumbent on you to remain informed of changes to the NWPs. The Corps will issue a public notice announcing the changes as they occur. Furthermore, if you commence, or are under contract to commence, the activity before the date the NWP is modified or revoked, you will have 12 months from the date of the modification or revocation to complete the activity under the present terms and conditions of this NWP.

If you desire to complete a "Customer Service Survey" on the Corps Regulatory Program, you are invited to visit on the internet at your convenience and submit your comments at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Your project has been assigned Identification Number SWT-2022-00210. If you have any questions, please contact Mr. Marcus Ware at (918) 669-7403.

Sincerely,



Andrew R. Commer  
Chief, Regulatory Office

Enclosures

PERMITTEE CONSTRUCTION SCHEDULE WORKSHEET

MAIL TO:

U.S. Army Corps of Engineers, Tulsa District  
CESWT-RO  
2488 East 81<sup>st</sup> Street  
Tulsa, Oklahoma 74137

WITHIN 30 DAYS OF "DATE OF ISSUANCE"

PERMIT NO.: SWT-2022-00210

USACE PROJECT MANAGER: Mr. Marcus A. Ware

PERMITTEE NAME: Mr. Joe Brutsché, Oklahoma Department of Transportation  
(Mr. Tim Vermillion, ODOT)

DATE OF ISSUANCE: November 15, 2022

Please provide the following information:

Anticipated/Known Construction Start Date: \_\_\_\_\_

Anticipated Completion Date: \_\_\_\_\_

I have read and understand the obligations and requirements of this authorization.

\_\_\_\_\_  
Mr. Joe Brutsché

\_\_\_\_\_  
DATE

---

(FOR AGENCY USE ONLY - DO NOT WRITE BELOW THIS LINE)

RECEIVED IN CESWT-RO: \_\_\_\_\_

INSPECTION NEEDED:        Y / N

CONSTRUCTION INSPECTION SCHEDULED: \_\_\_\_\_

FINAL INSPECTION SCHEDULED: \_\_\_\_\_

Atoka County

PERMITTEE COMPLIANCE CERTIFICATION

Upon completion of the activity authorized by this permit and any mitigation required by this permit, sign and complete this certification form and return it to:

U.S. Army Corps of Engineers, Tulsa District  
CESWT-RO  
2488 East 81<sup>st</sup> Street  
Tulsa, Oklahoma 74137

PERMIT NO.: SWT-2022-00210

USACE PROJECT MANAGER: Mr. Marcus A. Ware

PERMITTEE NAME: Mr. Joe Brutsché, Oklahoma Department of Transportation  
(Mr. Tim Vermillion, ODOT)

DATE OF ISSUANCE: November 15, 2022

(Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.)

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Mr. Joe Brutsché

\_\_\_\_\_  
DATE

DATE WORK COMPLETED: \_\_\_\_\_

(FOR AGENCY USE ONLY - DO NOT WRITE BELOW THIS LINE)

---

RECEIVED IN CESWT-RO: \_\_\_\_\_

INSPECTION NEEDED:  Y /  N

FINAL INSPECTION SCHEDULED: \_\_\_\_\_

Atoka County

## **Nationwide Permit 14 - Linear Transportation Projects**

Effective Date: February 25, 2022; Expiration Date: March 14, 2026  
(NWP Final Notice, 86 FR 73522)

**Nationwide Permit 14 - Linear Transportation Projects.** Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

**Note 1:** For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

**Note 2:** Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

## **2021 Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain

low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. **Spawning Areas**. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas**. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds**. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material**. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. **Water Supply Intakes**. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects From Impoundments**. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows**. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100-Year Floodplains**. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment**. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. **Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal

applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. **Migratory Birds and Bald and Golden Eagles**. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and

available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

**20. Historic Properties.** (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream

rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan

may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may

be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. **Water Quality.** (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state,

Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

**30. Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

**31. Activities Affecting Structures or Works Built by the United States.** If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

**32. Pre-Construction Notification.** (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no

more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile

transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWP, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **2021 District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

## **2021 Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

## **2021 Nationwide Permit Definitions**

**Best management practices (BMPs):** Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

**Compensatory mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which

remain after all appropriate and practicable avoidance and minimization has been achieved.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects:** Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term “discharge” means any discharge of dredged or fill material into waters of the United States.

**Ecological reference:** A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

**High Tide Line:** The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

**Historic Property:** Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This

term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

**Independent utility:** A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Indirect effects:** Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

**Loss of waters of the United States:** Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

**Navigable waters:** Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open water:** For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

**Ordinary High Water Mark:** The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Perennial stream:** A perennial stream has surface water flowing continuously year-round during a typical year.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Riffle and pool complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic

characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

**Single and complete non-linear project:** For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

**Stormwater management:** Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater management facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or

improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream channelization:** The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

**Structure:** An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

**Tidal wetland:** A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

**Tribal lands:** Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

**Tribal rights:** Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

**Vegetated shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

**Waterbody:** For purposes of the NWP, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

## **ADDITIONAL INFORMATION**

Information about the U.S. Army Corps of Engineers Regulatory Program, including nationwide permits, may also be accessed at

<http://www.swt.usace.army.mil/Missions/Regulatory.aspx> or  
<http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>

Scott A. Thompson  
Executive Director



Kevin Stitt  
Governor

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

December 18, 2020

Mr. Andrew R. Commer  
Chief, Regulatory Office  
U.S. Army Corps of Engineers, Tulsa District  
1645 South 101<sup>st</sup> East Avenue  
Tulsa, OK 74128-4609

Re: Water Quality Certification for the U.S. Army Corps of Engineers (Corps) Nationwide Permits

Dear Mr. Commer:

The Department of Environmental Quality (DEQ) has received your request for a Water Quality Certification under Section 401 of the Federal Clean Water Act [33 U.S.C. §1251 et seq. (1972)], for the proposed issuance of the Nationwide Permits published September 15, 2020 in Federal Register. The Department of Environmental Quality rules governing 401 Certification are contained in Oklahoma Administrative Code (OAC) § 252:611-3 (2011) pursuant to 27A O.S. § 2-6-103(C)(2) (OSCN 1999). DEQ rules and regulations related to the 401 procedures are available at <https://www.deq.ok.gov/wp-content/uploads/degmainresources/611.pdf> or through contacting the DEQ Office of External Affairs at (800) 869-1400.

This Water Quality Certification supersedes all previous Water Quality Certifications for the Nationwide Permits in the State of Oklahoma.

DEQ requests that all Pre-Construction Notifications (PCN) and information pertaining to any project, regardless of size, located within any waters designated in Oklahoma's Water Quality Standards (WQS) as Outstanding Resource Waters (ORW), High Quality Waters (HQW), Sensitive Public and Private Water Supplies (SWS), and Appendix B Waters (OAC 785:45-5-25), which is proposed to be authorized under NWP 19, 23, 27, 33, or 37 be provided to the DEQ. This request is not a condition of certification.

DEQ requests that all PCN and information pertaining to any project which may result in a loss of more than 300 linear feet of stream which is proposed to be authorized under NWP 21, 29, 39, 40, 42, 43, 44, 51, or 52 be provided to the DEQ. Additionally, DEQ requests the opportunity to review and comment on these proposed actions following the time frames specified in the NWP General Condition 32. DEQ will expedite the review and notification process when practicable. This request is not a condition of certification.

Water Quality Certification for the proposed Nationwide Permits 3, 13, 18, 41, 45, 46, 53, C, D, and E is denied and require an individual water quality certification for all activities located within any Outstanding Resource Waters (ORW), High Quality Waters (HQW), Sensitive Public and Private Water Supplies (SWS), and Appendix B Waters as identified in WQS, OAC 785:45-5-25.

In order to determine compliance with water quality standards set forth in OAC 785:455-25 for these waters, projects covered under NWP on such waters shall be reviewed by DEQ.

Water Quality Certification for the proposed Nationwide Permits 49 and 50 are denied and require individual water quality certification for all activities in all watersheds of Oklahoma. We are concerned that use of these permits could lead to more than minimal adverse environmental effects on waters of the U.S. located in Oklahoma and may result in violation of WQS as set in OAC 785: 45-3-2. In order to determine compliance with water quality standards set forth in OAC 785:45-3 and OAC 785: 455-25 for Oklahoma waters of the U.S., projects covered under these two NWP shall be reviewed by DEQ.

For the proposed Nationwide Permit 16, *Return Water from Upland Contained Disposal Areas*, the certification is conditioned as follows to comply with OAC 785: 45-5-9(b) and OAC 785: 45-5-12(f)(7) and (8). A plan describing best management practices for sediment control in return water shall be submitted to, and approved by DEQ before any discharge can be commenced.

DEQ acknowledges that the potential to use NWP 34, 48, 54, A, and B in Oklahoma is not likely. However, for administrative clarity the Water Quality Certification is denied for the proposed NWP 34, 48, 54, A, and B.

This certification does not authorize industrial stormwater discharges, stormwater runoff from construction sites, or municipal/domestic wastewater discharges. These discharges may require permits from DEQ.

Subject to the exceptions noted above, the DEQ grants Clean Water Act 401 Water Quality Certification for the Corps Nationwide Permits subject to the following conditions:

1. Permittee shall take all reasonable measures to prevent spills of fuel or other pollutants to comply with CWA 301(a), OAC 785: 45-3-2, OAC 785:45-5-12(f)(4) and (6), and OAC 785: 45-5-19. In the event such spill occurs it shall be reported to the DEQ, within twenty-four (24) hours, to the pollution prevention hotline at 1-800-522-0206.
2. All fueling and servicing of vehicles and equipment shall be done above the Ordinary High Water Mark (OHWM) to comply with CWA 301(a), OAC 785: 45-3-2, OAC 785: 45-5-12(f)(4) and (6), and OAC 785: 45-5-19.
3. Any material and fuels used in the project shall be stored and/or stockpiled above the Ordinary High Water Mark (OHWM) and shall be removed from a likely flood zone prior to any predicted flood to comply with CWA 301(a), OAC 785: 45-3-2, OAC 785: 45-5-12(f)(4) and (6), OAC 785: 45-5-19.
4. If the project is located on or may affect water impaired for turbidity and/or sediment, Best Management Practices and other controls shall be selected and implemented in order to control soil erosion and maintain compliance with WQS, OAC: 45-5-12(f)(7)(B). A copy of the current EPA-approved list of impaired waters (303(d) list) is available at [Integrated Report - 303\(d\) & 305\(b\) - Oklahoma Department of Environmental Quality](#).
5. For any project involving bank stabilization, the permittee shall consider implementing bioengineering practices in lieu of structural practices (e.g. riprap) to minimize impacts to an aquatic resource and enhance aquatic habitat to comply with WQS, OAC 785: 45-3-2.

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6. Post-project condition should not result in downstream water quality degradation which will interfere with the attainment or maintenance of an existing or designated beneficial uses to ensure compliance with WQS, OAC 785: 45-3-2.

If you have any questions regarding this Certification, please contact Elena Jigoulina at (405) 702-8200.

Sincerely,



Joe Long, Environmental Programs Manager  
Watershed Planning Section  
Water Quality Division

cc: David Carraway, Regulatory Project Manager, Regulatory Branch, Corps, Tulsa  
Barry Bolton, Fisheries Chief, Oklahoma Department of Wildlife Conservation  
Bill Cauthron, Chief, Water Quality Programs Division, Oklahoma Water Resources Board  
Brooks Tramell, Monitoring, Assessment and Wetlands Programs, Oklahoma Conservation Commission  
Daniel Landeros, EPA Region 6 (6WQ-EM)  
Jennifer Lewis, Assistant Attorney General, Conservation Unit, OK Office of the Attorney General

# OKLAHOMA DEPARTMENT OF TRANSPORTATION

## SECTION 404 PERMIT APPLICATION FORM FOR STATE PROJECTS

DATE:

8/12/2022

<b>Project No.:</b>		<b>J/P:</b>	30410(04)	<b>Facility:</b>	US 69	<b>County:</b>	Atoka
<b>Description:</b>	Grade, Drain & Surface for US-69 from 12 MI north of Bryan C/L ext, north approximately 2.5 miles thru Tushka. Widening includes new center turn lane, shoulders, and culvert extensions.						
<b>Let Date:</b>	2026	<b>Division:</b>	2	<b>Programmed Construction Project</b>		\$15,000,000	

Sta or Str. No.	Location			Waterbody	Type	Description		Calculations			
	Latitude	Longitude	Legal			Critical Resource Water?	Existing Structure/Condition	New Structure	Area acre	Cubic Yards of Fill*	Linear Feet of Impacts
Sta. 181+80.31	34.32906° N	96.16204°W	T-3-S, R-11-E, SEC 4	Clear Boggy Creek Tributary, No	RCB	10'x10'x97' RCB	10'x10'x130' RCB	0.028		148	1,2,3,4
Sta. 207+92.61	34.33529° N	96.15766°W	T-2-S, R-11-E, SEC 33	Clear Boggy Creek Tributary, No	RCB	6'x4'x115' RCB	6'x4'x148' RCB	0.025		528	1,2,3,4

**AVOIDANCE AND MINIMIZATION:**

Existing structures are left in place where possible. Existing channels approaching structures are left in place where possible. 3:1 slopes are utilized to minimize grading / fill footprint within the OHWM. A detailed Storm Water management plan will be developed, implemented, and monitored in accordance with ODOT specifications and OPDES regulations.

Types: BP--Bank Protection, CC—Channel Change, Chan--Channel Work, RCB--Reinforced Concrete Box, SB--Span Bridge,\*\* Wet--Wetlands, Misc—Miscellaneous  
acres

\*Only necessary if impacts are over 0.1

\*\*Wetland Information will be added from the delineation report by ODOT

Notes:

1. Blue Line Stream
2. Extension ("New Structure" Length is extension + existing)
3. Includes fill in existing channel
4. Includes fill (RCB construction) in new channel / alignment.

**FHWA Approved Clearance type:**

CE: \_\_\_\_\_ FONSI/EA: \_\_\_\_\_ EIS: \_\_\_\_\_ Date: \_\_\_\_\_ Pending: \_\_\_\_\_ None: \_\_\_\_\_

**Applicant:**

Name: Oklahoma Department of Transportation Phone No: (405) 522-0734

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**Address:**

200 Northeast 21<sup>st</sup> Street, Oklahoma City, OK 73105-3204

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**Application Prepared By:**

Name: Marcus Geist, PE HNTB Corporation Phone No: 405-416-9018

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Email: Mgeist@hntb.com

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**CULTURAL RESOURCES  
PROGRAM'S DESKTOP REVIEW  
&  
USACE SECTION 106**



**OKLAHOMA**  
**Transportation**

**Oklahoma Department of Transportation**

Environmental Programs Division, Office 405.521.3050 / Fax 405.522.5193

**DATE:** February 6, 2023

**TO:** Project Management Division

**FROM:** Environmental Programs Division

**SUBJECT:** Atoka County Project JP 30410(04): US-69: FROM 12 MI NORTH OF BRYAN C/L, EXT NORTH APPROX 2.5 MI THRU TUSHKA

There are potentially significant archaeological sites within the general vicinity of the referenced project. Please have the following note added to a section of the project plans entitled "Environmental Mitigation Notes" per Policy Directive C-201-2D(2):

**Locations outside the project area in the following area must not be utilized for borrow, equipment staging, haul roads, spoil dumps or any off-site project-related activity.**

**T2S R11E:**

- Section 28:** S ½ SW ¼
- Section 32:** SE ¼  
SE ¼ NW ¼ SW ¼
- Section 33:** NW ¼ NW ¼ SE ¼  
NE ¼ NE ¼ SW ¼

**T3S R11E**

- Section 5:** NE ¼  
NW ¼ SE ¼ SW ¼  
NW ¼ NW ¼ SE ¼ (Tushka Cemetery)
- Section 6:** SW ¼ SE ¼
- Section 7:** SE ¼ NE ¼  
SE ¼  
SE ¼ SE ¼ SW ¼
- Section 8:** NE ¼ SW ¼ NW ¼  
NW ¼ NW ¼ SW ¼
- Section 18:** NE ¼ NE ¼ NW ¼  
NW ¼ NW ¼ NE ¼

SAS

# ODOT CULTURAL RESOURCES PROGRAM DESKTOP REVIEW FOR STATE FUNDED PROJECTS

County: Atoka Request Date: November 15, 2022  
JP No: 30410(04) Completion Date: February 6, 2023  
Staff CRP Reviewer: Scott Sundermeyer NEPA Project Manager: Kathy Koon  
ODOT Division: Div. 2

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1. **PROJECT DESCRIPTION:** (as described in Project Status System)

US-69: FROM 12 MI NORTH OF BRYAN C/L, EXT NORTH APPROX 2.5 MI THRU TUSHKA

**Project specifications:**

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

The proposed improvements include constructing four 12-foot-wide driving lanes with a 16-foot-wide center turning lane.

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2. **CULTURAL RESOURCES REVIEW FOR PREVIOUSLY RECORDED HISTORIC PROPERTIES:**

**Results:**

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

Comments: Consultation between USACE and SHPO (File 2763-22) and OAS (FY-22-2800) resulted in a finding of "no historic properties affected".

**Project subjected to field review:**

\_\_\_\_\_ No  
XXX Yes

Comments: The state-funded project was subjected to cultural resources survey in advance of a Section 404 permit in accordance with USACE requirements. All Section 106 consultation was conducted by the USACE.

---

3. **PROJECT REVIEW SUMMARY:**

XXX Fill

The ODOT Cultural Resources Program obtained the Section 106 consultation for the referenced project from the USACE (lead agency). This material is provided as an attachment to this memo. Consultation with SHPO (File 2763-22) and OAS (FY-22-2800) resulted in a finding of "no historic properties affected". The USACE also consulted with the Caddo Nation, Chickasaw Nation, Choctaw Nation, Osage Nation, Quapaw Nation, and Wichita and Affiliated Tribes. The USACE consultation provided does not indicate any tribes responded with information on places of religious and cultural significance.

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

Comments: An avoidance note for off-site facilities ins included in this correspondence.

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## Oklahoma Historical Society

Founded May 27, 1893

### State Historic Preservation Office

Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7917  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

October 5, 2022

Mr. Andrew Commer, Chief  
Regulatory Office  
U.S. Army Corps of Engineers, Tulsa District  
2488 East 81<sup>st</sup> Street  
Tulsa, OK 74137

RE: File #2763-22; USACE Proposed US-69 ODOT Improvements Project #SWT-2022-00210  
[ODOT #JP-30410(04)]; Atoka County

Dear Mr. Commer:

We have received and reviewed the documentation submitted on the referenced project. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no known historic properties affected within the referenced project's area of potential effect (APE). [Note: the 22 properties listed on the attachment, for which you submitted forms and photos, are outside the project's APE. However, for your records, it is our opinion that these 22 properties are not eligible for the National Register of Historic Places (NRHP).]

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 East Chesapeake, #102, Norman OK 73019 (#405/325-7211, FAX #405/325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the NRHP. Should the OAS conclude that there are no prehistoric archaeological sites or other types of "historic properties," as defined in 36 CFR Part 800.16(l), which are eligible for inclusion in the NRHP within the project area and that such sites are unlikely to occur, we concur with that opinion.

The OAS may conclude that an additional on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of prehistoric archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the SHPO will be necessary.

Please note that this project is located within the reservation boundaries of the Choctaw Nation and is therefore on tribal lands as defined in the National Historic Preservation Act (NHPA) and the Section 106 regulations (36 CFR Part 800).

Should further correspondence pertaining to this project be necessary, please reference the above file #. If you have any questions, please call Kristina Wyckoff, Hist. Archaeologist, at 405/521-6381.

Sincerely,

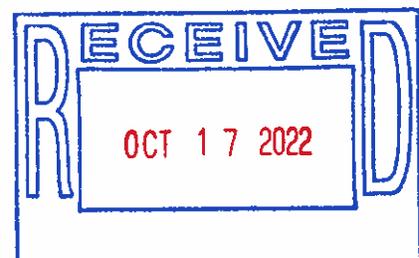
A handwritten signature in blue ink, appearing to read "Lynda Ozan".

Lynda Ozan  
Deputy State Historic  
Preservation Officer

LO:pm

Attachment

cc: Dr. Ian Thompson, Choctaw Nation  
Mr. Scott Sundermeyer, ODOT



FILE # LIST OF PROPERTIES

2763-22 USACE PROPOSED US-69 ODOT  
IMPROVEMENTS PROJECT  
#SWT-2022-00210, ATOKA COUNTY

- I. US-69 FROM 12 MILES NORTH  
OF BRYAN COUNTY LINE,  
NORTH APPROX. 2.5 MILES

BUILDINGS IN ATOKA:

- 1-2. #1A-1B [2 BUILDINGS]  
2715 SOUTH MISSISSIPPI AVENUE
3. #2A SHOP, SEC33 T2S R11E
4. #2B SHOP, SEC33 T2S R11E
5. #2C SHOP, SEC33 T2S R11E
6. #2D SHOP, SEC33 T2S R11E
7. #3A MOTOR COURT OFFICE,  
2755 SOUTH MISSISSIPPI AVENUE
8. #3B HOUSE, 2755 SOUTH  
MISSISSIPPI AVENUE
9. #3C EQUIPMENT SHED, 2755  
SOUTH MISSISSIPPI AVENUE

OBJECT:

10. #3D SORGHUM PRESS, 2755 SOUTH  
MISSISSIPPI AVENUE

BUILDINGS:

11. #3E EQUIPMENT SHED, 2755  
SOUTH MISSISSIPPI AVENUE
12. #3F OUTBUILDING, 2755 SOUTH  
MISSISSIPPI AVENUE
13. #4A HOUSE, 4421 SOUTH  
MISSISSIPPI AVENUE

STRUCTURE:

14. #4B GATE POSTS, 4421 SOUTH  
MISSISSIPPI AVENUE

BUILDINGS IN TUSHKA:

- 15-16. #5A-5B OUTBUILDINGS,  
SEC5 T3S R11E
17. #6 COMMERCIAL BUILDING,  
129 SOUTH JEFFERSON HIGHWAY
18. #7A CONVENIENCE STORE,  
103 SOUTH JEFFERSON HIGHWAY

STRUCTURE:

19. #7B GAS STATION PUMP CANOPY,  
103 SOUTH JEFFERSON HIGHWAY

BUILDINGS:

20. #8 HOUSE, 348 SOUTH  
JEFFERSON HIGHWAY
21. #9 CELLAR (FEATURE #1),  
SEC33 T2S R11E

STREETSCAPE:

22. SEC5 T3S R11E



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81ST STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

Mr. Trait Thompson  
State Historic Preservation Office  
Oklahoma Historical Society  
800 Nazih Zuhdi Drive  
Oklahoma City, OK 73105

Dear Mr. Thompson:

This is in regard to a Nationwide Permit application received by the Corps of Engineers for the proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

The Corps has reviewed the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

The Corps would like to give your office an opportunity to review our finding of "no historic properties effect". We seek your concurrence in this finding within 35 calendar days of the date of this letter, October 22, 2022, to assure that you have 30 days to provide a response.

This project has been assigned Identification No. SWT-2022-00210. Please refer to this number during any future correspondence. If you have any questions, please contact Mr. Marcus A. Ware at 918-669-7403.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew R. Commer".

Andrew R. Commer  
Chief, Regulatory Office

Enclosure



## Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

October 24, 2022

U.S. Army Corps of Engineers  
Attn: Andrew R. Commer  
Chief, Regulatory Office  
2488 East 81<sup>st</sup> St.  
Tulsa, OK 74137-4290

Re: OAS FY22-2800 USACE *Cultural Resources Survey Report: Proposed Improvements to Grade, Drain, & Surface US-69*. Report by Logan A. Smith, Josh Davis, Dean Afendras (Afendras Archaeology).  
Legal Location: Sections 4, 5, 8, T3S, R11E; Sections 28, 33, T2S, R11E, Atoka County, Oklahoma.

Dear Mr. Commer,

This agency received the above-listed cultural resources survey report of investigations regarding the proposed US-69 Project in Atoka County for review and comment. From the information provided, I understand that Afendras staff surveyed the 85.1-acre project area on September 23, 2021. One new prehistoric site (34AT941) and ten new historic sites (34AT932-940 and 34AT942) were identified within the APE. Afendras recommends 34AT942 remain unassessed for eligibility and all other archaeological resources are not eligible for listing on the National Register of Historic Places (NRHP). None of the sites are within the portion of the APE under consideration for Corps permitting. USACE recommends a finding of *No Historic Properties Effect [sic]* for the project as proposed.

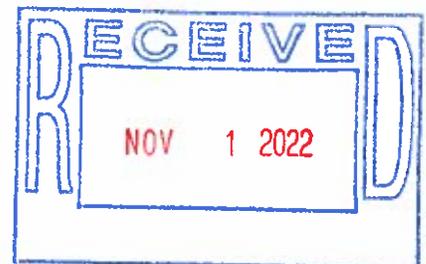
**I concur with the findings and recommendations as they pertain to prehistoric archaeological resources and defer opinion on the NRHP-eligibility of 34AT942 and overall project effects to the Historical Archaeologist with the State Historic Preservation Office.**

This review has been conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. You must also have a letter from that office to document your consultation pursuant to Section 106 of the National Historic Preservation Act.

Sincerely,

Kary L. Stöckelbeck, Ph.D.  
State Archaeologist

cc: SHPO





**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

Kary Stackelbeck, Ph.D.  
State Archaeologist  
Oklahoma Archeological Survey  
111 E. Chesapeake  
Norman, OK 73019-0575

Dear Dr. Stackelbeck:

This is in regard to a Nationwide Permit application received by the Corps of Engineers for the proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

The Corps would like to give your office an opportunity to review our finding of "no historic properties effect". We seek your concurrence in this finding within 35 calendar days of the date of this letter, October 22, 2022, to assure that you have 30 days to provide a response.

Please refer to project identification number SWT-2022-00210 in future correspondence regarding this project. If you have any questions, please contact Mr. Marcus A. Ware at (918) 669-7403.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew R. Commer".

Andrew R. Commer  
Chief, Regulatory Office

Enclosure



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT**  
**2488 EAST 81<sup>ST</sup> STREET**  
**TULSA, OKLAHOMA 74137-4290**

September 23, 2022

Regulatory Office

Chairman Bobby Gonzalez  
Caddo Nation of Oklahoma  
P.O. Box 487  
Binger, OK 73009

Dear Chairman Gonzalez:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

Please let us know if there are any previously unrecorded properties that have religious and cultural significance to your Tribe that you know of within the project area, or any other tribal resources, tribal rights, or tribal lands, that you believe have the potential to be significantly affected by the proposal. We want to work with you to address those impacts. The Corps is committed to confidentiality and is willing to address any such concerns and work with you to ensure the information you provide is appropriately protected.

Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

cc: Mr. Jonathan Rohrer, THPO, Caddo Nation of Oklahoma



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

Governor Bill Anoatubby  
The Chickasaw Nation  
P.O. Box 1548  
Ada, OK 74821

Dear Governor Anoatubby:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

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Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

cc: Ms. Karen Brunso, THPO, The Chickasaw Nation of Oklahoma



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

Chief Gary Batton  
The Choctaw Nation of Oklahoma  
P.O. Box 1210  
Durant, OK 74702

Dear Chief Batton:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

Please let us know if there are any previously unrecorded properties that have religious and cultural significance to your Tribe that you know of within the project area, or any other tribal resources, tribal rights, or tribal lands, that you believe have the potential to be significantly affected by the proposal. We want to work with you to address those impacts. The Corps is committed to confidentiality and is willing to address any such concerns and work with you to ensure the information you provide is appropriately protected.

Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

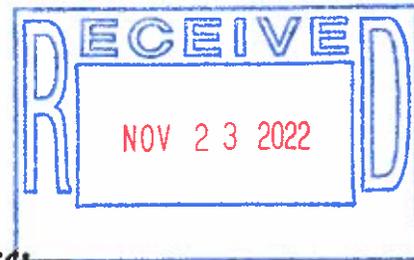
The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

cc: Dr. Ian Thompson, THPO, The Choctaw Nation of Oklahoma



## Osage Nation Historic Preservation Office

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Date: November 10, 2022

File: 2223-3461OK-10

RE: USACE, Tulsa District, SWT-2022-00210, ODOT Job: 30410(04), US-69 Improvements, Atoka County, Oklahoma

Tulsa District, USACE Regulatory  
Marcus Ware  
2488 East 81st Street  
Tulsa, OK 74137-4290

Dear Mr. Ware,

The Osage Nation Historic Preservation Office has evaluated your submission regarding the proposed USACE, Tulsa District, SWT-2022-00210, ODOT Job: 30410(04), US-69 Improvements, Atoka County, Oklahoma and determined that the proposed project **most likely will not adversely affect any sacred properties and/or properties of cultural significance to the Osage Nation**. For direct effect, the finding of this NHPA Section 106 review is a determination of "No Properties" eligible or potentially eligible for the National Register of Historic Places.

In accordance with the National Historic Preservation Act, (NHPA) [54 U.S.C. § 300101 et seq.] 1966, undertakings subject to the review process are referred to in 54 U.S.C. § 302706 (a), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969). **The Osage Nation concurs that the U.S. Army Corps of Engineers fulfilled NHPA compliance by consulting with the Osage Nation Historic Preservation Office in regard to the proposed project referenced as USACE, Tulsa District, SWT-2022-00210, ODOT Job: 30410(04), US-69 Improvements, Atoka County, Oklahoma.**

The Osage Nation has vital interests in protecting its historic and ancestral cultural resources. We do not anticipate that this project will adversely impact any cultural resources or human remains protected under the NHPA, NEPA, the Native American Graves Protection and Repatriation Act, or Osage law. **If, however, artifacts or human remains are discovered during project construction, we ask that work cease immediately and the Osage Nation Historic Preservation Office be contacted.**

Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

  
Andrea A. Hunter, Ph.D.  
Director, Tribal Historic Preservation Officer

  
Caitlin Nichols  
Archaeologist



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT**  
**2488 EAST 81<sup>ST</sup> STREET**  
**TULSA, OKLAHOMA 74137-4290**

September 23, 2022

Regulatory Office

Dr. Andrea Hunter  
The Osage Nation  
627 Grandview  
Pawhuska, OK 74056

Dear Dr. Hunter:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

Please let us know if there are any previously unrecorded properties that have religious and cultural significance to your Tribe that you know of within the project area, or any other tribal resources, tribal rights, or tribal lands, that you believe have the potential to be significantly affected by the proposal. We want to work with you to address those impacts. The Corps is committed to confidentiality and is willing to address any such concerns and work with you to ensure the information you provide is appropriately protected.

Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

# QUAPAW NATION

P.O. Box 765  
Quapaw, OK 74363-0765

(918) 542-1853  
FAX (918) 542-4694

October 19, 2022

ATTN: Andrew Commer  
Department of the Army  
U.S. Army Corps of Engineers, Tulsa District  
2488 East 81<sup>st</sup> Street  
Tulsa OK 74137-4290

Re: Job Piece # 30410(04)) in Atoka County, OK

Dear Mr. Commer,

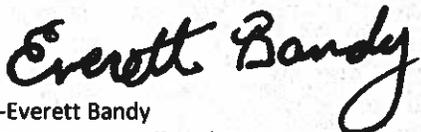
The Quapaw Nation Historic Preservation Program (QNHPP) has received and reviewed the information you have provided. Based upon the information you provided we believe that the proposed Job Piece # 30410(04)) in Atoka County, OK will have no effect to known properties of cultural or sacred significance to the Quapaw Nation.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d) (6) (A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

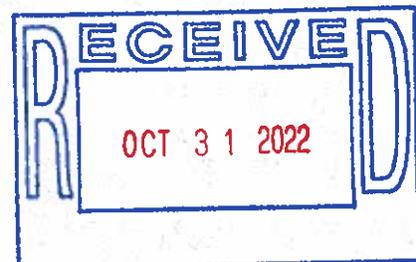
The Quapaw Nation has vital interests in protecting its historic and ancestral cultural resources. We do not anticipate that this project will adversely impact any cultural resources or human remains protected under the NHPA, NEPA, or the Native American Graves Protection and Repatriation Act. If however, artifacts or human remains are discovered during project construction, we ask that work cease immediately and that you contact the Quapaw Nation Historic Preservation Office.

Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Quapaw Nation on this matter.

Sincerely,



-Everett Bandy  
Preservation Officer/ QNHPP Director  
Quapaw Nation  
P.O. Box 765  
Quapaw, OK 74363  
(w) 918-238-3100  
(f) 918-674-2456





**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

Chairman Joseph Byrd  
Quapaw Nation  
P.O. Box 765  
Quapaw, OK 74363

Dear Chairman Byrd:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

With regard to historic property matters, the Corps is evaluating the proposed project in accordance with National Historic Preservation Act Section 106 regulations and 33 CFR 325 Appendix C and determined that, in this instance, there are no historic properties affected within the permit area. This determination was based, in part, on "Cultural Resources Survey Report for Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka", dated September 13, 2022, copy enclosed for your consideration.

Please let us know if there are any previously unrecorded properties that have religious and cultural significance to your Tribe that you know of within the project area, or any other tribal resources, tribal rights, or tribal lands, that you believe have the potential to be significantly affected by the proposal. We want to work with you to address those impacts. The Corps is committed to confidentiality and is willing to address any such concerns and work with you to ensure the information you provide is appropriately protected.

Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

cc: Mr. Everett Bandy, THPO, Quapaw Nation



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

September 23, 2022

Regulatory Office

President Terri Parton  
Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma  
P.O. Box 729  
Anadarko, OK 73005

Dear President Parton:

This letter is to invite government-to-government consultation concerning a proposed undertaking related to the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act permitting authority. The proposal is by Oklahoma Department of Transportation (ODOT) for Job Piece 30410(04) for proposed improvements to grade, drain, and surface US-69. The proposed project is located at latitude 34.31369, longitude -96.17157 in Tushka, Atoka County, Oklahoma.

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Thank you for any information or comments you are able to provide. We ask that you please contact us by October 22, 2022, so that we may consider your concerns prior to our final decision on this proposal. We will assume that you have no comment on the proposed undertaking as described above if we do not receive a response by that time.

-2-

The project identification Number is SWT-2022-00210. Please reference this number during any future correspondence. If you have any questions, please contact Mr. Marcus Ware at 918-669-7403.

Sincerely,

Andrew R. Commer  
Chief, Regulatory Office

Enclosure

cc: Mr. Gary McAdams, THPO, Wichita and Affiliated Tribes, Oklahoma

# Afendras Archaeology, LLC

## CULTURAL RESOURCES SURVEY REPORT

Atoka County 30410(04): Proposed Improvements to Grade, Drain, & Surface US-69: from 12 miles north of Bryan County Line, extend north approximately 2.5 miles through Tushka

Prepared by: Afendras Archaeology

Preparer(s): Joshua E. C. Davis, Logan A. Smith, and Dean Afendras

Principal Investigator: Dean Afendras

September 13, 2022

Lead Federal Agency: U.S. Army Corps of Engineers



<b>County:</b>	Atoka
<b>J/P#:</b>	30410(04)
<b>Surveyed by:</b>	Logan A. Smith, MA, RPA, Chris Phillips, MA, RPA, Josie Mythen, BA, Jenny Williams, BA
<b>Survey Date:</b>	September 23, 2021
<b>Prime Consultant:</b>	CC Environmental

### MANAGEMENT SUMMARY:

On September 23, 2021, a cultural resources survey was completed for proposed improvements to an approximately 2.65-mile-long stretch of US-69 through Tushka in central Atoka County. The project was originally going to receive funding through the Federal Highway Administration (FHWA) which would have served as the federal nexus and resulting in the primary review agency being the Oklahoma Department of Transportation (ODOT) Cultural Resources Program (CRP). The cultural resources survey was completed under ODOT CRP guidelines, and the report was reviewed and approved by ODOT CRP. However, FHWA funding was recently pulled from the project resulting in no FHWA involvement. With the exception of two water crossings, the project as a whole no longer has a federal nexus. The proposed project will impact the two water crossings that are considered to be "Waters of the United States" and so under the jurisdiction of the US Army Corps of Engineers (USACE) which serves as the federal nexus. Impacts to the watercourses will require Clean Water Act Section 404 permits. Both crossings (USACE jurisdictional permit areas) are at points where US-75 intersect with unnamed intermittent watercourses at the headwaters of Fronterhouse Creek. Crossing A is 890 feet southwest of the US-69 and CR EW-185 intersection and covers approximately 0.86 acres. Crossing B is 1,760 feet northeast of the US-69 and CR EW-185 intersection and covers approximately 1.4 acres. Both crossings total approximately 2.26 acres.

All references in this report and associated resource forms to "study area" corresponds to the original FHWA/ODOT cultural resources survey area. All references in this report to "Crossings A and B" corresponds to the USACE jurisdictional permit areas. No cultural resources were documented in the USACE jurisdictional permit areas.

The current roadway has four 12-foot-wide asphalt lanes (totaling 48 feet wide) and 2-foot-wide asphalt shoulders within a 100-foot-wide (50 feet left and right of centerline) right-of-way. The purpose of the project is to widen the existing 4-lane facility to a 5-lane facility on the existing alignment with a continuous center turn lane. The proposed improvements include constructing four 12-foot-wide driving lanes with a 16-foot-wide center turning lane. The roadway will be an open section facility with 8-foot-wide paved shoulders except through town and for a portion north of town where it will be a curb and gutter section. The project study area encompasses approximately 85.1 acres.

The survey of the study area resulted in the documentation of one prehistoric culturally unassigned site (34AT941), one early- to mid-twentieth century roadside park/campground site (34AT932/Building 3A), nine mid-twentieth century farmstead sites (34AT933, 34AT934, 34AT935, 34AT936, 34AT937, 34AT938, 34AT939, 34AT940, and 34AT942), one isolated mid-twentieth century standing building (Building 9A), eight mid-twentieth century standing building complexes (Building Complexes 1 – 8), and the downtown portion of Tushka crossed by US-69 (Tushka Streetscape).

### Archaeological Resources

**34AT941:** This site is a culturally unassigned prehistoric open habitation that consists entirely of a subsurface deposit of artifacts from 3.9 – 31.4 inches (10 – 80 cm) deep. The site has been investigated in its entirety and is unlikely to yield additional information. The site appears to have good subsurface integrity, but does not contain significant archaeological features or deposits to be eligible to the NRHP under Criterion D. Therefore, the site is recommended **not eligible** for inclusion in the NRHP.

**34AT932/Building 3A:** This site is the remains of an early-twentieth century roadside park and campground consisting of a circa 1920 office building (Building 3A), a concrete foundation with a cast iron drain in the floor (Feature 1), a ceramic utility pipe installation (Feature 2) as well as a surface artifact and subsurface artifact deposits from 0 – 17.7 inches (0 – 45 cm). The site has been investigated in its entirety and is unlikely to yield additional information. According to the *Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture*, the *Indian-Pioneer Papers*, and general internet search, the site is not associated with historically significant individuals to be eligible under Criterion B. Although Building 3A is intact, it is in poor condition and does not display unique architecture for Criterion C to apply. The site lacks archaeological integrity and does not contain significant archaeological features or deposits to be eligible under Criterion D. However, Building 3A is considered to be **individually eligible** for inclusion in the NRHP under Criterion A for its association with transportation developments in Atoka County during the period from 1920 to 1935.

**34AT933; 34AT934; 34AT935; 34AT936; 34AT937; 34AT938; 34AT939; 34AT940;** These are the remains of mid-twentieth century sites that have been investigated in their entirety. These sites typically do not have significant association with persons or events, lack integrity, do not contain buildings with significant architecture or design, and do not contain significant archaeological deposits or associations, and all are recommended **not eligible** for inclusion on the NRHP.

**34AT942:** Site 34AT942, as it has been visited, is the remains of a mostly destroyed mid-twentieth century farmstead consisting of a surface artifact and a subsurface artifact scatter from 0 - 19.6 inches (0 – 50 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. The site has not been investigated in its entirety because it extends well beyond the study area. The eligibility of site 34AT942 as a whole for inclusion in the NHRP has not been determined. This study considered only those portions of the site within the study area, and accessible by ODOT. The portion of the site within the study area does not have characteristics that would qualify the site for inclusion in the NRHP (pursuant to 36 CFR 60.4). Based on this evaluation, the site as a whole is considered not assessed, however the proposed undertaking would have no effect on any characteristics of the site within the study area that would qualify it for inclusion in the NRHP.

#### **Built Environment Resources**

**Building Complexes 1 – 8:** These are early to mid-twentieth century building complexes, some of which also contain post-1976 standing buildings and structures. Only one building (Building 3A) is eligible for listing in the NRHP, under Criterion A for its association with transportation developments during the period from 1920 to 1935. Other than building 3A, Building Complex 3 is an average late twentieth century residential complex with no distinctive architectural style.

All other early to mid-twentieth century buildings and structures generally do not display either significant architecture, design, or integrity, and the complexes lack historic significance to be eligible for the NRHP individually or as part of an eligible historic district. Building Complexes 1 - 8, except for building 3A, lack historic significance and integrity to be eligible for the NRHP individually or as part of an eligible historic district and are therefore recommended **not eligible** as individual properties or as a contributing property to an eligible historic district.

**Tushka Streetscape, on US-69 from SE 1<sup>st</sup> St. to NE 2<sup>nd</sup> St.:** This is a portion of downtown Tushka that extends from a point beginning at the intersection of SE 1<sup>st</sup> Street with US-69/S Jefferson Street, then northeast 1,110 feet to the intersection of NE 2<sup>nd</sup> Street with US-69/S Jefferson Street, was documented on an HPRI form with streetscape photos as a district type resource. The Tushka Streetscape does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an historic district.

#### **Project Recommendations**

Based on 30% ROW plans dated March 31, 2021 (the only plans available at the writing of this report), the proposed improvements do not infringe on the footprint of Building 3A of Building Complex 3 (see ROW plans, pages 38, 59, and 65). However, the plans show Building 3A is five feet within existing ROW and the proposed improvements will be within 2 -3 feet of Building 3A. Minor changes in the project design at this location could result in impacts to Building 3A. If Building 3A can be avoided, approval of the project is recommended as it is proposed.

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## 1. PROJECT DESCRIPTION:

This report documents the cultural resources survey concerning the proposed improvements to an approximately 2.65-mile-long stretch of US-69 through Tushka in central Atoka County. The current roadway has four 12-foot-wide asphalt lanes (totaling 48 feet wide) and 2-foot-wide asphalt shoulders within a 100-foot-wide (50 feet left and right of centerline) right-of-way. The purpose of the project is to widen the existing 4-lane facility to a 5-lane facility on the existing alignment with a continuous center turn lane. The proposed improvements include constructing four 12-foot-wide driving lanes with a 16-foot-wide center turning lane. The roadway will be an open section facility with 8-foot-wide paved shoulders except through town and for a portion north of town where it will be a curb and gutter section.

The study area has two main portions, the portion along US-69 and an intersection portion along Boggy Depot Rd. The portion of the study area along US-69 begins approximately 2,100 feet south of the US-69 and Boggy Depot Rd intersection. From this point, this portion extends north for approximately 2.66 miles, terminating approximately 50 feet north of the US-69 and Shady Ln. intersection. The study area width along US-69 is variable, ranging from 175 feet along straightaways to 400 feet at bump-outs associated with watercourse crossings and intersections. The portion of the study area along Boggy Depot Rd. extends approximately 790 feet west and 560 feet east of the intersection with US-69. The study area width along Boggy Depot Rd. is also variable, ranging from approximately 160 – 300 feet. The study area encompasses approximately 85.1 acres.

<b>Legal Location:</b>	Sections 4, 5, and 8, T3S R11E; Sections 28 and 33, T2S R11E
<b>U.S.G.S. Quadrangle:</b>	Tushka, Okla. (1969)

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## 2. ENVIRONMENTAL SETTING:

### Built Environment Setting:

The study area crosses portions of commercial, residential, and rural agricultural development along US-69 heading through Tushka. The southwestern 5,000 feet of the study area (includes Tushka) is in a mix of commercial and residential development with paved parking lots interspersed with manicured lawns. Nearby buildings are associated with commercial properties and rural residences. The portion of the study area northeast of Tushka is a mix of rural agricultural and commercial settings with nearby buildings associated with both. Several buildings are within the study area, both greater and less than 45 years of age.

### Geomorphology, Geology, and Soils:

The study area is within the Dissected Coastal Plain geomorphic province, an area of “Mostly unlithified, south-dipping Cretaceous sands, gravels, clays and some limestones form the Gulf Coastal Plain; slightly dissected by streams” (Curtis et al. 2008). The uplands at the west end of the study area are underlain by Antlers Sandstone (Trinity Group) which consists of medium-grained, poorly indurated sandstones. The remaining floodplain portion of the study area is underlain by Holocene alluvium consisting of unconsolidated sand, silt, clay, and gravel (Miller and Stanley 2004).

The study area is mantled by soils of the Bernow-Bosville association which consists of deep nearly level to strongly sloping, well drained and moderately well drained, loamy soils on uplands (Shingleton and Watterson 1979:General Soil Map). This association is represented within the study area by Bernow fine sandy loam, (0 to 1 percent slopes), Bernow fine sandy loam, (1 to 3 percent slopes), Bernow fine sandy loam, (3 to 5 percent slopes), Bernow fine sandy loam, (1 to 5 percent slopes, eroded), Bernow fine sandy loam, (5 to 8 percent slopes), Bernow fine sandy loam, (3 to 8 percent slopes, gullied), Boggy fine sandy loam, (0 to 1 percent slopes, frequently flooded), and Hamden fine sandy loam,(0 to 2 percent slopes) (U.S. Department of Agriculture, Natural Resources Conservation Service [NRCS] 2021).

Bernow Series soils form on broad nearly level to strongly sloping forested coastal plains from loamy sediments on Cretaceous uplands (NRCS 2003a). The typical profile consists of a fine sandy loam topsoil (A) from 0 – 6

inches (0 – 15.2 cm) deep over a fine sandy loam leaching horizon (E) ranging from 4 – 15 inches (10.2 – 38.1 cm) deep followed by successive, well-developed sandy clay loam subsoils (Bt1/Bt2) from 9 – 80 (22.9 – 203.2 cm) deep (NRCS 2021). Buried surface horizons (Ab) are not noted within the typical profile or range in characteristics for Bernow series soils (NRCS 2003a).

Boggy Series soils form on flood plains from recent alluvial sediments from Cretaceous rocks (NRCS 2003b). The typical profile consists of a fine sandy loam topsoil (A) from 0 – 20 inches (0 – 50.8 cm) deep followed by a loam parent material horizon (C) from 20 – 79 inches (50.8 – 200.7 cm) deep (NRCS 2021). Buried surface horizons (Ab) are not noted within the typical profile or range in characteristics for Boggy series soils (NRCS 2003b).

Hamden Series soils form on nearly level to gently sloping uplands from material weathered from Cretaceous sandstone and clay (NRCS 2003c). The typical profile consists of a fine sandy loam plowzone (Ap) from 0 – 18 inches (0 – 45.7 cm) deep followed by successive well-developed clay loam to clay subsoils (Bt1/Bt2) from 18 – 86 inches (45.7 – 218.4 cm) deep (NRCS 2021). Buried surface horizons (Ab) are not noted within the typical profile or range in characteristics for Hamden series soils (NRCS 2003c).

**Vegetation:**

The historic regional vegetation is associated with the Post Oak-Blackjack Forest, which is part of the Arbuckle Uplift ecoregion (Hoagland 2008; Woods et al. 2005). In 1898, the study area was wooded. By 1939, much of the woods had been removed for agricultural fields. From 1939 through the 1960s, the landuse pattern remained the same. From the 1980s through the present, the woods were allowed to expand.

**Surface Visibility:**

<p><u>XXX</u> 0-25%</p> <hr/> <p><u>XXX</u> 25-50%</p> <hr/> <p><u>XXX</u> 50-75%</p> <hr/> <p><u>XXX</u> 75-100%</p>	<p>The northern portion of the study area extending out of Tushka consists of open pastures with mixed grasses or tall grasses that blocked surface visibility, averaging less than 10 percent.</p> <p>North portion of study area consists of native grasses and scrubby woodland with dense woodland detritus and intermittent patches of exposed surface, allowing for greater than 25 percent surface visibility.</p> <p>The portion of the study area within the town of Tushka consists of manicured lawns and short grasses, permitting up to 75 percent surface visibility.</p>
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**3. CULTURAL BACKGROUND:**

**Background Research:**

XXX State Site Files at Oklahoma Archeological Survey (OAS)

XXX SHPO NRHP and DOE, and OLI Files

There are no previously recorded properties listed on the NRHP or DOE within one mile of the study area. There is one OLI property, the Tushka School Administration Building (OLI #27554), within the 1-mile area of interest (AOI), but at 860 feet away will not be impacted by the project. There are 19 previously recorded archaeological sites within the revised 1-mile AOI, the nearest of which is 34AT345 and 360 feet southeast of the study area (Table 1). All the sites except 34AT345 are on ridgetoes and slopes overlooking or along intermittent watercourses. The OAS does not have the 34AT345 site form, so it is unknown what it represents. There is nothing at that location on the maps and aerials from 1898 to the present, so it is probably prehistoric. Site 34AT345 is at the edge of a prominent ridgecrest with the nearest intermittent watercourses over 1,200 feet away (Table 1).

**Table 1. Archaeological Sites with 1-Mile area of interest.**

#	Culture	Description	Eligibility	Dist/Dir (ft)
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34AT33	Culturally unassigned prehistoric	Lithic scatter including numerous debris as well as one knife, preforms, and cobbles	Not assessed	2,200 NW
34AT34	Not available	Not available	Not available	2,000 NW
34AT35	Culturally unassigned prehistoric	Small lithic scatter consisting of one projectile point and five flakes	Not assessed	2,770 NW
34AT36	Culturally unassigned prehistoric	Two concentrations of lithics, including dart points, other formal and expedient implements, and abundant debris	Not assessed; further work recommended	2,40 NW
34AT37	Archaic?	Lithic scatter including dart points (Scottsbluff, Calf Creek, Montreal, and Abasdo), other formal and expedient implements, abundant debris, and shell	Not assessed; further work recommended	1,450 NW
34AT38	Culturally unassigned prehistoric	Small lithic scatter including dart points, cores, flakes, and cobbles	Not assessed	670 NW
34AT39	Culturally unassigned prehistoric	Small lithic scatter including dart base, cores, flakes, and cobbles	Not assessed	1,010 SW
34AT40	Paleoindian, Archaic	Scottsbluff, Dalton, Greenbrier, Calf Creek, and other Archaic dart points, as well as other formal and informal implements and debris	Not assessed; further work recommended	2,470 NW
34AT41	Culturally unassigned prehistoric	Small lithic scatter including dart point, cores, flakes, and cobbles	Not assessed	1,850 NW
34AT42	Culturally unassigned prehistoric	Small lithic scatter including dart points, cores, flakes, and cobbles	Not assessed	2,680 SW
34AT43	Culturally unassigned prehistoric	Lithic debris scatter	Not assessed	3,980 SW
34AT52	Culturally unassigned prehistoric	Lithic debris scatter	Not assessed	2,120 NW
34AT53	Culturally unassigned prehistoric	Lithic debris scatter	Not assessed	2,500NW
34AT54	Culturally unassigned prehistoric	Thin cultural mantle representing an open camp (contents not described)	Not assessed	1,460 NW
34AT100	Not available	Not available	Not available	1,370 NW
34AT101	Culturally unassigned prehistoric	Thin cultural mantle representing an open camp (contents not described)	Not assessed	1,050 NW
34AT103	Culturally unassigned prehistoric	Thin cultural mantle representing an open camp (contents not described)	Not assessed	4,400 NW
34AT156	Culturally unassigned prehistoric	Lithic debris scatter	Not assessed	4,900 NW
34AT345	Not available	Not available	Not available	360 SE

All of the available previously recorded sites are prehistoric. Prominent landforms overlooking and along intermittent watercourses were clearly preferred by prehistoric people, but, as in the case of 34AT345, other landforms were also used. All the study area except the northern 2,200 feet crosses landforms considered high probability for prehistoric sites. While nineteenth and twentieth century sites have not been recorded in the 1-mile AOI, it is assumed they would be associated with roads visible on maps and aerial photographs.

Seven prior cultural resources surveys have been completed within the 1-mile AOI (Table 2). ODOT completed surveys through the study area for US-69 improvements in 1976 and 1979. These surveys relied primarily on surface inspection.

**Table 2. Prior surveys within 1-mile AOI.**

Year	Project	Surveyor	AOI Resources	Dist/Dir (ft)
1976	ODOT US-69	David Lopez and Kenneth Keith	34AT33, 34AT35, 34AT36	Within
1979	ODOT US-69	David Lopez and Kenneth Keith	34AT33, 34AT35, 34AT36	Within
1983	CAP Survey	Robert Brooks and Don Wyckoff	34AT36	Unknown
1983	CAP Survey	Robert Brooks	34AT36	Unknown
1990	Choctaw Housing Authority	Barnette	None	2,150 NW

2006	Choctaw Housing Authority, Marissa Walton new home	Bray (HRT)	None	2,010 NW
2011	ODOT Bridge Replacement	Cojeen	None	4,820 W

By 1898, roads crisscross the general area and there are widely scattered buildings and agricultural fields. The Missouri Kansas and Texas Railroad ran parallel to the study area at that time. In 1936, section line roads and adjacent buildings cover the general area. The railroad had been rerouted to pass on the east side of Tushka by 1936. US-69 follows the Jefferson Highway, which was built between 1915 and the early- to mid-1920s to connect Winnipeg (Manitoba, Canada) with New Orleans (Corbett 2009; Oklahoma Members of the Jefferson Highway Association 2017). A major purpose of the Jefferson Highway was to bring tourists into the communities connected by the highway. Tourist camps were built along the highway, similar to the one depicted on the 1936 county highway map north of Tushka (within study area). With the implementation of the national highway system, the Jefferson Highway segment within the study area was designated as US-69 in 1935. The 1936 highway map shows several residences and commercial buildings along US-69. The number of habitations has increased along US-69 between 1936 and the present. Based on maps and aerial photographs reviewed prior to fieldwork, 14 potential mid-twentieth century archaeological sites and eight standing building complexes greater than 45 years of age were anticipated. The 1,110-foot portion of the study area within Tushka, between NE 2<sup>nd</sup> St. at the north end and SE 1<sup>st</sup> St. at the south end needed to be documented and evaluated as a streetscape.

Based on reviewing the OAS quadrangles, there was a high probability for prehistoric resources. Many sites have been documented in settings which are crossed by all but the northern 2,200 feet of the study area. Buried sites were not anticipated based on county soil data.

Based on available maps and aerial photographs, 14 potential mid-twentieth century archaeological sites, eight standing building complexes, and the Tushka streetscape were expected to be documented during fieldwork.

#### 4. METHODOLOGY:

##### **Field Investigation Methodology: (must outline STP interval used in the project area and on sites)**

All fieldwork was conducted in accordance the ODOT CRP (2017) Cultural Resources Studies manual.

The fieldwork entailed a 100 percent survey of the entire study area, consisting of a combination of pedestrian transects, shovel testing, and auger testing. Pedestrian transects were spaced no greater than 49.2 feet (15 m) apart. Cut banks, gravel outcrops, eroded slopes, subtle rises in elevation, knolls, terraces, and rodent back dirt piles were also inspected.

##### **Method A**

Shovel testing was conducted in 98.4-foot (30 m) intervals, with judgmental tests placed in areas anticipated to yield potential resources, or along unanticipated landforms not visible on topographic maps, such as knolls, rises, and benches. Each test was a roughly 11.8-inch (30 cm) diameter hole dug to culturally sterile soil, or one meter below the surface where possible, or to a restrictive element such as bedrock or clay beds. Highly compacted or cobble-dense soils were dislodged using a tamper bar, as necessary. Fill from each test was hand-sifted through 0.25-inch hardware cloth before backfilling. Shovel turns were randomly used in areas of poor surface visibility between shovel tests and consisted of removing approximately 9.8 inches (25 cm) of soil, chopping through with a shovel or trowel to look for cultural material, and refilling.

The possibility for buried surface horizons was evaluated prior to fieldwork, primarily by reviewing county soil data. The NRCS soil data does not list potential buried surfaces (Ab) in the soil profiles within the study area and the potential for buried cultural deposits was considered low. No auger tests were dug during fieldwork.

Of the 14 potential early- to mid-twentieth century archaeological sites anticipated from background research, nine were identified and documented as sites during fieldwork. The potential site locales were inspected within

the study area through surface inspection at no more than 16.4-foot (5 m) intervals and shovel tests dug at 32.8-foot (10 m) intervals at the locations of buildings and structures visible on the historic aerial photographs. There were no indications of the five remaining potential sites within the study area. All eight of the anticipated standing building complexes were identified and documented.

#### **Method B**

This is a delineation methodology conducted for archaeological resources confirmed or identified while in the field. Shovel tests are excavated in 32.8-foot (10 m) intervals (16.4 feet (5 m) for prehistoric sites) around existing features or past features visible in archived aerial imagery to test for significant deposits and to establish a chronology for the site. A site is considered fully delineated by the maximum extent of known features, such as buildings or structures, well-established property boundaries, established roads or highways for late-nineteenth, twentieth, and twenty-first century sites, or by two negative tests along the boundaries that define the site. The site is pedestrian surveyed at intervals necessary to identify any features or components related to the resource that are intact at the surface. Those features identified are then photo-documented and described on an OAS site form that includes dimensions, observed artifacts, condition, and independent NRHP eligibility. Standing structures and buildings that are part of an identified archaeological site are documented on a Historic Preservation Resource Identification (HPRI) form and are also included on the OAS site form.

#### **Method C**

This is an inventory of the built environment to document standing buildings and structures (i.e., houses, barns, bridges, etc.) greater than 45 years of age within the study area. Prior to fieldwork, modern maps and aerial photographs were compared with archived maps and aerials to identify the potential locations of built resources. Bridge databases were also reviewed. Standing buildings or structures identified are documented on an HPRI form. Unanticipated standing buildings, structures, and bridges were also sought. HPRI forms were completed for all documented buildings and structures greater than 45 years of age. No bridges were documented.

#### **Method D**

This an archaeological survey portion of the study area that is a combination of both Methods B and C and was utilized in areas where standing buildings and structures were present as well as archaeological resources.

### **5. RESULTS OF INVESTIGATION:**

\_\_\_\_\_ No archeological sites or buildings recorded in study area.

XXX Resources recorded in study area assessed as **not eligible** for the NRHP. Forms being submitted for agency review.

XXX Oklahoma Archeological Site Survey Form(s) for State Archeologist files.

XXX Historic Preservation Resource Identification Form(s) for SHPO files.

\_\_\_\_\_ Oklahoma Bridge Survey and Inventory Form.

XXX **NRHP-eligible properties** recorded in study area. (**Note: No cultural resources were documented in the USACE jurisdictional permit areas.**)

**Forms being submitted for agency review.**

\_\_\_\_\_ Oklahoma Archeological Site Survey Form(s) for State Archeologist files.

XXX Historic Preservation Resource Identification Form(s) for SHPO files.

\_\_\_\_\_ Oklahoma Bridge Survey and Inventory Form.

\_\_\_\_\_ Archeological sites requiring further assessment (i.e., evaluative testing)

**COMMENTS AND DESCRIPTION OF FINDINGS:****General Observations**

Topography for the study area was typically flat through the town of Tushka with lightly undulating hills to the north of town. Vegetation consisted of native grasses outside the town limits with manicured lawns replacing those grasses within town limits. Disturbed soils were noted extensively throughout the town limits and within the roadside embankments and ditches.

The soils were generally consistent with the Bernow soil series anticipated by the soil survey with the exception of the upper sandy loam (A) topsoil showing consistent mechanical disturbance from development through Tushka and along US-69. The expected leached sandy loam (E) horizon was found to be a more weakly-developed sandy loam or sandy clay loam (Bw) throughout the majority of the study area. These soils were typically heavily compacted when encountered. Where paleochannels were encountered the soils proved to be most consistent with the Boggy soil series with either a thin sandy loam organic topsoil (A) over consecutive fine sand weathered parent material (C) or eroded soils of fine sand weathered parent material (C) at the surface.

No natural knappable stone was observed at the surface or in shovel tests.

**Cultural Resources**

No cultural resources were documented in the USACE jurisdictional permit areas.

The survey of the study area resulted in the documentation of one prehistoric culturally unassigned site (34AT941), one early- to mid-twentieth century roadside park/campground site (34AT932/Building 3A), nine mid-twentieth century farmstead sites (34AT933, 34AT934, 34AT935, 34AT936, 34AT937, 34AT938, 34AT939, 34AT940, and 34AT942), one isolated mid-twentieth century standing building (Building 9A), eight mid-twentieth century standing building complexes (Building Complexes 1 – 8), and the downtown portion of Tushka crossed by US-69 (Tushka Streetscape).

**Archaeological Resources**

**34AT941:** This site is a culturally unassigned prehistoric open habitation that consists entirely of a subsurface deposit of artifacts from 3.9 – 31.4 inches (10 – 80 cm) deep. It is located 1,410 feet southwest of intersection of US-69 and CR EW-185 and is 92 feet east of the US-69 centerline. The site is an irregularly shaped area with the maximum dimensions of 265 feet north-south by 104 feet east-west which covers approximately 0.48 acres. The site is bounded to the west by US-69 and to the east, north, and south by two consecutive negative shovel tests.

The site is located on a small ridge toe bisected by a utility corridor embankment and ditch running northeast to southwest. The vegetation consists of open deciduous woodlands to the south and north with open scrubby brush intermixed with sparse mixed prairie grasses in the middle. Visibility was 60 percent due to the open vegetation.

No artifacts were observed at the surface. A total of 36 shovel tests were excavated to determine the depth and extent of the site. Of the 36 tests, 13 were positive for artifacts from 3.9 – 31.4 inches (10 – 80 cm) deep. Subsurface artifacts (n = 59) include 3 Frisco primary flakes, 7 Frisco secondary flakes, 19 Frisco tertiary flakes, 1 heat-treated Frisco secondary flake, 1 Frisco tertiary shatter, 2 Frisco shatter, 1 Frisco tested cobble, 2 John's Valley Quartzite (JVQ) secondary flakes, 3 JVQ tertiary flakes, 1 possible heat-treated JVQ secondary flake, 1 possible heat-treated JVQ tertiary flake, 3 fire-cracked JVQ shatter, 2 John's Valley Chert (JVC) secondary flakes, 1 JVC tertiary flake, 1 possible heat-treated JVC secondary flake, 1 Red River Jasper primary flake, 2 Red River Jasper secondary flakes, 2 Reeds Spring tertiary flake, 2 Keokuk tertiary flake, 1 Novaculite tertiary flake, 1 possibly heat-treat Novaculite secondary flake, and 2 unidentified grey primary flakes. The artifacts were found between 3.9 – 31.4 inches (10 – 80 cm) with the majority found between 11.8 – 27.5 inches (30 – 70 cm). The soils generally consisted of a sandy loam topsoil (A) averaging 0 – 6.6 inches (0 – 17 cm) followed by a weakly developed sandy loam subsoil (Bw) averaging from 6.6 – 28.7 inches (12 – 73 cm) ending in a well-developed sandy clay subsoil (Bt) on the remains of the ridge toe or consecutive

weathered parent material soils (C) from 0 - 39.3+ inches (0 - 100+ cm) within the bisected utility drainage and a paleochannel drainage on the southeastern portion of the site.

Site 34AT941 is a culturally unassigned prehistoric open habitation that consists entirely of a subsurface deposit of artifacts represented by non-diagnostic debitage and has been investigated in its entirety. The site appears to have good subsurface integrity, but does not contain significant archaeological features or deposits to be eligible to the NRHP under Criterion D. Therefore, the site is recommended **not eligible** for inclusion in the NRHP.

**34AT932/Building 3A:** This site is the remains of an early-twentieth century roadside park and campground consisting of a circa 1920 office building (Building 3A), a concrete foundation with a cast iron drain in the floor (Feature 1), a ceramic utility pipe installation (Feature 2) as well as a surface artifact and subsurface artifact deposits from 0 – 17.7 inches (0 – 45 cm). The remainder of Building Complex 3, a mid-twentieth century residential complex, is unrelated to the original purpose and function of the site. Building Complex 3 has been documented on multiple HPRI forms. The site is located 45 feet northwest of the intersection of US-69 and CR EW-1844 and is 45 feet northwest of the US-69 centerline. The site is an irregularly shaped area with the maximum dimensions of 370 feet northeast-southwest by 140 feet northwest-southeast which covers approximately 1.12 acres. The site is bounded to the east by US-69, a visible property border to the west, and is delineated to the north and south by two consecutive negative shovel tests.

The site is located on a developed plot outside the borders of the town of Tushka, Oklahoma. The vegetation consists of a manicured residential lawn. Visibility across the site was 40 percent due to vegetation.

*Building 3A:* This is a single-story commercial building with multiple additions located 45 feet west of the US-69 centerline, directly across from the intersection of US-69 with CR EW-1844. The original section of Building 3A features a cross-gabled roof with clipped gables. It is clad in native sandstone with brick quoins and wide horizontal siding in the gable ends. There are two rear additions, one of which is the original porch. Both additions are clad in stone. The windows are aluminum replacements. The openings in the original section have cast stone sills and lintels. The original paneled wood doors are intact. Building 3A is in poor condition and is badly in need of repairs. Building 3A is recommended **individually eligible** for listing in the NRHP under Criterion A for its association with transportation developments during the period from 1920 to 1935.

*Feature 1:* This is a rectangular concrete foundation with a cast iron drain in the corner of the floor. It is located 179 feet west of the US-69 centerline. It measures 11 feet north-south and 8 feet 8 inches east-west. The southern half is raised up 1 inch over the northern half which is level with the ground surface. One artifact, a cinderblock fragment, was observed at the surface of Feature 1. Feature 1 is unlikely to yield additional information and will provide no further research value.

*Feature 2:* This is a ceramic pipe hookup. It is located 208 feet southeast of Feature 1. It measures 6 inches in diameter. It is level with the ground surface. No surface artifacts were observed at the location of Feature 2. Feature 2 is unlikely to yield additional information and will provide no further research value.

All surface artifacts are associated with features. Of the 17 shovel tests excavated, 11 were positive for subsurface artifacts from 0 – 17.7 inches (0 – 45 cm). Subsurface artifacts (n = 144) observed include 54 clear flat glass, 4 clear textured glass, 25 clear curved glass, 13 curved brown glass, 1 curved aqua glass, 1 curved green glass, 1 white bulb glass fragment, 1 solarized glass, 1 small brown glass shard with two dotted rows, 1 whiteware, 1 large brown patterned bottle base with "D-126" and "13", 1 red glazed ceramic, 2 tan-white tiles, 20 unmarked red brick fragments, 4 wire nails, 1 metal pull tab, 1 metal pull tab fragment, 1 unidentifiable flat ferrous metal strip, 1 unidentified ferrous metal fragment, 4 concrete chunks, 2 coal, 2 green plastic fragments and a metal spring and metal pipe. The artifacts were found between 0 – 17.7 inches (0 – 45 cm) with the majority found between 7.8 – 11.8 inches (20 – 30 cm). The soils generally consisted of a sandy loam disturbed roadside gravel (Ap) averaging 0 – 6.6 inches (0 – 17 cm) followed by either by the remains of a buried topsoil (A) down to an average of 8.2 inches (21 cm) or a weakly developed sandy clay loam subsoil (Bw) averaging from 8.2 – 16.9 inches (17 – 42 cm) ending in a well-developed sandy clay subsoil (Bt).

The site was identified prior to fieldwork on maps and aerial photographs from 1936 – 1995. It first appears as a roadside park and campground on the 1936 General Highway and Transportation map for Atoka County. Building 3A is visible with seven outbuildings visible in the 1939 aerial photograph. Building 3A was renovated with additional buildings added in 1966, which subsequently becomes a part of the mid-twentieth century building complex that is overlapped by the site. The site remains relatively unchanged from 1939 until 1995. By 1995 only two outbuildings remain in addition to Building 3A. The last of these structures associated with the site appears to be destroyed in the 2008 aerial photograph leaving only Building 3A.

According to Atoka County deed research, the first entry lists an allotment from the Chickasaw and Choctaw to Edith Banks of the Choctaw in 1905. The property is sold to J.E. Ward by Edith Banks in 1920, who sells the property to J.W. Ellis in 1925, who sells the property to L.P. Milam and Pauline Milam in 1927. In 1941 the Milam's sell the property to Paul L.P. Kelley. The property remains with the Kelley family until 1998 when the property is sold to the current owner. According to general internet searches, the site operated as a tourist park and campground as part of the historic Jefferson Highway Route in Oklahoma that was established in 1915 (Oklahoma Members of the Jefferson Highway Association 2017). The site itself was operational circa 1922, based on a newspaper clipping regarding the upkeep and repair of the campgrounds (Muskogee Times-Democrat 1922). It is unclear when the site was no longer used as a park and campground but based on the destruction of associated buildings and structures visible in aerial imagery, the components of the campground were being destroyed and replaced by 1966, when Building Complex 3 is being constructed. The site likely operated as a park and campground as part of the Jefferson Highway route from the circa 1920s until 1966.

Site 34AT932 is the remains of an early-twentieth century roadside park and campground consisting of a circa 1920 office building (Building 3A), a concrete foundation with a cast iron drain in the floor (Feature 1), a ceramic utility pipe installation (Feature 2) as well as a surface artifact and subsurface artifact deposits from 0 – 17.7 inches (0 – 45 cm). The artifacts are generally diagnostic to the early-twentieth century and complement the date range derived from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, the site is not associated with historically significant individuals to be eligible under Criterion B. Although Building 3A is intact, it is in poor condition and does not display unique architecture for Criterion C to apply. The site lacks archaeological integrity and does not contain significant archaeological features or deposits to be eligible under Criterion D. However, Building 3A is considered to be **individually eligible** for inclusion in the NRHP under Criterion A for its association with transportation developments in Atoka County during the period from 1920 to 1935. Because the site lacks archaeological integrity, 34AT932 is recommended **not eligible** for inclusion on the NRHP.

**34AT933:** This site is the remains of a mid-twentieth century farmstead consisting of subsurface artifacts from 0 – 15.7 inches (0 – 40 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is located 190 feet west of the intersection of US-69 with Boggy Depot Road and is 57 feet north of the centerline of Boggy Depot Road. The site measures 92 feet north-south and 256 feet east-west or approximately 0.47 acres. The site has been completely delineated to the west, east, north, and south by the maximum extent of artifacts and features in shovel testing.

The site is located on an upland ridge. The vegetation consists of tall grass prairie grasses. Surface visibility across the site averaged 20 percent due to vegetation.

No artifacts were observed at the surface. Of the 21 shovel tests dug across the site 7 were positive for artifacts. Subsurface artifacts (n = 102) include 4 white ware sherds, 13 ceramic sherds, 2 purple asbestos tile sherds, 14 asbestos tile sherds, 1 clear glass bottle top with broken screw top, 2 clear glass, 2 clear flat glass, 40 clear curved glass, 3 curved flat glass, 9 curved brown glass, 1 green bottle glass fragment, 1 squared foundation post, 3 round wire nails, 2 plastic fragments, 2 large round nails/stakes, 2 unidentifiable ferrous metal fragments, and 1 asphalt shingle fragment. The artifacts were found at depths between 0 – 15.7 inches (0 – 40 cm) below the surface, with most artifacts found between 0 – 7.8 inches (0 – 20 cm). The soils observed typically consisted of a sandy loam plow zone (Ap) to an average depth of 7 inches (18 cm), over sandy clay well developed subsoil.

The site was identified prior to fieldwork on maps and aerial photographs from 1956 – 2013. It first appears as a farmstead with two buildings in the 1956 aerial photograph. The site remains relatively unchanged from 1956 until 2003 when a single building is visible. The last structure appears to be destroyed in the 2013 aerial photograph.

Most of the site was wooded until 2012. Between 2012 and 2015, the entire site was cleared of woods. Tracks from heavy machinery and large graded areas are visible on the 2015 aerial photograph suggesting the site was heavily disturbed during tree removal.

Site 34AT933 is the remains of a destroyed rural mid-twentieth century farmstead consisting solely of a disturbed subsurface artifact scatter from 0 – 15.7 inches (0 – 40 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. Site 34AT933 lacks integrity, does not contain significant archaeological deposits or associations, and is recommended **not eligible** for inclusion on the NRHP.

**34AT934:** This is the remains of a mid-twentieth century residential complex. The site consists of four concrete foundations (Features 1 - 4), one asphalt driveway (Feature 5) and a surface and subsurface deposit of artifacts from 0 - 7.8 inches (0 – 20 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is 148 feet southwest of the intersection of US-69 (S Jefferson St.) with SE 1st St., then 50 feet southeast of the US-69 centerline. The site measures 118 feet northeast - southwest and 98 feet northwest - southeast or 0.27 acres. The site has been completely delineated to the west, east, north, and south by the maximum extent of artifacts and features in shovel testing and established property boundaries visible in aerial imagery.

The site is located on developed land within the town of Tushka, Oklahoma. The vegetation is a mixture of manicured lawn grasses and tall prairie grasses. Visibility across the site ranged from 50 percent in the manicured lawn portion and 15 percent in the tall prairie grasses.

*Feature 1:* This is a buried poured concrete foundation located 63 feet southeast of the US-69 centerline. Feature 1 measures 34 feet north-south and 22 feet east-west. A poured cement walkway branches off the west side of Feature 1, extending to the US-69 right-of-way. The sidewalk extension measures 4 feet 2 inches wide north-south and 11 feet 3 inches east-west. No artifacts were observed at the surface of Feature 1. Feature 1 is unlikely to yield additional information and will provide no further research value.

*Feature 2:* This is a poured concrete slab foundation, located 1-foot south of Feature 1. Feature 2 measures 24 feet east-west and 12 feet 9 inches north-south with a maximum height of 16 inches. A date of 1954 is etched into the concrete of Feature 2. Artifacts observed at the surface (n = 4) include 1 unmarked redbrick fragment, 1 metal handle, 1 wire nail, and 1 metal hook. Feature 2 is unlikely to yield additional information and will provide no further research value.

*Feature 3:* This is a poured concrete slab, located 7 feet east of Feature 1. Feature 3 is supported by three poured concrete walls on the north, east and south sides with the western side open. Feature 3 measures 14 feet 6 inches north-south and 8 feet east-west. Its maximum height is 16 inches. Artifacts observed at the surface (n = 6) include 4 General Electric appliance ovens, 1 electric outlet box, and 1 propane tank on top of the feature. Feature 3 is unlikely to yield additional information and will provide no further research value.

*Feature 4:* This is a poured concrete foundation 39 feet east of Feature 1. Feature 4 measures 14 feet north-south and 12 feet east-west. Feature 4 was covered in modern portable trash at the time of survey. Feature 4 is unlikely to yield additional information and will provide no further research value.

*Feature 5:* This is a poured asphalt driveway located directly adjacent to the west side of Feature 2. Feature 5 measures 40 feet east-west and 12 feet 9 inches north-south. No surface artifacts were visible on its surface. Feature 5 is unlikely to yield additional information and will provide no further research value.

Artifacts observed at the surface (n = 10) are all associated with Features 2 and 3. Of the 10 shovel tests excavated, 8 were positive for artifacts. Artifacts documented in subsurface testing (n = 88) include 10 curved clear glass, 1 clear flat glass, 2 flat curved glass, 2 curved brown glass, 1 clear bottle bottom with stamp (370 [X] LI-1, 8 F 91), 1 crockery sherd, 3 wire nails, 1 roof nail, 1 wire fragment, 11 unidentifiable flat metal, 3 slag metal fragments, 1 metal cap-like object with drilled hole in center, 3 metal bottle caps, 1 wooden plank edge with nail, 1 can tab, 3 tile fragments, 2 fiber concrete board, 2 concrete fragments, 6 asphalt shingle fragments, 1 plastic fragment, 4 green plastic fragments, 1 plastic wrapper, and 1 Winchester Repeating Arms Company .38 special bullet casing. A general search for the bottle stamp did not yield any results. Artifacts were found between 0 – 7.8 inches (0 – 20 cm) below the surface. The soils observed typically consisted of a sandy loam plow zone (Ap) to a depth of 3.9 inches (10 cm) followed by a well-developed sandy clay loam subsoil (Bt).

The site was identified prior to fieldwork on maps and aerial photographs from 1966 – 2003. It first appears as a farmstead with four buildings in the 1966 aerial photograph. The site remains relatively unchanged from 1966 until 1995 when a single building is visible. The last structure appears to be destroyed in the 2003 aerial photograph.

According to Atoka County deed research, the first entries listing the property are unavailable. The first available entry is an easement to Atoka County for the highway dated to 1946. The easement lists the owner of the property as W. B. Hall. The property is sold to Oneda Smith by Emma Hall in 1956, who sells the property to Billy Joe Hall in 1977. The property remains in the Hall family to the present day. Based on land records and aerial imagery, the site can be associated with both Oneda Smith and the Hall family.

Site 34AT934 is the remains of a destroyed residential complex consisting of four concrete foundations (Features 1 – 4) an asphalt driveway (Feature 5), as well as a surface and subsurface deposit of artifacts from 0 – 7.8 inches (0 – 20 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT935:** This is a mid-twentieth century residential site consisting of a foundation (Feature 1), a well foundation (Feature 2), and a surface and subsurface deposit of artifacts from 0 – 31.4 inches (0 – 80 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is located 58 feet northeast of the intersection of US-69 and E. Main St and is 64 feet east of the US-69 centerline. The site measures 64 feet northeast-southwest and 100 feet northwest-southeast or 0.15 acres. The site has been completely delineated to the west, east, north, and south by the maximum extent of artifacts and features in shovel testing within the visible property borders.

The site is in a developed plot within the town of Tushka, Oklahoma. The vegetation at the site is a manicured grass lawn. Visibility at the site averaged 50 percent due to vegetation and patches of exposed soil.

*Feature 1:* This is a foundation composed of poured concrete located 67 feet east of the US-69 centerline and 79 feet northeast of E Main St. It measures 21 feet 6 inches north-south and 16 feet east-west. No artifacts were visible on its surface. Feature 1 is unlikely to yield additional information and will provide no further research value.

*Feature 2:* This is a well foundation composed of poured concrete located 59 feet east of Feature 1. Feature 2 has a sealed water pipe located at the center of the foundation. Feature 2 measures 7 feet 6 inches north-south and 7 feet 6 inches east-west. Artifacts observed at the surface of Feature 2 (n = 5) include 5 unmarked redbrick fragments. Feature 2 is unlikely to yield additional information and will provide no further research value.

Of the five shovel tests excavated at the site, two were positive for artifacts from 0 – 31.4 inches (0 – 80 cm) deep. Artifacts observed in subsurface testing (n = 45) include 1 beer bottle glass, 7 clear curved glass, 1 clear bottle fragment, 33 unidentifiable metal fragments, 2 wire nails, and 1 pale blue plastic fragment. The artifacts observed were found at depths ranging from 0 - 31.4 inches (0 – 80 cm) with most found between 0 - 7.8 inches (0 – 20 cm). The soils observed typically consisted of a sandy loam plow zone (Ap) an average depth from 0 - 7 inches (0 – 18 cm) followed by a weakly developed sandy loam (Bw) from an average depth of 7 - 13.7 inches (18 - 35 cm) above a well-developed sandy clay subsoil (Bt).

Noted disturbances at the site include a heavily compacted gravel parking area over the southern third of the site.

The site was identified prior to fieldwork on maps and aerial photographs from 1956 – 1995. It first appears as a residential complex with a single structure surrounded by multiple residences in 1956. The site shows two buildings in the 1966 aerial photograph and remains relatively unchanged from 1966 until 1991 when a single building is visible. The last structure appears to be destroyed in the 1995 aerial photograph.

According to Atoka County deed research, the first entries listing the property are unavailable. The first available entry is a warranty deed to Elgin Stackhouse dated to 1951. The property is sold to Jack Barbee in 1951. The property remains in the Barbee family to 2007 when it is sold to David Chambers. Based on land records and aerial imagery, the site can be associated with both Elgin Stackhouse and the Barbee family.

Site 34AT935 is the remains of a mostly destroyed mid-twentieth century residential complex consisting of a concrete foundation (Feature 1) and a well foundation (Feature 2), as well as surface and subsurface deposits of artifacts from 0 - 31.4 inches (0 – 80 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT936:** This is a destroyed mid-twentieth century residential site that consists entirely of a subsurface deposit of artifacts from 0 – 11.8 inches (0 - 30 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is located 118 feet northeast of intersection of US-69 and E. Main St. and 64 feet east from the centerline of US-69. The site measures 64 feet northeast - southwest and 78 feet northwest - southeast or approximately 0.11 acres. The site has been completely delineated to the west, east, north, and south by the maximum extent of artifacts and features in shovel testing to the limits of the established property boundary.

The site is located on a developed plot within the town of Tushka, Oklahoma. The vegetation consisted of a manicured grass lawn. Visibility averaged 50 percent, due to vegetation and patches of exposed soil.

No artifacts or features were observed at surface. Of the five shovel tests excavated, five were positive for artifacts from 0 – 11.8 inches (0 - 30 cm) deep. Artifacts observed in subsurface testing (n = 123) include 3 flat aqua glass, 57 curved clear glass, 2 clear glass shards, 3 clear flat glass, 2 curved cobalt glass, 1 bottle base, 1 square bottle clear glass shard, 1 decorative clear rim glass, 1 opaque glass shard, 2 curved brown glass shards, 1 pink glass shard, 1 large corner shard of glass, 1 broken jar lip and neck, 5 whiteware sherds, 1 brown glazed ceramic sherd, 1 unidentified metal fragment, 1 unidentifiable small metal sealed pipe, 1 nut and bolt, 1 bolt, 1 button, 1 wire, 12 wire nails, 1 screw, 10 metal jar lid fragments, and 2 black plastic fragments. The artifacts were found at a range of depths from 0 - 11.8 inches (0 - 30 cm) with most artifacts within the 0 - 7.8 inches (0 - 20 cm) range. The soils observed typically consisted of a sandy loam plow zone (Ap) an average depth from (0 - 7 inches (0 – 18 cm) followed by a weakly developed sandy loam (Bw) from an average depth of 7 - 13.7 inches (18 - 35 cm) above a well-developed sandy clay subsoil (Bt).

The site was identified prior to fieldwork on maps and aerial photographs from 1956 – 1995. It first appears as a residential complex with a single structure surrounded by multiple residences in 1956. The site remains relatively unchanged from 1956 until 1991 when a single building is visible. The last structure appears to be destroyed in the 1995 aerial photograph.

Site 34AT936 is the remains of a destroyed mid-twentieth century residential site consisting solely of a disturbed subsurface artifact scatter from 0 - 11.8 inches (0 – 30 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. Site 34AT936 lacks integrity, does not contain significant archaeological deposits or associations, and is recommended **not eligible** for inclusion on the NRHP.

**34AT937:** This is a mid-twentieth century residential site consisting of a concrete foundation (Feature 1) and a subsurface deposit of artifacts from 0 – 60 cm (0 – 23.6 inches) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is located 50 feet north of the intersection of US-69 and NE 1st St and approximately 70 feet east of the centerline of US-69. The site measures 85 feet northeast - southwest and 38 feet northwest - southeast or approximately 0.07 acres. The site has been completely delineated to the west, east, north, and south by the maximum extent of artifacts and features in shovel testing to the limits of the established property boundary.

The site is located on a developed plot within the town of Tushka, Oklahoma. The vegetation is a manicured residential grass lawn. Visibility across the site average 40 percent, due to vegetation.

*Feature 1:* This is a rectangular poured concrete slab well-house foundation located 100 feet east from the centerline of US-69 and 43 feet north from the centerline of NE 1st St. The maximum dimensions measured 2 feet, 7.5 inches east-west and 1 foot, 10.5 inches north-south with a height of surface of 8.5 inches. Feature 1 has a metal pipe protruding from the center. No artifacts were observed at the surface of Feature 1. Feature 1 is unlikely to yield additional information and will provide no further research value.

No artifacts were observed at the surface. Of the five tests excavated, three were positive for artifacts from 0 – 60 cm (0 – 23.6 inches) deep. Subsurface artifacts (n = 78) include 6 clear flat glass, 3 clear curved glass, 1 green bottle glass, 2 transfer print sherds, 1 blue transfer ware sherd, 11 wire nail, 40 unidentifiable ferrous metal, 12 concrete fragments, and 1 plastic bead. The artifacts were found at depths between 0 - 23.6 inches (0 – 60 cm) with the majority being found within 15.7 - 23.6 inches (40 – 60 cm). The soils observed typically consisted of a sandy loam plow zone (Ap) 0 - 11.8 inches (0 – 30 cm), followed by a weakly developed sandy loam (Bw) 11.8 - 26.7 inches (30 – 68 cm) above a well-developed sandy clay loam subsoil (Bt).

Disturbances observed include the gravel driveway parallel to US-69 on the west side of the site and several utility lines that run parallel to NE 1st St. and modern buildings and development to the south and east.

The site was identified prior to fieldwork on maps and aerial photographs from 1956 – 2008. It first appears as a single building in the 1956 aerial photograph at the location of Feature 1. The site remains relatively unchanged from 1956 - 2008. The structure appears to be destroyed in the 2008 aerial photograph.

According to Atoka County deed research, the first entries listing the property are unavailable. The first available entry is a sale of the land from Mary Lovina Allison and O.B. Allison to Amos A. Poole in 1973. The sale lists the owner of the property as Mary Lovina. The property is sold to Amos A. Poole by Mary Lovina in 1973, who sells the property John Lambert in 1978. The property is sold back to Amos A. Poole in 1978 and remains with the Poole family to 1995 when it was sold to its current owners Brickie D. Griffin and Marsha F. Griffin. Based on land records and aerial imagery, the site can be associated with both Mary Lovina, John Lambert, and the Poole family. Ownership of the property prior to 1973 is unknown, due to missing deed research.

Site 34AT937 is the remains of a mostly destroyed mid-twentieth century residential site consisting of a concrete foundation (Feature 1) and a subsurface deposit of artifacts from 0 - 23.6 inches (0 – 60 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived

from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT938:** This site is the remains of a mostly destroyed mid-twentieth century farmstead. The site consists of a rectangular concrete foundation (Feature 1) and a surface and subsurface deposit of artifacts from 0 - 11.8 inches (0 - 30 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. It is located 1,505 feet north of the intersection of US-69 and NE 2nd St. and is 60 feet west of the US-69 centerline. The site is an irregularly shaped area with the maximum dimensions of 85 feet northwest - southeast by 151 feet northeast - southwest which covers approximately 0.24 acres. The site is delineated to the east by US-69, a property border to the west, and to the north and south by two consecutive negative shovel tests.

The site is located on a developed plot within the town of Tushka, Oklahoma. The vegetation is a manicured residential grass lawn. Visibility across the site average 40 percent, due to vegetation.

*Feature 1:* This is a rectangular poured concrete foundation border, located 1,505 feet northeast of the intersection of US-69 with NE 2nd St. and is 100 feet west of the US-69 centerline. Feature 1 measures 12 feet north-south and 7 feet east-west. Surface artifacts observed at the surface of Feature 1 (n = 4) include 1 metal spring and 3 clear flat glass shards. Feature 1 is unlikely to yield additional information and will provide no further research value.

The only surface artifacts were those associated with Feature 1. Of the 17 tests excavated, three were positive for artifacts from 0 - 11.8 inches (0 - 30 cm) deep. Artifacts observed below the surface (n = 42) include 1 ceramic pink mug stamped Shenango China, New Castle, PA, U.S.A. Rimroi Welroc H15, 2 crockery sherds, 32 curved clear glass shards, 1 clear flat glass shard, 1 unidentified electric part, and 5 black plastic fragments. A search of the Shenango China manufacturer's catalogue shows the ceramic mug was manufactured between July - December 1957 (Restaurant Ware Collectors 2021). The artifacts were found at depths between 0 - 11.8 inches (0 - 30 cm) with the majority found between 0 - 3.9 inches (0 - 10 cm). The soils observed typically consisted of a sandy loam plow zone (Ap) averaging 0 - 5.1 inches (0 - 13 cm), followed by a weakly developed sandy loam (Bw) averaging 5.1 - 14.1 inches (13 - 36 cm) above a well-developed sandy clay subsoil (Bt).

Disturbances observed include the gravel driveway parallel to US-69, along the southwest side of the site.

The site was identified prior to fieldwork on maps and aerial photographs from 1956 - 1995. It first appears as a farmstead with one building in the 1956 aerial photograph. An outbuilding is added by the 1966 aerial photograph. The site remains relatively unchanged from 1966 until 1991 when a single building is visible. The last structure appears to be destroyed in the 1995 aerial photograph.

According to Atoka County deed research, the first entries listing the property include an easement to Atoka County for the highway dated to 1946. The easement lists the owner of the property as W. B. Hall. The property is sold to Oneda Smith by Emma Hall in 1956, who sells the property to Billy Joe Hall in 1977. The property remains in the Hall family to the present day. Based on land records and aerial imagery, the site can be associated with both Oneda Smith and the Hall family.

Site 34AT938 is the remains of a mostly destroyed rural mid-twentieth century farmstead consisting of a foundation (Feature 1) and a surface and subsurface deposit of artifacts from 0 - 11.8 inches (0 - 30 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site

does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT939:** This site is the remains of a mostly destroyed mid-twentieth century farmstead. The site consists of a rectangular concrete/brick foundation border (Feature 1), a cinderblock well house (Feature 2), a metal pipe hookup (Feature 3), as well as a paint can push pile (Feature 4) and surface and subsurface deposits of artifacts from 0 – 3.9 inches (0 – 10 cm) deep. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. It is located 1,210 feet southwest of the intersection of US-69 and CR EW-185 and is 67 feet west of the US-69 centerline. The site is an irregularly shaped area with the maximum dimensions of 65 feet northwest - southeast by 149 feet northeast - southwest which covers approximately 0.20 acres. The site is bounded to the east by US-69, and the west, the north, and south by two consecutive negative shovel tests.

The site is located on a wooded upland setting. The vegetation consists of a forest with varietal deciduous trees. Visibility across the site average 20 percent due to vegetation

*Feature 1:* This is a damaged rectangular poured concrete/brick foundation border. It is located 84 feet west of the centerline of US-69. The northern wall is of poured concrete while the eastern and southern walls consist of mortared redbrick. The western foundation wall is missing. It measures 23 feet north-south and 22 feet east-west and is approximately 1 foot in height. Surface artifacts (n = 26+) observed at the surface include 20+ tile fragments, over 5+ redbrick fragments and 1 beer can. Feature 1 is unlikely to yield additional information and will provide no further research value.

*Feature 2:* This is a cinderblock well house around an open redbrick lined well located 8 feet southwest of Feature 1. Feature 2 measures 6 feet 9 inches north-south and 6 feet 7 inches east-west and is 4 feet 5 inches in height. The redbrick well on the interior measures 2 feet 3 inches in diameter and is 1 foot 3 inches above ground surface. Artifacts observed at the surface (n = 10+) include over 10+ roofing shingle fragments. Feature 2 is in poor condition and is unlikely to yield additional information and will provide no further research value.

*Feature 3:* This is a metal pipe hookup level with the ground surfaces. It is located 3 feet south of Feature 1. It is a steel pipe that measures 2.5 inches in diameter. Feature 3 is unlikely to yield additional information and will provide no further research value.

*Feature 4:* This is a paint can push pile located 30 feet north of Feature 1. It measures 3 feet east-west and 2 feet north-south. It was approximately 3 feet in height at the time of survey. Artifacts observed at the surface (n = 10) include 8 paint cans, 1 spray paint can and 1 cracked rubber ball. Feature 4 is unlikely to yield additional information and will provide no further research value.

The artifacts observed at the surface were concentrated at existing features. Of the 13 shovel tests dug across the site, three were positive for artifacts from 0 – 3.9 inches (0 – 10 cm) deep. Subsurface artifacts (n = 39) include 2 pale greenish-blue glassware decorated shards, 3 curved clear glass sherds, 1 unidentified metal fragment, and 33 asbestos tile fragments. The artifacts were found between 0 – 3.9 inches (0 – 10 cm). The soils generally consisted of a sandy loam topsoil (A) averaging 0 – 4.7 inches (0 – 12 cm) followed by a weakly developed sandy loam subsoil (Bw) averaging from 4.7 – 9 inches (12 – 23 cm) ending in a well-developed sandy clay subsoil (Bt).

The site was identified prior to fieldwork on maps and aerial photographs from 1956 – 1995. It first appears as a farmstead with four buildings in the 1956 aerial photograph. The site is obscured by vegetation in subsequent aerial imagery after 1956 but is shown as two structures on the 1973 topographic quadrangle. All structures appear to be destroyed in the 1995 aerial photograph.

According to Atoka County deed research, the first entries listing the property are unavailable. The first available entry lists Clara E. Lawson as the owner in 1939. The property is sold to I.E Shannon by Clara E. Lawson in 1941, who sells the property to Frank G. Boatright in 1943, who sells the property to W. H. Alston in 1945. The property remains in the Alston family until 1975 when the property is sold to Marvene Sanders.

In 1982 an easement transfer part of the property to the Public Service Company who takes ownership of the rest of the property. in 1986. Records of transfer after 1986 are missing but by 1992 Eulice M. Dillard has possession of the property. In 1992 Eulice M. Dillard sells the property to Phillip R. Eaves and his wife. The Eaves family retains possession of the property up until 2018 when the current owner takes possession. Based on land records and aerial imagery, the site can be associated with Clara E. Lawson, I.E Shannon, Frank G. Boatright, the Alston family, Marvene Sanders, Eulice M. Dillard and the Eaves family.

Site 34AT939 is the remains of a mostly destroyed rural mid-twentieth century farmstead consisting of a rectangular concrete/brick foundation border (Feature 1), a cinderblock well house (Feature 2), a metal pipe hookup (Feature 3) was well as a paint can push pile (Feature 4) and surface and subsurface deposits of artifacts from 0 – 3.9 inches (0 – 10 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT940:** This is the remains of a mostly destroyed mid-twentieth century farmstead that consists entirely of a single cinderblock cellar (Building 9A). The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site is located 1,130 feet southwest of intersection of US-69 and CR EW-1844 and is 45 feet west of the US-69 intersection. The site measures 44 feet northeast-southwest and 91 feet northwest-southeast or approximately 0.1 acres. The site has been completely delineated to the west, east, north, and south by two consecutive negative tests in shovel testing.

The vegetation consisted of a manicured grass lawn to the south and west and deciduous woods to the east and north. Visibility was 20 percent due to the vegetation blocking most of the ground surface but with bare patches visible in the maintained portion.

*Building 9A:* This is a rectangular cinderblock cellar buried into the ground into a raised hillock. It has a cement staircase descending from a south facing doorway. It is located 85 feet west of the US-69 centerline. The building measures 15 feet east–west and 10 feet north–south and is 5 feet above the ground. No surface artifacts were observed with this building. Building 9A has been documented on an HPRI form. Building 9A is in poor condition, does not display unique architecture, is unlikely to yield additional information and will provide no further research value. Building 9A is in ruins and does not exhibit significant architecture, design, or workmanship and is recommended not eligible for inclusion in the NRHP.

No artifacts were observed at the surface or in subsurface testing. The soils observed typically consisted of a sandy loam plow zone (Ap) an average depth from 0 – 5.9 inches (0 – 15 cm) followed by a weakly developed sandy loam (Bw) from an average depth of 5.9 - 13.7 inches (15 - 35 cm) above a well-developed sandy clay subsoil (Bt). Modern roadside trash was identified intermixed in several tests in disturbed soils.

The site was identified prior to fieldwork on maps and aerial photographs from 1939 – 1981. It first appears as a farmstead with one building in the 1939 aerial photograph though it may be present along a line of structures visible on the 1936 county highway map. The site remains relatively unchanged from 1939 until 1981 when a single building is visible. The last structure appears to be destroyed in the 1995 aerial photograph. Due to the size and vegetation in aerial imagery, Building 9A is never visible.

According to Atoka County deed research, the first entries listing the property are an allotment to Minnie M. Sharp later Minnie M. Bryant in 1906 (Choctaw Roll #11760). The property is sold to I.W. Butts by Minnie M. Bryant in 1919, who sells the property to Earl Evans in 1942. Earl Evans sells the property to Willie Moore in 1946 who again sells the property to Lee H. Quinlan in 1946. In 1949 Veda R. Dowd purchases the property and retains ownership until 2001 when the current owners take possession. Based on land records and aerial imagery, the site can be associated with both Minnie M. Sharp (Bryant), I.W. Butts, Earl Evans, Willie Moore, Lee H. Quinlan, and Veda R. Dowd.

Site 34AT940 is the remains of a destroyed mid-twentieth century farmstead consisting of a single cinderblock cellar (Building 9A). According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. Building 9A does not possess the characteristics necessary for NRHP inclusion and is therefore recommended not eligible as an individual property or as a contributing property to an eligible historic district. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT942:** This is the remains of a mostly destroyed mid-twentieth century farmstead. The site, as it has been investigated, consists of a surface artifact and a subsurface deposit of artifacts identified from a depth of 0 - 19.6 inches (0 – 50 cm). The site is located 264 feet southwest of the intersection of US-69 and CR EW-1844 and is 78 feet east of the US-69 centerline. The site was identified on historic maps and aerial photographs while conducting background research and was confirmed during fieldwork. The site could not be visited in its entirety, as it continues well beyond the scope of the survey. The site has been delineated to US-69 to the west and within the US-69 right-of-way. The portion of the site visited measures 119 feet northeast - southwest and 287 feet northwest - southeast or approximately 0.58 acres. Based on review of aerial imagery, the site is expected to continue to the south, southeast, and northeast. The anticipated site dimensions measure 337 feet northwest–southeast and 155 feet northeast–southwest or approximately 0.94 acres.

The site is located on an open pasture. The vegetation consisted of a tall prairie grass field. Visibility was 10 percent due to the vegetation at the time of survey.

One artifact (n = 1) a whiteware sherd, was observed at the surface. Of the 15 shovel tests excavated across the site five were positive for subsurface artifacts from a depth of 0 - 19.6 inches (0 – 50 cm). Subsurface artifacts (n = 62) include 1 whiteware sherd with blue rim, 1 brown glazed cup fragment, 1 milk glass shard, 1 flat aqua glass, 1 curved aqua glass, 4 coke bottle glass, 13 clear curved glass, 3 clear flat glass, 3 green curved glass, 1 curved brown glass, 1 clear bottle rim glass fragment, 1 cut nail, 3 wire nails, 6 round wire nail fragments, 13 unidentified metal fragments, 1 three-inch copper wire, 1 charcoal, 2 coal fragments, and 5 brick fragments. The artifacts were found between 0 - 19.6 inches (0 – 50 cm) with the majority found between 0 - 11.8 inches (0 - 30 cm). The soils generally consisted of a sandy loam topsoil (A) averaging 0 – 7 inches (0 – 18 cm) followed by a weakly developed sandy loam subsoil (Bw) averaging from 7 – 14.5 inches (18 – 37 cm) ending in a well-developed sandy clay subsoil (Bt).

The site was identified prior to fieldwork on maps and aerial photographs from 1939 – 1981. It first appears as a farmstead with a potential building in the 1939 aerial, with two buildings distinctly visible in the 1956 aerial photograph. The site remains relatively unchanged from 1956 until 1966 when the buildings appear demolished. The last structure appears to be removed in the 1981 aerial photograph.

Site 34AT942, as it has been visited, is the remains of a mostly destroyed mid-twentieth century farmstead consisting of a surface artifact and a subsurface artifact scatter from 0 - 19.6 inches (0 – 50 cm) deep. The artifacts are generally diagnostic to the mid-twentieth century and complement the date range derived from available maps and aerial imagery. The site has not been investigated in its entirety because it extends well beyond the study area. The eligibility of site 34AT942 as a whole for inclusion in the NHRP has not been determined. This study considered only those portions of the site within the study area, and accessible by ODOT. The portion of the site within the study area does not have characteristics that would qualify the site for inclusion in the NRHP (pursuant to 36 CFR 60.4). Based on this evaluation, the site as a whole is considered **not assessed**, however the proposed undertaking would have no effect on any characteristics of the site within the study area that would qualify it for inclusion in the NRHP.

#### **Built Environment Resources**

**Building Complex 1 (2715 S Mississippi Avenue):** This is a circa 1972 commercial complex that has been documented on a single HPRI form. The complex is located on the west side of US-69/75, approximately 500 feet north of the intersection with CR EW-1844 within Atoka city limits. Recorded buildings include Building 1A, a circa 1972 office building that was moved to the site (original location unknown). The complex also includes post-1976 Building 1B, a metal pole barn. This commercial complex is typical of other commercial

complexes from this time period in the area. Building Complex 1 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

**Building Complex 2:** This is a late-twentieth century commercial complex that has been documented on multiple HPRI forms. Recorded buildings include two circa 1970 metal clad shops, Buildings 2A and 2C, a circa 1960 concrete block shop Building, 2B, and a circa 1975 pole barn, Building 2D. The complex also includes two post-1976 storage buildings, Buildings 2E and 2F. Located on the east side of US-69/75, this complex is approximately 500 feet north of the intersection with CR EW-1844 within Atoka city limits. The buildings are typical of other commercial complexes in the area. Building Complex 2 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

**Building Complex 3 (2755 S Mississippi Avenue):** This is a twentieth century complex with a combination of commercial and residential buildings. The 1936 Atoka County highway map identifies this area as a tourist camp. The buildings standing today have been documented on multiple HPRI forms. The complex is located on the west side of US-69/75 at the intersection with CR EW-1844 within Atoka city limits. Recorded buildings include Building 3A, a native stone clad commercial building with additions, Building 3B, the prefabricated residence, Buildings 3C and 3E, corrugated metal clad equipment sheds, Object 3D, a cast iron sorghum press, and Building 3F, a corrugated metal storage building. The complex also includes the post-1976 Structure 3G, a prefabricated concrete storm shelter, Structure 3H, the stand for a small windmill, and Structure 3I, a propane tank.

The parcel containing Building Complex 3 was allotted in the early 1900s. Two tribal members claimed the property, Miss Lena Frinzell and Miss Edith Banks, and the allotment was subsequently contested. In a decision dated October 10, 1904, the Commission of the Five Tribes ruled in favor of Edith Banks, a small child identified as 1/8<sup>th</sup> Choctaw by Blood, roll number 11758. Her allotment was signed for by her guardian, Ida Ward, who was also her aunt and stepmother. In 1919, the property was transferred to her father/uncle, Joseph E. Ward. In 1920, Ward, sold the property to J.W. Ellis, a local farmer. From Ellis, it was transferred to a local businessman, Louis P. Milam. Milam operated a trucking company out of Atoka but relocated to Checotah circa 1942. He then sold the parcel to Paul and Inez Kelley. The Kelley's owned and operated a number of local businesses including a grocery store, a hardware store, and a furniture store. The Kelley's owned the property until the 1970s when it was sold to the current owners, the McNich family, who removed most of the standing structures related to the tourist camp. A review of available sources related to state and local history, including The University of Oklahoma Western History Collection Indian-Pioneers Collection, *The Chronicles of Oklahoma*, *Encyclopedia of Oklahoma History and Culture*, Indian Claims Commission Decisions, Oklahoma Academy of Science Proceedings, *Oklahoma Today* and Google did not result in any additional information indicating that any of the previous owners were significant to the development of Atoka, Tushka, or Oklahoma history.

In 1915, the roadway adjacent to Building 3A was designated part of the Jefferson Highway, an informal north to south route through the Midwest. The route was advertised by the Jefferson Highway Association, catering to increasing numbers of automobile owners. In an era before roadside hotels, tourist camps offered important services to travelers, conveniently located adjacent to the roadway. In Atoka, the tourist camp advertised "capacity 100 cars, electric lights, water, shower baths, comfort stations, shade, free fuel, tables and benches, ovens and pavilion for use in case of rain" (Oklahoma Members of the Jefferson Highway Association 2017). By 1929, the Jefferson Highway Association was no more, as the informally designated auto routes were formally designated by state and federal highway departments. The adjacent roadway was named SH-6 and in 1935, it became known as US-69 (Corbett 2009). Very few buildings associated with the Jefferson Highway and/or tourist camps have been documented in Oklahoma. Building 3A is recommended **eligible** for inclusion in the NRHP for its association with transportation developments in Atoka County during the period from 1920 to 1935. It is considered to be eligible for inclusion in the NRHP based upon that association under Criterion A. As this building is eligible under Criterion A, it is its association with transportation that conveys the property's significance. In terms of the seven aspects of integrity, the building remains in its original location and in a modified version of its original setting -- on the outskirts of a small town, along a highway. There have been multiple additions to the building; the additions are obvious but not overwhelming. The

original windows and roof have been replaced, but the original stonework and doors are intact. The workmanship of the original craftsmen, readily visible in the carefully laid stonework, is intact. In terms of feeling and association, the building evokes a sense of an earlier era in transportation, when travelers stopped at rustic facilities like this, rather than truck stops and fast-food restaurants. It is our opinion that Building 3A, proper, is the historic property. Other than building 3A, Building Complex 3 is an average late twentieth century residential complex with no distinctive architectural style.

***Building Complex 4 (4421 S Mississippi Avenue):*** This is a mid-twentieth century residential complex that has been documented on multiple HPRI forms. The complex is located on the west side of US-69/75, approximately 0.5 miles south of the intersection with CR EW-1844 within Atoka city limits. Recorded buildings include the highly altered circa 1956 residence (Building 4A) and the stone clad entry gate posts (Structure 4B) of the same date. The complex has multiple overwhelming additions, lacks design distinction, and possesses no apparent associations. Building Complex 4 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

***Building Complex 5:*** This is a late-twentieth century complex that has been documented on a single HPRI form. The only remaining structures are a circa 1974 metal clad outbuilding (Building 5A) and a much newer, post-1976 metal clad pole barn (Building 5B). The complex is located on the east side of US-69/75, at the northeast corner of the intersection with 1<sup>st</sup> St. within Tushka city limits. The pre-1974 outbuilding has no apparent association or design distinction. Building Complex 5 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

***Building 6 (129 S Jefferson Highway):*** This is a circa 1974 commercial building that has been documented on a HPRI form. It is located on the west side of US 69/75, at the southwest corner of the intersection with Main Street within Tushka city limits. This brick building has significant alterations, as is typical for commercial buildings in the area. The building lacks sufficient architectural distinction or historical association and integrity to be listed in the NRHP. Building 6 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

***Building Complex 7 (103 S Jefferson Highway):*** This is a late twentieth century commercial complex that has been documented on multiple HPRI forms. Recorded buildings include the circa 1974 convenience store building, Building 7A as well as Structure 7B, the circa 1974 canopy for the gas pumps. This commercial complex is located on the west side of US 69/75 at the northwest corner of the intersection with 1<sup>st</sup> St. within Tushka city limits. The buildings are typical of other commercial complexes in the area and lack sufficient association, design distinction or integrity to be eligible for listing in the NRHP. Building Complex 7 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

***Building 8 (348 S Jefferson Highway):*** This is a 1960s era residence that has been documented on a HPRI form. This residence is located on the east side of US 69/75, at the southeast corner of the intersection with S 1<sup>st</sup> Street within Tushka city limits. 348 S Jefferson Highway possesses no design distinction, nor apparent association. Building Complex 8 does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an individual property or as a contributing property to an eligible historic district.

***Tushka Streetscape, on US-69 from SE 1<sup>st</sup> St. to NE 2<sup>nd</sup> St.:*** A HPRI form with streetscape photographs documenting the 1,110-foot-long portion of the study area in Tushka as a district resource type is included in this submittal for SHPO review.

The survey area encompasses the far southern edge of the municipal boundaries of the city of Atoka as well as most of the highway frontage within the municipal boundaries of the city of Tushka. The oldest building in the survey area is associated with a tourist camp along the privately designated Jefferson Highway at the north end of the survey area. The route of the Jefferson highway would later become US-69. This stretch of

Highway 69/75 was modified most recently in April 2001, but this alignment is visible on state highway maps as early as 1916. This route roughly parallels the tracks of the adjacent Missouri, Kansas, and Texas (MK&T) railway (and its successors).

Atoka was established as a Choctaw settlement in the 1850s, with a Baptist mission established in the area by 1867. The Butterfield overland stage and the Texas road also passed through the area. In 1872, the route of the MK&T railway was constructed through Atoka, spurring significant growth. Historically development in Atoka was located primarily west of the railroad tracks, north and south of Court Street, the main east to west thoroughfare through downtown. With the designation of Highway 69 and Highway 75 north to south through town, commercial development shifted further west, and then north and south along the highway, named Mississippi avenue through the city.

Development of the city of Tushka was also related to the construction of the railroad. Originally known as “Peck Switch” and then simply as “Peck”, followed by “Lewis” and “Dayton,” this community five miles south of Atoka was named for another prominent Choctaw tribesman. The original townsite was platted in 1905, with the Katy addition platted in 1911. The city all but disappeared during the Great Depression and World War II but experienced a resurgence in the late 1960s. The buildings in Tushka within the survey area date to that post-1960 period of development. Since that time, commercial development has centered closely along the US 69/75 corridor, with residential development to the east and west. Along the northern end of the survey area, development is extremely scattered, with commercial along the roadway and residential deeply recessed from the highway on acreages. Most of the commercial resources feature gravel parking lots and residential resources feature gravel driveways. The commercial buildings have no distinctive architectural style, with most being examples of simple rectangular boxes clad entirely in metal. Residential development within the survey area dates primarily from the 1980s to the present, with earlier examples having been overwhelmingly altered. There are no outstanding architectural resources within the survey area. The only significant resource within the survey area is the highly altered native stone building associated with the historic tourist camp on S. Mississippi avenue (Building 3A), National Register eligible under criterion A for its association with transportation developments in the area between 1920 and 1935. With the exception of the extant tourist camp building, the resources within the survey area lack sufficient significance to be eligible for listing in the NRHP individually or as part of a district. Our assessment is that the study area, and the buildings contained within its boundaries, with the exception of the tourist camp building (Building 3A), lack sufficient historic integrity, design distinction, and architectural cohesion to be eligible for the NRHP individually or as part of a historic district. The Tushka Streetscape is recommended **not eligible** for inclusion in the NRHP.

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## 6. RECOMMENDATIONS:

XXX **Plan Notes** requiring avoidance of cultural resources in off-project areas

XXX **Approval Recommended** with the proposed project as planned with no additional research. If subsurface archaeological materials are exposed during construction, the Contractor and Resident Engineer shall notify the Department Archaeologist in accordance with Section 202.04(a), Standard Specifications for Highway Construction.

       **Approval NOT Recommended**, until one or more of the following measures are completed.

       **Additional consultation with SHPO** regarding NRHP-eligible Properties

       **Revise design** to avoid/protect resources

       **NRHP Eligibility Archaeological Test Excavations**

       **Implementation of MOA** with SHPO regarding Mitigation of Adverse Effects to Historic Properties

**SUMMARY AND COMMENTS REGARDING RECOMMENDATIONS:**

No cultural resources were documented in the USACE jurisdictional permit areas.

The survey of the study area resulted in the documentation of one culturally one prehistoric culturally unassigned site (34AT941), one early- to mid-twentieth century roadside park/campground site (34AT932/Building 3A), nine mid-twentieth century farmstead sites (34AT933, 34AT934, 34AT935, 34AT936, 34AT937, 34AT938, 34AT939, 34AT940, and 34AT942), one isolated mid-twentieth century standing building (Building 9A), eight mid-twentieth century standing building complexes (Building Complexes 1 – 8), and the downtown portion of Tushka crossed by US-69 (Tushka Streetscape).

**Archaeological Resources**

**34AT941:** This site is a culturally unassigned prehistoric open habitation that consists entirely of a subsurface deposit of artifacts from 3.9 – 31.4 inches (10 – 80 cm) deep. The site has been investigated in its entirety and is unlikely to yield additional information. The site appears to have good subsurface integrity, but does not contain significant archaeological features or deposits to be eligible to the NRHP under Criterion D. Therefore, the site is recommended **not eligible** for inclusion in the NRHP.

**34AT932/Building 3A:** This site is the remains of an early-twentieth century roadside park and campground consisting of a circa 1920 office building (Building 3A), a concrete foundation with a cast iron drain in the floor (Feature 1), a ceramic utility pipe installation (Feature 2) as well as a surface artifact and subsurface artifact deposits from 0 – 17.7 inches (0 – 45 cm). The site has been investigated in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, the site is not associated with historically significant individuals to be eligible under Criterion B. Although Building 3A is intact, it is in poor condition and does not display unique architecture for Criterion C to apply. The site lacks archaeological integrity and does not contain significant archaeological features or deposits to be eligible under Criterion D. However, Building 3A is considered to be **individually eligible** for inclusion in the NRHP under Criterion A for its association with transportation developments in Atoka County during the period from 1920 to 1935.

**34AT933:** This site is the remains of a mid-twentieth century farmstead consisting of subsurface artifacts from 0 – 15.7 inches (0 – 40 cm) deep. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. Site 34AT933 lacks integrity, does not contain significant archaeological deposits or associations, and is recommended **not eligible** for inclusion on the NRHP.

**34AT934:** This is the remains of a mid-twentieth century residential complex. The site consists of four concrete foundations (Features 1 - 4), one asphalt driveway (Feature 5) and a surface and subsurface deposit of artifacts from 0 - 7.8 inches (0 – 20 cm) deep. The site has been investigated in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT935:** This is a mid-twentieth century residential site consisting of a foundation (Feature 1), a well foundation (Feature 2), and a surface and subsurface deposit of artifacts from 0 – 31.4 inches (0 – 80 cm) deep. The site has been investigated in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT936:** This is a destroyed mid-twentieth century residential site that consists entirely of a subsurface deposit of artifacts from 0 – 11.8 inches (0 - 30 cm) deep. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. Site 34AT936 lacks integrity, does not contain significant archaeological deposits or associations, and is recommended **not eligible** for inclusion on the NRHP.

**34AT937:** This is a mid-twentieth century residential site consisting of a concrete foundation (Feature 1) and a subsurface deposit of artifacts from 0 – 60 cm (0 – 23.6 inches) deep. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT938:** This site is the remains of a mostly destroyed mid-twentieth century farmstead. The site consists of a rectangular concrete foundation (Feature 1) and a surface and subsurface deposit of artifacts from 0 - 11.8 inches (0 – 30 cm) deep. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT939:** This site is the remains of a mostly destroyed mid-twentieth century farmstead. The site consists of a rectangular concrete/brick foundation border (Feature 1), a cinderblock well house (Feature 2), a metal pipe hookup (Feature 3) as well as a paint can push pile (Feature 4) and surface and subsurface deposits of artifacts from 0 – 3.9 inches (0 – 10 cm) deep. The site has been investigated and assessed in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. There are no standing buildings at the site for Criterion C to apply. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT940:** This is the remains of a mostly destroyed mid-twentieth century farmstead that consists entirely of a single cinderblock cellar (Building 9A). The site has been investigated and assessed in its entirety and is unlikely to yield additional information. According to the Chronicles of Oklahoma, Encyclopedia of Oklahoma History and Culture, the Indian-Pioneer Papers, and general internet search, no historically significant events or people were associated with the site for it to be considered eligible for inclusion in the NRHP under Criteria A or B. Building 9A does not possess the characteristics necessary for NRHP inclusion and is therefore recommended not eligible as an individual property or as a contributing property to an eligible historic district. The site does not contain significant archaeological features or deposits to be eligible under Criterion D. Therefore, the site as a whole is recommended **not eligible** for inclusion in the NRHP.

**34AT942:** This is the remains of a mostly destroyed mid-twentieth century farmstead. The site, as it has been investigated, consists of a surface artifact and a subsurface deposit of artifacts identified from a depth of 0 - 19.6 inches (0 – 50 cm). The eligibility of site 34AT942 as a whole for inclusion in the NHRP has not been determined. This study considered only those portions of the site within the study area, and accessible by ODOT. The portion of the site within the study area does not have characteristics that would qualify the site for inclusion in the NRHP (pursuant to 36 CFR 60.4). Based on this evaluation, the proposed undertaking would have no effect on any characteristics of the site within the study area that would qualify it for inclusion in the NRHP.

### Built Environment Resources

**Building Complexes 1 – 8:** These are early to mid-twentieth century building complexes, some of which also contain post-1976 standing buildings and structures. Only one building (Building 3A) is eligible for listing in the National Register of Historic Places, under Criterion A for its association with transportation developments during the period from 1920 to 1935. Other than building 3A, Building Complex 3 is an average late twentieth century residential complex with no distinctive architectural style.

All other early to mid-twentieth century buildings and structures generally do not display either significant architecture, design, or integrity, and the complexes as a whole lack historic significance to be eligible for the NRHP individually or as part of an eligible historic district. Building Complexes 1 - 8, except for building 3A, lack historic significance and integrity to be eligible for the NRHP individually or as part of an eligible historic district and are therefore recommended **not eligible** as individual properties or as a contributing property to an eligible historic district.

**Tushka Streetscape, on US-69 from SE 1<sup>st</sup> St. to NE 2<sup>nd</sup> St.:** This is a portion of downtown Tushka that extends from a point beginning at the intersection of SE 1<sup>st</sup> Street with US-69/S Jefferson Street, then northeast 1,110 feet to the intersection of NE 2<sup>nd</sup> Street with US-69/S Jefferson Street, was documented on an HPRI form with streetscape photos as a district type resource. The Tushka Streetscape does not possess the characteristics necessary for NRHP inclusion and is therefore recommended **not eligible** as an historic district.

### Project Recommendations

Based on 30% ROW plans dated March 31, 2021 (the only plans available at the writing of this report), the proposed improvements do not infringe on the footprint of Building 3A of Building Complex 3 (see ROW plans, pages 38, 59, and 65). However, the plans show Building 3A is five feet within existing ROW and the proposed improvements will be within 2 -3 feet of Building 3A. Minor changes in the project design at this location could result in impacts to Building 3A. If Building 3A can be avoided, approval of the project is recommended as it is proposed. If refinement of the project design includes the Building 3A footprint, approval of the project would not be recommended, pending additional consultation with SHPO.

### Plan Notes

In order to avoid impacts to cultural resources that have not been assessed for NRHP eligibility in the project vicinity by off-project activity such as borrow pit excavation or staging of heavy equipment, it is recommended that the following areas be avoided for the establishment of off-project facilities.

#### T2S R11E

Section 28:	SW ¼ SW ¼ SW ¼
Section 28:	NE ¼ SW ¼ SW ¼
Section 28:	NW ¼ SE ¼ SW ¼
Section 32:	SE ¼ NW ¼ SE ¼
Section 32:	NE ¼ SW ¼ SE ¼
Section 32:	NW ¼ SW ¼ SE ¼
Section 32:	SW ¼ SW ¼ SE ¼
Section 32:	SE ¼ SW ¼ SE ¼
Section 32:	SE ¼ NW ¼ SW ¼
Section 33:	NW ¼ NW ¼ SE ¼
Section 33:	NE ¼ NE ¼ SW ¼

#### T3S R11E

Section 5:	SW ¼ NW ¼ NE ¼
Section 5:	SE ¼ NW ¼ NE ¼
Section 5:	NW ¼ SW ¼ NE ¼
Section 5:	NE ¼ SW ¼ NE ¼
Section 5:	SW ¼ SW ¼ NE ¼
Section 5:	SE ¼ SW ¼ NE ¼
Section 5:	SE ¼ NW ¼

Section 5: NW ¼ SE ¼ SW ¼  
Section 5: NW ¼ NW ¼ SE ¼ (Tushka Cemetery)  
Section 6: SW ¼ SE ¼  
Section 8: NE ¼ SW ¼ NW ¼  
Section 8: NW ¼ NW ¼ SW ¼  
Section 7: SE ¼ NE ¼  
Section 7: SW ¼ NW ¼ SE ¼  
Section 7: NW ¼ SW ¼ SE ¼  
Section 7: SW ¼ NE ¼ SE ¼  
Section 7: NW ¼ SE ¼ SE ¼  
Section 7: SE ¼ SE ¼ SW ¼  
Section 7: SW ¼ SW ¼ SE ¼  
Section 18: NE ¼ NE ¼ NW ¼  
Section 18: NW ¼ NW ¼ NE ¼

**REFERENCES CITED***Maps and Aerial Photographs*

- 1898 T2S R11E and T3S R11E GLO survey plat
- 1899 Atoka 30' quadrangle
- 1936 (rev. 1937), 1955 (rev. 1957), 1964 (rev. 1968), 1971 (rev. 1977) Atoka County highway map
- 1939, 1956, 1966, 1981, 1991, 1995, 2003, 2005, 2006, 2008, 2010, 2013, 2015, 2017, 2019 USDA Aerial photographs
- 1969 Tushka, Okla. 7.5' quadrangle
- 2012, 2015 Google Earth Aerial imagery

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2005 Level IV Ecoregions of Oklahoma (color poster with map, descriptive text, summary tables, and photographs). 1:1,000,000 scale. U.S. Geological Survey, Reston, Virginia.

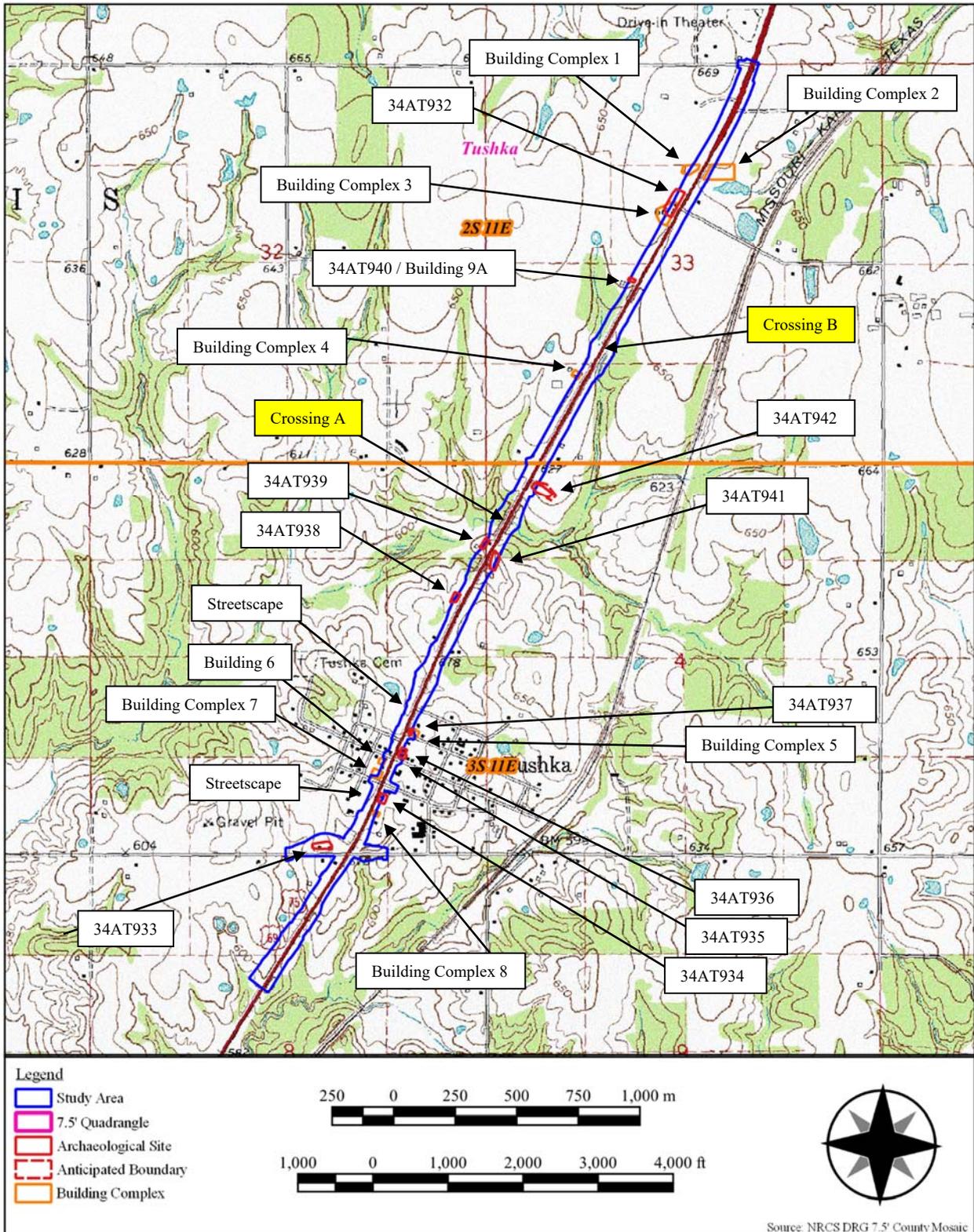


Figure 1. Atoka 30410(04): Road Improvements to US-69 through Tushka.

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

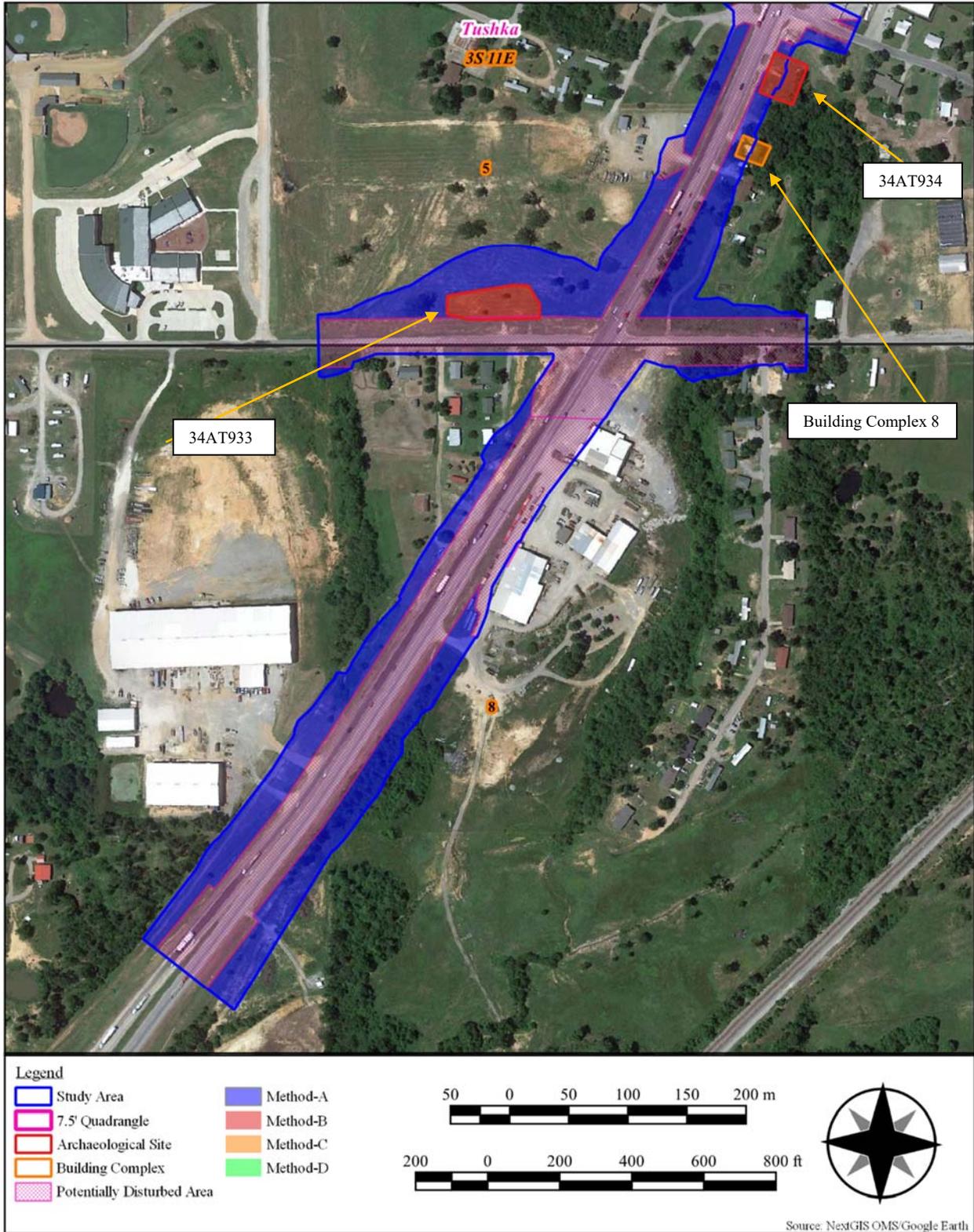


Figure 2. Atoka 30410(04): Road Improvements to US-69 through Tushka. Methods map – 1 (2015 aerial).

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

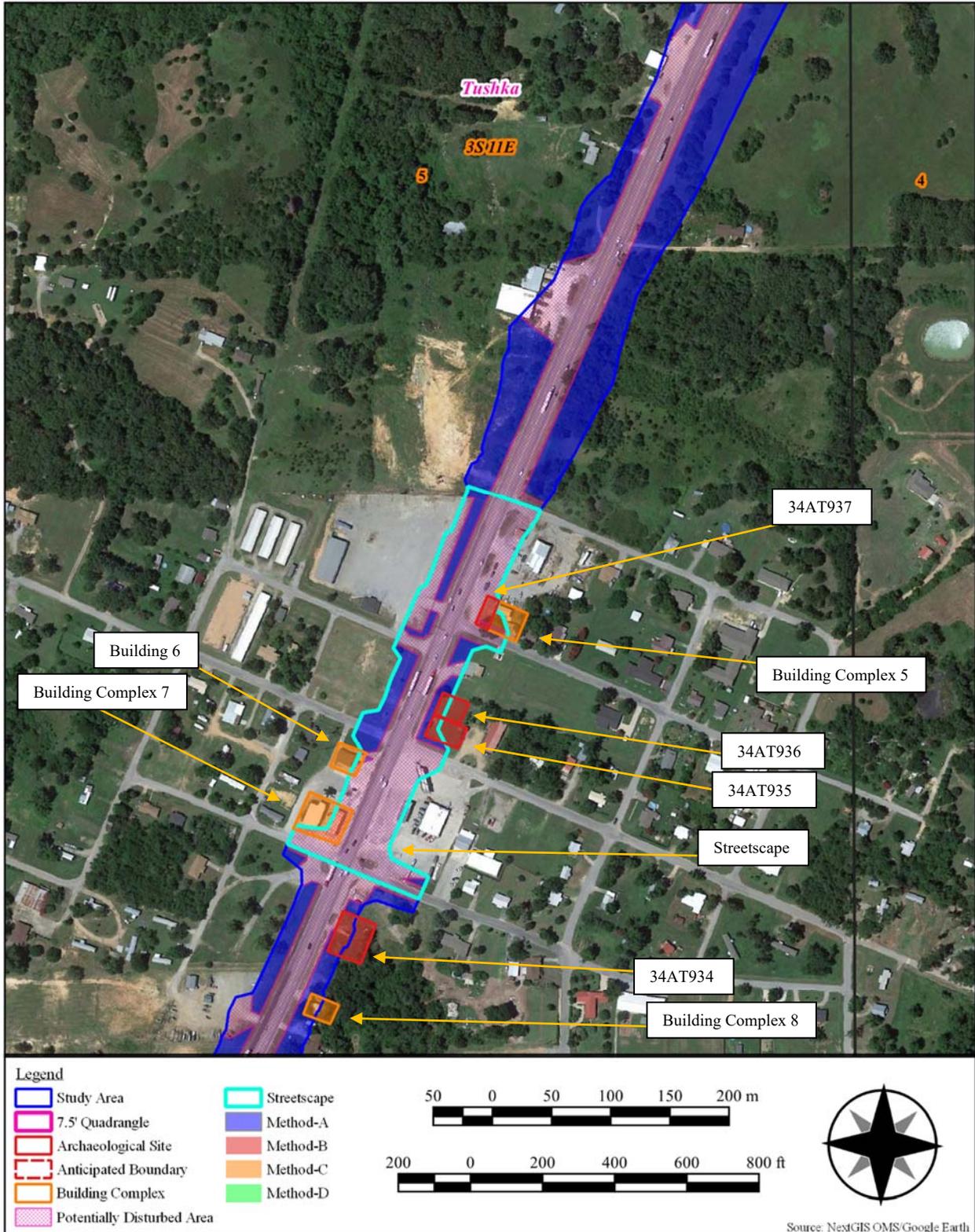


Figure 3. Atoka 30410(04): Road Improvements to US-69 through Tushka. Methods map – 2 (2015 aerial).

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.



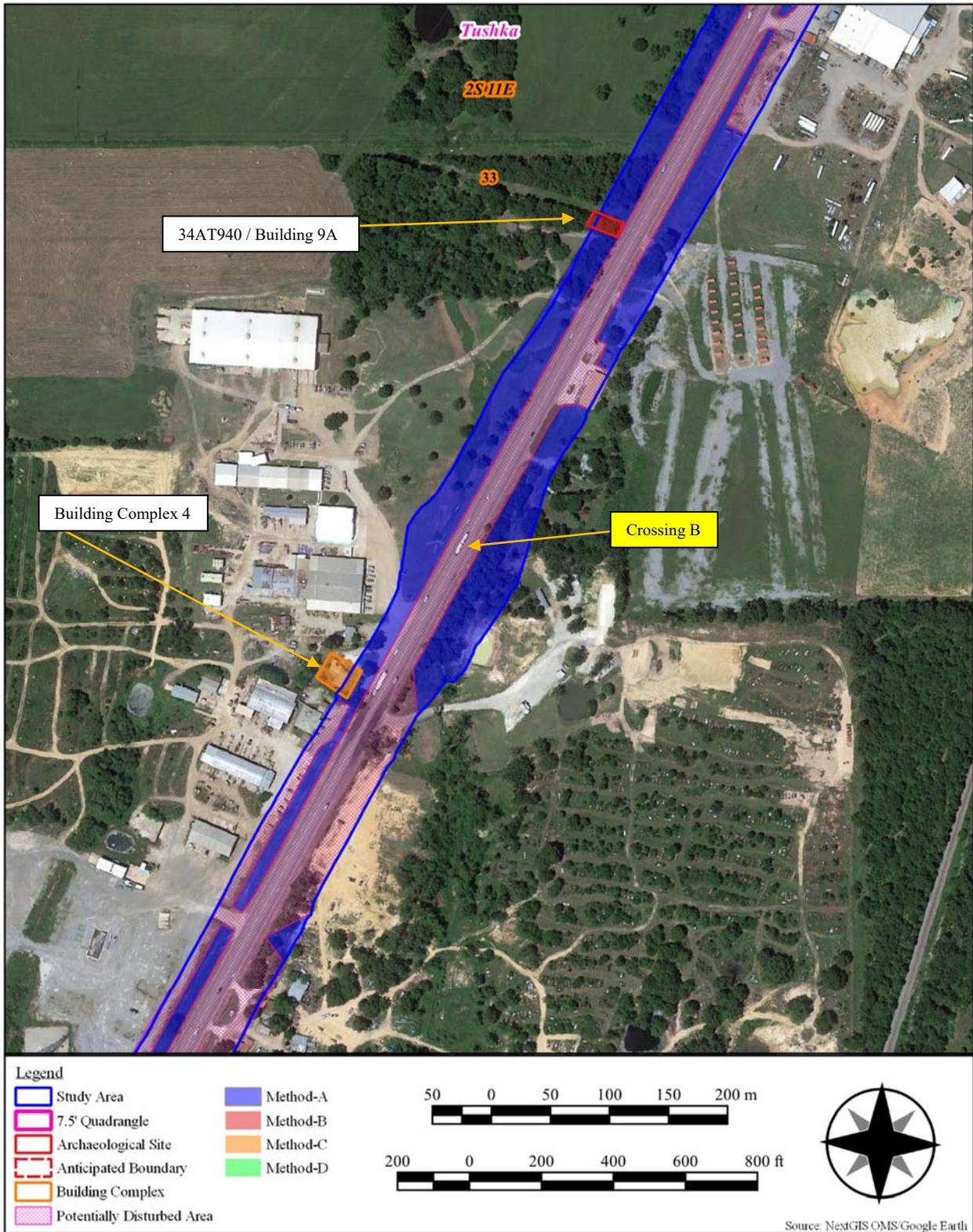


Figure 5. Atoka 30410(04): Road Improvements to US-69 through Tushka. Methods map – 4 (2015 aerial).

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

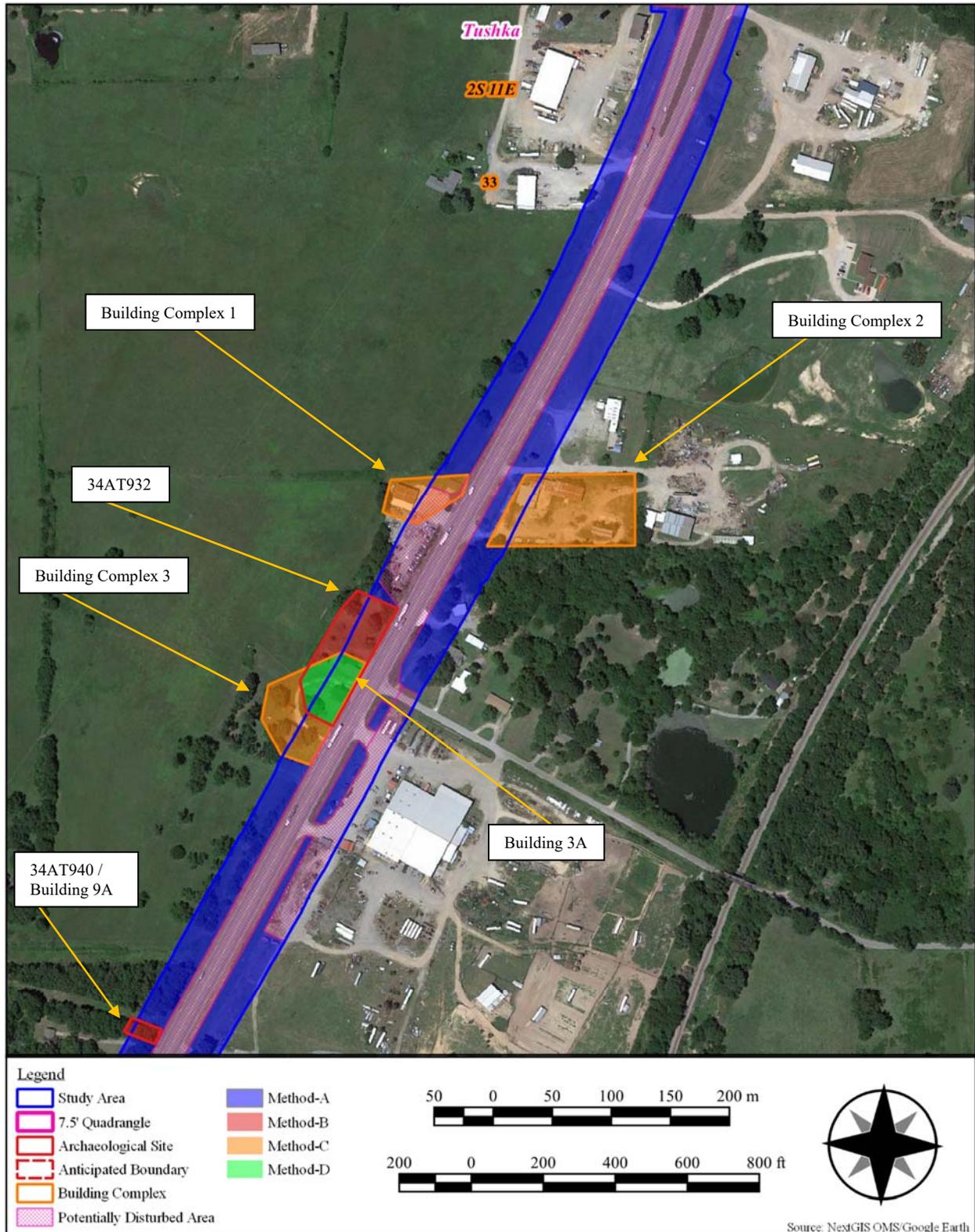


Figure 6. Atoka 30410(04): Road Improvements to US-69 through Tushka. Methods map – 5 (2015 aerial).

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

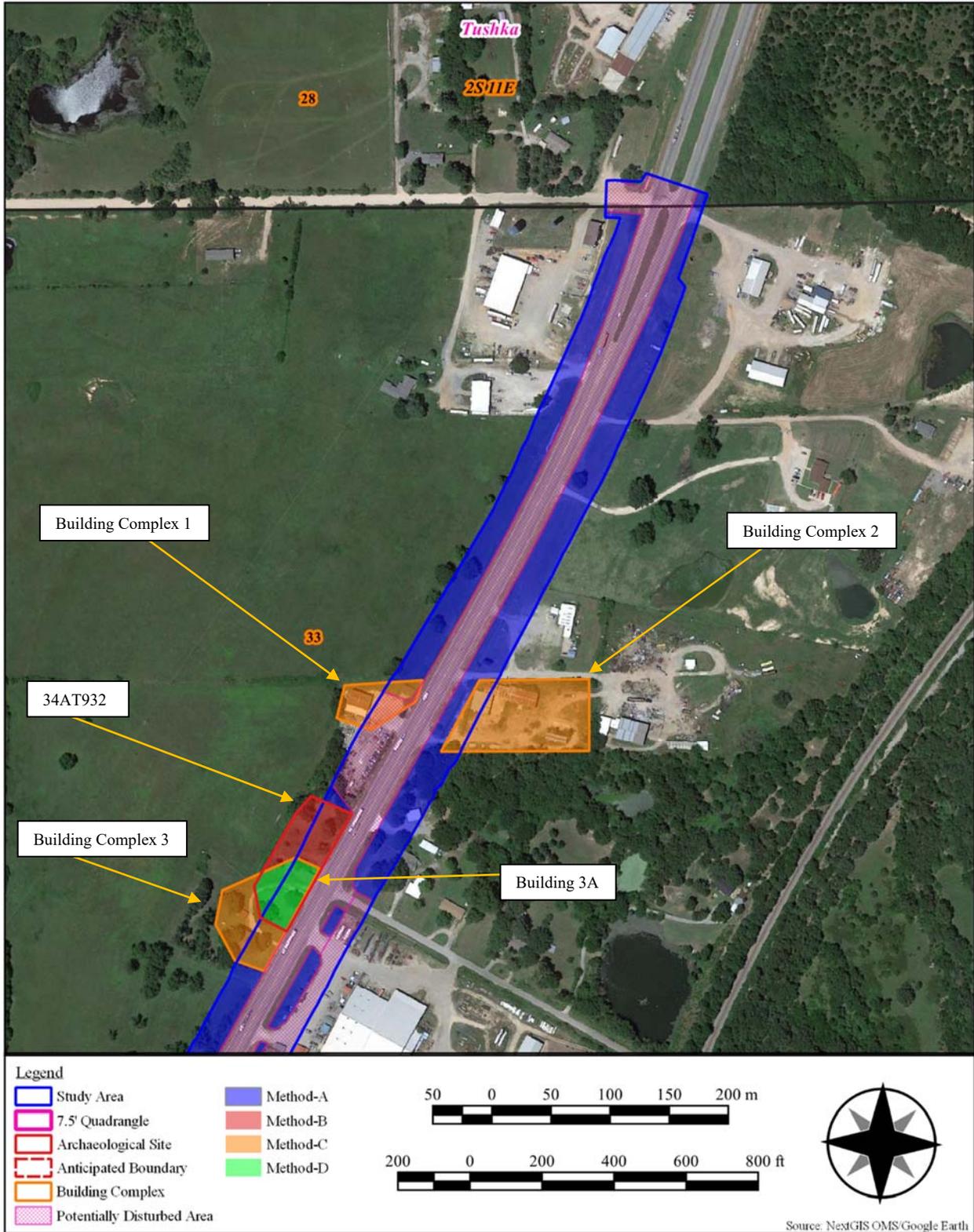


Figure 7. Atoka 30410(04): Road Improvements to US-69 through Tushka. Methods map – 6 (2015 aerial).

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

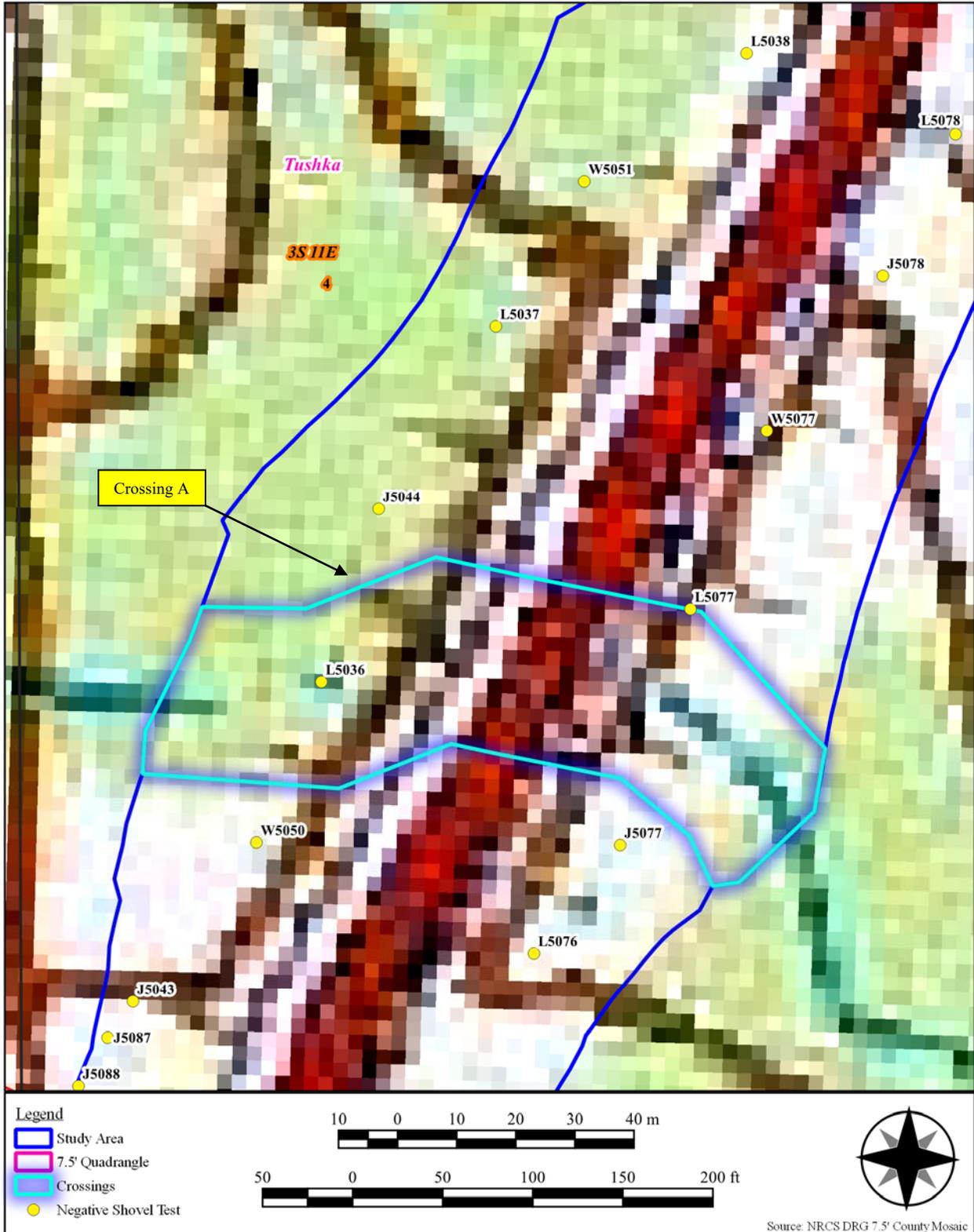


Figure 8. Atoka 30410(04): Road Improvements to US-69 through Tushka. Crossing A topographic map.

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

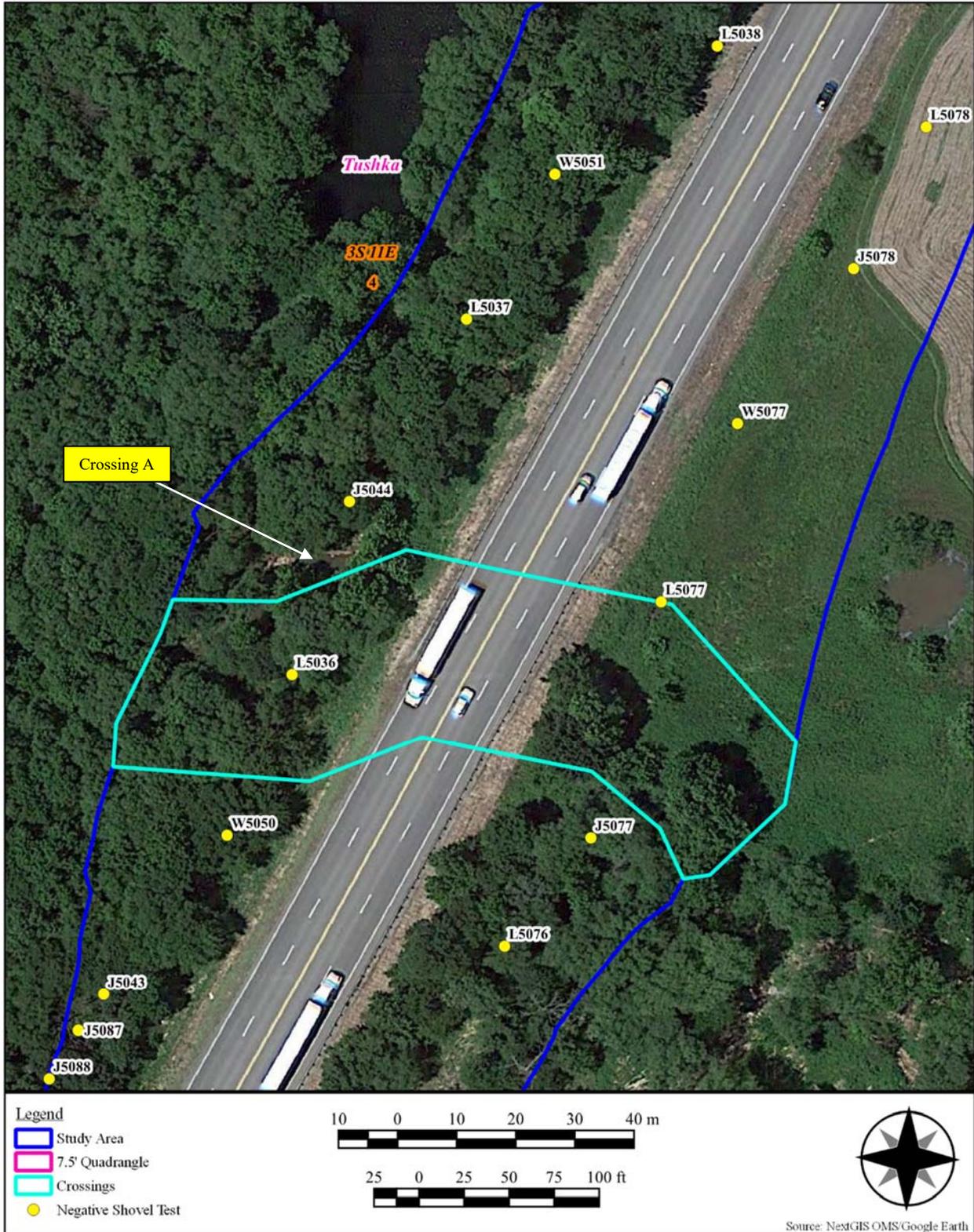


Figure 9. Atoka 30410(04): Road Improvements to US-69 through Tushka. Crossing A 2015 aerial photo.

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

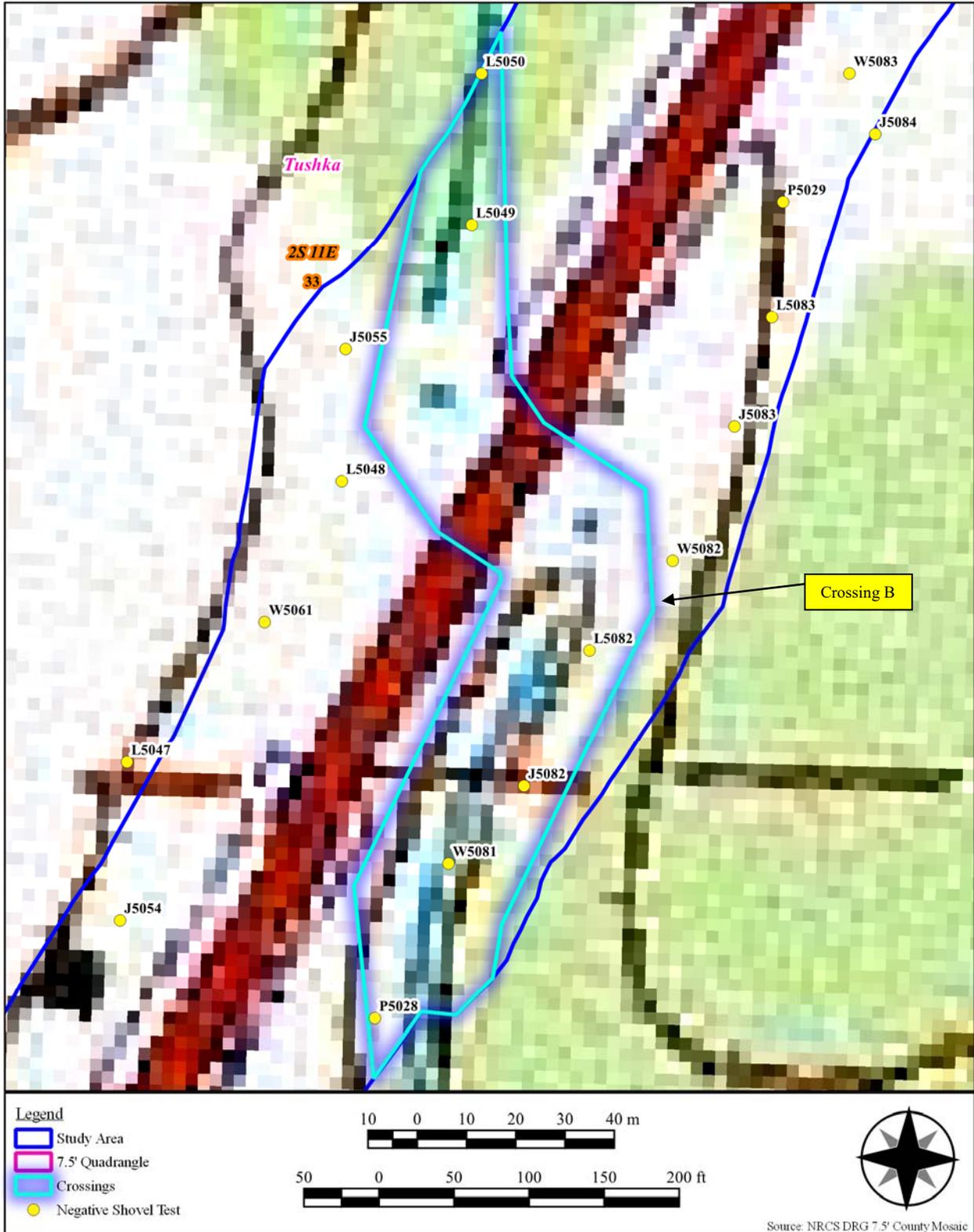


Figure 10. Atoka 30410(04): Road Improvements to US-69 through Tushka. Crossing B topographic map.

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.

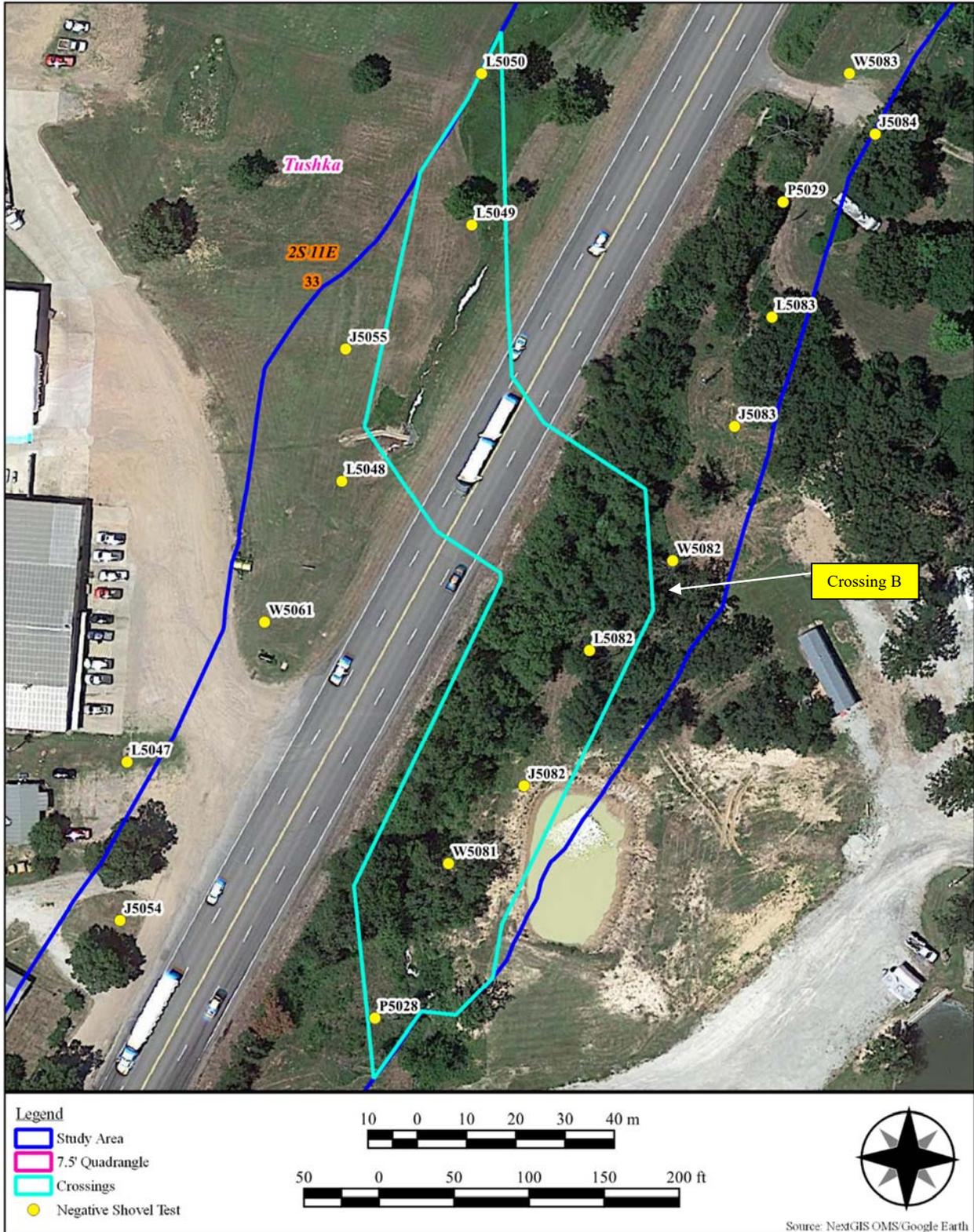


Figure 11. Atoka 30410(04): Road Improvements to US-69 through Tushka. Crossing B 2015 aerial photo.

Basemap: Tushka, Okla. (1969) USGS 7.5' Quadrangle, Sections 4, 5, and 8, T3S R11E and Sections 28 and 33, T2S R11E.



Figure 12. Manicured short grass and developed property, at southern portion of study area.



Figure 13. Mixed grass environment and scrubby regrowth, north of Tushka, facing north.



**Figure 14. Mixed grass open pasture, north half of study area.**



**Figure 15. Dense woodland environment and scrubby growth, north half of study area.**



**Figure 16. Building 3A, facing northwest.**



**Figure 17. Building 3A, facing southwest.**

# **BIOLOGICAL STUDIES**

**BIOLOGICAL STUDIES TRACKING FORM**

NEPA Project Manager	Geoff Canty / Kathy Koon
State or Local Government Project	State
USFWS TAILS #	<b>2022-0054482</b>
Original IPaC List	10/15/2021
Email used to request IpaC official species list	dale@ccenviro.net
Last Updated Species List Date	12/1/2022
ROW	2023
Let Date	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:	CC Environmental
Most Recent Field Date:	3/10/2021
Original Report Date:	10/25/2021
USFWS Consultation Submittal:	11/30/2021
USFWS Concurrence:	11/30/2021
Original Tracking Form Prepared by:	Elizabeth Nichols
Original Tracking Form date:	11/30/2021
Update Reason	Change in Footprint and Funding
Updated By Whom:	CC Environmental
Updated Waters and Wetlands Report:	6/21/2022
Amended USFWS Consultation Submittal:	NA – STATE FUNDED
USFWS Funding Change Notification:	7/5/2022
Tracking Form Updated By Whom:	Elizabeth Nichols & Amber McIntyre
Tracking Form Updated Date:	7/5/2022 & 12/1/2022 & 1/24/2023
<b><i>ADD MORE LINES AS NEEDED FOR EACH TIME PROJECT IS UPDATED</i></b>	

Form Date: October 2021

**Project Name from Oracle**

US-69: From 12 Miles North of Bryan C/L, Extend North Approximately 2.5 Miles through Tushka

**Project Description**

Grade, Drain and Surface

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 type="checkbox"/>	Choose an item.
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 checked="" type="checkbox"/>	Final Effect Analysis and Determination covered in the BO for the final 4(d) rule
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.
Tricolored Bat	Proposed Endangered	<input checked="" type="checkbox"/>	Not likely to jeopardize the continued existence of the species
Monarch Butterfly	Candidate	<input checked="" type="checkbox"/>	Not likely to jeopardize the continued existence
Rattlesnake-master Borer Moth	Candidate	<input type="checkbox"/>	Choose an item.
Peppered Chub	Proposed	<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.
Peppered Chub Critical Habitat	Proposed	<input type="checkbox"/>	Choose an item.

Updated June 2022	NEPA Footprint	Construction Footprint
Number of acres within the NEPA Study Footprint & Construction Footprint (if known)	96.1	<a href="#">Click here to enter text.</a>
Number of acres of perennial plant vegetation (ABB habitat) within the NEPA & Construction Footprints (if known)	9.4	<a href="#">Click here to enter text.</a>
Number of acres of forested/wooded area (Ibat and NLEB habitat) within the NEPA & Construction Footprints (if known)	8.2	<a href="#">Click here to enter text.</a>

ABB Conservation Lands adjacent	NO
Presence of milkweed and nectar plants	YES

Bald Eagle Assessment	Not expected to impact
Migratory Bird Assessment of Transportation Structures	Migratory birds found nesting on transportation structures
Migratory Bird Impacts	nesting habitat for migratory birds will be impacted
Birds of Conservation Concern	No BCC listed
Interior Least Tern (MBTA)	not expected to impact

<u>Species</u>	<u>Seasonal Restriction Period</u>
Migratory Birds: Swallows and Phoebes (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.

**ABB Commitment:** Minimize habitat loss by reducing the amount of ground disturbance of suitable ABB habitat within the construction footprint to only what is necessary for project construction and document in the monitoring reports to the Service. Following construction, areas of ground disturbance outside of the safety clear zone will be revegetated with native plant species where applicable and practicable. Areas where revegetation with native plant species is not practicable will be revegetated with more traditional plantings such as solid slab sodding.

**Tree Removal Minimization Commitment:** In order to avoid and minimize adverse impacts to birds of conservation concern, the removal of trees and shrubs shall 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.

**Monarch Commitment:** ODOT, as a Certificate of Inclusion partner in the Nationwide Monarch Butterfly CCAA for Energy and Transportation lands, will adhere to the conservation measures, as well as minimize threats to the monarch butterfly as stipulated in this CCAA.

**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.

**American Burying Beetle Note:** The American Burying Beetle is a large carrion burying beetle that occurs within the project limits. Artificial lighting may be used during construction for night activities if the equipment specifications outlined in Special Provision 656-5(a-b)19 for ABB are adhered to and measures to minimize use of artificial lighting have been implemented. Carcasses and all food trash shall be removed from the permanent and temporary right-of-way throughout the duration of project activities. Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented when appropriate. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will not be stored within areas of native vegetation (ie. outside of ABB habitat).

**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 RCB (at STA.181+80) was observed. Painting, repair, retrofit, rehabilitation or demolition of the existing 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 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 culverts shall be conducted between September 1, and February 28 (when migratory bird nests are not occupied).

**Waters and Wetlands Delineation Status**

Updated delineation June 2022

**Wetlands and Ponds**

Total Number of Sites	Water Body Type	Potential Jurisdiction Status	Acres within the NEPA Footprint
1	Herbaceous Wetland	Unlikely Jurisdictional	0.05
1	Pond	Unlikely Jurisdictional	0.59
1	Pond	Unlikely Jurisdictional	0.20

**Streams and Drainages**

## Atoka JP 30410(04)

<b>Total Number of sites</b>	<b>Water body name</b>	<b>USGS Designation</b>	<b>Potential Jurisdictional Status</b>	<b>Acres within the NEPA Footprint</b>	<b>Liner Feet within the NEPA Footprint</b>
2	Tributary to Fronterhouse Creek	mapped intermittent	Likely Jurisdictional	0.187	1,152
7	drainages	unmapped ephemeral drainages	Unlikely Jurisdictional	0.056	1,153

## Nichols, Elizabeth

---

**From:** Echo-Hawk, Patricia <Patricia\_Echo-Hawk@fws.gov>  
**Sent:** Tuesday, November 30, 2021 2:09 PM  
**To:** Nichols, Elizabeth  
**Cc:** Amber McIntyre; Vonceil Harmon  
**Subject:** 02EKOK00-2021-SLI-1252 ODOT Atoka JP 30410(04) Consultation Review Package

Greetings Liz,

The Service has reviewed consultation package 02EKOK00-2021-SLI-1252 ODOT Atoka JP 30410(04) Consultation Review Package

Based on the information provided, the project will occur within the range of the American burying beetle (*Nicrophorus americanus*; ABB) and you have concluded that the project may affect the species. The Service agrees with this determination. Any take that may occur as a result of the project is not prohibited under the Endangered Species Act of 1973 (Act; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Section 4(d) rule adopted for this species at 50 CFR 17.47(d) (85 FR 65241). The Service asks that the conservation measures as articulated in the assessment, and in conjunction with the guidelines set forth by the Federal Highway Administration, be implemented and maintained.

Additionally, the project will occur within the range of the federally-listed Northern long-eared bat (*Myotis septentrionalis*; NLEB). Based on the information provided in the amended documents, potential effects to the NLEB are not prohibited under the Endangered Species Act of 1973 (Act; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.)'s Section 4(d) rule adopted for this species at 50 CFR 17.47(d) (85 FR 65241). The Service asks that the appropriate conservation measures listed in the original document package and in conjunction with the guidelines set forth by the Federal Highway Administration, be implemented and maintained.

You have determined that the project will have no effect on the endangered whooping crane (*Grus americana*) and on the threatened piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*).

Additionally, based on the observation of migratory birds/nests on structures involved in this project, the Services asks that ODOT proceed in conjunction with guidance set forth by the Federal Highway Administration to avoid and minimize potential impacts to migratory birds, nests, and/or eggs.

In order to avoid impacts to Bald Eagles, if Bald Eagles or their habitat are observed during the biological assessment, a survey for eagles and their nests will be conducted within 660 feet of the work zone, during the winter prior to, and within one year of, the start of construction. If a nest is found, appropriate conservation measures based on the National Bald Eagle Management Guidelines will be implemented.

The Service also recommends ODOT/FHWA replace box culverts with structures that are fish passage friendly, as suggested in the Service email to ODOT dated 8/16/2021. This applies to project culverts (being demolished, repaired, retrofitted, maintained or rehabilitated) along perineal or intermittent streams still providing habitat to native fish species.

The online project review concurrence letter signed by the Field Supervisor is now valid, and the project may proceed accordingly. The Service asks that, within 90 days prior to construction, a new species list be obtained to see if any changes have occurred. If changes have occurred, please verify with the Oklahoma Ecological Services Field Office to determine if further consultation is needed. If you have any questions, please contact the Field Office.

Best Regards,

Patricia

Patricia D. Echo-Hawk  
Fish and Wildlife Biologist  
IR 6, New Mexico and Arizona Dive Officer

U.S. Fish and Wildlife  
Oklahoma Ecological Services Field Office  
9014 E. 21st Street  
Tulsa, OK, 74129  
phone # 918-382-4505

Only when the last tree has died, the last river poisoned and the last fish caught, will we realize we can't eat money. -Cree Proverb

Character is doing the right thing when nobody's looking. There are too many people who think that the only thing that's right is to get by, and the only thing that's wrong is to get caught. - J.C. Watts

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## 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:

November 30, 2021

Consultation code: 02EKOK00-2021-TA-1252

Event Code: 02EKOK00-2022-E-01425

Project Name: Atoka County JP 30410(04)

Subject: Verification letter for 'Atoka County JP 30410(04)' project under the October 15, 2020, Programmatic Biological Opinion on Final 4(d) Rule for the American burying beetle and Activities Excepted from Take Prohibitions (50 CFR § 17.47(d), Federal Register Citation 85 FR 65241).

Dear Elizabeth Nichols:

The U.S. Fish and Wildlife Service (Service) received on **November 30, 2021** your effect determination(s) for the 'Atoka County JP 30410(04)' (the Action) using the American burying beetle (*Nicrophorus americanus*) determination key within the Information for Planning and Consultation (IPaC) system.

This determination key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's October 15, 2020, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from incidental "take"<sup>[1]</sup> prohibitions applicable to the American burying beetle under the Endangered Species Act of 1973 (Act) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the American burying beetle; however, any incidental take that may occur as a result of the Action is not prohibited under the Act Section 4(d) rule adopted for this species at 50 CFR §17.47(d). **Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under Act Section 7(a)(2) with respect to the American burying beetle.**

Please report any changes to the information about the Action that you submitted in IPaC, the results of any American burying beetle surveys conducted in the Action area, and any dead, injured, or sick American burying beetles that are found during Action implementation. If the

Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with Act Section 7(a)(2) only for the American burying beetle.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (Act, Section 3(19)).

This letter covers only the American burying beetle. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Threatened
- Piping Plover *Charadrius melodus* Threatened
- Red Knot *Calidris canutus rufa* Threatened
- Whooping Crane *Grus americana* Endangered

If your project may affect additional listed species, you must evaluate additional DKeys for other species, or submit a request for consultation for the additional species to your local Ecological Services Field Office.

---

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

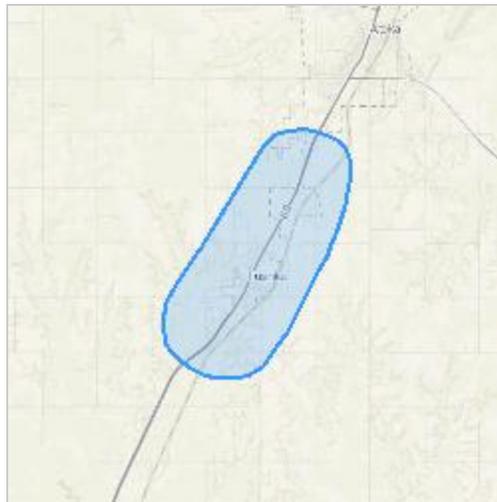
Atoka County JP 30410(04)

**2. Description**

The following description was provided for the project 'Atoka County JP 30410(04)':

Grade, Drain, & Surface on US-69 from 12 mi north of Bryan C/L, ext north approx. 2.5 mi thru Tushka

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.3280144,-96.16262401173898,14z>



## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

*Yes*

2. Have you determined that the proposed action will have “no effect” on the American burying beetle? (If you are unsure select "No")

*No*

3. Will your activity **purposefully take** American burying beetles?

*No*

4. Is your project wholly inside the 4d rule Analysis Area? For areas of your project occurring inside the Analysis Area (New England, Northern Plains, Southern Plains), your project may qualify for exemptions. For areas of your project occurring outside the Analysis Area, all incidental take is exempted according to the ABB 4d Rule.

**Automatically answered**

*Yes*

5. Is American burying beetle [suitable habitat](#) present within the action area?

*Yes*

6. Will suitable habitat be affected by the proposed action? Suitable habitat may be impacted if the action involves soil disturbance, use of vehicles or heavy equipment, artificial lighting, vegetation removal, use of herbicides, pesticides, other hazardous chemicals.

*Yes*

---

## Project Questionnaire

Please select the activity that best matches your proposed action.

*8. Soil disturbance related to road construction and maintenance*

If you chose 13 above, please describe below. If you did not choose 13 above, please type "0".

*0*

Estimate the total acres of suitable American burying beetle habitat that may be affected.

*9.1*

Please estimate the total number of acres of **temporary impacts** to American burying beetle habitat. See definitions

*9.1*

Please estimate the total number of acres of **permanent impacts** to American burying beetle habitat. See definitions

*9.1*

---



## 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:

November 30, 2021

Consultation code: 02EKOK00-2021-TA-1252

Event Code: 02EKOK00-2022-E-01428

Project Name: Atoka County JP 30410(04)

Subject: Verification letter for the 'Atoka County JP 30410(04)' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Elizabeth Nichols:

The U.S. Fish and Wildlife Service (Service) received on November 30, 2021 your effects determination for the 'Atoka County JP 30410(04)' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"<sup>[1]</sup> prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- American Burying Beetle *Nicrophorus americanus* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Piping Plover *Charadrius melodus* Threatened
- Red Knot *Calidris canutus rufa* Threatened
- Whooping Crane *Grus americana* Endangered

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

---

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

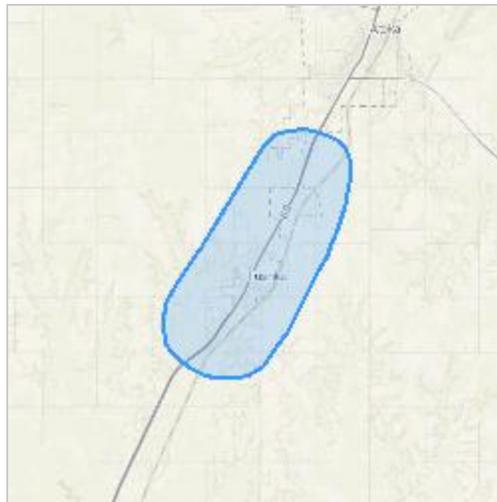
Atoka County JP 30410(04)

**2. Description**

The following description was provided for the project 'Atoka County JP 30410(04)':

Grade, Drain, & Surface on US-69 from 12 mi north of Bryan C/L, ext north approx. 2.5 mi thru Tushka

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.3280144,-96.16262401173898,14z>

**Determination Key Result**

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

**Determination Key Description: Northern Long-eared Bat 4(d) Rule**

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may

affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

---

## Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?  
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")  
No
3. Will your activity purposefully **Take** northern long-eared bats?  
No
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?  
**Automatically answered**  
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at [www.fws.gov/midwest/angered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/angered/mammals/nleb/nhisites.html).

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?  
No
  7. Will the action involve Tree Removal?  
Yes
-

8. Will the action only remove hazardous trees for the protection of human life or property?

*No*

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

*No*

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

*No*

---

## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

7.9

2. If known, estimated acres of forest conversion from April 1 to October 31

7.9

3. If known, estimated acres of forest conversion from June 1 to July 31

7.9

**If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

---

August 2015



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Ecological Services  
9014 East 21<sup>st</sup> Street  
Tulsa, Oklahoma 74129  
918/581-7458 / (FAX) 918/581-7467



### Online Project Review Concurrence Letter

To:

Project Name:

'Eqpuwncvkqp'Eqf g<

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Oklahoma Ecological Services Field Office (ESFO) online project review process. By providing this letter in conjunction with your complete project review package, you are certifying that you have accurately completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. Concurrence with “not likely to adversely affect” determinations does not provide any exemption for violations of section 9 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA) or “take” of federally-listed species. The Federal action agency is ultimately responsible for ensuring compliance with the ESA and any take that occurs due to your proposed action would be considered a violation under section 9 of the ESA.

This letter and the enclosed project review package complete the review of your project in accordance with the ESA. This letter also provides information for your project review under the National Environmental Policy Act (National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C.4321-4347, 83 Stat. 852), as amended.

A copy of this letter and the project review package must be emailed to **okprojectreview@fws.gov** for this certification to be valid. This letter and the project review package will be maintained in Service records. **Please allow the Oklahoma ESFO 60 days to review your information. If the Oklahoma ESFO determines that the package is not complete, or that additional coordination is necessary, we will contact your office. If, after 60 days from the date of your email submittal of your project review package, the Oklahoma ESFO has not contacted your office, consider your section 7 consultation complete.**

The proposed action consists of:

Project start and completion dates:

Federal agency or federal program providing a permit, funding, grant, authorization, loan, etc. associated with the proposed project and how that agency is associated with your project:

Federal Agency/Program Point of contact (Name, phone, and email address):

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in “not likely to adversely affect/modify” determinations for listed species and critical habitat in relation to potential effects of your proposed project. We certify that the use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with determinations of “not likely to adversely affect” for listed species and critical habitat reached by proper use of this process. For projects where this particular determination is reached, additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages efforts to avoid or minimize adverse impacts to them from project effects. Some federal agencies have standing policies that grant limited protections to candidate species. Conservation of candidate species now may preclude future needs to federally list them as endangered or threatened, at which point their legal protection would become required. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of listed species or critical habitat becomes available, this determination may be reconsidered. You should re-visit the Service's Information, Planning, and Conservation (IPaC) website at <http://ecos/fws.gov/ipac/> within 90 days of project initiation to ensure species information is correct. If new species or critical habitat is identified, this letter is no longer valid and a new project package should be submitted to the Oklahoma ESFO.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Oklahoma is available at our website: <<http://www.fws.gov/southwest/es/oklahoma/>>. If you have any questions, please call 918-581-7458 or send an email message to [OKProjectReview@fws.gov](mailto:OKProjectReview@fws.gov).

Sincerely,  
/s/ Jonna Polk  
Field Supervisor  
Oklahoma Ecological Services Field Office

Enclosures:

- 1) ENTIRE PROJECT REVIEW  
PACKAGE: Species Conclusion Table  
IPaC Species List and Action Area map  
This letter (Online Concurrence Letter)  
(Optional) Additional maps
- 2) Other relevant project data/documents

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

**For**

<b>USFWS TAILS #</b>		<b>02EKOK00-2021-SLI-1252</b>			
<b>Email used to request IPaC official species list</b>		dale@ccenviro.net			
<b>County</b>	Atoka	<b>JP Number</b>	30410(04)	<b>Project Number</b>	J3-0410(004)
<b>Road Number</b>	US-69	<b>Water Body Name</b>		Unnamed Tributaries to Fronterhouse Creek	
<b>ROW Date</b>	FFY 2023	<b>Let Date</b>	FFY 2026	<b>Let Date</b>	FFY 2026
<b>Project General Location</b>		US-69 from ~2,200 feet south of Boggy Depot Road, extend north through the town of Tushka to Shady Lane			
<b>Project Description &amp; Statement From Oracle</b>		Grade, Drain, & Surface US-69: From 12 Miles North of Bryan C/L, Extend North Approximately 2.5 Miles through Tushka			

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

Prepared by:

<b>Biologist Name</b>	Dale W. Daniel and Leah M. Peterson
<b>Company/Agency Name</b>	CC Environmental, LLC.
<b>Address</b>	P.O. Box 1292
<b>City, State Zip</b>	Norman, OK 73071

<b>Report Date:</b>	October 25, 2021
<b>Field Survey Date</b>	March 10, 2021
<b>Field Survey Biologist(s)</b>	Dale W. Daniel

Form Date: October 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

Grade, Drain and Surface

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

The existing segment of US-69 extending through Tushka is a principal arterial facility with four 12-foot-wide paved driving lanes and varying width paved shoulders. The current annual average daily traffic (AADT) is 21,000 vehicles per day (vpd) with a future AADT of 27,300 vpd. The roadway has deteriorating pavement, narrow shoulders, limited sight distances, poor traffic flow, and an elevated accident history.

#### Description of **proposed** improvements

The Oklahoma Department of Transportation (ODOT) proposes to widen the roadway on existing alignment to create four 12-foot-wide driving lanes with a 16-foot-wide center turning lane. The roadway will be an open section facility with 8-foot-wide paved shoulders, except through town and for a portion north of town. From roughly 1,000 feet south of Boggy Depot Road to approximately Cooper Place Road, the roadway will have a curb and gutter section with four 12-foot-wide driving lanes, a 16-foot-wide center turn lane and 5-footwide sidewalks on both sides of the road. From roughly County Road EW-185 and extending north approximate 2,300 feet there will be a similar curb and gutter section. Culverts will be extended or replaced, as needed. All improvements are anticipated to occur on existing alignment, but the acquisition of new right-of-way (ROW) will be required.

#### Check if any of the following is expected s part of the proposed action

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

**1.3. Project Area and Setting**

Project Location		Environmental Study Footprint		Ecoregion & Game Type	
<u>Section Range &amp; 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>
S4, 5, & 8-T3S-R11E; S28 & 33-T2S-R11E	Southwest end: (34.309658°, -96.175269°); northwest end: (34.346003°, -96.150972°)	3.0 miles along US-69, ranging 100-200 feet L/R of center	94 acres	35d- Cretaceous Dissected Uplands	Postoak-Blackjack Oak Forest

**Action Area:**

The action area includes the NEPA Environmental Study Footprint plus a 1-mile buffer to include potential impacts to Northern Long-Eared Bat.

**2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT**

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

Species	IPaC <sup>1</sup>	Watershed <sup>2</sup>	Water Body <sup>3</sup>	Records <sup>4</sup>
	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 checked="" type="checkbox"/>			<input checked="" 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 checked="" 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"/>

Species	IPaC <sup>1</sup>	Watershed <sup>2</sup>	Water Body <sup>3</sup>	Records <sup>4</sup>
	Check if Yes	Check if YES	Check if Yes	Check if Yes
Ozark Cavefish	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
American Alligator	<input type="checkbox"/>			<input type="checkbox"/>
Rabbitsfoot Mussel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monarch Butterfly	<input checked="" type="checkbox"/>			<input type="checkbox"/>
Rattlesnake-master Borer Moth	<input type="checkbox"/>			<input type="checkbox"/>
Peppered Chub	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

<sup>1</sup>Species is on the Proposed Project's IPaC List

<sup>2</sup>Action Area is within a watershed associated with occupied water bodies

<sup>3</sup>Action Area includes an occupied water body

<sup>4</sup>Project 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"/>
Peppered Chub	<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 **100%**

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	Coastal Plain
Soil Name	Bernow
Soil Type	Alfisols
Soil Characteristics	Very deep, loamy and well-drained soils on gentle slopes (6 %)

Climate (Use Woods et al. 2005)

Precipitation	Mean annual inches	45-55 decreases westward
Growing Season	Number of days	215-235 days
Mean Temperatures	Summer min/max	70/94 degrees F
	Winter min/max	28/52 degrees F

River System

There are two USGS mapped tributaries crossing the study area that empty into Fronterhouse Creek to the west. Fronterhouse Creek generally flows to the south and empties into Clear Boggy Creek, a major tributary to the Red River system in southeastern Oklahoma.
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Land Use and Land Ownership

From Woods et al. 2005	Mostly forests and pastureland. The main land uses include logging, livestock farming, and poultry production. A few gently sloping areas are used for crops, including corn, soybeans, hay, small grains, and peanuts.
From Field investigation	The study area corridor occurred primarily through a small-town urban corridor consisting of residential, commercial, and light industrial land uses. Segments of wooded corridor occurred within the study area generally along watercourses.

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

<p>The study area is located in a primarily small-town urban corridor within the Cretaceous Dissected Uplands of the South Central Plains. Undeveloped land in the study area vicinity is generally pastureland and deciduous woodlands. This area lies along the westernmost boundary of the Ouachita Mountains; a distinctly different ecoregion. Terrestrial vegetative communities observed within the study area included maintained right-of-way grasses and weeds such as bermudagrass (<i>Cynodon dactylon</i>), cheatgrass (<i>Bromus tectorum</i>), and henbit (<i>Lamium amplexicaule</i>). On undeveloped parcels, upland woodlands consisting of oak (<i>Quercus</i> spp.), elm (<i>Ulmus</i> spp.), redbud (<i>Cercis canadensis</i>), dogwood (<i>Cornus florida</i>), and eastern red cedar (<i>Juniperus virginiana</i>) were present.</p> <p>The study area generally drains to the west towards Fronterhouse Creek, an intermittent stream system. Fronterhouse Creek generally flows to the south and empties into Clear Boggy Creek, a major tributary to the Red River system in southeastern Oklahoma. The two unnamed tributaries which cross the study area are small intermittent features which occur through mostly wooded riparian corridor. Riparian woody species included sycamore (<i>Platanus occidentalis</i>),</p>
--

black walnut (*Juglans nigra*), pecan (*Carya illinoensis*), and green ash (*Fraxinus pennsylvanica*). Other stream bank herbaceous vegetation such as horsetail (*Equisetum hyemale*) and creek oats (*Chasmanthium latifolium*) were also observed.

### 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 <b>0.25 miles of the NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
	If within the 75% migration corridor, provide the number of acres of emergent wetlands that occur within the <b>NEPA Environmental Study Footprint.</b>	enter acres.
	Croplands suitable for foraging occur within the <b>0.25 miles of the NEPA Environmental Study Footprint</b> and is within the 95% migration corridor.	<input type="checkbox"/>
American Burying Beetle	Number of acres of native perennial plant vegetation (where native perennial vegetation is the dominant vegetation) within the <b>NEPA Environmental Study Footprint</b> (include shapefiles).	9.1 acres
Piping Plover	Sparsely vegetated sandy or gravelly shorelines and islands associated with the major river systems occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
	Salt flats or mudflats associated with reservoirs occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
Red Knot	Mudflats associated with reservoirs occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
Northern Long-eared Bat	Limestone karsts features occur within <b>0.5 mile of the NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
	Live or dead trees/and or snags with a DBH of $\geq 3$ inches occur within the <b>NEPA Environmental Study Footprint.</b>	<input checked="" type="checkbox"/>
	10 trees or less with DBH of $\geq 3$ inches	<input type="checkbox"/>
	Barns or sheds occur within the <b>NEPA Environmental Study Footprint.</b>	<input type="checkbox"/>
	Linear treed features such as fencerows, riparian forests, and other wooded corridors occur within <b>1 mile of the NEPA Environmental Study Footprint.</b> Wooded corridors may be dense or loose aggregates of trees with variable amounts of canopy closure.	<input checked="" type="checkbox"/>

SPECIES	HABITAT	
	Number of acres of forested/wooded area within the <b>NEPA Environmental Study Footprint</b> (include shapefiles). Include forests and woodlots, as well as linear features such as fencerows, riparian forests, and other wooded corridors. Wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1000 feet of other forested/wooded habitat.	7.9 acres
Monarch Butterfly	Presence of milkweed ( <i>Asclepias sp.</i> ) species within the <b>NEPA Environmental Study Footprint</b> .	<input type="checkbox"/>
	Presence of flowering or potentially flowering nectar plants ( <i>defined as forbs that can provide nectar for monarchs at some point in the growing season</i> ) within the <b>NEPA Environmental Study Footprint</b> .	<input checked="" type="checkbox"/>
	Presence of additional native habitat within the <b>NEPA Environmental Study Footprint</b> .	<input checked="" type="checkbox"/>

**NEPA Bridge, Culvert & Structure Assessment Form for All Listed Bat Species**

If all bridge, culverts and structures are 1,000 feet or more from suitable bat habitat (e.g. an urban or agricultural area without suitable foraging habitat or corridors linking the bridge, culvert or structure to suitable foraging habitat), check this box and **STOP HERE. Fill out p.1 of Appendix D Assessment.**

**BRIDGE INSPECTION:** Identify ALL Bridges by NBI # (include RCB bridges)

**CULVERT INSPECTION:** Identify ALL Culverts ≥4 feet in diameter within the Study Area

**BARN/SHED INSPECTION:** Identify ALL structures within the Study Area that potentially could be removed

**Method of Inspection (check all that apply)**  Visual  Ladder  Snooper  Thermal  Acoustic Survey  Emergence Survey (30 minutes at dusk and 1 hour after dark)

Fill out p.2 of Appendix D Assessment for each bridge/culvert/structure

**1. Page where located in appendix: D-1**

Road Number /Name	NBI Number	Water Body (or road if over road)
US-69	Structure 6: RCB (34.329140, -96.162024) STA.174+85	Unnamed Tributary to Fronterhouse Creek
<p><b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/></p> <p>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes.</p>		
<p><b>NOTES:</b> A total of seven drainage structures were observed during site reconnaissance. Only one (Structure 6) was of sufficient size to serve as potential habitat for roosting bat species.</p>		

**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>
American Burying Beetle	☒	Approximately 9.1-acres of potential habitat was observed in the form of deciduous woodland and unmanaged rangeland. There have been several recorded occurrences of the species within the vicinity of the project. Proposed construction may include clearing of potential foraging and reproductive habitat, and the placement of fill material (gravel and/or soil) or construction equipment on suitable habitat could result in loss of habitat.
Northern long-eared bat	☒	Approximately 7.9-acres of suitable foraging, roosting, and reproductive habitat in the form of woodlands and wooded fencerows occur within the study footprint. Clearing and grubbing of these areas are possible for the purpose of construction, and will have a direct impact on the species habitat. Impacts may include a permanent loss of suitable habitat if it is converted to maintained ROW.
Monarch butterfly	☒	Some potential habitat was observed in the form of overgrown grassland where some native and flowering nectar plants were observed. Proposed construction may include clearing of these potential foraging and reproductive habitat areas, the placement of materials (i.e., wider asphalt road widths), and construction equipment on suitable habitat could result in loss of habitat.

**4.2 Indirect Effects**

Long-term habitat alterations

Species/ Resource	<u>Identify long-term, permanent changes in habitat</u>
American Burying Beetle	Any clearing of woodlands in the study area for maintained right-of-way will result in permanent cover change for the species.
Northern Long-Eared Bat	Permanent loss of suitable roosting, foraging, and reproductive habitat is possible as a result of the conversion of undeveloped woodland area and wooded fencerows.
Monarch butterfly	Most habitat disturbance will likely be temporary. Any temporary storage of equipment and/or pavement materials could be considered temporary disturbance. Any conversion of mature and native pastureland or forest to maintained ROW or pavement will result in a permanent cover change.

Indirect land use impacts

Proposed construction will occur on existing alignment, and additional right-of-way is expected to be acquired for widening and utility relocation. Most of the study area corridor is small-town urban, and proposed construction will not change overall land use, but may further reduce some of the small undeveloped wooded parcels that still occur.

**4.3 Interrelated and Interdependent Actions and Activities**

Proposed construction will occur on existing alignment, and additional right-of-way is expected to be acquired for widening and utility relocation.

<b>USFWS TAILS Number:</b>	<b>02EKOK00-2021-SLI-1252</b>
<b>ODOT Project JP Number:</b>	<b>30410(04)</b>

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
American Burying Beetle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Project uses the BO for the final 4(d) rule	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Northern long-eared bat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Final Effect Analysis and Determination covered in the Programmatic BA&BO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input checked="" type="checkbox"/>	Project uses the BO for the final 4(d) rule				
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 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"/>
Monarch butterfly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CONCLUSIONS**

No Effect	Piping Plover, Red Knot, Whooping Crane
May Affect	American Burying Beetle, Northern long-eared bat
May affect, not likely to adversely affect	
May affect, likely to adversely affect	
Not likely to jeopardize the continued existence of the species – Candidate species only	Monarch butterfly
Appropriate Effect Determination for ABB has been made under the BO for the final 4(d) rule	<input checked="" type="checkbox"/>
Appropriate Effect Determination has been made under the FHWA NLEB/Ibat Programmatic BA & BO	<input type="checkbox"/>
Appropriate Effect Determination for NLEB has been made under the BO for the final 4(d) rule	<input checked="" type="checkbox"/>

**RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES**

Suitable habitat for the **American Burying Beetle** occurs within the immediate vicinity of the proposed project. In order to minimize adverse impacts to the ABB, the following conservation measures will be implemented:

- a) The areas of suitable habitat will be field mapped.
- b) The amount of ground disturbance to suitable ABB habitat within the construction footprint will be minimized to only what is necessary for project construction.
- c) Following construction, areas of ground disturbance outside of the safety clear zone will be revegetated with native plant species where applicable and practicable. Areas where revegetation with native plant species is not practicable will be revegetated with more traditional planting such as solid slab sodding.
- d) Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will be stored outside ABB habitat.
- e) The use of artificial lighting will be minimized. If night construction is necessary, direct light will be shielded to the work area and prevent light from projecting upwards. A special provision will be included in the project contract which outlines approved lighting for use during night work.
- f) Carcasses and trash will continuously be removed from any permanent and temporary construction rights-of-way, throughout the duration of the project.

Suitable **riparian foraging habitat** for threatened and endangered bat species occurs within the proposed project’s action area. 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. Tree removal will be limited to that specified in the project plans provided to contractors.

All **temporary lighting**, if used, will be directed away from suitable habitat during the active season for bats (April 1 – November 15). If any **permanent lighting** is installed or replaced, downward-facing full cut-off lens lights shall be installed and directed away from suitable bat habitat.

ODOT, as a Certificate of Inclusion partner in the Nationwide **Monarch Butterfly** CCAA for Energy and Transportation lands, will adhere to the conservation measures, as well as minimize threats to the monarch butterfly as stipulated in this CCAA.

## 5. BALD AND GOLDEN EAGLE PROTECTION ACT ASESMENT

### 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mature deciduous woodlands (with sycamores noted) were present, primarily along the watercourses and undeveloped wooded parcels within and beyond the study area footprint.
Open foraging areas with large trees	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limited grazed pastureland occurs in the vicinity of the study area.
Distance to closest perennial water body	River or Lake	6.5 mi	Two intermittent unnamed tributaries to Fronterhouse Creek (also an intermittent stream feature) cross the study area. Fronterhouse flows south and empties into Clear Boggy Creek, the closest perennial waterbody, approximately 4.3 miles south of the study area. Atoka Reservoir is the closest lake.
	Stream or Pond	4.3 mi	
Potential Bald Eagle Nests Observed	<input type="checkbox"/>	<input type="checkbox"/>	Closest known nest is at McGee Creek Reservoir 16 miles east.
Bald Eagles Observed in the general vicinity	<input type="checkbox"/>	<input type="checkbox"/>	None
General Description of Bald Eagle Nesting Habitat and Impact Determination, within the NEPA Footprint and within 660-ft of the NEPA Footprint	Mature deciduous woodlands and wooded riparian corridor exists within and in the vicinity of the study area; however, there are no suitable nesting trees that rise above the existing canopy or overlook quality foraging/open water areas. Indeed, the nearest perennial water feature appears to be Clear Boggy Creek 4.3 miles south of the study area. Atoka Reservoir also occurs well north of the study area and may provide more suitable habitat.		
Station #s for Buffered Bald Eagle Habitat	N/A		

**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
Structure 1: RCB over non-mapped drainage feature (34.311344, -96.173780) (outside construction area)	None		
Structure 2: RCB over non-mapped drainage feature (STA 118+31.58)	None		
Structure 3: RCB (STA 135+00, 300 ft left of CL along Boggy Depot Rd)	None		
Structure 4: RCP over non-mapped drainage feature (STA 134+35)	None		
Structure 5: RCB over non-mapped drainage feature (STA 157+95)	None		
Structure 6: RCB over non-mapped drainage feature (STA 174+85)	None		
Structure 7: RCB over unnamed tributary to Fronterhouse Creek (STA 181+80)	0	2	0
Structure 8: RCB over unnamed tributary (STA 207+95)	None		
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**

Species Identified on IPaC list	Breeding Season
There are no Birds of Conservation Concern listed for the project area.	

**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 potentially suitable habitat for the Interior Least Tern was identified in proximity to the study area.	

**7. REFERENCES:**

Carter, B.J. and M.S. Gregory (2008), *Soil Map of Oklahoma; Earth Sciences and Mineral Resources of Oklahoma*. Educational Publication 9, Oklahoma Geological Survey, University of Oklahoma, Norman OK, p. 16, map scale 1:2,000,000.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe (1979), *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79-31. USDI Fish and Wildlife Service, Washington, DC. 103 pp.

Duck, L.G., and J.B. Fletcher (1945), *A Survey of the Game and Furbearing Animals of Oklahoma*; Chapter 2, *The Game Types of Oklahoma*. Oklahoma Game and Fish Commission, Division of Wildlife Restoration and Research, Oklahoma City, OK.

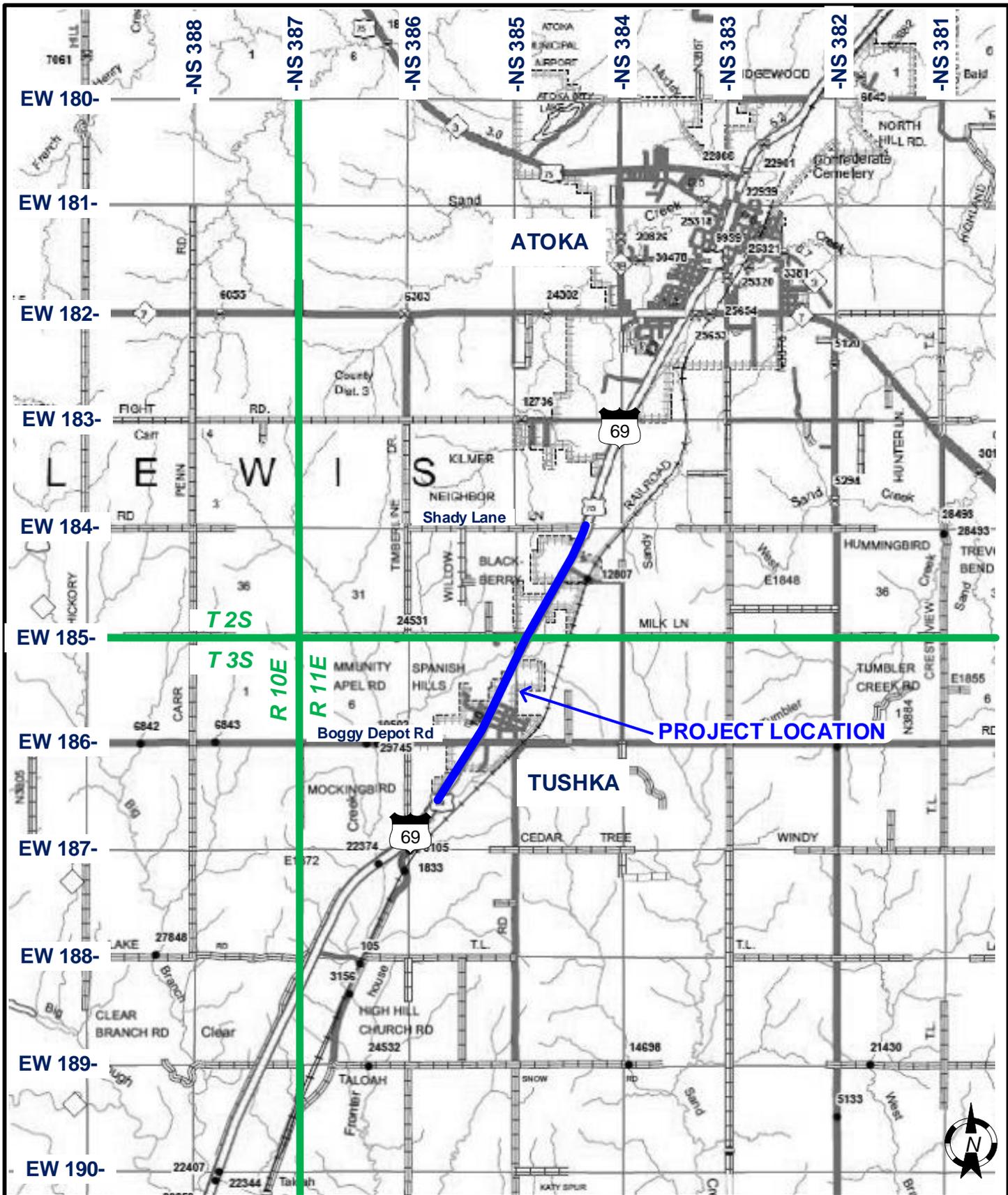
Fagin, T. (2021), *Oklahoma Federal or State Regulatory Species Data Request*, Response 2020-176-BUS-CCE, Oklahoma Natural Heritage Inventory (ONHI), Norman, OK (email dated February 18, 2021).

USFWS (2021), *National Wetland Inventory Maps*, US Fish & Wildlife Service on-line mapper, accessed March 2021: <https://www.fws.gov/wetlands/>

USGS (1957), *USGS Topographic Map*, US Geological Survey on-line viewer, accessed March 2021, 7.5-minute quadrangles, *Tushka*, map scale 1: 24,000.

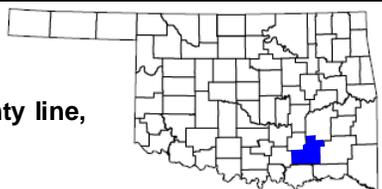
Woods, A.J., Omernik, J.M., Butler, D.R., Ford, J.G., Henley, J.E., Hoagland, B.W., Arndt, D.S., and Moran, B.C. (2005), *Ecoregions of Oklahoma*; U.S. Geological Survey, Reston, VA, map scale 1:1,250,000.

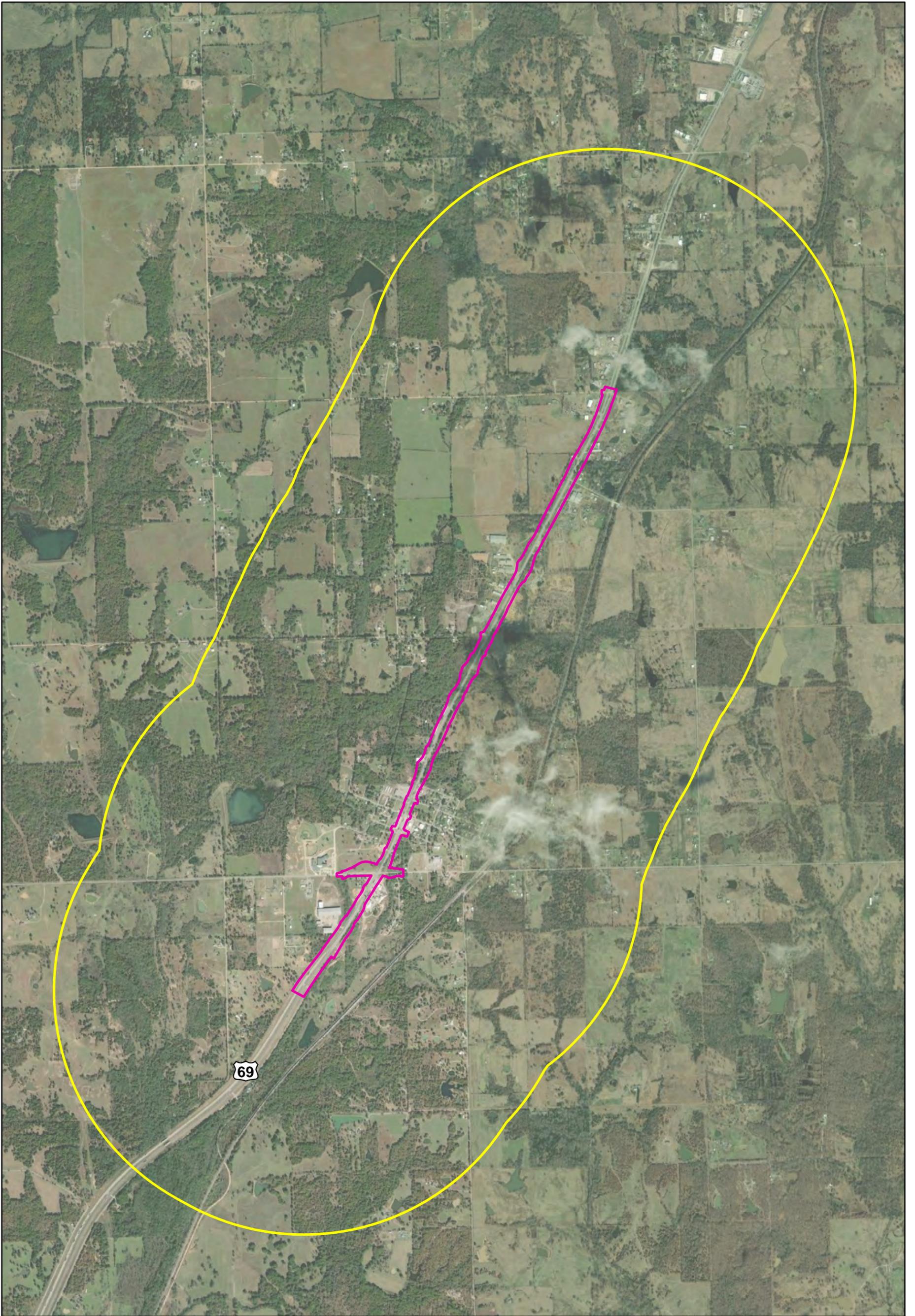
**8. FIGURES**

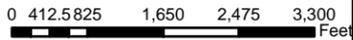


**LOCATION MAP**

JP 30410(04)  
 Grade, Drain & Surface US-69: From 12 miles north of Bryan County line,  
 extend north approximately 2.5 miles through Tushka  
 Atoka Co, OK

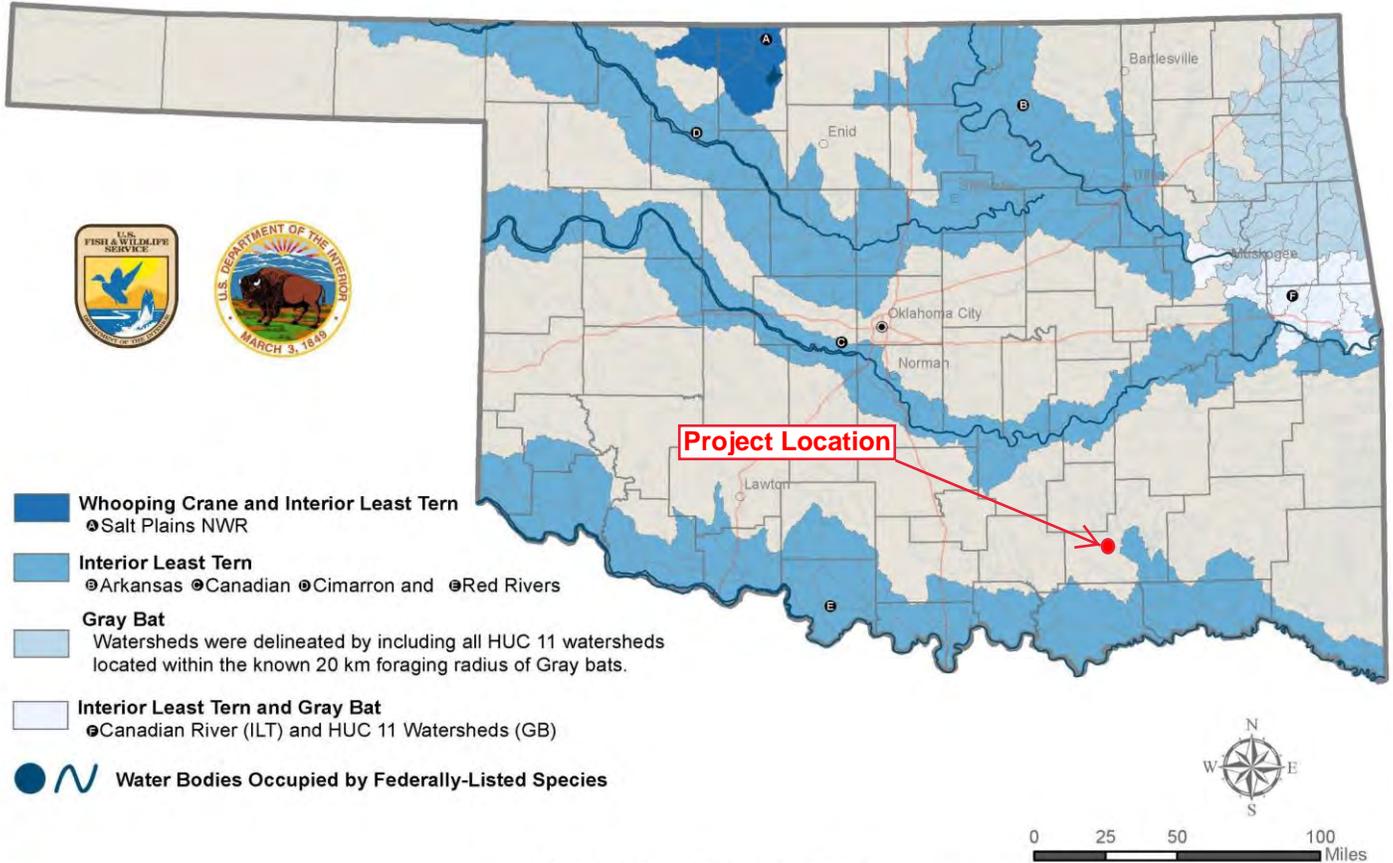




<p><b>COMMENTS/LEGEND</b></p> <p> NEPA Study Footprint</p> <p> Action Area</p> <div style="text-align: center;">    </div>	<p><b>Action Area</b>          JP 30410(04)          Grade, Drain, Surface, &amp; Bridge          on US-69 in Tushka          Atoka County, OK</p>	<p></p> <p>DRAWN BY: CKP          APPRV BY:          SOURCE: DEQ, Tiger 2000,          USGS</p>	<p><b>Figure 2</b></p> <p>Date: 8/25/2021</p>
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## Federally-Listed Aquatic Dependent Species Watersheds of Oklahoma

These watersheds were delineated using 11 digit Hydrologic Unit Code (HUC) watersheds. All watersheds adjacent to water bodies occupied by federally-listed species are included in the delineation, as well as those 11 digit HUC watersheds within 10 miles of the occupied water body. Please note that not all 11 digit HUC watersheds that feed into sensitive occupied water bodies are included in this delineation and effects to those watersheds outside of this delineation could impact sensitive water bodies.



### COMMENTS/LEGEND

### AQUATIC DEPENDENT SPECIES WATERSHEDS

J/P 30410(04)  
Grade, Drain, & Surface US-69; From 12 miles north of Bryan C/L, extend north approximately 2.5 miles through Tushka Atoka County, OK



**Figure  
3a**

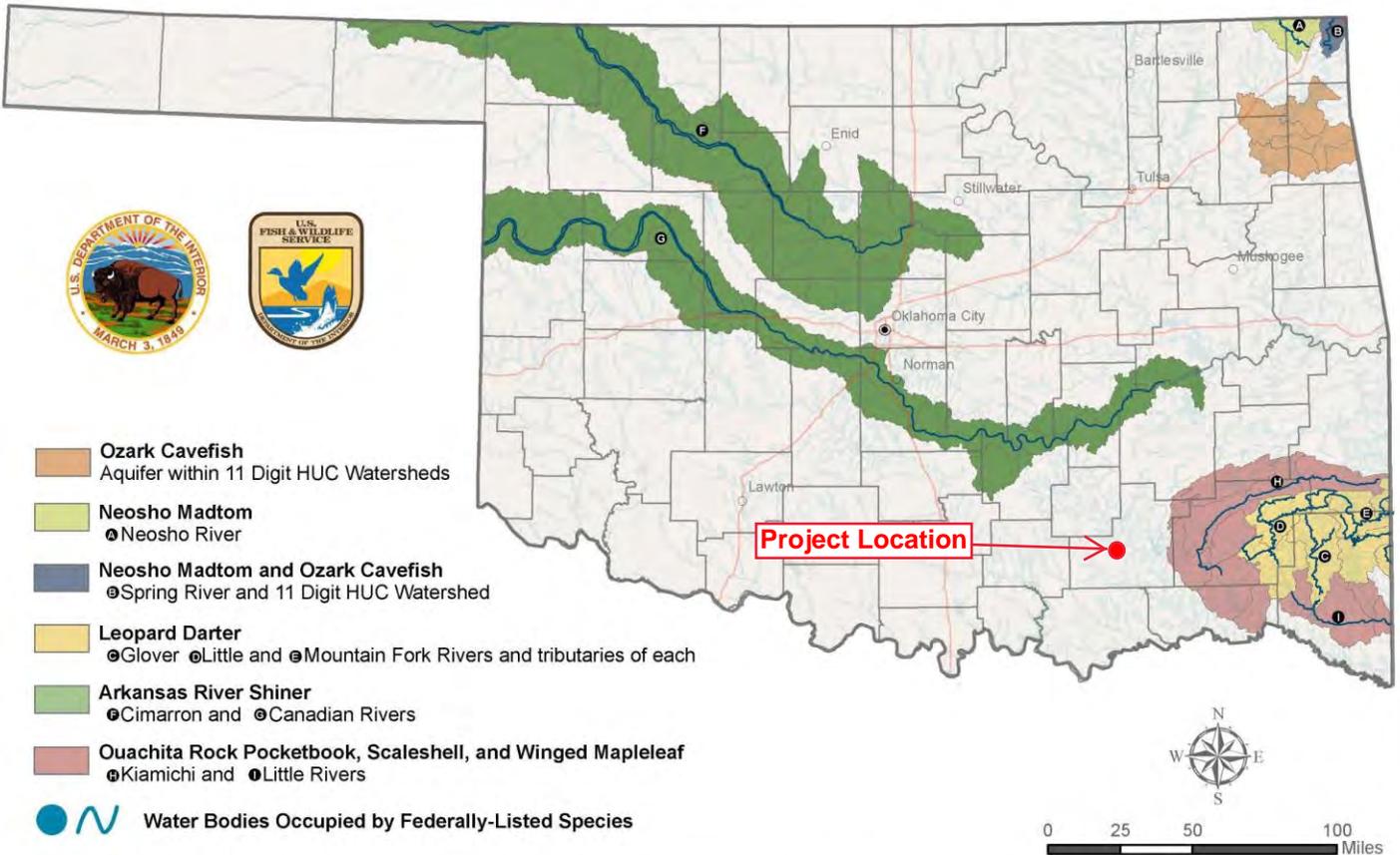


DRWN BY: LMP    APPRVD BY:  
CHKD BY:        SOURCE: USFWS

12/31/2020

## Federally-Listed Aquatic Species Watersheds of Oklahoma

These watersheds were delineated using 11 digit Hydrologic Unit Code (HUC) watersheds. All watersheds adjacent to water bodies occupied by federally-listed species are included in the delineation, as well as those 11 digit HUC watersheds within 10 miles of the occupied water body. Please note that not all 11 digit HUC watersheds that feed into sensitive occupied water bodies are included in this delineation and effects to those watersheds outside of this delineation could impact sensitive water bodies.



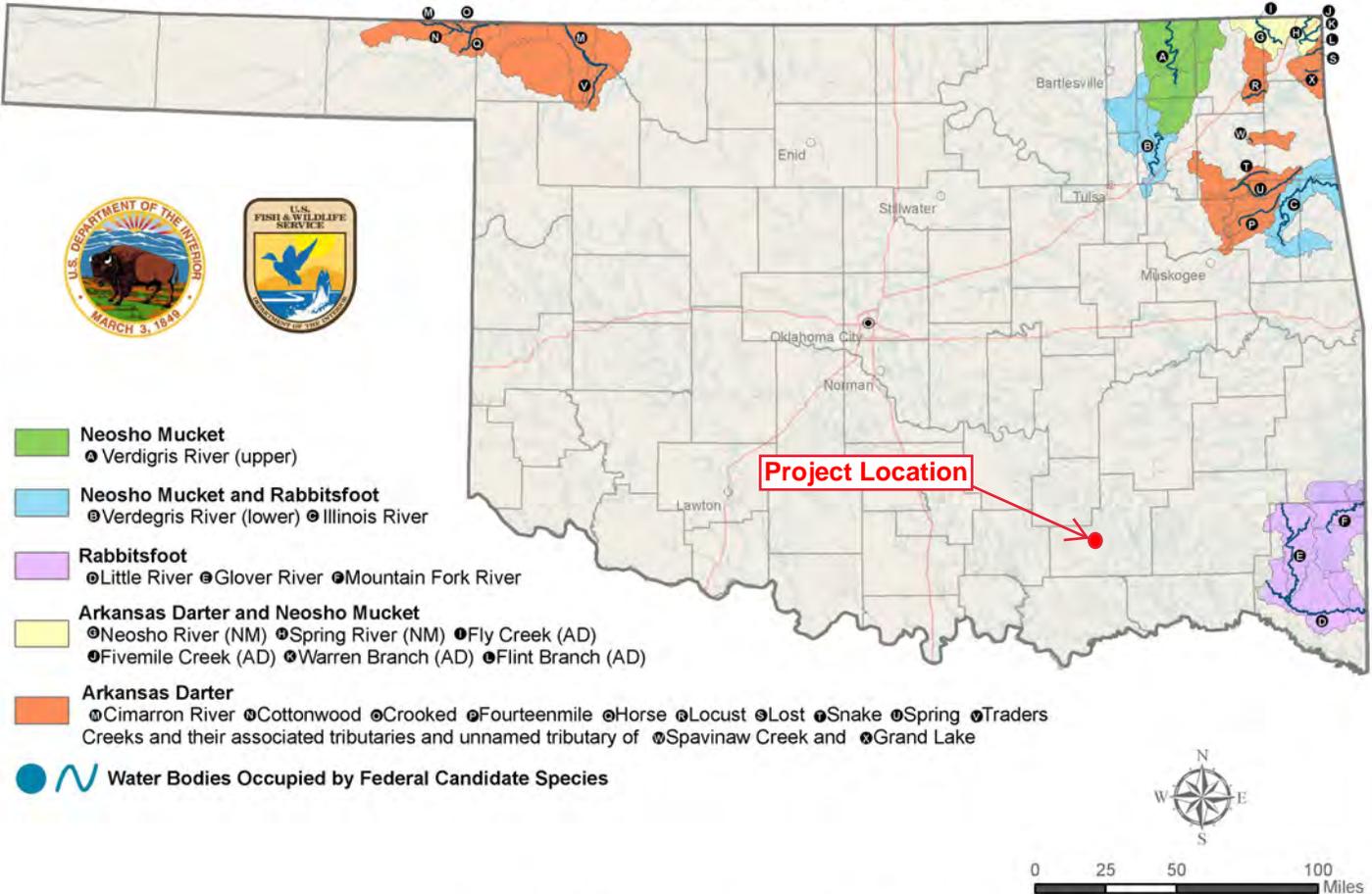
USFWS - Oklahoma Ecological Services Field Office - April 2010



<b>COMMENTS/LEGEND</b>	<b>AQUATIC SPECIES WATERSHEDS</b>	 OKLAHOMA Transportation	<b>Figure 3b</b>
	J/P 30410(04) Grade, Drain, & Surface US-69; From 12 miles north of Bryan C/L, extend north approximately 2.5 miles through Tushka Atoka County, OK		
	 Environmental PO BOX 1292 NORMAN OK 73070	DRWN BY: LMP    APPRVD BY: CHKD BY:        SOURCE: USFWS	12/31/2020

## Federal Candidate Aquatic Species Watersheds of Oklahoma

These watersheds were delineated using 11 digit Hydrologic Unit Code (HUC) watersheds. All watersheds adjacent to water bodies occupied by federal candidate species are included in the delineation, as well as those 11 digit HUC watersheds within 10 miles of the occupied water body. Please note that not all 11 digit HUC watersheds that feed into sensitive occupied water bodies are included in this delineation and effects to those watersheds outside of this delineation could impact sensitive water bodies.



USFWS - Oklahoma Ecological Services Field Office - April 2010



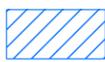
<b>COMMENTS/LEGEND</b>	<b>CANDIDATE SPECIES WATERSHEDS</b> J/P 30410(04) Grade, Drain, & Surface US-69; From 12 miles north of Bryan C/L, extend north approximately 2.5 miles through Tushka Atoka County, OK	 OKLAHOMA Transportation	<b>Figure 3c</b>
	 Environmental PO BOX 1292 NORMAN OK 73070	DRWN BY: LMP    APPRVD BY: CHKD BY:        SOURCE: USFWS	12/30/2020

Matchline Map 2

Tushka

69

COMMENTS/LEGEND

-  NEPA Study Footprint
-  Potential NLEB Habitat
-  Matchlines



0 80 160 320 480 640 Feet

**Potential NLEB Habitat**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK



DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Figure a**

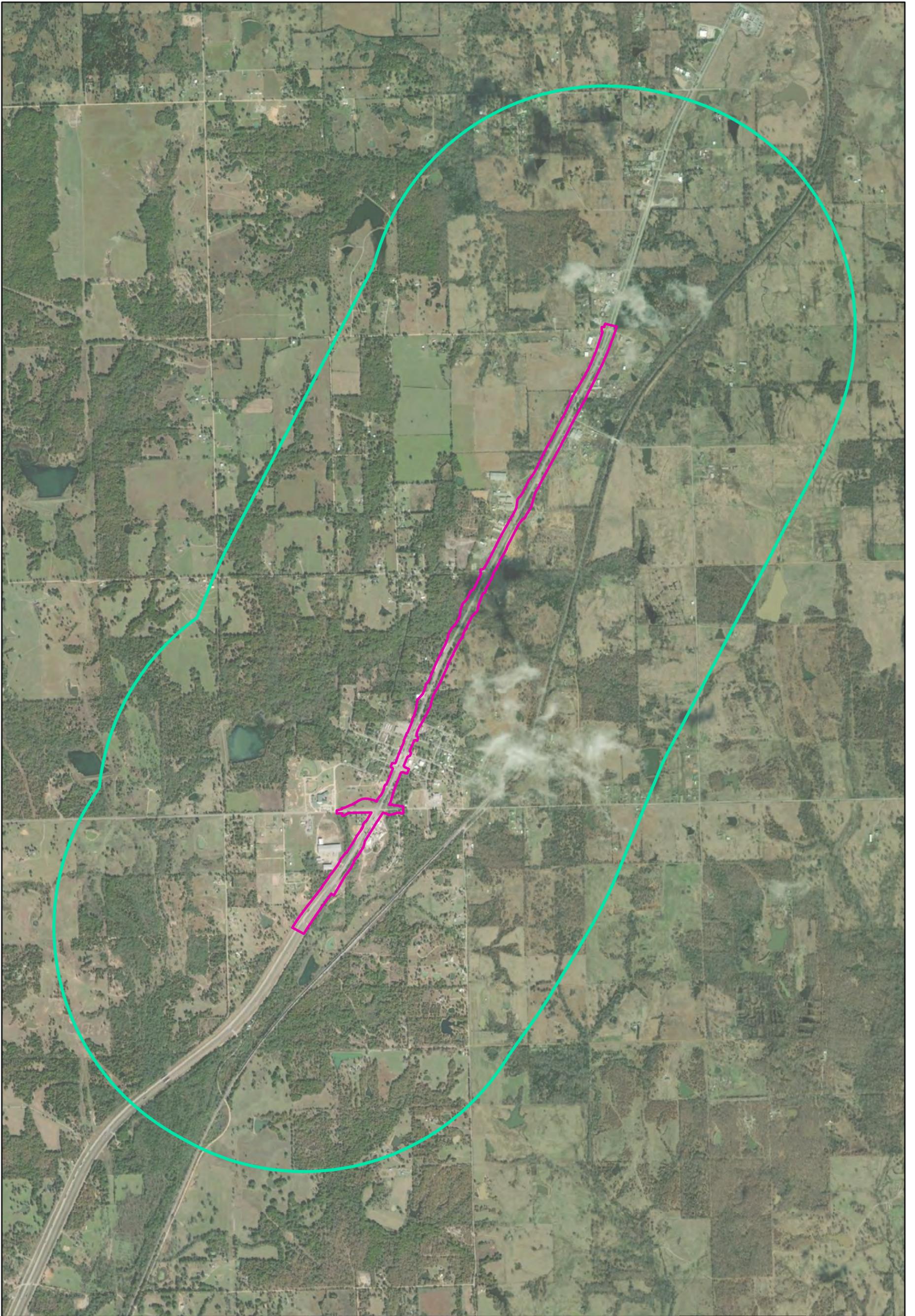
Date: 8/25/2021

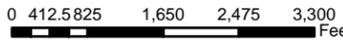


<b>COMMENTS/LEGEND</b>			<b>Potential NLEB Habitat</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK		<b>Figure b</b>
NEPA Study Footprint Potential NLEB Habitat Matchlines					



<b>COMMENTS/LEGEND</b>			<b>Potential NLEB Habitat</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK		<b>Figure</b>
NEPA Study Footprint Potential NLEB Habitat Matchlines					<b>c</b>



<p><b>COMMENTS/LEGEND</b></p>	<p><b>NLEB/lbat Travel Corridor Map</b> JP 30410(04)</p>		<p><b>Figure 5</b></p>
<p>  NEPA Study Footprint   1-mile Buffer of Study Footprint         </p> <div style="text-align: right;">    </div>	<p>Grade, Drain, Surface, &amp; Bridge on US-69 in Tushka Atoka County, OK</p>	<p>           DRAWN BY: CKP            APPRV BY:            SOURCE: DEQ, Tiger 2000,            USGS         </p>	<p>Date: 10/25/2024</p>

Matchline Map 2

Tushka

69

COMMENTS/LEGEND

-  NEPA Study Footprint
-  Potential ABB Habitat
-  Matchlines



0 80 160 320 480 640 Feet

Potential ABB Habitat

JP 30410(04)  
Grade, Drain, Surface, & Bridge  
on US-69 in Tushka  
Atoka County, OK



DRAWN BY: CKP  
APPRV BY:  
SOURCE: DEQ, Tiger 2000,  
USGS

Figure  
6a

Date: 8/25/2021



Matchline Map 3

69

Matchline Map 1

COMMENTS/LEGEND

-  NEPA Study Footprint
-  Potential ABB Habitat
-  Matchlines



0 80 160 320 480 640 Feet

**Potential ABB Habitat**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK



DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Figure 6b**

Date: 8/25/2021



Matchline Map 2

COMMENTS/LEGEND

- NEPA Study Footprint
- Potential ABB Habitat
- Matchlines



0 80 160 320 480 640 Feet

**Potential ABB Habitat**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

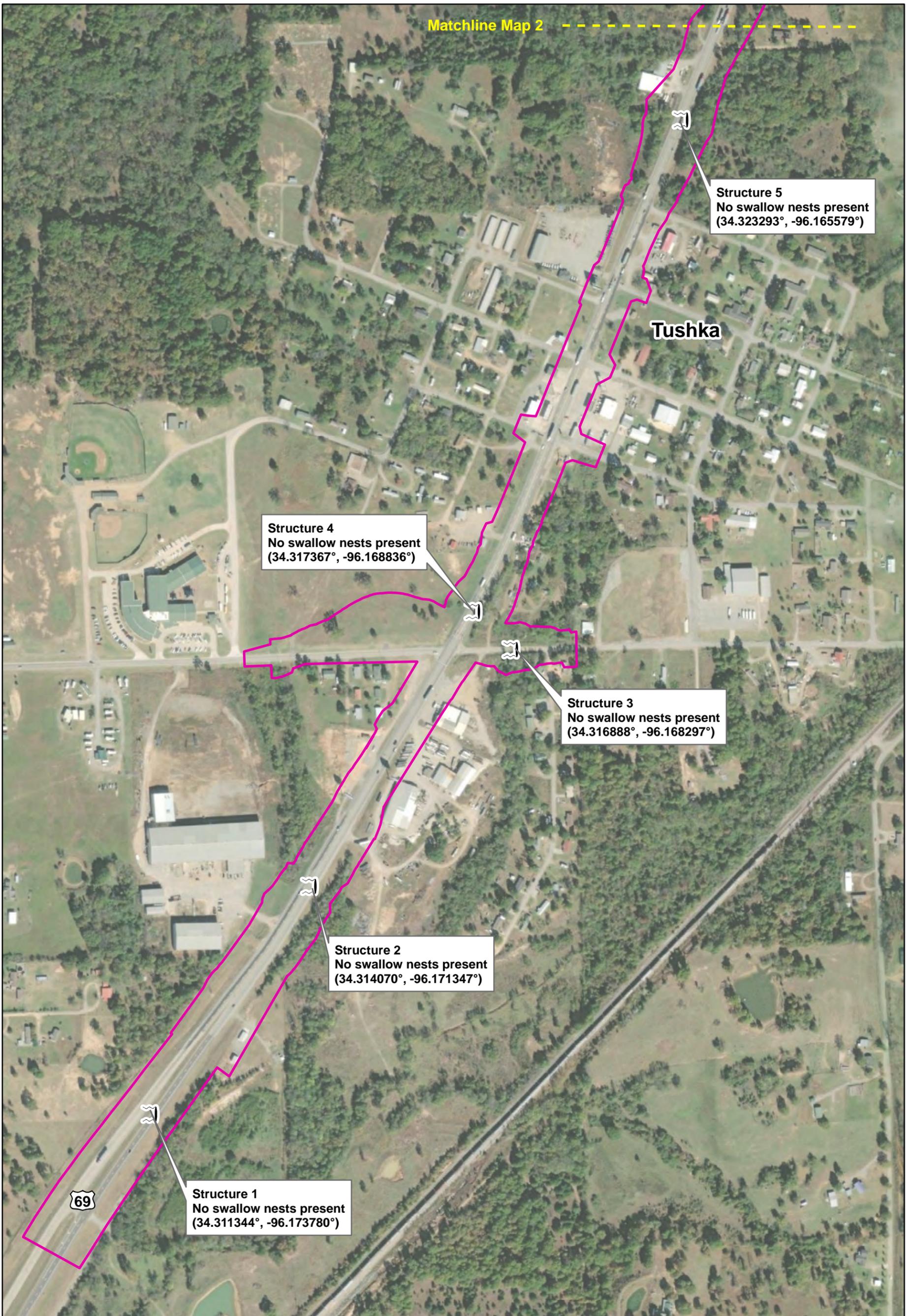


DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Figure  
6c**

Date: 8/25/2021

Matchline Map 2



COMMENTS/LEGEND

- NEPA Study Footprint
- Structures
- Matchlines



0 80 160 320 480 640  
Feet

**Structures**

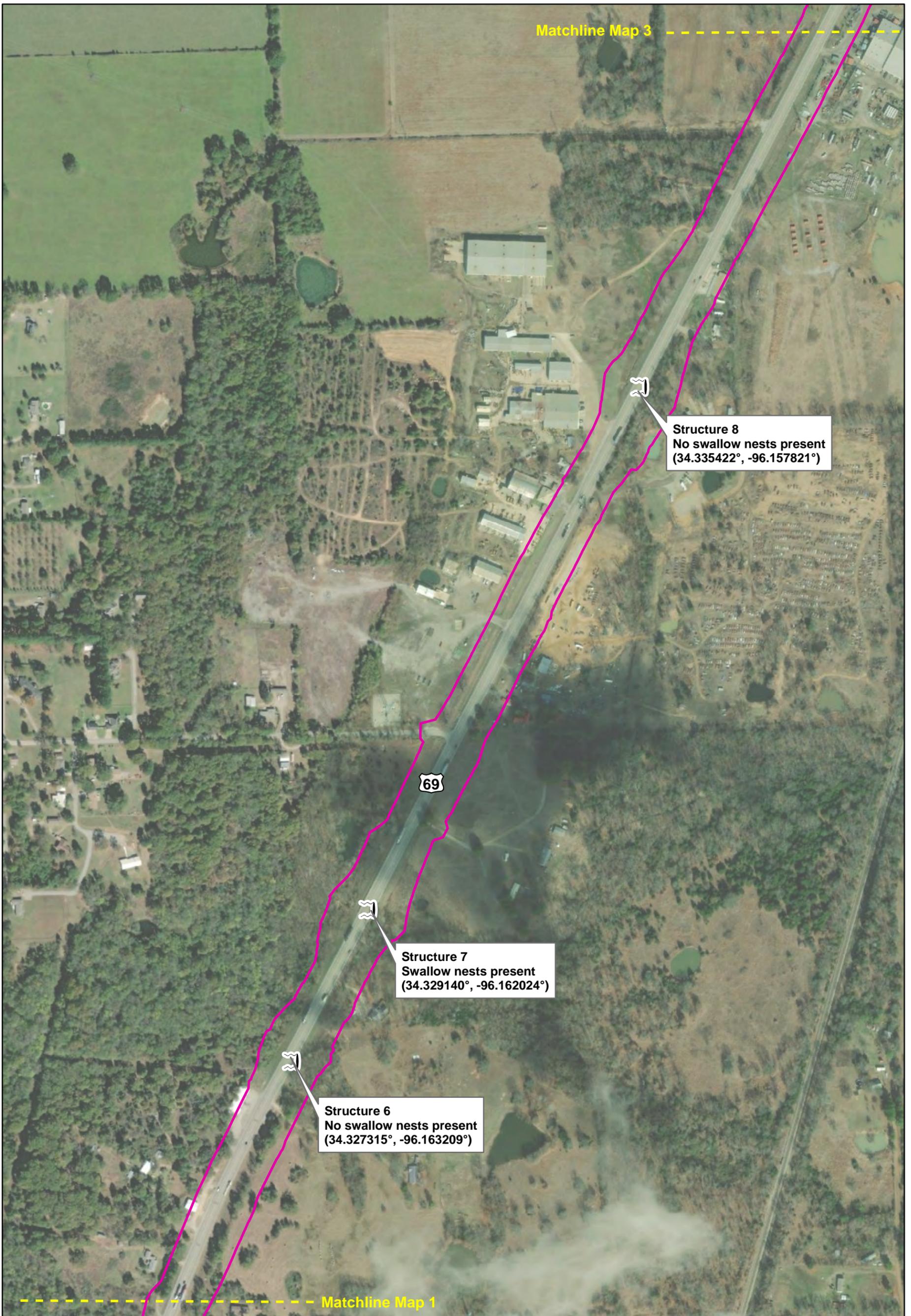
JP 30410(04)  
Grade, Drain, Surface, & Bridge  
on US-69 in Tushka  
Atoka County, OK



DRAWN BY: CKP  
APPRV BY:  
SOURCE: DEQ, Tiger 2000,  
USGS

**Figure  
7a**

Date: 8/25/2021

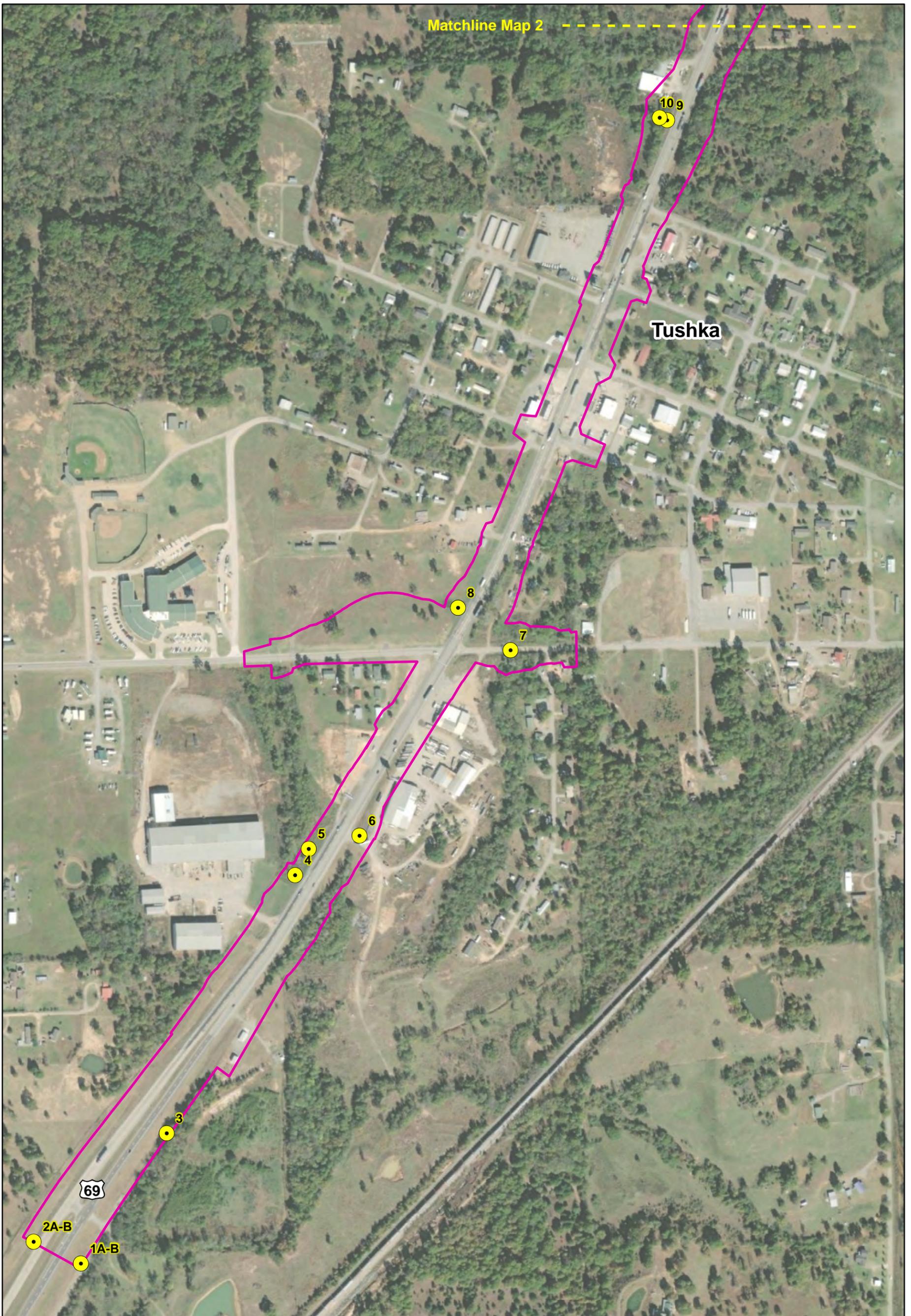


<b>COMMENTS/LEGEND</b>			<b>Structures</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK		<b>Figure 7b</b>
NEPA Study Footprint Structures Matchlines					



<b>COMMENTS/LEGEND</b>		 0 80 160 320 480 640 Feet	<b>Structures</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK	 DRAWN BY: CKP APPRV BY: SOURCE: DEQ, Tiger 2000, USGS	<b>Figure 7c</b>
 NEPA Study Footprint  Structures  Matchlines	Date: 8/25/2021				

Matchline Map 2



COMMENTS/LEGEND

- NEPA Study Footprint
- Photo Locations
- Matchlines



0 80 160 320 480 640  
Feet

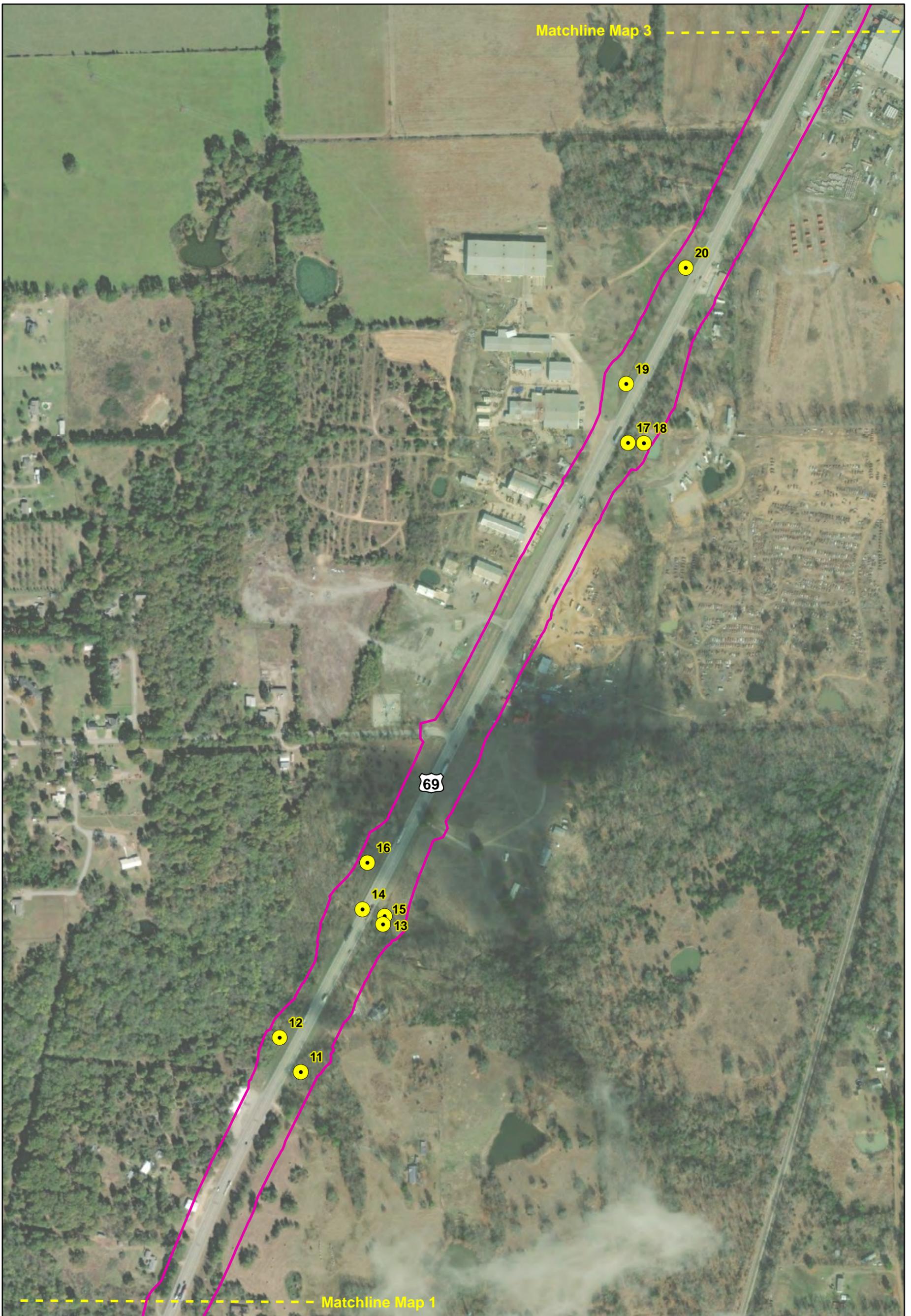
**Photo Locations**  
JP 30410(04)  
Grade, Drain, Surface, & Bridge  
on US-69 in Tushka  
Atoka County, OK



DRAWN BY: CKP  
APPRV BY:  
SOURCE: DEQ, Tiger 2000,  
USGS

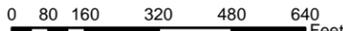
**Figure  
8a**

Date: 8/25/2021



<b>COMMENTS/LEGEND</b>		 	<b>Photo Locations</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK	 <b>Environmental Engineering</b>	<b>Figure 8b</b>
NEPA Study Footprint Photo Locations Matchlines	DRAWN BY: CKP APPRV BY: SOURCE: DEQ, Tiger 2000, USGS			Date: 8/25/2021	



<b>COMMENTS/LEGEND</b>		 	<b>Photo Locations</b> JP 30410(04) Grade, Drain, Surface, & Bridge on US-69 in Tushka Atoka County, OK	 DRAWN BY: CKP APPRV BY: SOURCE: DEQ, Tiger 2000, USGS	<b>Figure 8c</b>
 NEPA Study Footprint  Photo Locations  Matchlines	Date: 8/25/2021				



**Photograph 1-A:** S boundary of US-69 E side, view to S.



**Photograph 1-B:** S boundary of US-69 E side, view to N.



**Photograph 2-A:** S boundary of US-69 W side, view to S.



**Photograph 2-B:** S boundary of US-69 W side, view to N.



**Photograph 3:** Structure 1 at NDF-1, no swallow nests present.



**Photograph 4:** Structure 2 at NDF-2, no swallow nests present.



**Photograph 5:** Potential wetland area off NDF-2 near west study area boundary.



**Photograph 6:** Manufacturing along corridor common throughout study area.



**Photograph 7:** Structure 3 at NDF-3, no swallow nests present.



**Photograph 8:** Poorly drained FS-01 at entrance of Structure 4, no swallow nests present.



**Photograph 9:** Structure 5 at NDF-4, no swallow nests present.



**Photograph 10:** NDF-4 along property boundary of metal fabrication shop.



**Photograph 11:** Structure 6 at NDF-5, no swallow nests present.



**Photograph 12:** NDF-5 west of roadway.



**Photograph 13:** Structure 7 at Unnamed Tributary to Fronterhouse Creek (PFO1A-01).



**Photograph 14:** Beneath Structure 7, two barn swallow nests present.



**Photograph 15:** Unnamed Tributary to Fronterhouse Creek (PFO1A-01), facing E.



**Photograph 16:** Riparian woodland and upland impoundment west adjacent study area.



**Photograph 17:** Unnamed Tributary (R4SBC-01) east of roadway.



**Photograph 18:** Upland impoundment (PW-02) east of roadway.



**Photograph 19:** Structure 8 at Unnamed Tributary (R4SBC-01), no swallow nests present.



**Photograph 20:** NDF-6 through manicured lawn west of roadway.



**Photograph 21-A:** N boundary of US-69 E side, view to S.



**Photograph 21-B:** N boundary of US-69 E side, view to N.



**Photograph 22-A:** N boundary of US-69 W side, view to S.



**Photograph 22-B:** N boundary of US-69 W side, view to N.

<b>Date &amp; Time of Assessment</b>		<b>DOT Project Number</b>		<b>Route/Facility Carried</b>		<b>County</b>	
<b>Federal Structure ID</b>		<b>Structure Coordinates (latitude and longitude)</b>		<b>Structure Height (approximate)</b>		<b>Structure Length</b>	
<b>Structure Type (check one)</b>				<b>Structure Material (check all that apply)</b>			
<b>Bridge Construction Style</b>				<b>Deck Material</b>		<b>Beam Material</b>	
Cast-in-place		Pre-stressed Girder		Metal		None	
Flat Slab/Box		Steel I-beam		Concrete		Concrete	
Truss		Covered		Timber		Steel	
Parallel Box Beam		Other:		Open grid		Timber	
				Other:		Other:	
						<b>Creosote Evidence</b>	
				<b>Culvert Material</b>		Yes <input type="checkbox"/> No <input type="checkbox"/>	
				Metal		Unknown	
				Concrete		<b>Notes:</b>	
				Plastic			
				Stone/Masonry			
				Other:			
<b>Culvert Type</b>				<b>Other Structure</b>			
Box							
Pipe/Round							
Other:							
<b>Crossings Traversed (check all that apply)</b>				<b>Surrounding Habitat (check all that apply)</b>			
Bare ground		Open vegetation		Agricultural		Grassland	
Rip-rap		Closed vegetation		Commercial		Ranching	
Flowing water		Railroad		Residential-urban		Riparian/wetland	
Standing water		Road/trail - Type:		Residential-rural		Mixed use	
Seasonal water		Other:		Woodland/forested		Other:	
<b>Areas Assessed (check all that apply)</b>							
Check all areas that apply. If an area is not present in the structure, check the "not present" box.							
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.							
<b>Area (check if assessed)</b>		<b>Assessment Notes</b>		<b>Evidence of Bats (include photos if present)</b>			
<input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Vertical surfaces on concrete I-beams		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Spaces between walls, ceiling joists		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> All guiderails		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<input type="checkbox"/> All expansion joints		Not present		Visual - live #      dead #		Audible <input type="checkbox"/> Species	
				Guano		Odor <input type="checkbox"/>	
				Staining		Photos <input type="checkbox"/>	
<b>Name:</b>				<b>Signature:</b>			



## 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:

October 15, 2021

Consultation Code: 02EKOK00-2021-SLI-1252

Event Code: 02EKOK00-2022-E-00418

Project Name: Atoka County JP 30410(04)

Subject: Updated 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](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

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

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

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## Project Summary

Consultation Code: 02EKOK00-2021-SLI-1252

Event Code: Some(02EKOK00-2022-E-00418)

Project Name: Atoka County JP 30410(04)

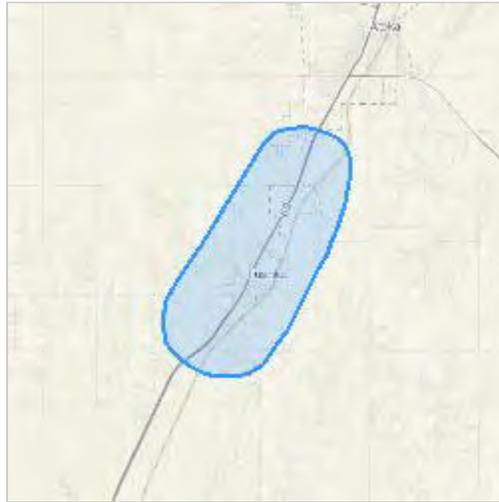
Project Type: TRANSPORTATION

Project Description: Grade, Drain, & Surface on US-69 from 12 mi north of Bryan C/L, ext north approx. 2.5 mi thru Tushka

Project Location:

Approximate location of the project can be viewed in Google Maps: [https://](https://www.google.com/maps/@34.3280144,-96.16262401173898,14z)

[www.google.com/maps/@34.3280144,-96.16262401173898,14z](https://www.google.com/maps/@34.3280144,-96.16262401173898,14z)



Counties: Atoka County, Oklahoma

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## Endangered Species Act Species

There is a total of 6 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 Fisheries<sup>1</sup>, 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.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### 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 <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Endangered

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## Insects

NAME	STATUS
<p>American Burying Beetle <i>Nicrophorus americanus</i> Population: Wherever found, except where listed as an experimental population No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/66">https://ecos.fws.gov/ecp/species/66</a></p>	Threatened
<p>Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a></p>	Candidate

## Critical habitats

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

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# 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.

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## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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](#).

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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)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

### 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](#).

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### **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 to 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](#)

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[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.

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# 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.

## FRESHWATER EMERGENT WETLAND

- [PEM1Ch](#)
- [PEM1Fh](#)

## FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1A](#)
- [PFO1C](#)
- [PFO1Ch](#)
- [PFO1F](#)

## FRESHWATER POND

- [PUBH](#)
- [PUBHh](#)
- [PUBHx](#)

## RIVERINE

- [R2UBH](#)
  - [R4SBA](#)
  - [R4SBC](#)
  - [R5UBF](#)
-

OBS Ref. 2021-211-BUS-CCE

Dear Mr. Daniel,

Mar. 31, 2021

We have reviewed occurrence information on federal and state threatened, endangered or candidate species, as well as non-regulatory rare species and ecological systems of importance currently in the Oklahoma Natural Heritage Inventory database for the following location you provided:

Sec.28 and 33-T2S-R11E and Sec. 4, 5, and 8-T3S-R11E, Atoka County

We found 7 occurrence(s) of relevant species within the vicinity of the project location as described.

<b>Species Name</b>	<b>Common Name</b>	<b>Federal Status</b>
<b><i>Nicrophorus americanus</i></b> <b>County</b>	<b>American burying beetle</b> <b>TRS</b>	<b>Threatened</b> <b>Count</b>
Atoka	Sec. 36-T2S-R10E	1
Atoka	Sec. 26-T2S-R11E	1
Atoka	Sec. 31-T2S-R11E	2
Atoka	Sec. 35-T2S-R11E	2
Atoka	Sec. 20-T3S-R11E	1

Additionally, absence from our database does not preclude such species from occurring in the area.

If you have any questions about this response, please send me an email, or call us at the number given below.

Although not specific to your project, you may find the following links helpful.

ONHI, guide to ranking codes for endangered and threatened species:  
<http://www.oknaturalheritage.ou.edu/content/biodiversity-info/ranking-guide/>

Information regarding the Oklahoma Natural Areas Registry:  
<https://okregistry.wordpress.com/>

Todd Fagin  
Oklahoma Natural Heritage Inventory  
(405) 325-4700  
[tfagin@ou.edu](mailto:tfagin@ou.edu)

## WATERS AND WETLANDS EVALUATION REPORT

**For**

<b>County</b>	Atoka	<b>JP Number</b>	30410(04)	<b>Project Number</b>	J3-0410(004)
<b>Road Number</b>	US-69	<b>Water Body Name</b>		Unnamed Tributaries to Fronterhouse Creek	
<b>ROW Date</b>	FFY 2023	<b>Let Date</b>	FFY 2026	<b>Project Length</b>	~3 miles
<b>Project General Location</b>		US-69 from ~2,200 feet south of Boggy Depot Road, extend north through the town of Tushka to Shady Lane			
<b>Project Description &amp; Statement From Oracle</b>		Grade, Drain, & Surface US-69: From 12 Miles North of Bryan C/L, Extend North Approximately 2.5 Miles through Tushka			

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

Prepared by:

<b>Biologist Name</b>	Dale W. Daniel and Leah M. Peterson
<b>Company/Agency Name</b>	CC Environmental, LLC.
<b>Address</b>	P.O. Box 1292
<b>City, State Zip</b>	Norman, OK 73071
<b>Report Date:</b>	October 25 2021
<b>Field Date:</b>	March 10, 2021

**PROJECT OVERVIEW**

<b>Project Type (Choose one)</b>	<b>Check <math>\checkmark</math></b>
Bridge and Approaches or bridge widening/structure extension	
Grade, Drain, Surface and Bridge	
Grade, Drain and Surface	$\checkmark$
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 segment of US-69 extending through Tushka is a principal arterial facility with four 12-foot-wide paved driving lanes and varying width paved shoulders. The current annual average daily traffic (AADT) is 21,000 vehicles per day (vpd) with a future AADT of 27,300 vpd. The roadway has deteriorating pavement, narrow shoulders, limited sight distances, poor traffic flow, and an elevated accident history.

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

The Oklahoma Department of Transportation (ODOT) proposes to widen the roadway on existing alignment to create four 12-foot-wide driving lanes with a 16-foot-wide center turning lane. The roadway will be an open section facility with 8-foot-wide paved shoulders, except through town and for a portion north of town. From roughly 1,000 feet south of Boggy Depot Road to approximately Cooper Place Road, the roadway will have a curb and gutter section with four 12-foot-wide driving lanes, a 16-foot-wide center turn lane and 5-footwide sidewalks on both sides of the road. From roughly County Road EW-185 and extending north approximate 2,300 feet there will be a similar curb and gutter section. Culverts will be extended or replaced, as needed. All improvements are anticipated to occur on existing alignment, but the acquisition of new right-of-way (ROW) will be required.

### Project Environmental Study Footprint

Project Location		Environmental Study Footprint	
Section Range & Township	Lat/Long (NAD 83)	Dimensions	Acreage
S4, 5, & 8-T3S-R11E; S28 & 33-T2S-R11E	Southwest end: (34.309658°, -96.175269°); northwest end: (34.346003°, -96.150972°)	3.0 miles along US-69, ranging 100-200 feet L/R of center	94 acres

### Environmental Study Footprint Soils (NRCS Soil Survey Map)

Map Unit Name	Percent Slope	Drainage Class	Hydric Rating		Description
			YES	NO	
7 – Bernow	1 to 3	Well drained		X	fine sandy loam
8 – Bernow	3 to 5	Well drained		X	fine sandy loam
9 – Bernow	1 to 5	Well drained		X	fine sandy loam
10 - Bernow	5 to 8	Well drained		X	fine sandy loam
12 – Bernow	3 to 8	Well drained		X	fine sandy loam, gullied
14 – Boggy	0 to 1	Somewhat poorly drained	X		fine sandy loam, frequently flooded
15 – Bosville	1 to 3	Moderately well drained		X	fine sandy loam
43 - Hamden	0 to 2	Moderately well drained		X	fine sandy loam

### Environmental Study Footprint General Description and Vegetation Present

The study area is located in a primarily small-town urban corridor within the Cretaceous Dissected Uplands of the South Central Plains. Undeveloped land in the study area vicinity is generally pastureland and deciduous woodlands. This area lies along the westernmost boundary of the Ouachita Mountains; a distinctly different ecoregion. Terrestrial vegetative communities observed within the study area included maintained right-of-way grasses and weeds such as bermudagrass (*Cynodon dactylon*), cheatgrass (*Bromus tectorum*), and henbit (*Lamium amplexicaule*). On undeveloped parcels, upland woodlands consisting of oak (*Quercus* spp.), elm (*Ulmus* spp.), redbud (*Cercis canadensis*), dogwood (*Cornus florida*), and eastern red cedar (*Juniperus virginiana*) were present.

The study area generally drains to the west towards Fronterhouse Creek, an intermittent stream system. Fronterhouse Creek generally flows to the south and empties into Clear Boggy Creek, a major tributary to the Red River system in southeastern Oklahoma. The two unnamed tributaries which cross the study area are small intermittent features which occur through mostly wooded riparian corridor. Riparian woody species included sycamore (*Platanus*

*occidentalis*), black walnut (*Juglans nigra*), pecan (*Carya illinoensis*), and green ash (*Fraxinus pennsylvanica*). Other stream bank herbaceous vegetation such as horsetail (*Equisetum hyemale*) and creek oats (*Chasmanthium latifolium*) were also observed.

## WATERS AND WETLANDS EVALUATION

### Data Sources Reviewed (list)

USGS 7.5 minute Quad	NWI Map	USACE Wetland Regional Supplement	Additional Resources Reviewed
Tushka, OK (2019)	Tushka	Atlantic and Gulf Coastal Plain	

### Wetlands and Ponds Summary Table

Field Sites	Type of Wetland or Pond	Cowardin Classification	Potential Jurisdictional Status	Acres within Environmental Study Footprint
PW-01	Non-mapped depressional emergent	None (Not mapped)	Not Likely Jurisdictional	0.03-acre
PW-02	Pond	None (Not mapped)	Not Likely Jurisdictional	0.07-acre

### 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
NDF-1	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.001-acre	20 feet
NDF-2	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.002-acre	79 feet
FS-01	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.028-acre	32 feet
NDF-3	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.003-acre	326 feet
NDF-4	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.009-acre	248 feet
NDF-5	Non-Mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.004-acre	181 feet

Field Sites	Stream Name	USGS Mapped Status	Potential Jurisdictional Status	Acres within Environmental Study Footprint	Linear Feet within Environmental Study Footprint
PFO1A-1	Unnamed Tributary to Fronterhouse Creek	Mapped	Likely Jurisdictional	0.10-acre	280 feet
R4SBC-1	Unnamed Tributary	Mapped	Likely Jurisdictional	0.087-acre	872 feet
NDF-6	Non-mapped Drainage	Not Mapped	Not Likely Jurisdictional	0.009-acre	243 feet

*Streams and other linear aquatic features*

Non-Mapped Drainage Features (NDFs) and FS-01 – There were six non-mapped drainage features identified within the study area. Generally, these features exhibited stagnant to slowly-moving water in narrow, poorly defined channels. In most cases, the drainage structures carrying these ephemeral water features across the study area did not appear effective, and water pooled at the openings. In one instance, significant pooling at the west opening of Structure 3 had resulted in extended ponded conditions (FS-01) along the drainway, which currently supports hydrophytic vegetation. This poor drainage appears to be the result of Structure 4 being mostly buried with sediment, likely from the significant recent disturbance in close proximity. The non-mapped drainage features appeared to be characteristic of upland drainages, conveying water in direct response to precipitation, and did not exhibit definitive bed or bank features. Therefore, NDF-1, NDF-2, NDF-3, NDF-4, NDF-5, and NDF-6 are ***not likely*** to be considered jurisdictional. The poorly drained feature (FS-01) did not exhibit hydric soils and it appears that when dry, it gets mowed similarly to the rest of the drainway west of the roadway. Under normal conditions, this drainage area would be conveyed east through Structure 4 and contribute to NDF-3 identified east of the roadway; FS-01 is ***not likely*** to be considered jurisdictional.

PFO1A-1 (Unnamed Tributary to Fronterhouse Creek) – is classified as a temporarily flooded, broad-leaved deciduous forested palustrine system. The unnamed tributary to Fronterhouse Creek flows from east to west, crossing the study area at Structure 7 before merging with Fronterhouse Creek approximately 1.0-mile west of the study area. At the time of reconnaissance, this feature exhibited slow-moving, clear water over a sandy loam stream bed. The stream banks were steeply incised and were vegetated with woody riparian species, including sycamore (*Platanus occidentalis*), black walnut (*Juglans nigra*), pecan (*Carya illinoensis*), and green ash (*Fraxinus pennsylvanica*). Other stream bank herbaceous vegetation such as horsetail (*Equisetum hyemale*) and creek oats (*Chasmanthium latifolium*) were also observed. The ordinary high water mark (OHWM) was approximately 11 feet wide through the study area. Because of its USGS mapped status, this stream is ***likely*** to be considered jurisdictional.

R4SBC-1 (Unnamed Tributary) – is classified as a seasonally flooded, intermittent stream bed, riverine system. This unnamed tributary flows generally from north to south, crossing the study area from west to east at Structure 8, then continuing south until emptying into PFO1A-1 east of the study area. At the time of reconnaissance, the portion of this feature occurring west of the roadway and within the study area meandered through a mostly manicured lawn and had a poorly defined bed and bank. Some slowly-moving water was noted throughout. East of the roadway, the tributary was somewhat larger and more defined, and flowed through a small wooded riparian corridor consisting of sycamore (*Platanus occidentalis*), green ash (*Fraxinus pennsylvanica*), and eastern red cedar (*Juniperus virginiana*). The understory was heavily vegetated with greenbrier (*Smilax bona-nox*) and johnsongrass (*Sorghum halepense*). West of the roadway, the OHWM was unable to be determined. However, east of the roadway, it was measured to be approximately 6 feet wide. Because of its USGS mapped status, this stream is likely to be considered jurisdictional.

### *Wetlands and ponds*

PW-01 (Potential Wetland adjacent to NDF-2) – This feature is currently a non-mapped depressional wetland feature adjacent and partially within the study area along the drainway of NDF-2, west of the roadway. Prior to the construction of the trailer manufacturing facility adjacent to this feature, the immediate watershed drained to an upland stock pond which was apparently filled in for the building pad. The highly altered watershed now appears to drain poorly toward Structure 2. At the time of reconnaissance, surface water was present in the feature which was dominated by cattails (*Typha* spp.), bushy bluestem (*Andropogon glomeratus*), and white oak (*Quercus alba*). This feature does not appear to share a significant hydrological connection with potentially jurisdictional waterbodies; thus, this wetland is considered not likely to be jurisdictional.

PW-02 (Upland Stock Pond) - This feature is currently a non-mapped upland, impounded pond observed on the east side of US-69. This feature did not exhibit any surface water connection to any jurisdictional or potentially jurisdictional stream; therefore, this pond is considered not likely to be considered jurisdictional. Because this feature was evidently characteristic of a constructed pond, a wetland data form was not completed for this wetland.

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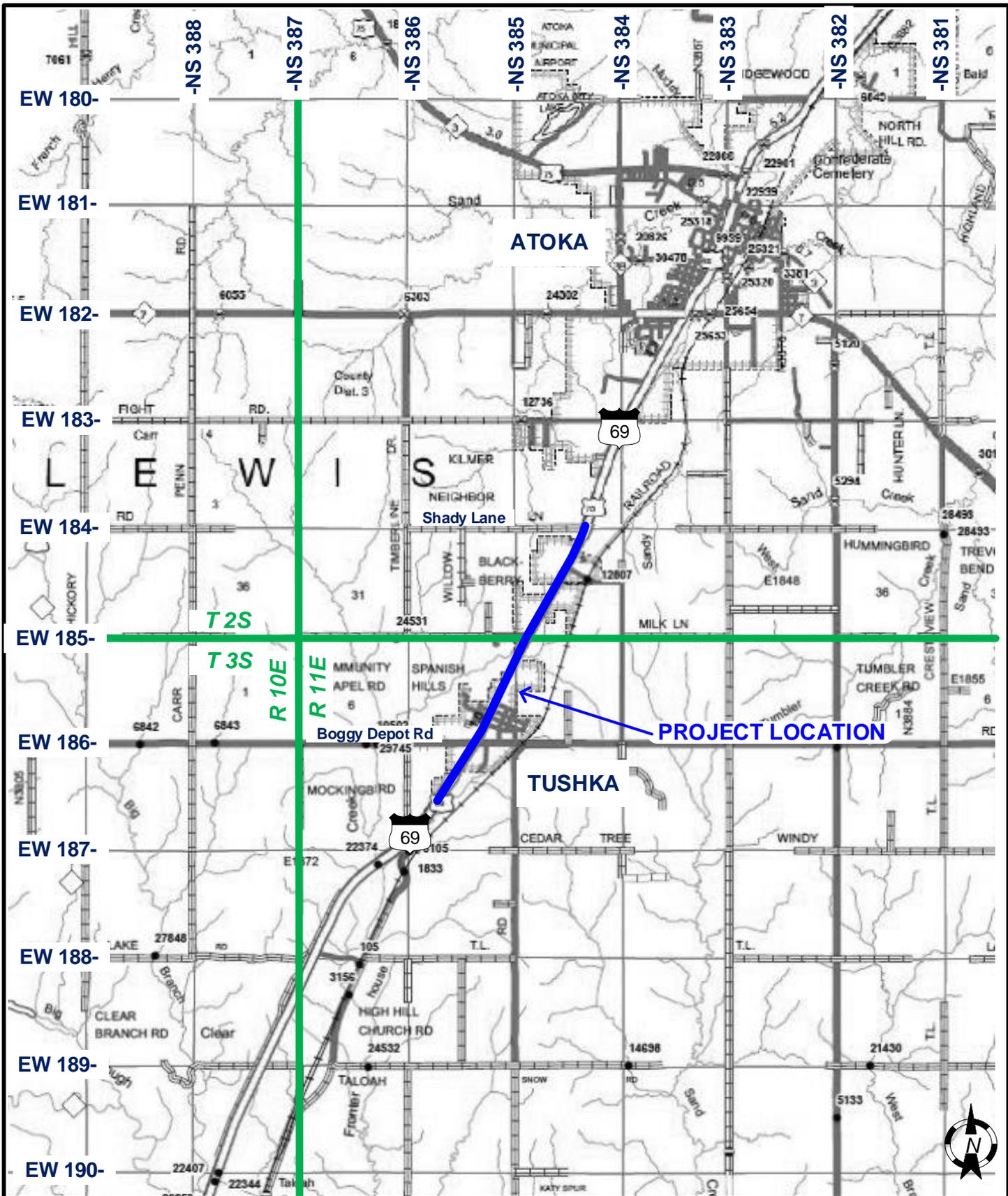
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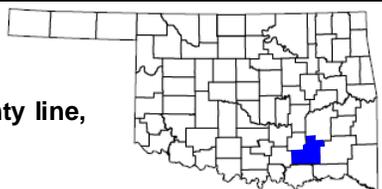
Woods, A.J., Omernik, J.M., Butler, D.R., Ford, J.G., Henley, J.E., Hoagland, B.W., Arndt, D.S., and Moran, B.C. (2005), *Ecoregions of Oklahoma*; U.S. Geological Survey, Reston, VA, map scale 1:1,250,000.

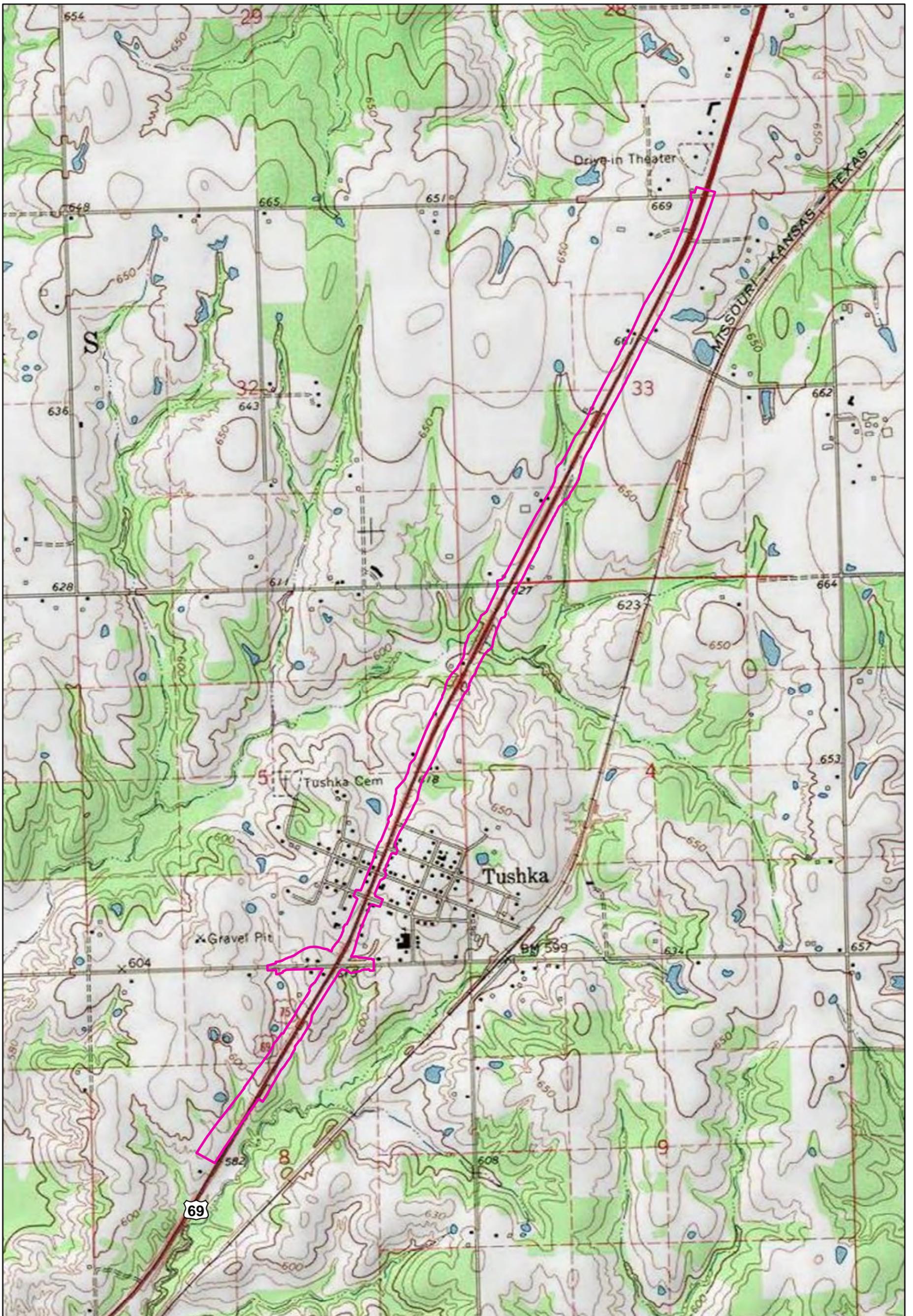
## FIGURES



**LOCATION MAP**

JP 30410(04)  
 Grade, Drain & Surface US-69: From 12 miles north of Bryan County line,  
 extend north approximately 2.5 miles through Tushka  
 Atoka Co, OK





COMMENTS/LEGEND

 NEPA Study Footprint



0 260 520 1,040 1,560 2,080 Feet

**Topographic Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK



DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

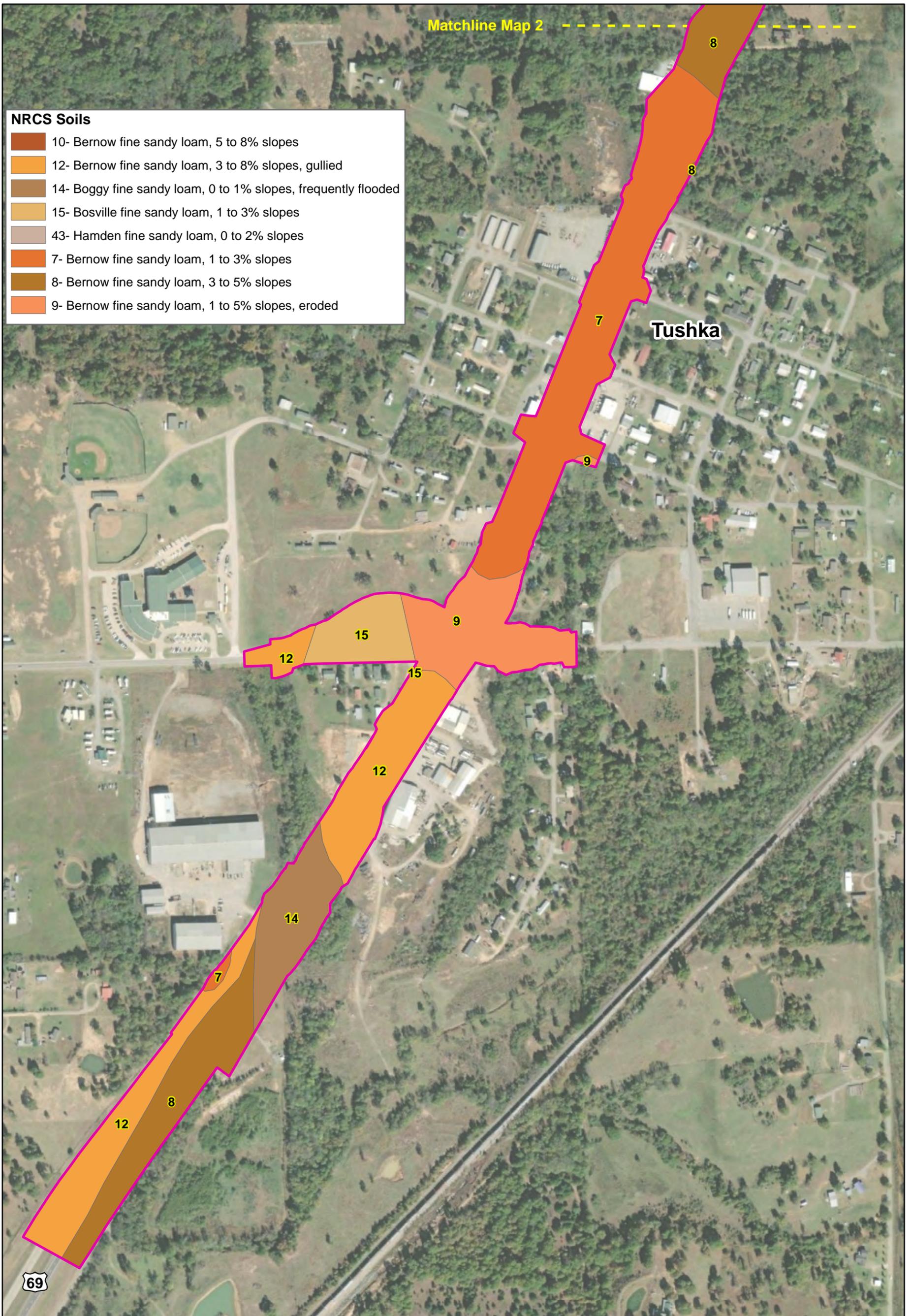
**Figure 2**

Date: 8/25/2021

Matchline Map 2

**NRCS Soils**

-  10- Bernow fine sandy loam, 5 to 8% slopes
-  12- Bernow fine sandy loam, 3 to 8% slopes, gullied
-  14- Boggy fine sandy loam, 0 to 1% slopes, frequently flooded
-  15- Bosville fine sandy loam, 1 to 3% slopes
-  43- Hamden fine sandy loam, 0 to 2% slopes
-  7- Bernow fine sandy loam, 1 to 3% slopes
-  8- Bernow fine sandy loam, 3 to 5% slopes
-  9- Bernow fine sandy loam, 1 to 5% slopes, eroded



**COMMENTS/LEGEND**

 NEPA Study Footprint

 Matchlines



0 80 160 320 480 640 Feet

**NRCS Soils**

JP 30410(04)

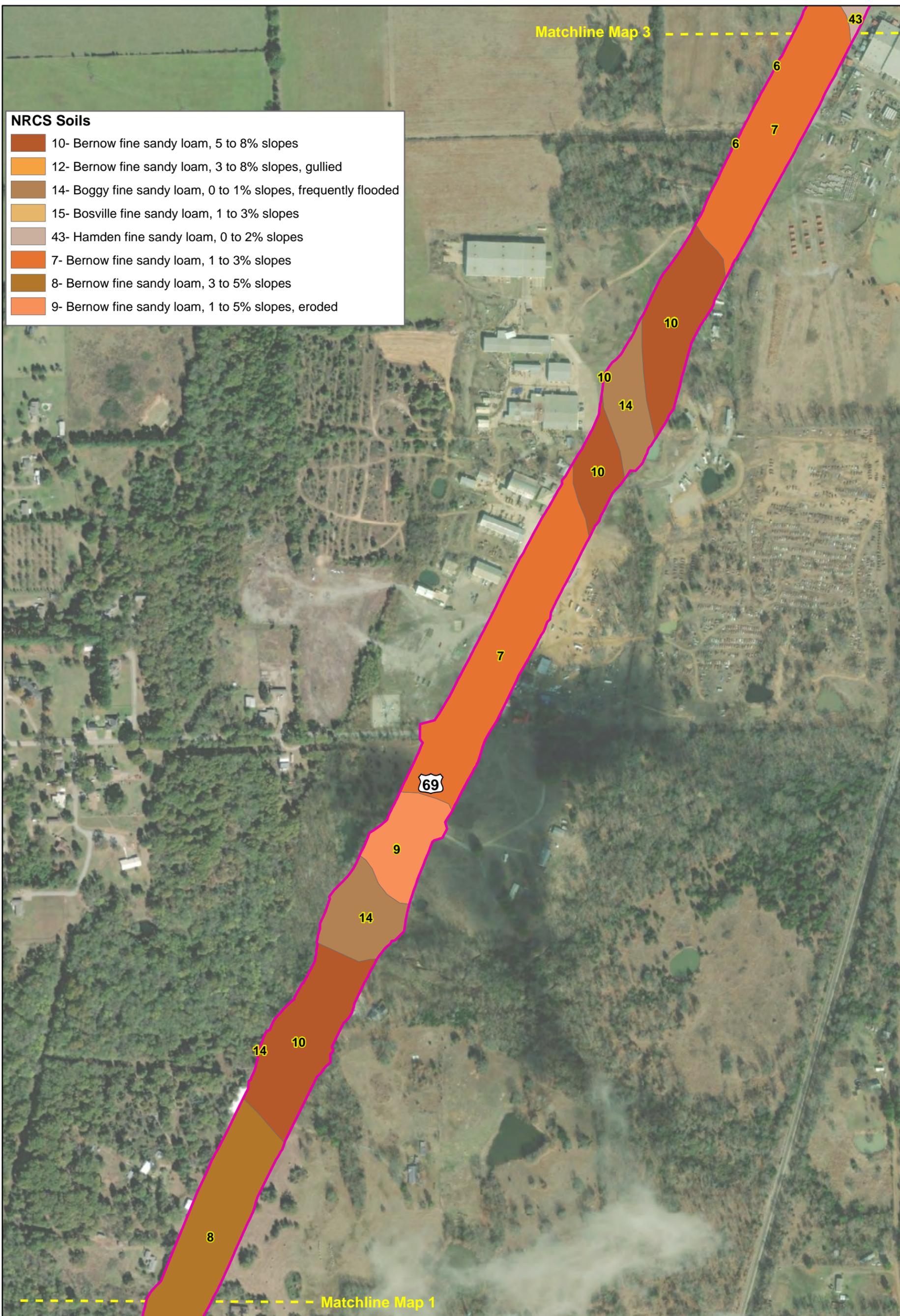
Grade, Drain, Surface, & Bridge  
on US-69 in Tushka  
Atoka County, OK



DRAWN BY: CKP  
APPRV BY:  
SOURCE: DEQ, Tiger 2000,  
USGS

**Figure  
3a**

Date: 8/25/2021



**COMMENTS/LEGEND**

NEPA Study Footprint

Matchlines

0 80 160 320 480 640 Feet

**NRCS Soils**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

Environmental Engineering

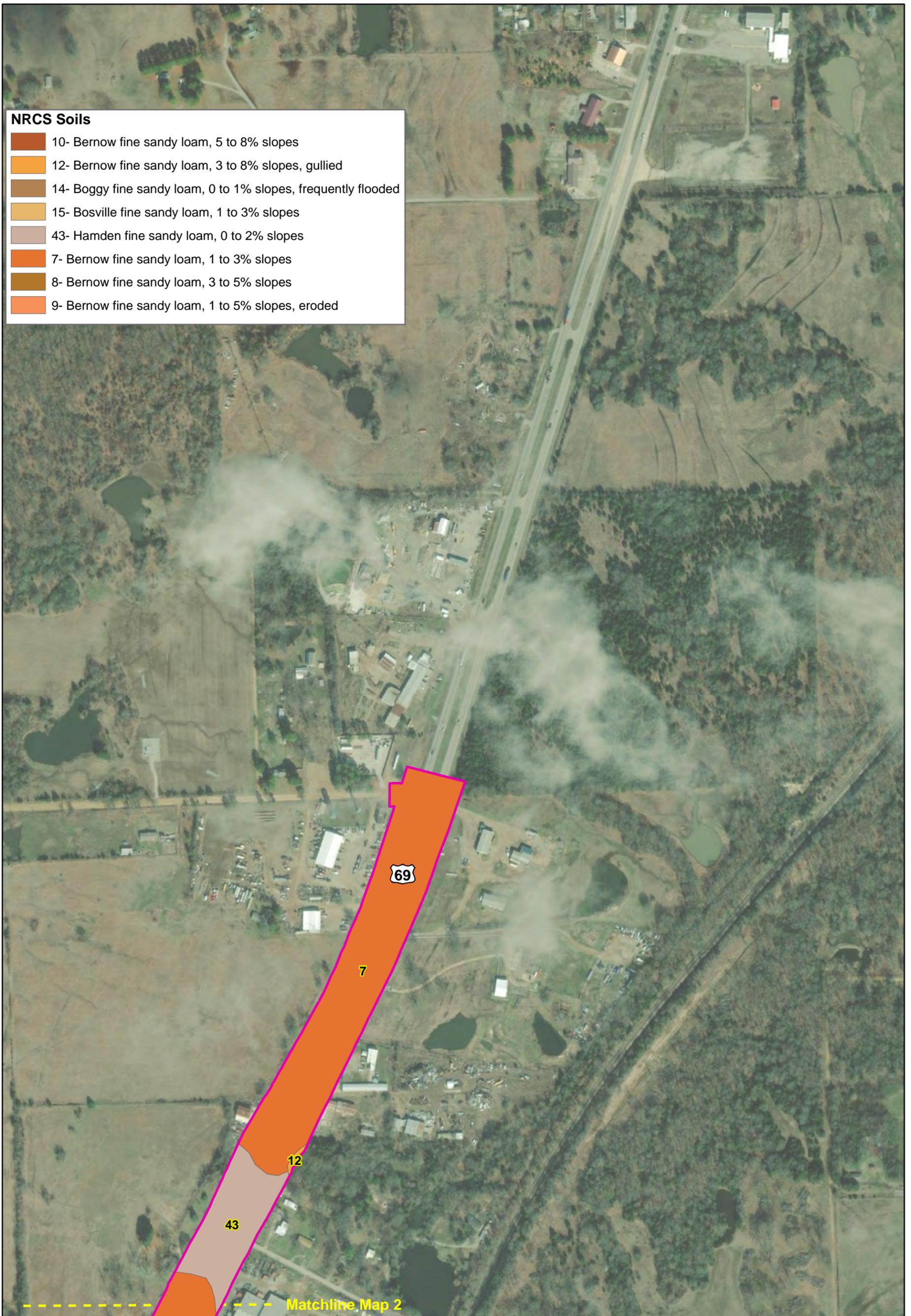
DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**Figure 3b**

Date: 10/22/2021

**NRCS Soils**

- 10- Bernow fine sandy loam, 5 to 8% slopes
- 12- Bernow fine sandy loam, 3 to 8% slopes, gullied
- 14- Boggy fine sandy loam, 0 to 1% slopes, frequently flooded
- 15- Bosville fine sandy loam, 1 to 3% slopes
- 43- Hamden fine sandy loam, 0 to 2% slopes
- 7- Bernow fine sandy loam, 1 to 3% slopes
- 8- Bernow fine sandy loam, 3 to 5% slopes
- 9- Bernow fine sandy loam, 1 to 5% slopes, eroded



**COMMENTS/LEGEND**

NEPA Study Footprint

Matchlines

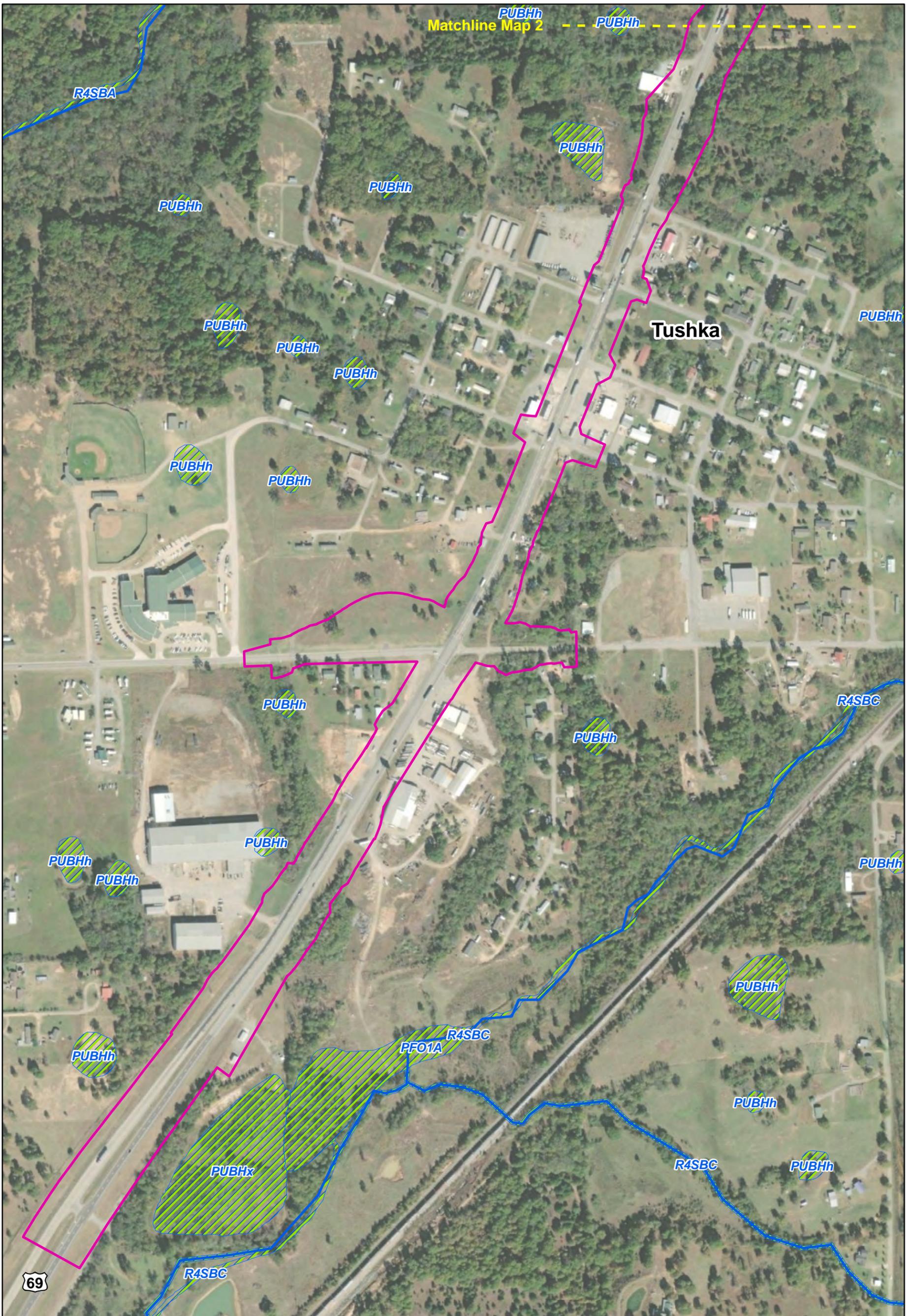


0 80 160 320 480 640 Feet

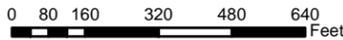
**NRCS Soils**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

  
 DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**Figure 3c**  
 Date: 8/25/2021



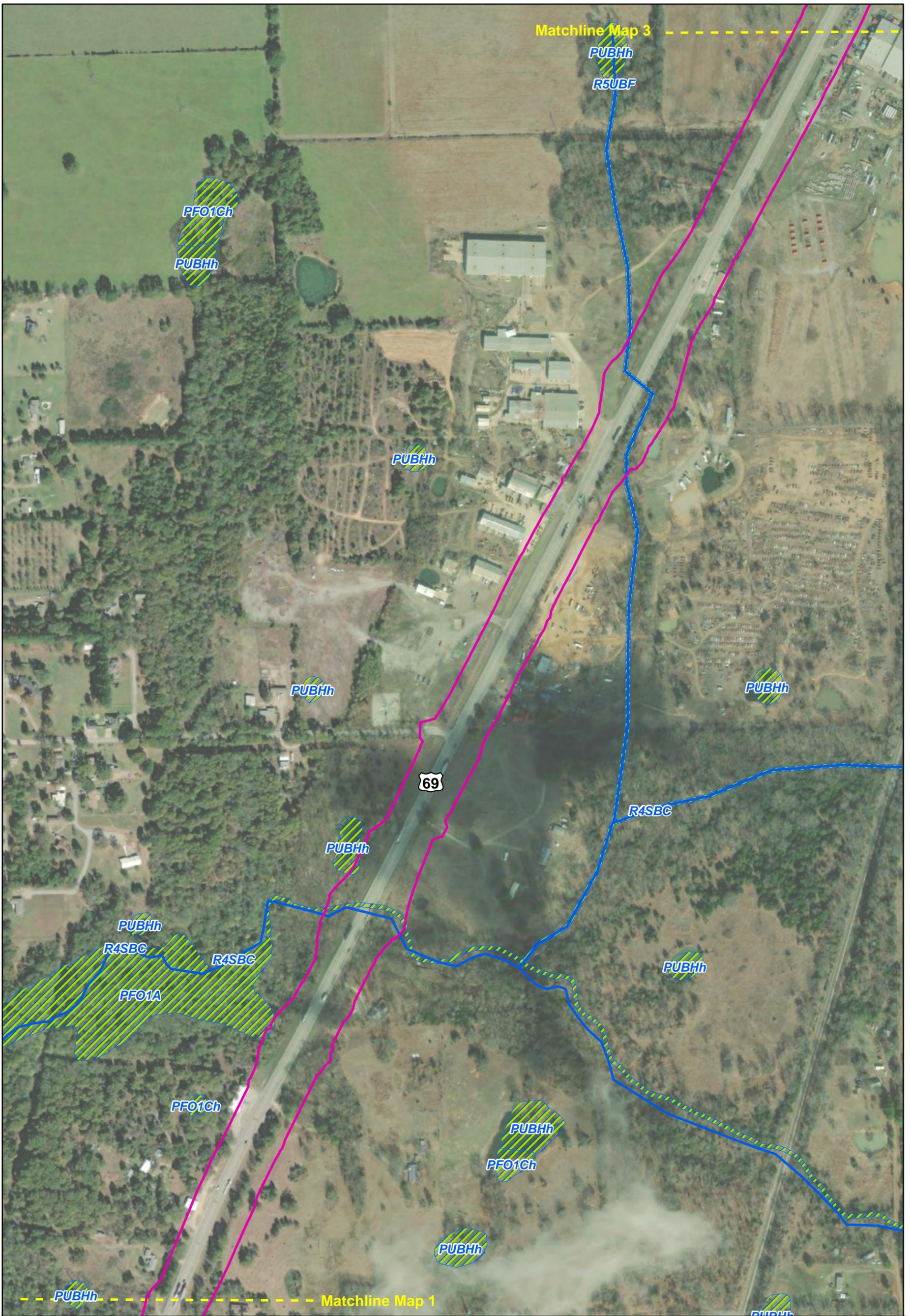
COMMENTS/LEGEND	
	NEPA Study Footprint
	Mapped Streams
	NWI Wetlands
	Matchlines



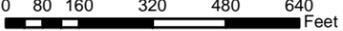
**National Wetlands Inventory Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

  
 DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**Figure 4a**  
 Date: 8/25/2021



COMMENTS/LEGEND	
 NEPA Study Footprint	 NWI Wetlands
 Mapped Streams	 Matchlines

**National Wetlands  
Inventory Map**  
JP 30410(04)  
Grade, Drain, Surface, & Bridge  
on US-69 in Tushka  
Atoka County, OK

  
DRAWN BY: CKP  
APPRV BY:  
SOURCE: DEQ, Tiger 2000,  
USGS

**Figure  
4b**  
Date: 8/25/2021



**COMMENTS/LEGEND**

NEPA Study Footprint
  NWI Wetlands

Mapped Streams
  Matchlines

N

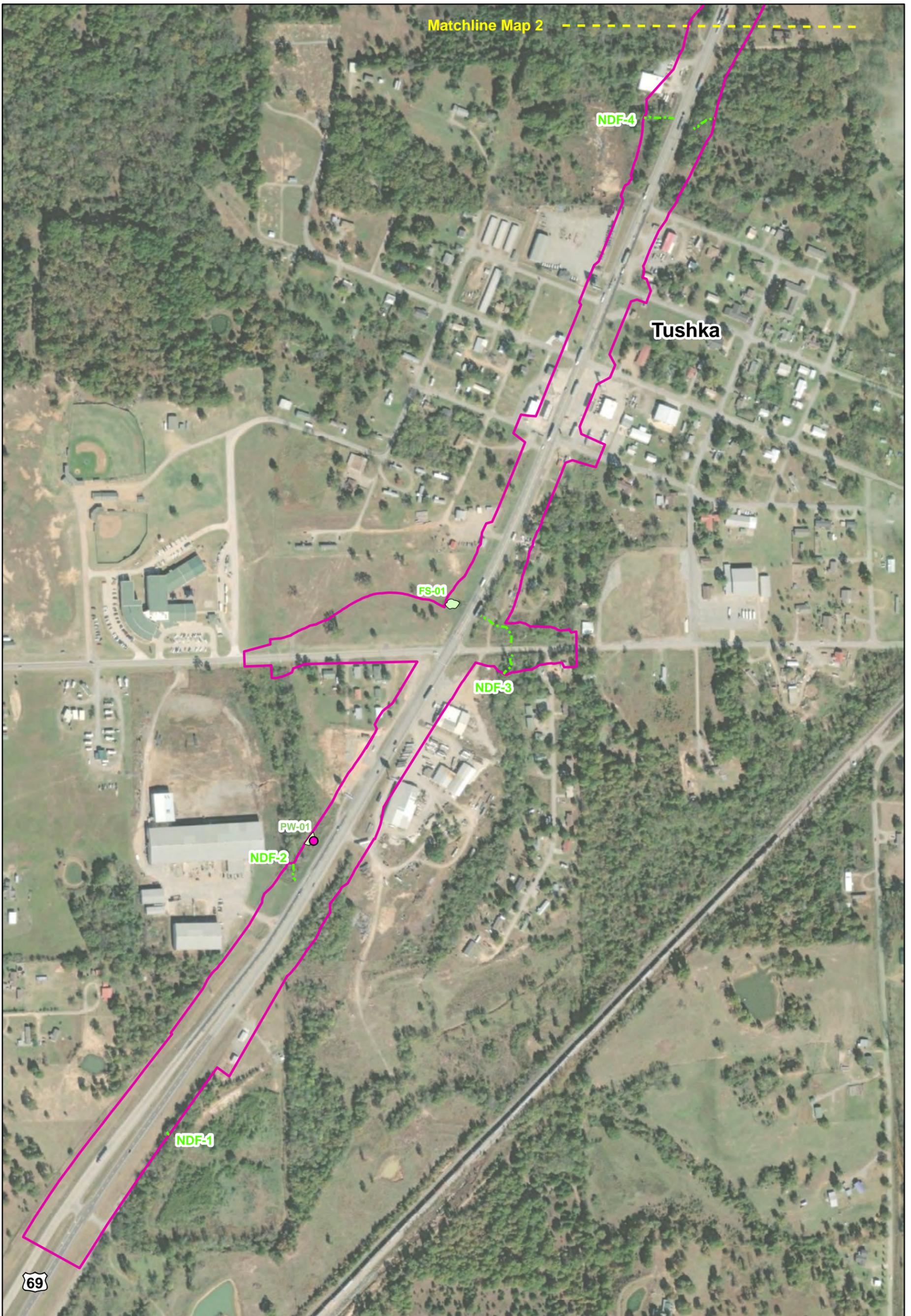


0 80 160 320 480 640 Feet

**National Wetlands Inventory Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

  
 DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**Figure 4c**  
 Date: 8/25/2021



COMMENTS/LEGEND	
NEPA Study Footprint	Field Verified Wetlands
Nonmapped Drainage Features	Mapped Streams
Wetland Data Point	Matchlines

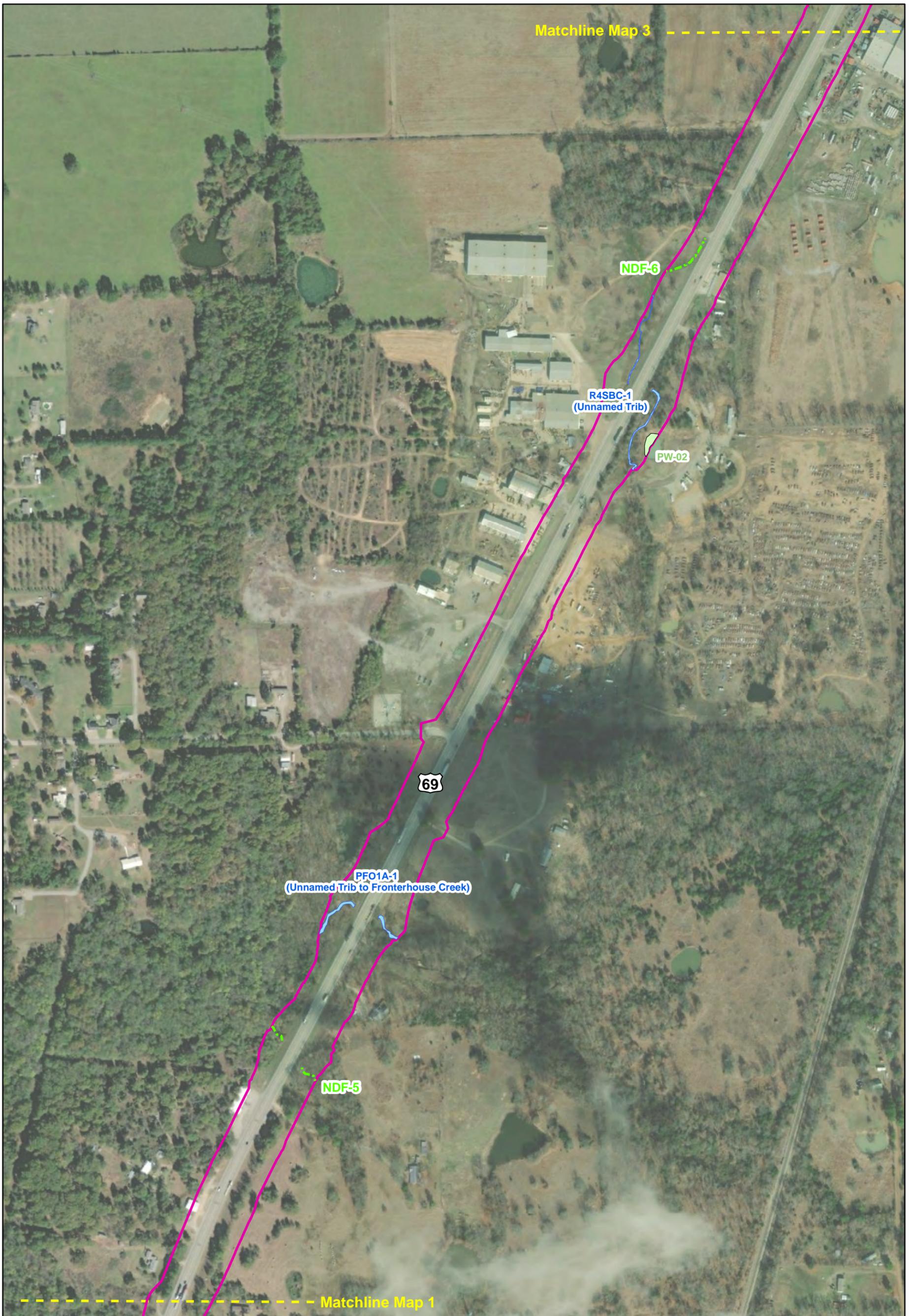
0 80 160 320 480 640 Feet

**Delineation Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

Environmental  
DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Figure  
 5a**

Date: 8/25/2021



COMMENTS/LEGEND	
NEPA Study Footprint	Field Verified Wetlands
Nonmapped Drainage Features	Mapped Streams
Wetland Data Point	Matchlines

**Delineation Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

Environmental  
 DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000,  
 USGS

**Figure 5b**  
 Date: 8/25/2021



**COMMENTS/LEGEND**

NEPA Study Footprint	Field Verified Wetlands
Nonmapped Drainage Features	Mapped Streams
Wetland Data Point	Matchlines

N  
 0 80 160 320 480 640 Feet

**Delineation Map**  
 JP 30410(04)  
 Grade, Drain, Surface, & Bridge  
 on US-69 in Tushka  
 Atoka County, OK

Environmental Technology  
 DRAWN BY: CKP  
 APPRV BY:  
 SOURCE: DEQ, Tiger 2000, USGS

**Figure 5c**  
 Date: 8/25/2021



**Photograph 1-A:** S boundary of US-69 E side, view to S.



**Photograph 1-B:** S boundary of US-69 E side, view to N.



**Photograph 2-A:** S boundary of US-69 W side, view to S.



**Photograph 2-B:** S boundary of US-69 W side, view to N.



**Photograph 3:** Structure 1 at NDF-1, no swallow nests present.



**Photograph 4:** Structure 2 at NDF-2, no swallow nests present.



**Photograph 5:** Potential wetland area off NDF-2 near west study area boundary.



**Photograph 6:** Manufacturing along corridor common throughout study area.



**Photograph 7:** Structure 3 at NDF-3, no swallow nests present.



**Photograph 8:** Poorly drained FS-01 at entrance of Structure 4, no swallow nests present.



**Photograph 9:** Structure 5 at NDF-4, no swallow nests present.



**Photograph 10:** NDF-4 along property boundary of metal fabrication shop.



**Photograph 11:** Structure 6 at NDF-5, no swallow nests present.



**Photograph 12:** NDF-5 west of roadway.



**Photograph 13:** Structure 7 at Unnamed Tributary to Fronterhouse Creek (PFO1A-01).



**Photograph 14:** Beneath Structure 7, two barn swallow nests present.



**Photograph 15:** Unnamed Tributary to Fronterhouse Creek (PFO1A-01), facing E.



**Photograph 16:** Riparian woodland and upland impoundment west adjacent study area.



**Photograph 17:** Unnamed Tributary (R4SBC-01) east of roadway.



**Photograph 18:** Upland impoundment (PW-02) east of roadway.



**Photograph 19:** Structure 8 at Unnamed Tributary (R4SBC-01), no swallow nests present.



**Photograph 20:** NDF-6 through manicured lawn west of roadway.



**Photograph 21-A:** N boundary of US-69 E side, view to S.



**Photograph 21-B:** N boundary of US-69 E side, view to N.



**Photograph 22-A:** N boundary of US-69 W side, view to S.



**Photograph 22-B:** N boundary of US-69 W side, view to N.

## WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region

Project/Site: 30410(04) Grade, Drain, & Surface on US-69 City/County: Atoka Sampling Date: 3/10/21  
 Applicant/Owner: Oklahoma Dept of Transportation State: OK Sampling Point: PW-01  
 Investigator(s): D. Daniel Section, Township, Range: 8-T3S-R11E  
 Landform (hillside, terrace, etc.): Depressional Local relief (concave, convex, none): Concave Slope (%): 2%  
 Subregion (LRR or MLRA): LRR P, MLRA 133B Lat: 34.314626 Long: -96.171290 Datum: WGS-84  
 Soil Map Unit Name: Boggy fine sandy loam, 0 to 1% slopes, frequently flooded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:    	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) ( <b>LRR U</b> ) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) ( <b>LRR T,U</b> )
--	--

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>24</u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>        </u> Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>        </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 Feature occurs in a natural topographic depression which has been altered by development in the watershed. Natural drainage appears to be toward the southeast and through a drainage structure crossing US-69. The delineated feature appears to overflow into the upland drain way and through the drainage structure during periods of high watershed runoff but there is no clear persistent hydrological connection to any potentially jurisdictional waterbodies. This is not within any NWI or USGS mapped stream or wetland.

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: PW-01

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>75</u> (A) <u>100</u> (B) Prevalence Index = B/A = <u>1.33</u>
50% of total cover: _____		20% of total cover: _____		
<u>Sapling Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: _____		20% of total cover: _____		
<u>Shrub Stratum</u> (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus alba</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Five Vegetation Strata:</b> <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. <b>Shrub</b> - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height. <b>Woody Vine</b> – All woody vines, regardless of height.
2. <u>Salix nigra</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>15</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
50% of total cover: <u>8</u>		20% of total cover: <u>3</u>		
<u>Herb Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Typha angustifolia</u>	<u>50</u>	<u>Yes</u>	<u>OBL</u>	_____
2. <u>Andropogon glomeratus</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>60</u> = Total Cover				_____
50% of total cover: <u>30</u>		20% of total cover: <u>12</u>		
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				_____
50% of total cover: _____		20% of total cover: _____		
Remarks: (If observed, list morphological adaptations below.)				

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: PW-01

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
50% of total cover: _____ 20% of total cover: _____					
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
_____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
50% of total cover: _____ 20% of total cover: _____					
<u>Herb Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
_____ = Total Cover				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.	
50% of total cover: _____ 20% of total cover: _____					
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					<b>Hydrophytic Vegetation Present?</b> Yes _____      No _____
50% of total cover: _____ 20% of total cover: _____					

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: PW-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	7.5YR 5/2	75	5YR 5/8	10	C	PL/M	Mucky Loam/Clay	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR, P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16) **(outside MLRA 150A)**
- Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

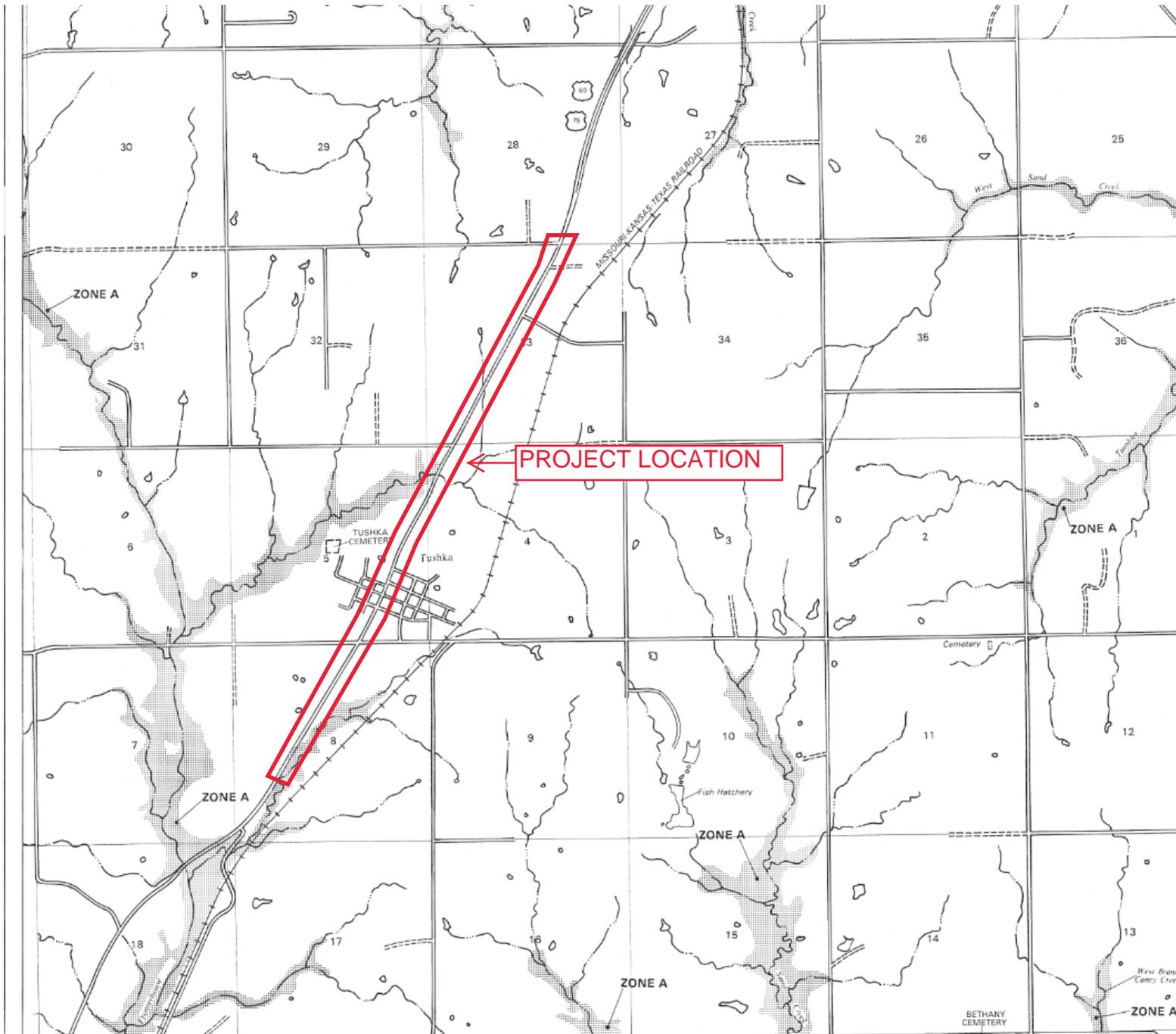
Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

This data sheet is revised from Atlantic and Gulf Coastal Plain Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

# **FLOOD PLAIN INFORMATION**



NATIONAL FLOOD INSURANCE PROGRAM

**FHBM**  
FLOOD HAZARD BOUNDARY MAP

**ATOKA  
COUNTY,  
OKLAHOMA**  
UNINC. AREAS

(SEE MAP INDEX FOR PANELS PRINTED)

PANEL 200 OF 300

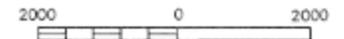
CONVERTED BY LETTER  
EFFECTIVE 8/1/2011

COMMUNITY PANEL NUMBER  
400508 0200 A

EFFECTIVE DATE:  
AUGUST 14, 1981



federal emergency management agency  
federal insurance administration



# **HAZARDOUS MATERIALS STUDIES**

# OKLAHOMA DEPARTMENT OF TRANSPORTATION CONSULTANT REPORT REVIEW – HAZARDOUS WASTE

**Reviewed By:** David Edwards  
**Review Date:** 07/18/2022  
**Consultant:** CC Environmental

**County:** Atoka  
**Project No.:** J3-0410(004)  
**J/P Number:** 30410(04)

---

**1. PROJECT DESCRIPTION:** GRADE, DRAIN & SURFACE: US-69: FROM 12 MI NORTH OF BRYAN C/L, EXT NORTH APPROX 2.5 MI THRU TUSHKA

**2. LEVEL OF INVESTIGATION:**  Assessment  Sampling

### 3. SUMMARY OF INVESTIGATION

- A. Relative risk of contamination in study footprint:  Low  Moderate  High  
B. Potential for contamination, if present, to affect project:  Low  Moderate  High  
C. Did Consultant recommend additional work?  No  Yes (describe below):

The ISA identified two leaking underground storage tank sites (LUST) as potential recognized environmental conditions (RECs) that may need further investigation if they are expected to impact the project.

### 4. RECOMMENDATIONS\*:

- Approval to Proceed (No Further Action)  
 Approval to Proceed, Pending:  
     Avoidance of described site(s)  
     Plan Notes regarding described site(s) (See Section 5)  
     Additional investigation by ODOT  
 Approval NOT Recommended

\* - If different from Consultant, explain in Section 6 General Comments

**5. PLAN NOTES:** A cautionary plan note memo is included.

**6. GENERAL COMMENTS:** Two leaking underground storage tank sites were identified in ISA and considered to be recognized environmental conditions (RECs). A cautionary plan note memo is included to address the environmental concern posed by the LUST sites identified..

No further action is recommended.

**ATTACH EXCERPTS FROM REPORT, AS APPROPRIATE.\***

\*The full document is on file with ODOT's Environmental Programs Division. Please contact David Edwards at (405) 923-5171 or [daedwards@odot.org](mailto:daedwards@odot.org) for more information.

Revised 04/28/2014



**DATE:** July 18, 2022

**TO:** NEPA Project Manager

**FROM:** Hazardous Materials Specialist

**SUBJECT:** **GRADE, DRAIN & SURFACE: US-69: FROM 12 MI NORTH OF BRYAN C/L, EXT NORTH APPROX 2.5 MI THRU TUSHKA, Atoka County. Project No. J3-0410(004); JP No. 30410(04).**

Two (2) current or historic underground storage tank UST sites are located along the project area in Tushka, Oklahoma. Please have the UST site locations added to the plan and profile sheets by placing a box in the appropriate locations with the Oklahoma Corporation Commission (OCC) facility number, case number, and denoting it as a UST site.

Please have the following added to the “Environmental Mitigation Notes” of the project plans per Policy Directive C-201-2D(2):

“Station	OCC Fac./Case No.	Facility
142+00 to 147+00 Rt 25 ft from CL	0312634/064-1603	Tushka Superette
142+00 to 147+00 Lt 25 ft .from CL t	0306405/064-2087	Tushka Truck Stop

**Petroleum contamination may exist at or near the referenced Underground Storage Tank (UST) sites. Based on the available information, contamination is not expected to affect construction activities, but is still possible. In the event contaminated soil or groundwater is encountered, the contractor shall adhere to ODOT’s Hazardous Materials Specification 107.15 and notify the Resident Engineer, who may then contact the Environmental Programs Division at (405) 521-3050 for assistance.”**

This mitigation measure should be discussed at all pre-work conferences per Policy Directive C-201-2-E(1). If you have any questions, please contact David Edwards at (405) 923-5171.

DAE

**JP#30410(04)**

OCC LUST Database Map

**OCC LUST Case No. 064-1603**  
**OCC Facility No. 0312634**  
**Tushka Superette**  
**103 S. Jefferson**  
**Tushka, OK 74525**

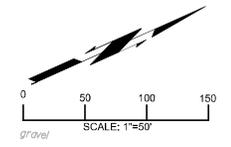
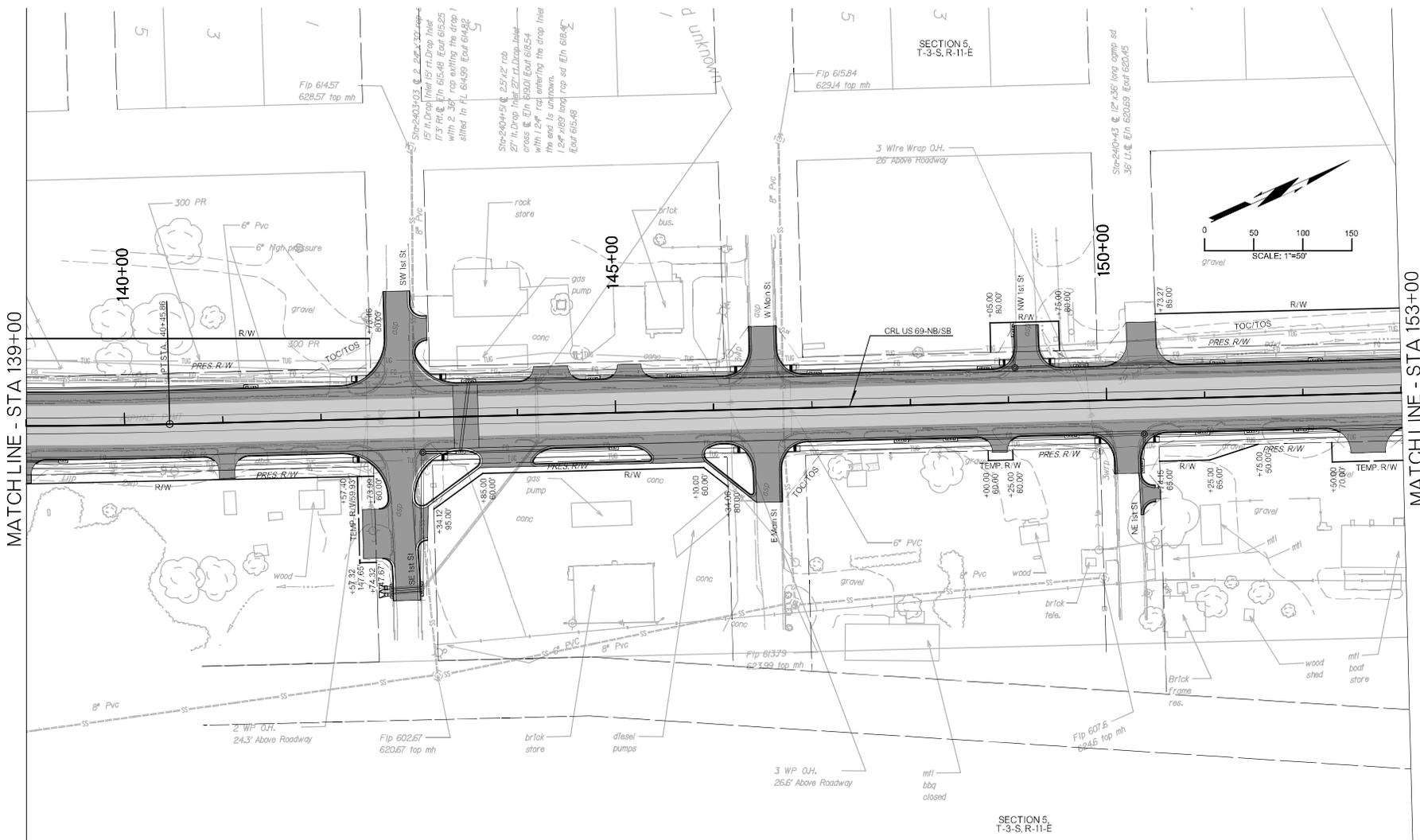
**OCC LUST Case No. 064-2087**  
**OCC Facility No. 0306405**  
**Tushka Truck Stop**  
**Tushka, OK 74525**

**Legend**

- 📍 Cactus Jack's Cantina
- 🟡 Feature 1
- 🔺 Feature 10
- 📍 Feature 11
- 📍 Feature 12
- 📍 Feature 13
- 🟣 Feature 2
- 🟡 Feature 3
- 🟢 Feature 4
- 🟡 Feature 5
- 🔴 Feature 6
- 🟢 Feature 7
- 🟡 Feature 8
- 🔴 Feature 9
- 🟢 Ranjit K Dhesi Llc
- 🟢 Style33
- 🟢 Style39
- 🟢 Style5
- 🟢 Style52
- 🟡 Style53
- 📍 Tushka Baptist Church
- 📍 Tushka Superette



PLOT DATE: 31-MAR-2021 11:25 AM  
 FILENAME: p:\proj\pand\pand\pvc\central\dwg\documents\oklahoma\projects\77746 US 89 through TuskapProduction\Roadway\20410104-2-Plan1.dwg



MATCHLINE - STA 139+00

MATCHLINE - STA 153+00

BM4  
 DEL POST 52.62 LT. STA. 2406+37.67  
 ELEV=624.90

SECTION 5,  
 T-3-S, R-11-E

DESIGN	RFB	OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION					
DRAWN	T.W.						
CHECKED	MJG						
APPROVED							
SQUAD	<b>HNTP</b>						
COUNTY	ELTORO	HIGHWAY	US 89	STATE JOB NO.	30410004	SHEET NO.	001

**PLAN SHEET**

# INITIAL SITE ASSESSMENT

Project:

**GRADE, DRAIN & SURFACE US-69:  
FROM 12 MI. NORTH OF BRYAN COUNTY LINE, EXTEND  
NORTH APPROX. 2.5 MI. THROUGH TUSHKA**

**ATOKA COUNTY  
JP#: 30410(04)**

CN 2222E

Prepared For:



**OKLAHOMA  
Transportation**

**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
Environmental Programs Division  
Oklahoma City, OK**

Prepared By:



**CC Environmental, LLC  
PO Box 1292  
Norman, OK 73069  
(405) 321-8181**

Report Date:

**APRIL 2021**

# INITIAL SITE ASSESSMENT

**Project:**

**GRADE, DRAIN & SURFACE US-69:  
FROM 12 MI. NORTH OF BRYAN COUNTY LINE, EXTEND  
NORTH APPROX. 2.5 MI. THROUGH TUSHKA**

**ATOKA COUNTY  
JP#: 30410(04)**

**CN 2222E**

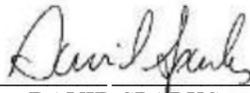
## SIGNATURE CERTIFICATION:

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR. We have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the study area. We have developed and performed the all appropriate inquiries in general conformation with the standards and practices set forth in 40 CFR Part 312.

### CC ENVIRONMENTAL

CCE PROJECT NO. 2173

**Prepared By:**



DAVID SPARKS  
Environmental Specialist



DALE DANIEL  
Environmental Project Manager

**Reviewed By:**



GEOFF CANTY  
Director of Environmental Services

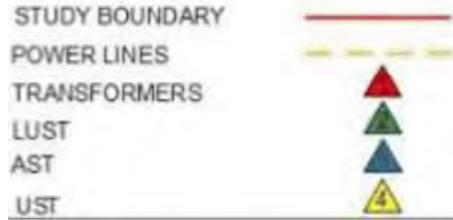
**APRIL 25, 2021**

# **PETROLEUM STORAGE TANK WORK SCOPE CERTIFICATION SHEET**

I have performed review of Petroleum Storage Tank findings within a Phase I Environmental Site Assessment in accordance with the scope and limitations of ASTM Practice E 1527-13 of the **INITIAL SITE ASSESSMENT PROJECT: GRADE, DRAIN & SURFACE US-69: FROM 12 MI. NORTH OF BRYAN COUNTY LINE, EXTEND NORTH APPROX. 2.5 MI. THROUGH TUSHKA [JP# 30410(04)], CN 2222E.** The work scope was limited to review of Petroleum Storage Tank issues by an Oklahoma Corporation Commission (OCC) - Licensed Consultant. Pursuant to Oklahoma Administrative Code (OAC) Title 165, Chapter 26, the definition of “Regulated substances” does not include compressed natural gas, liquid natural gas, or propane; therefore, this review and Certification does not apply to such tanks in the review area.

The review scope focused upon Sections 1.3.4 (Site Reconnaissance), 1.3.5 (Interviews), 3.2.1 (Standard Environmental Records Review), 4.1 (Findings & Opinions), 4.2 (Recommendations), 6.2.1 (Aerial Photographs & Topographic Maps), 6.4 (Site Photographs), and 6.5.1 (EDR Database Search Results) of the Initial Site Assessment by CC Environmental.

**Two Leaking Underground Storage Tank (LUST) sites (the Tushka Truck Stop at 102 S. Jefferson Street and the Tushka Superette at 102 S. Jefferson) were noted within the study area,** as illustrated by the following key and aerial photograph.



Contaminant plumes, including free-phase hydrocarbons, may be encountered within soil and groundwater if excavation work is performed in these areas. **This review has revealed no evidence of Recognized Environmental Conditions associated with Petroleum Storage Tanks except for those noted in bold print.**

*Sheila E. Baber*

Sheila E. Baber, PG

Senior Geologist, Manager, Licensed OCC Consultant #0042

## 4.0 FINDINGS, OPINIONS, AND RECOMMENDATIONS

Review the following points for a discussion of the items identified during this ISA evaluation.

### 4.1 Findings & Opinions

#### 4.1.1 Records Review

- According to the EDR search, there were six sites identified within the search radius of the project.
  - Review of the LUST database performed by EDR revealed two reported sites within 0.5 mile of the subject property.
    - Tushka Superette: This site was located at 103 S Jefferson Street (US-69 South) and within the study area. During site characterization associated with a LUST case at the Tushka Truck Stop (Facility ID: 0306405), contaminated soil and groundwater were found on the southeast corner of the Tushka Superette property. In September 1995, a suspicion of release was opened (6E-934). One monitoring well was installed, and soil and groundwater was encountered that contained petroleum constituents above action levels (OCC case 064-1603). Eleven additional monitoring wells were installed from November 1995 to May 1996 to collect soil and groundwater data to delineate the subsurface contaminant plume. It was found that the plume migrated beyond the property boundary, but did not extend beneath any offsite structures. The most likely route of exposure was concluded to be construction worker and the contamination delineated on site was not found to exceed this threshold; thus, this site was granted closure with contamination in place in September 2000. This site is currently still operating as a filling station, and two USTs are located on site. This facility passed the tank inspection in 2020. Since this site has a known release to the Property and there is very likely residual contamination still present, **this facility was considered to be a REC.**
    - Tushka Truck Stop: This site was located at 102 S Jefferson Street (US-69 South) and within the study area. Vapor monitoring readings collected from a product line monitoring well for four consecutive months from August to November of 1994 indicated that a possible release had occurred. In December 1994, soil and groundwater samples collected on site confirmed petroleum constituent contamination above OCC action levels, and a case (064-1298) was opened. Twenty-one monitoring wells were installed between January 1995 and June 1995 to collect soil and groundwater data to delineate the subsurface contaminant plume. In July 1995, free product was detected in four monitoring wells, and weekly manual bailing of the affected wells commenced until March 1996, at which time it switched to a monthly bailing schedule. In 1997, six USTs were removed from the ground and three new ones were installed in a new tank pit area. A second confirmed release for this site occurred in June 1998 after 3 feet of free product was encountered in a compliance well in the new tank pit (case 064-2087). Free product continued to be removed from the well onsite until the case was granted closure by the OCC in August 2000 with contamination still in place. This site is currently still operating as a filling station, and three USTs are located onsite. This facility passed inspection in 2020. Since this site has a known release to the Property and there is very likely residual contamination still present, **this facility was considered to be a REC.**
  - Review of the TIER 2 database performed by EDR revealed two reported sites within the subject property.

- Eaves Propane, Inc.: This site was located at 205 N Jefferson Street and within the study area. This site was listed as a TIER 2 site twice in 2010 and 2011 because of their handling of liquefied Petroleum Gas. Based on aerial imagery of the site and site reconnaissance, it appears that this facility was no longer operating at this location by 2012. Indeed, at the time of site reconnaissance, this address was occupied by Aquahawk Energy, LLC. However, two large commercial liquefied petroleum gas tanks were noted east of the Atoka Feed & Seed which were labeled as Eaves Propane. It is possible that the tanks and operation were moved to this current location. There have been no documented releases to the study area, and the tanks observed east of the Atoka Feed & Seed do not appear to be in poor condition, thus this site was not considered to be a REC.
- According to the OCC Oil & Gas Division database search, there was one well reported to be within the same quarter sections as the NEPA study area. This was not considered to be a REC.
- OWRB Search: According to the OWRB groundwater well records search, there were twenty monitoring wells identified within the study area. The wells appeared to be associated with identified LUST sites. As discussed above, the LUST sites were considered to be RECs.
- Aerial Photographs: Based on review of the aerial photographs there appeared to be some type of commercial building in the southwest corner of the Boggy Depot Rd / US-69 intersection. There could have been a gas station given its ideal location, but there was no overt evidence of such.

#### 4.1.2 Site Reconnaissance

- The study area was surveyed to verify the existence of facilities identified in the environmental databases, as well as discover any additional potential environmental risks to the study area not identified in the database search. In general, the conditions observed did not change opinions regarding the environmental risk of the facilities detailed in the previous section. However, the study area is situated within a corridor occupied by multiple light industrial facilities and various auto repair/machine works businesses that do not occur in the database searches. These facilities have the potential to be associated with unreported releases of potentially hazardous substances or other latent conditions. If excavation work occurs near these sites, or if these properties will be acquired as part of the right-of-way/utilities process, then additional review and testing may be warranted.
  - Manufacturing Facilities/Machine Works & Metal Fabrication
    - Atoka Trailer Manufacturing (677 S Jefferson Street)
    - Nuttall trailer Manufacturing (472 S Jefferson Street)
    - Falcon Machine Works (446 S Jefferson Street)
    - Atoka Welding Fabrication, Inc. (477 N Jefferson Street)
    - Diamond Attachments Manufacturing (4381 S Mississippi Avenue)
    - Southeastern Metals Recycling (3798 S Mississippi Avenue)
    - American Metal Products (2714 S Mississippi Avenue)
  - Automotive/Equipment Repair, Sales & Salvage
    - Tiger Equipment Rental (375 S Jefferson Street)
    - Texoma Marine Boat Sales & Repair (204 N Jefferson Street)
    - Rector Salvage Yard (South of Atoka RV Park, S Mississippi Avenue)
    - Southwest Tractor & Parts (4453 S Mississippi Avenue)
    - Atoka Feed & Seed (2754 S Mississippi Avenue)
    - Perry's Automotive Repair (2715 S Mississippi Avenue)
    - McDaniel's Trailer Repair (~2720 S Mississippi Avenue)

- Alan Truck & Tire Repair (3621 S Mississippi Avenue)
  - Fomby & Sons Towing, Truck & Tire Repair (3551 S Mississippi Avenue)
  - Mullins Wrecker Service & Repair (3526 S Mississippi Avenue)
- Generally, environmental concerns specifically noted during the site reconnaissance were associated with discarded scrap metal, vehicles, parts and equipment from metal fabrication, manufacturing, and repair services. Often, these discarded materials were placed along the operating property's boundaries, which in some cases, were within the boundaries of the study area. Items specifically noted included numerous vehicles, an empty storage tank in the salvage yard near the study area boundary line, and numerous pulled USTs staged in the metals recycling facility outside of the study area.
  - Two filling stations were in operation within the study area. Five USTs were currently in use. Three 55-gallon drums of waste oil and a used cooking oil dumpster were noted behind the Tushka Truck Stop filling station. One 55-gallon waste oil drum and some surficial staining was noted behind the Tushka Superette filling station.
  - Three 55-gallon drums were noted outside the American Metal Products facility adjacent to the study area. In addition, approximately 14 one-gallon paint cans were discarded outside along the rear wall of the facility.
  - Two large commercial liquified petroleum gas tanks were noted east of the Atoka Feed & Seed facility and were labeled as Eaves Propane. It is possible that the former Eaves Propane facility documented in the Tier 2 reporting database has moved to this new location, however, this is not apparent in the database information. A third large commercial liquified petroleum gas tank was located north adjacent the study area boundary.

### 4.1.3 Interviews

- No recognized environmental conditions were identified during the interview process.

## 4.2 Recommendations

- There are two LUST sites located within the study area and across the highway from one another. Both sites (Tushka Truck Stop and Tushka Superette) have delineated subsurface petroleum contamination plumes that extend into the study footprint. One plume is mapped within the existing US-69 right of way. Although the plumes were mapped over 20 years ago, it is possible that any subgrade work along the roadway adjacent to these facilities could encounter petroleum odors, contamination, or free product. If excavation work occurs near these sites, or if these properties will be acquired as part of the right-of-way/utilities process, then additional review and testing may be warranted. These sites were considered to be RECs.
  - Tushka Truck Stop (103 S Jefferson Street)
  - Tushka Superette (102 S Jefferson Street)
- Overall, numerous metal fabrication, manufacturing, and repair businesses were located within and in close proximity to the study area. Environmental concerns associated with these sites primarily include discarded metal products, parts, and equipment which may require special handling for removal on any acquired right-of-way. Furthermore, although there were no overt indications of or documentation of any releases from these facilities, there is the potential that latent conditions could be encountered during construction activities. General plan notes may be warranted at a minimum. If property will be acquired as part of the right-of-way/utilities process, then additional review and testing may be warranted.



Figure 6-2a: Site Diagram



Figure 6-2b: Site Diagram



Figure 6-2c: Site Diagram



Figure 6-2d: Site Diagram



Figure 6-2e: Site Diagram



<p><b>COMMENTS</b></p> <p>STUDY BOUNDARY <span style="color: red;">—</span></p> <p>POWER LINES <span style="color: yellow;">- - -</span></p> <p>TRANSFORMERS <span style="color: red;">▲</span></p> <p>LUST <span style="color: green;">▲</span></p> <p>AST <span style="color: blue;">▲</span></p> <p>LUST <span style="color: yellow;">▲</span></p>		<p><b>SITE DIAGRAM</b>                  Grade, Drain &amp; Surface US-69                  JP 30410(04)                  Atoka County, OK</p>		<b>6-2f</b>
		<p>DATE: 1/28/2021 VER: 001                  DRAW BY: DWD PROJ #:</p>		

Figure 6-2f: Site Diagram



Figure 6-2g: Site Diagram



Figure 6-2h: Site Diagram



Figure 6-2i: Site Diagram



Figure 6-2j: Site Diagram

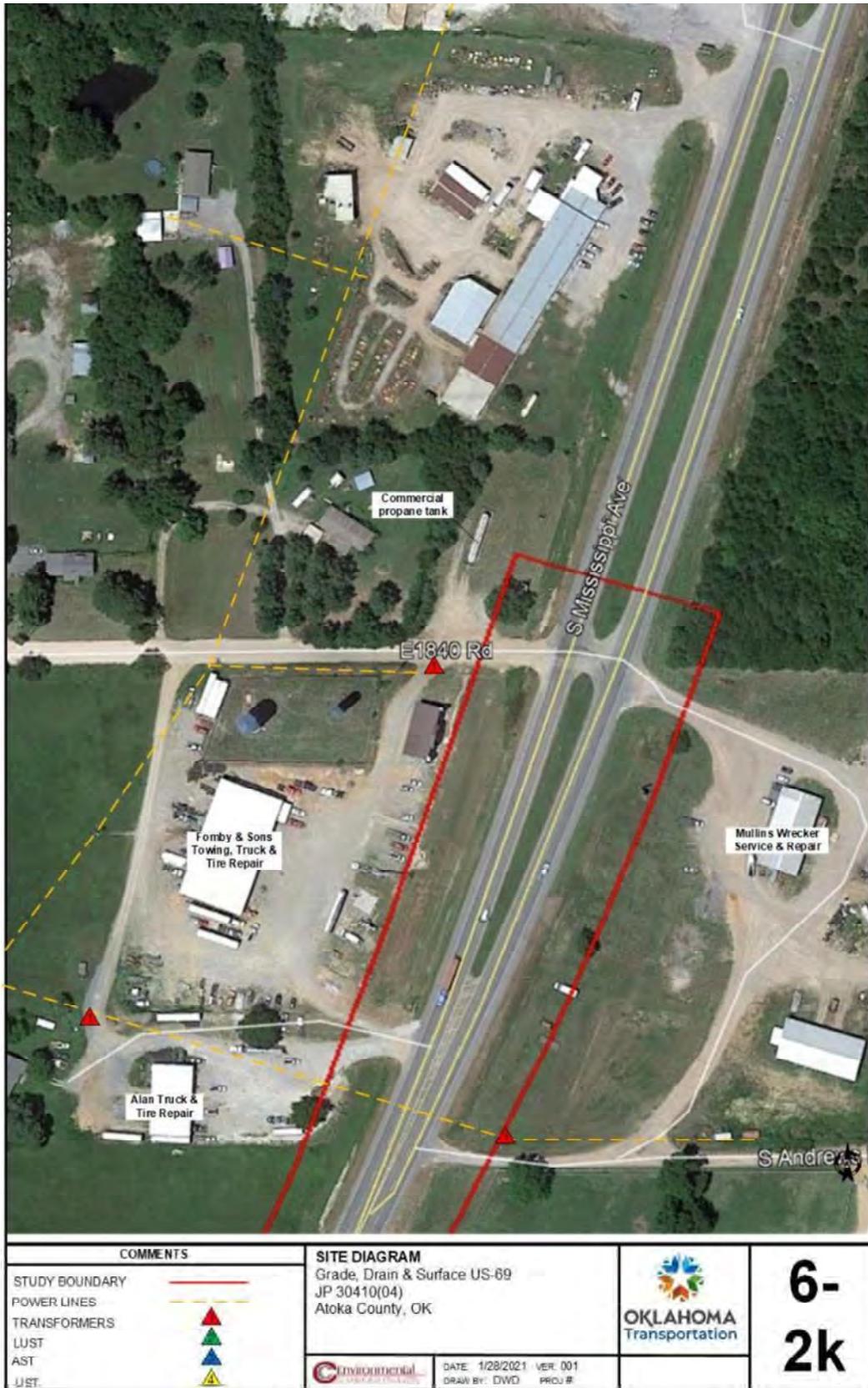


Figure 6-2k: Site Diagram

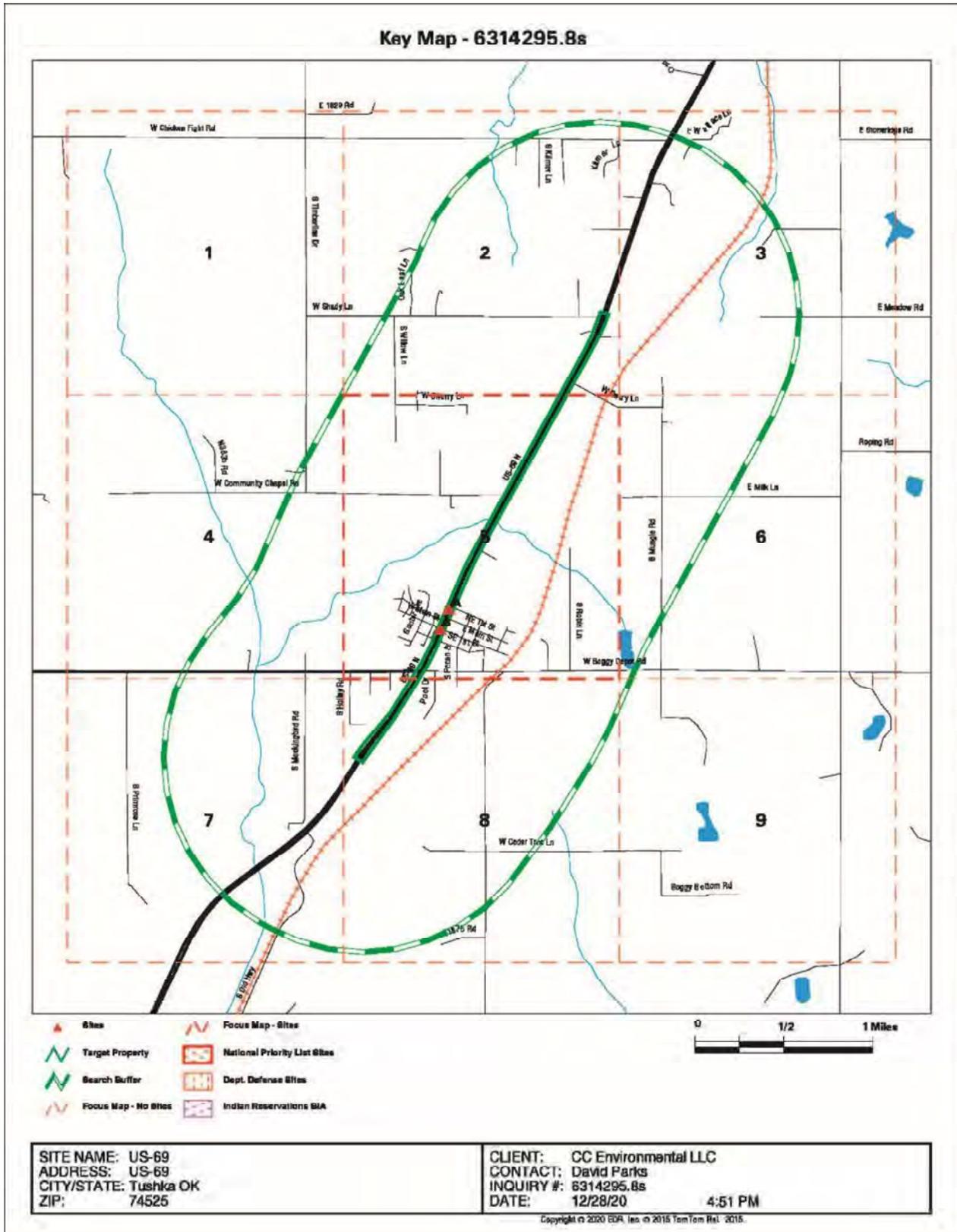


Figure 6-3: Site map depicting the extended environmental database search radii (EDR, 2020a).

**OTHER**



# Oklahoma Department of Transportation

Project Management Division (405)522-7601 Fax (405) 522-7612 Room 3C9

**DATE:** June 17, 2014 (2020.03.09 – Amended Proposed Improvements)

**TO:** Distribution List

**FROM:** Project Management Division

**SUBJECT:** Project Initiation

J/P Number: 30410(04) County: Atoka Highway: US-69 Division: 2  
PS&E Date: FFY 2025 R/W Date: FFY 2023 Drive-out Date: 06/17/2014  
Programmed Estimate: \$ 15,000,000  
Project Description: US-69 in Tushka (5 Lane)

### FUNCTIONAL CLASSIFICATION

Area Type:  Urban  Suburban  Rural  
Terrain Type:  Flat  Rolling  Mountainous  
Access Control:  Full  Partial  None  
Highway Type:  Freeway  Principal Arterial  Minor Arterial  Collector  
 NHS  Non-NHS  STRAHNET  Scenic Hwy

### EXISTING INFORMATION

Current ADT: 17600 % Trucks: Number of Lanes: 4 Width: 48'  
Outside Shoulder Width: 2' Inside Shoulder Width:  
 Open Section  Curb & Gutter  Divided, median width:  
 Other (describe):  
Pavement Type: Asphalt Pavement Condition:  Good  Fair  Poor  
Shoulder Type: Asphalt Shoulder Condition:  Good  Fair  Poor  
Storm Sewer  No  Yes Storm Sewer Condition:  Good  Fair  Poor  
Sidewalks  No  Yes Sidewalk Width:

Bridge One Description:  
Bridge Two Description:  
Bridge Three Description:

	Bridge One	Bridge Two	Bridge Three
Feature Intersected:			
NBI Number:			
Location Number:			
Sufficiency Rating:			
Year Built:			
Bridge Width:			
Bridge Length:			
Posted Clearance:			
Health Index:			
Steel Beam Bridge:			

## ENVIRONMENTAL CONSIDERATIONS

- Historic Properties, list:
  - Archeological Sites, list:
  - Cemeteries, list:
  - Hazardous Waste / LUST Sites, list: **2 ~ LUST Sites & a Tier II Haz Waste Site (Liquefied Petroleum Gas Dealer)**
  - Endangered Species, list: **ABB, Least Tern, Piping Plover, Whooping Crane**
  - Section 4F or 6F Properties, list:
  - Farmland    ■ Wetlands     Scenic and Protected Aquifers     100 Year Flood Plain
- ### Potential Residential & Commercial Relocations

## ALTERNATIVE IMPACTS

- Other Agencies    List:
  - Turnpike Involvement
  - Metropolitan Planning Organizations    List:
- 

## PERMIT INFORMATION

Design Exception Anticipated:     No     As required by design     Yes, type:  
Maintenance Agreements (Lighting, Signals, etc.):     No     Yes, type:  
Permits required: ■ FAA    ■ USACE     OWRB     Railroad     Other, type:  
Additional: **Atoka Airport ~ 3.5 miles away**

## PROPOSED IMPROVEMENT

Project Intent: Widen to 5 lanes

Special Considerations:

### Description of Proposed Improvements:

The general scope of this project is to widen the existing 4 lane facility to a 5 lane facility on the existing alignment with a continuous center turn lane. This project will incorporate the following items:

- Widen on the existing alignment to 5 lanes and include a continuous center turn lane.
  - Widen and overlay the existing pavement.
- Typical Section –
  - Open section with Curb & Gutter used where needed to minimize impacts.
  - No shoulder in the C&G sections.
  - Sidewalks – ADA compliant only
- Boggy Depot Road –
  - Look at having a left turn bay.
  - Consider the vertical coming in from the west.
- Need pedestrian crossings.
- Road will remain open during construction using phased construction.

Design Speed: 45 mph

Potential to transfer steel bridge beams to County ( Oklahoma Statute Title 69 subsection 1001)

- Yes   
No  Fully document specific reasons preventing transfer:  
NA

Project Termini

Beginning of Project:

End of Project:

Limits of Survey: Survey limits will include data for both Northbound and Southbound lanes, due to the anticipated work to improve median openings. From the EW 186.5 Quarter Section Line, the survey will extend Northeasterly, along the existing US-69, to a point 500 feet North of the EW 184 Section Line. Survey length approximately 3.0 miles. Survey width will be 200 feet Right and Left.

Limits of NEPA Survey Area: **200 ft Lt. & Rt. – Same Length as Survey**

Typical Section

- Open Section  Curb & Gutter  Divided, median width:  
 Other (describe):  
Number of Lanes: 5 Lane Width: 12'  
Outside Shoulder Width: 8' Inside Shoulder Width: 8' (No shoulder in C&G sections)  
Storm Sewer  No  Yes Sidewalks  No  Yes, width: ADA compliant  
Overlay  No  Yes, thickness: TBD  
Coldmill  No  Yes, thickness: TBD  
Add Shoulders  No  Yes, width: 8'  
Bridge Width '

Alignment

- Existing  
 New, located  North or  South or  East or  West of existing  
 Parallel Lanes, located  North or  South or  East or  West of existing  
 Spot Improvements  
 Horizontal, Description:  
 Vertical, Description:

Detour

- Shoo-fly, located  North or  South or  East or  West of existing  
 Widening, located  North or  South or  East or  West of existing  
 Crossovers  
 Close Road  
 Signed Detour, Route Description:

- Phased Construction, Description:

