



# Public Notice

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U.S. Army Corps  
of Engineers  
Tulsa District

Reply To:

U.S. Army Corps of Engineers  
ATTN: Regulatory Office  
1645 South 101st East Avenue  
Tulsa, Oklahoma 74128-4609

SWT-2016-39  
Public Notice No.

February 10, 2016  
Public Notice Date

March 11, 2016  
Expiration Date

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## PURPOSE

The purpose of this public notice is to inform you of a proposal for work in which you might be interested and to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

## SECTION 10

The U.S. Army Corps of Engineers is directed by Congress through Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) to regulate all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

## SECTION 404

The U.S. Army Corps of Engineers is directed by Congress through Section 404 of the Clean Water Act (33 U.S.C. 1344) to regulate the discharges of dredged and fill material into all waters of the United States. These waters include lakes, rivers, streams, mudflats, sandflats, sloughs, wet meadows, natural ponds, and wetlands adjacent to other waters. The intent of the law is to protect these waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical, and biological integrity.

## NOTICE TO PUBLISHERS

This public notice has been provided as a public service and may be reprinted at your discretion. However, any cost incurred as a result of reprinting or further distribution shall not be a basis for claim against the Government.



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101ST EAST AVENUE  
TULSA, OKLAHOMA 74128-4609

Application No. SWT-2016-39

JOINT PUBLIC NOTICE  
U.S. ARMY CORPS OF ENGINEERS  
AND  
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ)  
(30-DAY COMMENT PERIOD)

Interested parties are hereby notified that the District Engineer (DE) has received an application for a Department of the Army permit and water quality certification pursuant to Sections 404 and 401 of the Clean Water Act. The ODEQ hereby incorporates this public notice and procedure as its own public notice and procedure by reference thereto.

The application is for the placement of fill material related to the proposed replacement of the Mud Creek Bridge, east and west Mud Creek overflow bridges, and associated approaches on State Highway 32 (SH-32) in Love County, Oklahoma.

Name of Applicant: Ms. Dawn Sullivan  
Oklahoma Department of Transportation (ODOT)  
200 Northeast 21<sup>st</sup> Street  
Oklahoma City, OK 73105

Name of Agent: Mr. Richard Wilson  
HDR Engineering, Inc.  
613 NW Loop 410, Suite 700  
San Antonio, TX 78216

Location: The proposed project is in parts of Section 13, 14, 15, 22, 23, and 24, Township 7 South, Range 3 West, about 20 miles west of Marietta in Love County, Oklahoma. The project site can be found on the Leon North, Oklahoma 7.5 Minute USGS Quadrangle map at North Latitude 33.941 and West Longitude 97.482.

Purpose: The basic purpose of this work is to correct three bridges, two that are structurally deficient and one that is in need of widening for public safety on SH-32 over Mud Creek in Love County.

A water dependency determination will be made upon consideration of the basic purpose to discharge soil and rock riprap to permanently fill approximately 1.13 acres of emergent wetland.

The overall purpose of this work is for public safety. ODOT states a dangerous curve with a history of accidents, including a fatality, would be eliminated along with the replacement of the three bridges. The bridge corrections and associated roadway approaches/improvements would maintain Oklahoma's SH-32 as a safe transportation route between the cities of Marietta and Ryan in south-central Oklahoma.

Table of Impact:

Original Proposal					
Number or Location	Impact Activity	Type of Water	Type of Fill Material	Qty of Material cys below OHWM	Footprint (ac and/or lf)
West Overflow Bridge	Placement of fill material	Open water & emergent wetland	Soil	149 cys	0.07 ac open water  0.03 ac emergent wetland
East Overflow Bridge	Placement of fill material & bank stabilization	Emergent wetland	Soil and rock riprap	125 cys	0.08 ac emergent wetland
Mud Creek Bridge	Placement of fill material & bank stabilization	Emergent wetland & Mud Creek	Soil and rock riprap	2,253 cys	1.02 ac emergent wetland  0.05 ac Mud Creek
Total				2,527 cys	1.25 ac
cubic yards (cys), ordinary high water mark (OHWM), acre (ac), linear feet (lf)					

Description of Work: ODOT is proposing the replacement of the Mud Creek Bridge, east and west Mud Creek overflow bridges, and associated approaches on SH-32 in Love County (J/P No. 26502(04)). In order to construct the eastern portion of the new roadway on an offset alignment to the south, with a new bridge over Mud Creek (in phase 2), traffic would first be shifted to a short detour at the east end of the project in phase 1. In phase 2, a detour would be constructed on the west end of the project, south of the existing roadway, to connect to the west end of the new offset roadway, during construction of the new overflow bridge and approaches on the existing alignment (in phase 3). This expanded roadway and bridge approaches would utilize fill material from the short east detour and the large volume of fill material to be excavated in phase 3 from the old causeway of the existing Mud Creek Bridge in the curved portion of the existing roadway which would no longer be used. After the rebuilt roadway on the west end and the new south offset roadway alignment on the east end are joined, the west detour would be removed and graded back to existing/natural

contours in phase 4. The old causeway of the existing curved alignment where a large volume of fill material was excavated would also be graded back to existing/natural contours (in phase 3). Any remaining excess excavated material would be disposed of by the contractor in a manner approved by the ODOT engineer.

The west and east Mud Creek overflow bridges are currently 24 feet wide and structurally deficient, while the Mud Creek bridge is 24 feet wide and contributes to a dangerous curve on the western approach that has a history of accidents, including a fatality. The proposed project consists of removing the west Mud Creek overflow bridge, replacing the east Mud Creek overflow bridge with a 40-foot wide bridge on the existing alignment, and replacing the Mud Creek bridge with a 40-foot wide bridge on an offset alignment to the south. The approach roadway would have two 12-foot driving lanes with 8-foot paved shoulders. The south alignment was chosen to eliminate the dangerous curve west of the Mud Creek Bridge and to keep the roadway open to traffic during construction. The project would require the placement of approximately 2,527 cubic yards (1.25 acres) of soil and rock riprap fill in emergent wetlands, open water, and Mud Creek for road construction, bridge replacement, and bank stabilization.

Avoidance and Minimization Information: The applicant provided the following statement with regard to how avoidance and minimization of impacts to aquatic resources was incorporated into the project plan:

The bridge corrections and associated roadway approaches/improvements would maintain Oklahoma's SH-32 as a reliable transportation route between the cities of Marietta and Ryan in south-central Oklahoma. The no action alternative would not meet the purpose of this project. An alternative to offset the bridge replacement and roadway to the north is not feasible because it does not allow for the elimination of the dangerous curve west of the Mud Creek Bridge. An alternative to modify or replace the current bridge and road infrastructure is not feasible because it does not allow the roadway to remain open during construction. A south offset was selected considering the ability to eliminate the dangerous curve and the need to keep the roadway open to traffic during construction of the bridge replacements. The proposed project represents the least environmentally damaging practicable alternative which meets the purpose and need for the project.

Impacts to waters of the United States were avoided to the maximum extent practicable while keeping a south offset to reduce the road curve for safety, and to keep the roadway open to traffic during construction. Avoidance measures for the project include locating the offset alignment as near the existing alignment as practicable. The proposed project would entirely avoid impacts to 0.50 acre of emergent wetlands. Additionally, of the wetlands that are partially impacted, about 0.95 acre of remaining emergent wetland would be avoided by both permanent and temporary impacts within the proposed right-of-way. Furthermore, the toe of slope was pulled in to avoid permanent impacts to an ephemeral stream.

In addition to the avoidance measures described above, the proposed project would minimize impacts to waters of the United States to the extent practicable. The proposed project includes bridges to span Mud Creek and an intermittent stream and emergent wetland, thereby minimizing permanent impacts. Additionally, the proposed roadway utilizes primarily 3:1 side slopes to reduce the fill required therefore minimizing impacts to emergent wetlands. Thus, the permanent impacts to stream and open water are minimal (i.e., only 0.10 acre or less each). To minimize the potential short-term impacts (such as turbidity and suspended solids) associated with the increased sediment generated by construction activities, best management practices would be implemented in order to control soil erosion and sedimentation.

Mitigation: Furthermore, the applicant proposes the following as compensatory mitigation for the unavoidable impacts to aquatic resources expected from the proposed project:

To compensate for the loss of 1.13 acres of emergent wetland, ODOT proposes creation and enhancement of approximately 2.82 acres of emergent wetland adjacent to the project site (approximately 2.5:1 ratio). The impacted wetlands are dominated by herbaceous vegetation consisting principally of common spike-rush (*Eleocharis palustris*), shortbeak sedge (*Carex brevior*), and ravenfoot sedge (*Carex crus-corvi*). Historic and current land uses have significantly effected native vegetation and diminished the ecologic condition and species diversity of these wetlands in the Mud Creek floodplain. The proposed mitigation area is directly adjacent to the proposed project, with wetlands having soils with a clay surface layer that limits infiltration and causes runoff to pond in depressions that maintains the wetland hydrology. Perennial flow with seasonal flooding of Mud Creek as well as surface ponding of the wetlands provides evidence of reliable contribution to hydrology and the sustainability and suitability of the hydrology at the mitigation area. The existing emergent wetlands in the mitigation area are of medium to low quality due to past disturbance, surrounding land use, and low species richness. This includes degradation from livestock accessing the wetland as well as other human disturbances from mowing and agricultural activities. Existing wetlands in the mitigation area would be enhanced through mowing restrictions, livestock exclusion, fencing, and small berms (as appropriate). The benefits of livestock (cattle) exclusion that promote wetland enhancement include reducing herbivory, trampling, and water quality impacts. Enhancement activities also allow regeneration/succession of the native plant community and restoration of natural processes by removing a source of stress and impact. These enhancement activities would promote increased ecological functions in existing wetlands. Wetland creation would involve excavation of uplands down to the elevation of existing wetland depressions in the floodplain of Mud Creek which capture runoff and pond surface water, thus forming the hydrology which mimics existing wetland hydrology. Within the designated wetland creation areas the surface would be contoured by spreading topsoil stockpiled from the impacted wetlands to promote the revegetation of created wetlands using the native seed bank and natural succession. As appropriate, small berms would be placed to enhance hydrologic

condition in created wetlands. Low elevation berms would be constructed to promote the collection of water from overland flow and stream overflow for at least seasonal inundation (about 3 weeks) in order to improve the wetland hydroperiod and related habitat functions within the created wetlands. The wetlands created and enhanced in the mitigation area would be protected from unauthorized activities, such as mowing, herbicide application, and livestock grazing, using fencing and no mowing signs.

This mitigation plan is the applicant's proposal. The Corps has made no determination at this time with regard to the adequacy of the proposed mitigation relative to the federal mitigation rules and guidance, including Tulsa District's Mitigation and Monitoring Guidelines. The Corps is accepting comments on the need for and nature of the proposed mitigation in addition to comments on the applicant's primary proposal. The Corps bears the final decision on the need for and extent of mitigation required if the project proposed herein is authorized.

Other: ODOT consulted with the U.S. Fish and Wildlife Service (USFWS) on the proposed project. The USFWS concurred with the biological assessment and effect determination and did not include any concurrence requirements.

Project Setting: SH-32 crosses the Mud Creek floodplain which supports emergent wetland depressions, as well as upland pasture and woods. The project area is located in the western Cross Timbers ecoregion of Oklahoma. This ecoregion is dominated by rolling hills, cuestas, and ridges with vegetation communities including oak forest, savannah, and prairie. Land use in the project area and surrounding area includes agricultural pasture land, undeveloped, and recreational uses.

Existing Condition: The project area lies within the Farmers-Mud Creek watershed (8-digit HUC 11130201) which is directly north of and drains to the Red River. The project area crosses Mud Creek, which drains approximately 574 square miles upstream of the project area. The project area also crosses an intermittent stream, an open water, and eight emergent wetlands.

Plans and Data: Plans showing the location of the proposed activity and other data are enclosed with this notice. If additional information is desired, it may be obtained from U.S. Army Corps of Engineers, Tulsa District, ATTN: Regulatory Office, 1645 South 101st East Avenue, Tulsa, OK 74128-4609, or telephone 918-669-7400.

Cultural Resources: ODOT has conducted a cultural resources survey. The survey was coordinated with the Chickasaw Nation, Osage Nation, Wichita and Affiliated Tribes, Oklahoma Historical Society, and the Oklahoma Archeological Survey. No objections were received from the Chickasaw Nation, Osage Nation, or Wichita and Affiliated Tribes. Both state agencies concurred that there are no historic properties affected by the proposed project.

Threatened and Endangered Species: The following federally listed species are known to occur in the vicinity or are listed for the county in which the proposed action is located: interior least tern (*Sterna antillarum*), whooping crane (*Grus americana*), piping plover (*Charadrius melodus*), and red knot (*Calidris canutus rufa*). A copy of this notice is being furnished to the USFWS and appropriate state agencies. This notice constitutes a request to those agencies for information on whether any other listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity. In 2013 the USFWS concurred with an ODOT finding of no effect on the interior least tern and piping plover; and a may affect, unlikely to adversely affect for the whooping crane. The red knot was later added as Threatened. We are currently assessing the potential effects of the proposed action on these species and will comply with the Endangered Species Act with regard to any effect of our decision on this permit application.

Environmental Considerations: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownerships, and, in general, the needs and welfare of the people. A permit will be denied if the discharge does not comply with the Environmental Protection Agency's 404(b)(1) Guidelines. Subject to the 404(b)(1) Guidelines and any other applicable guidelines or criteria, a permit will be granted unless the DE determines that it would be contrary to the public interest.

Comments: In order to consider and evaluate the impacts of this proposed activity the Corps is soliciting comments from the public, federal, state, and local agencies and officials, Indian tribes, and other interested parties. Comments concerning the issuance of this permit should be received by the DE no later than 30 days from the date of this public notice. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. Any person may request in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

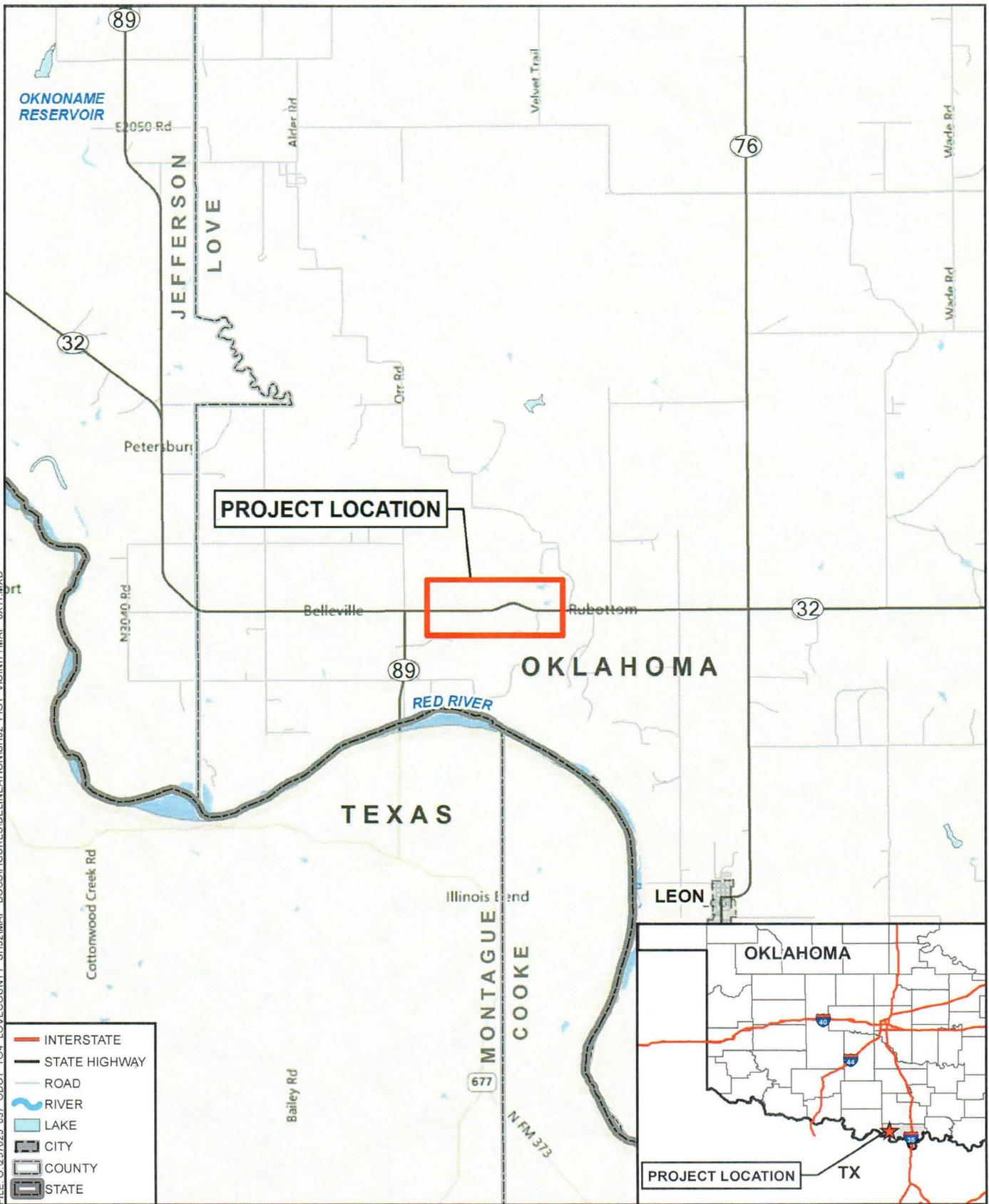
At the request of the Oklahoma Water Resources Board's National Flood Insurance Program State Coordinator, we are sending a copy of this notice to the local floodplain administrator to apprise the administrator of proposed development within their jurisdiction. In accordance with 44 CFR Part 60 (Criteria for Land Management and Use), participating communities are required to review all proposed development to determine if a floodplain development permit is required. The local floodplain administrator is required to perform this review for all proposed development and maintain records of such review.

Comments concerning water quality impacts will be forwarded to ODEQ for consideration in issuing a Section 401 Water Quality Certification for the proposed project. Work may **not** commence until decisions have been made on both Sections 401 and 404.

Andrew R. Commer  
Chief, Regulatory Office

Enclosures

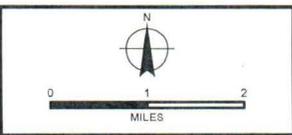
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- INTERSTATE
- STATE HIGHWAY
- ROAD
- RIVER
- LAKE
- CITY
- COUNTY
- STATE

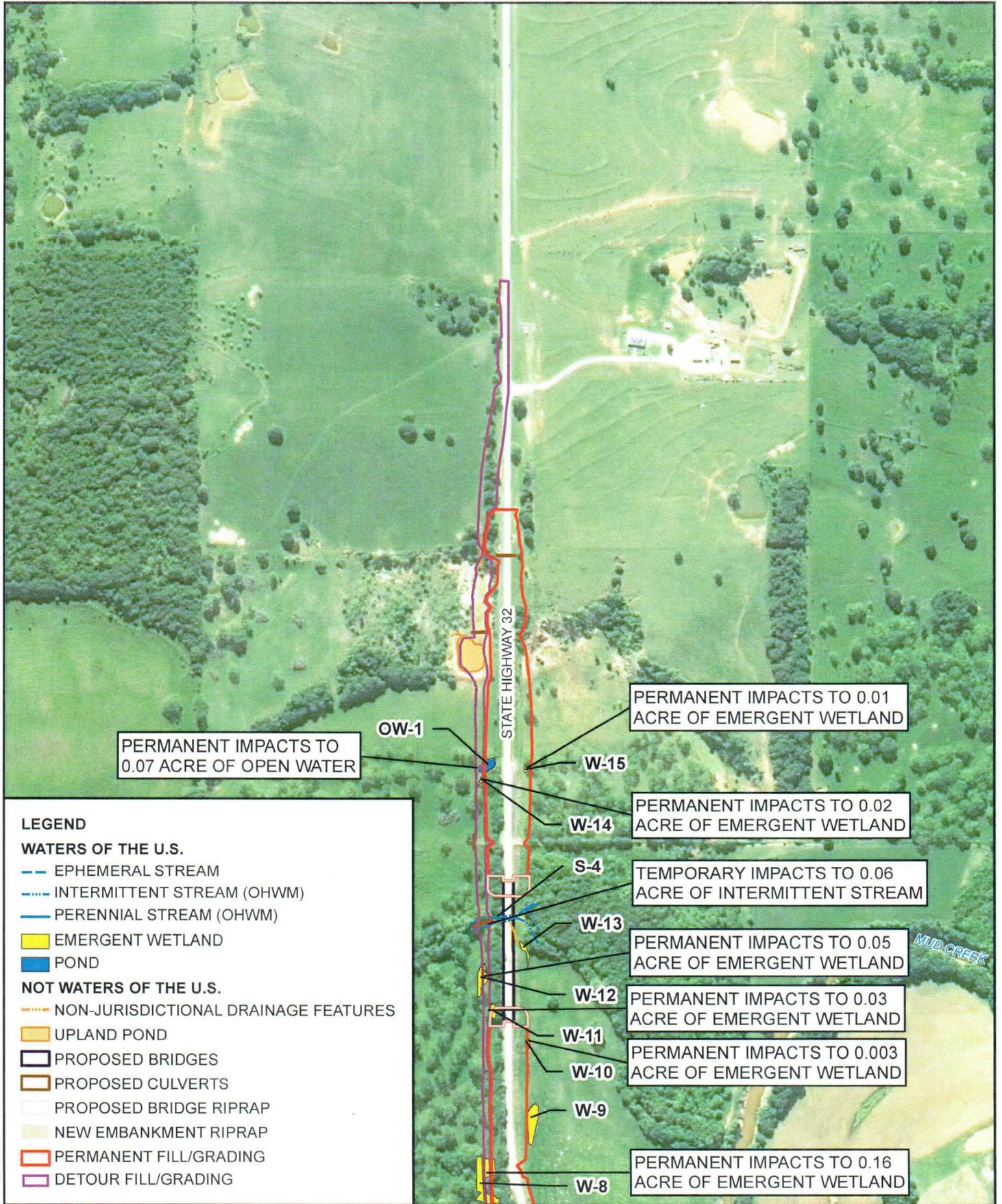


**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 VICINITY MAP

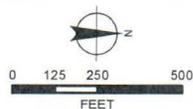


SWT-2016-39  
 Oklahoma Department of Transportation  
 SH 32 Bridge Replacements  
 Mud Creek and tributaries  
 Enclosure 1 of 12

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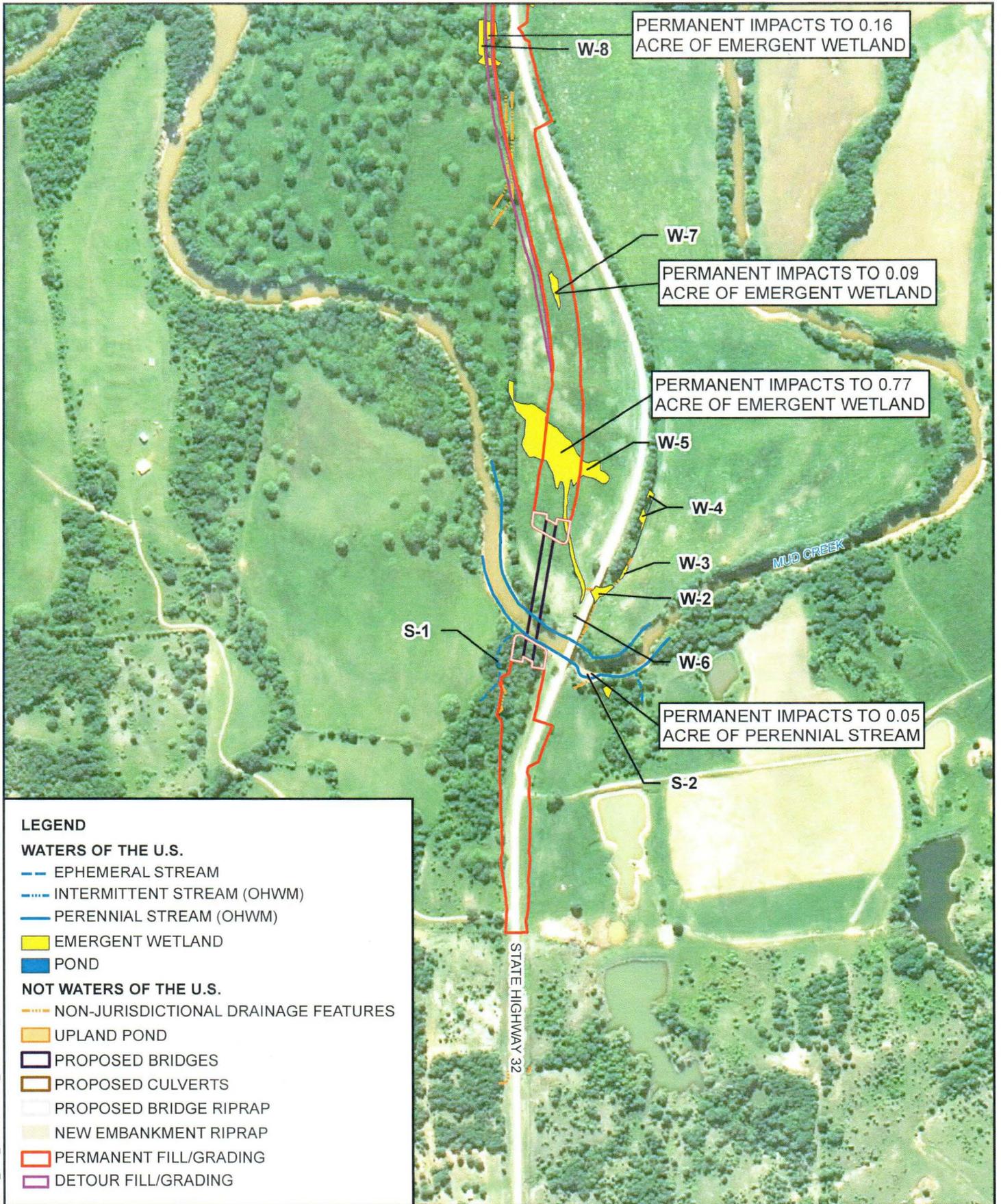


**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 IMPACT OVERVIEW



SWT-2016-39  
 Oklahoma Department of Transportation  
 SH 32 Bridge Replacements  
 Mud Creek and tributaries  
 Enclosure 2 of 12

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**LEGEND**

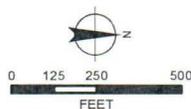
**WATERS OF THE U.S.**

- EPHEMERAL STREAM
- .-.- INTERMITTENT STREAM (OHWM)
- PERENNIAL STREAM (OHWM)
- EMERGENT WETLAND
- POND

**NOT WATERS OF THE U.S.**

- NON-JURISDICTIONAL DRAINAGE FEATURES
- UPLAND POND
- PROPOSED BRIDGES
- PROPOSED CULVERTS
- PROPOSED BRIDGE RIPRAP
- NEW EMBANKMENT RIPRAP
- PERMANENT FILL/GRADING
- DETOUR FILL/GRADING

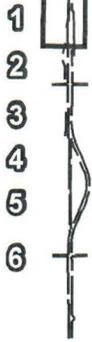
**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 IMPACT OVERVIEW



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 Oklahoma Department of Transportation  
 SH 32 Bridge Replacements  
 Mud Creek and tributaries  
 Enclosure 3 of 12

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EXHIBIT INDEX



START OF PROJECT  
J/P NO. 26502(04)

SH-32 28+00

30+00

PROPOSED  
TEMPORARY  
DETOUR

PROPOSED PERMANENT  
GRADING LIMITS

PROPOSED  
PERMANENT  
ROAD

LEGEND

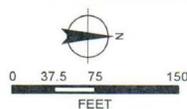
WATERS OF THE U.S.

- ..... EPHEMERAL STREAM
- INTERMITTENT STREAM (OHWM)
- PERENNIAL STREAM (OHWM)
- PERMANENT IMPACT
- TEMPORARY IMPACT
- EMERGENT WETLAND
- OPEN WATER

FEATURES NOT WATERS OF THE U.S.

- NON-JURISDICTIONAL DRAINAGE FEATURES
- PERMANENT ALIGNMENT
- TEMPORARY ALIGNMENT
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- UPLAND POND
- PERMANENT GRADING LIMITS
- DETOUR GRADING LIMITS
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED PERMANENT ROAD PAVEMENT
- PROPOSED DETOUR ROAD PAVEMENT

STATE HIGHWAY 32  
LOVE COUNTY, OKLAHOMA  
J/P NO. 26502(04)  
DESIGN EXHIBITS



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Oklahoma Department of Transportation  
SH 32 Bridge Replacements  
Mud Creek and tributaries  
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EXHIBIT INDEX

- 1
- 2
- 3
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- 5
- 6



PROPOSED TEMPORARY DETOUR

OPEN WATER OW-1  
0.07 AC TO BE IMPACTED (PERMANENT)

WETLAND W-14  
0.02 AC TO BE IMPACTED (PERMANENT)

PROPOSED PERMANENT GRADING LIMITS

PROPOSED PERMANENT ROAD

WETLAND W-15  
0.01 AC TO BE IMPACTED (PERMANENT)

LEGEND

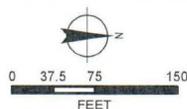
WATERS OF THE U.S.

- ..... EPHEMERAL STREAM
- [diagonal lines] INTERMITTENT STREAM (OHWM)
- [horizontal lines] PERENNIAL STREAM (OHWM)
- [cross-hatch] PERMANENT IMPACT
- [diagonal lines] TEMPORARY IMPACT
- [stippled] EMERGENT WETLAND
- [solid grey] OPEN WATER

FEATURES NOT WATERS OF THE U.S.

- NON-JURISDICTIONAL DRAINAGE FEATURES
- PERMANENT ALIGNMENT
- TEMPORARY ALIGNMENT
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- [dotted] UPLAND POND
- [dashed] PERMANENT GRADING LIMITS
- [dotted] DETOUR GRADING LIMITS
- EXISTING BRIDGE
- PROPOSED BRIDGE
- [solid grey] PROPOSED PERMANENT ROAD PAVEMENT
- [cross-hatch] PROPOSED DETOUR ROAD PAVEMENT

**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 DESIGN EXHIBITS



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 Oklahoma Department of Transportation  
 SH 32 Bridge Replacements  
 Mud Creek and tributaries  
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STREAM S-4  
0.06 AC TO BE  
IMPACTED  
(TEMPORARY)

WETLAND W-12  
0.05 AC TO BE  
IMPACTED  
(PERMANENT)

WETLAND W-11  
0.03 AC TO BE  
IMPACTED  
(PERMANENT)

PROPOSED PERMANENT  
GRADING LIMITS

PROPOSED  
TEMPORARY  
DETOUR

PROPOSED  
PERMANENT  
ROAD

PROPOSED  
BRIDGE

STREAM S-5

WETLAND W-13

WETLAND W-10  
0.003 AC TO BE  
IMPACTED  
(PERMANENT)

WETLAND W-9

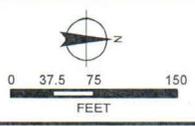
CROSS SECTION A

WETLAND W-8  
0.16 AC TO BE  
IMPACTED  
(PERMANENT)

LEGEND

- WATERS OF THE U.S.**
- ..... EPHEMERAL STREAM
  - ▨ INTERMITTENT STREAM (OHWM)
  - ▩ PERENNIAL STREAM (OHWM)
  - ▧ PERMANENT IMPACT
  - ▦ TEMPORARY IMPACT
  - ▨ EMERGENT WETLAND
  - OPEN WATER
- FEATURES NOT WATERS OF THE U.S.**
- - - NON-JURISDICTIONAL DRAINAGE FEATURES
  - PERMANENT ALIGNMENT
  - TEMPORARY ALIGNMENT
  - - - PROPOSED RIGHT-OF-WAY
  - - - EXISTING RIGHT-OF-WAY
  - UPLAND POND
  - ▭ PERMANENT GRADING LIMITS
  - ▭ DETOUR GRADING LIMITS
  - EXISTING BRIDGE
  - PROPOSED BRIDGE
  - ▨ PROPOSED PERMANENT ROAD PAVEMENT
  - ▨ PROPOSED DETOUR ROAD PAVEMENT

**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
J/P NO. 26502(04)  
DESIGN EXHIBITS

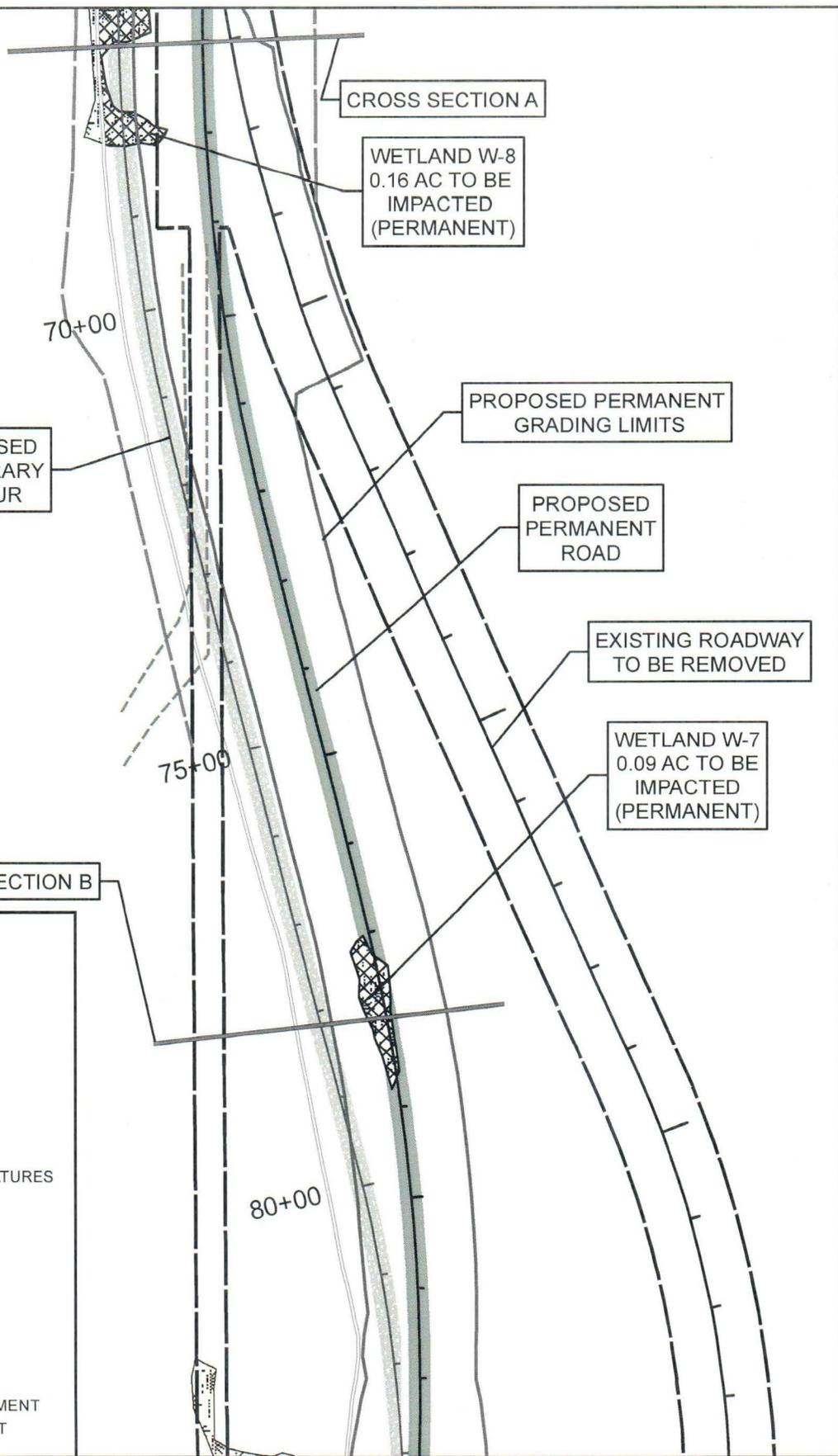


SWT-2016-39  
Oklahoma Department of Transportation  
SH 32 Bridge Replacements  
Mud Creek and tributaries  
Enclosure 6 of 12

FILE: O:\257025\_037\_ODOT\_TO4\_LOVECOUNTY\_SH32\MAP\_DOCS\FIGURES\FIG32\_SH32\_FIG3\_DESIGN\_EXHIBITS\_8X11.MXD

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CROSS SECTION A

WETLAND W-8  
0.16 AC TO BE IMPACTED (PERMANENT)

PROPOSED TEMPORARY DETOUR

PROPOSED PERMANENT GRADING LIMITS

PROPOSED PERMANENT ROAD

EXISTING ROADWAY TO BE REMOVED

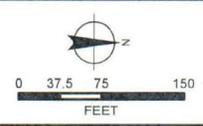
WETLAND W-7  
0.09 AC TO BE IMPACTED (PERMANENT)

CROSS SECTION B

LEGEND

- WATERS OF THE U.S.**
- ..... EPHEMERAL STREAM
  - INTERMITTENT STREAM (OHWM)
  - PERENNIAL STREAM (OHWM)
  - PERMANENT IMPACT
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  - EXISTING RIGHT-OF-WAY
  - UPLAND POND
  - PERMANENT GRADING LIMITS
  - DETOUR GRADING LIMITS
  - EXISTING BRIDGE
  - PROPOSED BRIDGE
  - PROPOSED PERMANENT ROAD PAVEMENT
  - PROPOSED DETOUR ROAD PAVEMENT

**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 DESIGN EXHIBITS

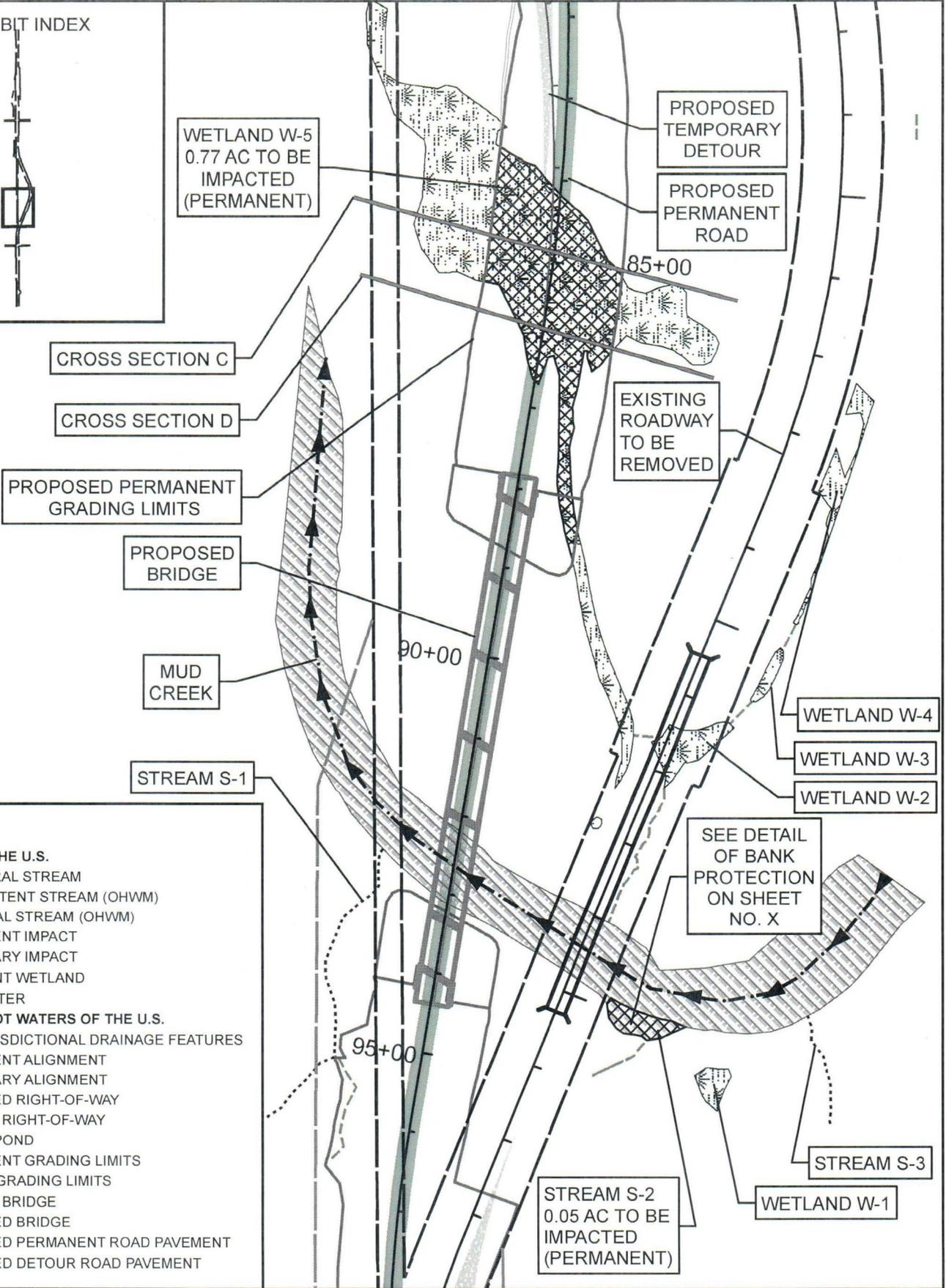


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 Enclosure 7 of 12

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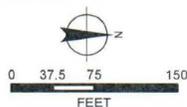
WATERS OF THE U.S.

- EPHEMERAL STREAM
- ▨ INTERMITTENT STREAM (OHWM)
- ▩ PERENNIAL STREAM (OHWM)
- ▧ PERMANENT IMPACT
- ▦ TEMPORARY IMPACT
- ▨ EMERGENT WETLAND
- OPEN WATER

FEATURES NOT WATERS OF THE U.S.

- - - NON-JURISDICTIONAL DRAINAGE FEATURES
- PERMANENT ALIGNMENT
- - - TEMPORARY ALIGNMENT
- - - PROPOSED RIGHT-OF-WAY
- - - EXISTING RIGHT-OF-WAY
- UPLAND POND
- ▭ PERMANENT GRADING LIMITS
- ▭ DETOUR GRADING LIMITS
- EXISTING BRIDGE
- PROPOSED BRIDGE
- ▨ PROPOSED PERMANENT ROAD PAVEMENT
- ▨ PROPOSED DETOUR ROAD PAVEMENT

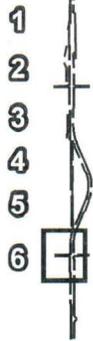
**STATE HIGHWAY 32**  
**LOVE COUNTY, OKLAHOMA**  
 J/P NO. 26502(04)  
 DESIGN EXHIBITS



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EXHIBIT INDEX



PROPOSED PERMANENT GRADING LIMITS

PROPOSED PERMANENT ROAD

PROPOSED TEMPORARY DETOUR

LEGEND

WATERS OF THE U.S.

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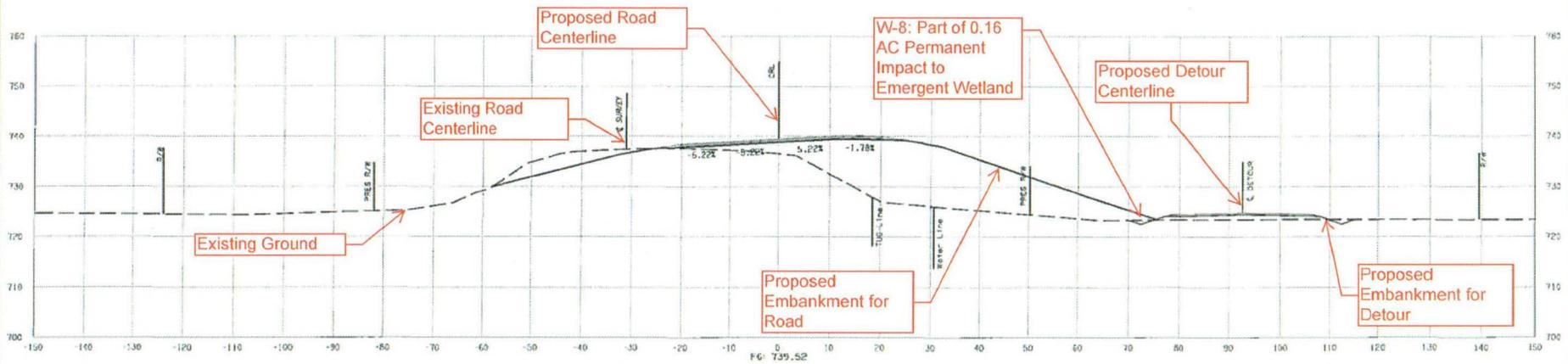
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END OF PROJECT  
J/P NO. 26502(04)

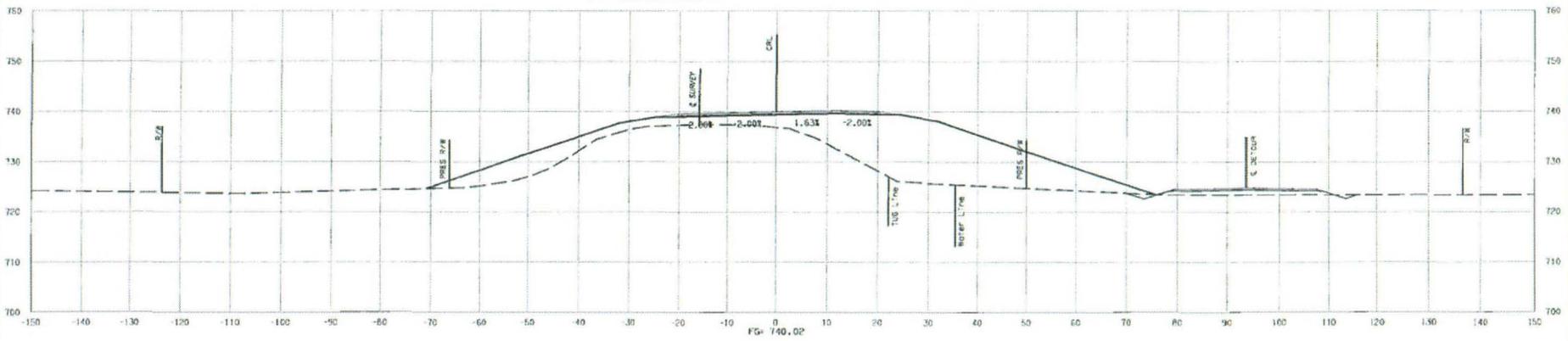
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**LOVE COUNTY, OKLAHOMA**  
J/P NO. 26502(04)  
DESIGN EXHIBITS



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Cross Section A 67+00.00

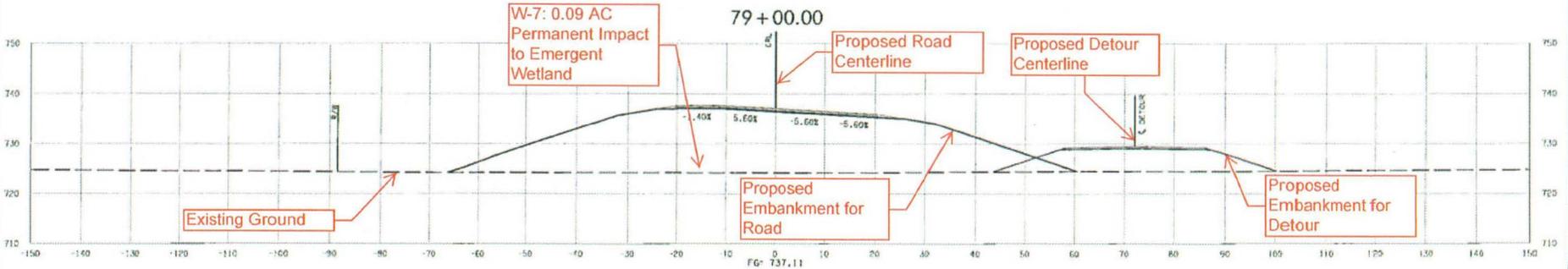
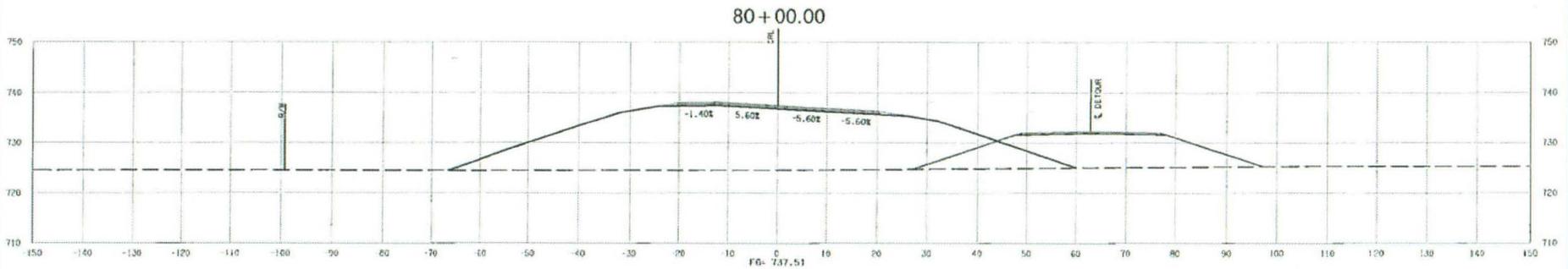
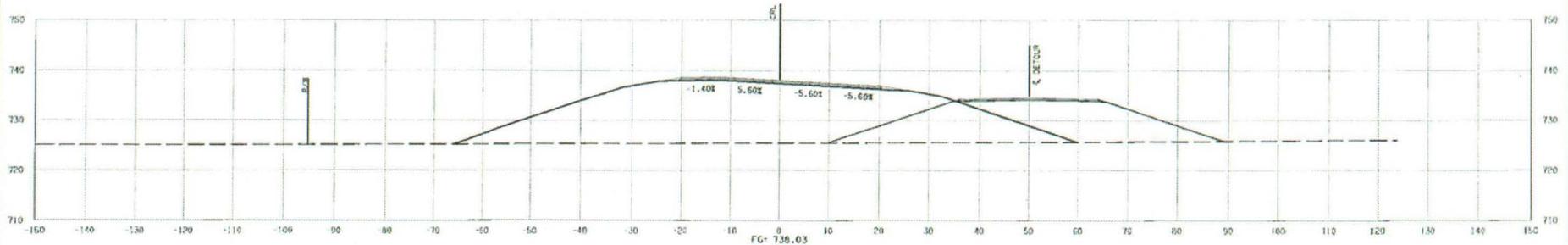


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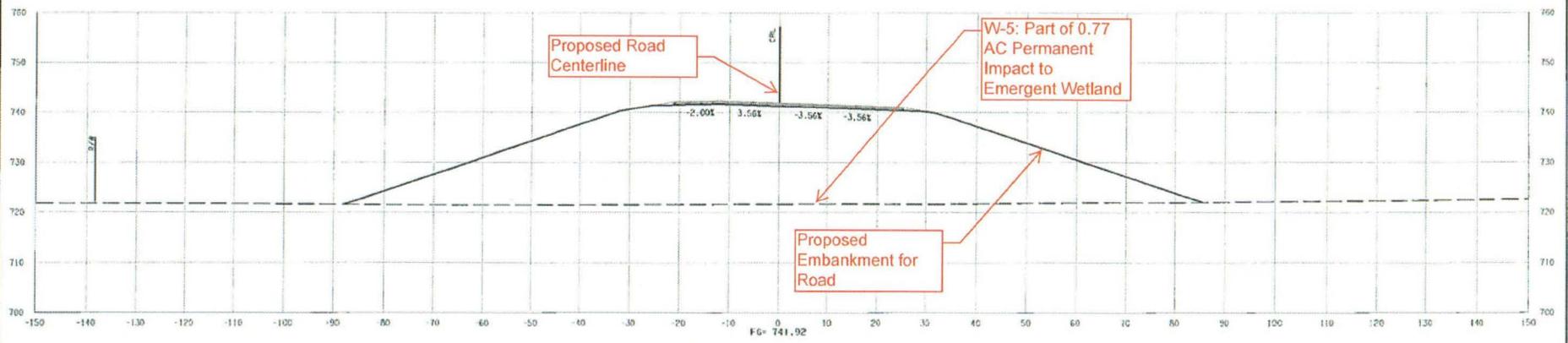
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STATE JOB NO. 265021041  
 COUNTY SHEET NO. X26

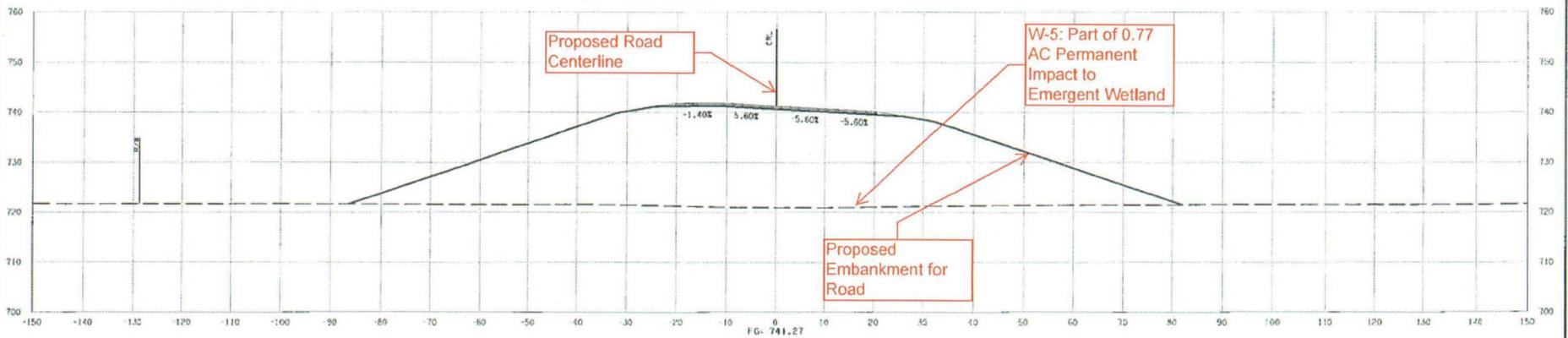
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Cross Section D 86+00.00



Cross Section C 85+00.00

STATE JOB NO. 265021041  
 LOVIE COUNTY SHEET NO. X-11

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