Wetlands PQS Memorandum

DATE 6/14/2016

TO Carmen Modrcin, NDOR EDU

FROM Patrick Sward, NDOR EPU

SUBJECT Wetlands PQS Memo
Project No: STP-63-2(108)
Control No: 11450
Project Name: Alvo North

☒ **Field work for a wetland delineation was completed** May 6-8, 2013 with additional field work completed on June 18, 2013 and October 1-2, 2015. Wetland delineation reports were issued to NDOR dated June 2013 and October 2015.
Or
☐A desktop review was completed on Click here to enter a date.

Are there wetlands, stream channels, or other waters within the study area?
☒ Yes ☐ No

Will the action result in wetland impacts in accordance with Section 404 of the Clean Water Act and/or Nebraska State Title 117?
☒ Yes ☐ No ☐ Not Applicable

If the project is processed with a Nationwide Permit, is a Pre-construction Notification required?
☒ Yes ☐ No ☐ Not Applicable

Describe resources, <u>potential</u> impacts and anticipated permit type (*Include estimated permanent wetland impacts (acres). If known, also provide estimated temporary wetland impacts (acres), estimated channel impacts (linear feet/acres), special wetland areas, cause of impacts, and any Nationwide Permit information.*): Based on the Olsson Associates wetlands delineation report prepared for NDOR EPU and the Final DR-290 issued by NDOR design, unavoidable project impacts consist of 1.6569-ac permanent impacts to PEMA/C wetlands, 0.0597-ac temporary impacts to PEMA/C wetlands, 0.1398-ac permanent impacts to PEMF wetlands, 0.0153-ac temporary impacts to PEMF wetlands, and 0.2432-ac permanent impacts to PFOA wetlands. Stream channel impacts associated with the project include 0.0354-ac of filled stream channel (775 feet) and 0.0238-ac (521 feet) of channel cleanout/shaping. (Note that none of the stream channel impacts nor the channel cleanout/shaping impacts exceed 200 feet at any such location.) Based on the project impacts and permitting thresholds, the roadway project will be permitted as a NWP-23 accompanied with a CE document signed by FHWA. Impacts to PEMA/C and PEMF wetlands will be debited to the existing NDOR Rock Creek mitigation bank site. A permittee responsible wetlands mitigation site will be constructed along the project corridor to account for impacts to forested wetlands. All Nationwide and General Permit Conditions will be detailed in the project green sheets to require contractor compliance.

Cowardin Class Impacted (*Select all that apply*)
☒ Palustrine ☐ Riverine ☐ Lacustrine ☐ Not Applicable

Describe any coordination conducted to date with officials/agencies (*Include: Any coordination with USACE)*: A pre-application meeting was conducted with the Corps PM Phil Rezac on 8/4/2015 to discuss the permitting process, calculation of stream channel impacts, and options available to address required mitigation for unavoidable project wetland impacts.

Wetlands/Waters of the U.S. Mitigation
☒ On-Site/Permittee Responsible ☒ USACE Approved Mitigation Bank Site ☐ Not Applicable
Impacts to PEMA/C and PEMF wetlands will be debited to the existing NDOR Rock Creek mitigation bank site. A permittee responsible wetlands mitigation site will be constructed along the project corridor to account for impacts to forested wetlands.

Wetlands/Waters of the U.S. Commitments:
The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear "bed and Bank" channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas.

☒ All wetlands/waters within the project area that are not permitted for impacts will be marked on the 2W aerial sheets for the contractor as avoidance areas.

Select the following that apply:
☐ No wetland impacts are anticipated for this project; however, if impacts are found during design, the required permits shall be obtained prior to letting. NDOR Environmental shall reevaluate the project for the change in impacts. All wetlands within the project area shall be marked on the project plans or listed on Attachment 1 of the Environmental Commitment for the Contractor as avoidance areas. (NDOR Design, NDOR Environmental)

☐ The project qualifies under Nationwide Permit # 3a. The contractor shall adhere to the permit conditions, including regional and general conditions, during construction. (Contractor)

☒ The project will require a Nationwide Permit for impacts to waters of the U.S. The permit shall be obtained prior to project letting. The contractor shall adhere to all permit conditions, including regional and general conditions, during construction. (NDOR Environmental, Contractor)

☐ The project will require a Title 117 Letter of Opinion for impacts to waters of the State. (NDOR Environmental, Contractor)

Project Description:
Original Project Description dated 6/6/2012; last updated 4/25/2016:
This New & Reconstruction project on N-63 will replace the existing asphalt pavement with dowelled concrete pavement on a shifted alignment for 6.15 miles and 0.14 miles of shoulder work located in Cass County. The project starts just south of the northern corporate limits of the City of Alvo at mile marker (MM) 4.20, and extends north to MM 10.49, 0.32 miles south of the Interstate 80 (I-80) and N-63 interchange. Construction may begin and/or end approximately 200 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement. Removal of the entire pavement structure and modification of the pavement base requires the use of reconstruction standards, in this DR-4 design template.

The existing roadway on this segment of N-63 consists of the following:

- MM 4+20 to MM 4+23: This segment consists of two 12 foot wide asphalt lanes and 5 foot wide earth shoulders.
- MM 4+23 to MM 10+35: This segment consists of two 11.75 foot wide asphalt lanes and 1 foot wide earth shoulders.
- MM 10+35 to MM 10+49: This segment of N-63 consists of two 12 foot wide concrete lanes and variable width earth shoulders.

The improvements on this project consist of removing the existing pavement and reconstructing with dowelled concrete pavement on foundation course and lime stabilized subgrade. The alignment of N-63 will be shifted to the west or east of the existing highway centerline at various locations along the project. The new roadway typical section consists of two 12-foot wide lanes and an 8-foot wide shoulder, of which 2 feet is surfaced. The project also includes grading consistent with the DR4 standard typical cross section to the Lateral Obstacle Clear distance (LOC). One bridge size structure will be extended, Structure Number S063 00814, and an overflow structure will be added. Culverts located along the project will be removed and replaced or extended to accommodate the new grading.

Scope details include:

- Grading beyond the hinge point will be required for the following work:
    - Culverts
    - Guardrail
    - Mailbox turnouts
    - Correction or construction of horizontal alignment
    - Correction or construction of vertical alignment
    - Drives and intersections
    - Shoulder widening and surfacing
    - Flattening foreslopes
    - Ditch construction
    - Ditch cleanout
    - Berm construction
    - Roadway grading for culvert extensions

- All culverts will be modified and culverts will be constructed at new locations.
- One existing bridge size structure (Structure Number S063 00814) will be extended and an overflow structure will be added.
- Existing surfaced driveways and intersections will be replaced.
- Rock or gravel will be placed behind driveways and intersections to match the new concrete.
- Mailbox turnouts will be constructed.
- New horizontal and vertical alignments will be constructed.
- The reconstructed shoulders will be widened from the variable existing width to 8 foot wide with 2 foot wide surfaced. A beveled edge and rumble stripes will be included with the surfaced shoulder.
- Project surveying and staking will be required.
- Areas disturbed during construction will be stabilized utilizing methods of erosion control as shown in the Storm Water Pollution Prevention Plan (SWPPP).
- Permanent pavement markings will be applied to all new surfacing.
- Additional property rights will be required to build this project. An alignment shift will occur to meet design standards and to minimize impacts to channels, wetlands, residential homes and two cemetery locations.
- A permittee responsible mitigation site will be acquired and developed as part of this project.

- Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.
- Work may be required to be accomplished at night.
- This project will not be constructed under traffic. A detour will be provided.
- Traffic will be detoured on the state highway system. Work will not be required on the designated detour route.
- The project will include relocation of existing utility poles outside of the 30 foot wide Lateral Obstacle Clear distance.