

Exhibit [redacted]  
SCOPE OF SERVICES

WETLAND AND STREAM DELINEATION AND PERMITTING SERVICES  
for

Project Name: [redacted]  
Project Number: [redacted]  
Control Number: [redacted]

A. PROJECT DESCRIPTION

This schedule provides for wetland services for [redacted] in [redacted] County, Nebraska.

[redacted], (Consultant) shall serve as agent for [redacted], (Client), representing the Client in all matters related to wetland services for this project and, if needed, the permitting process pursuant to Section 404 of the Clean Water Act as administered by the US Army Corps of Engineers (Corps).

General Wetland Delineation Services: The Consultant shall visit the project sites as assigned to determine if waters of the United States (waters of the US), including wetlands, are present within the proposed project limits of construction (LOC). Identified stream channels and/or wetlands shall be delineated on aerial photographs for assessment of fill or disturbance impacts resulting from construction of proposed project(s). Documentation will be submitted to the Client and Nebraska Department of Roads (NDOR) for review and approval, and as a final record. For this work, the following definitions will apply:

*Full Delineation shall mean delineating wetlands and waters of the US (regardless of isolation or jurisdictional status) according to the 1987 Corps Wetland Delineation Manual and NDOR Memorandum on Qualifications and Documentation Requirements for LPA Project Wetlands Reviews.*

*The delineation shall include (a) ground level photographs, (b) documentation of wetlands on Corps Wetland Determination Data Sheets (using the Midwest or Great Plains Regional Supplements) at all sample points, and (c) identification and characterization of other waters of the US (streams, lakes, ponds, pits or other impoundments), including delineation of the ordinary high water mark (OHWM) if present and determination of USGS Hydrologic Code and water regime. Field data collection shall be accomplished during the growing season, generally between 1 May and 1 November. The delineation data will be organized in to a clearly written Wetland Delineation Report.*

*Delineation of wetlands shall be performed using transect methods with at least one sample point in the wetland and one in upland at each upland/wetland interface. Wetlands shall be identified according to the Cowardin classification and Nebraska Wetland Subclass. Water regime (perennial, intermittent, ephemeral, etc.) will be based on best professional judgment and published resources (7.5 minute Topographic Map, County Soil Survey, National Hydrography Data Set, etc). Consultant shall take digital ground photos and use GPS to locate wetland boundaries and observation point locations. Consultant shall use a sub-meter accuracy GPS, to map all wetland and/or stream channel boundaries, photo points and data points.*

*For bridges and culverts, the OHWM will be delineated at the location of the bridge hydraulic cross-section(s), if these locations are provided. Where hydraulic cross-sections have been provided, wood lath (or equivalent) shall be placed at the OHWM to identify both the vertical and horizontal OHWM location. In situations where a temporary access crossing for construction may be required, the OHWM will also be delineated upstream and downstream of bridge structures on both banks of the stream using the same method. Beyond the locations of the bridge hydraulic cross-section or temporary crossing locations, the Consultant shall walk the stream channel banks with the GPS unit to obtain a multiple point horizontal OHWM boundary within the identified study area.*

*Preliminary Determination shall mean identifying potential wetlands and other waters of the US with field observations documented using the Routine Wetland Determination Data Forms (from the 1987 Corps Wetland Delineation Manual); however, no soil sampling will be necessary. Wetland information shall include Cowardin classification (including water regime) and Nebraska Wetland Subclass. Stream channel information shall include general stream channel type (ephemeral, intermittent, perennial) and estimates of width. Locations and estimated boundaries of wetlands and waters shall be recorded on an aerial photograph. Additional figures and ground level photographs should be provided as necessary to characterize the wetlands. A Wetland Delineation Report is not required.*

Wetland documentation will be required for all projects that require grading below the existing hinge point of the road for the construction of various roadway features (such as culvert extension, guardrail updates, embankment widening, bank stabilization, and/or bridge substructure repair, replacement, reconstruction, etc).

The level of wetland documentation will vary according to location.

New Projects and Reconstruction Projects. Along the project alignment, a Full Delineation shall be provided for the area 50 feet beyond the project LOCs or within the project right-of-way (ROW), whichever is farthest from the centerline. A Preliminary Determination shall be provided for the area 150 feet outside of the LOCs or ROW, whichever is farthest from the centerline. At a minimum, a Preliminary Determination shall be performed for any area that likely would be used for construction access, staging, stockpiling, or waste disposal (e.g. interchange/intersection areas, culvert and bridge construction sites, etc.). A full delineation shall be performed for known construction access, staging, stockpiling, or waste disposal areas.

Culverts and Bridges. At culverts and bridges along the project alignment, a Full Delineation (including delineation of the OHWM if present, and adjacent wetlands) shall be provided for the area 150 ft outside of the LOCs or ROW, whichever is farthest from the centerline.

3R (Resurfacing, Restoration, or Rehabilitation) Projects. 3R projects may include substantial portions of the alignment where no grading is planned outside of the existing shoulder. For these areas, the Full Delineation is not necessary and only the Preliminary Determination shall be performed for the area within the ROW.

Pavement Preservation Projects. Pavement Preservation Projects (i.e. those resulting in less than two (2) inches of pavement placed) shall be reviewed using a desktop GIS analysis level wetland determination. All wetland areas identified by GIS review shall be identified and described as a "do not disturb" area. Questionable areas identified by GIS review should be verified on-site using Preliminary Determination methods if the project will require certain activities within the existing ROW (i.e., construction access, staging, stockpiling, waste disposal or excavation of borrow).

Additional Permitting Services: If needed, the Consultant shall prepare materials for submittal of an application for a 404 permit from the Corps, and for 401 Water Quality Certification or Title 117 compliance from the Nebraska Department of Environmental Quality (NDEQ). The Consultant will also handle coordination activities with the Corps and other regulatory and resource agencies, as needed.

## **B. APPLICABLE PUBLICATIONS**

Work shall be done in accordance with the following materials:

1. NDOR Memorandum on Wetland & Water Resources Review Procedure for Federal Aid Projects (27 October 20109). This document contains important information on required data and level of detail.
2. NDOR Memorandum on Qualifications and Documentation Requirements for LPA Project Wetlands Reviews (16 November 2009). This document contains important information on required data and level of detail.
3. NDOR Instructions for Completing the Wetland Determination Checklist (18 November 2009)
4. NDOR Wetland Determination Checklist

5. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. Environmental Laboratory, Department of the Army Waterways Experiment Station, US Army Corps of Engineers, Vicksburg, Mississippi. 1987.
6. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, ERDC/EL TR-08-27. Wetlands Regulatory Assistance Program, US Army Engineer Research and Development Center, Vicksburg, Mississippi. 2008.
7. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region, ERDC/EL TR-08-12. Wetlands Regulatory Assistance Program, US Army Engineer Research and Development Center, Vicksburg, Mississippi. 2008.
8. Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification. US Army Corps of Engineers. 2005.
9. Cowardin et al. Classification of Wetlands and Deepwater Habitats of the United States, FWS/OBS 79/31. Biological Services Program, Fish and Wildlife Service, US Department of the Interior. 1979.
10. Nebraska Wetland Subclasses (Attachment K, Wetland Mitigation Banking, Standard Operating Procedures in Nebraska)

### C. CLIENT SHALL PROVIDE

1. Project description.
2. Project location map, if available.
3. Electronic files of current aerial photographs with project alignment, existing and new rights-of way (ROW) and easements, and LOC, if available.
4. Hydraulic cross-section (downstream of bridges, and upstream of culverts), if available.
5. Roadside safety guidelines (Survey Crew Traffic Control Policy, see NDOR website).
6. Sample of 2W Sheet (Plan Sheet of aerial photograph with wetland locations).
7. Feature Codes and SMD (Simple Method Description) File (downloadable from NDOR website).
8. NEPA Document, if available.
9. Documentation of concurrence/compliance for T&E, SHPO, floodplain etc., if permitting services are required.
10. Waterway Permit Data Sheet, if permitting services are required.

### D. CONSULTANT SHALL PROVIDE

#### For Wetland Delineation Services:

1. Project Management and Coordination. This task includes activities to initiate and monitor project schedules, workload assignments and internal cost controls throughout the project. Also included are efforts to prepare and process invoices and monthly progress reports; prepare project correspondence with the Client and/or NDOR; and maintain project records.
  - 1.1 Project Management
  - 1.2 Prepare Invoicing
  - 1.3 Maintain Project Records
2. Quality Assurance / Quality Control. The Consultant shall perform QA/QC checks at various stages of the study including prior to any official submittal.
3. Meetings. Project staff will meet with the Client and/or NDOR, and prepare minutes of the meeting. An on-site kick-off meeting will be held for complex new and reconstruction projects. For other projects, the kick-off meeting may be held at the Client's office, or conference called.
  - 3.1 On-site Meetings
  - 3.2 Office Meetings
  - 3.3 Conference Calls

4. Review Existing Resources / Databases. Consultant will review existing resources and prepare the *Wetland Determination Checklist* prior to the site visit. For cultivated fields, the consultant shall review the past 10 years of aerial photographs (if available) and the official 5-year NRCS slide set used for their wetland determinations.
  - 4.1 Wetland Determination Checklist
  - 4.2 Additional Review for Agricultural Lands
  
5. Conduct Field Survey. Consultant shall delineate all wetlands and waters of the US within the project corridor as specified in Section A., above. If it is determined that on-site or off-site mitigation must be developed, the Consultant shall identify a minimum of two potential mitigation sites along the project corridor. Recommendations will be submitted in a Mitigation Site Suitability Memorandum to the Client and NDOR, and locations of the mitigation sites will be plotted on the aerial photographs. If two sites cannot be identified, this will be explained in the memorandum.
  - 5.1 Wetland Preliminary Determination
  - 5.2 Wetland Full Delineation
  - 5.3 Stream Characterization
  - 5.4 OHWM Delineation at Culverts and Bridges
  - 5.5 Investigate Mitigation Sites
  - 5.6 Collect GPS Data Points/Boundaries
  
6. Wetland Documentation. Consultant shall prepare documents according to procedures described in Section A., above.
  - 6.1 Data Forms
  - 6.2 Photolog
  - 6.3 Mapping
  - 6.4 Memorandum of Findings (Determinations)
  - 6.5 Wetland Delineation Report (Delineations), Mitigation Site Suitability Memorandum
  
7. Plot Boundaries. Consultant shall plot the data on aerial photographs with the roadway alignment and stationing. Data will include wetland boundaries, wetland types, waters of the US (OHWM) and location of data collection points and photographs. Map scale must be drawn to a scale no smaller than 1-inch = 200-feet.

If contract includes additional permitting services, Consultant shall assess project impacts on wetlands and other waters of the U.S.
  
8. Obtain Preliminary and/or Final Jurisdictional Determination. In some cases, the Consultant shall request the Corps to make a Preliminary and/or Final Jurisdictional Determination. In some cases, the Consultant shall request a Certified Delineation.
  
9. Prepare Electronic Files and Transmittal Letter. Consultant shall submit the wetland materials to the Client and NDOR for review and approval, and final submission (in electronic format as described in Section G).

When Additional Permitting Services are Required:

10. Pre-application Meeting. Consultant will conduct a meeting with Corps and/or NDOR (and other regulatory or resource agencies, if appropriate) in advance of project field work. Meeting may be held on-site, if useful.
  
11. Develop Mitigation Plan. Consultant may be asked to prepare a proposal for additional services to develop a mitigation plan. Mitigation plan will follow Corps guidance.
  
12. Alternatives Analysis and Sequencing Demonstration. For Individual Permits, Consultant shall prepare an Alternatives Analysis and Sequencing Demonstration for inclusion in the permit application. For NDOR designed projects, this will involve incorporating materials provided by Roadway Design and Environmental Permits Unit (EPU). For consultant

designed projects, this will involve preparing documentation after consulting with the design consultant and NDOR Roadway Design and EPU.

- 12.1 Develop Additional Alternative
  - 12.2 Preliminary Engineering
  - 12.3 Cost Estimates
  - 12.4 Environmental Impacts
  - 12.5 Prepare Report
  - 12.6 Address Review Comments
13. 404 Permit Application Package. Consultant shall prepare a 1<sup>st</sup> Draft of the 404 Permit Application Package consisting of 404 Permit Application and Wetland Delineation Report, including complete description of the project, documentation of impacts to all wetlands and waters of the US, and wetland and stream channel mitigation. A hard copy and electronic files of the documents will be submitted to the Client and NDOR for review and approval.
- The Consultant shall revise materials per Client and NDOR comments, and resubmit subsequent drafts to the Client and NDOR for review and approval. For the final package, the Consultant will submit one bound copy and electronic files to NDOR and the Corps. Instead of a bound copy, a .pdf copy delivered to the NDOR FTP site is acceptable.
14. Agency Coordination. The Consultant shall submit the 404 permit application package to the Corps and NDEQ. If needed, Consultant shall arrange and conduct an on-site post-application meeting. The 404 authorization must be secured before PSE Turn-in, but not so early that the permit would expire before roadway fill impacts are accomplished. The target date for submittal of a 404 permit application is 12 months prior to letting. Time of the application submittal must be closely coordinated with NDOR.
- Consultant shall coordinate correspondence with the Corps, whether in writing or personal contact. Consultants are expected to be available to provide additional information, answer questions, respond to public comments, and attend meetings, if necessary. All correspondence with the Corps and other agencies, if necessary, shall be submitted to NDOR in draft form for approval before final submittal.
- If needed, Consultant shall coordinate with NDEQ and obtain a letter of 401 Water Quality Certification. If wetlands are non-jurisdictional, Consultant shall obtain a letter of opinion from NDEQ stating compliance with the non-degradation clause of Title 117 Nebraska Surface Water Quality Standards.
- 14.1 On-site Meeting with Corps
  - 14.2 Address Comments/Provide Information to Corps
  - 14.3 Attend Other Meetings
  - 14.4 401 WQ Certification
15. Prepare Final Deliverables. Consultant shall prepare and submit to the Client and NDOR the electronic files and hard copies of all materials.
16. Other. (additional project specific tasks may be added here)

## E. DELIVERABLES

### For Wetland Delineation Services:

1. Monthly Invoices and Progress Reports
2. Meeting Minutes
3. *NDOR Wetland Delineation Checklist*
4. For Full Delineation, *USACE Wetland Determination Data Sheets* (Midwest or Great Plains Regional Supplements) and Wetland Delineation Report. For Preliminary Determination, *Routine Wetland Determination Data Sheets* (.pdf or Word/Excel).
5. Photolog with captions (.jpg).
6. Plot(s) showing Wetland Boundaries, Wetland Types, OHWM, Waters of US and Location of Data Collection Points and Photos (in ESRI Shapefile format with attribute table (\*.shp),

- AND in Microstation (DGN) for NDOR Modified State Plane Coordinate System, or assumed coordinate system according to project)
- 7. Memorandum on Potential Mitigation Sites
- 8. Electronic Files on CD or FTP site transfer and Transmittal Letter

When Additional Permitting Services are Required:

- 9. 404 Permit Application Package consisting of 404 Permit Application and Wetland Delineation Report. For Individual Permits, includes Alternatives Analysis and Sequencing Demonstration (Hard Copy and Electronic Files)
- 10. Agency correspondence
- 11. Responses to Public Comments
- 12. 404 Authorization Letter
- 13. NDEQ 401 Water Quality Certification or Letter of Opinion regarding compliance with Title 117
- 14. Hard Copies of All Materials and Final Electronic Files

**F. PROJECT INFORMATION FORMAT**

- 1. Consultant will follow the State's CADD drafting procedures and guidelines in preparing plans and the wetland delineations. File names must follow the State's CADD naming convention. Line weights, line styles, text size and leveling must follow the State's guidelines.

**G. DATA TRANSFER**

- 1. It shall be the consultant's responsibility to obtain the necessary software to translate to and from the specified format for all electronic files supplied by the State and for all electronic files prepared by the Consultant and supplied to the State.
- 2. If available, the State and the Consultant will supply DTM survey files for photogrammetric or ground surveys in a 3D MICROSTATION format. This shall include random spots, break lines and obscure/void areas on levels specified by the Preliminary Survey CADD levels (PCL) document. An ASCII file will also be supplied to Geopak DAT File Format (if both parties are using Geopak, only the TIN needs to be supplied). If available, both formats will be supplied on a CD or via electronic means.
- 3. The State and Consultant shall transfer all other files in a 2D MICROSTATION (V8) format. A transmittal must accompany all CD's or other electronic file submittals listing file names, file descriptions, and detailing the method of placement so that State will know how to restore the data in the State system.
- 4. Plot(s) showing wetland boundaries, wetland types, waters of US and location of data collection points and photos will be submitted in ESRI Shapefile format with attribute table (\*.shp) AND in Microstation (DGN) for NDOR Modified State Plane Coordinate System, or assumed coordinate system according to project).
- 5. Consultant shall submit a horizontal alignment (geopak\*.gpk file, .ird) for ROW plan preparation.
- 6. Electronic files should be submitted with each submittal or revision of the plans.

**H. SCHEDULE**

- 1. Notice to Proceed: [REDACTED]
- 2. The Consultant shall provide a schedule of activities and deliverables upon award [REDACTED]
- 3. Completion Date: [REDACTED]
- 4. Project Letting Date (subject to change): [REDACTED]