



LOWER PLATTE SOUTH natural resources district

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MEMORANDUM

Date: February 13, 2025

To: Lower Platte South Natural Resources District Board of Directors

From: Will Inselman, Resources Coordinator *WI*

Subject: Minutes for MoPac East – Lied Connector Subcommittee Meeting

On Wednesday, February 12th, 2025, at 6:27 p.m., the MoPac East – Lied Connector subcommittee met in the Large Conference Room. Subcommittee members present: Luke Peterson-Chair, Melissa Baker, Anthony Schutz, John Yoakum, Christine Lamberty, Deborah Eagan, and Seth Hawkins. Director Bob Andersen was also present. LPSNRD staff in attendance were Mike Sousek, David Potter, Eric Zach, and Will Inselman. Andrew Wilshusen from JEO Consulting was also present.

The single item on the agenda was the consideration of a Scope of Services Agreement with JEO Consulting Group for the design and engineering of the MoPac East Connector Trail. In December, LPSNRD staff advertised a Request for Qualifications seeking qualified consulting firms for their services to design and engineer the MoPac East Connector trail. Through that process, two consulting firms submitted RFQ applications; Benesch and JEO Consulting Group, Inc (JEO). After interviewing the two consulting firms, the staff identified JEO Consulting as the most qualified firm for this project. Their experience and familiarity with the project they gained through the evaluation study, ability to hit the ground running, and the relationships they developed with the local community and local leaders, make them the best fit for this project. Andrew from JEO spoke about their excitement to continue the project and JEO's commitment to seeing this trail completed. Staff recommended awarding the contract to JEO.

Staff and Andrew (JEO) fielded questions specific to the scope of work and questions regarding timeline, process and budget. There was concern from Director Hawkins that this agreement would put the NRD at a point of no return. Other Directors commented that we need to start somewhere and so this agreement is a necessary step to building the trail. Staff also reminded the Directors that the agreement is based on a time and materials basis, and that the contract amount is intended to cover any foreseeable obstacles or challenges require more observation. When JEO finishes the concept design later this summer, staff will have a better grasp of the trajectory of the project and expenditures for the project. Staff referred to the memo provided by JEO for the justification of the scoping cost (attached).

It was moved by Yoakum, seconded by Schutz, and approved to recommend that the Lower Platte South NRD Board of Directors authorize the General Manager to sign the Scope of Services Agreement with JEO Consulting Group, Inc. for \$1,979,515.00 for the design and engineering of the MoPac East Connector Trail.

Motion Passed: 6-1 (Hawkins voting NO)

The meeting adjourned at 6:55 p.m.

PC: MoPac East – Lied Connector subcommittee file



SCOPE OF SERVICES: Exhibit A

PROJECT DESCRIPTION:

The Lower Platte South Natural Resources District (LPSNRD) is advancing the MoPac East Trail connection from the Elmwood/Wabash area to the Lied Platte River Bridge Trailhead into final design. The project will be completed in three phases:

- Phase 1: Conceptual Design
- Phase 2: Preliminary and Final Design
- Phase 3: Construction Oversight

This scope of services encompasses all three phases; however, the estimated fee includes only Phases 1 and 2. Phase 3 services would require a contract amendment and LPSNRD approval before proceeding.

SCOPE OF SERVICES:

1 PROJECT MANAGEMENT

- 1.1 **Project Coordination** - Maintain regular communication with LPSNRD about budget, schedule, and milestones. This includes a project kick-off meeting, monthly progress meetings (March 2025-July 2026), and monthly progress reports submitted with billings.
- 1.2 **Design Milestone Meetings** - Coordinate and facilitate design milestone meetings with LPSNRD at key phases, including conceptual, preliminary, and final design, to review progress, gather input, and ensure alignment with project goals.
- 1.3 **Agency Coordination Meetings** – Facilitate coordination meetings with key agencies, including Cass County Highway Superintendent and Surveyor, the Nebraska Department of Transportation (NDOT), and the U.S. Army Corps of Engineers (USACE). Meetings will ensure agency input is incorporated into design development and regulatory considerations are addressed throughout the project.
- 1.4 **Funding Strategy Support** - Assist LPSNRD in identifying funding gaps, tracking potential funding sources, and supporting grant applications or fundraising efforts as needed. Ensure funding considerations align with project planning and implementation.

2 STAKEHOLDER ENGAGEMENT

- 2.1 **Outreach and Communication Plan**
Collaborate with LPSNRD to develop an Outreach and Communication Plan for the design phase. This plan will ensure transparency, maintain engagement with landowners and stakeholders adjacent to the trail route, and outline strategies to provide consistent messaging to broader audiences.
- 2.2 **Stakeholder Engagement Activities**
Implement targeted outreach to landowners and stakeholders based on the approved P2 Plan, which is anticipated to include:
 - Project Area Stakeholder Coordination
 - **Stakeholder database** - Develop and maintain stakeholder contact databases to track engagement activities and key coordination details.

- **Land surveying phase** - Notify and coordinate with landowners regarding land surveying activities. Activities may include developing and distributing a survey notification postcard, coordinating right-of-entry as needed, and responding to landowner inquiries.
- **Conceptual and Detailed Design Phases** Conduct individual and small group meetings (2–4 participants) with adjacent landowners and stakeholders, as needed, to discuss design-related details, including local context and mitigation strategies for property impacts. Meetings will be conducted in person whenever possible. (Fee assumes up to 60 meetings across the conceptual and detailed design phases, with additional sessions as needed and budget allows.)
- **Final design** - Coordinate with landowners and stakeholders on final design details, such as mitigation measures and anticipated construction impacts. Engagement may include meetings, virtual discussions, and phone calls. (Fee assumes coordination with 10 property owners.)
- **Stakeholder and Public Communication**
 - Provide project updates at up to two LPSNRD Board and/or MoPac Subcommittee meetings.
 - Support LPSNRD in providing quarterly updates to agency stakeholders, including but not limited to Cass County Commissioners and Nebraska Department of Transportation.
 - Provide content for LPSNRD to distribute routine newsletter-based updates to the MoPac trail listserv. (Fee assumes monthly updates.)
 - Support LPSNRD in maintaining the project-specific ArcGIS Hubsite, ensuring content is refreshed at key design milestones, including the development and maintenance of a frequently asked questions (FAQ) section.
 - Collaborate with LPSNRD staff to integrate project updates into broader NRD communications, including direct mail, digital content, and social media, ensuring consistency across outreach channels.
- **Public Open Houses** - Support LPSNRD in hosting up to one public open houses at key design milestones to share project updates, including progress on the design. The consultant will be responsible for:
 - Developing promotional materials (postcards, social media content, press releases).
 - Preparing and presenting technical information, including displays and visualizations.
 - Managing meeting logistics, including setup/teardown and participant sign-in.
 - Summarizing public comments.

3 TOPOGRAPHIC SURVEY

- 3.1 Perform site and topographic survey to support trail design, utilizing mobile LiDAR scanner, drone-mounted LiDAR scanner, and conventional GPS methods.
- 3.2 Utilize Cass County Low Distortion Projection for horizontal coordinate system. Utilize NAVD88 Vertical Datum for all Survey and design.

- 3.3 Utilize Nebraska 811 to submit utility locate request for entire project alignment along both sides of the road(s)/route, and tie-in all utility locate marks utilizing conventional GPS surveying methods. This may include rural water, gas pipeline, electrical, all forms of communication utilities, etc.
- 3.4 Utilizing LIDAR collected datasets, extract the locations of all physical features within preferred 50 feet either side of county road centerline, center of abandoned railroad right of way or preferred trail alignment to support trail design and landowner engagement activities. Features may include, but are not limited to: fences, field drives, edges of road, power poles, utility pedestals and warning signs, location and diameter of all trees over 6 inches in diameter (unless believed to be planted, then locate all trees and note diameter), location of all tree masses, location of buildings with building use noted, ornamental boundaries and landscaped areas, mailboxes, cemetery headstones, and other objects.
- 3.5 Utilize GPS equipment to survey the location and note the size and material of all drainage culverts and other drainage structures, including driveway culverts, and flowline of stream beds.
- 3.6 Create an electronic drawing in AutoCAD Civil 3D 2025 illustrating elevations, site features, and utility locate and known utility information.
- 3.7 Utilize unmanned aerial vehicle (drone) to collect high-resolution aerial ortho imagery along trail alignment to support design effort.

4 BOUNDARY SURVEY

- 4.1 Verify with LPSNRD the desired coordinate system to utilize for trail design. (i.e. Cass County Low Distortion Projection, Nebraska State Plane Coordinate System). Utilize NAVD88 Vertical Datum for all design.
- 4.2 Perform survey research using online State and County survey record repositories, and Cass courthouse.
- 4.3 Utilize Nebraska Title Company to perform parcel research for up to 60 parcels along the desired route.
- 4.4 Review title reports and add all existing easement locations to the AutoCAD base drawing. Prepare a database of all known easements and encumbrances on each property along the route that may impact trail design.
- 4.5 Recover all pertinent Section and property corners along the trail alignment that control the right of way location. This may include Section corners, $\frac{1}{4}$ Section Corners, $\frac{1}{16}$ Section Corners, property corners, and Right of Way corners
- 4.6 Establish or re-establish missing property corners along portions of route that have deeded (fee simple) right of way.
- 4.7 Prepare a survey plat showing section and property corners found or established during the course of this survey and file the survey for public record.
- 4.8 Prepare up to five (5) plats including legal descriptions to support various aspects of trail design, such as public road right of way clarification.

5 ENVIRONMENTAL/PERMITTING

5.1 Wetland Delineation

- 5.1.1 Prior to conducting field work, identify potential Waters of the U.S. (WOTUS), including wetlands, in the study area by researching publicly-available data and resources including, but not limited to: current and historic aerial imagery, National Wetlands Inventory, National Hydrography Dataset, hydric soils, topography, and floodplains. Reviewing these resources prior to conducting the field investigation allows work to be focused on areas most likely to contain wetlands, either currently or historically, and to be impacted by the proposed project.
- 5.1.2 Conduct a site visit to delineate all potential WOTUS, including wetlands, in the study area. The on-site wetland delineation will be conducted in accordance with the 1987 USACE Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) and NRCS National Engineering Handbook, Part 650, Chapter 19. Information pertaining to vegetation, soils, and hydrology will be collected at paired data points (e.g., one wetland and one upland), with at least one set of paired data points for each aquatic resource observed on-site. Boundaries of all aquatic resources identified on-site will be recorded in the field using a hand-held GPS with sub-meter accuracy (e.g., Trimble DA2 and Field Maps for ArcGIS).
- 5.1.3 Upon completion of the site visit, analyze and compile the field data into a wetland delineation report that will detail findings and identify potential WOTUS, including wetlands, located in the study area. The wetland delineation report will include the following:
- Project site location
 - Summary of desktop review
 - Identification and mapping of boundaries for all recorded WOTUS, including wetlands
 - Identification of the types of WOTUS, including wetlands, present on-site (i.e., Cowardin classification and Nebraska Wetland Subclass)
 - Photographs of each sample point and all WOTUS, including wetlands
 - USACE Wetland Determination Data Forms
- 5.2 **Nebraska Stream Condition Assessment Procedure (NeSCAP)** - Stream mitigation is required for projects that will cause stream bed losses exceeding 0.03 acres. To facilitate 404 permitting requirements, JEO will obtain stream assessment data during the wetland delineation field visit that is needed to complete a Nebraska Stream Condition Assessment Procedure (NeSCAP).
- 5.3 **Section 404 Permit Applications** - If WOTUS, including wetlands, will be impacted as a result of the proposed project, prepare and submit Pre-Construction Notification (i.e., permit application) packages to USACE to obtain Section 404 authorization via a Nationwide Permits (NWP). Although it is anticipated that permanent, unavoidable impacts to wetlands would be less than 0.1 acre at the site and stream losses would be less than 0.03 acre, thus avoiding the requirement for compensatory mitigation, this is subject to change based on project design.
- 5.4 **Threatened and Endangered Species Coordination** - Submit the project using the Nebraska Game and Parks Commission (NGPC) Conservation Environmental Review Tool (CERT) and coordinate with NGPC and US Fish and Wildlife Service (USFWS) to ensure threatened and

endangered species conservation conditions are met. Conduct required pre-construction species surveys. Train contractors to perform any required regular occurring surveys during construction.

- 5.5 **NPDES Construction Stormwater (CSW) Permit and SWPPP** - Compile a construction Stormwater Pollution Prevention Plan (SWPPP) book and submit a Notice of Intent (NOI) to the Nebraska Department of Environment and Energy (NDEE). After the final stabilization requirements have been met, submit the Notice of Termination (NOT).

6 DRAINAGE ANALYSIS

6.1 Data Collection

- 6.1.1 Obtain LiDAR, as-built drawings, stream gage data, land use data, and USGS Web Soil Survey data.
- 6.1.2 Includes editing and formatting of LiDAR, land use data, and topographic survey into smaller datasets for 2D hydraulic model development.

6.2 Site Visit and Non-Bridge Sized Culvert Condition Assessment

- 6.2.1 Conduct a project site visit along the corridor following notice to proceed to confirm hydraulic characteristics, obtain additional site photos, and other pertinent information such as sedimentation, condition of pipe, and existing erosion concerns.
- 6.2.2 Excludes TV inspection and private subsurface drainage evaluation and inspection.
- 6.2.3 Conduct a second site visit following 30% review to verify design.

6.3 Hydrologic Analysis

- 6.3.1 Perform hydrologic analysis to determine runoff conditions for the contributing drainage areas for the existing and proposed drainage structures.
- 6.3.2 Design discharges will be computed using NOAA precipitation data in conjunction with typical methodologies such as the Rational Method and SCS Method. Chosen methodology for each drainage region/hydraulic crossing site will be based on drainage area size and engineering judgment.
- 6.3.3 Design discharges will be computed for the 10-, 25-, and 100-year frequency storm events.
- 100-year frequency storm event will be used for floodplain analysis purposes only.

6.4 Existing Conditions Hydraulic Analysis

- 6.4.1 Develop existing conditions two-dimensional (2D) HEC-RAS Model to show existing hydraulic performance of roadway culverts, roadside ditches, and drainageways. This analysis will identify existing flow paths, overtopping frequencies, and inundation extents in addition to any conveyance inefficiencies in the existing corridor.
- 6.4.2 The existing conditions 2D model will be used to establish a baseline condition for which to evaluate against the proposed alternative(s).
- 6.4.3 The model will incorporate topographic survey coupled with the most recently available LiDAR data and National Land Cover Database (NLCD) land use data to create a pre-project terrain model that includes each drainageway.
- 6.4.4 Any terrain/structure modifications documented in the topographic survey or site visit will be incorporated into the model.

6.5 **Proposed and Alternate Hydraulic Analyses**

- 6.5.1 Create proposed (post-project) conditions model by modifying the existing conditions model to reflect the proposed conditions for the preferred alternative at each hydraulic crossing.
- 6.5.2 Alternative analysis may include one additional proposed conditions alternative evaluation at each tributary/drainageway crossing.
- 6.5.3 Proposed crossings should meet a 10-year overtopping design for drainage areas less than 100 acres, and a 25-year overtopping design for drainage areas greater than 100 acres where possible.
 - If unachievable, at a minimum, proposed alternatives should meet existing hydraulic performance and not increase roadway overtopping frequency.
- 6.5.4 Roadside drainage ditches will be evaluated for proposed conditions, ensuring conveyance needs are met .
- 6.5.5 Upstream and downstream landowner impacts from drainage modifications for proposed conditions will be evaluated and limited wherever possible.

6.6 **Scour and Energy Dissipation Analysis and Design**

- 6.6.1 Where new bridges are proposed, proposed scour depths will be calculated for the final proposed structures utilizing HEC-18 methodologies. NCHRP equations will be used to calculate abutment scour.
- 6.6.2 Culvert outlet velocities will be analyzed, and where necessary, energy dissipation design will be completed. Types of dissipation will vary based on resulting velocities.

6.7 **Risk Assessment**

- 6.7.1 Complete an assessment of alternatives and the risks associated with each alternative to arrive at the most practicable design.

6.8 **Floodplain Analysis and Permitting**

- 6.8.1 Utilize final proposed conditions 2D hydraulic model to quantify impacts to the water surface elevations between the existing and proposed alternative(s) for the 100-year design discharge. Alternatives will be evaluated to ensure they cause no more than a foot of rise at any location.
- 6.8.2 Floodplain certifications, if appropriate based on evaluation results, will include the following tributaries:
 - Weeping Water Creek near Wabash (Missouri Pacific Railroad)
 - Tributary of Weeping Water Creek near 334th Street and McKelvie Road
 - Fountain Creek at Kleiser Road
 - Fountain Creek at Allison Drive
 - Platte River/Fountain Creek at W Lake Park Drive
- 6.8.3 Deliverables include a floodplain memorandum with summary documentation to be submitted to the County.
- 6.8.4 Individual certifications, if appropriate based on evaluation results, will be provided and attached to the floodplain memorandum for each floodplain crossing.

6.9 QA/QC

6.9.1 Perform an internal quality assurance/quality control (QA/QC) review of the drainage design.

6.9.2 QA/QC will be completed following the completion of:

- Hydrology
- Existing Conditions/Baseline hydraulic model development
- Proposed Conditions and Alternative hydraulic model(s) development
- Final Design

6.10 Design Memorandum

6.10.1 A hydrologic and hydraulic memorandum will be prepared that describes work completed as part of the drainage analysis.

6.10.2 The memo may include descriptions of preliminary design data, field inspection photographs (electronic), relevant project information, existing and proposed modeling effort, and recommendations for the proposed construction.

7 STRUCTURAL ASSESSMENT

7.1 Conduct a project site visit / inspection of the existing bridge sized structures along the corridor to confirm structural condition, obtain additional site photos, and other pertinent information.

Anticipated bridge/culvert structures:

7.1.1 Existing Railroad (assumed to be timber) Bridge east of Wabash

- Assume bridge can remain in place and converted to pedestrian use.
- Anticipated bridge rehab/repair items:
- New timber bridge deck over existing RR ties
- New timber railing

7.1.2 Bridge Structure – 334th Street just south of McKelvie Road – County Bridge Structure: C001302520

- Existing county bridge structure is a single span, 30' long multi steel girder bridge in serious condition that is currently being replaced with a concrete box culvert.
- Assume concrete box culvert extension of the new (under construction) county road twin concrete box culvert structure.

7.1.3 Bridge Structure – Kleiser Road (East) – County Bridge Structure: C001311220P

- Existing county bridge structure was replaced in 2013 with a new (non-bridge sized) single corrugated metal pipe (CMP) with sheet pile wing walls.
- Assume existing CMP can be lengthened for new trail.

7.1.4 Bridge Structure – Kleiser Road (West) over Fountain Creek – County Bridge Structure: C001311215P

- Existing bridge was built in 2016. 3 span, 92' long precast plank bridge in very good condition. 28' clear roadway width.
- Assume new single span prefabricated steel truss pedestrian bridge separate from existing county bridge structure.

- 7.1.5 Bridge Structure – Allison Drive – County Bridge Structure: C001302310P
 - Existing county bridge structure was replaced in 2013 with new (non-bridge sized) twin corrugated metal pipes (CMP) with sheet pile wing walls.
 - Assume existing CMP can be lengthened for new trail.
- 7.2 The results of the structural inspection will be summarized in a brief memorandum. The memorandum will include recommendations, conceptual design, and opinions of probable cost estimates for the one recommended design for each bridge sized structure location (3 bridge sized structures, see above for details).
- 7.3 One review meeting (virtual) will take place to discuss structural inspection results prior to preliminary design.
- 7.4 Deliverables: Structural memorandum and opinion of probable cost estimates.
- 7.5 Geotechnical Investigation
 - 7.5.1 Thiele Geotech will serve as a subconsultant to JEO. Thiele will perform up to 28 test borings, soil samples, provide guidance on bridge piling information and provide a geotechnical report for Engineering Design.
 - Borings at new bridge structures will be approximately 80' all other borings will be 10' to 15'.

8 CONCEPTUAL TRAIL DESIGN

- 8.1 Develop a Basis of Design Memorandum to memorialize the design direction established through the project kickoff, site investigation tour, local/state/federal regulations, and best practices for multimodal design. The memorandum will serve as a living document that can be updated if design changes or subsequent findings are made. Deviation from the final Basis of Design Memo will be recorded through written documentation.
- 8.2 Prepare 30% conceptual design, consisting of horizontal and vertical alignment and grading limits, along both sides of the roadway for the entire length of the project to determine critical locations of excessive impact or cost. The improvements shall be displayed on a roll plot; a project plan set will not be developed for this design phase.
- 8.3 Conduct one (1) site visit to conduct a design review based on the draft conceptual design. This review shall include grading limits of impact, crossroad and driveway implications, constructability, site distance requirements, and impact and proximity to features within the public right-of-way.
- 8.4 Considering all sources of information gathered from the conceptual design phase thus far, a preferred alternative will be selected that denotes which side of the roadway along Alternative D from the feasibility study is preferred in any given location of the project, including preferred locations of road crossings.
- 8.5 Conduct a review with the Owner to confirm the preferred alignment. (One meeting)
- 8.6 One (1) round of alignment refinements will be made that balance the needs of the project and are fiscally responsible. A single alignment will be chosen at this point of the project and used moving forward. Any change in the alignment outside of public right-of-way or to the opposite side of the roadway may warrant scope and fee negotiations via an amendment.
- 8.7 Preliminary Bridge Design - Preliminary Bridge Type, Size, and Location (TS&L) for each bridge site will be designed according to NDOT State Bridge Standards. See the drainage analysis section for bridge structure hydraulic analysis.

- 8.8 Prepare a 30% complete opinion of probable construction cost inclusive of the preliminary bridge design.
- 8.9 Perform an internal quality assurance/quality control (QA/QC) review of the conceptual design.
- 8.10 Conduct a review with the Owner to confirm the preferred alignment and opinion of probable construction cost. (One meeting)

9 FINAL DESIGN

After the conceptual design phase, the Consultant will move into preliminary and final design of the trail, drainage, and bridge structure(s).

9.1 Preliminary Trail Design

- 9.1.1 Preliminary Trail Design (60%) - The design will be advanced from *Phase 9 – Conceptual Design Phase* through preliminary according to CADD standards using Autodesk Civil 3D.
- 9.1.2 Prepare 60% complete preliminary plans, to include:
- Cover sheet and general location maps
 - Survey control sheets
 - Typical section(s) of trail
 - Horizontal alignment sheets
 - Aerial plan view sheets with ROW data (50 Scale)
 - Trail plan and profile sheets (including retaining wall locations and construction notes) (50 Scale)
 - Preliminary drainage plan and profile sheets (excluding driveway culverts)
 - Trail cross sections
- 9.1.3 Prepare a 60% complete opinion of probable construction cost.
- 9.1.4 Perform an internal quality assurance/quality control (QA/QC) review of the preliminary submittal package.
- 9.1.5 Conduct one (1) site visit to conduct a design review based on the 60% design.
- 9.1.6 Conduct a review with the Owner to confirm the preliminary design, opinion of probable construction cost, and special provisions. (One meeting)
- 9.1.7 Deliverables: 60% review plan set and opinion of probable cost estimate.

9.2 Final Trail Design

- 9.2.1 Final Trail Design - The design will be advanced from Preliminary Trail Design (60%).
- 9.2.2 Prepare 90% complete plans, to include:
- All sheets previously listed for the 60% complete plans.
 - Insertion of design details sheets.
 - Geometrics and Grade sheets (50 Scale)
 - Temporary Traffic Control/Phasing Sheets
 - Completion of special provisions and specifications.
 - Wayfinding locations for mile markers and amenities along the project.
- 9.2.3 Perform an internal quality assurance/quality control (QA/QC) review of the 90% completed plans and specifications.
- 9.2.4 Finalize construction drawings and specifications subject to Owner's approval.
- 9.2.5 Prepare a list of final construction quantities and furnish a final opinion of construction cost.

- 9.2.6 Attend one (1) meeting to review final design of probable construction cost, obtain approval of the final plans, specifications and bid documents and receive authorization to submit final plans, specifications and bid documents to the appropriate agencies for review and approval.
- 9.2.7 Prepare necessary permit applications to construct the trail crossing improvements adjacent to Highway 1 with the Nebraska Department of Transportation (NDOT). Owner to sign and send actual submittal to NDOT and pay all fees associated with the permit application.
- 9.2.8 Deliverables: Final plan set, specifications, bid documents, and opinion of probable construction cost.
- 9.3 **Final Bridge Design**
- 9.3.1 Pedestrian bridge / box culvert extension plans will be developed for each bridge site (3 total bridge sized sites) in accordance with AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, Current Edition and with NDOT Bridge Design Manual and associated drafting standards in the current version of Microstation CONNECT.
- 9.3.2 The railroad timber bridge site with proposed rehabilitation/repairs to convert to pedestrian use, anticipated plan sheets includes:
- Bridge General Notes / Quantities / Index
 - Bridge General Plan and Elevation
 - Repair Details
 - Retrofit Bridge Deck Details
 - Retrofit Bridge Rail Details
- 9.3.3 The bridge site with a proposed concrete box culvert extension, anticipated plan sheets include:
- General Notes / General Plan and Sections
 - End Section Details
 - Drainage and Culvert Foundation Details
 - Bill of Bars
- 9.3.4 The bridge site with a proposed new prefabricated, pre-engineered steel truss bridge structures, anticipated plan sheets include:
- Bridge General Notes / Quantities / Index
 - Bridge General Plan and Elevation
 - Geological Profile and Pile Layout
 - Abutment Plan and Elevation
 - Abutment/Wingwall/Backfill Details
 - Bridge Bill of Bars and Approach Slab Details
- 9.3.5 Design Support for Retaining Walls
- Wall type recommendations/selection
 - Wall structural design and analysis as necessary (dependent on wall type)
 - Structural details for construction
 - Applicable performance specifications (dependent on wall type)
 - Construction specifications and special provisions.

- 9.3.6 Developed Specifications/Special Provisions: The bridge design/construction will be in accordance with the current edition of NDOT Standard Specifications for Highway Construction. Special provisions will be created as required to supplement the standard specifications and will be included for the bidding documents.
- 9.3.7 Plans, specifications, and opinion of probable cost will be completed to 90% complete and submitted to be reviewed with the LPSNRD. Following review, JEO will incorporate any comments and finalize 100% signed plans and specifications for bidding. QA/QC will be performed on all deliverables prior to submittals.
- 9.3.8 Deliverables: Final plan set, specifications, bid documents, and opinion of probable construction cost.

10 BIDDING & NEGOTIATION

- 10.1 Provide assistance with authorizing the advertisement for bids and setting the bid date and time.
- 10.2 Send Notice to Bidders to Contractors, Builder Bureaus and Plan Rooms.
- 10.3 Furnish electronic or paper copies of plans, specifications, and contract documents of the project to prospective bidders, material suppliers, and other interested parties upon their request.
- 10.4 Respond to inquiries from prospective bidders and prepare any addenda required.
- 10.5 Assist the Owner in securing construction bids for the project.
- 10.6 Assist the Owner at the bid opening, consisting of one (1) meeting.
- 10.7 Tabulate and analyze construction bids and report on them to the Owner, together with advice and assistance to the Owner in award of construction contract.
- 10.8 Attend one (1) subcommittee meeting with the Owner to present and review all bids received and assist the Owner in award of the construction contract.
- 10.9 Attend one (1) LPSNRD Board meeting with the Owner to present and review all bids received and assist the Owner in award of the construction contract.
- 10.10 Prepare and submit necessary information to the Owner for project award approval.
- 10.11 Prepare Contract Documents (Construction Contract and Notice to Proceed) for execution by the Prime Contractor(s) and the Owner; provide cursory reviews of all insurance and bonds submittals; then advise the Owner to proceed with execution of all documents.
- 10.12 Provide copies of all executed Contract Documents to the Owner and Prime Contractor(s).

**Tasks 11 and 12 are considered optional services and are not included in the base scope of work. If these services are needed, they would require a contract amendment and approval from LPSNRD prior to proceeding.*

11 *CONSTRUCTION ADMINISTRATION

- 11.1 Schedule and conduct a Pre-construction Conference, consisting of one (1) meeting prior to construction beginning. This conference (Pre-Con) will review the required timelines set forth in the specifications, lines of communication, key contacts of those involved, review any conflicts with utilities or schedules, review the schedule proposed by the Contractor, review any requirements of the Contractor for locates and staking needs, etc. Summary of the Pre-Construction Conference will be provided to all participants by the Engineer.
- 11.2 Schedule and conduct up to twelve (12) progress meetings with Owner and Contractor.
- 11.3 Provide interpretation of the plans and specifications, when necessary.
- 11.4 Review and process Contractor's monthly payment applications (up to 12) and change orders (up to 3) and provide to Owner for review and approval.
- 11.5 Attend up to six (6) MoPac Subcommittee meetings during construction to provide project updates and assistance with pay applications, change orders, etc.
- 11.6 Attend up to six (6) LPSNRD Board meetings during construction to provide project updates and assistance with pay applications, change orders, etc.
- 11.7 Consult with and advise Owner during construction regarding all aspects of the project.
- 11.8 Provide baseline survey for horizontal and vertical controls for the proposed improvements, to be referenced by both the Engineer and Contractor during the construction of the project.
- 11.9 Provide the contractor or their subcontractors with electronic surface models for use in grading or similar operations. These files will be in AutoCAD C3D or similar format.
- 11.10 Provide Construction staking of the proposed infrastructure improvements.
 - 11.10.1 Storm Sewer Pipe and Culverts Improvements
 - 11.10.2 Bridge Abutments
 - 11.10.3 Trail Alignment
 - 11.10.4 Limits of Construction
 - 11.10.5 Permanent Traffic Control Signage
- 11.11 Coordinate and review geotechnical soil and concrete testing results. Construction material testing (compaction and concrete compressive strength) cost to be paid for by the Owner. Any retesting and testing of the water distribution system are the responsibility of the Contractor.
- 11.12 Perform measurement of all final as-built quantities.
- 11.13 Conduct a final inspection of project with the Contractor and Owner.
- 11.14 Prepare a final punch list of outstanding items needing completion prior to finalization of the project based on field observations and reviews by the Resident Project Representative, Contractor, and Owner.
- 11.15 Recommend to the Owner the acceptance of the project and complete the necessary certificate(s). This recommendation will be based on the Engineer's observation of construction utilizing professional judgment and accepted tests to determine that the Contractor has completed their contracts in substantial compliance with the plans, specifications and contract documents.
- 11.16 Prepare Record Drawings.
- 11.17 Assist the Owner during the 12-month warranty period with questions and coordination with the contractor for warranty period correction items.

- 11.18 Issue 6- and 11-month warranty letters to the Owner and Contractor. Conduct field reviews of project should a field inspection be necessary.
- 11.19 Issue a warranty period correction letter to the contractor for warranty repair items if necessary.

12 *RESIDENT PROJECT REPRESENTATION

- 12.1 JEO will furnish a full-time Resident Project Representative (RPR) to observe construction progress and quality of the work. Approximately 40 hours a week for 50 weeks.
- 12.2 The duties and responsibilities of the RPR are described as follows:
- 12.2.1 Review of contractors work for general compliance with the plans and specifications.
- 12.2.2 Complete Construction Observation Reports daily, reports to include:
- Weather Report
 - Site Personal
 - Site Equipment
 - Site work progression
 - Conflicts
 - Onsite meetings
- 12.2.3 Coordinate pay quantities with contractor and engineer.
- 12.2.4 Review of materials delivered to the site for specification compliance.
- 12.2.5 Assist the engineer in interpretation of the plans and specifications to the contractor.
- 12.2.6 Review and coordinate materials testing by assigned testing firm.
- 12.2.7 Attend progress meetings.
- 12.2.8 Compile records for use in preparing record drawings
- 12.3 Storm Water Pollution Plan (SWPPP) inspection:
- 12.3.1 Conduct SWPPP inspections every 14 days or within 24 hours of a 0.5" rainfall event beginning after initial breaking ground and continuing until final stabilization of site (Inspections performed until June 1, 2027)
- 12.3.2 Maintain SWPPP logs, inspection results, and maintenance records within the SWPPP book to comply with State regulations.
- 12.3.3 Direct Contractor to maintain best management practices (BMP's) as designed.
- 12.3.4 Provide NPDES Permit Administration and Monitoring
- 12.4 Materials Testing
- 12.4.1 Thiele Geotech will serve as a subconsultant to JEO for materials testing.
- Concrete strength testing
 - Soil density tests

13 OWNER RESPONSIBILITIES

- 13.1 Provide timely review of documents or requests for information.
- 13.2 Assist in coordination with Cass County regarding any right-of-entry needed to complete land surveying activities.
- 13.3 LPSNRD to conduct bird surveys, if needed.

14 FEE

- 14.1 JEO proposes to provide the services defined above for an **hourly not-to-exceed fee** as outlined in the fee schedule below:

Task	Fee	
1	Project Management	\$182,620
2	Stakeholder Engagement	\$156,810
3	Topographic Survey	\$55,180
4	Boundary Survey	\$100,250
5	Environmental/Permitting	\$48,750
6	Drainage Analysis	\$175,280
7	Structural Assessment	\$37,360
8	Conceptual Trail Design	\$183,610
9	Final Trail Design	\$996,520
10	Bidding and Negotiation	\$19,135
	Reimbursables	\$24,000
Total		\$1,979,515

JEO may re-allocate fee between tasks, as needed, provided the total fee remains unchanged.

15 PROGRESS PAYMENTS

- 15.1 JEO will bill for services completed near the end of each month. All invoices are due payable upon receipt and are considered delinquent after 30 days.
- 15.2 Invoices not paid within 30 days may be charged interest at the annual rate of 12% (1.0%/month).
- 15.3 Payments will be applied first to the interest then principal.
- 15.4 Work by JEO will cease if invoices have not been paid in full within 60 days and will not begin again until full payment with interest has been received.

16 CONTRACT TIME

- 16.1 JEO will work as expeditiously as possible, pending authorization from Owner to complete the tasks in this project.
- 16.2 A preliminary schedule is included; however, it is subject to change. JEO will work with LPSNRD to develop and maintain a schedule of project milestones.
- 16.3 Anticipated notice to proceed: February 20, 2025
- 16.4 If the Basic Services covered by this Agreement have not been completed by June 1, 2027, through no fault of JEO, extension or adjustment of JEO's services beyond that time shall be compensated as additional services.
- 16.5 The information in this proposal and fee estimate is valid until April 1, 2025. After that time, the scope of services and estimated are subject to adjustment.

17 EXCLUSIONS

- 17.1 Land rights and ownership.
- 17.2 Operations and Maintenance Manual
- 17.3 Prebid Meeting
- 17.4 Any permit fees associated with permit applications
- 17.5 Special meetings and meetings not outlined in the Scope of Services
- 17.6 Updates to water, sanitary sewer and electrical distribution plat maps (existing and proposed).
- 17.7 Compensatory wetland or stream mitigation
- 17.8 Environmental assessments or permitting, not outlined in the scope of services
- 17.9 Preliminary and final plats
- 17.10 Phase I or II ESA
- 17.11 Site design of utilities and streets
- 17.12 Architectural services
- 17.13 Property title searches or title commitments
- 17.14 Traffic study
- 17.15 Temporary stream crossings
- 17.16 Rezoning or application for conditional use permits
- 17.17 Review fees associated with building permits, etc.
- 17.18 Permit fees, if any
- 17.19 Legal descriptions and/or easements (both temporary and permanent) not within the proposed platted area
- 17.20 Landscaping design
- 17.21 Bridge Load Rating – Box culvert extension load rating will match the existing box culvert load rating.
- 17.22 Irrigation layout
- 17.23 Installation and maintenance of SWPPP measures
- 17.24 Borrow site location determination

18 REIMBURSABLE EXPENSES

- 18.1 Typical reimbursable expenses are included in the fee and cover: mileage for trips required to complete the work defined above, long-distance phone calls, meals, other travel expenses, software, copies/prints, and faxes.
- 18.2 Other reimbursable expenses shall be billed at 110% of their cost.

19 ADDITIONAL TERMS

- 19.1 The General Conditions are specified in Exhibit B.



February 10, 2025

MoPac East-Lied Connector Subcommittee
Lower Platte South NRD
3125 Portia Street
Lincoln, NE 68521

RE: MoPac East to Lied-Platte River Bridge Connector Trail Design and Engineering

Subcommittee Members:

On behalf of the JEO-Toole team, thank you for the opportunity to continue working with the Lower Platte South NRD on this project.

As you review the scope and fee, you may notice that the estimated design fee exceeds the feasibility study estimate, which included a 40% contingency. This isn't unusual at this stage, given the number of unknowns to be addressed during conceptual design. It is common to scope projects only through conceptual design first, using that milestone to refine final design estimates. In this case, our scope includes full design, requiring us to account for uncertainties upfront to reduce the likelihood of contract amendments later.

Some of the key uncertainties we'll resolve in conceptual design include:

- Right-of-way (ROW) limits
- Potential trail crossings to avoid driveways and other ROW constraints
- Number and type of drainage crossings required
- Whether retaining walls will be needed to mitigate drainage impacts
- Condition of the former rail bed and the level of engineering required
- Trail width, grading limits

The conceptual design milestone can also provide LPSNRD the clarity needed to confidently reaffirm its decision to move forward with final design.

While our estimate includes flexibility to address potential unknowns and challenges, we are committed to using only the necessary resources to complete the work efficiently. The allocated funding presents a significant opportunity to close the trail gap, and we remain committed to being responsible stewards of these public dollars.

Let us know if you have any questions. We appreciate your time and consideration.

Sincerely,

Andrea Gebhart, *Project Manager*
Planning & Engagement Department Leader
JEO Consulting Group
p. 605.212.0523
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