



SCOPE OF SERVICES: Exhibit A

Project Description:

The City of Crete is looking to improve streets through gap paving projects and an alley repaving project. The street projects will include construction with concrete pavement with curb, sidewalk, curb ramps, and where necessary, storm sewer and inlets. The alley repaving project will include the removal and replacement of concrete pavement. The three (3) blocks of gap paving and one (1) block of alley paving to be improved include:

Project 304:

Alley Between 12th Street and 13th Street, Oak Avenue to Norman Avenue
- 7" concrete pavement, 20' wide alley with valley gutter

Project 300:

21st Street – Norman to Oak (1 block)
Oak Avenue – 21st Street to 22nd Street (1 block)
- 7" concrete pavement, 32' wide with curb and gutter

Project 305:

Oak Avenue – 20th Street to 21st Street (1 block)
- 7" concrete pavement, 32' wide with curb and gutter

For this project, JEO Consulting Group, Inc. (JEO) will perform a topographical survey of the four gap paving projects to move them forward into design. JEO will then proceed with creating construction documents for the improvements and supporting the City through bidding and negotiation and construction phase services. JEO will also provide assessment services.

Phase 1: Topographic Survey

Objective: Conduct site visits and field survey to collect data necessary for the design and construction phases. Coordination with the City of Crete may be necessary for access or permission for some areas.

Deliverable: None.

- **One Call:** Schedule a utility locate "One-Call" and/or request for utility maps within the existing project areas and incorporate into drawings. Coordinate with both public and private utilities as necessary to properly document utilities within the project area.
- **Topographic Survey:** The Consultant will perform the necessary topographic ground survey including the existing street centerline, intersecting streets, alleys and drives, the tying of located land monuments to the existing centerline, cross-sections and profiles necessary for the hydraulic design. A topographic survey will be performed using electronic 'Total Station' technology. Copies of field book records and electronic records can be submitted to the City at the completion of final design upon request. Natural topographic features and man-made features will be recorded by coordinates to the nearest one-hundredth (0.01) of a foot. All such topographic features, which are pertinent to the design or are necessary to properly show the effect of the proposed work upon the adjoining property and/or improvements, will be recorded.



The limits of the survey along each street to be improved shall extend one-quarter block before and after the limits of improvements. The survey will also extend one-quarter block away at each intersecting street. Collect available utility location information and incorporate on preliminary plans (gas, telephone, electric, water, sanitary sewer, storm sewer, communications, etc.) based on One-Call provided information.

- **Prepare Base Map:** Prepare the base map using the topographic survey data..

Phase 2: Preliminary Design

Objective: During this task, the design team will review feedback from the kick-off meeting, site visit, and City input to prepare a 60% complete plan set that illustrates the basis of the improvements to be made.

Deliverable: The deliverable shall include a 60% complete plan set and OPC.

- Project Management during the Preliminary Design phase, including coordination between all parties to ensure a successful project delivery, preparing progress reports, ensuring tasks are followed through.
- Client coordination includes providing timely and coordinated communication to and from the City for requests for information, providing progress updates, scheduling meetings, and receiving and providing feedback.
- Develop the preliminary street design to show the basis of the work to be furnished and performed by a Contractor as part of the project. The plans will include sufficient information to review the roadway improvements limits, curb ramps, street alignments, profiles, cross sections, geometrics, and grades. A complete plan set is likely to include a title sheet, location map, site map, typical sections, construction and removal, paving, geometrics and grades, and preliminary details. A 60% preliminary engineer's OPC will also be developed through this effort.
- Determine the existing ROW width in the area.
- Coordinate with public and private utilities within the project area to identify potential conflicts. Effort includes coordination with utility companies, assembling a utility memo together, and assembling sheets with utility lines clearly identified. It is assumed this project will have 10 Utility "Touchpoints" during the design phase, including back and forth conversations in person, by email, or by telephone. Additional utility touchpoints can be added as an additional expense.
- Conduct an internal 60% complete QA/QC review of the plan set and OPC
- Project Meetings Subtask
 - a. Project Kick-off Meeting: Kick-off meeting shall introduce key members of the project design team, review scope, schedule, budget, critical success factors, as well as identify potential project risks and associated mitigations. Special emphasis on the first tasks of the project will be reviewed at the meeting. A site visit of the project will also be conducted to review the project area.
 - b. 60% Design Review Meeting: Conduct a 60% complete review meeting with City staff to review the preliminary design plans and opinion of probable cost (OPC). A project walk-through via a plan-in-hand will occur during this review and include the design team, city officials, and utilities. All comments identified by the Client during this review will be incorporated into the final design of the project..



Phase 3: Final Design

Task 3.1: 90% Complete Design

Objective: During the 90% complete design process we will incorporate any final comments and details into the project plans and prepare for final production.

Deliverable: Deliverables during this phase include a 90% complete plan set, an opinion of probable cost, and special provisions.

- Project Management during the Final Design phase, including coordination between all parties to ensure a successful project delivery, preparing progress reports, ensuring tasks are followed through.
- Client coordination includes providing timely and coordinated communication to and from the City for requests for information, providing progress updates, scheduling meetings, and receiving and providing feedback.
- Revise designs based on 60% complete comments received.
- Finalize the design for the streets and add the necessary relevant details for all the improvements. Revise the OPC as necessary to reflect the final design documents.
- Develop the erosion control sheets and prepare storm water pollution prevention (SWPPP) plans and details for the proposed project areas.
- Review constructability of improvements and design temporary measures to allow for the construction of the improvements at all project areas while keeping residences accessible.
- Submit plans to utilities for purposes of utility coordination for construction as necessary. Conduct a utility coordination meeting to discuss conflicts and finalize relocation plans and schedules.
- 90% Design Review Meeting: Conduct a 90% complete review meeting with City staff to review the 90% complete plan set, OPC, and special provisions. All comments identified by the Client during this review will be incorporated into the final design of the project.

Task 3.2: PS&E Design Finalization Process

Objective: The objective during this task is to finalize and sign and seal the plan by a Professional Engineer and specification documents in preparation for bidding and negotiation.

Deliverables: Deliverables for this task include three (3) sets of final plans on 11"x17" paper and electronically in pdf format.

- Receive 90% complete comments and revise plans and specifications.
- Create construction document set and sign and seal by engineers registered in the State of Nebraska.
- Provide three (3) sets of final plans to the City printed on 11"x17" paper and an electronic copy (.pdf).
- Conduct an internal 100% complete QA/QC review of the plan set and OPC.
- The final paper and electronic files resulting from the design shall be the property of the City of Crete.



Phase 4: Permitting

Task 4.1: Stormwater Pollution Prevention Permitting

Objective: Comply with the Clean Water Act to reduce discharges from the project area into Waters of the United States. While the project blocks are individually smaller than thresholds requiring a NPDES Permit, collectively they are part of a singular project and exceed the thresholds, therefore require this permit.

Deliverable: Deliverables will include a SWPPP and NPDES permit.

- Prepare environmental consultation letters and submit letters to applicable local, state, and federal agencies.
- Prepare a Storm Water Pollution Prevention Plan (SWPPP) book complying with State regulations. Coordinate the City's signature and submit a Notice of Intent (NOI) to obtain an NPDES Stormwater Discharge permit. City shall be responsible for any applicable permit fees.

This scope does not include any wetland delineation, mitigation, 404/408 permitting, or the preparation of NEPA documentation (EA, CE, etc). If required, these services can be provided as an additional service.

Phase 5: Bidding and Negotiation

Objective: Solicit bidders and assist in obtaining construction bids according to state statutes. This phase only applies to the concrete pavement gap paving projects.

Deliverable: Bid tabulations and a written recommendation of award.

- Furnish copies of plans, specifications, and contract documents of the project to prospective bidders, material suppliers, and other interested parties upon their request and payment of the purchase cost established for the documents.
- Respond to inquiries from prospective bidders and prepare any addenda required.
- Assist the City in securing construction bids for the project.
- Assist the City at the bid opening. (1 meeting).
- Tabulate and analyze construction bids and report on them to the City, together with advice and assistance to the City in award of construction contract.
- Prepare and submit a Letter of Recommendation to the City for project award approval.
- Prepare Contract Documents for execution by Contractor and the City, and approval by City and City's legal and insurance counsel.

Phase 6: Construction Administration

Objective: Assist the City during the construction of the improvements. The scope of services is based on an estimate of sixteen (16) weeks of construction management services. Assist with the creation of the assessment plans for the improvements.

Deliverable: None.

- Coordinate and attend one (1) Pre-construction Conference, on site, prior to construction beginning.



- Review shop drawings (submittals) and related data supplied by the Contractor.
- Provide interpretation of the plans and specifications when necessary.
- Review Contractor's monthly pay applications and provide to the City for review and approval. The scope of services is based on six (6) pay applications for the project.
- Consult with and advise the City during construction.
- Review geotechnical soil and concrete testing results, as needed. Testing to be contracted by and paid for by the Engineer. The Engineer to coordinate when testing is required.
- Conduct one (1) final inspection of the project with the Contractor and Owner at the project substantial completion.
- Recommend to the City the acceptance of the project and complete the necessary certificates. These recommendations will be based on the Engineer's observation of construction utilizing professional judgement and accepted tests to determine that the Contractor has completed their contracts in substantial compliance with the plans, specifications, and contract documents.
- Prepare record drawings to illustrate the final constructed improvements should there be any modifications from the plans.
- Create assessment documents for the improvements and include the preparation of a report of total costs, preparation of the assessment schedule and assessment plat, and attendance at the assessment hearing.
 - a. The City is responsible for the title research and to provide legal descriptions, property owner names, mailing address, etc. the Engineer to prepare the Assessment Schedule and Plats.

Task 6.1: Construction Staking

Objective: Provide construction staking with horizontal and vertical control for the proposed improvements.

Deliverable: On site construction staking.

- Provide baseline horizontal and vertical control for the proposed improvements to include:
 - a. Paving – Mainline/Curb & Gutter every 25 feet (three (3) total trips)
 - b. Line and cut to flow line of storm sewer pipe and inlets (stake each end). (two (2) total trips)
 - c. This effort does not include subgrade staking or settings stakes for tree removal or utility relocation. These additional services can be provided via an amendment if deemed necessary.

Phase 7: Construction Observation

Objective: Provide construction personnel on site on a part-time basis to observe construction procedures for compliance with the plans, specifications, and contract documents.

Deliverable: Site observation reports.



- Furnish a part-time Resident Project Representative (RPR) to observe the construction progress and quality of work, estimated at 192 hours (12 hours/week for 16 weeks). Additional delays beyond the engineer's control or extensions provided to the Contractor may require additional effort and will be negotiated and reviewed with the City of Crete. Key inspections to include:
 - a. Marking of removal limits with paint.
 - b. Subgrade preparation and compaction.
 - c. Concrete pavement placement.
 - d. Storm sewer placement.
- In addition to the RPR key inspections, duties shall include:
 - a. Review of Contractor's work for general compliance with the plans and specifications.
 - b. Complete Construction Observation Reports when on site.
 - c. Coordinate pay quantities with the Contractor and Consultant.
 - d. Assist in the review of shop drawings.
 - e. Assist the Engineer in interpretation of the plans and specifications to the Contractor.
 - f. Review and coordinate material testing by the assigned testing firm.
 - g. Prepare record drawings in pdf format.

Phase 8: Geotechnical Testing

Task 8.1: Geotechnical Testing

Objective: Geotechnical testing services will be contracted by Thiele as a subconsultant to JEO and coordinated through JEO.

Deliverables: Geotechnical Report

- This includes field sampling, laboratory testing, and the development of a Geotechnical Report.

Phase 9: Materials Testing

Task 9.1: Materials Testing

Objective: Material testing services will be contracted by Thiele Geotech as a subconsultant to JEO and coordinated through JEO.

Deliverables: Material test results.

- This includes twelve (12) site visits (3 per block) for subgrade compaction testing, including the use of modified proctors and conducting Atterberg limits (up to four (4)). Up to forty (40) concrete compressive tests (2 sets of 5 per block) will be conducted on cylinders cast by Thiele staff.



Items not included with this scope that can be provided as Additional Services:

1. Any services or meetings not specifically mentioned above.
2. Land acquisition services, easement, ROW descriptions, and negotiations with landowners.
3. Water, sanitary sewer, service lines or associated manhole/water valve box design, or utility relocations.
4. Structural design or any retaining wall designs.
5. Storm sewer design or analysis outside the immediate blocks covered by this project.
6. Electrical design.
7. Temporary or permanent traffic control, including pavement marking design.
8. Drainage study or storm sewer condition analysis, including CCTV and visual inspection.
9. Title research or legal descriptions.
10. Setting survey monuments to identify street right-of-way.
11. Any website assistance or public outreach.

The City shall provide:

1. Existing water, sanitary sewer, and storm sewer as-built drawings or other relevant mapping data.
2. Existing sanitary sewer and water main and service line information
3. Title research and furnish property ownership list including owner names, mailing addresses, and legal descriptions.
4. Notify property owners of meetings.
5. Schedule and attend meetings.
6. Create Street Improvement Projects with assistance from Bond Counsel. Bond Counsel to prepare documents for a gap paving project.
7. Setup funding of project with Fiscal Agent.
8. Publications.
9. Permit fees.



PROJECT FEE

JEO Proposed to provide the services defined above for the fees defined below:

Design Phases

	<u>Fee</u>
Phase 1 - Topographic Survey (Lump Sum)	\$ 14,320
Phase 2 - Preliminary Design (Lump Sum)	\$ 26,000
Phase 3 - Final Design (Lump Sum)	\$ 34,000
Phase 4 - Permitting (Lump Sum)	\$ 2,500
Phase 5 - Bidding and Negotiation Phase (Lump Sum)	\$ 4,750
	<u>\$ 81,570</u>

Construction Phases

Phase 6 - Construction Administration & Staking (Lump Sum)	\$ 36,380
Phase 7 - Construction RPR (Hourly)	\$ 21,120
	<u>\$ 57,500</u>

Direct Expenses

Phase 8 - Geotechnical Investigation (Lump Sum)	\$ 7,050
Phase 9 - Material Testing (Unit Rate Not To Exceed)	\$ 12,650
	<u>\$ 19,700</u>

Total	\$ 158,770
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Progress Payments

- 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.
- Invoices not paid within 30 days may be charged interest at the annual rate of 12% (1.0%/month).
- Payments will be applied first to the interest then principal.
- 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.

Contract Time

- JEO will work as expeditiously as possible, pending authorization from Owner to complete the tasks in this project.
- Design Phase – Completed by **November 22nd, 2024** assuming a Notice to Proceed by **July 15th, 2024**.
- Bidding and Negotiation Phase – 45-60 days from authorization to advertise.
- If the Basic Services covered by this Agreement have not been completed by **November 15th, 2025**, through no fault of JEO, extension or adjustment of JEO's services beyond that time shall be compensated as additional services.
- The information in this proposal and fee estimate is valid until **July 29th, 2024**. After that time, the scope of services and estimated are subject to adjustment.