MODIFICATION NO. 5 TO AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR COLBERN ROAD IMPROVEMENTS FROM M350 TO DOUGLAS STREET (RFQ NO. 569-32272)

THIS MODIFICATION TO AGREEMENT made and entered into this _____ day of ______, 2021, by and between the City of Lee's Summit, Missouri (hereinafter "City"), and Garver, LLC (hereinafter "Engineer").

WITNESSETH:

WHEREAS, City and Engineer entered into an Agreement for Professional Engineering Services for Colbern Road Improvements from M350 to Douglas Street (RFQ No. 569-32272) dated February 14th, 2019 (hereinafter "Base Agreement"); and

WHEREAS, City and Engineer modified the Base Agreement pursuant to Modification No. 1 dated October 18, 2019; Modification No. 2 dated March 27, 2020; Modification No. 3 dated July 27, 2020; and, Modification No. 4 dated September 10, 2020; and

WHEREAS, City and Engineer desire to amend the provisions of the Base Agreement, as amended, as provided herein; and

WHEREAS, Engineer has submitted a proposal for the amended engineering services and an estimate of engineering costs to perform said services; and

WHEREAS, the City Manager is authorized and empowered by City to execute contracts providing for professional engineering services.

NOW THEREFORE, in consideration of the mutual covenants and considerations herein contained, **IT IS HEREBY AGREED** by the parties hereto to amend the following Articles contained in the Base Agreement, as amended, as follows:

ARTICLE I SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Article I of the Base Agreement, as amended, is hereby amended as follows:

1.6 Administration and Project Management

Section 1.6 of the original agreement is hereby amended as follows:

Additional administration and project management time as specified within Section 1.6 of the original agreement will be provided for the contract within this task from June 16, 2021 through March 1, 2022 or until such time as the construction phase services, Task 2.0 Bidding/Construction Phase Services, commences.

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1.14 Final Design (PS&E Submittal)

Section 1.14.4 of the original agreement is hereby amended as follows:

The following task item will be added to the bulleted list.

• Revise roadway and landscaping plans for previously designed relocated Unity Village (UV) limestone columns. Limestone columns are to be removed and replaced with 8 inch x 8 inch cedar posts with red caps mimicking the red roofed towers on the UV campus. Posts are to be spaced at 75-foot increments commencing at the proposed UV property line at MO Route 350 to just east of the Gardens and Unity Village. Any posts that would not be completely visible from the reconstructed Colbern Road will be omitted. Perform Qa/Qc on the revised roadway and landscaping plans. Modify construction contract documents as needed.

Section 1.14.9 Force Main Reconstruction will be added as a new task.

The following scope of services will be added to the contract.

Section 1.14.9 Force Main Reconstruction

Engineer will provide design services required to relocate approximately 4,800 linear feet of 12-inch sanitary sewer force main from approximately roadway station 93+30 west to its discharge into the gravity sewer system along Little Cedar Creek. As part of the work, Engineer will:

- Coordinate the force main relocation route with the City.
 - Force main is expected to be installed on the north side of Colbern Road, typically in the 13-foot-wide utility corridor north of the proposed sidewalk.
 - A 20-inch steel casing will be installed across Colbern Road near the eastern end of the proposed bridge to allow this force main to cross to the southern side of the road.
 - The crossing of the Union Pacific Railroad (UPRR) line will utilize the existing 20inch steel casing that currently contains the 12-inch ductile iron force main that is being replaced.
 - The new 12-inch force main material is expected to be HDPE or fusible PVC in order to minimize fittings. Ductile iron will not be used for this force main relocation.
- Review relocation plans for natural gas and electric lines, and notify City of any conflicts that may require additional easements. Preparation of easement descriptions and land acquisition documents are not included in this scope.
- Prepare preliminary drawings to include horizontal and vertical alignments without notations.
- Submit 60% design drawings to the City for review and comment.
- Meet with City discuss preliminary design.
- Address City comments and make revisions as necessary.
- Prepare phasing drawings for replacement of force main at railroad crossing.
- Update roadway cross sections to indicate the new force main.
- Update water and sewer quantity tables as necessary for the plans.

- Update Bid Documents.
- Submit final design to the City for approval. Final submittal will include plan and profile drawings, details, specifications (if applicable), and opinion of probable construction cost.
- Coordinate environmental issues with Missouri Department of Natural Resources (MDNR).
- Prepare and submit utility permit application package to MDNR.
- Coordinate replacement of force main with UPRR.

Revise roadway and other detail plan sheets to remove the existing force main modification linework and notes and add in the new design for the reconstructed force main. Perform Qa/Qc on the revised plan sheets. Modify the construction contract document as necessary.

Section 1.14.10 Public Engagement Summary will be added as a new task.

The following scope of services will be added to the contract.

Section 1.14.10 Public Engagement Summary

Assemble the following items into a Public Engagement Summary as specified in the MoDOT LPA Manual Section 136.7.6.11 Transcripts.

- 1. Executive Summary
- 2. Project information handout.
- 3. Double-spaced transcript of any oral hearing proceedings.
- 4. Color location map(s) showing the location of the recommended design.
- 5. Data pertinent to statements or exhibits used or filed in connection with the public hearing.
- 6. Data pertinent to information made available to the public prior to the public hearing.
- 7. Pertinent correspondence.
- 8. Copy of all written comments received.

Document will be prepared using Microsoft Word and will be submitted as an electronic 8.5" x 11" PDF document.

Section 2.0 Bidding/Construction Phase Services

The following scope of services will be added to the contract

- 4. Attend the Contractor/City Preconstruction Meeting
- Provide review and recommendation of Approved/Not Approved/Modification Required for the following submittals as identified in the Colbern Road Construction Project Manual Section 01116 Submittal Checklist:
 - Prelim. Matters: Prelim. Progress Schedule
 - Crack Seal: Oil
 - Curb and Gutter: Concrete
 - Curb and Gutter: Curing Compound

- Curb and Gutter: Dowell Bars
- Curb and Gutter: Expansion Material
- Driveways or Entrances: Aggregate
- Erosion: Erosion Control Blanket
- Erosion: Silt Fence
- Fence: Fence Material
- Force main: Pipe
- Force main: Air and Vacuum Release Valve Assembly
- Force main: Valves
- Force main: Fittings
- Landscaping: Fertilizer
- Landscaping: Mulch
- Landscaping: Plantings
- Landscaping: Seed
- Landscaping: Sod
- Landscaping: Turf Reinforcing Mat
- Landscaping: Trees
- Miscellaneous: Anchor Bolts
- Miscellaneous: Epoxy
- Miscellaneous: Geotextile
- Miscellaneous: Grout
- Miscellaneous: Guardrail and Guardrail Structures
- Miscellaneous: Handrail
- Miscellaneous: Monument Box
- Miscellaneous: QC Plan (if different than 1306)
- Miscellaneous: Traffic Control Plan
- Pavement Asphalt: Aggregate
- Pavement Asphalt: Base Course
- Pavement Asphalt: Oil
- Pavement Asphalt: Surface Course
- Pavement Concrete: Aggregate
- Pavement Concrete: Concrete
- Pavement Concrete: Curing Compound
- Pavement Concrete: Expansion Material
- Pavement Concrete: Joint Layout
- Pavement Concrete: Joint Sealer
- Pavement Concrete: Reinforcing Steel (For Joints)
- Pavement Marking: Beads, Paint, Tape, Thermoplastic
- Pavers: Concrete, Pavers, Sand
- Surface Seal: Aggregate, Mix Designs, Oil
- Ramps: Detectable Warning Surface
- Ramps: Concrete
- Ramps: Curing Compound
- Ramps: Dowel Bars
- Ramps: Expansion Material
- Reinforced Concrete Box (RCB): Concrete
- Reinforced Concrete Box (RCB): Design Calcs (Pre-cast)
- Reinforced Concrete Box (RCB): Joint Material

- Reinforced Concrete Box (RCB): Precast Design
- Reinforced Concrete Box (RCB): Reinforcing Steel
- Retaining Walls: Aggregate
- Retaining Walls: Block or Stone
- Retaining Walls: Concrete
- Retaining Walls: Curing Compound
- Retaining Walls: Grid Tieback Materials
- Retaining Walls: Graffiti Protection
- Retaining Walls: Wall Design (assumes 3)
- Rip Rap: Rip Rap
- Sanitary Sewer: Encasement
- Sanitary Sewer: Fittings (Angles, Reducers, Sleeves)
- Sanitary Sewer: Manhole Pre Cast
- Sanitary Sewer: Manhole Cast in Place
- Sanitary Sewer: Pipe
- Sanitary Sewer: Ring and Lid Assembly
- Sanitary Sewer: Steps
- Sanitary Sewer: Wye
- Sidewalk: Concrete
- Sidewalk: Curing Compound
- Sidewalk: Dowel Bars
- Sidewalk: Expansion Materials
- Signs (Permanent): Anchors
- Signs (Permanent): Banding
- Signs (Permanent): Brackets
- Signs (Permanent): Posts
- Signs (Permanent): Sleeves
- Signs (Permanent): Sign Blanks
- Signs (Permanent): Sign Sheeting
- Signs (Permanent): Signs
- Storm Sewer Concrete
- Storm Sewer End Section
- Storm Sewer Pipe
- Storm Sewer Pipe Joint Material
- Storm Sewer Reinforcing Steel
- Storm Sewer Ring and Lid Assembly
- Storm Sewer Steps
- Storm Sewer Structures
- Soil: Contractor Furnished Borrow
- Street Lights: Anchor Bolts
- Street Lights: Base-Screw In
- Street Lights: Bracket Arms
- Street Lights: Breakaway Base
- Street Lights: Cable-Electrical
- Street Lights: Concrete
- Street Lights: Conduit (Pipe & Fittings)
- Street Lights: Conduit Markers
- Street Lights: Connector Kits

- Street Lights: Fuses
- Street Lights: Ground Clamp
- Street Lights: Ground Rod
- Street Lights: Junction Boxes
- Street Lights: Lamps
- Street Lights: Luminaires
- Street Lights: Photocells
- Street Lights: Poles
- Street Lights: Power Supply Assembly
- Street Lights: Pull Boxes
- Street Lights: Reinforcing Streel
- Street Lights: Splice Kit
- Subgrade: MoDOT Base Course
- Subgrade: Underdrain Filter Fabric
- Subgrade: Underdrain Pipe
- Temporary Surfacing: Aggregate
- Temporary Surfacing: Asphaltic Concrete
- Traffic Signals: Anchor Bolts
- Traffic Signals: Back Plate
- Traffic Signals: Base Screw In
- Traffic Signals: Bracket Arm
- Traffic Signals: Brackets
- Traffic Signals: Cable Electrical
- Traffic Signals: Concrete
- Traffic Signals: Conduit (Pipe & Fittings)
- Traffic Signals: Controller and Equipment
- Traffic Signals: Controller Cabinet
- Traffic Signals: Emergency Vehicle Detection System
- Traffic Signals: Ground Clamp
- Traffic Signals: Ground Rod
- Traffic Signals: Luminaire & Lamp
- Traffic Signals: Mast Arm
- Traffic Signals: Pole
- Traffic Signals: Power Supply Assembly
- Traffic Signals: Pull Boxes
- Traffic Signals: Push Button Detector
- Traffic Signals: Reinforcing Steel
- Traffic Signals: Signal Head
- Traffic Signals: Signal Indications
- Traffic Signals: Video Detection System
- Water Line: Air Relief Assembly
- Water Line: Concrete
- Water Line: Encasement
- Water Line: Fire Hydrant
- Water Line: Fittings (Angles, Reducers, Sleeves)
- Water Line: Meter Well
- Water Line: Pipe
- Water Line: Polyethylene Wrap

- Water Line: Ring and Lid Assembly
- Water Line: Valves < 12"
- Water Line: Valves 12" and greater

Recommendation of Approved/Not Approved/Modification Required will be communicated in PDF format via email to City and an explanation of denial or modification needed will be included. Review includes the initial submittal and one re-submittal.

- 6. Provide review and recommendation of Approved/Not Approved/Modification Required for the following Bridge submittals as identified in the Colbern Road Construction Project Manual Section 01116 Submittal Checklist:
 - Controlled Demolition Plan
 - Erection Plan
 - Temporary Falsework Plan over UPRR
 - Laminated Neoprene Bearing Pads and Assembly
 - Prestressed Concrete Girder
 - Steel Diaphragms and Connections for Prestressed Girders
 - Actual Prestressed Concrete Girder Camber Review per Drawing Requirement
 - Pedestrian Fence and Pedestrian Rail
 - Structural Waterline Attachments to Bridge Slab and Concrete Diaphragms
 - Light Pole Attachments to Bridge
 - Bridge Materials Review

The intent of the bridge shop drawing reviews is to confirm general compliance with the requirements of the plans and contract documents. Structural analysis and design performed by the consultant are not anticipated for review of shop drawings. The contractor is responsible for the quality of work, confirming and correlating all quantities and dimensions, selecting fabrication processes and construction techniques of construction, coordinating the work of all trade and subcontractors, and performing the work in a safe and satisfactory manner.

Recommendation of Approved/Not Approved/Modification Required will be communicated in PDF format via email to City and an explanation of denial or modification needed will be included. Review includes the initial submittal and one re-submittal.

7. Questions from Contractor/City During Construction

Engineer will respond to City generated or City approved Contractor generated design related questions. Engineer will respond to City within two business days of receipt of question. Responses will be in an email or other applicable documentable format.

8. Plan Revisions Due to Contractor/City Requested Changes

Engineer will respond with a fee estimate and schedule for City's review and approval within two business days of receipt of City's requested revision; provided however, Engineer does not guarantee the plan revisions can be completed for such estimated amount. In the event Engineer is within ten percent (10%) of the not to exceed limit and reasonably believes it cannot complete the scope of work for the not to exceed amount, Engineer shall notify the City, which shall either direct Engineer to continue with the scope

of work and increase the not to exceed amount as reasonably necessary or direct Engineer to cease performance of the services prior to reaching the not to exceed limit. If the fee is approved by the City the Engineer will make the associated design modifications utilizing the City's most recent design standards or the standards that were in effect at the time of design, according to the industry standard of care. If the requested design change is deemed unsafe or not adhering to engineering practices the Engineer will respond with written documentation as to why the design change will not be made.

9. Construction Progress Meetings

Engineer will attend two (2) construction progress meetings as requested by the City.

10. Construction inspection for Bridge over Little Cedar Creek and UPRR

DESCRIPTION OF PROJECT AND SERVICES TO BE PROVIDED

The City of Lee's Summit is replacing the existing Colbern Road bridge over Little Cedar Creek and the UP Railroad, between North Main Street and Ward Road. The Engineer's work generally consists of providing construction support services. The following project description was used to develop the scope of work and fee for the project:

The existing bridge will be removed and replaced with a new bridge with a roadway width of 75'-0" and will, in general, follow the existing alignment. The bridge will be supported by driven piles with concrete abutments, drilled shafts, and concrete cap beam pile bents. The road will be closed to through traffic. All removal/construction activities to be performed by a contractor. No in-kind work will be performed by the City. The bridge is anticipated to have span lengths of 135'-135'.

CONSTRUCTION PHASE SERVICES TO BE PROVIDED BY "Engineer"

The Engineer will serve as the City's representative for administering the terms of the construction contract between the City and their Contractor. Engineer will endeavor to protect the City against defects and deficiencies in workmanship and materials in work by the Contractor. However, the furnishing of such project representation will not make Engineer responsible for the construction methods and procedures used by the Contractor or for the Contractor's failure to perform work in accordance with the contract document. Engineer's services will include more specifically as follows:

- A. Assist the City with a pre-construction conference to discuss the Colbern Road bridge project details with the Contractor.
- B. Perform daily site inspections to observe the Contractor's progress and quality of work, and to determine if the work conforms to the contract documents for the Colbern Road bridge structure construction, only. Provide full-time resident construction observation services for the 168-calendar-day construction contract performance time. The proposed fee is based on approximately 10 hours per day, 5 days per week, during the 168-calendar-day construction contract performance time. If the construction time extends beyond the time established in this agreement or if the Owner wishes to increase the time or frequency of the observation, the Owner will pay Garver an additional fee agreed to by the Owner and Garver. It is anticipated that Engineer will have inspector(s) on site for an estimated duration of 24 weeks to complete the Colbern Road bridge installation work.

- C. The Engineer will accompany City representatives on visits of the project site as requested.
- D. Attend progress/coordination meetings with the Owner/Contractor.
- E. Evaluate and respond to construction material submittals and shop drawings. Corrections or comments made by Garver on the shop drawings during this review will not relieve Contractor from compliance with requirements of the drawings and specifications. The check will only be for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor will be responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner. Garver's review shall not constitute approval of safety precautions or constitute approval of construction means, methods, techniques, sequences, procedures, or assembly of various components. When certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, either directly or implied for a complete and workable system, Garver shall be entitled to rely upon such submittal or implied certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents.
- F. Reject work not conforming to the Contract Documents.
- G. Inspect materials, review material certifications furnished by Contractor. Independent assurance samples and tests will be performed by City personnel or City contracted consultants other than Engineer and such sampling and testing is excluded from the work to be performed by the Engineer under this contact.
- H. Issue instructions to the Contractor on behalf of the Owner and issue necessary clarifications (respond to RFIs) regarding the construction contract documents.
- I. Maintain progress diary and other project records, measure and document quantities, and prepare monthly estimates for payments due the Contractor Review the Contractor's progress payment requests based on the actual quantities of contract items completed and accepted and will make a recommendation to the Owner regarding payment. Garver's recommendation for payment shall not be a representation that Garver has made exhaustive or continuous inspections to (1) check the quality or exact quantities of the Work; (2) to review billings from Subcontractors and material suppliers to substantiate the Contractor's right to payment; or (3) to ascertain how the Contractor has used money previously paid to the Contractor.
- J. Maintain a set of working drawings and prepare and furnish record drawings.
- K. When authorized by the Owner, prepare change orders for changes in the work from that originally provided for in the construction contract documents. If redesign or substantial engineering or surveying is required in the preparation of these change order documents, the Owner will pay Garver an additional fee to be agreed upon by the Owner and Garver.
- L. Participate in final project inspection, prepare punch list, review final project closing documents, and submit final pay request.'

EXCLUDED SERVICES

The following services are not included in the scope of services and are specifically excluded from the Scope of Services. If these services are required, then a supplemental agreement is required to add the scope and additional fee:

- A. Surveying, staking, re-design efforts, etc. to avoid conflict with a utility after preliminary plans have been approved. It is contemplated that survey staking and layout will be accomplished by the Contractor's forces.
- B. Design of utility relocations required for utility agreements.
- C. Material testing of any kind including; Testing of compaction & moisture for embankment, base, and pavement.
- D. Sampling and testing of concrete specimens.
- E. Preparation and submittal of documentation to support the use of In-Kind work by City forces.
- F. Efforts to mitigate adverse effects on archeological sites which may be identified in the project area. This includes all work required to develop and satisfy a Memorandum of Agreement between SHPO, FHWA, MoDOT, etc., the need for Archeological Reports.
- G. Daily site visits during non-critical construction operation for the purpose of collecting information for daily diaries.
- H. Inspection of work on elements of the project other than the Colbern Road bridge structure.

ARTICLE IV PAYMENTS TO THE ENGINEER

Article IV of the Base Agreement, as amended, is hereby amended to provide additional compensation to Engineer as follows:

- A. The additional compensation to be paid to Engineer for the amended Basic Services described in Article I of this Modification No. 5 above shall not exceed the total sum of Five Hundred and Fifty Six Thousand Two Hundred and Seventy Eight Dollars (\$556,278). The total fees (hourly fees and expenses) for the Basic Services is hereby amended and shall not exceed the total sum of Two Million Thirty Three Thousand Five Hundred and Ninety Eight Dollars (\$2,033,598.00). See Exhibit B for the Modification No. 5 fee estimate.
- B. The amended total not to exceed amount for both the Basic Services and Optional Services is Two Million One Hundred and Eleven Thousand Nine Hundred and Ninety Eight Dollars (\$2,111,998).

ARTICLE V COMPLETION TIME

Article V of the Base Agreement, as amended, is hereby amended as follows:

The additional Title I services which include scope of service items 1.6, 1.14.4, 1.14.9, and 1.14.10 shall be completed prior to construction which is anticipated to commence in April, 2022.

The additional Title II services which include scope items 2.4 through 2.10 will be completed within the duration of the construction project which is anticipated to commence in April, 2022 and be complete by June, 2024.

ARTICLE VIII ALL OTHER TERMS REMAIN IN EFFECT

All other terms of the Base Agreement, as amended, not amended by this Modification No. 5 to Agreement shall remain in full force and effect.

This Modification No. 5 to Agreement shall be binding on the parties thereto only after it has been duly executed and approved by City and Engineer.

The remainder of this page left blank on purpose.

IN WITNESS WHEREOF, the parties have caused this Modification to Agreement to be executed on the _____ day of _____, 2021.

CITY OF LEE'S SUMMIT, MISSOURI

Stephen A. Arbo, City Manager

ATTEST:

City Clerk Trisha Fowler Arcuri

APPROVED AS TO FORM:

Office of City Attorney

GARVER, LLC

Bent & Schniers BY: <u>Brent Schniers</u> TITLE: <u>Vine Presiden</u>

ATTEST: the Ing