

EXHIBIT 1 TO ORDINANCE

**AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES
FOR THE WARD AND PERSELS ROAD SIGNAL PROJECT (RFQ NO. 2021-072)**

THIS 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 intends to have engineering services for the design of the existing intersection at Ward Road and Persels Road to improve safety and traffic operations for all roadway users (hereinafter "Project"); and

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

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

WHEREAS, City desires to enter into an agreement with Engineer to perform the Project; and

WHEREAS, Engineer represents that the firm is equipped, competent, and able to undertake such an assignment.

NOW THEREFORE, in consideration of the mutual covenants and considerations herein contained, **IT IS HEREBY AGREED** by the parties hereto as follows:

ARTICLE I

SCOPE OF BASIC SERVICES TO BE PROVIDED BY ENGINEER

Engineer shall provide the following professional engineering services to City ("Basic Services"):

The City hereby engages Engineer to perform the scope of service described in Exhibit A attached hereto.

ARTICLE II

OPTIONAL SERVICES TO BE PROVIDED BY ENGINEER

The following is a list of additional services which will be furnished by Engineer, if needed by City, upon receipt of written authorization by the Director of Public Works ("Optional Services"):

EXHIBIT 1 TO ORDINANCE

The City hereby engages Engineer to perform the Optional Services described in Exhibit A attached hereto.

ARTICLE III SCOPE OF SERVICES TO BE PROVIDED BY CITY

City shall provide the following services to Engineer:

In connection with the Project, City's responsibilities shall include the following:

- A. Those responsibilities set forth in Exhibit A attached hereto.
- B. City shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by City to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items as further set forth in Exhibit A attached hereto.
- C. City shall give prompt written notice to Engineer whenever City observes or otherwise becomes aware of the presence at the Project site of any hazardous materials or any relevant, material defect, or nonconformance in: (i) the services; (ii) the performance by any contractor providing or otherwise performing construction services related to the Project; or (iii) City's performance of its responsibilities under this Agreement.
- D. City shall include "Garver, LLC" as an indemnified party under the contractor's indemnity obligations included in the construction contract documents.
- E. City will not directly or indirectly solicit any of Engineer's Personnel during performance of this Agreement and for a period of one (1) year beyond completion of this Agreement.

ARTICLE IV PAYMENTS TO THE ENGINEER

For the services performed by Engineer pursuant to this Agreement, and as full compensation therefore, and for all expenditures made and all expenses incurred by Engineer in connection with this Agreement, except as otherwise expressly provided herein, subject to and in conformance with all provisions of this Agreement, City will pay Engineer a maximum fee for Basic Services and Optional Services in the sum of Nine Hundred Eight Thousand Five Hundred Sixty Dollars (\$908,560.00), according to the following provisions:

EXHIBIT 1 TO ORDINANCE

- A. The cost of all Basic Services covered under Article I shall be billed hourly at the rates set forth in Exhibit B attached hereto and incorporated herein by reference. Expenses incurred to provide the Basic Services shall be billed as set forth in Exhibit B attached hereto and incorporated herein by reference. The total fees (hourly fees and expenses) for the Basic Services shall not exceed the total sum of Seven Hundred Eighty-Nine Thousand Seven Hundred Dollars (\$789,700.00).
- B. The cost of all Optional Services covered under Article II shall be billed hourly at the rates set forth in Exhibit B attached hereto. Expenses incurred to provide the Optional Services shall be billed as set forth in Exhibit B attached hereto. The total fees (hourly fees and expenses) for the Optional Services shall not exceed the total sum of One Hundred Eighteen Thousand Eight Hundred Sixty Dollars (\$118,860.00).
- C. If so requested by Engineer, City will make payment monthly for Basic Services and Optional Services that have been satisfactorily completed. The City shall make payment to Engineer within a period not to exceed thirty (30) days from the date an invoice is received by City. All invoices shall contain the following information:
1. Project Name/Task Name/RFP Number/Description of Agreement.
 2. Invoice Number and Date.
 3. Purchase Order Number issued by City.
 4. Itemized statement for the previous month of Labor (including Personnel Description, Title or classification for each person on the Project, Hours Worked, Hourly Rate, and Amount), Itemized Reimbursable Expenses, and Invoice Total.
 5. Description of monthly progress detailing the amount of the services completed to date and projected completion time.
 6. Project Billing Summary containing the Contract or Agreed Maximum Fee Amount, Cumulative Amount Previously Billed, Billing Amount this Invoice, Contract or Agreed Amount Remaining, and Percent of Maximum Fee Billed to Date.

All moneys not paid when due as provided herein shall bear interest at a per annum rate equal to one percent (1%) plus the average *Consumer Price Index for All Urban Consumers (CPI-U)-U.S. City Average* for the time period in which payment is past due; provided, however, that in no event will the amount of interest to be paid by the City exceed 9% per annum.

ARTICLE V COMPLETION TIME

The Basic Services shall be completed in accordance with the following schedule:

EXHIBIT 1 TO ORDINANCE

The City hereby engages Engineer to perform the scope of service according to the schedule provided in Exhibit A attached hereto.

The Director of Public Works may, with the mutual consent of the parties, amend the deadlines contained in this Article by written authorization upon a showing of cause for amendment by Engineer.

The Optional Services shall be completed in accordance with the deadlines set by the Director of Public Works and accepted by Engineer at the time said Optional Services are authorized by the Director of Public Works.

ARTICLE VI INSURANCE

A. General.

1. Insurer Qualifications. Without limiting any obligations or liabilities of Engineer, Engineer shall purchase and maintain, at its own expense, the insurance set forth in this Section with insurance companies authorized to do business in the State of Missouri, with an AM Best, Inc. rating of A or above, and with policies and forms satisfactory to the City. Failure to maintain insurance as specified herein may result in termination of this Agreement at the City's option.
2. No Representation of Coverage Adequacy. The City reserves the right to review any and all of the insurance policies and/or endorsements cited in this Agreement, but has no obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in this Agreement or failure to identify any insurance deficiency shall not relieve Engineer from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Agreement.
3. Additional Insured. All insurance coverage, except Workers' Compensation insurance and Professional Liability insurance, if applicable, shall name and endorse, to the fullest extent permitted by law for claims arising out of the performance of this Agreement, the City, its agents, representatives, officers, directors, officials and employees as Additional Insured as specified under the respective coverage sections of this Agreement, to the extent of the indemnities provided within Article VII.K. of this Agreement.
4. Coverage Term. All insurance required herein shall be maintained in full force and effect until all work or services required to be performed under the terms of this Agreement are satisfactorily performed, completed and formally accepted by the City, unless specified otherwise in this Agreement.
5. Primary Insurance. Engineer's insurance shall be endorsed to indicate its primary, non-contributory insurance with respect to performance of this Agreement and in

EXHIBIT 1 TO ORDINANCE

the protection of the City as an Additional Insured. Such coverage shall be at least as broad as ISO CG 20 01 04 13, or an equivalent.

6. Claims Made. In the event any insurance policies required by this Agreement are written on a “claims made” basis, coverage shall extend, either by keeping coverage in force or purchasing an extended reporting option, for five (5) years past completion and acceptance of the services. Such continuing coverage shall be evidenced by submission of annual Certificates of Insurance citing the required coverage is in force and contains the provisions as required herein for the five (5) year period.
7. Waiver. To the fullest extent permitted by law, all policies required herein, except for Professional Liability, including Workers’ Compensation insurance, shall contain a waiver of rights of recovery (subrogation) against the City, its agents, representatives, officials, officers and employees for any claims arising out of the work or services of Engineer. Engineer shall arrange to have such subrogation waivers incorporated into each policy via endorsement.
8. Policy Deductibles and/or Self-Insured Retentions. The policies set forth in these requirements may provide coverage that contains deductibles or self-insured retention amounts. Such deductibles or self-insured retention under the required general liability and automobile liability policies shall not erode the limit required by the City. Engineer shall be solely responsible for any such deductible or self-insured retention amount.
9. Automatic Escalator. The limits of liability for each policy coverage amount stated above shall be automatically adjusted upward as necessary to remain at all times not less than the maximum amount of liability set forth in Chapter 537.610 RSMo. applicable to political subdivisions pursuant to 537.600; provided that nothing herein or in any such policy shall be deemed to waive the City’s sovereign immunity. The statutory waiver of sovereign immunity for 2021 is \$\$2,940,868 for all claims arising out of a single accident or occurrence.
10. Use of Subcontractors. If any work under this Agreement is subcontracted in any way, Engineer shall execute written agreements with its subcontractors containing the indemnification provisions set forth in this Section and insurance requirements set forth herein protecting the City and Engineer, commensurate with the scope of services provided by said Subconsultant/Subcontractor. Engineer shall be responsible for executing any agreements with its subcontractors and obtaining certificates of insurance verifying the insurance requirements.
11. Notice of Claim. Engineer shall upon receipt of notice of any claim in connection with this Agreement promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability. Engineer shall also promptly notify the City of any reduction in limits of protection afforded under any policy listed in the certificate(s) of insurance in an amount such that the policy aggregate becomes less than the current statutory waiver of sovereign immunity regardless of whether such

EXHIBIT 1 TO ORDINANCE

impairment is a result of this Agreement. A breach of this provision is material breach of the contract.

12. Evidence of Insurance. Prior to commencing any work or services under this Agreement, Engineer will provide the City with suitable evidence of insurance in the form of certificates of insurance and, if requested by the City, a copy of the relevant endorsement for the insurance policies as required by these requirements, issued by Engineer's insurance insurer(s) as evidence that policies are placed with reasonably acceptable insurers as specified herein and provide the required coverages, conditions and limits of coverage specified in these requirements and that such coverage and provisions are in full force and effect. The City shall reasonably rely upon the certificates of insurance and endorsements for the insurance policies as evidence of coverage but such acceptance and reliance shall not waive or alter in any way these insurance requirements or obligations.

If any of the policies required by these requirements expire during the life of the Agreement, it shall be Engineer's responsibility to forward renewal certificates and relevant endorsements the City 30 days prior to the expiration date. All certificates of insurance and relevant endorsements shall be identified by referencing the Agreement; certificates of insurance and endorsement for the insurance policies submitted without referencing the Agreement, as applicable, will be subject to rejection and may be returned or discarded. Certificates of insurance shall specifically include the following provisions:

- a. The City, its agents, representatives, officers, directors, officials and employees are Additional Insureds (to the extent of the indemnities agreed upon in Article VII.K. herein) as follows:
 - i. Commercial General Liability – Under Insurance Services Office, Inc., ("ISO") Form CG 20 10 03 97 or equivalent.
 - ii. Auto Liability – Under ISO Form CA 20 48 or equivalent.
 - b. Engineer's insurance under which City is included as an additional insured shall be primary, non-contributory insurance with respect to performance of the Agreement.
 - c. All policies, except for Professional Liability, waive rights of recovery (subrogation) against City, its agents, representatives, officers, officials and employees for any claims arising out of work or services performed by Engineer under this Agreement.
 - d. ACORD certificate of insurance form 25 (2014/01) is preferred.
13. All Certificates of Insurance shall name the City of Lee's Summit as the certificate holder and send the certificate and any endorsements to:

City of Lee's Summit
Attn: Public Works Dept.
220 SE Green Street

EXHIBIT 1 TO ORDINANCE

Lee's Summit, MO 64063-2358

B. Required Insurance Coverage.

1. Commercial General Liability. Engineer shall maintain “occurrence” form Commercial General Liability insurance with an unimpaired limit of at least \$3,000,000 for each occurrence, \$3,000,000 Products and Completed Operations Annual Aggregate and a \$3,000,000 General Aggregate Limit. The policy shall cover liability arising from premises, operations, independent contractors, products-completed operations, bodily injury, personal injury and advertising injury. Coverage under the policy will be at least as broad as ISO policy form CG 00 01 93 or equivalent thereof, including but not limited to, separation of insured’s clause. To the fullest extent allowed by law, for claims arising out of the performance of this Agreement, the City, its agents, representatives, officers, officials and employees shall be endorsed as an Additional Insured under ISO, Commercial General Liability Additional Insured Endorsement forms CG 20 10 07 04 and CG 20 37 07 04, or their equivalents. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be “follow form” equal or broader in coverage scope than underlying insurance.
2. Automobile Liability. Engineer shall maintain Business Automobile Liability insurance with an unimpaired limit of at least \$1,000,000 each occurrence on Engineer’s owned, hired and non-owned vehicles assigned to or used in the performance of the Engineer’s work or services under this Agreement. Coverage will be at least as broad as ISO coverage code “1” “any auto” policy form CA 00 01 12 93 or equivalent thereof. City, its agents, representatives, officers, directors, officials and employees shall be endorsed as an Additional Insured under ISO Business Auto policy Designated Insured Endorsement form CA 20 48 or equivalent. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be “follow form” equal or broader in coverage scope than underlying insurance.
3. Professional Liability. If this Agreement is the subject of any professional services or work, or if the Engineer engages in any professional services or work adjunct or residual to performing the work under this Agreement, the Engineer shall maintain Professional Liability insurance covering negligent errors and omissions arising out of the services performed by the Engineer, or anyone employed by the Engineer, or anyone for whose negligent acts, mistakes, errors and omissions the Engineer is legally liable, with an unimpaired liability insurance limit of at least \$3,000,000 each claim and \$3,000,000 annual aggregate. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be “follow form” equal or broader in coverage scope than underlying insurance.
4. Workers’ Compensation Insurance. If Engineer employs anyone who is required by law to be covered by workers’ compensation insurance, Engineer shall maintain Workers’ Compensation insurance to cover obligations imposed by federal and state

EXHIBIT 1 TO ORDINANCE

statutes having jurisdiction over Engineer's employees engaged in the performance of work or services under this Agreement and shall also maintain Employers Liability Insurance of \$500,000 for each accident, \$500,000 disease for each employee and \$1,000,000 disease policy limit.

5. Cyber Liability Insurance. If this Agreement is the subject of any services involving the City's information technology structure, or if the Engineer engages in any services in any way related to performing work involving the City's information technology structure under this Agreement, Engineer shall maintain Cyber Liability insurance with limits not less than \$3,000,000 per occurrence or claim, \$3,000,000 aggregate. Coverage shall be sufficiently broad to respond to the duties and obligations as are undertaken by Engineer in this Agreement and shall include, but not be limited to, claims involving infringement of intellectual property, infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, alteration of electronic information, extortion and network security. The policy shall provide coverage for breach response costs, regulatory fines and penalties, and credit monitoring expenses with limits sufficient to respond to these obligations.
- C. Cancellation and Expiration Notice. Insurance required herein shall not expire, be canceled, or be materially changed without thirty (30) days' prior written notice to the City.

ARTICLE VII MISCELLANEOUS PROVISIONS

The following miscellaneous provisions are agreed to by both parties to this Agreement:

- A. COVENANT AGAINST CONTINGENT FEES: Engineer warrants that Engineer has not employed or retained, and will not employ or retain for the duration of this Agreement, any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this Agreement, and that Engineer has not paid or agreed to pay any company or person, other than bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee. Engineer further covenants that in the performance of this Agreement no person having such interest shall be employed.
- B. OWNERSHIP OF ENGINEERING DOCUMENTS: Payment by City to Engineer as aforesaid in Article IV shall vest in City title to all drawings, sketches, studies, analyses, reports, models, and other paper, documents, computer files, and material produced by Engineer exclusively for the

EXHIBIT 1 TO ORDINANCE

services performed pursuant to this Agreement up to the time of such payments, and the right to use the same without other or further compensation, provided that any use for another purpose shall be without liability to the Engineer. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at City's risk and without liability or exposure to Engineer, and City shall indemnify and hold harmless, to the extent allowed by the Constitution and Laws of the State of Missouri, Engineer from all claims, damages, losses, expenses, including attorneys' fees arising out of or resulting therefrom.

- C. **MODIFICATIONS TO SCOPE OF WORK:** In the event of any changes which creates increase in the scope of services contained in this Agreement, prior to commencing the services City and Engineer shall enter into a mutually executed modification of this Agreement describing the changes in the services to be provided by Engineer and City, providing for compensation for any additional services to be performed by Engineer, and providing completion times for said services.
- D. **EMERGENCY CHANGES IN SERVICES:** The Director of Public Works, with the consent of the City Manager, is authorized to execute on behalf of the City modification agreements as provided for in subsection C. above where there is an emergency and the overall compensation authorized in Article IV above, and any supplements or modifications thereto, is not increased. For purposes of this subsection, an "emergency" shall mean those unforeseen circumstances that present an immediate threat to public health, welfare, or safety; or when immediate response is necessary to prevent further damage to public property, machinery, or equipment; or when delay would result in significant financial impacts to the City as determined by the Director of Public Works and the City Manager.

In the event an emergency change in services is authorized by the Director of Public Works and the City Manager pursuant to this provision, the modification agreement shall be submitted to the City Council for ratification at its next available meeting.

- E. **TERMINATION:** In the event of termination by City, if there are any services hereunder in progress but not completed as of the date of termination, then said Agreement may be extended upon written approval of the City until said services are completed and accepted.
1. **Termination for Convenience:** The services called for by this Agreement or any supplements thereto may be terminated upon request and for the convenience of City upon thirty (30) days advance written notice. City shall pay Engineer for (i) all services rendered up to the date of termination, and (ii) all costs reasonably incurred to bring such Services to an orderly cessation.
 2. **Termination for Cause:** This Agreement may also be terminated for cause by City or Engineer. Termination for cause shall be preceded by a fourteen-(14) day correction period effective upon delivery of written notice. City shall pay Engineer for all services rendered up to the date of termination. In the event of termination for cause by City, compensation for services rendered by Engineer up to the date of termination shall be offset by City's cost to mitigate or correct the effects of such termination, including by

EXHIBIT 1 TO ORDINANCE

not limited to damages resulting from breach or deficiencies in performance or breach of any obligation under this Agreement.

3. Termination Due to Unavailability of Funds in Succeeding Fiscal Years: When funds are not appropriated or otherwise made available to support continuation of the Project in a subsequent fiscal year, this Agreement shall be terminated and Engineer shall be reimbursed for the services rendered up to the date of termination plus the reasonable value of any nonrecurring costs incurred by Engineer but not amortized in the price of the services delivered under this Agreement.
- F. **COMPLIANCE WITH LAWS**: Engineer shall comply with all Federal, State, and local laws, ordinances, and regulations applicable to the services. Engineer shall secure all licenses, permits, etc. from public and private sources necessary for the fulfillment of its obligations under this Agreement.
- G. **SUBLETTING ASSIGNMENT OR TRANSFER**: Engineer shall not subcontract, sublet, assign, or transfer any interest in the services covered by this Agreement, except as provided for herein and except with the prior written and signed consent of City. The use of subcontractors shall in no way relieve Engineer of his/her primary responsibility for the services. No approval will be necessary for non-professional services such as reproductions, printing, materials, and other services normally performed or provided by others.
- H. **CONFERENCES, VISITS TO SITE, INSPECTION OF SERVICES**: Upon reasonable advance notice and during normal business hours at Engineer's place of business, representatives of City shall have the privilege of inspecting and reviewing the services being performed by Engineer and consulting with him/her at such time. Conferences are to be held at the request of City or Engineer.
- I. **ENGINEER'S ENDORSEMENT**: Engineer shall endorse all plans, specifications, estimates, and engineering data furnished by him/her.
- J. **INSPECTION OF DOCUMENTS**: Engineer shall maintain all records pertaining to its services hereunder for inspection, upon reasonable advance notice and during normal business hours at Engineer's place of business, by a City representative during the contract period and for three (3) years from the date of final payment for each individual project performed pursuant to this Agreement. Notwithstanding anything in this Agreement, in no event shall City be entitled to audit the makeup of lump sum or other fixed prices (e.g., agreed upon unit or hour rates).
- K. **INDEMNIFICATION AND HOLD HARMLESS**: Engineer shall indemnify, defend, and hold harmless City and its officers, employees, elected officials, and attorneys, each in their official and individual capacities (the City and any such person being herein called an "Indemnified Party"), for, from and against any and all judgments, damages, claims, fines, penalties, losses, costs, and expenses (including reasonable attorneys' fees, court costs and the costs of appellate proceedings) to which any such Indemnified Party may become

EXHIBIT 1 TO ORDINANCE

subject, under any theory of liability whatsoever (collectively "Claims"), insofar as such Claims (or actions in respect thereof) relate to, arise out of, or are caused by or based upon the acts, directives, errors, or omissions, in the performance of Engineer's duties and services under this Agreement, or any supplements or amendments thereto, of Engineer, or its employees, officers, agents, or any tier of subcontractor or person for which Engineer may be legally liable in the performance of this Agreement

- L. LIMITATION OF LIABILITY: In no event will either Party be liable to other Party for indirect or consequential damages, and in no event will City's liability under this Agreement exceed the amount to be paid to Engineer pursuant to Article IV of this Agreement.

Notwithstanding any provision to the contrary herein, Engineer's (including its subconsultants, agents, assignees, affiliates and vendors) total aggregate liability under the Agreement shall be limited to three million five-hundred thousand and no/100 dollars (\$3,500,000), regardless of the cause or action (including negligence of any kind or character).

- M. PROFESSIONAL RESPONSIBILITY: Engineer warrants that the Services rendered will conform to the requirements of this Agreement and with the care and skill ordinarily used by members of the same profession practicing under similar circumstances at the same time and in the same locality.
- N. ENTIRE AGREEMENT: This Agreement constitutes the entire agreement between the parties with respect to its subject matter, and any prior agreements, understandings, or other matters, whether oral or written, are of no further force or effect. This Agreement may be amended, changed, or supplemented only by written agreement executed by both of the parties hereto.
- O. CONFLICT: In the event of any conflict, ambiguity, or inconsistency between this Agreement and any other document that may be annexed hereto, the terms of this Agreement shall govern.
- P. GOVERNING LAW: This Agreement shall be governed by and construed in accordance with the laws of the State of Missouri, and any suit pertaining to this Agreement may be brought only in courts in eastern Jackson County, Missouri. The Parties expressly and irrevocably consent to the exclusive jurisdiction and venue of such courts and expressly waive the right to transfer or remove any such action.
- Q. OPINION OF PROBABLE CONSTRUCTION COST AND SCHEDULE: Since Engineer has no control over the cost of labor, materials, or equipment, or over contractor's(s') methods of determining prices, or over competitive bidding or market conditions, the estimate of construction cost and schedule provided for herein is to be made on the basis of Engineer's experience and qualifications and represents Engineer's best judgment as a professional engineer familiar with the construction industry, but Engineer cannot and does not guarantee

EXHIBIT 1 TO ORDINANCE

that the bids or the Project construction cost or schedule will not vary from the opinion of probable construction cost and schedule prepared by Engineer.

- R. TAX EXEMPT: City and its agencies are exempt from State and local sales taxes. Sites of all transactions derived from this Agreement shall be deemed to have been accomplished within the State of Missouri.
- S. SAFETY: In the performance of its services, Engineer shall comply with the applicable provisions of the Federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental laws and regulations.
- T. ANTI-DISCRIMINATION CLAUSE: Engineer and its agents, employees, or subcontractors shall not in any way, directly or indirectly, discriminate against any person because of age, race, color, handicap, sex, national origin, or religious creed.
- U. DELAY IN PERFORMANCE: Neither City nor Engineer shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions, floods, earthquakes, fire, epidemics, war, riots, and other civil disturbances, strikes, lockouts, work slowdowns, and other labor disturbances, sabotage, judicial restraint, and delay in or inability to procure permits, licenses, or authorizations from any local, State, or Federal agency for any of the supplies, materials, accesses, or services required to be provided by either City or Engineer under this Agreement. Engineer and City shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of the Agreement.
- V. NON-EXCLUSIVE AGREEMENT. This Agreement is entered into with the understanding and agreement that it is for the sole convenience of the City. The City reserves the right to obtain like goods and services from another source when necessary.
- W. TIME. Time is of material consideration for services provided under this Agreement. Unless otherwise specifically provided, any consent to delay in Engineer's performance of its obligation is applicable only to the particular transaction to which it relates, and is not applicable to any other obligation or transaction.
- X. SIGNATORY AUTHORITY. Each person signing this Agreement represents that such person has the requisite authority to execute this Agreement on behalf of the entity the person represents and that all necessary formalities have been met.
- Y. IMMIGRATION REQUIREMENTS. Pursuant to Section 258.530, RSMo. if Agreement exceeds five thousand dollars (\$5,000.00), Engineer warrants and affirms to the City that (i) Engineer

EXHIBIT 1 TO ORDINANCE

is enrolled and participates in a federal work authorization program with respect to the employees working in connection with the contracted services and (ii) Engineer does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

Engineer shall swear to and sign an affidavit declaring such affirmation, and provide the City with supporting documentation of its enrollment and participation in a federal work authorization program with respect to the employees working in connection with this Agreement. The required documentation must be from the federal work authorization program provider (e.g. the electronic signature page from the E-Verify program's Memorandum of Understanding); a letter from Engineer reciting compliance is not sufficient.

Z. RIGHTS AND REMEDIES. No provision in this Agreement shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of this Agreement. The failure of the City to insist upon the strict performance of any term or condition of this Agreement or to exercise or delay the exercise of any right or remedy provided in this Agreement, or by law, or the City's acceptance of and payment for services, shall not release the Engineer from any responsibilities or obligations imposed by this Agreement or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of this Agreement.

AA. NO THIRD-PARTY RIGHTS: The services provided for in this Agreement are for the sole use and benefit of City and Engineer. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Engineer.

BB. CONFIDENTIALITY OF RECORDS. The Engineer shall establish and maintain procedures and controls that are acceptable to the City for the purpose of ensuring that information contained in its records or obtained from the City or from others in carrying out its obligations under this Agreement shall not be used or disclosed by it, its agents, officers, or employees, except as required to perform Engineer's duties under this Agreement. Persons requesting such information should be referred to the City. Engineer also agrees that any information pertaining to individual persons shall not be divulged other than to employees or officers of Engineer as needed for the performance of duties under this Agreement.

CC. ANTI-DISCRIMINATION AGAINST ISRAEL ACT. If this Contract has a total potential value of \$100,000 or more and Contractor has 10 or more employees, the following applies. Pursuant to Section 34.600, RSMo. and to the fullest extent permitted by law, Contractor certifies that Contractor is not engaged in a boycott of Israel as of the Effective Date of this Agreement, and agrees for the duration of this Agreement to not engage in a boycott of Israel as defined in Section 34.600, RSMo.

DD. PROVISIONS REQUIRED BY LAW. Each and every provision of law and any clause required by law to be in the Agreement will be read and enforced as though it were included herein

EXHIBIT 1 TO ORDINANCE

and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either Party, the Agreement will promptly be physically amended to make such insertion or correction.

EE. SEVERABILITY. The provisions of this Agreement are severable to the extent that any provision or application held to be invalid by a Court of competent jurisdiction shall not affect any other provision or application of the Agreement which may remain in effect without the invalid provision or application.

FF. NOTICE: Whenever any notice is required by this Agreement to be made, given or transmitted to any party, it shall be enclosed in an envelope with sufficient postage attached to ensure delivery and deposited in the United States Mail, first class, with notices to City addressed to:

City Engineer
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64063

Director of Public Works
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64063

and notices to Engineer shall be addressed to:

Garver, LLC
7301 W. 129th Street, Suite 330
Overland Park, KS 66213

or such place as either party shall designate by written notice to the other. Said notices may also be personally hand delivered by each party to the other, at the respective addresses listed above. If hand delivered, the date of actual completion of delivery shall be considered the date of receipt. If mailed, the notice shall be considered received the third day after the date of postage.

ARTICLE VIII

EXHIBITS The following Exhibits are attached to and made a part of this Agreement:

Exhibit A – Scope of Services
Exhibit B – Fee Estimate

City and Engineer, by signing this Agreement, acknowledges that they have independently assured themselves and confirms that they individually have examined all Exhibits, and agrees that all of the aforesaid Exhibits shall be considered a part of this Agreement and agrees to be bound to the terms, provisions, and other requirements thereof, unless specifically excluded.

EXHIBIT 1 TO ORDINANCE

THIS AGREEMENT shall be binding on the parties thereto only after it has been duly executed and approved by City and Engineer.

IN WITNESS WHEREOF, the parties have caused this 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:

Scott Ison,
Chief Counsel of Infrastructure and Recreation
Office of City Attorney

GARVER, LLC

Brent S. Schniers

BY: *Brent S. Schniers*

TITLE: *Vice President*

ATTEST:

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

SCOPE OF BASIC SERVICES TO BE PROVIDED BY ENGINEER

Engineer shall provide the following professional engineering services to City (“Basic Services”):

1.1 General

Generally, the scope of services includes surveying, roadway design, traffic studies, water line and gravity sewer design, preparation of property acquisition documents, geotechnical investigations, traffic data collection, and utility coordination for improvements to Ward Road from Persels Road (south) to 720 feet south of SW 14th Street. Additionally, approximately 1200 feet of Persels Road (south) will be realigned to the Persels Road (north) Ward Road intersection. Improvements will consist primarily of widening Ward Road to the east to facilitate the addition of left turn lanes and provide access management through this section of Ward Road. Improvements to Persels Road will consist of constructing a new two-lane city street with curb & gutters, sidewalks, lighting, shared-use path, enclosed stormwater systems, stormwater BMP’s, MSE retaining walls, signage, pavement markings, a relocated 8” water main, repairing a visible, due to erosion, gravity sewer, and landscaping/streetscaping features.

1.2 Surveys

1.2.1 Design Surveys

Contract with Powell CWM, Inc. (Powell) to provide field survey data for designing the project, and this survey will be tied to the City’s control network.

Powell will conduct field surveys, utilizing radial topography methods, at intervals and for distances along the project site as appropriate for modeling the existing ground (maximum of 50-foot intervals), including locations of pertinent features or improvements. Powell will locate buildings and other structures, streets, existing enclosed drainage features, existing crossroad culverts, existing streetlights, existing traffic signals, pull boxes, controllers, sidewalks, trails, street signs, trees over six inches in diameter, visible utilities as well as those underground utilities marked by their owners and/or representatives, and any other pertinent topographic features that may be present at and/or along the project site. Powell will establish control points for use during construction.

Powell will provide two (2) additional pick-up survey days and associated post processing for additional pick-up surveying.

1.2.2 Hydraulic Surveys

Powell will conduct field surveys to assist in the development of the hydraulic modeling. Sixteen cross sections will be taken in the creek and at the upstream

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

and downstream toe of roadway embankments. These sections will be taken of the creek channel and 25 feet beyond the top of bank of the creek channel on both sides of the channel. In addition, three roadway crossings will be surveyed. These include Ward Rd, Percels Rd and the trail/railway embankment crossing. Surveyor is to obtain all pertinent crossing information including, but not limited to, high point of roadway, guard rails, flowline of culverts (upstream and downstream sides), inside top of culverts (upstream and downstream sides), culvert shape dimensions and lengths.

Powell will conduct field surveys to assist in the development of the LOMR. One section will be taken in the creek and at the upstream and downstream toe of roadway embankments. These sections will be taken of the creek channel and 25 feet beyond the top of bank of the creek channel on both sides of the channel. In addition, the two new roadway crossings will be surveyed. These include the Ward Road and Persels Road crossings. Surveyor is to obtain all pertinent crossing information including, but not limited to, high point of roadway, guard rails, flowline of culverts (upstream and downstream sides), inside top of culverts (upstream and downstream sides), culvert shape dimensions and lengths.

1.2.3 Property Surveys

Powell will locate existing monumentation representing right of way and/or easements based on record data which will be provided by the City.

1.2.4 Geotechnical Boring Surveys

Powell will locate and survey the geotechnical boring holes and provide said surveyed locations to Engineer in MicroStation format.

1.3 Traffic Data Collection

Engineer will subcontract with The Traffic Group to perform data collection at the following locations:

- SW Ward Road and SW Longview Road
- SW Ward Road and SW Persels Road (north intersection)
- SW Ward Road and SW Persels Road (south intersection)
- SW Ward Road and SW 13th Terrace
- SW Ward Road and SW 14th Street

The traffic data collection will include 24-hour video turning movement counts at the above intersections with truck classifications and pedestrian crossings included. The collection will occur shortly after Notice to Proceed and will be

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

conducted when conditions are above freezing, while school is in session, and avoiding holiday influences.

Trail counts, including bikes and pedestrians, will also be collected at the north intersection of SW Ward Road and SW Persels Road.

1.4 Geotechnical Services

Engineer will subcontract with Geotechnology, Inc. to provide geotechnical investigations for the pavement design of the Ward Road widening and the Persels Road realignment.

Geotechnology will provide the following:

- 1) Geotechnology will notify Missouri One-Call. The boring locations will be estimated by measuring distances from site features. Measurement of the boring locations by a professional surveyor is recommended.
- 2) Geotechnology will complete the City of Lee's Summit right-of-way excavation permit. City will waive the fees for permitting.
- 3) Drilling and soil sampling at nine (9) locations depicted on the attached plan; two borings will be sampled to a depth of 20 feet and seven borings will be sampled to depths of 5 to 10 feet (these borings depths, however, can be adjusted once flow lines of nearby sewers are calculated). If auger refusal material is encountered prior to the planned depth the boring will be terminated. Rock is not planned nor budgeted. The borings will be drilled in areas accessible to the drill rig.
- 4) One boring is planned within SW Persels Road (i.e., east of SW Ward Road) and four borings are planned within SW Ward Road. The pavement at these boring locations will be penetrated with augers (i.e., pavement coring is not planned nor budgeted).
- 5) Lane closures and a flagging crew will be required to drill the roadway borings. Geotechnology will engage a third-party traffic control subcontractor; these borings will be performed between hours permissible to the City, and 9 am to 3 pm are anticipated.
- 6) Access to the culvert boring might require permission of a private property owner. Access to the boring in the lawn area south of SW Persels Road west of Ward Road might also require permission from a third party. We understand Engineer and/or City will obtain permission to access private property. Geotechnology, however, will work with private property owners to determine an agreeable route to the boring locations. City to provide permission access template to Engineer for use in gaining property access.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- 7) Soil sampling will be performed using split-spoon and Shelby tube techniques at 2.5-foot intervals to 10 feet followed by 5-foot intervals thereafter.
- 8) The borings will be logged by a field engineer/geologist.
- 9) In general, the boreholes will be backfilled with auger cuttings. Roadway borings will be backfilled with dry mix concrete and topped with a thickness of quickset cement equal to the thickness of the pavement section. Excess auger cuttings will be wasted on site.
- 10) Laboratory testing will include determination of moisture content, Atterberg limits, unconfined compressive strength, proctors, CBR's, and dry unit weight determination.
- 11) The report will be prepared by a Missouri-registered professional engineer. The report will include the results of the borings and laboratory tests; a boring location plan; recommendations for the pipe and box culverts; recommendations for site grading, backfilling, temporary excavations and preparation of pavement subgrades, and asphaltic concrete and Portland cement concrete pavement designs.

1.5 Subsurface Utility Engineer (SUE) Level A

Engineer will subcontract with Geotechnology, Inc. to perform subsurface excavation for up to four (4) locations to develop accurate location and depth information for underground utilities.

1.6 Administration and Project Management

The Engineer shall perform the following Administration and Project Management Tasks:

1. Set up and attend the project kick-off meeting.
2. Personnel planning, project scheduling, and budget control.
3. Plan and hold internal project team meetings, as needed.
4. Coordination with City on an as needed basis.
5. Prepare agendas and meeting minutes for as needed meetings.
6. Submit monthly progress report documents, along with the monthly invoices. The Monthly Progress Report shall document the following:
 - a. Past Month's Activities/Accomplishments
 - b. Pending Issues and Decisions
 - c. Problem Areas and Recommended Corrective Actions
 - d. Budget Summary Status (showing % complete vs. % expended per task)

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- e. Schedule Summary Status (chart showing baseline schedule vs. actual schedule)
 - f. Next month's Planned Activities/Goals
 - g. Summary of Coordination Efforts (including correspondence summaries)
6. Develop subconsultant contracts, review, and process subconsultant invoices.

All of the above items shall include/address sub-consultant tasks.

1.7 Stakeholder Coordination

The Engineer shall perform the following Stakeholder Coordination Tasks:

- Attend stakeholder face to face meetings:
 - Up to four (4) meetings with MoDOT LPA Staff
 - Up to four (4) meetings with the RIRCA/Jackson County Staff

The Engineer will develop agendas and meeting minutes for all meetings. Agendas will be submitted to City for review two (2) weeks prior to any meeting and meeting minutes will be completed and submitted to City within (2) weeks after said meeting.

For the Design Public Meeting Engineer will:

- Prepare exhibits for and attend an in-person design public meeting.
- Host and maintain a virtual public meeting.

Both the in-person and virtual public meeting will meet MoDOT LPA and FHWA guidelines.

To document the Design public Meeting the Engineer will 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.
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.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

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

1.8 Quality Assurance and Quality Control

The Engineer shall perform the following Quality Assurance and Quality Control Tasks:

- Develop project Quality Control Plan (QCP) document.
- Perform independent Quality Assurance Reviews to verify that QCP is being followed and continuously updated as required.
- Perform independent Quality Control reviews on the design and plans.
- Perform Conceptual, Preliminary, Right of Way, and Final Design Reviews.
- Perform Conceptual, Preliminary, Right of Way, and Final Plan Reviews.
- Perform Engineers Estimate of Probable Cost Reviews.
- Review deliverables from subconsultants such as, but not limited to:
 - Geotechnical Reports
 - Survey Design Files
 - Traffic Data Collection Summaries
 - Right of Way and Easement Acquisition Documents

1.9 Utility Coordination

Furnish plans to all known utility owners potentially affected by the project at the approved conceptual, preliminary, and final design stage of plan development.

Conduct the following coordination meetings among all known affected utility owners to enable them to coordinate efforts for any necessary utility relocations.

- Kickoff Meeting (30 days after conceptual design submittal to utility companies)
- Preliminary Design Meeting (30 days after preliminary submittal to utility companies)
- Final Design Meeting (30 days after final plans submittal to utility companies)

Engineer will include the surveyed locations of the observable and marked utilities in the construction plans. Engineer will also include proposed and/or relocated utility information in the construction plans as provided by the utility companies.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

Attend coordination meetings with the City as required, and prepare agendas and meeting minutes for these meetings.

1.10 Environmental Services (NEPA)

Engineer will coordinate with the Missouri Department of Transportation (MoDOT) for confirmation of the appropriate Categorical Exclusion (CE) documentation (a CE2 is anticipated for this project). Engineer will coordinate completion and approval of a CE2 with MoDOT and the Federal Highway Administration (FHWA). The following tasks shall be performed as required by MoDOT.

1.10.1 Request for Environmental Review (RER)

Engineer will obtain information pertinent to complete online submittal of the RER from the City. Engineer will submit the RER to MoDOT for review and address comments and requests for additional information as the RER is processed throughout design.

1.10.2 Data Collection and Constraints

Engineer will develop an initial constraints map and collect data from governmental and other sources to document potential environmental constraints. Desktop constraints will be verified thorough a detailed site visit to review the presence of readily visible and environmentally sensitive features such as wetlands, endangered and threatened species habitats, streams, ponds, rivers, farmlands, historic properties, residences and noise sensitive properties, any hazardous material sites, and businesses. Photos environmentally sensitive features will be taken.

1.10.3 Agency Coordination

Engineer will coordinate with MoDOT regarding Section 106 and establish a Direct Area of Potential Effect (APE) and indirect APE, and provide MoDOT all Section 106 documentation to review prior to submittal to the State Historic Preservation Officer (SHPO).

Engineer will provide MoDOT with project information for Tribal coordination through the Federal Highway Administration (FHWA).

Engineer will complete an Individual Section 4(f) determination and submit to MoDOT for review and approval. Coordination with FHWA and the Advisory Council is also required. Section 4(f) documentation is anticipated due to potentially eligible National Register of Historic Places (NRHP) sites/structures and the existing trail system that may be affected by the project.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

Engineer will obtain an Information for Planning and Consultation (IPaC) list from the US Fish and Wildlife Service (USFWS) to document federally listed threatened and endangered species in the area. Engineer will also submit project information to the Missouri Department of Conservation (MDC) through the Heritage database. Potential impacts to listed species will be evaluated. Spatial, seasonal, or temporal restrictions or design modifications will be evaluated. Informal Section 7 consultation with the USFWS is anticipated in this scope.

Engineer will coordinate with the US Army Corps of Engineers (USACE) and Missouri Department of Natural Resources (MDNR) regarding potential impacts to jurisdictional waters of the US and water quality.

Engineer will coordinate with the City and the Mid-America Regional Council (MARC) in determining the level of air quality analysis required.

1.10.4 Floodplain and Regulatory Floodway

Engineer will evaluate impacts to floodplains and floodways. Refer to the Hydrology and Hydraulics section of this scope. Hydrology and floodplain coordination will be coordinated with appropriate floodplain managers and results of any studies included in the RER for insertion into the CE2.

1.10.5 Flood Buyout Lands

Engineer will evaluate whether the project requires the use of FEMA flood buyout properties by contacting FEMA.

1.10.6 Borrow, Staging and Haul Roads

Engineer will include anticipated borrow, staging, and haul roads in the study area to be environmentally reviewed and receive environmental clearance with the project.

1.10.7 Farmlands

Engineer will review the project and whether it will convert any farmland to non-farming use. If so, Engineer will complete the Natural Resources Conservation Service (NRCS) farmland impact rating form (Form AD-1006 or SCS-CPA-106) and coordinate with NRCS.

1.10.8 Community Impacts

Engineer will comply with Title VI requirements of the Civil Rights Act of 1964 and Executive Order 12898 Environmental Justice by confirming if minority and/or low-income populations, and the general community will be affected by the project. Engineer will coordinate with the City and MoDOT for hosting a public meeting that will include a project overview, available design layouts, any detours, potential available environmental

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

impacts, and other project information. Public meeting materials, public comments, and responses will be included in the RER and CE2.

1.10.4 Special Environmental Studies

Cultural Resources

Engineer will assist the City in coordinating with MoDOT for determination of applicability of MoDOT's programmatic Section 106 compliance under Minor Highway Projects. If compliant, Section 106 is complete. If not, Engineer will complete the Section 106 submittal and submit to MoDOT for review. Upon MoDOT approval, Engineer will submit the Section 106 package to SHPO. If determined by SHPO a survey is required, Engineer will provide complete a Phase I archaeological survey and architectural survey. For the purposes of this contract, fees for historic and archaeological surveys are included.

If an "adverse effect" determination is made by SHPO, a Memorandum of Agreement (MOA) will be coordinated with MoDOT, SHPO, City, FHWA, and possibly interested Tribes. An adverse effect determination also triggers Section 4(f), which is discussed in a separate section of this scope of work.

An Alternatives Analysis will also be performed for documentation inclusion in the MOA and Section 4(f) submittals. Up to two build alternatives will be evaluated (No Action, Proposed Action, and one build alternative).

Habitat Assessment

Engineer will complete a habitat assessment for the project that will include documentation of the potential project effects on state and federally listed species. The habitat assessment will include detailed evaluation for the preferred habitats of the listed species and provide an effects determination for each species. Impact determinations and potential mitigation for habitat impacts will be determined for coordination with the USFWS.

Section 4(f) – Public Recreation and Historic Sites

Engineer will evaluate impacts to the trail system and make a preliminary determination of impacts for anticipated net benefit to the trail system. Engineer will coordinate with the City (Official with Jurisdiction (OWJ)). This information will be combined into one Individual Section 4(f) document as identified below as there are multiple Section 4(f) properties located within the project area.

Engineer will evaluate if any NRHP eligible properties or structures would be impacted. MoDOT and SHPO will be coordinated with closely

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

and impact determinations presented to both agencies. It is anticipated that the project may require an Individual Section 4(f) evaluation due to the involvement of potential NRHP structures and will incorporate potential impacts to the trail system, historic sites, and historic structures.

The Individual Section 4(f) evaluation will include preparation of a report that will detail alternatives considered and their impacts on Section 4(f) properties, avoidance and minimization, and documenting overall least harm. This evaluation will be coordinated with MoDOT, the City, SHPO and FHWA. All correspondence will go through MoDOT to FHWA. Engineer will address comments from all reviewing parties and obtain Section 4(f) approval for the project.

Wetland Delineation and Section 404 Permitting

Engineer will complete a wetland delineation that will include field evaluation and mapping of jurisdictional waters. A report of the findings will be completed and presented to the USACE for use in Section 404 permitting.

Engineer will coordinate avoidance, minimization and mitigation with the designer and the City. We will assess the potential effect of construction activities of the proposed project on jurisdictional waters and wetlands, consult with the USACE to propose mitigation measures if required. Engineer will complete a Section 404 Nationwide permit application package that will include design plan sheets and fill quantities.

Section 401 water quality shall be obtained as part of the Section 404 Nationwide Permit. If Individual Section 401 water quality certification is required, this can be coordinated and obtained upon written amendment.

Noise Analysis

Engineer will conduct a detailed noise analysis of the proposed improvements for up to two reasonable alternatives. The noise study will take into account existing and future traffic volumes. Potential traffic noise impacts will be evaluated and if needed one barrier analysis will be completed. The noise study will be conducted in accordance with MoDOT Noise Policy. Engineer will submit the noise analysis to MoDOT for review and approval.

1. Each travel and turn lane centerline and elevation will be entered into TNM for both existing and future conditions into the TNM model from plan, profiles, and cross-sections. Topographic mapping for insertion of terrain lines would also be used where possible and modeled for both existing and future conditions.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

2. Based on traffic counts and projections provided by MoDOT, the City, and/or Engineer, determine the appropriate design traffic volumes to be used in the analyses. Classification counts will be utilized that will include heavy trucks, medium trucks, and autos.
3. The TNM model will be validated with noise level measurements determined in the field. If necessary, make appropriate adjustments to the base TNM computer model to reflect the existing conditions as well as possible. Use the validated TNM model to determine the existing and future 66 dBA noise level contours.
4. Determination of noise level impacts (approaching or exceeding the 67 dBA Noise Abatement Criteria (NAC) level) for residential, park, and Section 4(f) sites. If impacts are determined, noise abatement feasibility will be evaluated first. If found feasible, reasonableness criteria will be applied to the impacted and benefited receptors. Up to two noise barrier analyses will be completed. Detailed noise abatement design is considered extra work and can be completed upon written authorization. If noise abatement meets MoDOT Noise Policy feasibility and reasonableness criteria, views of benefited property owner would be required. A noise barrier is not anticipated for this project; however, detailed barrier design and public outreach can be completed upon written amendment.
5. Prepare and submit a report which summarizes the findings, provides details of the noise analysis, impact noise level contours, and recommendations.
6. Revise the study report per comments received from the property owners, City and MoDOT, and submit the final report to MoDOT for review/approval.

Stormwater and Erosion Control

Engineer will assess the potential for any water quality impacts, including potential contamination of groundwater aquifers or surface waters and document measures to be incorporated to minimize adverse water quality effects. Disturbance of land equal to or greater than one acre will require a National Pollutant Discharge Elimination System (NPDES) Land Disturbance Permit at the time of construction.

Hazardous Materials

Engineer will conduct a review of MDC's hazardous materials sites and complete a site review documenting potentially hazardous materials sites that could affect construction of the project within the standard ASTM guideline parameters. No bridges or buildings are anticipated to be affected by this project.

EXHIBIT A

1.11 Conceptual Design (10% Submittal)

1.11.1 Traffic Engineering

The engineer will redistribute existing traffic volumes for the proposed intersection configuration, develop future year traffic volumes, and analyze existing and proposed conditions. The following tasks will be completed to support the development of a preferred option to carry into development of final construction plans.

- The engineer will perform field observations of existing delay and lane utilization within the study area to validate base models
- The engineer will develop traffic volumes for multiple scenarios to be used for analysis from the raw data collected in **Item 1.3**
 - Engineer will develop 2021 traffic volumes for the existing configuration
 - Engineer will study background growth trends in area and project base 2040 forecasts
 - Engineer will perform Trip Generation for known developments within the study area:
 - Conduct Stakeholder Meeting to determine the location/size of proposed developments adjacent to the study area that may impact traffic volumes on Ward Road
 - Review Lee's Summit Thoroughfare Plan and prior studies
 - Develop assumptions methodology for stakeholder review
 - Perform trip generation for study area developments
 - Add trip generation to the 2040 base volumes to produce 2040 design volumes
- The Engineer will use the 2040 design volumes and re-route traffic for up to 3 design scenarios that assume median openings with some restricted movements.
- The engineer will perform capacity analysis for the existing and proposed configurations. Intersection Level of Service analysis using Synchro/SimTraffic software for the following scenarios:
 - 2021 Existing Configuration (AM/PM)
 - 2040 Existing Configuration (AM/PM)
 - 2040 Build Configuration (AM/PM) – up to 3 scenarios
 - The engineer will summarize all preliminary findings in a meeting with City staff before finalizing any recommendation

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- The engineer will evaluate crash data within in the study area from the last five year of information. A safety analysis will be completed for each alternative will be evaluated using Crash Modification Factors from the Highway Safety Manual
- The engineer will produce a selected alternative which includes access management features, trail accommodations, intersection modifications, and turn lane needs/storage lengths
- The engineer will produce sections for draft report. After comments from City, the engineer will update all report elements for the final report. The report will include sections documenting the operational performance and safety impacts (via crash modification factors from the HSM) of various alternatives and support of selected alternative.

1.11.2 Conceptual Roadway Design and Document

The conceptual roadway design phase will include development of alternative Ward Road widening and Persels Road realignment options. The following concepts will be evaluated:

- No build option with improved signal equipment,
- Realign Persels Road (North) to Persels Road (South),
 - Develop conceptual typical sections for Ward Road and Persels Road,
 - Develop two (2) horizontal alignments and associated vertical profiles,
 - Develop conceptual models and earthwork volumes.

Conceptual Report Documentation

For the evaluation, the Engineer will develop written documentation on the following criteria.

- Traffic Operation and Safety Impacts (reported in 1.11.1),
- Utility Impacts,
- R/W Impacts,
- Long term maintenance,
- Rock Island Trail Constraints/Procedures,
- Conceptual Cost Estimates.

Results will be summarized and documented in a report format (8.5" x 11" letter size) utilizing Microsoft Word. Concept drawings will be

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

developed utilizing Microstation SS4 and InRoads and will be presented on half size sheets (11" x 17" Tabloid). The report and concept drawings will be delivered electronically as a PDF.

1.11.3. Existing Culvert Inspection and Recommendation

The existing Ward Road double arch pipe culvert and the existing Persels Road reinforced concrete box culvert will be inspected and evaluated for continued use, rehabilitation, extension, or replacement.

1.12 Preliminary Design (50% Submittal)

1.12.1 The preliminary design phase submittal will include:

- Title Sheet,
- General Notes and Legend,
- Survey Control and Layout Sheet
- Typical sections,
- Roadway plan & profile sheets showing:
 - Existing topographical data,
 - New horizontal and vertical alignments,
 - Curb and gutter,
 - Enclosed drainage improvements,
 - Sidewalks and trails,
 - Traffic Signal Poles and Controller Locations,
 - Fiberoptic Cable Location,
 - Proposed water line, gravity sewer, and sewer force main (if needed),
 - MSE walls (if needed),
 - Existing utilities,
 - Proposed right of way and easements:
 - Right of Way,
 - Utility Easement 10-foot-wide minimum behind any new Right of Way,
 - Drainage Easements for proposed or extended culverts and ditches,
 - Temporary Construction Easements,
- Preliminary demolition plans
- Preliminary drainage area map sheet,
- Preliminary driveway profiles,
- Concept MOT and staging plans,
- Preliminary pavement marking plans,
- Preliminary lighting layout,
-
- Preliminary traffic signal and fiber optic location and layout plans,

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- Cross road culvert sections,
- Cross sections,
- Preliminary quantities,
- Opinion of probable construction cost.

Any City and MoDOT provided review comments will be reviewed and addressed and revised documents will be submitted as per the project schedule. Review comment responses will be documented and a copy will be submitted with the revised plans.

This preliminary design submittal will be for the purpose of setting the horizontal alignment and vertical profile, coordinating the proposed improvements and right of way/easements with the City, and developing an order of magnitude cost estimate for the project. Any City requested changes to the horizontal or vertical alignment after approved preliminary plans may require a scope amendment and a supplemental agreement. Final design will begin upon City notification of preliminary design approval.

Utilize City Design Standards and supplement with MoDOT Design Standards as needed. Design criteria as specified in the City Design Authorization Memo will be utilized as applicable with exceptions being documented and approved by the City prior to implementation.

1.12.2 8" Water Main Relocation and Gravity Sewer Rehabilitation

Engineer will provide the following utility work as necessary:

- Review Lee's Summit and KC Water record drawings for water lines that run along and across Ward Road.
- Coordinate with roadway design team to determine extent of utility relocations that will be required. Currently, the only relocation anticipated will be the 8" water line running north-south along the eastern side of Ward Road, including reconnecting the 8" water line that runs along the south side of Persels Road. Relocation of any other water lines is not a part of this Scope.
- Prepare preliminary water line plan & profile sheets drawn at 1"=20', showing:
 - Existing topographical data,
 - Horizontal and vertical alignments of water relocations where necessary due to conflict or depth, to include the following:
 - Roughly 2,000 LF of 8" water line relocation along Ward Road
 - Crossings with proposed or existing drainage structures, utilities, and roadways,
 - Proposed permanent utility easements,

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- Preliminary recommendations for rehabilitation of 8" gravity sewer line along tributary C3 of Cedar Creek from its crossings of Ward Road and Persels Road. Relocation design is not a part of this Scope.
- Preliminary quantities and opinion of probable construction cost.

1.12.3 Hydraulics and Hydrology

Engineer will provide Hydrology and Hydraulics services for the tributary C3 of Cedar Creek.

- The project limits for the analysis will extend approximately 1,200 feet upstream and downstream of the centerline of Ward Road and Persels Road over the creek.
- Engineer will develop discharges for the portion of the creek to be studied. Flows will be developed using the HEC-HMS software to determine the existing watershed and fully urbanized watershed condition discharges for the 10-, 25-, 50, 100-, and 500-year storms. If possible, Engineer will also attempt to obtain the Flood Insurance Rate Study hydrologic models for Cedar Creek that were used in the published FEMA study. Engineer will compare each of the models and work with the City to choose the most appropriate creek discharges to use to design the proposed bridge.
- Engineer will develop a hydraulic model of the existing portion of the tributary to be analyzed using the HEC-RAS software. A hydraulic model will be developed with both existing and fully-urbanized watershed discharges. The models to be created for hydraulic analysis will be an existing bridge and a proposed bridge at Ward and Percels Roads. Up to two proposed bridge alternatives will be analyzed at each road. Engineer will attempt to obtain the FEMA hydraulic models used in the FEMA study of the creek. These models will be used to compare results between the proposed bridge and current FEMA conditions.
- Engineer will work with the project surveyors to obtain surveyed cross sections of the creek in the study area. The cross-section survey effort is described in the survey section of this scope of services.
- Since the current floodplain of the creek is shown as a Zone AE floodplain, a Floodway analysis will be prepared for this scope of services.
- Engineer will prepare a drainage report including the following:
 - description of the existing and fully-urbanized floodplain hydraulic condition;

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- Plots of relevant cross sections and floodplain limits,
- Tables showing existing and proposed condition hydraulic results such as water surface elevations, average velocities and velocity distribution and other hydraulic parameters;
- Plots of the floodplain and Floodway boundary;

Submit drainage report to City for review.

1.12.4 Preliminary Lighting Layout

Existing lights and light poles will be evaluated for relocation where applicable. Lighting on Persels will be evaluated to be located on the south roadside to attempt to gain dual benefit with backlighting the trail.

Lighting design will be performed using the Visual lighting software. Lighting design will conform with the City of Lee's Summit Design Criteria Section 5800 - Street Lighting, City of Lee's Summit Standard Specifications Section 2800 - Street Lighting, APWA KCMO Section 2800 – Street Lights, MoDOT Engineering Policy Guide Category 901 – Lighting, and Illuminating Engineering Society recommendations.

The Engineer will deliver one lighting layout exhibit and an associated opinion of probable construction cost for each under this phase. Additionally, the Engineer will provide a high-level opinion of probable construction cost during the conceptual phase.

1.2.5 Develop Preliminary Traffic Signal Layout

Engineer will produce preliminary traffic signal layouts for the preliminary plans for the new signal at the intersection of Ward Road with Persels Road (south).

Engineer will coordinate with the local utility as needed for powering of the new signal.

Engineer will coordinate with City Traffic Engineer for proposed signal pole locations, existing signal timings and interconnect.

Signal modification design will conform with the City of Lee's Summit Design Criteria Section 5900 - Traffic Signals, City of Lee's Summit Standard Specifications Section 2900 – Traffic Signals, MoDOT Engineering Policy Guide Category 902 – Lighting, and Manual on Uniform Traffic Control Devices (MUTCD). All signal modification design will comply with these standards as well as with the latest requirements of the National Electrical Code (NEC), National Electrical Safety Code

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

(NESC), standards of the American Society of Testing Materials (ASTM), American Standards Associations (ASA), and National Electrical Manufacturers Association (NEMA).

The traffic engineer will attend one (1) on-site meeting during this project.

The Engineer will deliver an opinion of probable construction cost for the preliminary design.

1.2.6 Develop Preliminary Fiber Optic Layout Sheets (Longview Road to Water Tower)

The Engineer will develop a preliminary layout to be included within the preliminary plans for a 96-strand fiber optic trunk line from Longview Road at Ward Road south for approximately 0.5 miles to the water tower located east of Ward Road south of Persels Road (south).

The fiber optic installation will interconnect the existing traffic signal at the intersection of Longview Road at Ward Road, the proposed traffic signal at the intersection of Persels Road (south) at Ward Road, and at the proposed radio cabinet at the water tower.

No temporary fiber optic connection will be made to the existing signal to be replaced at Persels Road (north) at Ward Road.

1.13 Right of Way Plans (60% Submittal)

1.13.1 The MoDOT and City approved preliminary plans will be updated for the Right of Way Plan submittal to MoDOT. Items needed to be updated or added:

- Update Title Sheet
- Add a summary of takings and remainders sheet
- Addition of takings/remainders to parcels on the plan sheets

1.14 Final Design (PS&E Submittal)

1.14.1 Conduct final design to prepare construction plans and specifications for one construction contract. The following items will be included:

- Finalize title sheet,
- Finalize typical section sheets,

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

- Develop general notes sheets
- Develop overall quantity bid item summary table and detailed quantity summarization tables,
- Update approved R/W plan and profile sheets into final construction roadway plan and profile sheets,
- Finalize demolition plans and details,
- Finalize MSE retaining wall plans and details (if needed),
- Develop intersection detail and grading sheet,
- Develop concrete jointing details,
- Finalize storm sewer design and drainage plan and profile sheets,
- Develop drop inlet special details (if needed),
- Develop erosion control plans and details (for two construction phases),
- Develop tree replacement plan and details,
- Develop miscellaneous details (as needed),
- Finalize 8" waterline plans and details,
- Finalize gravity sewer plans and details,
- Finalize MOT and staging plans,
- Finalize culvert sections,
- Finalize pavement marking plans,
- Develop signing plans,
- Finalize lighting plans and details,
- Finalize traffic signal and fiber optic plans and details,
- Finalize temporary traffic signal plans and details for 2 phases
- Finalize cross sections,
- Develop Construction Project Manual,
- Finalize Engineers opinion of probable construction cost.

City will develop the Bid Manual and Construction Project Manual as per the MoDOT LPA Manual Section 136.9.4 Bid Documents. For the sections to be completed by the LPA the Engineer will use the City's standard construction bid documents, modified for this project, and other EJCDC language as applicable. Engineer will provide the following supporting items for the Bid and Construction Manual.

- Bid Form Table for Section 520
- Work Day Study (Calendar Days) for contractor
- Section 1116 – Submittal Checklist
- Section 1120 – Measurement and Payments
- Project Special Provisions (PSP's) and Technical Specs
- Utility Job Special Provisions

Any City and MoDOT provided review comments will be reviewed and addressed and revised documents will be submitted as per the project

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

schedule. Review comment responses will be documented, and a copy will be submitted with the revised plans.

Prepare, submit, and coordinate approval of a Stormwater Pollution Prevention Plan (SWPPP).

1.14.2 8" Water Main and Gravity Sewer Final Design and Plans

Conduct final design to prepare construction plans and specifications for one construction contract. The following items will be included as part of the PS&E submittal:

- Finalize water plan & profile sheets (95%)
- Compile applicable City details and develop additional water and sewer details as necessary,
- Develop specifications for water line relocation and gravity sewer rehabilitation as necessary to supplement the City's Standard Specifications in the Construction Project Manual,
- Finalize the water and gravity sewer opinion of probable construction cost,
- Submit to Missouri DNR for permitting, and provide design revisions for up to two resubmittals.

1.14.4 Final Lighting Design, Plans, and Details

Engineer will produce final lighting design, construction plans, details, and specification coordination for the design developed in the preliminary phase.

Engineer will coordinate with the local utility as needed for powering of the new roadway lighting.

Lighting design will conform with the City of Lee's Summit Design Criteria Section 5800 - Street Lighting, City of Lee's Summit Standard Specifications Section 2800 - Street Lighting, APWA KCMO Section 2800 – Street Lights, MoDOT Engineering Policy Guide Category 901 – Lighting, and Illuminating Engineering Society recommendations. Electrical design will comply with these standards as well as the National Electric Code, current edition.

The Engineer will deliver a revised opinion of probable construction cost under this phase.

1.14.5 Develop Traffic Signal Plans and Details

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

Engineer will produce traffic signal design and final construction plans, details, and specifications for the new signal at the intersection of Ward Road with Persels Road (south).

Engineer will coordinate with the local utility as needed for powering of the new signal.

Engineer will coordinate with City Traffic Engineer for proposed signal pole locations, existing signal timings and interconnect.

Engineer will produce temporary traffic signal plans at the intersection of Ward Road with Persels Road (south). The design may include temporary span wire signals. The engineer will also develop temporary signal timing plans for the preferred alternative to be used during construction.

Signal modification design will conform with the City of Lee's Summit Design Criteria Section 5900 - Traffic Signals, City of Lee's Summit Standard Specifications Section 2900 – Traffic Signals, MoDOT Engineering Policy Guide Category 902 – Lighting, and Manual on Uniform Traffic Control Devices (MUTCD). All signal modification design will comply with these standards as well as with the latest requirements of the National Electrical Code (NEC), National Electrical Safety Code (NESC), standards of the American Society of Testing Materials (ASTM), American Standards Associations (ASA), and National Electrical Manufacturers Association (NEMA).

The Engineer will deliver an opinion of probable construction cost for final plans.

1.14.6 Develop Fiber Optic Plans and Details (Longview Road to Water Tower)

The Engineer will develop plans and details to install a 96-strand fiber optic trunk line from Longview Road at Ward Road south for approximately 0.5 miles to the water tower located east of Ward Road south of Persels Road (south).

The fiber optic installation will interconnect the existing traffic signal at the intersection of Longview Road at Ward Road, the proposed traffic signal at the intersection of Persels Road (south) at Ward Road, and at the proposed radio cabinet at the water tower.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

Other than being used as a termination point, modifications to the existing radio and any other existing communication equipment at the water tower is not part of this project.

No temporary fiber optic connection will be made to the existing signal to be replaced at Persels Road (north) at Ward Road.

1.14.7 CLOMR/LOMR

1.14.7.1 CLOMR

Upon completion of the above tasks, a submittal for a Conditional Letter of Map Revision (CLOMR) will be prepared and submitted to the City for review. The submittal will include a brief report with exhibits, maps, hydraulic models, and draft notification letter (City will prepare and send the notification letters to adjacent property owners) and FEMA MT-2 forms. The CLOMR will include the proposed floodplain modifications determined in the hydraulic modeling task above.

The CLOMR will be submitted to the City. Upon concurrence by the City, the CLOMR will be forwarded to FEMA for final review. Engineer will coordinate with the City, FEMA and the FEMA review consultant to resolve review comments from these entities.

1.14.7.2 LOMR

Upon completion of the construction of the Colbern Road project and bridge improvements, Engineer will prepare a Letter of Map Revision (LOMR) for submittal to the City for review. The submittal will include a brief report with exhibits, maps, hydraulic models, and draft notification letter (City will prepare and send the notification letters to adjacent property owners) and FEMA MT-2 forms. The LOMR will include the proposed floodplain modifications determined from actual project as-built surveys and in the hydraulic modeling task above.

The LOMR will be submitted to the City. Upon concurrence by the City, the LOMR will be forwarded to FEMA for final review. Engineer will coordinate with the City, FEMA and the FEMA review consultant to resolve review comments from these entities.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

The payment of required FEMA review fees for both the CLOMR and the LOMR are included in Engineer's scope of services.

Surveying services to obtain as-built project information is included in the survey task 1.2.2 above.

1.14.8 Final Sustainability Assessment (Revised Envision Checklist/Scorecard)

Engineer will review the preliminary ENVISION Checklist/Scorecard and update the ENVISION Checklist/Scorecard with any changes made during the final design phase. The updated Checklist/Scorecard will be presented to City staff for discussion and the final copy will be submitted to City for record.

1.15 Property Acquisition Documents

Provide mapping as required for preparing Right-of-Way/Easement acquisition documents for the City's use in acquiring the property. Documentation will include individual tract maps with a description of temporary and permanent acquisition for each property. The City will provide a standard easement acquisition document or "go-by" example for use by Engineer. The fee for providing property acquisition documentation is based on permanent right of way and temporary construction easements for no more than 15 parcels. Property acquisition document preparation will begin after receiving the City's comments from the Preliminary Design review.

2.0 Bidding/Construction Phase Services

During the bidding and construction phase of the project, Engineer will:

1. Respond to Contractor and City questions as requested by the City during the bid phase of the project.
2. Attend prebid meetings with the City/Contractors as requested by City.

3.0 Project Deliverables and Permits

The following will be submitted to the City, or others as indicated, by Engineer:

1. One copy of the Geotechnical Report.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

2. Electronic full size (22" x 34") PDF copy of the Preliminary Design with opinion of probable construction cost.
3. Electronic full size (22" x 34") PDF copy of the Right of Way Plans.
4. Electronic full size (22" x 34") PDF copy of the Final Design with opinion of probable construction cost.
5. One signed and sealed full size (22" x 34") PDF copy of the revised Final Design, for reproduction, with opinion of probable construction cost.
6. One digital (8.5" x 11") Letter size PDF copy of the project construction manual.
7. One digital copy, in PDF format, of the revised Final Plans to each potentially affected utility company.
8. CADD file submitted to each of the following: the City, utilities and contractor.
9. One digital PDF copy of the right-of-way and/or easement acquisition documents.
10. One copy of the traffic study and concept analysis documentation.
11. One copy of the lighting calculations.
12. One copy of the storm water calculations/drainage report.
13. One copy of the Stormwater Pollution Prevention Plan (SWPPP).
14. One copy of the No Rise Certification
15. Section 404 Nationwide Permit 14
16. Section 401 Water Quality certification (blanket authorization from MDNR in connection with general conditions of Section 404 permit – If met).
17. One copy of the Threatened and Endangered Species Clearance Letter
18. One copy of the Wetland Delineation Report
19. One copy of each Agency Clearance Letter other than listed above
20. One copy of the approved Noise Study
21. One copy of the Cultural Historic Report
22. One copy of the Archeological Resources Report
23. One copy of the Individual Section 4F document (if required)
24. One copy of the Categorical Exclusion 2 (CE2) Clearance Document
25. One copy of the MDNR Construction Permit

4.0 Schedule

Engineer shall begin work under this Agreement upon Notice to Proceed and shall complete the work in accordance with the schedule below:

<u>Phase Description</u>	<u>Deliverable Date</u>
Surveys – Design and Property	October 8, 2021
Draft Concept Design and Traffic Study	October 29, 2021
Final Concept Design and Traffic Study	November 26, 2021
Preliminary Design	Feb 25, 2022
Right of Way Plans	April 15, 2022

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

Property Acquisition Documents	30 calendar days after City approved Right of Way Plans
Final Design Submittal (90%)	September 2, 2022
Final Design (100%) Submittal	October 28, 2022

These deliverable dates are based on a NTP of September 16, 2021 and a two week review duration. If review takes longer than two weeks Engineer will update the project schedule/deliverable dates to reflect the change in schedule. Once the actual NTP date is known, the deliverable dates will be adjusted to meet the new schedule.

ARTICLE II OPTIONAL SERVICES TO BE PROVIDED BY ENGINEER

Engineer shall provide, if needed by the City, and only upon receipt of written authorization by the Director of Public works, the optional services ("Optional Services") as outlined as follows:

1.1 General

The following is a list of optional services that can be provided by the Engineer for the Ward and Persels Road Signal project.

1.2 Retaining Walls

Geotechnology will provide a boring plan which will include the following:

1. The retaining wall exploration will be performed concurrently with the exploration for the Ward Road and Persels Road exploration.
2. The exploration locations will be estimated by measuring distances from site features.
3. For exploration locations along Persels Road Geotechnology will complete the City of Lee's Summit right-of-way excavation permit.
4. Drilling two (2) borings and nine (9) probes. The borings will be drilled to a depth of 1.5 to 2H, where H is the wall height, along the tallest portions of the wall. The probes will be drilled on approximately 50-foot centers and to a depth of 1 to 1.5H. If auger refusal material is encountered prior to the planned depth the boring/probe will be terminated. Rock coring is not planned nor budgeted.
5. The borings/probes will be drilled in areas accessible to the drill rig. This fee does not include use of dozer or backhoe or hand clearing of vegetation to facilitate drill rig access.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

6. At the two borings, soil sampling will be performed using split-spoon and Shelby tube techniques at 2.5-foot intervals to 10 feet followed by 5-foot intervals thereafter. Soil sampling is not planned at the probe locations.
7. Lane closures and a flagging crew will be required to drill roadway borings/probes. Geotechnology will engage a third-party traffic control subcontractor; these borings/probes will be performed between hours permissible to the City of Lee's Summit, and 9 am to 3 pm are anticipated.
8. Roadway borings will be backfilled with dry mix concrete and topped with a thickness of quickset cement equal to the thickness of the pavement section. Borings in lawn/gravel areas will be backfilled with auger cuttings and plugged. Excess auger cuttings will be wasted on site.
9. The borings and probes will be logged by a field engineer/geologist.
10. Laboratory testing will include determination of moisture content, Atterberg limits, unconfined compressive/unconsolidated-undrained triaxial shear strength, dry unit weight determination, and direct shear triaxial shear strength.
11. The results of the retaining wall borings/probes and global stability analyses will be incorporated into the report that is prepared for the Ward Road and Persels Road project.
12. The retaining wall borings and probes will add two days to the field exploration (or 4 days total).
13. A geotechnical report with retaining wall considerations and global stability analyses will be submitted approximately 4 to 5 weeks after completion of the field work.

Engineer will evaluate the use of MSE walls vs. the use of cast-in-place (CIP) retaining walls for use in the realignment of Persels Road. Upon concurrence with the City on the retaining wall type the Engineer will design up to two (2) retaining walls for the project. Plans will include the location, layout, type, special details, quantities, and any specification needed for construction. MoDOT design criteria will be used for the wall type selected.

EXHIBIT 1 TO ORDINANCE

EXHIBIT A

**ARTICLE III
SCOPE OF SERVICES TO BE PROVIDED BY CITY**

City shall use its best efforts to provide the information to Engineer as described as follows:

- Tenant names
- Available water and sewer locations, size and materials
- Copies of available reports and as-built plans
- Available drainage studies
- Title commitments and last deed of ownership for impacted parcels
- Available plats of adjacent properties
- EJCDC Contract Documents, Division One-Special Contract Provisions
- Assist Consultant as needed in gaining right of entry to private property for geotechnical exploration.
- Any permitting needed for work on or within the Rock Island Trail right of way.
- City will coordinate the Land Disturbance Permit.
- Waive any City geotechnical permitting fees such as the ROW Permit Fee and Traffic Control Permit Fee.

EXHIBIT 1 TO ORDINANCE



EXHIBIT B
Ward and Persels Road Signal Project
Garver Hourly Rate Schedule: July 2021 - June 2022

Classification	Rates
Engineers / Architects	
E-1	\$ 114.00
E-2	\$ 132.00
E-3	\$ 160.00
E-4	\$ 187.00
E-5	\$ 228.00
E-6	\$ 280.00
E-7	\$ 373.00
Planners / Environmental Specialist	
P-1	\$ 137.00
P-2	\$ 172.00
P-3	\$ 214.00
P-4	\$ 239.00
P-5	\$ 276.00
P-6	\$ 316.00
P-7	\$ 381.00
Designers	
D-1	\$ 106.00
D-2	\$ 124.00
D-3	\$ 148.00
D-4	\$ 172.00
Technicians	
T-1	\$ 83.00
T-2	\$ 105.00
T-3	\$ 128.00
Surveyors	
S-1	\$ 51.00
S-2	\$ 68.00
S-3	\$ 91.00
S-4	\$ 130.00
S-5	\$ 172.00
S-6	\$ 196.00
2-Man Crew (Survey)	\$ 198.00
3-Man Crew (Survey)	\$ 249.00
2-Man Crew (GPS Survey)	NA
3-Man Crew (GPS Survey)	NA
Construction Observation	
C-1	\$ 100.00
C-2	\$ 129.00
C-3	\$ 158.00
C-4	\$ 194.00
C-5	\$ 232.00
Management / Administration	
M-1	\$ 381.00
X-1	\$ 65.00
X-2	\$ 89.00
X-3	\$ 123.00
X-4	\$ 157.00
X-5	\$ 193.00
X-6	\$ 238.00
X-7	\$ 287.00
X-8	\$ 359.00
X-9	\$ 433.00