CITY		ENGINEER	
CITY OF JOPLIN **602 S. MAIN STREET** **JOPLIN, MO 64801**		Name: Olsson Address: 702 S. Main Joplin, MO 64801	
Attention: David Hertzberg		Attention: Jack Schaller	
Department: Public Works Dept.		Phone: 417-781-0643	Fax: 417-781-4714
Phone:417-624-0820	Fax:	Joplin ADA Sidewalk Assessment	

WORK AUTHORIZATION NUMBER ADA-2019-01
TO AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

City and Engineer agree to amend their Agreement for Professional Engineering Consulting Services to include a scope of work and fees for engineering services, by adding the following terms to their Agreement.

1. **Services**. The City agrees to engage the services of the Engineer and the Engineer agrees to perform the services hereinafter set forth in connection with projects described in ***Exhibit A***.

2. **Addition to Services**. The City may add to the Engineer services or delete therefrom activities of a similar nature to those set forth in ***Exhibit A***, provided that the total cost of such work does not exceed the total cost allowance as specified in Paragraph 5 hereof. The Engineer shall undertake such changed activities only upon the direction of the City. All such directives and changes shall be in written form and prepared and approved by the City and shall be accepted and countersigned by the Engineer.

3. **Term**. The services of the Engineer shall commence as soon as practicable after the execution of this contract, unless otherwise directed in writing, and shall be undertaken and completed in such sequence as to assure their expeditious completion in the light of the purposes of the contract, but in any event, all of the services required hereunder shall be completed as set forth in the schedule for the project which is attached hereto as ***Exhibit A***.

4. **Costs not to Exceed**. The City of Joplin is limited by law with respect to the amount of money it can pay. Therefore, the City has established a fixed sum for this contract, which cannot be exceeded unless this contract is amended. The Engineer providing services hereunder shall be required to keep track of the amount of hours billable under this contract at all times; and any work in excess of the fixed sum shall not be eligible for payment. The Engineer shall notify the City if Engineer anticipates that the contract amount may be exceeded, in order to determine whether or not the City is prepared to increase the total compensation. The Engineer shall establish a billing system showing the amount of money remaining on the contract, which shall be shown in each monthly billing.

5. **Payment**.

a. **Conditioned upon acceptable performance**. The City agrees to pay the Engineer in accordance with the terms set forth in ***Exhibit A***, which shall constitute complete compensation for all services to be rendered under this contract; provided, that where payments are to be made periodically to Engineer for services rendered under this contract, the City expressly reserves the right to disapprove in whole or in part a request for payment where the services rendered during the period for which payment is claimed are not performed in a timely and satisfactory manner in accordance with the schedule and description of services set forth in ***Exhibit A***.

b. **Total compensation not to exceed**. It is expressly understood that in no event will the total compensation and reimbursement to be paid to the Engineer under the terms of this work Authorization Number ADA-2019-01 the sum of Two-Hundred Thirty-Eight Thousand and Zero cents Dollars ($ 238,000.00).

6. **Insurance**. Without limiting any of the other obligations or liabilities of the Engineer, the Engineer shall secure and maintain at its own cost and expense, throughout the duration of this Contract and until the work is completed and accepted by the City of Joplin, insurance of such types and in such amounts as may be necessary to protect it and the interests of the City of Joplin against all hazards or risks of loss as hereunder specified or which may arise out of the performance of the Contract Documents. The form and limits of such insurance, together with the underwriter thereof in each case, are subject to approval by the City of Joplin. Regardless of such approval, it shall be the responsibility of the Engineer to maintain adequate insurance coverage at all times during the term of

the Contract. Failure of the Engineer to maintain coverage shall not relieve it of any contractual responsibility or obligation or liability under the Contract Documents.

The certificates of insurance, including evidence of the required endorsements hereunder or the policies, shall be filed with the City at the time that this contract is signed by the Engineer. All insurance policies shall provide thirty (30) days written notice to be given by the insurance company in question prior to modification or cancellation of such insurance. Such notices shall be mailed, certified mail, return receipt requested, to:

City of Joplin - Public Works, 602 S. Main, Joplin, MO 64801; and

Such policies shall name the City as an additional insured with limits of liability not less than the sovereign immunity limits for Missouri public entities calculated by the Missouri Department of Insurance as of January 1 each calendar year and published annually in the Missouri Register pursuant to Section 537.610, RSMo.
(See, http://insurance.mo.gov/industry/sovimmunity.php).

As of January 1, 2019, the minimum coverage for the insurance referred to herein shall be as set out below:

a. Workers' Compensation….Statutory coverage per RSMo 287.010 et seq.
Employer's Liability……. $1,000,000.00

b. Commercial General Liability Insurance, including coverage for Contractual Liability and Independent Contractors Liability. Such coverage shall apply to bodily injury and property damage on an "Occurrence Form Basis" with limits of at Two Million Eight Hundred Sixty-Five Thousand Three Hundred Thirty and no/100 Dollars ($2,865,330.00) for all claims arising out of a single accident or occurrence and at least Four Hundred Twenty Nine Thousand Seven Hundred Ninety-Nine and no/100 Dollars ($429,799.00) with respect to injuries and/or death of any one person in a single occurrence and an amount not less than at least $1,000,000 for all claims to property arising out of a single occurrence and at least $100,000 to any one owner with respect to damages to property. Engineer agrees that the proceeds of such insurance policy shall first be used to pay any award, damages, costs, and/or attorneys' fees incurred by or assessed against City, its employees, officers and agents, before payment of any award, damages, costs or attorneys fees of Engineer, its employees, officers or agents. Engineer agrees to cause its insurer to name City as an additional insured on such insurance policy, including the City as an additional insured for coverage under its products-completed operations hazard, and said policy shall be primary and noncontributory.

c. Automobile Liability Insurance covering bodily injury and property damage for owned, non-owned and hired vehicles, with limits of at least Two Million Eight Hundred Sixty-Five Thousand Three Hundred Thirty and no/100 Dollars ($2,865,330.00) for all claims arising out of a single accident or occurrence and at least Four Hundred Twenty Nine Thousand Seven Hundred Ninety-Nine and no/100 Dollars ($429,799.00) with respect to injuries and/or death of any one person in a single accident or occurrence.

d. Errors and Omissions Insurance. The Engineer shall maintain a professional liability insurance policy in the amount of $1,000,000.00. This policy shall remain in full force and effect for a period of one year after completion and acceptance by the City of the construction of the project.

e. Subcontracts. In case any or all of this work is sublet, the Engineer shall require the subcontractor to procure and maintain all insurance required in subparagraphs (A), (B) and (C) hereof and in like amounts. Engineer shall require any and all subcontractors with whom it enters into a contract to perform work on this project to protect the City of Joplin through insurance against applicable hazards or risks and shall, upon request of the City, provide evidence of such insurance.

f. Notice. The Engineer and/or subcontractor shall furnish the City prior to beginning the work satisfactory proof of carriage of all the insurance required by this contract, with the provision that policies shall not be canceled, modified or non-renewed without thirty (30) days written notice to the City of Joplin.

g. Legislative or Judicial Changes. In the event the scope or extent of the City's tort liability as a governmental entity as described in Section 537.600 through 537.650 RSMo is broadened or increased during the term of this agreement by legislative or judicial action, the City may require Engineer, upon 10 days written notice, to execute a contract addendum whereby the Engineer agrees to provide, at a price not exceeding Engineer's actual increased premium cost, additional liability insurance coverage as the City may require to protect the City from increased tort liability exposure as the result of such legislative or judicial action. Any such additional insurance coverage shall be evidenced by an appropriate certificate of insurance and shall take effect within the time set forth in the addendum.

7. All other terms and conditions of the original Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals on the day and year herein stated.

REVIEWED FOR APPROVAL

Name & Title of Staff Project Manager

CERTIFICATE OF DIRECTOR OF FINANCE

I certify that the expenditure contemplated by this document is within the purpose of the appropriation to which it is to be charged and that there is an unencumbered balance of appropriated and available funds to pay therefore.

Leslie Haase, Director of Finance

APPROVED AS TO FORM

Peter Edwards, City Attorney

Engineer: Olsson

By:

Printed Name: Clayton Cristy

Title: Vice President

Date: 5/20/2019

By:

Printed Name: Jack Schaller

Title: Vice President

Date: 5/20/2019

CITY OF JOPLIN, MISSOURI

By:

David Hertzberg, P.E.
Public Works Director

Date:

EXHIBIT A
Scope of Services **– ADA** Sidewalk Assessment &
Pavement Condition Survey

PROJECT SUMMARY

The base scope of services will include a sidewalk, pedestrian curb ramp, and curb evaluation utilizing the IMS sidewalk surface tester (SST) covering the network as follows:

- The City's existing sidewalk GIS linework will be adopted and cleaned up as a part of this assignment. Long sidewalk segments will be split in an effort to develop homogeneous segmentation on an intersection-to-intersection basis.
- The Master Asset List (MAL) will be developed and reviewed with the City for accuracy. The MAL is the data/attribute dictionary that defines the elements to be recorded.
- The SST will perform a linear survey on the portion of City-owned sidewalks not affected by the recent tornado, covering approximately 120 linear sidewalk miles. The inspection will include City sidewalks, pedestrian curb ramps, and curbing. Residential driveway approaches shall not be treated as an independent asset or attribute. The condition of the travel path will be aggregated with the segment as a whole. The area inside the tornado zone (75 linear sidewalk miles) remains optional and can be added at the discretion of City staff.
- IMS will QA/QC and process the data collected in the field at the segment level on an intersection-to-intersection basis. The distress inspection data will be captured as a percentage of the sidewalk length to simplify the review process.
- IMS will also include a curb assessment, with good/fair/poor ratings. The curb condition will simply be an attribute to the sidewalk inventory and will not be inspected as a separate asset.
- Video from the SST field surveys will be processed and delivered to the City at approximately 10 – 20 foot intervals and delivered with a Personal Geodatabase containing image hyperlinks.
- A sidewalk and pedestrian curb ramp analysis will be performed to identify the network valuation, deficiencies, ramp compliance types, deficiencies by rehab activity & cost, annual rehab budgets based upon the program life, and a multi-year prioritized plan.

EXHIBIT A
Scope of Services **– ADA** Sidewalk Assessment &
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Task	Description	Activities	Deliverables
Project Initiation:			
1.	Project Initiation & Set Up	• Confirm scope, extent and content of surveys, set milestones, and deliverables. • Confirm key contacts, roles and responsibilities, and project documentation. • Identify location of key data elements such as GIS and existing sidewalk inventories. • Identify deficient data and the means to obtain it. • Confirm phases of the work and invoicing methodology. • Confirm deliverable formats and scheduling constrains. • Setup project within project management system along with confirmed milestones.	Technical memo detailing scope of work, budget and deliverables.
2.	Network Referencing & Line work Cleanup	• Obtain the City's street centerline such that all sidewalks can be linked to an appropriate street segment. • Obtain existing sidewalk attributes from GIS for ownership, length, material type, etc (if available). • Using the City's existing GIS sidewalk topology, develop a network wide sidewalk inventory on a block-to-block and/or intersection-to-intersection basis. Long blocks will be re-sectioned appropriately. • Ensure each segment is linked to its parent GIS section. • Utilizing aerial photography, measure, draw, and confirm lengths for each sidewalk segment.	Sidewalk inventory in Excel format and as a Personal Geodatabase.
3.	MAL & NOMAD Development	• Review the Master Asset List (MAL) with City staff to ensure the attributes being collected meet expectations. • Review the MAL attribute definitions with City staff. • Configure NOMAD for Joplin SST operation and take any corrective action that came from the MAL review.	Master Asset List (MAL) development.
4.	SST Survey Setup & Routing	• Develop mobile survey maps for review by City staff. Make necessary revisions to sidewalk coverage. • Load the NOMAD FM2 file and upload into the SST tablet for mobile routing.	Survey coverage map.

EXHIBIT A
Scope of Services **– ADA** Sidewalk Assessment &
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Sidewalk Field Surveys:

5.	SST Mobilization, Calibration, & Set Up	• Mobilize sidewalk and ramp inspection equipment to project. • Demonstrate the equipment to the City. • Calibrate equipment. • The Field Operator will schedule an onsite meeting upon arrival.	Equipment calibration & client meeting
6.	SST Sidewalk, Pedestrian Curb Ramp, & Curb Condition Assessment (Good/Fair/Poor)	• Development of a sidewalk & pedestrian curb ramp inventory that will be developed in the field using the IMS mobile mapping application NOMAD. • A modified ATV will be deployed to drive each sidewalk maintained by the City and log a series of pre-defined attributes for each sidewalk & curb ramp. • No information is being collected on the residential or commercial driveway approaches/cuts. The path through the approach will be assessed and aggregated as a part of the sidewalk segment (if applicable). • Curb ramp attributes will be defined in the Master Asset List (MAL) and include ADA compliance type, material, condition, location, distresses, slopes (running & cross), presence of VIF, lip of gutter and presence of obstructions. • Sidewalk attributes will be defined in the Master Asset List (MAL) and include material, condition, distresses, slopes (running & cross), and presence of obstructions. • Curb condition will be on a good/fair/poor scale and it will be an attribute of the sidewalk. A separate curb inventory with curb type definitions is not being conducted.	The SST will be mobilized to drive approximately 120 linear miles of sidewalk outside of the tornado zone. Residential and commercial driveway approaches remain optional and outside of this scope.

Data Management:

7.	Personal Geodatabase Development & QA/QC	• Assemble all of the sidewalk/ramp/curb information collected in the field and consolidate into a single database with several tables. • Link all distress data and attributes to their appropriate sidewalk, ramp, and or street ID. • Perform random samples on sidewalk and ramps using the HD imagery collected in the field to validate and complete the QC program.	Consolidation of all raw data table into a single source file for internal processing.
8.	Process & Deliver SST HD Video	• Process the RAW video collected in the field and clip duplicate runs. • Process the imagery in 10 – 20 foot intervals. • Deliver SST imagery on a portable hard drive with an	Sidewalk imagery on a portable hard drive with an associated Personal Geodatabase

		associated Personal Geodatabase that contains hyperlinks to each .jpeg.	
9.	Training – 6 Hours Remote (Spreadsheet & GIS)	• Conduct remote training using WebEx. • Training will be split into two or three sessions and focused on spreadsheet functionality as well as GIS if needed.	Remote training via WebEx
10.	Sidewalk/Ramp Analysis & Prioritization Plan	• Process the summarized sidewalk distress data and calculate a Sidewalk Condition Index (SCI) for each segment of sidewalk. o Apply a high severity distress flag and a fatal distress flag. o Acquire remediation techniques and unit costs associated with those activities from City staff. • Process the ramp distress and attribute data in an effort to assign compliance type categories and calculate a ramp condition score. o Apply a fatal distress flag. • Utilizing the assembled condition and attribute data collected in the field, perform an analysis that includes the following: o Summarize sidewalk deficiency by type, material, condition category, and rehab activity. Apply rehab costs to each summary element. o Summarize ramp deficiency by compliance type (type I – VIII) and priority. Apply rehab cost to each compliance type. o Summarize sidewalk rehab costs by priority using presence of fatal, severe, moderate, and low severity distresses. Apply rehab cost to each category. o Identify the network valuation, annual life cycle costs, total network deficiency, and the years to remove said deficiencies. • Develop a multi-year rehab plan for sidewalks that is prioritized/sequenced using a high severity distress flag and a fatal distress flag. • Develop a multi-year rehab plan for ramps that is prioritized/sequenced using a fatal distress flag as well as the compliance type category applied to each ramp. • The final spreadsheet will have the ability to reprioritize a multi-year plan by selecting the	

		program life span to remove the deficiencies identified. • Integrate sidewalk and ramp obstruction removal costs identified during the field data collection effort.
11.	Project Management	• Provide client with periodic e-mail updates and reports. • Meetings to be completed by conference calls. • Complete project administration and invoicing.

ATTACHEMENT A
Scope of Services **– ADA** Sidewalk Assessment &
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PROJECT FEES

Project Management	$ 20,000
Sidewalk, SST Assessment & Analysis, 120 Sidewalk Miles (outside the FISH)	$ 98,000
Sidewalk, SST Assessment & Analysis, 75 Sidewalk Miles (Inside the FISH)	$ 66,000
Streets, RST Survey, 20 Miles (1 Test Day)	$ 22,000
Streets, RST Survey, 20 Miles (additional 20 miles in conjunction with base scope)	$ 12,000
ADA Transition Services (On-Call Assistance, Hourly Estimated)	$ 20,000
Total	$238,000