



MASTER AGREEMENT WORK ORDER #2

This exhibit dated October 2, 2024, is hereby attached to and made a part of the Master Agreement for Professional Services dated August 20, 2024, between the Town of Garden City ("Client") and Olsson, Inc. ("Olsson") providing for professional services. Olsson's Scope of Services for the Agreement is as indicated below.

GENERAL

Olsson has acquainted itself with the information provided by Client relative to the project and based upon such information offers to provide the services described below for the project. Client warrants that it is either the legal owner of the property to be improved by this Project or that Client is acting as the duly authorized agent of the legal owner of such property.

PROJECT DESCRIPTION AND LOCATION

Project will be located at: Garden City, CO

Project Description: On-Call Traffic Support Services

SCOPE OF SERVICES

Olsson shall provide the following services (Scope of Services) to Client for the Project:

SCOPE OF SERVICES

General Project Scope

The Town of Garden City has requested assistance requested Olsson, Inc. (Olsson) to help the Town by performing a variety of general traffic engineering services. Olsson currently and routinely provides general traffic engineering services to local governments. This proposal identifies the general scope of work necessary to complete the following:

- Prepare traffic signal warrant studies
- Prepare analysis and recommendations on traffic impact studies
- Prepare specialized traffic studies, analysis and recommendations related to assess proposed projects
- Prepare multimodal transportation analysis and recommendation
- Evaluate crash data and perform QC on crash reports
- Prepare corridor and individual signal timing plans
- Provide safety studies & transportation operational analysis
- Prepare Work Area Traffic Control Plans
- Roundabout designs
- Provide intersection design services
- Perform intersection safety analyses
- Data collecting

1. Traffic Operations

Provide traffic engineering functions related to the operation and analyses of Garden City roadways, including intersection analyses, roadway operations and signal timing. Typical tasks include:

- a) *Traffic Analyses*—Analyze traffic and ITS operations to determine travel demand, incident management, mobility improvement alternatives, and travel time quality performance measures using standard procedures from the Highway Capacity Manual (HCM) along with general traffic engineering practices. The task may also include traffic volume data analysis, average daily traffic, delay calculations, and field observations. Findings and recommendations from this task will typically be documented in a technical memorandum or summary report.
- b) *Roadway Operations*—Operational analyses of the Town of Garden City roadways will be prepared in accordance with the HCM for ramp operations (merge/diverge), weaving segments, and basic freeway segment facilities. Software applications in support of this analysis may include HCS, CORSIM, Synchro, and VISSIM. Data collection would include vehicle classification, speed studies, and travel time studies. Findings and recommendations from this task will typically be documented in a technical memorandum or summary report.
- c) *Signal Timing*—This may include gathering existing information, collecting field data, and developing proposed timings for new HAWK signals. This may also include collecting before and after travel time data for corridors that include signal coordination between multiple intersections. Field implementation of the signal timings will be provided as requested.

2) Traffic Studies

Provide traffic study services related to warrant analyses, safety studies, school mobility and safety studies, traffic impact studies, and corridor studies. Typical tasks include:

- a) *Warrant Analyses*—In accordance with the 2009/2023 Manual on Uniform Traffic Control Devices (MUTCD), conduct warrant analyses for proper intersection control, including signalization. Subtasks for warrant studies may include the following:
 - Data collection (TMC, hourly approach counts, delays and speed)
 - Compilation and review of crash data
 - Comparison of compiled data to warrant thresholds
 - Operations analysis (HCM intersection analysis)
 - Report documentation
 - Present findings to local officials
- b) *Access Management*—Proper allocation of access is a proven strategy for improving the safety and operational efficiency of the Town of Garden City roads. Olsson would review

existing and/or proposed access along a corridor and develop recommendations to improve the safety and operations of the project area. In general, the following subtasks are typically included:

- Data collection (TMC, ADT, crash data, speed studies)
- Safety Analysis (Working in conjunction with Town's Police Department and CDOT, if necessary)
- Operational Analysis
- Public Participation
- Develop and Screen Alternatives
- Develop Preliminary Preferred Alternative
- Present to public and one-on-one meetings with stakeholders
- Revise and Finalize Access Plan
- Prepare Access Report

3) Transportation Engineering Design

Provide design services for transportation projects. Typical tasks include:

- a) *Traffic Signal Design* - Tasks include a field review of existing conditions, preparation of base mapping (survey if needed), utility locates, right-of-way, design of signal phasing, pole/mast arm placement, signal head layout, conduit/pull boxes, cabinet/ controller, detector design (including video detection if applicable), traffic signal interconnect, associated signs and pavement markings, specifications, quantities, and cost estimates. Signal plans will be prepared on (11"x17"). Preliminary (FIR) plans will be prepared showing pole locations, signal heads, detectors and conduit. Final design will address any comments received during the FIR plan review, and will also include all equipment to be installed, specifications and cost estimates.
- b) *Construction Traffic Control Plans* —Construction traffic control and construction phasing plans will be prepared as needed to safely convey vehicles, bicycles, and pedestrians through and/or around a construction project area. The plans will show the traffic control devices to be used during each phase of roadway construction. Plans will typically be prepared at 1" =100' (11"x17"), although a larger scale may be used if greater detail is needed. FIR level plans will show each phase of construction, where traffic is to be maintained (or detoured), typical sections, and construction phasing notes. The FIR plans will also clearly indicate temporary pavement markings, construction signing, barriers, channelizing devices, impact attenuators, temporary signal modifications, quantities, estimates and specifications.

4) ITS Planning and Design

Provide planning and design services in support of ITS strategies and devices. Typical tasks include:

- a) *ITS Planning* — Includes developing and/or updating Garden City's ITS plans. Specific tasks include:
 - i) Preparing an ITS device inventory
 - ii) Assembling an ITS working group
 - iii) Review of previous and current ITS documents
 - iv) Organizing stakeholder meetings
 - v) Market package selection
 - vi) Develop project list
 - vii) Conduct project priority workshop
 - viii) Prepare planning level cost estimates and identify potential funding sources
 - ix) Prepare draft and final reports
- b) *ITS Device Design*
 - i) Communication systems (wireless, fiber optic, Ethernet, networks, etc.)
 - ii) Communication hardware (modems, cabinets, racks, conduit systems, etc.)
 - iii) Dynamic message signs (DMS)
 - iv) Closed circuit television (CCTV)
 - v) Detection systems

Design and plan preparation for various intelligent transportation system (ITS) devices will be completed. Devices may include, but are not limited to, CCTV cameras, changeable message signs, communications, smart work zone devices, etc. ITS plans will typically be prepared on (11"x17") using all available information including survey, aerial photography and field photos. Plan preparation may include field visits statewide, tabulation sheets, specifications and cost estimate. Depending on the complexity of the project, FIR/FOR plans may be combined into one submittal. Overhead sign supports will be designed in accordance with CDOT's S-614-60, or custom design of support structures will be completed in special cases where the standard plans do not apply. Fiber optic design and splicing diagrams would be available as needed.

5) Design/Study Review and Technical Support

Provide review services and technical support for traffic study review, traffic/ITS plan review and assisting Garden City in responding to citizen inquiries. Typical tasks include:

- a) *Traffic Study Review* — This subtask includes being an extension of staff to perform the review of traffic impact studies, Garden City's transportation studies/plans, environmental documents, and access documents. Specific elements of this subtask

include reviewing the technical analyses for correctness and consistency with standard practices, conformance with Garden City policies, and to ensure that the integrity of the roadway system in Garden City is not compromised as a result of the study's recommendations. Additional tasks could include conducting an independent peer analysis and technical write-up of that peer review.

- b) *Traffic/ITS Plan Review*—Plan review may include a review of specific traffic/ITS design plans and/or cross-disciplinary review of a roadway plan set for impacts to traffic/ITS.

6) Field Services

Aid with various field tasks including construction observation, field inventories, and data collection. Typical tasks include:

- a) *Construction Observation*—Includes observing construction activities related to traffic, ITS, roadway, or structural. Typical tasks may include reviewing construction traffic control, measuring contract pay quantities, and completing required project construction forms.
- b) *Field Inventories*—Inventory various traffic engineering and other related assets using mobile GPS devices and spreadsheet data entry. Prior to beginning inventories, Olsson will meet with Town staff to identify the project limits and attributes to be inventoried. Devices to be inventoried may include but are not limited to:
 - i) Signs
 - ii) Traffic signal equipment
 - iii) ITS devices
 - iv) Network Equipment
 - v) Fixed objects
 - vi) Barriers
 - vii) Sign/Signal structures
- c) *Data Collection*—Traffic data collection is typically required in support of traffic studies and design tasks. Olsson staff will coordinate with Garden City to identify specific data to be collected, locations, time periods and any special instructions. Data will be provided in hard copy and/or electronic format. Data collection may include:
 - i) Average daily traffic (ADT) and hourly counts
 - ii) Turning movement counts (TMC)
 - iii) Vehicle classification
 - iv) Speed studies
 - v) Approach delay
 - vi) Corridor Travel Time/Delay
 - vii) Origin-Destination Studies

7) Miscellaneous Services

In addition to the tasks identified above, Olsson is available to assist the Town of Garden City with a variety of miscellaneous services related to meeting attendance, presentations, meeting minutes, correspondence, expert testimony, software and traffic engineering training, visual aids/graphics production, CADD services and other technical services.

8) Project Management/Continuing Requirements

Provide oversight and project management of the task order.

Typical tasks include:

1. Submit monthly progress reports outlining work completed in past month and work anticipated for the next month.
2. Prepare and review monthly invoices for payment.

Schedule and Fee

Based on our current workload, Olsson, Inc. can begin work on this project immediately upon notice to proceed. Olsson, Inc. will complete this work using the rates attached. This proposal is for time and materials need to complete each task requested by the Town.

Should Client request work in addition to the Scope of Services, Olsson shall invoice Client for such additional services (Optional Additional Services) at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Optional Additional Services without Client's prior written approval.

Olsson agrees to provide all of its services in a timely, competent and professional manner, in accordance with applicable standards of care, for projects of similar geographic location, quality and scope.

SCHEDULE FOR OLSSON'S SERVICES

Unless otherwise agreed, Olsson expects to perform its services under the Agreement as follows:

Anticipated Start Date:	Immediately Upon Notice to Proceed
Anticipated Completion Date:	December 31, 2025

Olsson will endeavor to start its services on the Anticipated Start Date and to complete its services on the Anticipated Completion Date. However, the Anticipated Start Date, the Anticipated

Completion Date, and any milestone dates are approximate only, and Olsson reserves the right to adjust its schedule and any or all of those dates at its sole discretion, for any reason, including, but not limited to, delays caused by Client or delays caused by third parties.

COMPENSATION

Client shall pay to Olsson for the performance of the Scope of Services, the actual time of personnel performing such services shall be in compliance with the rates listed in the original contract dated August 28, 2024. Olsson shall submit invoices on a monthly basis, and payment is due within 30 calendar days of invoice date.

TERMS AND CONDITIONS OF SERVICE

We have discussed with you the risks, rewards and benefits of the Project, the Scope of Services, and our fees for such services and the Agreement represents the entire understanding between Client and Olsson with respect to the Project. The Agreement may only be modified in writing signed by both parties.

Client's designated Project Representative shall be _____.

If this Work Order satisfactorily sets forth your understanding of our agreement, please sign in the space provided below. Retain a copy for your files and return an executed original to Olsson, 1880 Fall River Drive, Suite 200, Loveland, CO 80538. This proposal will be open for acceptance for a period of 30 days from the date set forth above, unless changed by us in writing.

OLSSON, INC.

By _____
Kurt Rotering, PE, PTOE
Senior Team Leader

By _____
Larry Haas, PE
Project Engineer

By signing below, you acknowledge that you have full authority to bind Client to the terms of the Agreement. If you accept this Work Order, please sign:

TOWN OF GARDEN CITY

By _____
Signature

Print Name _____

Title _____

Dated: _____

Attachments