ACUMEN
ENGINEERING, LLC

January 3, 2024

Project #: 25001

Jessica Thompson, P.E.
Senior Civil Engineer
Engineering
Town of Truckee
10183 Truckee Airport Road
Truckee, CA 96161

RE: Reimagine Bridge Street Scope of Work

Dear Jessica,

Acumen Engineering, LLC (Acumen) is pleased to present this scope of work to finalize the Reimagine Bridge Street project. The project, up to the 90% submittal, was prepared under my direction as President of Eastern Sierra Engineering (ESE). It is our understanding that Acumen will continue the design and coordination of the project through final submittal, bidding and construction. To allow for the most efficient continuation of the design, all files from ESE associated with the project should be transferred to Acumen. Information not transferred may need to be recreated or researched and is not included in this scope of work.

PROJECT UNDERSTANDING

The project is currently at a 90% design level. The Town would like to complete review and approval of the final drawings by late fall of 2025, bid the project in the winter of 2025/2026 and construct the project from April to October of 2026. Sage Land Surveying (Sage) and Headway Transportation (Headway) performed work on the original contract and will be contracted with Acumen to perform any remaining work. The traffic signal foundation design is expected to be finalized by ESE by March 2025 and is expected to include foundation recommendations, foundation details/plans, specifications, bid items, stamped calculations and cost estimate. As part of Acumen's contract, ESE will provide inspection and geotechnical recommendations during construction for the signal foundations as requested by the Town.

Scope of Work

The remaining work for the project includes legal descriptions; preparing electrical plans for the traffic signals and street lighting; finalizing traffic signal design; preparing traffic timing plans; preparing and coordinating utility agreements with UPRR; coordinating overall design with UPRR for approval of the plans; coordinating with utility agencies and property owners; finalizing the plans; providing support during bidding; providing construction support and preparing record drawings. The geometrics, grading, and drainage design is at a 90% level and requires only minor changes for final design. We anticipate up to three rounds of comments and three submittals to the Town at 95%, 100%, and Final. The number of submittals is an estimate based on previous work with UPRR.

CARSON OFFICE
ph: (775) 843-5626
djenkins@acumenengr.com

TRUCKEE OFFICE
ph: (530) 550-8068
bquesnelengineer@gmail.com

Task 1 – Legal Descriptions

Sage prepared the original topographical mapping and boundary information for the Reimagine Bridge Street project. Sage will prepare legal descriptions for up to four UPRR easements and up to five UPRR work areas. See attached scope of work from Sage.

Fee - $23,625
Deliverables – Up to nine legal descriptions

Task 2 – Electrical Engineering:

JP Electrical Engineering (JP) will provide electrical engineering design for the electric service to the meter pedestal for traffic signal power and street lighting; and secondary power to the street lights. The design will include the one-line-diagram, calculated loads, meter pedestal size and model, conductor sizes, plans etc. necessary for approval by TDPUD electric as well as specifications and cost estimate. Conduit and trenching will be shown on Acumen's dry utility plans. See attached scope of work from JP.

Fee - $3,675
Deliverables – Electrical Plans

Task 3 – Traffic Design

Headway Transportation (Headway) performed the traffic engineering for the Reimagine Bridge Street project up to 90% design under the ESE contract. Headway will continue their work to finalize the project and provide services through final design and bidding. See attached scope of work from Headway

Fee - $52,500
Deliverables – Traffic Plans and Reports

Task 4 - Design

The design portion of the project includes preparing and coordinating utility agreements with UPRR; coordinating the overall design with UPRR, utility agencies and the Town; and preparing final plans, specifications and cost estimate for the project. All of these remaining items depend on one another for a complete design.

UPRR Utility agreements – In general three utility agreements are expected to be necessary for the project. The first is for the utility bore under the UPRR tracks, the second a utility encroachment on East River Street for power to the new meter and the third is a utility encroachment permit for converting the existing overhead AT&T and Optimum communication lines behind the 76 Station to underground. It is Acumen's understanding from conversations with Trevor Taylor (Bensch – UPRR project coordinator), that the utility bore approval will be coordinated with the rest of the project through him. The utility bore permit includes permitting for all utilities within the bore and associated conduits within UPRR right-of-way. It may also include writing documents such as track and ground monitoring plan for approval from UPRR rather than waiting for approval between project award and construction start. The two utility encroachment permits will be submitted and coordinated through the UPRR website.

Snow Storage – Coordination between Town Maintenance and UPRR maintenance is expected for the snow storage necessary at the northwest and southeast quadrants of the UPRR track crossing. We anticipate three options will be considered at each location and refined to one selected layout for each. The selected layouts will be designed and included in the next design plan submittal to UPRR diagnostic team. The design of the layouts may include new fence details, other details, additional grading and changes to the easement limits. The designs

will likely trigger additional comments from the diagnostic team and require additional design changes and responses.

Coordination – Final coordination is required between UPRR, the utilities, property owners and the Town to ensure an agreement with UPRR is obtained, the existing overhead utilities can be undergrounded, the traffic signal foundations can be constructed, the adjacent property owners will grant necessary easements; and the improvements can be maintained by UPRR, utility agencies and the Town. We estimate three more meetings with UPRR, responding to three rounds of comments with UPRR and the Town, and weekly coordination with the Town through final design.

PS&E – The plans are currently at the 90% level. We anticipate 95%, 100% and Final PS&E submittals before bidding. Each submittal will incorporate the comments from UPRR, the Town and utility agencies as required. The specifications, and cost estimate would be updated with each submittal.

Fee - $114,025
Deliverables – Traffic Plans, Timing Plans and Reports

Task 5 - Bidding
Acumen will provide support to the Town during the bidding process including preparation of figures, review of agenda, participation in pre-bid meeting, preparation of addenda, response to RFIs and preparing conformed drawings if necessary.

Fee - $10,650
Deliverables – Addenda, Response to RFIs, Conformed Drawings

Task 6 – ESE Geotechnical Construction Support
ESE will provide inspection and geotechnical recommendations for the signal footings as requested by the Town. See attached scope of work from ESE.

Fee - $28,875
Deliverables – Response to RFIs, Revisions, Inspection Reports

Task 7 – Traffic Construction Support
Headway will provide Traffic Construction support for the project including submittal review, response to RFIs, field meetings, revisions etc. on an as needed basis as requested by the Town. See attached scope of work from Headway.

Fee - $42,000
Deliverables – Response to RFIs, Revisions, Inspection Reports

Task 8 – Construction Support
Acumen will provide construction support including submittal review, response to RFIs, field meetings, revisions etc. on an as needed basis as requested by the Town. We have anticipated 6 hours a week for five months for principal engineer and 3 hours a week for a drafter.

Fee - $38,500
Deliverables – Response to RFIs, Revisions, Inspection Reports

Task 9 – Record Drawings

Record drawings will be prepared from contractor markups of the drawings showing changes during construction. A draft of the record drawings will be sent to the Town and the contractor for verification and to confirm there are no other construction changes to note. Once the changes have been verified, the drawings will be sent to the utilities for their input and confirmation. When all changes have been verified, the AutoCAD drawings will be modified to fit the utility's required format and the AutoCAD record drawing files and electronic record drawing pdf files will be transmitted to the utilities and the Town.

Fee - $10,750
Deliverables – Record Drawings

Design Fees

Description	Budget
Task 1 - Legal Descriptions	$23,625
Task 2 – Electrical Engineering	$3,675
Task 3 – Traffic Design	$52,500
Task 4 – Design	$114,025
Task 5 - Bidding	$10,650
Task 6 – ESE Geotechnical Construction Support	$28,875
Task 7 – Traffic Construction Support	$42,000
Task 8 – Construction Support	$38,500
Task 9 – Record Drawings	$10,750
Total	$324,600

Billing Rates

Principal Engineer	$200
Engineer	$175
Drafter	$150
Admin	$100

Rates may increase 3.5% per year for the life of the contract.
Subconsultant markup is 5%.
All permit fees are to be paid by the Town.

We appreciate being considered for this work and hope to continue this mutually beneficial relationship in the future. Please contact me if you have any questions regarding this proposal.

Sincerely,
ACUMEN ENGINEERING, LLC

Debbie Davis Jenkins, P.E.
President

Attachments: Sage Land Surveying Proposal
JP Engineering Proposal
Headway Proposal
ESE Proposal

Contract Proposal	**CP24196**
Date	17 Dec 2024

Proposal For

Debbie Jenkins
Acumen Engineering, LLC
PO Box 3497
Truckee, CA 96160

Project

Truckee Bridge St. Signal and Street Lighting

Project Description

Based on information provided to our office, we understand this project to involve the installation of new traffic signaling equipment and street lighting. This will require verification of loads, providing specifications for meter and panel sizing, coordination with Truckee Donner Public Utilities District (TDPUD) and the Civil Engineering drawings.

Included:
Service Entrance
Branch Circuiting and Panel Schedules
Specifications of Equipment (Plan Specifications)
TDPUD Coordination

Excluded:
Photometric Plan
Book Specifications

Scope of Services

Our services will include site investigation, consultation, calculations, construction documents and plan specifications suitable for competitive bidding. Our contract support services will include consultation and shop drawing review. We will attend local design meetings as required to coordinate with other trades and will provide contract administration services as required for a complete and successful project.

Any significant changes to the project description that would require a change to the engineered plans and specifications; including, but not limited to size, schedule, budget (value engineering after the award of the contract for construction) and Owner and/or Contractor substitutions shall be subject to an adjustment to the original contract fee amount as agreed upon by the Owner's representative and Engineer.

Design Items

Entire Project	Fixed Fee	3,500.00
		$ 3,500.00

January 2, 2025

Debbie Davis Jenkins, PE
Acumen Engineering, LLC
4395 Combs Canyon Road
Carson City, NV 89703

Proposal for Traffic Signal Design Services – ReImagine Bridge Street

Dear Debbie,

Thank you for the opportunity to submit this proposal to provide traffic signal design and supporting traffic engineering services for the ReImagine Bridge Street project in Truckee, CA.

GCW, Inc. (which recently acquired Headway Transportation, LLC) has prepared this scope of work based on our extensive prior work on the project. Note that the entire project team and project manager (Loren Chilson) from Headway Transportation is still fully intact under GCW and will provide continuity of services for the Town of Truckee.

SCOPE OF WORK

Task 1 – Traffic Signal Design ($50,000)

We will advance the traffic signal plans, specifications, and an engineer's estimate (PS&E) from the current 90% stage to Final Plans. Our work will include:

- Finalizing conduit, pull box, signal pole, and equipment locations consistent with the intersection configurations and curb returns
- Coordinating the electrical engineering for service to the traffic signal cabinet
- Providing notes, equipment schedules, conduit/conductor schedules, and details
- Special Technical Specifications for signal items
- Engineer's Estimate
- Submittals at the 100% and Bid Stage (limited to two PS&E package submittals)
- Attendance at up to four (4) design review/coordination/diagnostic team meetings
- One round of final pre-emption study revisions
- Up to eight (8) hours of general project coordination/support time
- Providing Start-Up Traffic Signal Timing Plans
- Bidding Services (limited to eight (8) hours)

Exclusions:

This task specifically excludes:

- Micro-simulation and/or other traffic analysis
- Major revisions related to major changes from the 90% submittal design (no redesign of the 90% concept)
- Preparation, or review, of Temporary Traffic Control Plans
- Special Event Signal Timing or Special Event Operational Schemes

Additional services can be provided under Task 2,if needed.

Task 2 – Traffic Engineering Support Contingency ($23,000)

We will provide traffic engineering support for the design process and other needs during UPRR/CPUC permitting. This task is intended to be flexible, but is limited to one hundred (100) hours of professional staff time. Work on this task will not be performed without Acumen Engineering's prior approval.

Task 3 – Traffic Signal Construction Support ($40,000)

We will provide up to one hundred eighty (180) hours of professional staff time during construction of the project to support the construction process:

- Inspect the contractor's critical work activities on the signal systems (full-time inspection is not included)
- Attend a pre-construction meeting
- Review material submittals
- Respond to RFIs
- Attend site visits and walk-throughs
- Schedule the substantial completion walk-thru for signal items
- Assist with punchlist preparation (up to two (2) punchlists)
- Work with the Town of Truckee and the contractor to resolve any issues
- Complete record drawings for the project, if required

BUDGET

GCW will perform all work on a time-and-materials basis per the attached Hourly Rate Schedule. Task 1 will not exceed **$50,000,** Task 2 will not exceed **$23,000**, and Task 3 will not exceed **$40,000.**
The total not-to-exceed amount of this proposal is **$113,000**.

SCHEDULE

GCW can provide the 100% plans, specifications, and estimate package within approximately two (2) months of receiving written authorization to proceed and all comments on the 90% plan submittal. We may be able to accelerate that schedule, if necessary, dependent on the diagnostic team/UPRR review comments.

All other schedule elements will be determined following Town of Truckee and UPRR comments on the 100% plans.

CONTRACT TERMS

We understand this work will be performed under a subconsultant agreement with Acumen Engineering. We hereby reserve the right to review, and negotiate mutually agreeable terms of, that subconsultant agreement prior to accepting this assignment.

GCW, Inc. maintains professional liability insurance and will provide evidence of required insurance coverages upon execution of the subconsultant agreement.

We sincerely appreciate the opportunity to assist you in this effort and look forward to working with the project team. Please do not hesitate to contact me at 775.322.4300 with any questions or concerns.

Respectfully,
GCW, Inc.

Loren E. Chilson, PE
Principal

Attachments: Hourly Rate Schedule

GCW ENGINEERS \ SURVEYORS

Effective through
June 30, 2025

HOURLY RATE SCHEDULE

		Rate Per Hour
Principal		$ 280.00
Associate		$ 260.00
Supervising Project Manager/Supervising Engineer/Supervising Land Surveyor		$ 245.00
Senior Project Manager/Senior Engineer/Senior Land Surveyor		$ 215.00
Project Manager		$ 205.00
Project Engineer/Land Surveyor/Field Survey Manager		$ 195.00
Construction Project Manager		$ 190.00
Construction Inspector		$ 145.00
Construction Document Control Technician		$ 125.00
Supervising Designer		$ 185.00
Senior Designer		$ 175.00
Designer/Survey Office Technician		$ 155.00
GIS Analyst		$ 145.00
Engineering Intern 2		$ 160.00
Engineering Intern 1		$ 150.00
Land Surveying Intern		$ 150.00
Senior CAD Technician		$ 140.00
CAD Technician		$ 130.00
Senior Project Coordinator		$ 155.00
Project Coordinator		$ 135.00
Project Assistant 2		$ 110.00
Processor		$ 105.00
Project Assistant 1		$ 85.00
Administrative Assistant		$ 90.00
Survey:	One-Person Crew	$ 185.00
	Party Chief	$ 140.00
	Instrument Operator	$ 95.00

The individual hourly rates include salary costs, overhead, administration, and profit. Survey rates also include survey equipment amortization, stakes, flagging, supplies, and vehicle mileage. Expert witness services shall be invoiced at 1.5 times the hourly rate per employee category. Rates subject to change based on project role and staffing.

EASTERN SIERRA ENGINEERING
CIVIL ENGINEERING & CONSTRUCTION SERVICES

main: 775.828.7220
fax: 775.828.7221
4515 Towne Drive
Reno, NV 89521-9696
www.esengr.com

January 3, 2025

Debbie Jenkins, P.E.
Acumen Engineering
10775 Pioneer Trail, Suite 214
Truckee, California 96161

RE: REIMAGINE BRIDGE STREET GEOTECHNICAL PROPOSAL

Dear Debbie:

Eastern Sierra Engineering's (ESE's) Team is pleased to present our proposal to provide geotechnical construction support services for the Reimagine Bridge Street project. The project was initially started in 2018 and is now in the final design stage. It is anticipated that construction will be administered by others and our involvement will be an on-call basis for time and materials not to exceed.

SCOPE OF SERVICES

TASK 1 – Geotechnical Construction Support Services
ESE will provide construction support including:

- Inspection of signal pole foundation existing soils and/or micro-pile foundation.
- Special inspection for concrete, rebar, bolting etc of the signal pole foundations.
- Respond to RFIs.
- Attend site visits.
- Attend substantial completion walk-through.
- Assist with punch list preparation.
- Work with the Town and the contractor to resolve any construction issues.

Task Description	Task Total	Senior Engineer	Project Engineer
	Rate	$ 225.00	$ 200.00
Task 1 - Construction Support			
Pole Foundation Inspection		20	60
Site Visits		40	10
Task 1 Labor Costs		$ 13,500.00	$ 14,000.00
Total Not To Exceed Task 1	**$ 27,500.00**		

The estimated not-to-exceed amount would not be surpassed without your written authorization. Additional work outside the above outlined scope of work shall be billed according to the attached 2025 Schedule of Charges.

EASTERN SIERRA ENGINEERING
CIVIL ENGINEERING & CONSTRUCTION SERVICES

main: 775.828.7220
fax: 775.828.7221
4515 Towne Drive
Reno, NV 89521-9696
www.esengr.com

The ESE Team greatly appreciates the opportunity to provide this proposal and we look forward to working with Acumen and the Town of Truckee on this project. If you have any questions, or require additional information, please contact me at (775) 848-4252.

Sincerely,
Eastern Sierra Engineering, P.C.

Sarah Tomlinson, E.I.
Geotechnical Engineer

Brian Fitzgerald, P.E.
Senior Engineer
CA PE C 76226

Attachments – 2025 Schedule of Charges

EASTERN SIERRA ENGINEERING
CIVIL ENGINEERING & CONSTRUCTION SERVICES

2025 STANDARD RATES FOR TECHNICAL SERVICES

I. PERSONNEL

Charges will be made at the following rates for time spent in project management, consultation or meetings related to the project, conducting field inspections, sampling, evaluations, review and analysis of field and laboratory data, report preparation and review, design, travel time, etc. All rates are subject to a 3.5% increase in January for each subsequent year of the contract.

A. Professional Services

President	$325.00/hour
Principal Engineer	$265.00/hour
Senior Engineer II	$245.00/hour
Senior Engineer I	$225.00/hour
Project Engineer II	$210.00/hour
Project Engineer I	$200.00/hour
Staff Engineer/Designer III	$190.00/hour
Staff Engineer/Designer II	$180.00/hour
Staff Engineer/Designer I	$170.00/hour
Senior Drafter	$165.00/hour
Drafter	$145.00/hour
Administration	$120.00/hour
Director of CMT Services	$155.00/hour
Lab Manager	$140.00/hour

B. Technical Services

Senior Field Inspector	$150.00/hour
Field Inspector	$140.00/hour
Senior Field Technician	$125.00/hour
Field Technician	$115.00/hour
Field Technician/Inspector Travel Time	$90.00/hour
Field Technician/Inspector (Prevailing Wage)	Quote
Overtime Work	Rate plus 50%

II. EXPENSES

A. Expenses

Travel	Current IRS Standard Mileage Rate
Subsistence (Food)*	Quote
Subsistence (Room)	Cost plus 10%
Supplies & Shipping	Cost plus 10%

*Variable depending on contract requirements.

B. Equipment

Vehicle Surcharge*	Quote
Mobile Lab Trailer (Need power supplied)	$1500.00/month
Torque Wrench	$45.00/day

*Variable depending on contract requirements.

III. SUBCONTRACTS

Subcontract services will be invoiced at cost plus 10%.

IV. LABORATORY SERVICES

Test Types	Unit Price/Test
Index Tests	
Moisture Content of Soil (ASTM D2216, AASHTO T265)	$45
Moisture Content and Dry Density of Soil	$60
Atterberg Limits (ASTM D4318, AASHTO T89/90) - Plastic	$145
Atterberg Limits (ASTM D4318, AASHTO T89/90) - Non-Plastic	$100
Particle Size Analysis	
Sieve Analysis (ASTM C136, AASHTO T27)	$130
Sieve Analysis w/ Recycled AC (ASTM C136, AASHTO T27)	$180
Sieve Analysis Large Aggregate (ASTM C136, AASHTO T27)	$200
Minus No. 200 Determination - Soil (ASTM D1140)	$90
Minus No. 200 Determination - Aggregate (ASTM C117)	$70
Hydrometer Analysis (ASTM D422, AASHTO T88)	$325
Specific Gravity	
Soils (AASHTO T100)	$165
Fine Aggregate w/Absorption (ASTM C128, AASHTO T84)	$110
Coarse Aggregate w/Absorption (ASTM C127, AASHTO T85)	$100
Moisture-Density Relations	
Standard Proctor (ASTM D698, AASHTO T99)	$305
Modified Proctor (ASTM D1557, AASHTO T180)	$340
Compaction Check Point	$140
Rock Correction per sample (ASTM D4718)	$140
Aggregate Testing	
Clay Lumps and Friable Particles (ASTM C142, AASHTO T112)	$135
Flat and Elongated (ASTM D4791)	$110
Fractured Faces (ASTM D5821, AASHTO T335)	$110
Sand Equivalent (ASTM D2419, AASHTO T176))	$100
Organic Impurities (ASTM C40, AASHTO T21)	$110
Unit Weight of Aggregate (ASTM C29, AASHTO T19)	$150
Sodium Soundness (ASTM C88, AASHTO T104)	$85 per fraction
Los Angeles Abrasion (ASTM C131, AASHTO T96)	$250
Large Size Los Angeles Abrasion (ASTM C535)	$325
Durability Index (ASTM D3744, AASHTO T210)	$275
Cleanness Value (CT 227)	$180
Fine Aggregate Angularity (ASTM C1252, AASHTO T304)	$135

Other Testing

R-Value (ASTM D2844, AASHTO T190)	$400

Concrete Testing

Compression of 4x8 Concrete Cylinder (ASTM C39)	$35
Compression of 6x12 Concrete Cylinder (ASTM C39)	$45
Compression of Grout Cylinder (UBC 24-28)	$35
Compression of Mortar Cylinder (UBC 24-22)	$35
Hold Cylinder (cured not tested)	$20
Concrete Mix Design	Quote

Asphalt Concrete Testing

Bitumen Content by Ignition	$165
Bitumen Content by Solvent Extraction	$275
Mechanical Analysis of Extracted Aggregate	$130
Preparation of Aggregate Sample (Lab batching)	$55
Lab Mixing of HMA (per point)	$50
Maximum Theoretical Specific Gravity (Rice)	$145
Bulk Specific Gravity of HMA Specimen - Core	$50
Moisture Content of Asphalt Mixture by Oven Method	$55
Effects of Moisture on AC Mixtures (TSR) (ASTM D4867, AASHTO T283)	
Lab Produced HMA Sample	$1520
Plant Produced HMA Sample	$1025
Lab Produced RHMA-G Sample	$2090
Plant Produced RHMA-G Sample	$1650
Hamburg Wheel-Tracking of Compacted HMA (AASHTO T324)	
Lab Produced HMA Sample	$1650
Plant Produced HMA Sample	$1210
Lab Produced RHMA-G Sample	$2200
Plant Produced RHMA-G Sample	$1760
Gyratory Compaction and Air Voids (AASHTO T312/T166)	
Lab Produced HMA Sample, each specimen	$230
Plant Produced HMA Sample, Set of 3 Briquettes	$380
Lab Produced RHMA-G Sample, each specimen	$350
Plant Produced RHMA-G Sample, Set of 3 Briquettes	$745
Marshall Compaction with Stability, Flow & Volumetrics	
Lab Produced HMA Sample, Set of 3 Briquettes	$665
Plant Produced HMA Sample, Set of 3 Briquettes	$350
Hveem Compaction with Stability & Volumetrics	
Lab Produced HMA Specimen - each	$255
Plant Produced HMA Sample, Set of 3 Briquettes	$420
RAP Testing (Caltrans LP-9/CT384)	$2535
Ignition Oven Calibration (Variable depending on number of specimens)	Variable
Hot Mix Asphalt Mix Design (Marshall, Hveem and Superpave)	Quote

Notes:

- Laboratory test unit prices are based on the average running time required for each test. Any special research or unusual sample preparation will be based upon hourly personnel charges plus the unit price of the test.
- All samples will be discarded thirty (30) days after submission of our final report, unless otherwise directed by the client. Upon request, Eastern Sierra Engineering will return the samples to the client or keep them for the client for an agreed upon monthly fee.
- Any testing required that is not covered by this fee schedule will be contracted by an outside firm and the fee will be cost plus 10%.
- Inspection and materials testing technician services are billed portal to portal from the laboratory. There is 2–4 hour minimum charge for services.
- Overtime rates of time and one-half or Double Time will be charged at the appropriate rate. Overtime is defined as any hour of services provided in excess of 8 hours in a single day or any hour of service provided on a Saturday or Sunday.