MATANUSKA-SUSITNA BOROUGH ACTION MEMORANDUM **AM No. 24-103**

SUBJECT: Award of proposal number 24-135P to The Boutet Company, Inc. for the contract amount of $250,153.40 to design Kepler Bradley bridge replacement.

AGENDA OF: September 3, 2024

ASSEMBLY ACTION: Adopted without objection and with Assemblymember Yundt recused 09/03/24 - BJH

AGENDA ACTION REQUESTED: Present to the Assembly for consideration.

Route To:	Signature
Purchasing Officer	X Rustin Krafft 8/21/2024 Signed by: Russ Krafft
Public Works Director	X Tom Adams, PE 8/21/2024 Signed by: Tom Adams
Finance Director	X Cheyenne Heindel 8/22/2024 Signed by: Cheyenne Heindel
Borough Attorney	X Nicholas Spiropoulos 8/22/2024 Signed by: Nicholas Spiropoulos
Borough Manager	X Michael Brown 8/23/2024 Signed by: Mike Brown
Borough Clerk	X Lonnie McKechnie 8/23/2024 Signed by: Lonnie McKechnie

ATTACHMENT(S): Analysis Sheet (1p)
Scope of Services (8p)

SUMMARY STATEMENT: On April 17, 2024, the Matanuska-Susitna Borough Purchasing Division issued a solicitation requesting Proposals from qualified firms to provide design and construction management services to replace the existing Kepler Drive bridge over the channel connecting Kepler and Bradley Lakes. Services purchased will support the Public Works Department in assembly district #2.

In response to the advertisement, three proposals were received. A proposal evaluation team made up of Borough Public Works staff evaluated the proposals and selected The Boutet Company as the most advantageous firm for the Borough.

The final completion date for this project is December 31, 2025.

In accordance with MSB 3.08.170(B), Administration requests authority to modify the resulting contract completion date by 90 days for unforeseen circumstances.

The Public Works Department, Project Management Division will be administering the contract.

RECOMMENDATION OF ADMINISTRATION: Approve the subject action memorandum.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: September 3, 2024

SUBJECT: Award of proposal number 24-135P to The Boutet Company, Inc. for the contract amount of $250,153.40 to design Kepler Bradley bridge replacement.

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT **YES** NO
AMOUNT REQUESTED $250,153.40	FUNDING SOURCE RSA Capital Projects
FROM ACCOUNT # 410.000.000 4xx.xxx	PROJECT# 30039-1800-1801
TO ACCOUNT :	PROJECT #
VERIFIED BY: 8/22/2024 __X ___Liesel Weiland ___ Signed by: Liesel Weiland	CERTIFIED BY:
DATE: 08/22/2024	DATE:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						

CAPITAL	250.2					

REVENUE						

FUNDING: (Thousands of Dollars)

General Fund						
State/Federal Funds						
Other	250.2					
TOTAL	250.2					

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____

DEPARTMENT: _____ DATE: _____
8/22/2024

X Cheyenne Heindel

APPROVED BY: _____ DATE: _____
Signed by: Cheyenne Heindel

SCOPE OF SERVICES

24-135P, Design Kepler Drive Bridge Replacement

General

The Consultant shall provide services as identified and authorized by a sequentially numbered Notice-to-Proceed (NTP) issued by the MSB. Consultant shall not perform services or incur billable expenses except as authorized by a NTP.

The Consultant shall name individuals whose services must be performed by or under direct supervision. Replacement of or addition to the Project Staff named shall be accomplished only by prior written approval of the MSB.

All coordination and correspondence for the project shall be handled through or with the concurrence of the MSB Project Manager.

The Consultant is required to maintain a schedule detailing project tasks and milestones. This schedule will show the interdependence and duration of the various design activities/contract tasks. The schedule will be the basis for performance measurements throughout the Project development and used to track Consultant progress and billings.

Professional Registration

All reports, plans, surveys, specifications, estimates, and similar work products provided by the Consultant shall be prepared by or under the supervision of a professional Engineer or Land Surveyor, as applicable, who is registered in the State of Alaska.

Billing Reports

The Consultant shall provide a two-page (typical) report with each monthly billing for months in which services are performed. Billings will be submitted no later than the 15th of each month.
The report shall include the previous accumulative amount, current amount billing, percent complete, summary of work effort performed for each task during the period covered by the invoice and planned work for the next billing period.

Plan Sheets and Documents

The Consultant shall use the latest MSB standard drawings, cover sheet, bid forms, special provisions, and Standard Modifications to the Alaska DOT&PF Standard Specifications for Highway Construction. These documents are available as Word documents on the Public Works Department webpage. Small Consultant logos are allowed on documents produced for the project. The Consultant logo or company name shall be included in the title block adjacent to the engineer's seal. Documents produced for the MSB shall include the Consultant's company name and/or logo at the bottom right of the first page, cover sheet or title sheet only. All Specifications shall be developed using Microsoft Word or compatible software. Final specifications modifications and special provisions shall be sealed by the engineer of record and submitted as an Adobe pdf file. Develop the Engineer's Estimate in an MS Excel spreadsheet program.

Review Meetings
Following each review, the MSB Project Manager will provide written comments and hold a meeting to discuss and adjudicate comments and design issues. The Consultant's personnel who are in-responsible-charge for the work products under review shall attend the meeting to interpret and provide explanations of the content. The Consultant shall provide a written response with subsequent submittals that address all written and oral comments from the MSB and third-party reviewers. All changes from previous submittals shall be clearly explained.

Right-of-Entry Permits
The MSB will obtain Right-of-Entry authorizations for the Consultant, when required. The Consultant shall provide a minimum of 10 working days advance notice to acquire any authorization. Should the authorizations take additional time to obtain, performance schedule(s) may be adjusted accordingly. The Consultant shall not be entitled to any additional compensation for any delay incurred in obtaining Right-of-Entry Permits.

SCOPE OF SERVICES

Project Description

The Matanuska-Susitna Borough (MSB) is seeking engineering consulting services for design and construction management to replace the existing Kepler Drive bridge over the channel connecting Kepler and Bradley Lakes with a culvert.

The Kepler Drive Bridge is located near milepost 37 of the Glenn Highway south of Palmer, Alaska, within Road Service Area 16 (South Colony) and serves public and private property, including a campground for recreational vehicles. The bridge is in poor condition, and the foundation is believed to be settling due to the construction of the bridge's spread footings on compressible soils. As a result, the bridge causes vehicles to "bottom out" and recreational boats crossing below the bridge have insufficient clearance to travel safely between lakes. The intent of this project is to remove the 20+ year-old timber bridge and replace it with a large-diameter arch-pipe, box culvert, or similar structure.

The proposed upgrade shall be wide enough to accommodate a single lane of traffic for a local road (typically 10 feet), including minimum 2-foot shoulders and a 5-foot-wide pedestrian walkway on the west side of the bridge. The culvert shall have a foundation suitable for the soil conditions and shall be built with sheet pile or concrete headwalls to minimize wetland impacts and have timber rails to match the park aesthetic. The walkway should be delineated by a concrete curb stop, rail, or similar device to provide protect pedestrians fishing on the bridge. The proposed culvert shall provide a minimum of 5 feet of freeboard above the channel's ordinary high-water line to allow for recreational boat traffic to pass safely.

The project limits on the north side shall extend approximately 40 feet beyond the culvert, and the southern extent shall match the limits of the improvements planned for the Kepler Road approach as part of the ongoing Alaska Department of Transportation & Public Facilities (DOT&PF) Glenn Highway Upgrade project. The Consultant shall coordinate elevation changes or other design elements that may affect the DOT&PF project through the MSB Project Manager.

Kepler and Bradley Lakes are stocked with arctic grayling and rainbow trout; therefore, a fish habitat permit will be required. The project will require a permit from the Corps of Engineers for the wetland

impacts. A Nationwide Permit (NWP) is anticipated to be adequate for the proposed scope of work The Consultant shall assist the Borough in preparing applications for these and other permits, as required.

All tasks and construction processes shall follow current MSB design standards and other roadway design references, including the MSB Subdivision Construction Manual for roads and fish passage culverts, and the *American Association of State Highway and Transportation Officials (*AASHTO) AASHTO Geometric Design of Highways and Streets for general roadway design.

Project Tasks and Services

Task 1 – Survey

The survey scope includes a control survey and a design survey for the project site.

The Consultant shall survey all topographic elements needed for project design and construction purposes, including but not limited to roadway features, waterline for water bodies, utilities (above and below ground), ditch lines, structures and property corners necessary to determine ROW limits. Perform topographic survey suitable to generate 1-foot contour intervals and to accurately design any changes in finished grade. Provide vertical and horizontal control within 0.01 foot accuracy.

The Consultant shall perform a hydrologic survey of the stream channel between the lakes, including channel depth, cross-section, waterline, ordinary high water, and any other hydraulic features necessary to design infrastructure in the water.

The Consultant shall perform control surveys, including establishing horizontal and vertical control points as directed by the MSB. The Contractor shall prepare a Survey Control Drawing (SCD) showing the control survey results to be used for construction. At least two temporary benchmarks for vertical control shall be established using stable objects. Horizontal and vertical coordinates shall use State Plane Zone 4 and NAVD 88, respectively, or translation to these coordinate systems shall be provided.

All survey services shall be conducted by, or under, the direct supervision of a Professional Land Surveyor (PLS) holding current registration in the State of Alaska. A PLS shall be an active, on-site field supervisor of the survey crew. A PLS shall also be directly involved in the preparation of all survey deliverables. The Consultant shall furnish hardbound field books for recording survey information. The books shall become the property of the Contracting Agency after the survey information has been entered and the contract completed. Each book shall be labeled with the project name and an appropriate title, e.g. Horizontal Control, Vertical Control, etc., and shall have an index and comments page. The index page shall reference the contents by page number. A readable PDF copy of the field books is acceptable.

Deliverables: Topographic Survey Base Map
Survey Control Drawing
ACAD drawing and TIN surface files, including point files
Survey Report with control computations and adjustments
Survey field notes

Task 2 – Preliminary Engineering

The Consultant shall perform preliminary engineering for the proposed project.

2.1 Roadway and Culvert Design

The work shall include development of a typical section, design criteria, plan and profile, approximate cut and fill limits and volumes, foundation and structure concepts and preliminary cost estimates. This phase of the project shall examine various appropriate alternatives for the bridge replacement culvert to determine the most cost-effective solution. Preliminary drawings and cost estimates for at least two alternatives shall be presented in the design study memorandum as part of the preliminary design submittal.

2.2 Hydrologic and Hydraulic

The Consultant shall perform hydrologic and hydraulic investigations and calculations, as necessary, to determine the ordinary high-water elevation, wetland limits, and other information necessary to design the culvert to minimize the project's impacts on the existing or natural hydrologic patterns and wetlands. Hydrologic and hydraulic calculations, if applicable, shall be included in the design study memorandum.

2.3 Geotechnical

The Consultant shall conduct a geotechnical site investigation to provide soils information necessary for the design of the roadway and water crossing structures. Representative samples of materials collected during field activities shall be tested to determine those material characteristics pertinent to the design and construction of the project. All field activities shall follow guidelines in the State of Alaska, Department of Transportation and Public Facilities Engineering Geology and Geotechnical Exploration Procedures Manual, September 1992, revised May 1993, and the 1988 AASHTO Manual on Subsurface Investigations.

Following field investigations, the Consultant shall provide recommendations to address usability of excavation materials, borrow site materials, the presence of materials affecting the rate of excavation, drainage control, muskeg design, estimating factors, and other pertinent details for the design.

The Consultant shall provide a draft and final Geotechnical Technical Memorandum, presenting data collected during the geotechnical investigation/analysis and providing design recommendations. Information shall include at least the following: project location map, description of the project scope, presentation of the field investigations, descriptions of the earth materials encountered during the field investigation, laboratory test results, and sheets with test holes/boring information.

Deliverables:

1. Draft and final design study memorandum that includes (but is not limited to):
    - A brief description of the project
    - Design criteria
    - Hydrologic and hydraulic information
    - Geotechnical investigation and recommendations memorandum (attached as an appendix)
    - Preliminary design (35%) drawings showing the following:
        - Existing topography,
        - ROW limits,
        - preliminary plan and profile,
        - proposed structure, including foundation
        - geotechnical borings and test holes.
    - Summary of alternatives
    - Preliminary cost estimates
    - Recommended alternative

Task 3 – Final Design and Construction Plans, Specifications, & Estimate

3.1 Plans-In-Hand Submittal (65%):

Show existing and proposed road surfaces with slope catch points; provide a complete set of cross-sections. Include alignment and vertical adjustments to minimize ROW impacts and to maximize cut/fill balance. The plans should include driveway profiles with existing and proposed driveway slopes in the plans. A a draft engineer's estimate for major bid items only. As applicable, identify requirements for acquisition of road ROW or easements of any kind. Cost estimates for developing parcel plats, easement descriptions, and ROW acquisition should be provided as needed.

Deliverables:

- Final Design Study Memorandum
- Draft engineer's estimate
- Plans (11" x 17") and Specifications. One set of hard copies and digital PDF files
- Comment-response table with written responses to address review comments on previous submittal.

3.2 Pre-PS&E Design (95%):

Include complete plans and bid documents including the MSB standard mods, project special provisions, scope of work, and refined engineer's estimate.

Deliverables:

- Draft engineer's estimate
- Plans (11" x 17") and Specifications. One set of hard copies and digital PDF files
- Comment-response table with written responses to address review comments on previous submittal.

3.3 Final PS&E Design (100%):
Include complete plans sealed by the engineer of record and bid documents including the project special provisions, scope of work, and final engineer's estimate.

Deliverables:

- Final engineer's estimate
- Final Plans (11" x 17")
- Project Specification Standard Modifications and Special Provisions.
- Comment-response table with written responses to address review comments on previous submittal.
- ACAD files of final design and survey drawings in 2023 Civil 3D format
- Excel file for final quantities and cost estimate

100% plans shall include (but is not limited to):

- Cover sheet
- Survey control
- Typical sections
- Plan and profile
- Summaries of quantities
- Structural Plan and Profile
- Details
- Erosion and Sediment Control
- Diversion and Dewatering
- Traffic control

Task 4 – Permitting

The consultant shall prepare applications and supporting documentation for the following permits, which are anticipated for this project:

- Alaska Department of Fish and Game (ADF&G) Fish Habitat Permit
- United States Army Corps of Engineers (USACE) Clean Water Act, Section 404 Permit
- Alaska Department of Natural Resources – Temporary Water Use Authorization

All permit fees will be paid by the MSB and the payment of application fees and application submittals shall be coordinated through the MSB Project Manager.

Task 5 – Assistance during Bidding

Assist the MSB as requested during project bidding. Personnel who were in responsible charge for engineering, surveying, permitting, etc. must be available to interpret and clarify documents prepared during project development and to assist the MSB with answering bidders questions, as necessary, through addenda and/or revisions to the bid documents.

Task 6 –Construction Management

6.1 Project Observation and Inspection

The Consultant shall establish an on-site organization and lines of authority to observe and inspect the Contractor's work for compliance with the contract documents and communicate with the Contractor regarding the acceptability of the work. The Consultant shall provide a professional engineer, licensed in the State of Alaska, to represent the MSB as the construction engineer and main point of contact for the construction phase of the project. The Consultant shall monitor the overall progress of the project, ensuring that the work is completed according to the contract documents, and inform the Contractor when construction work does not comply, so that corrective actions can be taken in a timely manner. The Consultant shall notify the MSB as soon as possible when major discrepancies occur. The Consultant shall monitor corrective actions taken by Contractors needed to correct work that is not in compliance with contract documents. The Consultant or their designated subconsultant shall schedule and coordinate and perform Quality Assurance testing, as required by the MSB.

During construction of structures and their foundations, the construction engineer shall be on site to inspect and accurately document construction information such as pile depths, subsurface conditions, obstructions encountered and prepare pile logs and other related structural engineering record documents.

The Consultant shall keep accurate and detailed written and photographic records of project progress during all stages of construction, which shall be summarized in a daily report. The daily report shall describe the construction activities of the day along with manpower and equipment usage, including that of the subcontractors. The report shall contain the results of any testing performed for each construction contract. The Consultant shall submit the daily reports to the MSB Project Manager no later than the morning of the day following the date of the report. The contractor shall notify the MSB Project Manager of potential change orders, claims, etc., as soon as practicable.

6.2 Meetings and Schedule

The Consultant shall organize, coordinate and lead meetings as conditions on the various contracts require but at least weekly, in addition to the project pre-construction meeting. All meetings shall include the construction contractor, the MSB Project manager, utility companies and other agencies, as needed. At each meeting, the Consultant shall review the contractor's plan and schedule, identify potential variances between scheduled and desired completion dates, review schedule for work not started or incomplete and notify the owner of all schedule related issues. The Consultant shall take and distribute complete minutes of meetings to all attendees and others as directed by the MSB Project Manager.

6.3 Communications and Changes

The Consultant shall be the main point of contact for communications with the Contractor. The Consultant shall be responsible for tracking and approval contractor submittals and responding to all contractor Requests for Information (RFIs), substitutions, deviation requests and change requests in a timely manner. Changes to the design must be approved by the engineer of record, and where

substantial, shall include revisions to the construction drawings. Changes to the construction contract amount shall be negotiated by the Consultant and MSB Project Manager and must be approved by the MSB Purchasing Division before the work can commence.

The Consultant shall be responsible for tracking and reviewing all Contractor pay requests for consistency with the work performed and provide recommendations to the owner as to payment. The construction engineer shall review and approve pay requests by signature to certify the quantities and work completion represented in the pay estimate is accurate and acceptable. Approved pay request should be forwarded to the MSB Project Manager within 14 days of receipt from the Contractor.

At the completion of the project and before final payment, the Consultant shall deliver all records to the MSB along with a complete set of Record Drawings incorporating, revisions to the plans, red lines and changes that were made in the field.

Project Schedule

The Consultant shall perform the work as outlined in the following general schedule. The Consultant shall prepare a detailed project schedule with specific dates for submittals, reviews, and other milestones and submit it to the MSB Project Manager for review and approval following contract award.

Milestone	**Date**
Notice to Proceed / Project Start	May 2024
35% Design Review	August 2024
65% Design Review	October 2024
95% Pre PS&E Review	November 2024
Final Plans, Specifications, and Estimate	January 2025
Bid Advertisement	February 2025
Construction	Spring/Summer 2025

24-135P Design Kepler Drive Bridge Replacement

Scoring Summary

	Total	Objectives and Services	Relevant Project Experience	Proposed Project Staff	Methods	Management
Supplier	**/ 100 pts**	**/ 24 pts**	**/ 22 pts**	**/ 19 pts**	**/ 18 pts**	**/ 17 pts**
The Boutet Company, Inc.	81 pts	24 pts	16.13 pts	13.93 pts	15.6 pts	11.33 pts
HDL Engineering Consultants LLC	77.6 pts	16 pts	16.13 pts	13.93 pts	16.8 pts	14.73 pts
PND Engineers, Inc.	75.2 pts	12.8 pts	19.07 pts	16.47 pts	14.4 pts	12.47 pts