SUBJECT: Award of proposal number 25-058P to Stantec Consulting Services, Inc. for the contract amount of \$286,772.45 to Design Tuxedo Avenue & Wade Drive Bridge Replacements.

AGENDA OF: March 18, 2025 ASSEMBLY ACTION: Approved under the consent agenda 03/18/25 - EMW

AGENDA ACTION REQUESTED: Present to the Assembly for consideration.

Route To:	Signature	
Purchasing Officer	X Dustin Silva Signed by: Dustin Silva	. / 5 / 2 0 2 5
Public Works Director	X to m A dams, P E	
Finance Director	X Cheyenne Heindel	
Borough Attorney	3 X Nicholas Spiropoulos Signedby:Nicholas Spiropoulos	/ 6 / 2 0 2 5
Borough Manager	X ichaelBrown signed by: MichaelBrown	
Borough Clerk	X Lonnie McKechnie sig ned by: Lonnie McKechnie	

ATTACHMENT(S): Analysis Sheet (1p) Scope of Services (7p)

SUMMARY STATEMENT: On September 12, 2024, the Matanuska-Susitna Borough (MSB) Purchasing Division issued a solicitation requesting Proposals from qualified firms to provide design and construction management services to replace the single-lane Tuxedo Avenue bridge with a culvert for a two-lane road and to investigate options and costs for replacing the existing Wade Drive bridge over Willow Creek side channel with a new bridge. Services purchased will support the Public Works Department in Assembly District #7.

In response to the advertisement, the Borough received seven proposals. A proposal evaluation team consisting of Borough Public Works staff reviewed and scored the submissions. Based on the evaluation results, the MSB entered contract negotiations with PTS, Inc. However, an agreement on price and scope could not be reached, leading the Borough to conclude negotiations with PTS, Inc. and initiate discussions with Stantec Consulting Services, Inc. These negotiations were successful, and Stantec has been identified as the most advantageous firm for the Borough.

The completion date for this project is April 30, 2027.

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: <u>March 18, 2025</u>

SUBJECT: Award of proposal number 25-058P to Stantec Consulting Services, Inc. for the contract amount of \$286,772.45 to Design Tuxedo Avenue & Wade Drive Bridge Replacements.

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT YES NO
AMOUNT REQUESTED \$286,772.45	FUNDING SOURCE RSA Capital Projects
FROM ACCOUNT # 410.000.000 4XX.XXX	PROJECT # 30042
TO ACCOUNT :	PROJECT #
VERIFIED BY: X M e rissa C a rreit sign and by: M erissa C a rreit	CERTIFIED BY:
DATE:	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	2040					
CATHAL	286.8					
REVENUE						
INDING: (Thousands of Dollars)						

FUNDING:		(1	nousands of Dollars)		
General Fund					
State/Federal Funds					
Other	286.8				
TOTAL	286.8				

POSITIONS:

Full	-Time					
Part	-Time					
Tem	nporary					
ANAL	ANALYSIS: (Attach a separate page if necessary)					

PREPARED BY:		PHONE:	
DEPARTMENT:		DATE:	
DEI ARTMENT.	🖛 Recoverable Signature	DAIL.	
	X Cheyenne Heindel		
APPROVED BY:			
	Signed by: Cheyenne Heindel	DATE:	



25-058P Design Tuxedo Avenue & Wade Drive Bridge Replacements

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
PTS, Inc.	82.87 pts	22.4 pts	16.13 pts	13.93 pts	16.8 pts	13.6 pts
Stantec Consulting Services Inc	81.47 pts	19.2 pts	19.07 pts	16.47 pts	12 pts	14.73 pts
PND Engineers, Inc.	80.87 pts	16 pts	19.07 pts	17.73 pts	15.6 pts	12.47 pts
Kinney Engineering	78.33 pts	22.4 pts	17.6 pts	13.93 pts	10.8 pts	13.6 pts
R & M Consultants Inc	71.8 pts	19.2 pts	13.2 pts	11.4 pts	14.4 pts	13.6 pts
RESPEC	54.33 pts	14.4 pts	8.8 pts	10.13 pts	10.8 pts	10.2 pts
Menzies Engineering Group, Inc. and River Focus, Inc.	42.33 pts	6.4 pts	7.333 pts	7.6 pts	10.8 pts	10.2 pts

Generated on Oct 30, 2024 7:47 AM AKDT - Dustin Silva

SCOPE OF SERVICES

25-058P, Design Tuxedo Avenue & Wade Drive Bridge Replacements

Project Description

The Matanuska-Susitna Borough (MSB) is seeking engineering consulting services for design and construction management to replace the single-lane Tuxedo Avenue bridge with a culvert for a two-lane road and to investigate options and costs for replacing the existing Wade Drive bridge over Willow Creek side channel with a new bridge. Tuxedo Avenue crosses the stream outlet from Ruth Lake, known as Gene Creek. Both water bodies contain anadromous fish and project sites are in Willow, Alaska and east of the Parks Highway, about 2 miles apart.

The scope of work for the Tuxedo Drive Bridge shall include all tasks listed below, through design and construction. The scope of work for Wade Drive will be phased, such that the initial phase will include field work and preliminary design alternatives identified in tasks 1 and 2. This work in this phase will be summarized in a "Bridge Selection Report". The MSB will review this report and decide whether to proceed with tasks 3 through 6 for the Wade Drive bridge project.

All tasks and construction processes shall follow current MSB design standards and other bridge and culvert design references, including the MSB Design Criteria Manual, Alaska Bridges and Structures Manual, the Alaska Highway Drainage Manual, 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 both project sites.

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 for both sites, including channel depth, cross-section, waterline, ordinary high water, and any other hydraulic features necessary to design infrastructure in the water. Additional fish passage survey requirements shall apply to the Tuxedo Avenue site, as described in Attachment A.

The Consultant shall perform roadway approach surveys collecting topographic points along the roadway every 25 feet or as required to delineate the road prism and adjacent ground. The survey is expected to include 300 feet of the road on both approach sides to accommodate adjusting the road grade for the new culvert. Points taken shall include edges of road, centerline of road, toe of fills, bottom of ditch or banks, tops of banks, utilities, ground shots, and other features necessary to model site conditions required for the replacement design.

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 at each site 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. Survey drawings shall be stamped by a PLS licensed 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.

<u>Deliverables</u>: 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 Fish Passage Survey Data

Task 2 – Preliminary Engineering

The Consultant shall perform preliminary engineering for the proposed project.

2.1 Roadway, Bridge and Culvert Designs

The work shall include development of a typical section, design for both bridge and culvert, 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 bridge replacements to determine the most cost-effective solution. Preliminary drawings and cost estimates for the alternatives shall be presented in the design study memorandum as part of the preliminary design submittal, with justification for the recommendations.

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 for flood flows and scour protection shall be included in the design study memorandum. Refer to the Alaska Highway Drainage Manual for specific requirements.

2.3 Geotechnical

The Consultant shall conduct a geotechnical site investigation to provide soils information necessary for design of the water crossing structures. Representative samples of materials collected during field activities shall be tested to determine those material characteristics pertinent to the project's design and construction. 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.

Conduct geotechnical site investigations to provide accurate information for the design. 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. 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 Report, presenting data collected during the geotechnical investigation/analysis and providing design recommendations.

Deliverables:

- 1. Draft and final design study reports for Tuxedo Ave and draft and final "Bridge Selection Report" for Wade Drive 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 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.

Include alignment and vertical adjustments to minimize ROW impacts, utility impact, and to maximize cut/fill balance. Provide cost estimates for easement descriptions and drawings if they are identified at this stage. Provide a draft engineer's estimate for major bid items only.

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. 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

In addition to all previous information, include any permits needed, engineer's estimate, total disturbed area, and any other pertinent information to complete a bid-ready set of documents. Include estimating and conversion factors for materials. All final drawings, specifications, and engineering reports shall be sealed by a professional engineer licensed in the State of Alaska, in accordance with AS 08.48.

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
- MSB Flood Hazard Development Permit

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 bidder's 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 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 after the report's date. 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 track and approve contractor submittals and respond to all contractor Requests for Information (RFIs), substitutions, deviation requests and change requests promptly. 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 project's completion 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 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.

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.

Milestone	Date
Notice to Proceed / Project Start	November 2024
35% Design Review	
65% Design Review	
95% Pre PS&E Review	
Final Plans, Specifications, and Estimate	November 30, 2025
Construction Bidding	January 2026
Construction Complete	Spring 2027

ADMINISTRATIVE REQUIREMENTS

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 an NTP.

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

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.

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.

Billing Reports

The Consultant shall provide a two-page (typical) report with each monthly billing for the 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. 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.