--MEMORANDUM-

TO:

City Council

FROM:

Gregory E Buckley

City Manager

DATE:

January 24, 2025

SUBJECT:

Professional Services Agreement With Stantec for Shoreline Planning

Initiative: "Creating a Resilient Waterfront Parkland"

The City has been working for the past two years to assemble funding for an initiative to to study and develop plans for Two Rivers' Lake Michigan shoreline from the harbor to the south city limits (and slightly beyond, as the City owns shoreline along the lake all the way to the Chamber of Commerce, a few hundred feet into the City of Manitowoc).

That funding has been secured, totaling \$405,354 from three different sources, working closely with consultants from Stantec Consulting Services, Inc. Stantec has done previous work for the City and for Woodland Dunes Nature Center, on projects including wetlands studies, stream restoration and habitat restoration.

Stantec's proposed services agreement and work plan is attached and is recommended for Council authorization on Monday night. Also on the agenda is the proposed funding agreement with one of the funding agencies, the Great Lakes and St. Lawrence Cities Initiative.

The overall goals of this work include:

- -- Developing plans to make the area more resilient in light of fluctuating lake levels -
- --Enhancing public access to and use of the publicly-owned shoreline in this area, particularly the subarea adjacent to the City's utilities/public works complex
- --Establishing native plantings along the shoreline corridor
- --Introducing "green infrastructure" to address treatment of stormwater runoff in the Memorial Drive/STH 42 corridor.

The primary focus of this work—the "deepest dive" in terms of analysis and plan development--will be the area immediately south of the harbor, to the south property line of the Lighthouse Inn. This work will build on a concept that was laid out for this area in the

City's 2013 Harbor Master Plan. An excerpt from that plan, specific to this area, is attached. (Full Harbor Master Plan is available for review on-line at www.two-rivers.org, under Government/City Departments/Community Development/Planning and Zoning/Plans).

In this area, the consultants will review existing data from the Corps of Engineers, FEMA and other sources to serve as the basis for modeling shoreline solutions in this area that address:

- --Possible widening of the public beach
- --Capturing sand in this area, to both to enhance/maintain the beach and to reduce sand transport northward along the shoreline, which currently contributes to shoaling at the harbor entrance

There is also a limited amount of funding to be used by Stantec for implementation activities: pollinator garden plantings and establishment of dune grass in areas along Mariners Trail, adjacent to STH 42.

The three funding sources for this contract are:

Great Lakes and St. Lawrence Cities InitiativeUnder a grant from the National Fish and Wildlife	\$135,000
Foundation Coastal Resilience Fund	
(on January 27, 2025 agenda)	
Sustain Our Great Lakes Program Grant,	\$204,354
National Fish and Wildlife Foundation	
(Grant agreement with City in place May 2024)	
Fund for Lake Michigan	\$66,000
(Grant approved, funds on deposit with City)	
TOTAL FUNDING	\$405,354

3: Lake Michigan Beach Restoration

According to an agreement between the City and WDNR, the City has the right to place fill on the lake bed out to the designated bulkhead line. Uses are limited, however to recreational and/or marina related.

This is a key redevelopment opportunity for a number of reasons:

- The waterfront is under utilized along the lake in this area.
- The development will include a buffer to the city treatment plant that can be maintained until a time if/when the treatment plant is relocated.

- The land is highly visible, especially for transient boaters.
- Access to the waterfront and the south pier will be dramatically improved through a dedicated trail/pathway.
- Stormwater management facilities can be incorporated which would help clean run-off before it reaches the beach and lake.

The project options as shown will require coordination with the owners of Seagull Marina as a portion of their property is shown as beach (though to a lesser degree in Option 1).

The beach redevelopment would include a series of pocket beaches

protected and stabilized by rubble revetments.

Option 2 is shown below. In this option, a naturalized pocket beach is shown in the channel (mirroring the beach adjacent to the US Coast Guard station) as part of the internal surge mitigation strategy.





PROFESSIONAL SERVICES AGREEMENT

This Agreement is made and entered into effective January 22, 2025 (the "Agreement Date") by and between;

"Client"

Name:

City of Two Rivers

Address:

1717 East Park Street, PO Box 87, Two Rivers WI 54241-0087

Phone:

920-793-5540

Representative:

Matthew R. Heckenlaible, PE

Email:

mathec@two-rivers.org

"Stantec"

Name:

Stantec Consulting Services Inc.

Address:

12080 Corporate Parkway Suite 200, Meauon WI 53092-2661

Phone:

262-541-4466

Representative:

Melissa Curran, Senior Associate

Email:

melissa.curran@stantec.com

Project Name (the "Project"):

Creating a Resilient Waterfront Parkland, Two Rivers, Wisconsin

DESCRIPTION OF WORK: Stantec shall render the services described in Attachment "A" (hereinafter called the "Services") in accordance with this Agreement. Stantec may, at its discretion and at any stage, engage subconsultants to perform all or any part of the Services. The Client and Stantec by written amendment to this Agreement may from time to time make changes to the Services. All changed work shall be carried out under this Agreement. The time for completion of the Services shall be adjusted accordingly.

COMPENSATION: Charges for the Services rendered will be made in accordance with the Contract Price indicated in Attachment "A", or, if no Contract Price is indicated, in accordance with Stantec's Schedule of Fees and Disbursements in effect from time to time as the Services are rendered.

Invoices shall be paid by the Client in the currency of the jurisdiction in which the Services are provided without deduction or setoff upon receipt. Failure to make any payment when due is a material breach of this Agreement and will entitle Stantec, at its option, to suspend or terminate this Agreement and the provision of the Services. Interest will accrue on accounts overdue by 30 days at the lesser of 1.5 percent per month (18 percent per annum) or the maximum legal rate of interest. The Client will make payment by Electronic Funds Transfer when requested by Stantec.

REPRESENTATIVES: Each party shall designate in the space provided above a representative who is authorized to act on behalf of that party and receive notices under this Agreement. Such representatives have complete authority to act on behalf of their principals in respect to all matters arising under this Agreement.

NOTICES: All notices, consents, and approvals required to be given hereunder shall be in writing and shall be given to the representatives of each party. All notices required by this Agreement to be given by either party shall be deemed to be properly given and received within two (2) business days if made in writing to the other party by certified mail or email, addressed to the regular business address of such party as identified above.

CLIENT'S RESPONSIBILITIES: The Client shall provide to Stantec in writing, the Client's total requirements in connection with the Project, including the Project budget and time constraints. The Client shall make available to Stantec all relevant information or data pertinent to the Project which is required by Stantec to perform the Services. Stantec shall be entitled to rely upon the accuracy and completeness of all information and data fumished by the Client, including information and data originating with other consultants employed by the Client whether such consultants are engaged at the request of Stantec or otherwise. Where such information or data originates either with the Client or its consultants then Stantec shall not be responsible to the Client for the consequences of any error or omission contained therein.

When requested by Stantec, the Client may engage specialist consultants directly to perform items of work necessary to enable Stantec to carry out the Services. If the Client refuses or fails to engage the requested specialist consultants, the Client shall be responsible for any resulting delays, losses, or damages arising from Stantec's inability to perform the Services. Whether arranged by the Client or Stantec, these services shall be deemed to be provided under direct contracts to the Client unless expressly provided otherwise.

The Client shall give prompt consideration to all documentation related to the Project prepared by Stantec and whenever prompt action is necessary shall inform Stantec of Client's decisions in such reasonable time so as not to delay the schedule for providing the Services.

When applicable, the Client shall arrange and make provision for Stantec's entry to the Project site as well as other public and private property as necessary for Stantec to perform the Services. The Client shall obtain any required approvals, licenses and permits from governmental or other authorities having jurisdiction over the Project so as not to delay Stantec in the performance of the Services.



STANTEC'S RESPONSIBILITIES: Stantec shall furnish the necessary qualified personnel to provide the Services. Stantec represents that it has access to the experience and capability necessary to and agrees to perform the Services with the reasonable skill and diligence required by customarily accepted professional practices and procedures normally provided in the performance of the Services at the time when and the location in which the Services were performed. This undertaking does not imply or guarantee a perfect Project and in the event of failure or partial failure of the product or the Services, Stantec will be liable only for its failure to exercise diligence, reasonable care, and professional skill. This standard of care is the sole and exclusive standard of care that will be applied to measure Stantec's performance. There are no other representations or warranties expressed or implied made by Stantec. In particular, but not by way of limitation, no implied warranty of merchantability or fitness for a particular purpose shall apply to the Services provided by Stantec nor shall Stantec warrant or guarantee economic, market or financial conditions, proforma projections, schedules for public agency approvals, or other factors beyond Stantec's reasonable control. Stantec does not warrant the Services to any third party and the Client shall indemnify and hold harmless Stantec from any demands, claims, suits, or actions of third parties arising out of Stantec's performance of the Services.

In performing the Services under this Agreement, Stantec shall operate as and have the status of an independent contractor and shall not act as or be an employee of the Client.

TERMINATION: Either Stantec or the Client may terminate this Agreement without cause upon seven (7) days' notice in writing. If either party breaches this Agreement, the non-defaulting party may terminate this Agreement after giving seven (7) days' notice to remedy the breach. On termination of this Agreement, the Client shall forthwith pay Stantec for the Services performed to the date of notice of termination. Non-payment by the Client of Stantec's invoices within 30 days of Stantec rendering same is agreed to constitute a material breach of this Agreement and, upon written notice as prescribed above, the duties, obligations, and responsibilities of Stantec are terminated. Either party may suspend the project immediately upon notice to the other party.

SUSPENSION OF SERVICES: If the project is suspended for more than thirty (30) calendar days in the aggregate, Stantec shall be compensated for services performed and charges incurred prior to receipt of notice to suspend and, upon resumption, an equitable adjustment in fees to accommodate the resulting demobilization and remobilization costs. In addition, there shall be an equitable adjustment in the project schedule based on the delay caused by the suspension. If the Project is suspended for more than ninety (90) days, Stantec may, at its option, terminate this agreement upon giving notice in writing to the Client.

ENVIRONMENTAL: Except as specifically described in this Agreement, Stantec's field investigation, laboratory testing and engineering recommendations will not address or evaluate pollution of soil or pollution of groundwater.

Where the Services include storm water pollution prevention (SWPP), sedimentation or erosion control plans, specifications, procedures or related construction observation or administrative field functions, Client acknowledges that such Services proposed or performed by Stantec are not guaranteed to provide complete SWPP, sedimentation or erosion control, capture all run off or siltation, that any physical works are to be constructed and maintained by the Client's contractor or others and that Stantec has no control over the ultimate effectiveness of any such works or procedures. Except to the extent that there were errors or omissions in the Services provided by Stantec, Client agrees to indemnify and hold Stantec harmless from and against all claims, costs, liabilities, or damages whatsoever arising from any storm water pollution, erosion, sedimentation, or discharge of silt or other deleterious substances into any waterway, wetland or woodland and any resulting charges, fines, legal action, cleanup, or related costs.

In the prosecution of work, Stantec will take reasonable precautions to avoid damage to subterranean structures or utilities. However, it is the responsibility of the Client to provide Stantec with assistance in locating underground structures and utilities in the vicinity of any construction, exploration, or investigation. Stantec shall also rely upon third party sources in order to determine the existence and location of any underground structures and utilities of any kind. The Client acknowledges and agrees that Stantec may rely on such third-party advice, so long as such third party is, in Stantec's opinion, a reasonable source for such information, without any requirement that Stantec shall make an independent evaluation or investigation of such underground structures and utilities. In the event that the information supplied by third parties in incorrect, the Client acknowledges that Stantec shall not be responsible for any damages done to any such underground structures or utilities. If neither party can confirm the location of such structures and utilities, the Client agrees to accept all liabilities, costs, expenses and damages, whether direct, indirect, economic, punitive, incidental, special, exemplary or consequential, associated with the repair, replacement or restoration of any damages to such structures and utilities caused by Stantec or its subcontractor(s) or subconsultant(s) in the performance of the Services and the Client agrees to defend, indemnify and hold Stantec hamless from any such damages.

BUILDING CODES, BYLAWS AND OTHER PUBLIC REGULATIONS: Stantec shall, to the best of its ability, interpret building codes, by-laws, and other public regulations as they apply to the Project and as they are published at the time Services commence. Furthermore, Stantec shall observe and comply with all applicable laws, ordinances, codes, and regulations of government agencies, including federal, state, provincial, municipal, and local governing bodies having jurisdiction over the conduct of the Services ("LAWS"). However, it is expressly acknowledged and agreed by the Client that as the Project progresses such building codes, by-laws, other public regulations, and LAWS may change or the interpretation of any public authority may differ from the interpretation of Stantec, through no fault of Stantec, and any extra costs



necessary to conform to such changes or interpretations during or after execution of the Services will be paid by the Client.

Stantec shall continue to provide equal employment opportunity to all qualified persons and to recruit, hire, train, promote and compensate persons in all jobs without regard to race, color, religion, sex, age, disability or national origin or any other basis prohibited by applicable laws.

COST AND SCHEDULE OF CONSTRUCTION WORK: In providing opinions of probable cost and project schedule, it is recognized that neither the Client nor Stantec has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices or time. The opinions of probable cost or project duration are based on Stantec's reasonable professional judgment and experience and do not constitute a warranty, express or implied, that the Contractors' bids, project schedules, or the negotiated price of the Work or schedule will not vary from the Client's budget or schedule or from any opinion of probable cost or project schedule prepared by Stantec. Exact costs and times will be determined only when bids have been received for the Project and when the construction work has been performed and payments finalized.

ADMINISTRATION OF CONSTRUCTION CONTRACTS: When applicable, Stantec shall provide field services during the construction of the Project only to the extent that such Services are included and defined in this Agreement. The performance of the construction contract is not Stantec's responsibility nor are Stantec's field services rendered for the construction contractor's benefit.

It is understood and agreed by the Client and Stantec that only work which has been seen during an examination by Stantec can be said to have been appraised and comments on the balance of any construction work are assumptions only.

When field services are provided by Stantec, the authority for general administration of the Project shall reside with Stantec only to the extent defined in this Agreement. In such case, Stantec shall coordinate the activities of other consultants employed by the Client, only to the extent that Stantec is empowered to do so by such other consultants' contracts with the Client.

Stantec shall not be responsible for any contractor's failure to carry out the work in accordance with the contract documents nor for the acts or omissions of any contractor, subcontractor, any of their agents or employees, or any other persons performing any of the work in connection with the Project. When field services are provided, no acceptance by Stantec of the work or services of a construction contractor or other consultants, whether express or implied, shall relieve such construction contractor or other consultants from their responsibilities to the Client for the proper performance of such work or services and further, Stantec shall not be responsible to the Client or to the construction contractor or to the other consultants for the means, methods, techniques, sequences, procedures and use of equipment of any nature whatsoever, whether reviewed by Stantec or not, which are employed by the construction contractor or the other consultants in executing, designing, or administering any phases of the Project, or for placing into operation any plant or equipment or for safety precautions and programs incidental thereto.

When field services are provided, Stantec will not be designated as the party responsible for the compliance by others on the construction work site with the purposes or requirements of applicable environmental, occupational health and safety, or similar legislation. The Client shall designate a responsible party, other than Stantec, for the coordination and performance of environmental, occupational health and safety activities on the construction work site as required by applicable legislation and associated regulations.

JOBSITE SAFETY: Neither the professional activities of Stantec, nor the presence of Stantec or its employees and subconsultants at a construction site, shall relieve the Client and any other entity of their obligations, duties and responsibilities with respect to job site safety. Subject only to applicable legislation, Stantec and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

INDEMNITY: The Client releases Stantec from any liability and agrees to defend, indemnify, and hold Stantec harmless from any and all claims, damages, losses, and/or expenses, direct and indirect, or consequential damages, including but not limited to attorney's fees and charges and court and arbitration costs, arising out of, or claimed to arise out of, the performance of the Services, excepting liability arising from the negligence or willful misconduct of Stantec.

LIMITATION OF LIABILITY: It is agreed that, to the fullest extent possible under the applicable law, the total amount of all claims (including any and all costs associated with such claims such as attorney and expert fees and interest) the Client may have against Stantec under this Agreement or arising from the performance or non-performance of the Services under any theory of law, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to the lesser of the fees paid to Stantec for the Services or \$500,000. No claim may be brought against Stantec in contract or tort more than two (2) years after the cause of action arose. As the Client's sole and exclusive remedy under this Agreement any claim, demand or suit shall be directed and/or asserted only against Stantec and not against any of Stantec's employees, officers, or directors.



Stantec's liability with respect to any claims arising out of this Agreement shall be absolutely limited to direct damages arising out of the Services and Stantec shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the Client, including but not limited to claims for loss of use, loss of profits and loss of markets.

In no event shall Stantec's obligation to pay damages of any kind exceed its proportionate share of liability for causing such damages.

DOCUMENTS: All documents prepared by Stantec or on behalf of Stantec in connection with the Project are instruments of service for the execution of the Project. Stantec retains the property and copyright in these documents, whether the Project is executed or not. Payment to Stantec of the compensation prescribed in this Agreement shall be a condition precedent to the Client's right to use documentation prepared by Stantec. These documents may not be used for any other purpose without the prior written agreement of Stantec. The Client shall have a permanent non-exclusive, royalty-free license to use any concept, product or process which is patentable or capable of trademark, produced by or resulting from the Services rendered by Stantec in connection with the Project, for the life of the Project. The Client shall not use, infringe upon, or appropriate such concepts, products or processes without the express written agreement of Stantec. In the event Stantec's documents are subsequently reused or modified in any material respect without the prior consent of Stantec, the Client agrees to indemnify Stantec from any claims advanced on account of said reuse or modification.

Any document produced by Stantec in relation to the Services is intended for the sole use of Client. The documents may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion. Any such consent will provide no greater rights to the third party than those held by the Client under the contract and will only be authorized pursuant to the conditions of Stantec's standard form reliance letter.

Stantec cannot guarantee the authenticity, integrity or completeness of data files supplied in electronic format ("Electronic Files"). Client shall release, indemnify, and hold Stantec, its officers, employees, consultants, and agents harmless from any claims or damages arising from the use of Electronic Files. Electronic files will not contain stamps or seals, remain the property of Stantec, are not to be used for any purpose other than that for which they were transmitted, and are not to be retransmitted to a third party without Stantec's written consent.

PROJECT PROMOTION: Where the Client has control or influence over construction signage, press releases and/or other promotional information identifying the project ("Project Promotion"), the Client agrees to include Stantec in such Project Promotion.

FORCE MAJEURE: Any default in the performance of this Agreement caused by any of the following events and without fault or negligence on the part of the defaulting party shall not constitute a breach of contract: labor strikes, riots, war, acts of governmental authorities, unusually severe weather conditions or other natural catastrophe, disease, epidemic or pandemic, or any other cause beyond the reasonable control or contemplation of either party. Nothing herein relieves the Client of its obligation to pay Stantec for services rendered.

GOVERNING LAW: This Agreement shall be governed, construed, and enforced in accordance with the laws of the jurisdiction in which the majority of the Services are performed.

DISPUTE RESOLUTION: If requested in writing by either the Client or Stantec, the Client and Stantec shall attempt to resolve any dispute between them arising out of or in connection with this Agreement by entering into structured non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. The Parties agree that any actions under this Agreement will be brought in the appropriate court in the jurisdiction of Governing Law, or elsewhere by mutual agreement. Nothing herein however prevents Stantec from any exercising statutory lien rights or remedies in accordance with legislation where the project site is located.

ATTORNEYS FEES: In the event of a dispute hereunder, the prevailing party is entitled to recover from the other party all costs incurred by the prevailing party in enforcing this Agreement and prosecuting the dispute, including reasonable attorney's and expert's fees, whether incurred through formal legal proceedings or otherwise.

ASSIGNMENT AND SUCCESSORS: The Client shall not, without the prior written consent of Stantec, assign the benefit or in any way transfer the obligations of this Agreement or any part hereof. This Agreement shall inure to the benefit of and be binding upon the parties hereto, and except as otherwise provided herein, upon their executors, administrators, successors, and assigns.

PROTECTION OF PRIVACY LAWS: The parties acknowledge that information relating to an identified or identifiable person ("Personal Information") may be exchanged in the course of this Project pursuant to this Agreement.

The party disclosing Personal Information (the "Disclosing Party") warrants that is has all necessary authorizations and approvals required to process and disclose the Personal Information and to enable the party receiving the Personal Information (the "Receiving Party") to process it in performing the Services. The Disclosing Party will provide the Receiving Party with written notice containing the details of what Personal Information will be provided.

The Receiving Party will comply with any reasonable instruction from the Disclosing Party in respect of such Personal Information and implement appropriate technical and organization measures to protect the Personal Information against unauthorized or unlawful processing and accidental loss, theft, use, disclosure, destruction and/or damage.

PROFESSIONAL SERVICES AGREEMENT

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The Receiving Party shall be permitted, upon prior written consent of the Disclosing Party, to transfer Personal Information outside the jurisdiction if required for performance of the Services provided that such transfers are in accordance with relevant and applicable requirements under applicable legislation. The Receiving Party shall provide the Disclosing Party with full cooperation and assistance in meeting its obligations under applicable privacy legislation, including in relation to the security of processing, the notification of Personal Information breaches, the notification of requests from individuals and Personal Information protection impact assessments.

On termination of this Agreement, the Receiving Party shall cease processing Personal Information and shall delete and destruct or return to the Disclosing Party (as the Disclosing Party may require) all Personal Information held or processed by the Receiving Party on the Disclosing Party's behalf. It is understood however, that the Receiving Party may need to keep a copy of all Personal Information for legal purposes and therefore it will continue to take reasonable steps to protect the Personal Information as outlined herein and will proceed with the destruction of the Personal Information within a reasonable period of time if there is no longer any legal justification to keep the Personal Information.

Nothing herein relieves either party from their responsibilities for compliance with applicable privacy legislation.

ENTIRE AGREEMENT: This Agreement constitutes the sole and entire agreement between the Client and Stantec relating to the Project and supersedes all prior agreements between them, whether written or oral respecting the subject matter hereof and no other terms, conditions, or warranties, whether express or implied, shall form a part hereof. This Agreement may be amended only by written instrument signed by both the Client and Stantec. All attachments referred to in this Agreement are incorporated herein by this reference; however, in the event of any conflict between attachments and the terms and conditions of this Agreement, the terms and conditions of this Agreement shall take precedence.

SEVERABILITY: If any term, condition, or covenant of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this Agreement shall be binding on the Client and Stantec.

CONTRA PROFERENTEM: The parties agree that in the event this Agreement is subject to interpretation or construction by a third party, such third party shall not construe this Agreement or any part of it against either party as the drafter of this Agreement.

BUSINESS PRACTICES: Each Party shall comply with all applicable laws, contractual requirements and mandatory or best practice guidance regarding improper or illegal payments, gifts or gratuities, and will not pay, promise to pay or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a government official or private individual) or entity for the purpose or illegally or improperly inducing a decision or obtaining or retaining business in connection with this Agreement or the Services.

THE PARTIES EXPRESSLY ACKNOWLEDGE THAT THIS AGREEMENT CONTAINS LIMITATION OF LIABILITY PROVISIONS RESTRICTING RIGHTS FOR THE RECOVERY OF DAMAGES.

The Parties, intending to be legally bound, have made, accepted, and executed this Agreement as of the Agreement Date noted above.

City of Two Rivers		Stantec Consulting Services Inc.	
	Greg Buckley, City Manager	Melissa Curran, Senior Associate	
	Print Name and Title	Print Name and Title	
Signature		Signature Melissa Curran	



PROFESSIONAL SERVICES AGREEMENT ATTACHMENT "A"

Attached to and forming part of the Agreement BETWEEN:

City of Two Rivers

(Hereinafter called the "Client")

- and -

Stantec Consulting Services Inc.

(Hereinafter called "Stantec")

EFFECTIVE:

January 22, 2025

This Attachment details the Services, Contract Time, Contract Price, Additional Conditions and Additional Attachments forming part of the above-described Agreement.

SERVICES:

Stantec shall perform the following Services:

Refer to attached Task Order #1, Creating a Resilient Waterfront Parkland, Two Rivers,

Wisconsin

(Hereinafter called the "Services")

CONTRACT TIME:

Commencement Date:

January 22, 2025

Estimated Completion Date:

June 1, 2025

CONTRACT PRICE:

Subject to the terms below, Client will compensate Stantec as follows:

Refer to attached Task Order #1:

Where not stated as being included in the fees, project specific subconsultant, contractor, lab and other similar third-party charges will be charged as invoiced to Stantec with a ten percent (10%) markup.

Unless otherwise noted, the fees in this agreement do not include any value added, sales, or other taxes that may be applied by Government on fees for services. Such taxes will be added to all invoices as required.

Where the Services or services conditions change, Stantec shall submit to the Client in a timely manner, documentation of the revisions to Attachment "A" adjusting the Contract Services Time and Price as required.

Unless otherwise specified, charges for Services are based on Stantec's hourly billing rate table ("Rate Table"), attached hereto. The Rate Table is subject to escalation from time to time. At a minimum, effective each January 1 during the term of this Agreement, Stantec's charges for Services shall escalate by either (a) the most current Consumer Price Index year over year percentage increase, not seasonally adjusted, for the preceding July, all items, as published by Statistics Canada (for Projects in Canada) plus 1.0%, or (b) the most current Consumer Price Index for All Urban Consumers (CPI-U) year over year percentage increase, not seasonally adjusted, for the preceding July, as published by the U.S. Bureau of Labor Statistics plus 1.0% (for all other projects).

ADDITIONAL CONDITIONS:

The following additional conditions shall be read in conjunction with and constitute part of this Agreement:

No additional conditions.



PROFESSIONAL SERVICES AGREEMENT ATTACHMENT "A"

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ADDITIONAL ATTACHMENTS:

The following additional attachments shall be read in conjunction with and constitute part of this

Agreement:

Rate Table

INSURANCE REQUIREMENTS:

Before any services are provided under this agreement, Stantec shall procure, and maintain

insurance coverage during the term of this agreement.

January 22, 2025 Matthew R. Heckenlaible, PE Page 1 of 14

Reference: Task Order #1

January 22, 2025

Project/File: Creating a Resilient Waterfront Parkland, Two Rivers, Wisconsin

Matthew R. Heckenlaible, PE
Director of Public Works, City of Two Rivers
1717 East Park Street
PO Box 87
Two Rivers, WI 54241-0087
mathec@two-rivers.org
Phone: 920-793-5540

Greetings Matt,

The City of Two Rivers (the "City") is experiencing significant impacts and costs related to climate change, including rapidly changing Lake Michigan conditions, such as recent record high lake levels and severe storms, which have caused erosion of City beaches and damage to shoreline infrastructure along a 3.2-mile section of the shoreline. We understand that the City is interested in stabilizing this Lake Michigan shoreline (the "project shoreline"), located south of the Two Rivers Harbor, using nature-based solutions and green infrastructure. The project shoreline is shown in Figure 1 below.



Figure 1. Project shoreline

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Reference: Task Order #1

The City is also interested in reducing the frequency of maintenance dredging in the outer channel of the Two Rivers Harbor. The City's understanding is that net longshore sediment transport is from south to north. As the shoreline to be stabilized is south of the harbor, any proposed solutions must be designed to avoid additional sediment deposition in the harbor that would not reduce the frequency of maintenance dredging.

Finally, the City is aware of existing challenges to navigation due to wave agitation in the harbor during storm conditions. The USACE Detroit District conducted a wave agitation study in 2017 where these unfavorable conditions were related to the orientation of the harbor jetties, with respect to the direction of wave approach during storms, and resonance. In that effort, the USACE evaluated several structural alternatives to improve wave agitation and resonance within the harbor; the range of alternatives and their effects are well understood and thus wave agitation will not be a focus of the proposed effort. The City is, however, interested in solutions that may reduce the frequency of maintenance dredging while improving wave tranquility in the inner harbor.

Our proposal includes green infrastructure design and a coastal study that will use coastal modeling, science, and engineering methods to develop solutions that can address the issues expressed by the City in a unified manner. This scope of work also includes project management, grant administration and reporting, ecological restoration, and community engagement to support the City through every step of the project.

Task 1: Project Management

Stantec will provide project management through the duration of the project to coordinate internally with the technical leads and production staff as well as City, funding partners, and identified stakeholders, with the goal of providing deliverables that are aligned with this scope of work and Stantec's quality standards.

Stantec will coordinate a kick-off virtual meeting using Teams with City staff, consultants, stakeholders, and key team members to review the scope of work, timeline, establish communication lines, discuss community engagement methods, and identify existing data and relevant studies that may be used for design. Stantec will host up to 6 monthly virtual progress meetings using Teams to keep the City and stakeholders up to date and request feedback in a timely manner. Stantec will participate in additional phone calls to discuss project status with the City as deemed necessary.

Deliverables include meeting minutes or emails following virtual meetings to summarize discussion and action items.

Task 2: Grant Administration & Reporting

Stantec understands the City successfully secured grant funds from the following sources: National Fish & Wildlife Foundation (NFWF) Sustain our Great Lakes (SOGL); Fund for Lake Michigan (FFLM); and NFWF National Coastal Resiliency Fund (NCRF) in partnership with the Great Lakes and St. Lawrence Cities Initiative (Cities Initiative).

Stantec has extensive experience with each of these grant programs and will assist the City with responding to information requests from the granting agencies through the life cycle of each program. Our team has standard approaches to verify the appropriate documentation is gathered, reviewed, and

January 22, 2025 Matthew R. Heckenlaible, PE Page 3 of 14

Reference: Task Order #1

presented for quality control. We understand that the NFWF NCRF funding will be managed by the Cities Initiative.

The Stantec Funding Specialist will maintain communication with the City throughout the grant-funded timeline through phone calls, emails, regular meetings, and interim/final report submittals, as appropriate, to complete the required grant administration tasks. This will include coordination of the following: 1) completing NFWF SOGL NEPA compliance documents, including preliminary desktop reviews for both threatened and endangered species and cultural resources; 2) tracking of project deliverables; 3) reimbursement requests to NFWF SOGL and FFLM grant programs; and 4) interim, progress, and final reporting as required under each funding agreement. This task will commence upon signed Task Order and will be completed when all grant reimbursements have been completed at the end of the project.

Task 3: Coastal Study for Shoreline Stabilization and Reduced Maintenance Dredging

The scope of the Coastal Study includes stabilization of approximately 2,130 LF of shoreline located directly south of the Two Rivers Harbor, as shown in Figure 2 below, and alternatives to reduce the frequency of maintenance dredging of the Two Rivers Harbor outer channel.



Figure 2. Coastal Study Area

Subtask 3a. Data Collection and Analysis

Stantec will gather and analyze publicly available meteorological and oceanographic data, ground elevations, bathymetry, dredging records, and flood hazard studies, to characterize the conditions of the project area and serve as a basis for the modeling and engineering tasks. Table 1 presents the data sources and data types that will be included in this exercise. The data analysis will be complimented with a literature review of relevant studies available in the public domain and provided by the City (including the 2017 study by the USACE).

The deliverable of Subtask 3a is a dedicated section in the Coastal Study Report.

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Reference: Task Order #1

Table 1. Data sources

Source	Data	Purpose
Iowa State University IEM ASOS Network	Winds	Process measured winds at Manitowoc Municipal Airport to develop wind roses and calculate exceedance statistics and extreme values.
FEMA (2023) Flood Insurance Study, Manitowoc County, WI	Base Flood Elevation and Flood Hazard Zone	From the effective flood maps, gather Base Flood Elevation and flood hazard zone along the project coastline.
	Extreme stillwater elevations and waves	From the FIS Report, extract the starting stillwater elevations (various return periods) and 100-year starting wave height and period from transects near the project site.
NOAA Digital Coast Website	Topography/Bathymetry	Use most recent digital elevation model to characterize the topography and bathymetry in the project area.
NOAA Tides & Currents	Water levels	Process historical water level record at Kewaunee, WI, to calculate statistics and examine seasonality.
USGS National Water Dashboard	River discharge	Process historical river discharge record at West Twin and East Twin rivers.
U.S. National Ice Center	lce coverage maps and statistics	Understand historical ice coverage in the area and future projections.
USACE Detroit District	Record of maintenance dredging	Request historical maintenance dredging information (dates, pre- and post-hydrographic surveys, and dredged volumes, grain size)
USACE Wave Information Study	Offshore wave and wind conditions	Analyze hindcast of offshore wave and wind parameters from the closest data point to the harbor. Download extreme wave parameters.

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Reference: Task Order #1

Subtask 3b. Conceptual Alternatives Development

Preliminary review of literature suggests that the net longshore sediment transport at Two Rivers is from south to north. This is consistent with the wider beach in the vicinity of the south jetty. However, examination of the shoreline between Two Rivers and Manitowoc harbors via Google Earth suggests that the beach is generally narrow or non-existent, indicating a limited source of sediments, which could be attributed to the presence of Manitowoc harbor and other shoreline revetments.

Based on this information, it is inferred that:

- Beach widening along the project shoreline will be challenging to achieve without measures that
 can supply sand to the system (e.g. beach fill), provide long-term growth potential to the beach, and
 provide stability during storm conditions (e.g., detached breakwaters and groins).
- The sedimentation of the harbor channel is dominated by local sediment transport during storm conditions. This hypothesis is supported by the current maintenance dredging cycle estimated by the City to be every 3 5 years, as an active longshore sediment transport regime not associated with storm conditions would likely result in more frequent dredging.

Stantec proposes to evaluate the following alternatives using the numerical models described in Subtask 3c. Only the dog-leg extension of the south harbor jetty is included in Alternatives 3 and 4, as the USACE (2017) study found this modification to be the most efficient at improving harbor tranquility, due to the prevailing wave directionality during storms. Extension of the south jetty is also expected to positively impact sediment deposition patterns that can reduce maintenance dredging. The orientation and length of the south jetty extension will be informed by the USACE (2017) study and the numerical modeling carried out in Subtask 3c.

- Alternative 1: Beach Fill.
 - The project shoreline is nourished to provide increased protection to the existing landside facilities against erosion, particularly during high lake levels, and improve recreational use. The design beach fill template will take into consideration the analysis of water levels and input from the City.
- Alternative 2: Beach Fill with Detached Breakwaters.
 - In addition to beach fill, detached breakwaters are placed in the nearshore but inside the "bulkhead line" identified in the Two Rivers Implementation Framework. The detached breakwaters are included to reduce wave energy (particularly during storm conditions) and therefore provide some protection to the beach fill, as well as to minimize sediment migration from the nourished beach to the outer harbor channel. The geometry and crest elevation of the breakwaters will be determined through coastal engineering methods. The number, length, and shape of the breakwaters will be determined through the modeling carried out in Subtask 3c.
- Alternative 3: Alternative 1 with South Jetty Extension.
- Alternative 4: Alternative 2 with South Jetty Extension.

The deliverables of Subtask 3b include conceptual plan view drawings of each alternative and existing and proposed nourished beach profiles.

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Reference: Task Order #1

Subtask 3c. Numerical Modeling

Waves in the surf zone are the primary driving mechanism of longshore and cross-shore sediment transport in the nearshore. The modeling of wave conditions is therefore vital to achieving the project objectives. Stantec proposes to conduct numerical modeling of selected wave conditions associated with storms to evaluate the proposed alternatives.

The location of the WIS data point providing offshore wave conditions closest to Two Rivers is located approximately 4 miles seaward of the harbor jetties (Figure 3). Stantec will use the Delft 3D SWAN model with a domain of preliminary extent shown in Figure 3 to transform the offshore wave conditions to the nearshore and provide boundary conditions to the local, high-resolution nested model of the approaches to the harbor (approximately within 0.6 miles of the harbor jetties as shown in Figure 3). Winds from WIS will be applied uniformly over the domain.



Figure 3. Preliminary model domain extents

The wave model will be coupled with the Delft 3D Sediment Transport model. Sediment parameters will be determined from the analysis of historical maintenance dredging records and/or from literature review.

Stantec will identify up to three storms to model from analysis of the WIS and water level records. The selection will be based on peak conditions at the WIS data point, wave directionality with respect to the harbor entrance, and availability of water levels from the Kewaunee water level monitoring station. If water levels are available for the selected storms, water levels will be included in the simulation as a time-varying, spatially uniform variable. The simulations will be carried out for existing conditions and for each alternative considering a low, average, and high water level.

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Reference: Task Order #1

Calibration of the wave model for the existing conditions will be conducted using the measurements collected by the USACE in 2015 at the location outside the harbor. If the wave measurements are not timely provided, wave model parameters will be selected based on experience and literature review. Calibration of the sediment transport model for the existing conditions simulation will be carried out if suitable historical hydrographic survey data is available; otherwise, sediment transport model parameters will be selected based on experience and literature review.

Model results will be used to inform the engineering calculations for the sizing of armor to be used for the detached breakwaters and extension of the south jetty.

The deliverable of Subtask 3c is a dedicated section in the Coastal Study Report.

Subtask 3d. Coastal Study Report

Stantec will prepare a report summarizing the work performed in Subtasks 3a-3c, including an assessment of each alternative providing advantages and disadvantages. The draft report will be submitted to the City and stakeholders for review within 3 months of the City's authorization to proceed. The City and stakeholders will provide comments on the draft report within two (2) weeks. A comment resolution table will be developed by Stantec and submitted to the City along with the final report within two (2) weeks of receipt of comments from the City.

Subtask 3e. Green Infrastructure at Stormwater Outfall

Stantec will develop one concept, to be included within each of the 4 concept alternatives developed under Subtask 3b, and 30% preliminary design for green infrastructure at the stormwater outfall located along the west end of the coastal study area. The preliminary design will include the following:

- Collect necessary geotechnical data for design of rain gardens, bioretention ponds, or other green infrastructure system.
- Identify conflicts with utilities, structures, or property limits.
- · Identify method of restoration at each site.
- Develop preliminary drawings showing areas of restoration, site improvements, grading, and drainage. Includes one round of revisions based on minor City comments.
- Development of preliminary water quality modeling. This will include analysis using the most current version of WinSLAMM. This data will be presented in basic table format and not in a stormwater management plan.
- Develop an Engineer's Opinion of Probable Construction Costs.

Deliverables will be included in plan sets developed under Subtasks 3b and 3g.

Subtask 3f. Green Infrastructure Landscape Architecture

Stantec's landscape architectural team will collaborate with water resource and coastal engineers on data collection, analysis and the conceptual alternatives design for coastal and green infrastructure area improvements. Concept level landscape graphics will be included in the conceptual renderings prepared for stakeholder engagement under Task 6.

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Reference: Task Order #1

The scope will include a site visit to identify views, opportunities, and constraints for landscape design. Landscape details will be included in the 30% preliminary design for green infrastructure BMPs, gardens, and beach plantings. Vegetated options will utilize pollinator friendly, native plantings.

Synchronizing stakeholder feedback shall include:

- Development of design alternatives for pedestrian access improvements, trail corridor connections and incorporation of amenities into the existing Mariner's Trail extension for 30% preliminary design plans
- Supporting living shoreline vegetation and stabilization options
- Green stormwater infrastructure (GSI) design alternatives in conjunction with the stormwater design task.
- Development of resilient, native landscaping plant palettes and layouts for upland, floodplain, stormwater, and shoreline zones for incorporation throughout the site

Deliverables will be included in concept renderings developed under Task 6 and the plan set developed under Subtask 3g.

Subtask 3g. 30% Design of Selected Alternative

Based on the conclusions of the Coastal Study Report, the City, Stantec and stakeholders will select an alternative to further develop to a 30% design. The 30% design will consist of engineering and design, relative to the project goals, to lay out the major design elements of the project and establish preliminary costs and timelines for construction. During this task, Stantec will develop 30% level design drawings and preliminary estimates of probable construction costs in coordination with the City and stakeholders. The City and project stakeholders will be given two (2) weeks to review and provide comments on the design deliverable. A joint meeting will be scheduled by Stantec within two (2) weeks prior to completion of Subtask 3f, during the stakeholder review period, to allow for questions and clarifications to be discussed regarding the design. 30% Design is expected to be completed by May 1, 2025.

Next Steps. 60% and Final Design, Implementation

The design of the elements that make up the selected alternative for shoreline stabilization will be finalized or optimized, based on input from the City and stakeholders on the 30% design and associated cost estimate. Optimization may be driven by the need to improve performance or reduce cost and may include changes to the extent and volume of beach fill, number and location of detached breakwaters, crest elevation of detached breakwaters, and length/alignment of south jetty extension. Depending on the nature of the changes, the numerical models described in Subtask 3c may need to be rerun to assess the impact of the changes on the shoreline and harbor channel.

For 60% design, plans with profile views of the beach fill and rock structures (if appropriate) will be added to the drawing package, showing details related to geometry, toe protection, primary and bedding stone layer characteristics, and elevations. The cost estimate will be refined accordingly. Specifications for beach fill, armor stone works, and other works associated with the alternative will be developed.

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Reference: Task Order #1

Detailed cost estimates will be developed upon finalization of 30% design.

Task 4: Green Infrastructure Along Mariners Trail

Stantec will develop a Green Infrastructure Plan for a section of the Mariners Trail corridor, which parallels Lake Michigan between the lake and State Highway 42 (Memorial Drive). The eastern boundary of the study area will be at the Lighthouse Inn parking lot. The western boundary of the study area will be the Memorial Drive Wayside Park

The Green Infrastructure Plan will examine alternatives to use green infrastructure to manage surface stormwater runoff in the project area, in order to reduce erosion and improve runoff quality. The planning will focus on stormwater runoff from the four municipal parking lots in the project area, as well as surface stormwater runoff from trail areas in the corridor. The primary goal is to reduce the discharge of nonpoint source pollutant runoff from stormwater into Lake Michigan.

Subtask 4a. Data Collection, Analysis and Conceptual Alternatives Design

Stantec will assess existing site conditions and develop three conceptual alternatives within the described project area by completing the following:

- Review of available topographic, aerial data, soil mapping, historic storm and precipitation data, and other related data within the project area.
- Visit the site and identify areas of existing or potential erosion due to surface stormwater runoff.
- Develop a photo documentation log of areas identified.
- Site schematic identifying areas of erosion concern from surface stormwater runoff. The graphic will identify areas of high priority and any potential challenges.
- Up to three concepts will be developed and evaluated for the project corridor.
- Green infrastructure facilities that may be considered include vegetated and non-vegetated pretreatment and energy dissipator options, tree trenches, rain gardens, bioswales, or bioretention basins. Vegetated options will utilize pollinator friendly, native plantings within their design.

Subtask 4b. 30% Preliminary Design of Selected Alternative

Stantec will develop one preliminary design to use green infrastructure to restore and stabilize each of the selected areas affected by surface stormwater runoff within the project area. These areas will be selected by analyzing areas of high priority. The preliminary design will include the following:

- Collect survey data of each site.
- Collect necessary geotechnical data for design of rain gardens, bioretention ponds, or other green infrastructure system.
- Identify conflicts with utilities, structures, or property limits.
- · Identify method of restoration at each site.
- Develop plant palette schedules identifying species and quantities for the different green infrastructure facilities.
- Develop preliminary drawings showing areas of restoration, site improvements, grading, and drainage. Includes one round of revisions based on minor City comments.

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Reference: Task Order #1

- Development of preliminary water quality modeling. This will include analysis using the most current version of WinSLAMM. This data will be presented in basic table format and not in a stormwater management plan.
- Develop an Engineer's Opinion of Probable Construction Costs.

Deliverables will include data collection photo log and modeling analysis summary, illustrative alternative plans and one conceptual alternative plan view (PDF format), preliminary design plans (30%) (ACAD and PDF format). 30% Design is expected to be completed by May 1, 2025.

Next Steps. 60% and Final Design, Implementation

The design of the elements that make up the selected alternative for Mariners Trail will be finalized based on input from the City and stakeholders for the 30% design and associated cost estimate. Changes may be driven by the need to improve stormwater retention/nutrient reductions or reduce cost.

For 60% design, plans with profile views of the green infrastructure elements (if appropriate) will be added to the drawing package and cost estimate will be refined accordingly. Specifications for structural elements, grading, habitat restoration, and other design elements associated with the alternative will be developed.

Detailed cost estimates will be developed upon finalization of 30% design.

Task 5: Ecological Restoration

Subtask 5a. Native Pollinator Establishment

This task includes herbicide application for site preparation, native seed installation, and vegetation management for up to 2 acres along Mariners Trail. Exact locations are yet to be determined but will be informed based on City and stakeholder input. The native prairie established and managed by Stantec near Wayside Park is included in this acreage. Activities will commence in spring 2025 and extend through the end of the 2026 growing season. Approximate timelines and activities associated with this task will consist of:

- Native Seeding Preparation includes non-selective broadcast herbicide applications, using a high-volume boom sprayer from a Utility Terrain Vehicle (UTV) or completed with a low volume backpack sprayer.
- Native Seed Installation includes the installation of native seed developed by Stantec based on site conditions, topography, and target plant community characteristics. Seed installation will be completed using a combination of no-till drilling, broadcasting, or hand seeding determined by project area access constraints, soil moisture, and other site conditions during the seeding window. Stantec anticipates seed installation to occur after Native Seeding Preparation.

Vegetation Management - includes vegetation management across the new native pollinator project areas (yet to be identified) and the pollinator planting established in 2023 near Wayside Park. Vegetation management is expected to take place during the 2025 and 2026 growing season (May-September). Vegetation management will consist of spot herbicide application and management mowing. Spot herbicide application will consist of low volume herbicide application using backpack sprayers to target invasive and undesirable species encountered. Management mowing will be conducted with a tractor-mounted rotary mower or with handheld mowers (for selective mowing and for areas that are inaccessible by tractor).

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Reference: Task Order #1

Management mowing will be conducted to promote native species establishment and reduction of annual weeds.

Subtask 5b. Great Lakes Dune Restoration

This task includes native seed installation and native dune grass plug planting within/near the beach areas along Mariners Trail in areas at risk for increased erosion and sand displacement. The Dune Restoration locations are yet to be determined but will be informed based on City and stakeholder input. For costing purposes, we assume up to 5 acres will be restored. Native Dune Restoration activities will commence in 2025. Approximate timelines and activities associated with this task are outlined below:

- Native Seed Installation includes the installation of up to 5.0 acres of native seed across the dune
 restoration project area. Seed mixes will be developed by Stantec based on site conditions,
 topography, and target plant community characteristics. Seed installation will be completed using a
 combination of UTV broadcasting, or hand seeding determined by Project Area access constraints,
 soil moisture, and other site conditions during the seeding window.
- Dune Grass Plug Planting includes the installation of Dune Grass plugs across the planting area in areas of poor native establishment. Exact locations, size and number of plugs will be refined based on input from the City and stakeholders.

Task 6: Stakeholder Engagement

Stakeholder meetings will be conducted to inform and gather feedback from partners and community stakeholders. Stakeholder engagement tasks shall include:

- Development of engagement graphic materials, with one round of minor revisions based on Client input. Engagement graphics will include conceptual renderings of each of the 4 coastal alternatives and 3 Mariners Trail alternatives.
- Two (2) stakeholder engagement meetings held virtually. The meetings will be held at key
 milestones in the design process to result in:
 - Discovery of participants' input identifying their concerns and improvement opportunities for the project areas
 - Share initial concept alternatives based on participant and stakeholder feedback
 - No public engagement events are included in this scope.
 - Conceptual renderings do not include upland parcel redevelopment options or upland stormwater management approaches for the water treatment area.

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Reference: Task Order #1

ASSUMPTIONS AND EXCEPTIONS

- Stantec assumes that staff will have access to the property, following reasonable notification to the Client regarding the duration of the anticipated project timeline.
- If other site features or issues are discovered that require additional attention and/or work, the costs to address such issues will be completed as an extra service.
- The City will reach out to USACE to follow up on the status of harbor dredging. They will also request a meeting between City/Stantec/ USACE to discuss dredging details.
- The effectiveness of herbicide applications is dependent upon several conditions such as target species, growth habit, weather conditions before and after the herbicide application, available target species propagule bank, and target species populations on adjacent parcels. Sustainable control of target weed populations often takes consistent and appropriately timed applications over multiple years. Complete control of a target species may not be achievable based on factors mentioned above; however, we will implement industry standard practices to reduce the establishment and spread of target species while maintaining an acceptable cost.
- Herbicide products, surfactants, and other additives will be chosen based on site conditions, demonstrated effectiveness, and consideration of potential impacts on pollinators and other wildlife.
- On-site meetings with a Stantec representative are included during scheduled workdays. Additional
 correspondence, meetings, documentation, or changes to the Scope of Services outside of that
 proposed or referenced herein may be completed as an additional service at additional cost and
 may affect schedule.
- Delays due to landowner access coordination, utility locates, material availability, permitting, site
 conditions, weather delays, and/or requirements from project stakeholders are not included within
 the cost estimate and schedule.
- Stantec reserves the right to adjust costs if the Client requires a different approach than that proposed by Stantec.
- Stantec will follow best practices during installation of native seed and plugs but will not warranty
 the establishment success of the native plantings. A range of environmental factors beyond our
 control, including soil compaction, poor soil quality, poor soil-seed contact out of Stantec's control
 (e.g., excessive crop litter or existing vegetation, inadequate seedbed prep), weather, pressure
 from weedy and invasive species, herbivory, and other damage may contribute to reduced planting
 success.
- Stantec will procure native seed/plugs and has included a \$1800 allowance per acre for native pollinator seed cost and \$0.50 per dune grass plug; final costs may vary according to final specs and native species seed/plug list.
- The proposed project schedule is based on work occurring during favorable site and weather conditions, including dry and/or frozen ground and typical site hydrology. Other site conditions may cause delays beyond Stantec's control and affect the overall project schedule.

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Reference: Task Order #1

FEE

The time-and-materials estimate to complete the services described is \$405,354.00 USD, with a breakdown of fees shown in Table 2. Funds may be moved between tasks during the project lifecycle. Labor hours may be moved between staff as project demands arise.

Table 2. Estimated fee

Task	Description	Estimated Fee (USD)	Funding Source		
			NFWF- NCRF*	NFWF- SOGL	FFLM
1	Project Management	\$26,400		\$16,400	\$10,000
2	Grant Administration & Reporting	\$10,000		\$7,000	\$3,000
3	Coastal Study	\$193,574	\$135,000	\$15,574	\$43,000
4	Green Infrastructure	\$99,464		\$99,464	
5	Ecological Restoration	\$57,000		\$57,000	
6	Stakeholder Engagement	\$18,916		\$8,916	\$10,000
	Total	\$405,354	\$135,000	\$204,354	\$66,000

^{*}Funds provided by Cities Initiative

SCHEDULE

Table 3 provides the estimated schedule. The proposed schedule may be affected by the response times for data requested from the USACE and other agencies.

Table 3. Estimated schedule

Task	Deliverables	Date of Completion
1	Project Management Meeting Notes	Ongoing
2	Grant Administration & Reporting	Ongoing
3	Coastal Study	
	Data Collection and Analysis	March 1, 2025
	Conceptual Alternatives Development	April 1, 2025
	Coastal Study Report	May 1, 2025
	30% Design of Selected Alternative	June 1, 2025
4	Green Infrastructure	
	Conceptual Alternatives Development	April 1, 2025
	30% Design of Selected Alternative	June 1, 2025
5	Ecological Restoration	
	Pollinator - Native Seeding Preparation	TBD
	Pollinator - Native Seed Installation	TBD

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Reference: Task Order #1

	Pollinator - Vegetation Management	On-going
	Great Lakes Dune – Native Seed Installation	TBD
	Great Lakes Dune – Plug Planting	TBD
6	Stakeholder Engagement	TBD

Best Regards,

STANTEC CONSULTING SERVICES INC.

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Melissa Curran



ATTACHMENT - STANDARD RATE TABLE

BC1937 2024-0

HOURLY RATES

Stantec Billing Level	2024 Hourly Rate*
3	\$103
4	\$109
5	\$121
6	\$125
7	\$133
8	\$140
9	\$149
10	\$156
11	\$165
12	\$169
13	\$181
14	\$192
15	\$212
16	\$236
17	\$249
18	\$254
19	\$273
20	\$284
21	\$299

^{*}Rates subject to annual increase.

OTHER EXPENSES / MATERIALS

Stantec's standard mark-up on expenses is 10%. Unless prescribed differently within the proposal or other contract paperwork, this mark-up is used in all areas as indicated below:

- Sub-Consultants
- Subcontracted Commodity Services

e.g., analytical laboratory services, drilling contractors, etc.

- Meals and Lodging
 - May be billed at cost or daily per diem. If applicable, per diem rates will be those set by the U.S. General Services Administration (https://www.asa.gov).
- Vehicle and Equipment Rentals Not owned by Stantec.
- External Equipment and Supplies.
 - e.g., delivery charges, outside copying/reproduction, leased/rented field equipment, etc.

<u>Company-owned equipment</u> will be billed on unit rate basis (e.g., daily; weekly); the expense markup does not apply to these rates. For Stantec owned vehicle, a combination of daily vehicle or milage rates are used depending on the type of work and/or contract. A separate Stantec Equipment Rate Schedule* is available upon request.