RESOLUTION NO. 4543

A RESOLUTION OF THE CITY OF MILES CITY APPROVING A TASK ORDER WITH KADRMAS, LEE & JACKSON, INC. RELATED TO THE MILES CITY FLOOD PROTECTION PROJECT

WHEREAS, The City of Miles City has retained the engineering services of Kadrmas, Lee & Jackson, Inc. (KLJ) to provide engineering services related to the Miles City Flood Protection Project – Yellowstone River Levee Phase I;

AND WHEREAS, the City wishes to approve a Task Order related to certain work to be provided by KLJ pertaining to said project;

AND WHEREAS, KLJ has provided the City with a written task order setting forth the duties and responsibilities of the parties;

NOW THEREFORE BE IT RESOLVED by the City Council of Miles City, Montana, as follows:

- 1. "Task Order 2304-01884," attached hereto as Exhibit "A", and made a part hereof, is hereby approved and adopted by this Council.
- 2. The Mayor of the City of Miles City is hereby empowered and authorized to execute said document on behalf of the City of Miles City and bind the City of Miles City thereto.

SAID RESOLUTION FINALLY PASSED AND ADOPTED BY A DULY.

WE'VE COUNCIL OF THE CITY OF MILES CITY,

MONTANA, AT A DULY CALLED MEETING THIS 9TH DAY OF JANUARY, 2024.

John Hollowell, Mayor

ATTEST:

Mary Rowe City Clerk

This is Task Order No. <u>2304-</u> <u>01884</u>, consisting of <u>3</u> pages.

Task Order

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated [June 22, 2021] ("Agreement"), Owner and Engineer agree as follows:

1. Background Data

a. Effective Date of Task Order: December 13, 2023

b. Owner: City of Miles City

c. Engineer: KLJ Engineering LLC

d. Specific Project (title): Yellowstone Levee Phase I

e. Specific Project (description): The project includes reviewing the 2015 Feasibility Report,

gathering existing data, communicating with agencies and utilities to determine areas of concern, looking at right of way impacts along the route, determining what Geotechnical is needed, preliminary hydraulic model for selected alternative and

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understanding certification requirements for the project.

2. Services of Engineer

A. The specific services to be provided or furnished by Engineer under this Task Order are:

set forth in Exhibit A, "Engineer's Services for Task Order 2304-01884," modified for this specific Task Order, and attached to and incorporated as part of this Task Order.

3. Additional Services

A. Additional Services that may be authorized or necessary under this Task Order are:

those services (and related terms and conditions) set forth in Paragraph A2.01 of Exhibit A, as attached to the Agreement referred to above, such paragraph being hereby incorporated by reference.

4. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement.

5. Task Order Schedule

In addition to any schedule provisions provided in Exhibit A or elsewhere, the parties shall meet the following schedule:

<u>Party</u>	Action	<u>Schedule</u>
Engineer	Furnish 1 digital copy of the final deliverables including coordination communication documentation to owner.	Anticipated no later than December 31, 2024

6. Payments to Engineer

A. Owner shall pay Engineer for services rendered under this Task Order as follows:

Description of Service	Amount	Basis of Compensation
1. Services of Engineer	\$ 486,000.00	Standard Hourly Rates
TOTAL COMPENSATION	\$486,000.00	Standard Hourly Rates
2. Additional Services (Part 2 of Exhibit A of Agreement)	(N/A)	Standard Hourly Rates

Compensation items and totals based in whole or in part on Hourly Rates or Direct Labor are estimates only. Lump sum amounts and estimated totals included in the breakdown by phases incorporate Engineer's labor, overhead, profit, reimbursable expenses (if any), and Consultants' charges, if any. For lump sum items, Engineer may alter the distribution of compensation between individual phases (line items) to be consistent with services actually rendered, but shall not exceed the total lump sum compensation amount unless approved in writing by the Owner.

B. The terms of payment are set forth in Article 4 of the Agreement and in the applicable governing provisions of Exhibit C.

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- was a see that . Zer Consultants retained as of the Effective Date of the Tosk Order; N/A
 - 8. Other Modifications to Agreement and Exhibits: N/A
 - 9. Attachments: Exhibit A Engineer's Services for Task Order 2304-01884
 - 10. Other Documents Incorporated by Reference:

11. Terms and Conditions

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Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

OWNER:	ENGINEER: KLJ Engineering LLC		
By: De Joseph Mucho	Ву:	dele de de les	
Print Name: JOHN HOLLOWELL	Print Name:	Luke LaLiberty	
Title: MAYON	Title:	Associate Vice President, Municipal	
	Firm's Certif required): State of:	Montana PEL-EF-LIC-37	
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED	REPRESENTATIVE FOR TASK ORDER:	
Name: Samantha Malenovsky	Name:	Dan Richardson	
Title: Floodplain Admin.	Title:	Project Manager	
Address: 17 S. 8 H	Address:	2969 Airport Road, Suite 1B Helena, MT 59601	
E-Mail Address: Smalenovely@milesctg-mt.org	E-Mail Address:	dan.richardson@kljeng.com	
Phone: 406 874 8/ 1	Phone	406_449.7764	



EXHIBIT A

City of Miles City – Phase I Yellowstone Levee Project Engineer's Services for Task Order 2304-01884

KLJ's scope for Phase I consists of reviewing the 2015 Feasibility Report, gathering existing data, communicating with agencies and utilities to determine areas of concern, looking at right of way impacts along the route, determining what Geotechnical is needed and understanding certification requirements for the project. A critical item for development of this project is overall progress and coordination with the USACE on their Tongue River Project. The outcome of Phase I is two-fold:

- Select one (1) alternative and up to two alignment options to move ahead into the environmental permitting and preliminary design phase.
- Identify the review agencies and how coordination will go with the Interior Tongue River Slough Project and the COE Tongue River Levee Project.
- Develop a scope and fee for Phase II environmental permitting and preliminary design

The Scope of Work tasks for the project will consist of 10 primary tasks from conception to completion which include the following:

1.	Project Management	1
2.	Agency Coordination	2
3.	Hydrology & Hydraulics	2
	Environmental	
	Geotechnical	
	Alternative Analysis	
	Public Involvement / Funding	
	Right of Way	
9.	Survey	4
	QC/QA	
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1. Project Management (\$61,593.00)

- 1.1. Track budget and schedule monthly. Keep owner informed about progress.
- 1.2. Prepare Monthly Progress Reports as Required
- 1.3. Coordination with Subconsultants. Invoicing, contracts and project coordination.
- 1.4. Coordination meetings with team members and City (Assumed 2 in Person and 2 Virtual)
- 1.5. General Project Management to include staff coordination, invoice coordination, managing and adjusting scope/schedule/budget, answering questions from City and agencies and review of submittal packages.

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2. Agency Coordination (\$56,330.00)

- 2.1. Gather data from USACE on the Yellowstone and Tongue Rivers (e.g. Project History, Hydraulic models, Hydrology, Ice Models, responses to policy questions, Geotechnical Information).
- 2.2. Gather data from MDT on the Roadway/Structure over Yellowstone River.
- 2.3. Gather data from FEMA (e.g. FIS models and background data, Certification Requirements).
- 2.4. Coordinate with USACE and FEMA on the Yellowstone and Tongue River Projects and the interior Tongue River Slough Project.
- 2.5. Meet with BNSF RR to start discussions on potential impacts.
- 2.6. Meet with DPHHS MT and DNRC MT on requirements.
- 2.7. Meet with Utilities to identify potential impacts.

3. Hydrology & Hydraulics (\$268,080.00)

- 3.1. Verify project coordinate systems and identify the system to be used in Design.
- 3.2. Ensure all USACE and FIS FEMA models are in HEC-RAS and georeferenced. Scope has included 40 hours to convert files if needed. Any additional time will be considered out of scope.
 - 3.2.1. Review surface data provided by USACE, FEMA, City and KLJ survey.
- 3.3. Update existing USACE developed HEC-RAS hydraulic model.
 - 3.3.1. Utilize LiDAR surface data for overbank areas.
 - 3.3.2. Incorporate channel geometry and soundings from existing model cross sections and KLJ survey.
 - 3.3.3. KLJ to provide historic high-water measurements and corresponding permanent/temporary flood protection measures, debris/ice obstructions and most recent bridge/crossing dimension measurements.
- 3.4. Calibrate model to known historic events as documented at Miles City. (3 events).
- 3.5. Hydrology
 - 3.5.1. Per conversations with USACE on February 10, 2022, the project hydrology is current and does not require updates. If determined updated hydrology is needed, time to update will be considered out of scope.
 - 3.5.2. Per conversations with FEMA and DNRC-MT on March 25, 2022, new hydrology for the Yellowstone River was being developed and is available as of the summer of 2022.
- 3.6. Coordinate with USACE on Tongue River Levee Project, confluence of the rivers, hydrology to use, ice requirements and base model.
 - 3.6.1. Verify boundary condition on models



- 3.6.1.1. Tongue into Yellowstone
- 3.6.1.2. Yellowstone ice or other downstream conditions
- 3.6.1.3. Interior to river
- 3.6.2. Verify how ice will be addressed in the Yellowstone River modeling
- 3.6.3. Verify how to treat overland breakouts that are modeled through the city.
- 3.7. Prepare model to review one (1) alternative and up to two alignment options.
- 3.8. Models will utilize current 1D steady-state hydrology in the river and 2D on the overbank.
- 3.9. A second simplified model will be created in a 2D hydraulic software. This model is intended to support the 1D assumptions. It may also be used to explore design options. It is not intended to replace the 1D model for final submittal to FEMA.
- 3.10. Obtain existing HEC-RAS FIS hydraulic model.
 - 3.10.1. Update geometry (in similar fashion to USACE model updates)
 - 3.10.2. Recalibrate model (in similar fashion to USACE model updates)
- 3.11. QA/QC all modeling efforts.
- 3.12. Prepare report documenting model updates, report to be submitted with CLOMR package at a later date.
- 3.13. Develop preliminary models for Levee Alternative with 2 Alignment options.
 - 3.13.1. Models will be cursory and limited in detail; but will be used to provide initial guidance on footprints and potential impacts associated with each alignment option to assist the City of Miles City in the screening process.
 - 3.13.2. Levees will be modeled as levee cards without changes to station-elevation points in HEC-RAS.
 - 3.13.3. These models will undergo significant refinement during the next phase.
- and the state of the proposed condition. The Work with EEMA to determine mapping requirements for the proposed condition.
 - 3.14.1. Map tie in points.
 - 3.14.2. Floodplain limits and Floodway methodology
 - 3.14.3. Coordinate with Interior Drainage mapping requirements interior to the City.
 - 3.14.3.1. Mapping within the existing floodplain
 - 3.14.3.2. Any new mapping outside the existing floodplain
 - 3.15. Assist with team planning (scheduled internal meetings)
 - 3.16. Follow-up from QC efforts



4. Environmental (\$6,619.00)

- 4.1. Determine type of Environmental Document Required, who will be lead review agency (if any) and limits of the study.
- 4.2. Provide Environmental scope.
- 4.3. Phase I does not include any field work, surveys, reviews, etc.

5. Geotechnical (\$23,592.00)

- 5.1. Meet with USACE on Geotechnical Data. Determine what data exists in the area and what data would be required for design of the levee.
- 5.2. Review FEMA requirements for certification.
- 5.3. See Braun Intertec Report for Geotechnical Investigation plan for this project.

6. Alternative Analysis (\$21,572.00)

- 6.1. Review 2015 Feasibility Report and data from USACE or Miles City on past projects.
- 6.2. Confirm alternate/alignment to move forward into environmental and design phases.

7. Public Involvement / Funding (\$7,980.00)

- 7.1. Media Relations/Unscheduled Meetings (est. 3 meetings in Miles City).
- 7.2. City Council Meetings (2 in Miles City)
- 7.3. Funding Meeting with DNRC MT (1 in Helena)
- 7.4. Research Grant packages
- 7.5. Manage public communications materials for this project (such as newsletters, website, Facebook, and press releases).

8. Right of Way (\$2,640.00)

- 8.1. Identify preliminary impacts to property owners for up to two (2) alignments, assume 70 parcels and 35 landowners.
- 8.2. No landowner meetings, documents, plats, or title work will be part of Phase I.

9. Survey (\$19,594.00)

- 9.1. Determine survey datum information that will be used for data collection, verify datums match any survey information provided by the City, COE, FEMA or others.
- 9.2. Preliminary Data Collection and review.
 - 9.2.1. Verify Q1 Lidar data for this area with ground survey
 - 9.2.2. Verify Lidar extents and need for additional topography for modeling with Hydraulic lead
 - 9.2.2.1. Determine the need for refining data on the riverbanks, or slough.
 - 9.2.2.2. Determine the need for extending lidar.
 - 9.2.2.3. Determine need for river bathymetry/cross sections.
 - 9.2.2.4. Determine the need for bridge survey.

Programming to 1 1 miles may -



- 9.2.2.5. Determine the need for hand survey or drones
- 9.3. River soundings for Hydraulic model
 - 9.3.1. KLJ to obtain channel elevations by use of boat sonar. It is assumed 15,000 feet of the Yellowstone River bottom will need to be surveyed by sonar.

10. QC/QA (\$18,000.00)

- 10.1. Hydraulics Verify Hydraulic Models inputs and results
- 10.2. Survey Verify survey data collected and datums.

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