



AMENDMENT NO. 2

TO

AGREEMENT FOR CONSULTANT SERVICES (PO 20-000314)

PUBLIC WORKS ASSET MANAGEMENT PROGRAM SUPPORT

THIS AGREEMENT, made and entered into on _____, 2021, by and between the following:

CITY OF BILLINGS, A MUNICIPAL CORPORATION
P.O. BOX 1178
Billings, Montana 59103,
hereinafter designated the CITY

and

JACOBS ENGINEERING GROUP
1301 W Summit St
Livingston, MT 59047
hereinafter designated the CONSULTANT

WITNESSETH:

WHEREAS, the City and Consultant have entered into an agreement dated November 12, 2019, for Consultant to provide asset management support services to the City, and;

WHEREAS, the City has need for additional consultant services, and;

WHEREAS, the City has authority to contract for consulting services, and;

WHEREAS, the Consultant represents that it is qualified to perform such services and is willing to furnish such services to the City;

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated herein, the Parties hereto agree as follows:

- 1. SCOPE OF CONSULTANT'S SERVICES:** The scope of the work has been amended to add the services and fees outlined in Appendix A.
- 2. TERM OF CONSULTANT'S SERVICES:** The term has been amended to extend the period of the agreement for two (2) years to November 12, 2023.
- 3. PAYMENT IN CONSIDERATION OF CONSULTANT'S SERVICES:** The price that the City agrees to pay the Consultant has been amended as outlined in Appendix B.



APPENDIX A

Add the following to the Scope of Work:

D2 Asset Hierarchies

Project Purpose: To improve asset hierarchies as needed to align with stakeholder needs (O&M, Finance, and Stakeholders who receive Reports on asset performance related to Regulatory, Public, Council, Capital Planning).

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Prepare Asset Hierarchy Recommendations

- Obtain asset hierarchy exports from existing tracking systems (from the supporting system) and O&M metrics (from S6 – Service Levels and Performance).
- Review asset reporting needs for Stakeholders.
- Review and compare existing asset hierarchies to reporting needs and best practice examples.
- Prepare initial high-level recommendations for improvement as needed.
- Facilitate a discussion with each of the asset group leads to discuss recommendations.
 - Water Treatment (O&M and Finance rep).
 - Wastewater Reclamation (O&M and Finance rep).
 - Distribution (O&M and Finance rep).
 - Collections (O&M and Finance rep).
 - Storm Water (O&M and Finance rep).
 - Solid Waste/Landfill (O&M and Finance rep).
 - Transportation Systems (O&M and Finance rep).

Deliverables:

- Initial asset hierarchy recommendations for each of the seven asset groups.

Task 3 –Revise Asset Hierarchies

- Prepare DRAFT asset hierarchies for the asset groups listed in Task 2 based on feedback obtained during Task 2 with existing hierarchies mapped to new asset hierarchies.
- Facilitate meetings with each of the asset groups listed in Task 2 that includes: (O&M; Finance, Deputy Director, and Asset Manager) to obtain feedback on the DRAFT versions.
- Update the asset hierarchies and mapping to FINAL.

Deliverables:

- Updated asset hierarchies with existing hierarchies mapped to the new structure – DRAFT.
- Updated asset hierarchies with existing hierarchies mapped to the new structure – FINAL.

Assumptions:

- PWD will provide the updated asset hierarchies to HDR to update the asset registries in the supporting databases (Cityworks/FastMaintenance).
- PWD may also need to make the updated changes to the asset hierarchy in the financial system.

D5 Data Standards

Project Purpose: To establish consistent standards for required attribute information that is in alignment with performance reporting and operational decision-making needs.

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.
- Identify any assets and attribute information that are not the responsibility of PWD but that would be helpful to understand overall system operation.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Identify Required Data Attributes for each Asset Group in the Asset Hierarchy

- Review stakeholder reports and discuss asset reporting needs (that inform asset reporting needs with representatives from Management, Finance, O&M, asset management, and regulatory).
- Summarize existing data elements tracked for each asset in the asset hierarchy (from D2 – Asset Hierarchies).
 - Water Treatment (O&M and Asset Manager).
 - Wastewater Reclamation (O&M and Asset Manager).
 - Distribution (O&M and Asset Manager).
 - Collections (O&M and Asset Manager).
 - Storm Water (O&M and Asset Manager).
 - Solid Waste/Landfill (O&M and Asset Manager).
 - Transportation Systems (O&M and Asset Manager).
- Identify asset data that comes from stakeholders for assets that are not the responsibility of PWD but that are important for PWD to track and any attributes that are critical to understand.

Deliverables:

- Summary of attributes per asset type.

Task 3 – Review Attribute Needs with Asset Groups

- Facilitate a discussion with each of the asset groups listed in Task 2 to review the summary list of attributes, data owners, supporting technology where data is stored, and identify strategies to collect any missing attribute information required for reporting and/or to inform operational decision-making.
- Summarize discussion results per asset group.

Deliverables:

- Meeting Materials.
- Meeting Summary (reflecting strategies to collect missing attributes, data owners, and master databases).

Task 4 – Develop Data Dictionary

- Summarize the results of Task 3 and prepare a DRAFT Data Dictionary.
- Facilitate a discussion with identified staff to review the DRAFT Data Dictionary.
- Define an owner and process to keep the Data Dictionary updated over time and ensure attribute information is being collected.
- Update the Data Dictionary to FINAL following review meeting and submitted comments.

Deliverables:

- Data Dictionary – DRAFT.



- Data Dictionary – FINAL.

Assumptions:

- PWD will facilitate activities to gather missing attribute information in alignment with strategies defined in Task 3.
- PWD will provide the asset attribute information desired for tracking to HDR to update and align to the asset registries in the supporting databases (Cityworks/FastMaintenance).
- PWD will communicate data standards to outside stakeholders who maintain assets that are important for PWD to understand.

D7 CMMS Coding

Project Purpose: To review and update pull-down menus in the CMMS (Cityworks and/or FastMaintenance) to capture and track asset failures (causes and mitigation/remedy activities) by asset and work order type.

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Identify Asset Failure Types

- Facilitate Meetings with each asset group leader to define asset failure types (reflected in the work order types).
 - Water Treatment.
 - Wastewater Reclamation.
 - Distribution.
 - Collections.
 - Storm Water.
 - Solid Waste/Landfill.
 - Transportation Systems.
- Summarize asset failures by asset type/work order type in a spreadsheet format and create candidate codes and identify the affected supporting technology where codes will be captured.

Deliverables:

- Failures Codes - - spreadsheet format for configuring into the CMMS.

Task 3 – Define Mitigation Tasks by Asset Failure Type

- Using the results of Task 2, work with each asset group to define high-level mitigation tasks that can be captured using codes in the CMMS.
- Summarize high-level activities in alignment with the mitigation codes that can be recorded in the CMMS or in an SOP (from M2 – Failure Analysis).
- Present results to identified staff and update to a final version following comments received.

Deliverables:

- Mitigation Codes and Activity Lists – spreadsheet format for configuring into the CMMS – DRAFT.
- Mitigation Codes and Activity Lists – spreadsheet format for configuring into the CMMS – FINAL.

Assumptions:

- PWD will set up the failure and mitigation codes in the CMMS technologies.



D8 Inventory Management System

Project Purpose: To update the supporting technology that tracks inventory to support the Inventory Management Strategy (M6). Investigate the option of replacing CitySuite with the Cityworks Storeroom Module. Document configuration specifications to integrate Cityworks and/or FastMaintenance with CitySuite/Cityworks Storeroom. Automate pulling items from inventory as parts and materials are used to perform work through configuration. Include min/max counts of parts and materials in the configuration specifications.

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Define Functionality Needs and Assess CitySuite/Cityworks Storeroom

- Compare CitySuite's to Cityworks' Storeroom functionality and facilitate demos of those two options.
- Facilitate a meeting with identified staff to review existing functionality provided by CitySuite compared to Cityworks Storeroom to define desired functionality.
- Facilitate meeting to determine which software best supports desired functionality.

Deliverables:

- Facilitated Demo of CitySuite and Cityworks Storeroom.
- Functionality Requirements – summarized in spreadsheet format.

Task 3 – Develop Configuration Specifications to Set Up Inventory Management System

- Depending on the results of M6 – Inventory Management Strategy and Task 2 of this Task Order – develop a configuration specifications spreadsheet to support integration of CitySuite/Cityworks Storeroom with Cityworks and/or FastMaintenance.
- Obtain min/max counts for parts and materials documented in the Inventory Management Strategy (M6).
- Review the draft configuration specifications with identified PWD staff.
- Update the configuration specifications with comments to a final version.

Deliverables:

- Configuration Specifications Document – DRAFT.
- Configuration Specifications Document – FINAL.

Assumptions:

- PWD will use their CitySuite or Cityworks vendor to use the Configuration Specifications Document and set up supporting technology to work as defined.

L2 Asset Management Plan Development

Project Purpose: To identify assets on which to develop AMPs and prioritize the development of them so that the highest risk assets for each asset group are completed first. Create a strategy and schedule for completing the AMPs. Jacobs will develop a pilot AMP for each of the seven asset groups.

Note: This project relies on obtaining information developed from separate Improvement Initiatives D2; M2 – M5; S6, and S7.

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Develop AMP Template

- Facilitate a meeting with representatives from each of the asset groups to review a DRAFT AMP Template.
 - Water Treatment.
 - Wastewater Reclamation.
 - Distribution.
 - Collections.
 - Storm Water.
 - Solid Waste/Landfill.
 - Transportation Systems.
- Update the AMP Template to a FINAL version based on comments received.

Deliverables:

- AMP Template – DRAFT.
- AMP Template – FINAL.

Task 3 – Identify Assets to Develop AMPs

- Identify assets for each of the asset groups.
- Summarize the assets in a spreadsheet format and with the asset group representatives to prioritize.
- Determine the top asset(s) for each group that a pilot AMP will be developed.

Deliverables:

- List of assets for which AMPs will be developed.

Task 4 – Develop AMPs

- Collect data to initiate development of the AMPs.
- Prepare DRAFT AMPs using known data and strategies (coordinate input with D2; M2 – M5; S6, and S7).
- Facilitate up to three meetings with each asset group to complete the sections contained in the AMP.
- Submit the DRAFT AMPs for review to each asset group.
- Finalize each AMP based on comments received.

Deliverables:

- AMPs (7) – DRAFT.
- AMPs (7) – FINAL.

Task 5 – Establish an AMP Maintenance Process and Usage Strategy

- Facilitate a meeting to document a process and AMP owners who will update the AMPs as new information is received with identified staff.
- Discuss AMP Usage Strategy and triggers
- Draft the AMP Maintenance Process.
- Facilitate a meeting to validate the business process to update the AMPs and subsequently make FINAL.

Deliverables:

- List of AMP owners.
- AMP Maintenance Process – DRAFT.
- AMP Maintenance Process – FINAL.

Assumptions:



- PWD will use the piloted AMPs to further develop AMPs on the remaining critical assets or will secure additional assistance from Jacobs as part of a separate Task Order.

L3 CIP Prioritization Strategy

Project Purpose: To finalize development of a formalized and repeatable CIP Prioritization Process. (Reference pilot work completed in 2020).

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs. Include a description of the pilot CIP prioritization work completed.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Finalize Evaluation Criteria

- Facilitate a meeting with staff to review evaluation criteria and modify, as necessary.
- Develop service-specific sub-criteria and measurement scales.
- Facilitate a meeting with staff to review and finalize service-specific sub-criteria.

Deliverables:

- Evaluation Criteria – DRAFT.
- Evaluation Criteria – FINAL.

Task 3 – Identify Projects and Scoring Teams

- Obtain a list of projects to be scored and prioritized.
- Assess and establish a Scoring Team consisting of senior managers.

Deliverables:

- Scoring Teams.

Task 4 – Score and Prioritize Projects

- Facilitate a meeting with the Scoring Team to score projects.
- Facilitate a meeting with the Scoring Team review and refine project scores.

Deliverables:

- Scoring Results – DRAFT.
- Scoring Results – FINAL.

Task 5 – Finalize CIP Results

- Facilitate a meeting with the Scoring Team to assess weights assigned during prioritization pilot test and refine as needed.
- Calculate MODA evaluation of CIP projects.
- Conduct sensitivity analysis and establish project ranking.
- Conduct CIP harmonization (typical PWD process to address sequencing, funding sources, etc.).

Deliverables:

- CIP Projects Prioritized – DRAFT.
- CIP Projects Prioritized – FINAL.

Task 6 – Define CIP Prioritization Business Process

- Facilitate a meeting with identified staff to define a CIP Prioritization business process.
- Develop the business process and How-To documentation.
- Validate the business process with staff.

Deliverables:

- CIP Prioritization Documentation – DRAFT.
- CIP Projects Documentation – FINAL.



L5 Business Case Analysis Strategy

Project Purpose: To develop a formalized Business Case Analysis (BCA) process and define criteria for when BCAs need to be prepared to initiate requirements for BCA development.

Task 1 – Kick-Off Meeting

- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Determine BCA Approach

- Facilitate a meeting with identified staff to review example BCA approaches and tools and select the approach and tool appropriate for PWD.

Deliverables:

- Example BCA Approaches and Tools.
- BCA Approach and Tool for PWD.

Task 3 – Identify BCA Criteria

- Facilitate a meeting with identified staff to determine criteria and weightings for use in the BCA Tool.

Deliverables:

- List of criteria and weightings.

Task 4 – Pilot BCA Analysis

- Obtain sample data for up to six BCA projects.
- Prepare the BCAs using received data.
- Facilitate a meeting with identified staff to review the BCAs results.
- Update the BCA Tool with input received from identified staff.

Deliverables:

- BCA Results (six projects) – DRAFT.
- BCA Results (six projects) – FINAL.

Task 5 – Establish a Process for use of the BCA Analysis

- Facilitate a meeting with identified staff to document the triggers for using the BCA Tool.

Deliverables:

- Documented business process reflecting triggers.

Task 6 – Train Staff on Usage of the BCA Tool

- Develop Training Manual on the BCA Analysis.
- Facilitate two training sessions with identified staff to use the BCA Tool.

Deliverables:

- Training Manual.
- Training Sessions (2).

Assumptions:

- PWD will enforce the BCA Analysis process within Billings PWD based on triggers identified in Task 5.

M2 Failure Analysis

Project Purpose: To standardize a process to record and investigate failure modes, root causes, and remedies. Identify staff roles responsible for trend analysis and revising preventive maintenance and risk mitigation strategies to improve asset reliability. Assign responsibility and document a business process to initiate and conduct investigations for asset failures.

Task 1 – Kick-Off Meeting



- Facilitate Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Identify Failure Modes and Mitigation Strategies for Critical Assets

- Facilitate a meeting with representatives from each asset group to define failure modes on critical assets.
- Facilitate a meeting with each asset group representative(s) to define mitigation strategies to respond to each failure mode on critical assets (coordinate with M3 Asset Risk).
- Document the results from the meetings.
- Facilitate a review meeting with each asset group representative(s) to review the results and validate.
- Finalize the failure modes and mitigation strategies (coordinate with D7 – CMMS Coding).

Deliverables:

- Spreadsheet of Failure Modes and Mitigation Strategies for each of the Asset Groups – DRAFT.
- Spreadsheet of Failure Modes and Mitigation Strategies for each of the Asset Groups – FINAL.

Task 3 – Define a Failure Identification, Investigation, and Mitigation Process

- Facilitate a meeting with the asset group representative(s) to document a standardized business process to identify, investigate and respond to failed assets.
- Draft the business processes and supporting text SOP and reflect defined roles and responsibilities for each asset group.
- Review the draft business processes and supporting text SOP with asset group representative(s).
- Finalize the business process and supporting text SOP following comments/edits received.

Deliverables:

- Failure Identification, Investigation and Mitigation Business Process – Business Process Diagram and supporting text SOP – DRAFT.
- Failure Identification, Investigation and Mitigation Business Process – Business Process Diagram and supporting text SOP – FINAL.

Task 4 – Train Staff on the Failure Identification, Investigation, and Mitigation Process

- Facilitate up to three training sessions with identified staff to ensure understanding of the documented business processes and SOPs.
- Coordinate with the Change Management Communication Coordinator to support roll-out and tracking of the new business process implementation.

Deliverables:

- Training Materials.
- Training Sessions (3).

Assumptions:

- PWD will update any related job descriptions with identified responsibilities as needed.

M3 Asset Risk



Project Purpose: To determine asset risk scores for critical assets using likelihood and consequence of failure determinations. Identify risk tolerance levels that trigger defined risk mitigation strategies. Incorporate data fields into supporting technology. This project coordinates with S7 – Risk Frameworks. The Asset Risk Framework will be developed as part of S7 and built out as part of M3 – Asset Risk.

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Determine Risk Scores for Critical Assets

- Facilitate a meeting with identified staff to review the Risk Score calculation methodology.
- Facilitate a meeting with each of the asset groups to identify critical assets on which to calculate risk scores and criteria.
- Obtain available data to calculate risk scores (this may be a combination of quantitative and qualitative data).
- Calculate risk scores on identified assets.
- Review risk score results with each of the asset groups.
- Update risk score results following validation meetings.

Deliverables:

- Spreadsheet of Risk Score Calculations – DRAFT.
- Spreadsheet of Risk Score Calculations – FINAL.

Task 3 – Define Risk Tolerance Levels

- Facilitate a meeting with identified staff from each of the asset groups to review the Risk Tolerance Level approach.
- Facilitate meetings with each of the asset groups to define asset specific risk tolerance levels to trigger mitigation strategies (coordinate with M4- Mitigation Strategies).
- Prepare a results and review with identified staff in a meeting.

Deliverables:

- Risk Tolerance Strategy for each asset group– DRAFT.
- Risk Tolerance Strategy for each asset group– FINAL.

Task 4 – Train Staff

- Facilitate up to three Training Sessions with staff to understand how to use risk scores to prioritize and trigger work activities.

Deliverables:

- Training Materials.
- Training Sessions (3).

Assumptions:

- PWD provide risk scores to IT to build into the CMMS.

M4 Maintenance Strategies

Project Purpose: To document planned and reactive maintenance strategies aligned to risk tolerance levels.

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:



- Meeting Materials.
- Meeting Summary.

Task 2 – Align Maintenance Strategies to Risk Tolerance Levels

- Confirm asset types on which to define maintenance strategies in alignment with risk tolerance levels.
- Facilitate meetings with each of the asset groups to align maintenance strategies with risk tolerance levels. These include routine planned preventive maintenance to increased escalation of frequencies and specific activities.
- Prepare Draft results and review with identified staff in each of the asset groups.
- Update results to Final versions following review and comments.

Deliverables:

- Spreadsheet of Maintenance Strategies – DRAFT.
- Spreadsheet of Maintenance Strategies – FINAL.

Task 3 – Train Staff

- Facilitate up to three Training Sessions with staff to review maintenance strategies in alignment with risk tolerance levels.

Deliverables:

- Training Materials.
- Training Sessions (3).

Assumptions:

- PWD to update the CMMS with mitigation strategy options to track work.

M5 Preventive Maintenance Optimization

Project Purpose: To conduct a preventive maintenance optimization (PMO) assessment and update preventive maintenance activities and frequencies as documented in M4-Maintenance Strategies and in the supporting technology to support implementation. Include an assessment of work orders, costs, and failures to determine optimization opportunities.

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Assess Maintenance Work Activities

- Confirm asset types on which to conduct the PMO Assessment.
- Obtain required data.
- Perform assessment.
- Facilitate meetings with the asset groups to review results of the PMO Assessment.

Deliverables:

- Assessment Results.

Task 3 – Develop PMO Recommendations

- Based on PMO Assessment results, draft optimization recommendations.
- Facilitate meetings with each of the asset groups to review the recommendation results.
- Update the recommendations following feedback from staff.
- Update the Maintenance Strategy documentation (M4 – Maintenance Strategies).

Deliverables:

- Optimization Recommendations – DRAFT.
- Optimization Recommendations – FINAL.



- Updated Maintenance Strategy Documentation (M4 – Maintenance Strategies).

Assumptions:

- PWD to update the CMMS with maintenance optimization recommendations that impact PM frequencies.

S6 Service Levels and Performance

Project Purpose: To develop a Service Level Framework that defines terms, use, and stakeholder expectations. Document performance indicators (leading and lagging) and service level targets per asset group and stakeholder and define how performance will be tracked and reported. Formalize future trend analysis business process and identify staff responsible to perform this work that will inform decision making on maintenance and asset investments.

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project and describe data needs.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Define the Service Level Framework and Service Level Targets

- Obtain PWD Strategic Goals.
- Obtain listing of PWD Division functional responsibilities.
- Develop Service Level Framework that aligns Division functional responsibilities under the Strategic Goals.
- Facilitate a meeting with identified staff to review the draft Strategic Level Framework.
- Update the Strategic Level Framework to final version following receipt of comments.

Deliverables:

- Strategic Framework – DRAFT.
- Strategic Framework – FINAL.

Task 3 – Identify Performance Metrics

- Work with each Division to identify strategic and operational metrics and service level targets valuable for reporting performance and informing operational decision-making. Jacobs will present a library of optional leading and lagging metrics at these meetings in alignment with industry best practices.
- Summarize the metrics in a spreadsheet format under the Strategic Goals and Operational Functions reflecting service level targets and from which supporting technologies will provide the required data.
- Review the metrics spreadsheets with each Division.
- Update the metrics spreadsheets to a final version based on comments received.

Deliverables:

- Metrics Spreadsheets – DRAFT.
- Metrics Spreadsheets – FINAL.

Task 4 – Define Future Trend Analysis Business Processes and SOPs

- Facilitate two meetings with identified staff from each Division to document a business process and define responsibilities for performing trend analysis.
- Ensure staff understand how to use the data to inform decision-making and reflect in the business processes.

Deliverables:

- Future Trend Analysis SOP and Business Process for each Division – DRAFT.
- Future Trend Analysis SOP and Business Process for each Division – FINAL.



S7 Risk Frameworks

Project Purpose: To create Risk Frameworks and implementation processes for Enterprise-wide, Operational, Project, and Asset risks.

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Define an Enterprise-wide Risk Framework and Implementation Process

- Facilitate a meeting with identified staff to define an Enterprise-wide Risk Framework. As part of this meeting, identify Enterprise Risks.
- Document mitigation strategies in response to each Enterprise Risk.
- Draft the Enterprise-wide Risk Framework and review with identified staff.
- Finalize the Enterprise-wide Risk Framework following staff comments and edits.
- Facilitate a meeting to define an Enterprise-wide Risk Mitigation Implementation Process with identified staff.
- Draft the Enterprise-wide Risk Mitigation Process and review with staff in a meeting.
- Update the Enterprise-wide Risk Mitigation Process following comments received.

Deliverables:

- Enterprise-wide Risk Framework – DRAFT.
- Enterprise-wide Risk Framework – FINAL.
- Enterprise-wide Risk Mitigation Process – DRAFT.
- Enterprise-wide Risk Mitigation Process – FINAL.

Task 3 – Define an Operational Risk Framework and Implementation Process

- Facilitate a meeting with identified staff to define an Operational Risk Framework. As part of this meeting, identify Operational Risks.
- Document mitigation strategies in response to each Operational Risk.
- Draft the Operational Risk Framework and review with identified staff.
- Finalize the Operational Risk Framework following staff comments and edits.
- Facilitate a meeting to define an Operational-wide Risk Mitigation Implementation Process with identified staff.
- Draft the Operational Risk Mitigation Process and review with staff in a meeting.
- Update the Operational Risk Mitigation Process following comments received.

Deliverables:

- Operational Risk Framework – DRAFT.
- Operational Risk Framework – FINAL.
- Operational Risk Mitigation Process – DRAFT.
- Operational Risk Mitigation Process – FINAL.

Task 4 – Define Project Risk Framework and Implementation Process

- Facilitate a meeting with identified staff to define a Project Risk Framework. As part of this meeting, identify Project Risks.
- Document mitigation strategies in response to each Project Risk.
- Draft the Project Risk Framework and review with identified staff.
- Finalize the Project Risk Framework following staff comments and edits.
- Facilitate a meeting to define a Project Risk Mitigation Implementation Process with identified staff.
- Draft the Project Risk Mitigation Process and review with staff in a meeting.
- Update the Project Risk Mitigation Process following comments received.



Deliverables:

- Project Risk Framework – DRAFT.
- Project Risk Framework – FINAL.
- Project Risk Mitigation Process – DRAFT.
- Project Risk Mitigation Process – FINAL.

Task 5 – Define Asset Risk Framework and Implementation Process

- Facilitate a meeting with identified staff to define an Asset Risk Framework. As part of this meeting, identify Asset Risks.
- Document mitigation strategies in response to each Asset Risk.
- Draft the Asset Risk Framework and review with identified staff.
- Finalize the Asset Risk Framework following staff comments and edits.
- Facilitate a meeting to define an Asset Risk Mitigation Implementation Process with identified staff.
- Draft the Asset Risk Mitigation Process and review with staff in a meeting.
- Update the Asset Risk Mitigation Process following comments received.

Deliverables:

- Asset Risk Framework – DRAFT.
- Asset Risk Framework – FINAL.
- Asset Risk Mitigation Process – DRAFT.
- Asset Risk Mitigation Process – FINAL.

Task 6 – Train Staff on the Risk Frameworks

- Facilitate up to three Training Sessions to train staff on how to implement the Risk Frameworks in alignment with the defined Business Processes.

Deliverables:

- Training Materials.
- Training Sessions (3).

S8 Standard Operating Procedures and Business Processes

Project Purpose: To list business processes and Standard Operating Procedures (SOPs) that are desired. Inventory and assess quality of existing SOPs, identify missing SOPs, and prioritize SOPs for update/completion. Include asset management business processes that span asset operations, maintenance, managing maintenance and construction contractors, asset onboarding and asset management quality assurance. Define standardized SOP and Business Process templates and complete SOP and Business Process documentation. *Note: Some business processes are embedded in other Improvement Initiatives and may be documented as part of those efforts.*

Task 1 – Kick-Off Meeting

- Facilitate a Kick-Off Meeting with the staff who will be involved in the project to provide an overview of the project.

Deliverables:

- Meeting Materials.
- Meeting Summary.

Task 2 – Identify Business Processes and SOPs to be Documented

- Inventory those that exist to support identification of gaps and update needs.
- Facilitate a meeting with identified staff to identify Business Processes and SOPs to be documented prioritize Business Process and SOPs to be updated/created.

Deliverables:

- Inventory List of Business Processes and SOPs – prioritized.

Task 3 – Identify Business Process and SOP templates



- Facilitate a meeting with identified staff to review example Business Process and SOP templates. Options will include existing Business Process and SOP templates from PWD.
- Prepare standardized templates as needed.
- Facilitate a meeting with identified staff to gain consensus on templates.
- Finalize the templates upon feedback from staff.

Deliverables:

- Business Process Template – DRAFT.
- SOP Template – DRAFT.
- Business Process Template – FINAL.
- SOP Template – FINAL.

Task 4 – Document Identified Business Processes

- In alignment with priorities defined in Task 2, facilitate meetings to document business processes using the identified template. As part of these sessions, optimization, data collection, and communication channels will be reflected.
- Draft Business Processes.
- Review optimized business processes with staff.
- Finalize Business process.

Deliverables:

- Business Process Diagrams (up to 10) – DRAFT.
- Business Process Diagrams (up to 10) – FINAL.

Task 5 – Document Identified SOPs

- In alignment with priorities defined in Task 2, facilitate meetings to document SOPs using the identified template.
- Draft SOPs using existing data.
- Review SOPs with identified staff and obtain missing details as needed.
- Finalize SOPs.

Deliverables:

- SOPs (up to 10) – DRAFT.
- SOPs (up to 10) – FINAL.

Assumptions:

- PWD will roll-out the optimized business processes to identified staff and work with the Change Management Communication Coordinator to enforce and track implementation.
- Jacobs will focus on the top 10 Business Processes and top 10 SOPs for this Task Order unless otherwise directed. PWD will complete the remaining internally using the approach and templates provided.



APPENDIX B

Add to the not to exceed price paid to Consultant as follows:

Improvement Initiative	Jacobs Cost
D2 - Asset Hierarchies	\$ 51,952
D5 - Data Standards	\$ 51,012
D7 - CMMS Coding	\$ 64,300
D8 - Inventory Management System	\$ 30,662
L2 - AMP Development	\$ 100,297
L3 - CIP Prioritization Strategy	\$ 29,875
L5 - Business Case Analysis Strategy	\$ 33,042
M2 - Failure Analysis	\$ 58,996
M3 - Asset Risk	\$ 52,458
M4 - Maintenance Strategies	\$ 47,182
M5 - Preventive Maintenance Optimization	\$ 88,299
S6 - Service Levels and Performance	\$ 67,556
S7 - Risk Frameworks	\$ 101,579
S8 - SOPs and Business Processes	\$ 80,387
SUB-TOTAL	\$ 857,597
<i>Deduct for Phase 1 Budget Not Spent</i>	<i>-\$ 59,000</i>
AMENDMENT TOTAL	\$ 798,597

All other Sections of the original Contract remain the same.

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

CITY OF BILLINGS, MONTANA

By _____
 William A. Cole
 Mayor

Jacobs Engineering Group Inc.
 CONSULTANT (Print Name Above)

By  _____
 Print Name Court Harris

Print Title: VP/Client Account Manager