Packet A – Stormwater Conveyance System Mapping

State of Washington Department of Transportation

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SCORING CRITERIA 1: QUALIFICATIONS/EXPERTISE OF FIRMS ON TEAM

A. Include the following items:

Provide a Listing of all firms on your proposed team,

Below is a list of all firms on Axim Geospatial, LLC's proposed team:

1. Axim Geospatial, LLC (Axim)
2. IDS Infrastructure Data Services, Inc. (IDS)
3. Land Development Engineering & Surveying, LLC (LDES) – Minority-owned Business Enterprise (MBE)

List the type(s) of expertise that each firm on your team can provide

Below is a list of the types of expertise that each firm on the Axim team can provide:

1. Axim –
   a. **Project Management.** Axim has an established Project Management Office (PMO) consisting of over 30 project management staff, of which 7 maintain Project Management Professional (PMP) certifications. Our large PMO offers clients assured risk mitigation, through backup project management personnel, in the event that additional project management resources are needed throughout the course of the project.
   b. **Local Staff.** Axim has several key staff for this project who are local to the work. Axim's In-Field Collection Lead Nathan Kohrmann is located in Portland, Oregon and our Geospatial Processing Lead Chris Paola is located nearby in Corvallis, Oregon.
   c. **Stormwater Conveyance Expertise.** Axim has collected and processed 10,000s of stormwater conveyance system measurements across 100+ projects throughout the country in landscapes similar to what exists throughout Washington State. One such example, highlighted in the project examples section of the proposal, is the extensive work Axim has completed in support of FEMA's Risk Mapping, Assessment and Planning Program (Risk MAP). This expertise also includes inventory and maintenance management of stormwater systems across the country. We understand stormwater systems, what to collect, how to do it efficiently, and how to consolidate that data to support downstream analysis.
   d. **Safe and Efficient Field Data Acquisition.** Axim's modern equipment and experienced field crews provide dependable, safe, efficient, and nationwide field acquisition coverage. Axim dedicates 12 field survey staff, including Professional Licensed Surveyors, to field acquisition projects and introduces subcontractors when additional licensure or field resources are needed.
   e. **GIS Asset Management Implementation Expertise.** Axim is one of only 12 Esri Platinum partners in the US. We have helped shape countless GIS Asset Management programs including data modeling, field collection, and implementation services. We have deep experience with standards such from the Federal Spatial Data Standards for Infrastructure and Environment (SDSFIE), the Esri Local Government Information Model (LGIM), and the Utility Network for water and stormwater systems. Axim has a staff of over 300 geospatial professionals, including technicians, solutions engineers, and solutions architects.
   f. **End-to-end Geospatial Services.** Axim frequently provides clients not only with upfront and initial GIS services, but also with ongoing, post-implementation management of geospatial solutions. This is particularly true for the services Axim provides to support client utility networks. Axim was the first Esri Partner to earn the Utility Network (UN)

Management Specialty for Water and our staff have implemented the UN for more water clients than any other vendor. We have performed the largest UN for water implementations in the country, including Charlotte Water, Austin Water, Kansas City Water. Additionally, we are actively implementing the UN for the City of Houston for water, wastewater, and stormwater. In total, our staff have now supported the adoption of the UN for 35 clients and 60 systems (e.g., water, wastewater, stormwater, reclaimed water).

2. IDS –
    a. **Stormwater Conveyance Expertise.** IDS brings over 3 decades of experience working with DOTs, ports, and municipalities on asset management projects from design through implementation and maintenance. The firm has developed proprietary software used by many organizations, including DOTs, to assist in managing their stormwater networks. IDS is well adept at offering clients geospatially-enabled solutions that support the entire workflow of stormwater asset management including inspections, data management, lifecycle modeling, investment planning, and program optimization.
3. LDES –
    a. **Field Data Acquisition and relevant Professional Land Surveyor Licensure.** LDES is an MBE that brings two state-licensed Washington Professional Land Surveyors (PLS) to the Axim team. LDES regularly works with public agencies, including WSDOT, providing land survey services throughout Whatcom, Skagit, Island, Sun Huan, Snohomish, and King Counties in Washington. LDES's has a strong understanding of current WSDOT standards and regulations for field data acquisitions given their local presence and expertise in performing field acquisition in Washington.
    b. **Stormwater Management Technical Expertise.** LDES has completed over 250 stormwater management and design projects for multi-agency projects and private development. LDES's expertise ranges from large stormwater management systems for residential subdivision, commercial properties, or roadway projects to design of low impact development (LID) best management practices (BMPs) for smaller residential homes.

How long has each firm on your team provided these type(s) of expertise;

Below is a list of each firm on the team as well as how long each firm has provided the types of expertise listed above:

1. Axim – 32 years
2. IDS – 11 years
3. LDES – 19 years

For each firm on your proposed team, provide the number of employees within the state of Washington (including the Greater Portland Metropolitan Area). Also, provide the number of employees that each firm on your proposed team has nationwide

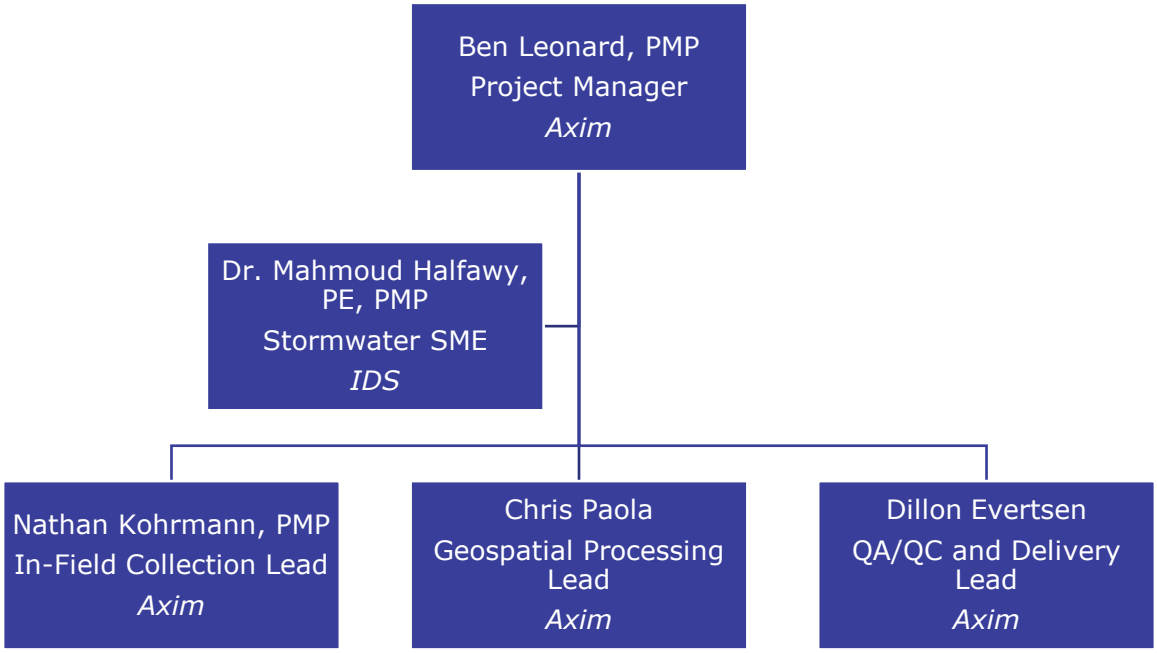
Below is a list of each firm on the team as well as the number of employees within the state of Washington from each firm and the number of employees each firm has nationwide:

1. Axim –
    a. Number of employees within the state of Washington (including the Greater Portland Metropolitan Area) – 3
    b. Number of employees nationwide – 340

2. IDS –
    a. Number of employees within the state of Washington (including the Greater Portland Metropolitan Area) – 0
    b. Total number of employees nationwide – 0 (22 employees in Canada)
3. LDES -
    a. Number of employees within the state of Washington (including the Greater Portland Metropolitan Area) – 13
    b. Number of employees nationwide – 13

Provide organization chart of your proposed team and include the respective roles that each firm will provide for the team.

The following organizational chart represents the key personnel from each firm that will be assigned to this contract:



B. Include the following items:

Provide listing of each team member's offices within the state of Washington (including the Greater Portland Metropolitan Area), include the total number of employees within each location and the types of expertise that is available at each location.

Below is a list of each team member and their corresponding offices within the state of Washington and the total number of employees available at each location

1. Axim – Axim's workforce is primarily remote, with over 80% of our staff currently working from home in various locations nationwide. While Axim does not have any physical office locations in the state of Washington, our In-Field Collection Lead Nathan Kohrmann is located in Portland, Oregon and our Geospatial Processing Lead Chris Paola is located nearby in Corvallis, Oregon.
2. IDS – IDS is a Canada-based firm and does not maintain any offices or personnel in Washington.

3. LDES – LDES has one office location within Washington with 13 employees. Included in these employees are two state-licensed Washington Professional Land Surveyors, Raymond Peterson and Kyle Haggith.

C. Include the following items:

Has the prime consultant worked with proposed sub-consultant(s) on similar projects in the last three (3) years? If yes, provide name of the project, each firm's role on the project and the dates the services were performed. Limit examples to one (1) project for each sub-consultant firm.

Axim has not completed similar projects with partner IDS or LDES in the last three years, but we have collaborated closely with Dr. Mahmoud Halfawy and the IDS team on recent pursuits. Our capabilities and missions align to support WSDOT across all current and any future requirements, and our processes and tools are complementary including mutual expertise with Esri and Cityworks platforms, and mutual business partnerships with each vendor.

D. Include the following items:

Provide table identifying current availability of key staff and resources for each firm on the proposed project team. The availability of staff must be identified as hours available per month for the length of the project, not in percentages of time available.

The table below identifies the current availability of key staff on Axim's proposed team:

Key Staff Member	Availability (for the length of the project)
Ben Leonard, PMP	80 Hours/Month
Mahmoud Halfawy, PE, PMP	40 Hours/Month
Nathan Kohrmann, PMP	120 Hours/Month
Chris Paola	80 Hours/Month
Dillon Evertsen	80 Hours/Month

E. Include the following items:

Provide a list of up to three (3) projects that each firm on your project team has completed within the last three (3) years. The project(s) must demonstrate the required expertise needed for this project. Include the work/services provided on the project(s) and the approximate amount received for each project.

Axim has provided descriptions for projects that have been completed by the Axim team within the last three years. These projects demonstrate the required expertise needed for this project.

AXIM PROJECT 1

Project Name: California Field Survey in Support of FEMA, Including City of Ridgecrest, CA

Dollar Value of the California FEMA Work: $1,332,678

Dollar Value of the Program as a Whole: $12,786,000

Description of Work/Services Provided: Axim supports western States and local communities through production and technical services for FEMA's Risk Mapping, Assessment and Planning (Risk MAP), Hazard Mitigation Technical Assistance Program (HMTAP) and Technical Assistance and Research Contracts (TARC) programs. The Risk MAP program combines flood-hazard mapping, risk-assessment tools and hazard-mitigation planning into an integrated program that encourages building more-resilient communities. FEMA offers technical assistance to states

and local communities to map floodplains and support their mission of disaster resiliency and sustainable communities. Axim has supported this program across 60 projects totaling over $12M, to survey watersheds in support of hydrologic and hydraulic (H&H) modeling efforts and ultimately the creation of new and accurate floodplain maps. In Washington State the stakeholder agency associated with this FEMA Program is the Department of Ecology, where the State Risk MAP Coordinator Position resides.

An example task order was for the City of Ridgecrest, California. Axim began the work by evaluating existing aerial digital elevation models, and available source data provided by the stakeholders to provide a topographic baseline of the entire site and to plan out subsequent fieldwork. Survey crews then mobilized to the site and performed a comprehensive field survey of any stormwater structures that could impede water flow (e.g. culverts, dams, bridges, etc.). Equipment used included terrestrial static lidar units, total stations, and hydrographic unmanned surface vessels (USV) with echosounders. "Traditional" land survey tools were also deployed to provide field data necessary for hydrologic modelling inputs. Axim used Microstation CADD software for data processing to prepare final sketches/reports.

Axim developed a proprietary workflow – the Enhanced Badger Approach (EBA) – by designing unique field collection and data processing approaches around the latest in hardware and sensor technologies to streamline structural surveys and update conventional techniques. The results of the innovative EBA include:

1. *Efficiency and Best Value*: Doubles the Team's capacity to survey and map assets within watersheds.
2. *Quality and Completeness*: Provides all the required measurements, sketches, images, and technical documentation to support the hydrologists, ecologists, and other professionals engaged in H&H modeling.
3. *Innovation Enhancements*: Provides supplemental content such as 3D visualizations, digital surface models (DSM), and additional ESRI deliverables that the modeling professionals had never received before, giving them the ability to interrogate the data more fully, reduce field trips, and gain a better understanding of the watersheds.

This work, as with other Axim FEMA task orders, was completed for the STARR II JV. The team frequently turns to Axim for field survey services including land survey, hydrographic survey, and aerial mapping due to our high quality past performance and efficiency.

AXIM PROJECT 2
Project Name: MnDOT Innovative Infrastructure Asset Data Collection and Conflation
Dollar Value: $3,100,000+
Description of Work/Services Provided: In July 2022, MnDOT awarded Axim the Innovative Infrastructure Asset Data Collection and Conflation project. This is the follow-on contract to the statewide asset inventory and assessment project Axim was awarded in 2017 and completed in 2019. The current project involves updating the inventory, assessment, and conflation of various asset types to include signs, sign supports, earth retaining systems, roadside barriers, pavement striping, pavement markings, bridge clearances, overhead utility line clearances, bike paths, sidewalks, hydraulic infrastructure, ADA ramps, and safety attributes along specific corridors. The project scope requires data collection within the right-of-way along 11,671 centerline miles of

state-maintained roadway. To date, the Axim team has collected data along 10,440 miles of roadway and will complete collection in the summer of 2023. During collection, the source data is sent back to the Axim office where it is loaded to redundant production servers for quality control and asset extraction. The Axim production team will extract and deliver over 600,000 assets across 16 different asset types by the time the project is complete. To date, the team has extracted and delivered data from approximately 2,000 miles of roadway.

Axim has partnered with a local Minnesota state certified Disadvantaged Business Enterprise (DBE) engineering firm recognized by MnDOT for superior performance on previous transportation projects. This firm is providing local field teams to augment the Axim field crews as well as forward logistical support from their offices located throughout the state. This strategic partnership supports three critical goals for this project: risk mitigation to project timeline, cost reduction associated with field team deployments, and achievement of the 10% DBE participation goal established for this project.

During the initiation stage of the project, the Axim project team led a series of scoping and technical definition meetings with the MnDOT stakeholders for each specific asset class identified in this project. The outcome of the meeting was client approved collection and extraction guidance for each specific asset type, which ensured all deliverables would align with existing MnDOT asset management requirements.

To ensure project timelines and quality standards were met, Axim deployed an Esri-based ArcGIS Online tool named Project-AID, which contains a project management dashboard and two user experience tabs displaying a 2D layer of each asset type as well as access to the source imagery and lidar. Project metrics are updated each week to support a weekly project status meeting. Project deliverables are updated bi-weekly for review by the MnDOT project team. By the time the project is complete, the Project-AID tool will be used by over 100 MnDOT stakeholders to provide data review and project feedback. This level of engagement is fostering an environment of ownership among all MnDOT stakeholders which will translate to a widespread understanding and long-term adoption of this dataset.

Throughout the duration of the project, the Axim team will make over 26 biweekly deliveries for review and approval by the MnDOT team. Upon the completion of a specific MnDOT District Axim will make a “final” delivery of an enterprise geodatabase formatted specifically for direct upload into the MnDOT AgileAssets-based Asset Management System. As Axim is an experienced geospatial firm and trusted partner, Axim staff were provided user credentials allowing the project team to assist in the upload process and provide a series of quality control steps to ensure the data meets all governance requirements and is compliant and ready to support MnDOT’s internal business processes.

IDS PROJECT 1
Project Name: City of Vernon Stormwater Infrastructure Management
Dollar Value: $60,711
Description of Work/Services Provided: Ageing and deterioration of stormwater infrastructure assets, along with increasing maintenance backlogs and widening investment gaps, posed significant challenges to the City of Vernon. To address this, IDS implemented a robust and proven

asset investment planning solution, called Asset Optimizer™, to support efficient management of the City's stormwater asset portfolio. This geospatially-enabled solution supported the entire workflow of stormwater asset management including inspections, data management, lifecycle modeling, investment planning, and program optimization. The solution integrated engineering and economic analyses across the whole asset lifecycle to support the development and delivery of robust, optimized, and defensible investment plans. The solution also enabled City staff to evaluate assets performance measures and benchmark these measures against established targets and performance objectives. Staff also were able to forecast specific performance measures, assess the impact of various investment levels on these measures, and determine optimal asset improvements and investment levels to ensure maintaining performance targets at the lowest lifecycle costs.

Through comprehensive asset lifecycle modeling and what-if scenarios, IDS guided the City staff in the development and analysis of programs and business cases to meet defined needs within available funding constraints. The solution also helped evaluate the trade-offs of various decisions, perform detailed trade-off analysis at system and project levels, and compare the value of each alternative in terms of established organizational objectives. Specifically, the City used Asset Optimizer to develop long-range capital plans for their infrastructure systems. The software integrated with the City's ArcGIS and other data sources. The City used the software to generate optimal renewal plans under a range of scenarios, and to analyze the trade-offs between various investment strategies and funding levels. The City developed comprehensive risk model, deterioration models for various asset classes, and asset management plans for linear and non-linear assets including the stormwater system, wastewater system, treatment plants, and pump stations.

IDS PROJECT 2
Project Name: Infrastructure Management for Iowa Department of Transportation
Dollar Value: $224,562
Description of Work/Services Provided: Since 2013, Iowa Department of Transportation (IDOT) has been using IDS Asset Optimizer software and consulting services to support the management of state-owned asset inventory of their bridge network, and the development of optimized asset management programs. IDS developed deterioration models based on historical data as well as a comprehensive risk model to prioritize assets based on their sufficiency to remain in service. Costs and benefits models were also developed for a range of renewal actions including preservation, rehabilitation, functional improvement, and replacement actions. Funding needs analysis and bridge improvement programming have been developed through detailed analysis of multiple scenarios over a 5, 10, and 20-year planning horizon. Planning scenarios were developed to evaluate the impact of varying funding levels on the condition and risk measures of the asset inventory, and to evaluate funding needs to achieve required condition and risk targets. The analysis of various scenarios helped to explicitly define performance objectives and constraints and accurately assess funding needs and consequences of alternative scenarios.

LDES PROJECT 1
Project Name: City of Anacortes R Avenue Improvement Project in Anacortes, Washington
Dollar Value: $62,000

Description of Work/Services Provided: The City of Anacortes requested a full detailed topographic survey map inside of right-of-way along roads as well as surveying services for future design of roadway improvements along R Avenue over 1 mile including storm improvements. LDES is working on a team with H W Lochner for design of roadway improvements along R Avenue. LDES established survey control, determined roadway right-of-way from recorded maps and GIS, performed a full detailed topographic survey, and performed an aerial drone flight for imaging and topographic features. LDES performed topographic survey of over 1 mile of roadway along R Avenue and adjoining side roads.

LDES PROJECT 2
Project Name: Lummi Shore Drive Pedestrian Path (Phase I), Lummi Nation in Washington
Dollar Value: $219,000
Description of Work/Services Provided: This project required design of 4,000 linear feet of new sidewalk along Lummi Shore Drive including curb, gutter, roadway widening, and storm sewer systems. LDES provided engineering and land surveying services for this project. In addition, LDES installed a new stormwater management system, which included new stabilized outfalls to preserve natural drainage patterns and new runoff treatment media filters. LDES also completed civil design, project management, P&S documents, as well as survey base mapping, ROW acquisition, construction surveying, record drawings, and sub-consultant management.

SCORING CRITERIA 2: QUALIFICATIONS OF PROPOSED PROJECT MANAGER
A. Include the following items:
Provide up to three (3) examples for the proposed Project Manager that demonstrates his/her prior experience as a Project Manager on WSDOT or similar projects. Include the date(s) of each project; the name of the client/organization for each project; list the project manager's responsibilities and tasks on each project.
The following three project examples completed by Project Manager Ben Leonard demonstrate his prior experience on similar projects to what is required for this contract:

VENTURA COUNTY STORMWATER INFRASTRUCTURE SURVEY FOR THE STARR II JV – FEMA *(VENTURA COUNTY, CALIFORNIA - 2022)* Under the FEMA STARR II Region 9 Survey contract, one of the projects Axim completed was the survey of the Ventura County watershed. This survey entailed obtaining hundreds of simple & complex channel cross-sections, field measurements, as well as railroad bridges and other complex structures in the watershed. Mr. Leonard managed this project, overseeing its execution and delivery. The survey team dealt with adverse conditions such as dense vegetation, the need for boats on large rivers, and access to private property. GPS and total stations were used as well as combinations of terrestrial lidar, conventional survey, and hydrographic vessels.

STARR II – FEMA PERALTA CREEK STORMWATER INFRASTRUCTURE SURVEY *(ALAMEDA COUNTY, CALIFORNIA -2022)* Under the FEMA STARR II Region 9 Survey contract, Axim surveyed the Peralta Creek Watershed, which is in a heavy urban setting in Oakland, California. This survey entailed obtaining field measurements, and pictures of manholes, drop inlets, and cross sections, primarily located in private property. As the Project Manager, Mr. Leonard ensured the project was completed accurately and according to schedule despite the adverse conditions such as heavy traffic, unpredictable changes in weather, and access to private

property. To this end, Axim employed numerous tools and survey methods in addition to traditional survey technologies to accurately survey these structures, which are vital to allowing the movement of water through this urban area.

NAVAL AIR WARFARE CENTER (NAWC) AERIAL LIDAR DATA COLLECTION & PROCESSING FOR NAVAL BASE KITSAP (NBK) BANGOR *(JEFFERSON COUNTY, WASHINGTON - 2017)* As Project Manager, Mr. Leonard led the effort in Kitsap County, Washington, to acquire both ground survey and aerial lidar necessary for the specific deliverables outlined in the Naval Air Warfare Center's 4.11 Rapid Integration and Engineering Capability Engineering Department via Axim's Prime contract with USACE St. Louis District. This project supported a fleet identified problem requiring highly accurate mapping to be used within a Navy-developed modeling and simulation tool in order to conduct an advanced engineering analysis. For this effort, tidally coordinated, high accuracy classified lidar data was collected and delivered in accordance with the Navy's regulations and specifications.

B. Include the following items:

Demonstrate the Project Manager's familiarity with relevant state and federal regulations and/or procedures.

Throughout his 17 years in the industry, Mr. Leonard has managed and supported over 500 projects with state DOT's and other public agencies and is well versed in digesting state and local government regulations and ingesting these into project execution processes. As evidenced by his experience leading large state projects in the next section, Mr. Leonard is an industry leader in working with state and local government regulations and procedures. Axim's existing production processes for this type of work will therefore be tailored to WSDOT specific regulations and procedures and communicated to and enforced with the project execution team at all levels.

C. Include the following items:

Provide up to three (3) examples of the proposed Project Manager's ability to manage all of the following within a project:

- **Project schedule;**
- **Scope of work/scope creep;**
- **Budget issues; and**
- **Changes that arise throughout the life of the project.**

The following three examples represent longstanding programmatic contracts held by Axim. Mr. Leonard has served as the Project Manager on these contracts since their onset and has excelled at managing both the projects themselves and the client relationship associated with each.

MASTER SERVICES AGREEMENT FOR PRODUCTION & TECHNICAL SERVICES IN SUPPORT OF STORMWATER INFRASTRUCTURE MAPPING FOR FEMA *(NATIONWIDE, US – ONGOING)* Axim is critical member of the STARR II JV Team, which is a prime contractor to the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA). STARR II was awarded a Flood Risk Mapping, Assessment, and Planning ("Risk MAP") Production and Technical Services Prime Contract (PTS-3), with services under Risk Mapping Assessment and Planning (Risk MAP); Hazard Mitigation Technical Assistance Program (HMTAP); and the Technical Assistance and Research Contract (TARC). Axim has developed a custom and efficient approach for asset measurements and cross-sections we refer to as the EBA

approach. Our data and services support flood-hazard mapping, risk-assessment tools, and hazard-mitigation planning in an integrated program that enhances community resiliency. Mr. Leonard has managed Axim's work on the Contract since 2015 and through several recompetes. Our current contract was awarded in 2021 and our activities focus on western States, where we are currently working task orders in California and Arizona. Mr. Leonard is an industry expert in managing field survey and mapping services of watersheds and structures to serve as inputs to flood modeling and analysis. The work has included land survey of levees and appurtenances, profiling rivers via river cross-sections and modeling in 3D. While Mr. Leonard has managed this program, he has been required to adhere to tight project schedules, manage project scopes and scope creep, address budget issues, and quickly adapt to any changes that arose throughout each task order.

WISDOT PHOTOGRAMMETRY MASTER CONTRACT *(STATEWIDE, WI – ONGOING)* The Wisconsin Department of Transportation (WisDOT) was Axim's first master contract back in 1999 and has been continuous a client ever since. Axim is one of ~7 master contract holders with WisDOT offering mapping services requiring aerial imaging and lidar, mobile lidar, and photogrammetric services. Since 2001, Mr. Leonard has served as project manager on this program and has led over 160 different projects for WisDOT across the state including aerial data collection, aerial triangulation, photogrammetric stereocompilation (e.g., digital terrain models, planimetric mapping, etc.), lidar processing, and orthophoto product generation. Most jobs are corridor based along a 1000' wide corridor and support final design requirements so absolute vertical and horizontal accuracy specifications tend to be high. Mr. Leonard is intimately familiar with all WisDOT regulations and procedures and has had his project management skills tested in every way over possible over the past 13 years of managing this program. This includes adhering to tight schedules, managing project scopes and scope creep, addressing budget issues, and quickly adapting to any changes that arose throughout each task order.

MNDOT STATEWIDE AERIAL MAPPING CONTRACT *(STATEWIDE, MN - ONGOING)* The Minnesota Department of Transportation (MnDOT) is responsible for monitoring, maintaining, and upkeeping over 142,000 miles of road across the state, from rural to densely urban. Axim won its first photogrammetry master contract with MnDOT in 2006, has held the contract continuously since then, and maintains an excellent working relationship with numerous staff. Since 2006, Mr. Leonard has served as the project manager for this program and continues to lead approximately 30 different jobs per year for MnDOT across the state including ground control, aerial data collection, aerial triangulation, photogrammetric stereocompilation (e.g., digital terrain models, planimetric mapping, etc.), lidar processing, and orthophoto product generation. As a result, Mr. Leonard is intimately familiar with all MnDOT regulations and procedures and has showcased his superior project management skills over the past 13 years of managing these projects. This includes adhering to tight schedules, managing project scopes and scope creep, addressing budget issues, and quickly adapting to any changes that arose throughout each task order.

D. Include the following items:

Provide listing of professional licenses/accreditations for the proposed Project Manager; include the year that each license/accreditation was received. Please include the licenses that were obtained in the State of Washington only.

Mr. Leonard has obtained his PMI Institute Project Manager Professional (PMP) Certification (Certification Number 3158135), which is valid in the State of Washington. Mr. Leonard has not obtained other licensure specifically in the State of Washington.

SCORING CRITERIA 3: KEY TEAM MEMBERS QUALIFICATIONS (PRIME CONSULTANT AND SUB-CONSULTANTS)

A. Include the following items:

List each key team member's role/responsibilities on your proposed team.

• For each proposed key team member, provide up to three (3) examples of prior relevant projects. Include the name of project(s); dates of the project(s); and roles/responsibilities for each team member on those project(s); and

• For each key team member on your proposed team, demonstrate his/her understanding of WSDOT and/or public agency regulations/procedures.

Axim has listed each key team member below along with 3 projects for each team member as examples of prior relevant experience. Axim has also included a statement of understanding for each individual regarding public agency regulations and procedures.

MAHMOUD HALFAWY, PE, PMP – STORMWATER SME

City of Vernon Stormwater Infrastructure Management *(City of Vernon, Canada - Ongoing)*

Since 2018, Dr. Halfawy has leveraged is subject matter expertise to provide the City of Vernon with Asset Optimizer software licenses and implementation services. The City of Vernon used Dr. Halfawy's implemented Asset Optimizer to develop long-range capital plans for the City's infrastructure systems. Dr. Halfawy ensured the software integrated with the City's ArcGIS and other data sources and enabled the City to use the software to generate optimal renewal plans under a range of scenarios, and to analyze the trade-offs between various investment strategies and funding levels. The City's end goal was to use Dr. Halfawy's implementation to develop a comprehensive risk model, deterioration models for various asset classes, and asset management plans for linear and non-linear assets including the stormwater system, wastewater system, treatment plants, and pump stations.

Asset Optimizer Implementation and Services for Stormwater Assets *(City of Temiskaming Shores, Canada - Ongoing)*

Since 2021, Dr. Halfawy has leveraged his stormwater subject matter expertise to provide the City of Temiskaming Shores with Asset Optimizer implementation and SaaS services. These services support the City in managing its entire asset portfolio, such as pavement, bridges, culverts, water, wastewater, and stormwater assets. The City used Dr. Halfawy's implementation of Asset Optimizer to develop predictive lifecycle models to forecast the performance, criticality, and risk of assets over 20-year planning horizon and develop optimized asset management programs to meet the O. Reg 588/17 provincial requirements. Dr. Halfawy also enabled the City to use the software to generate optimal asset management plans under a range of scenarios, and to analyze the trade-offs between various investment strategies and funding levels.

Stormwater and Wastewater Network Planning *(City of Burnaby, Canada - 2019)*
Dr. Halfawy worked with the City of Burnaby to support the development of long-range capital plans for the City's wastewater and stormwater sewer networks. Through the services and software he provided, Dr. Halfawy enabled the City to develop deterioration and risk models, generate optimal renewal plans under a range of scenarios, and to analyze the trade-offs between various investment strategies and funding levels. Dr. Halfawy also supported the development of comprehensive risk and deterioration models and asset management plans under various planning scenarios.

Understanding of WSDOT and/or public agency regulations/procedures
Dr. Halfawy has completed over 38 projects with state DOT's and other public agencies and is well versed in digesting state and local government regulations and ingesting these into project execution processes. Axim's existing production processes for this type of work will therefore be tailored to WSDOT specific regulations and procedures and communicated to and enforced with the project execution team at all levels.

NATHAN KOHRMANN, PMP, CSM – IN-FIELD COLLECTION LEAD
MnDOT Innovative Infrastructure Asset Data Collection and Conflation *(Statewide, MN - Ongoing)*
In July 2022, MnDOT awarded Axim the Innovative Infrastructure Asset Data Collection and Conflation project. The project scope requires data collection within the Right-of-Way along 11,671 miles of state-maintained roadway as well as subsequent asset extraction. To date, Mr. Kohrmann has managed Axim field crews in data collection along 10,440 miles of roadway and will continue to manage the project through completion in the summer of 2023. Mr. Kohrmann continues to manage collection efforts, project schedule, scope, and budget, as well as hold weekly status meetings with the client, and update our custom developed Esri-based project management tool, Project-Aid, which provides real-time updates on project status directly to MnDOT users.

Igiugig Village Council Upper Kvichak LiDAR & Ortho Imagery Survey *(Kvichak, AK – 2020)*
As a project and field crew lead, Mr. Kohrmann led this 35.4 Square Mi project to acquire geospatial data for assessment of village property/land use, watershed delineation, FEMA Hazard Mitigation, and archeological site assessment. Mr. Kohrmann scoped and planned the full project including engagement with multiple client, interagency, and subcontracted stakeholders. He also oversaw all infield staff including on-site survey personnel and guided the professional land surveyor quality control process.

San Diego Gas & Electric Fire Risk Mitigation Initiative (FiRM) & Drone Investigation, Assessment and Repair (DIAR) Programs *(San Diego, CA – 2022)*
Starting in 2018 as a project and field crew lead, Mr. Kohrmann managed a 20k+ utility pole modelling and assessment project in California. Mr. Kohrmann led the collection of geospatial datal and asset inspection imagery in high fire risk areas of SDGE's network. He scoped and planned work the project work, managed inhouse production and Professional Land Surveyor QC processes, and worked extensively with UAV pilot team on client requirements, QC, and process implantation.

Understanding of WSDOT and/or public agency regulations/procedures

Mr. Kohrmann has completed over 30 projects with state DOT's and other public agencies and is well versed in digesting state and local government regulations and ingesting these into project execution processes. Notable regulations include FHWA's Model Inventory of Roadway Elements (MIRE) which was developed to support a State's advanced safety analyses, which Mr. Kohrmann is currently upholding through his work on leading the MnDOT Statewide Asset Collection. Axim's existing production processes for this type of work will therefore be tailored to WSDOT specific regulations and procedures and communicated to and enforced with the project execution team at all levels.

CHRIS PAOLA – GEOSPATIAL PROCESSING LEAD

MnDOT Innovative Infrastructure Asset Data Collection and Conflation *(Statewide, MN - Ongoing)*

In July 2022, MnDOT awarded Axim the Innovative Infrastructure Asset Data Collection and Conflation project. The project scope requires data collection within the Right-of-Way along 11,671 miles of state-maintained roadway as well as subsequent asset extraction. To date, Axim field crews have collected data along 10,440 miles of roadway. Throughout the course of this project, Mr. Paola has led and continues to lead geospatial production teams in project execution. He is responsible for translating client regulations and requirements to his team, and ensuring production is completed on schedule and in accordance with client expectations.

CDOT Bridge Clearance Asset Collection *(Statewide, CO - Ongoing)*

In July 2020, Axim was awarded a contract with CDOT to perform lidar collection, post processing, and extraction services relating to vertical clearance measurements of bridge and sign structures. Using the Maverick Mobile Lidar System and Ladybug 360° camera, Axim delivered collected, extracted, and delivered over 440 bridges and 690 signs using CSVs and shapefiles since the beginning of the project. CDOT also amended the contract with Axim to include an additional 904 bridge clearances and 1,118 signs. Mr. Paola currently leads the production team in the execution of this project, ensuring the team adheres to regulations and requirements of the State.

OLC Topobathy LiDAR: *(Middle Fork Willamette River, OR - 2015)*

Mr. Paola served as a lidar production analyst on a project to provide topobathymetric data to OLC to support their morphology analysis of the Middle Fork Willamette River. Mr. Paola was responsible for collecting secchi depths over the course of the project and reporting those measurements on a weekly basis.

Understanding of WSDOT and/or public agency regulations/procedures

Mr. Paola has completed over 50 projects with state DOT's and other public agencies and is well versed in digesting state and local government regulations and ingesting these into project execution processes. Notable regulations include FHWA's Model Inventory of Roadway Elements (MIRE) which was developed to support a State's advanced safety analyses, which Mr. Paola is currently upholding through his work on leading the MnDOT Statewide Asset Collection. Axim's existing production processes for this type of work will therefore be tailored to WSDOT specific regulations and procedures and communicated to and enforced with the project execution team at all levels.

DILLON EVERTSEN – QA/QC AND DELIVERY LEAD

Ventura County Stormwater Infrastructure Survey For The STARR II JV – FEMA *(Ventura County, CA - 2022)*

Under the FEMA STARR II Region IX Survey contract, one of the projects assigned to Axim was the survey of the Ventura County watershed. This survey entailed obtaining hundreds of simple & complex channel cross-sections, field measurements, as well as railroad bridges and other complex structures in the watershed. Mr. Evertsen oversaw QA/QC and delivery for this project, ensuring final products were delivered in accordance with FEMA format, requirements, and regulations.

MnDOT Innovative Infrastructure Asset Data Collection and Conflation *(Statewide, MN - Ongoing)*

In July 2022, MnDOT awarded Axim the Innovative Infrastructure Asset Data Collection and Conflation project. The project scope requires data collection within the Right-of-Way along 11,671 miles of state-maintained roadway as well as subsequent asset extraction. To date, Axim field crews have collected data along 10,440 miles of roadway. Throughout the course of this project, Mr. Evertsen has supported and continues to support QA/QC and delivery procedures on this project to ensure final deliverables are provided to MnDOT in accordance with client specifications.

TrueNet Utility Asset Collection and Extraction *(Twin Cities, MN and SD – 2021)*

Axim was selected to perform mobile mapping data collection, extraction, and delivery of roadside assets and ROW measurements for fiber optic/ telecom cable installation along about 700 miles from Twin Cities, Minnesota to South Dakota. Mr. Evertsen acted as the QA/QC and Delivery lead for this project. He prepared the 3D workspace for extraction and imported all data collected in the field. He also oversaw a team of extraction technicians, ensuring standardized procedures were in place and followed. Finally, Mr. Evertsen packaged the final deliverables according to client specifications and delivered the products in accordance with the project schedule.

Understanding of WSDOT and/or public agency regulations/procedures

Mr. Evertsen has completed over 10 projects with state DOT's and other public agencies and is well versed in digesting state and local government regulations and ingesting these into project execution processes. Notable regulations include FHWA's Model Inventory of Roadway Elements (MIRE) which was developed to support a State's advanced safety analyses which Mr. Evertsen is currently upholding through his work on leading the MnDOT Statewide Asset Collection. Axim's existing production processes for this type of work will therefore be tailored to WSDOT specific regulations and procedures and communicated to and enforced with the project execution team at all levels.

SCORING CRITERIA 4: FIRM'S PROJECT MANAGEMENT SYSTEM (PRIME CONSULTANT ONLY)

A. Include the following items:

Describe your firm's Quality Assurance/Quality Control processes;

Axim has built a trusted partnership with customers over the past 32 years based on consistent quality, reliable accountability, and transparency. We have taken on challenging and highly visible tasks that had not previously been accomplished. With these challenges come risks and opportunities for improvement, and our commitment to ultimately helping agencies meet national

defense and critical infrastructure security missions has not wavered in times of stress, such as with emergency response assignments.

We take pride in a culture that promotes quality first and always. We engrain it into every facet of our operations and project management approach. Axim is hyper-focused on delivering value to customers through all aspects of quality, ranging from client experience through technical delivery.

Our project management activities include project control, quality assurance, risk management, and communication management. We utilize a project management methodology that complies with PMI's Project Management Body of Knowledge (PMBOK) and is centered around five key Process Groups: Initiating, Planning, Executing, Monitoring, and Closing. Our Project Management methodology provides a streamlined approach to solution delivery while minimizing risk with efficient and effective communication and documentation.

Axim's quality management plan and process are based upon a proactive, and continuously improving Quality Management System (QMS) to meet all WSDOT quality requirements and expectations. With decades of experience providing digital mapping products to thousands of clients, the QMS is proven for data collection, survey, and security services. Axim's QMS and supporting processes design quality early and throughout the order lifecycle. The QMS includes subject matter experts trained in QA/QC policies and procedures and equipped with proven, automated quality toolsets and partners that provide independent certification of deliverables.

We build our quality program based on established practices (International Organization for Standardization (ISO) 9001:2015, and final solutions consistent with ISO 55000 for asset management. Our quality success is demonstrated through previous experience, and long-term relationships with DOTs and other customers. We also seek to introduce new and innovative processes to enhance delivery. Axim partners must demonstrate processes compliant with this QMS and their deliverables are subject to Axim QA/QC and acceptance prior to delivery. Axim's QMS effectiveness is demonstrated by metrics such as exceptional 98% First-Time-Right results for over 1M deliverables under the National Geospatial-Intelligence Agency (NGA) Janus Aeronautical Features contract and has been so successful that Axim assisted NGA's Aeronautical Group to develop and improve their own ISO-compliant QMS with implementation of in process, automated, and semi-automated QA/QC. Axim leans forward our partners to collaborate on quality performance and a shared knowledge, processes, and tools to meet the mission objectives.

• Describe your firm's tracking system(s) to monitor the project's budget and/or scope;

DATA, PRODUCTS, & SERVICES QUALITY AND DOCUMENTATION

The project QMS complies with Axim's corporate QMS, which defines the corporate responsibility to quality policies and objectives. This documentation validates that Axim's data, products, and services meet SOW requirements and that the effectiveness of the QMS is continually improved.

All processes (e.g., procedures, documents, tools) are documented, version-controlled, implemented, and continuously maintained. This includes exhaustive checklists which guide in-process QC tools and checks, independent QA validation of deliverables, and closure of all identified issues, which are provided as evidence that all production and quality steps have been

completed and validated. This documentation ensures that the QMS is consistently applied at the Order and individual analyst level. Axim teammates IDS and LDES will have access to the QMS and is required to maintain compliance.

Scheduled and unscheduled audits validate conformance to the QMS and that deliverables are consistently free of critical defects and produced to SOW/Order requirements. Internal surveillance audits and second-party audits are employed to demonstrate, document, and validate conformance. Non-conformities are documented and resolved prior to audit closure, if possible. Nonconformities or Corrective Action Reports (CARs) are addressed as soon as possible, with demonstrated evidence corrective action results provided within two weeks, or according to a defined CAR-specific timeline.

METRICS

The QMS overall goal is to maintain the integrity of, and continually improve the quality of WSDOT deliverables. Axim measures the ability to meet quality, cost, and schedule or other objectives on metrics program performance metrics, as well as customer feedback. With input from the client and subcontractors, the Axim project manager and QA/QC lead establish collectable metrics to validate compliance with scope requirements, as well as measurable improvement objectives and activities. Improvement objectives are documented and reviewed for achievement and continued relevancy/alignment over time. Metrics and associated actions are frequently communicated to applicable stakeholders and are available to WSDOT in real-time, providing complete transparency and status. Axim's quality objectives are as follows:

- 100% compliance to contractual requirements and all Federal, State, and Local regulations
- Zero critical defects/nonconformities
- 100% on-time deliveries
- Program at/below target cost
- Adherence to all published procedures and process documentation
- Acknowledgement of all WSDOT requests/inquiries within timeframe established at Project Objectives meetings at Project commencement

Customer satisfaction with quality, cost, and schedule is measured through reviews of issues identified, weekly/monthly meetings, Government Contract Reviews, and verbal or written customer feedback. Deficiencies are identified and tracked by our project manager, QA/QC lead, and through the corrective action process. Axim collects and compiles performance metrics in the form of internal and customer error calls, product conformity, on-time delivery performance, customer issues and corrective action requests which are tracked by the project manager. Axim develops and implements plans for improving customer satisfaction to address deficiencies identified by these evaluations and assess the effectiveness of the results.

The Axim team operates in an environment where quality is every employee's responsibility, and a clear understanding of that responsibility increases overall data, product, and service quality to WSDOT. Every employee is responsible and held accountable for quality services and support.

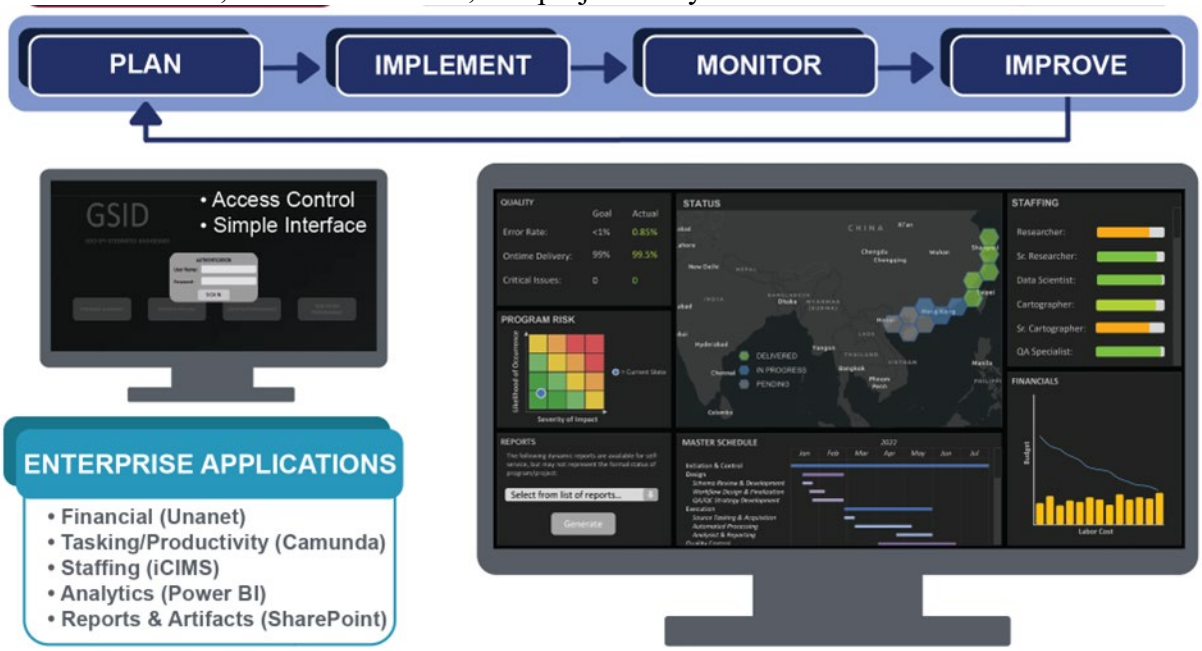
CONTINUOUS PROCESS IMPROVEMENT

Axim maintains and continually improves the effectiveness of the QMS and processes through internal metrics and project dashboards. Our process is customer-focused, identifying opportunities from communication and feedback, including email exchanges, technical exchange meetings, innovation initiatives, and formal/informal WSDOT feedback. Axim's project approach for WSDOT will be collaborative at each stage, with outcomes of one stage driving improvements, innovation, and configuration in the following stages.

Axim identifies opportunities for improvement through in-process employee and teammate feedback, production, quality and management metrics, independent surveillance/assessment results, and the preventative/corrective action process. This process provides the mechanisms to identify, assess, and implement quality improvement. Axim's continuous improvement process leverages both preventative actions and corrective actions to establish and implement continuous improvement initiatives across the contract.

INTEGRATED DASHBOARD ARCHITECTURE

Axim's dashboard (shown below) provides a proactive approach to monitoring quality through consolidated data, visualized metrics, and project analytics.



PREVENTATIVE ACTIONS

Axim's preventative action processes identify potential sources of nonconformities, documenting the potential root cause and actions that may be implemented to prevent occurrence of a nonconformance. Preventive action implementation includes:

- Determining potential nonconformities and their causes
- Evaluating the risk of occurrence and need for action to prevent nonconformities
- Implementing needed actions
- Recording the results of actions taken and reviewing for effectiveness

The preventative action process is part of Axim's risk management process and is planned for discussion at recurring management meetings commensurate with the risk level and timeframe to impact.

CORRECTIVE ACTIONS

Axim's corrective action process identifies nonconformance and implements actions to correct the deficiency before the level of performance becomes unacceptable. Evidence of nonconformities, including customer dissatisfaction or ineffective processes drive the corrective action system through indication that a problem exists and requires immediate correction to eliminate or reduce the likelihood of recurrence. Investigating and eliminating the root cause of these failures is a critical part of the continuous improvement process. Axim implements and maintains its corrective action process, defining the requirements for:

- Formulating the action to ensure nonconformities do not recur
- Implementing the action needed
- Recording the results of actions taken and reviewing for effectiveness
- Identifying specific actions where timely and/or effective corrective actions cannot be achieved for additional oversight

Project managers work with the QA/QC lead to address nonconformance and analyze and summarize preventative and corrective action data to assess the overall effectiveness of the QMS actions and develop recommendations for further improvement. Preventative and corrective actions are considered effective if specific problems are resolved and metrics indicate that the same or similar problems have not recurred. Preventative and corrective actions are subjects for future audits to ensure actions are maintained and continue to be effective in mitigating the initial condition. Additionally, preventative and corrective actions are integrated into risk management process and are planned for monitoring and discussion at recurring management meetings.

MANAGEMENT OF SUBCONSULTANTS

Axim has successfully managed subconsultants on large projects for over 32 years. Contributions of subconsultants are monitored and controlled through the same processes required internally. Axim will operate with a performance-based subcontracting approach, adjust internal and subcontracted resources as needed to ensure the project stays on track. This may include adjustments for delays due to weather or equipment and where the subcontracting strategy is modified to include backup resources as needed to surge a field effort to stay on schedule. Axim, as the prime contractor, takes full responsibility for subcontractor performance on this contract.

• List your firm's scheduling program/process. Identify the type of software or process and list up to three (3) projects where the proposed Project Manager(s) have utilized this software/process;

Axim has established daily, weekly, and monthly reviews with appropriate levels of management to monitor resource allocation and scheduling. Software used to support resource allocation, time management/charging, and financial performance include Unanet for corporate metrics, Camunda and SharePoint for process tracking and reporting, and Office 365 Teams for calendars and collaboration, among others. Our project manager has used, and is currently using, these software and processes successfully across hundreds of active projects. Three projects of note include: 1)

FEMA Asset Mapping for Hydrologic Modelling, 2) Wisconsin DOT Photogrammetry task orders, and 3) Minnesota DOT Photogrammetry task orders as noted in Scoring Criteria 2 above.

• Describe your firm's process for interacting with your internal project team; and

Axim has established daily, weekly, and monthly reviews with all levels of management to monitor resource allocation, scheduling, financial performance, quality performance, and risks. Our Operations Manager has oversight and review of the field collection teams and Project Management Office (PMO) teams to ensure the operational and financial aspects of each project are in sync and on track. Our teams use multiple tools for communication, while we connect all staff in our MS Office 365 Teams environment for shared access to files, software, procedures, calendars, email, and messaging capabilities, among others. Our Office 365 environment is GCC High, providing enhanced security to support our state and federal contracting and cybersecurity requirements.

The figure below describes the methods the Team uses to proactively monitor performance for WSDOT:

Method	Frequency	Description	WSDOT Benefit
QC Checks/Tools	Continuous	• Automated and statistically-based sampling of data while in production • Axim has developed/deployed tools that have reduced QA/QC time by up to 80%	• Identifies nonconformities and trends early in the process to bring corrective actions online • Increased efficiency/effectiveness through automated tools
Incremental Deliveries	Dependent on Requirement	• Continuously expose data in process to the Quality Team and customer, if desired	• Full transparency into production processes and quality to enable persistent surveillance.
Independent QA (Internal/External)	Prior to Delivery	• Validation of formatting, 100% completion of all processes and QC checks • Conducted by teams with authority to stop the process if non-compliant	• Deliverables are correct upon first delivery, minimizing WSDOT evaluation time and effort • Deliverables are ready for immediate WSDOT application.
Project Status Monitoring	Daily-Monthly	• Project and Quality Team metrics tracking • Formal Program Reviews • Quality, documentation & metrics audits	• Continual validation processes and procedures are compliant • Identification of performance trends
Financial Reviews	Bi-weekly to Monthly	• Internal review of planned vs actual schedule and cost	• Cost and schedule are managed to approved estimates
Accounting	Bi-weekly	• Review of Team	• Assures accurate cost

Oversight	to Monthly	summary/status reports, timesheet reports, and ODCs	reporting to WSDOT and prevents major cost discrepancies

• Describe your firm's ability to provide interaction with your client and/or stakeholders.
WSDOT satisfaction with quality, cost, and schedule will be measured through reviews of issues identified, weekly/monthly meetings, performance reviews, and verbal or written customer feedback. Axim uses customer-facing project dashboards, standardized weekly report templates, or reporting within customer managed systems, or a combination of these interactive methods depending on project and agency requirements. Our ability to provide exceptional interaction and client satisfaction is proven through our ongoing relationship with many state and federal clients, including multiple years in support of MnDOT across a range of stakeholders, contracts, and requirements.

SCORING CRITERIA 5: PROJECT DELIVERY APPROACH (SPECIFICALLY HOW YOU WOULD DEVELOP YOUR TEAM AND MANAGE THE WORK)

A. Include the following items:

• How does your firm develop a work plan for this project;
Axim has outlined how we develop a work plan for this project in the subsequent sections below.

• Who is involved with the decision-making process for the development of the work plan;

- Ben Leonard, PMP: Project Manager
  - Mr. Leonard will create, own, and maintain the project work plan through the duration of project. Ben will gather input from the RFQ, proposal, contract, and the individuals below to document the key elements required for successful project execution.
- Mahmoud Halfawy, PE, PMP: Stormwater SME
  - Dr. Halfawy will review all project requirements and ensure that production and quality processes produce deliverables that support the client needs.
- Nathan Kohrmann, PMP, CMS: In-Field Collection Lead
  - Mr. Kohrmann will ensure that that the field team resources are identified and in place to support the production timeline and technical requirements.
- Chris Paola: Geospatial Processing Lead
  - Mr. Paola will ensure that that the in-office production resources are identified and in place to support the production timeline and technical requirements.
- Dillon Evertsen: QA/QC and Delivery Lead
  - Mr. Evertsen will review all quality requirements and ensure the quality and delivery plan supports the project requirements.
- WSDOT Project Manager
  - The WSDOT project manager will provide input on scheduling and budget details. The project manager will identify if there are specific areas that need priority scheduling or if project funding needs to be considered during the creation of the project. The WSDOT project manager will review and approve the work plan before the project transitions into the execution phase.

• Describe each of the elements of the proposed work plan for this project;

The work plan for this project will follow the primary tasks outlined in the scope by WSDOT. Axim understands the importance of a comprehensive assessment of what assets are currently in place, how they connect to convey highway runoff, and where the water goes. Our goal is to provide solutions that empower WSDOT to take actions through a deeper understanding of status of the statewide system, stormwater impacts and needs of future projects. Our team appreciates the scheduling demands driven by the new legislation to accomplish the mission.

TASK 00 – SCOPING

Axim will provide a final draft scope and budget for review and approval by the State. The scope will outline the tasks and deliverables that are required to complete the project. The budget will include a summary for anticipated monthly cost per team. Axim will work with the State to agree upon the corridors for which we will conduct the work.

Deliverables:

Scope of Work, Completed Budget

Overall scoping duration estimate TBD

TASK 01 – PROJECT MANAGEMENT

Axim will provide project management tasks for the duration of the project that include regular coordination with the State, weekly team meetings, cost and progress reporting, management of our subconsultants, and monthly invoicing.

Assumptions:

- Axim will coordinate on a weekly basis with the State.
- Axim has the right to substitute staff within labor classifications, using the same rate or less, as needed within approved budget. WSDOT will be notified of any staffing changes that will generate a positive variance over $5K.
- Axim will provide monthly billings for month proceeding the month the costs were incurred.
- Field team adjustments may be made based on positive/negative variances.
- Axim's project manager and field crews are experienced with optimizing schedules for maximize performance around weather, ground conditions, construction activity, or other challenges. Any potential schedule impacts, including those due to force majeure conditions, will be reported to WSDOT and Axim will identify the best options to keep on schedule. This may include adjusting collection areas, surging staff resources, or other resolutions.
- Any required safety costs for blocker trucks, railroad access, and other public/private access fees will be reported and billed to WSDOT.

Deliverables:

Monthly invoices, with progress reports including budget variance (actual vs anticipated charges).

Overall Project Management duration is TBD to 06/30/2025.

TASK 02 – START-UP

The project start-up will include updates to the following manuals prior to the initiation of Task 03 (Field Inventory): Health and Safety Plan, QA/QC Plan, and the Stormwater Feature Inventory (SFI) Field Procedure Manual for consistency with Axim personnel and document names. Axim will mobilize equipment and materials necessary to perform the work in advance of starting field activities. Axim will onboard team members, hosting safety training, equipment operation best practice training, and SFI Field Procedure Manual training. As Axim's field operations team has grown, we have been onboarding field staff and they get training as they enter new geographies and different operational requirements. As a result, our field teams are well prepared to handle new challenges, new terrain, and onboard new teammates.

Assumptions:

- Axim will utilize the existing manuals to the extent practical when updating.
- State staff will participate in the onboarding training; the onboarding training is assumed to consist of an 8-hour training location to TBD.
- Axim will include alternate staff at the onboarding training that will be used as needed during Task 03.

Deliverables:

Axim will furnish one (1) one electronic copy (in pdf format) of the updated Health and Safety Plan, updated QA/QC Plan, and the updated SFI Field Procedure Manual.

Dates of delivery for Task 02 – TBD.

TASK 03 – FIELD INVENTORY

Axim will conduct field inventory in accordance with the updated SFI Field Procedure Manual. The first 1-4 weeks of field inventory will be conducted with the State for concurrence to approach and data processing, then weekly as needed.

Assumptions:

- All work will occur within State right of way.
- A field crew of three (3) crew members performing field inventory is the base.
- The number of field crews will likely fluctuate based on the budget and winter months.
- Estimate (4) field crews between Mid-March and Mid-February each year, and (1) field crew between Mid- February and Mid-March (Winter) each year, which may do office-based tasks depending on weather (TBD-examples: MS4 base level data collection, data qc, network mapping, and drainage area mapping).
- The field inventory will be statewide, teams should be based out of consultant offices to minimize the need for travel whenever possible.
- The Field Crew Leads are responsible for daily data transfers, as well as uploading photographs and field notes to server for QA/QC.
- Check-out and Check-in procedures will be used to collect and update data.

Deliverables:

Initial data collection review of the first week of data by WSDOT. Final stormwater conveyance feature's locations and attribution checked in, and one electronic copy of all final field notes (.pdf format) and photos (.jpeg/.tiff format).

Dates of delivery for Task 03 – TBD -06/14/2025

TASK 04 – CLOSE-OUT
Axim will provide a compiled data set of all data collected in accordance with the updated SFI Field Procedure Manual.

Assumptions:

- Axim will stop field work with adequate time to finalize work products, submit final deliverables, and close-out the task order.

Deliverables:
Axim will furnish the provided copy (replica geodatabase format) with the final stormwater conveyance features locations and attribution checked in, and one electronic copy (in pdf format) of all final field notes and photos. All stormwater conveyance Feature Classes will follow the schema provided by the State. The data will be provided in the NAD 1983 HARN State Plane Washington South coordinate system. No modifications will be made to the provided schema.

Dates of delivery for Task 04 – 06/14/2025-06/30/2025

• Describe how your work plan addresses contingencies that may arise during the project.
Ineffective change management may result in a variety of negative consequences including lack of buy-in, misalignment of goals, untracked progress, change fatigue, or unauthorized change requests. Axim has a long history of working with customers where change requests with scope and/or cost impacts are coordinated through program management and executed by contracting officers. We strive to maintain responsiveness and agility to address dynamic project and customer needs, while adhering to basic structural roles and approvals to ensure conflicts are avoided or minimized. Axim will implement the following change management activities to work with WSDOT to manage changes:

- Scope for Change: The scope for change can be due to scheduling, quality, budget, or risk mitigation. We will ensure to define these reasons clearly in the change request. Also, we'll specify when and who will execute the adjusted tasks.
- Change Management Roles: At project kickoff we'll include change management roles to the agenda to ensure WSDOT and Axim leaders mutually agree how changes will be addressed and executed.
- Communication Plan: Our status and communication plans are critical to keeping all stakeholders aware of progress, risks, upcoming activities and requested changes.
- Change Request Form: The change request form will capture the essential data required for the change and how it impacts the entire project. A change request form will be shared with the entire team as it helps to know what type of change has been requested and approved, its impact on the project, and its benefit.
- Key Performance Indicators: Key Performance Indicators will set milestones toward change objectives just as they do for the original project requirements.
- Activity Log: An activity log will track changes made, requests documented, and all the other changes, including change management activities for all the project team. This will accompany project briefs and status reports to communicate the progress of the project.

B. Include the following items:

Describe your approaches to resolve issue(s) within the project team; client(s) and stakeholders.

Axim's project manager and account executive work collaboratively to ensure Axim's obligations and project deliverables maintain alignment with the client and stakeholder mission and needs. Our firm's ability to navigate complex projects with dynamic field conditions has been fundamental to our success over the past 32 years. Weather or other schedule impacts will be proactively monitored and reported to all stakeholders as part of status and risk metrics. Change requests will be addressed via the change management process address in Section A above.

C. Include the following items:

Provide assumptions for work breakdown structure, e.g. WSDOT vs. consultant deliverables.

Assumptions in addition to those provided above:

- Axim's recognizes the assumptions noted by WSDOT in Tasks 1-4 of the project scope. Axim's response, schedule and performance assumes WSDOT selection and notice to proceed timeline will support the schedule requirements. Axim further assumes all meetings, training, guidance, and field coordination will include WSDOT staff available within the dates needed to support schedule milestones.
- Axim assumes that access will be granted access to all public and private lands required to perform the fields survey. Axim will not be responsible for the inventory of items located in areas where access is restricted or unsafe.
- Axim will be provided appropriate access to any WSDOT business system required to perform the tasks outlined in the scope of work.

D. Include the following items:

Identify any key issues and critical milestones for the project.

- Key Issues that can arise on a project of this scope and length are identified in the contingency section within Task 03 Field Inventory. Additionally, The Axim team has significant staff bench strength a surplus of production hardware that would allow the team to scale, if needed, to maintain the agreed upon project timeline in the face of unforeseen delays.
- Critical Milestones are identified and grouped below by the project phase. Many of these items are covered in detail within the Scoring Criteria 5 project task breakdown above.
    - **Initiation** (Finalize scope, negotiate fee, finalize terms of contract, receive notice to proceed)
    - **Planning** (Finalize and approve key project documents, finalize project timeline and key incremental milestones, allocate and train field resources)
    - **Execution** (Conduct project kickoff meeting, deploy field teams, receive approval of initial and interim deliveries, complete field work)
    - **Monitoring** (Conduct weekly status meetings and KPI review)
    - **Closing** (Make final data delivery, finalize and deliver all project documents receive approval of all deliverables)