PSC-AE ISID Billing Rate
Rev 12/05/2022

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

This contract authorizes the professional services contractor to provide professional services.
(Authority: Public Act 431 of 1984, as amended)

CONTRACT FOR PROFESSIONAL SERVICES: Indefinite Scope – Indefinite Delivery Billing Rate – Not to Exceed

THIS CONTRACT, authorized this 17th day of March in the year two-thousand and twenty-three (2023), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the STATE FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, 3111 West St. Joseph Street, Lansing, Michigan, hereinafter called the Department, and

Weston Solutions of Michigan, Inc.
2501Jolly Road, Suite 100
Okemos, MI 48864

the Prime Professional Services Contractor, hereinafter called the Professional,

WHEREAS the Department proposes securing professional services FOR THE FOLLOWING PROJECT:

Indefinite-Scope, Indefinite-Delivery Contract No. 00999
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery Contract (ISID) for Minor Projects -
Various State Departments and Facilities
Various Site Locations, Michigan

Provide professional services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within various locations as defined by the State of Michigan. These various ISID minor projects may include projects where the construction costs are between fifteen-thousand dollars ($15,000) and five-hundred-thousand dollars ($500,000) for this Contract.

This Contract is for professional design services for an unspecified number of ISID projects. The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm.

The professional services required for each of these assigned projects requested by the Department may include any or all the Tasks included in the Phase 100 – Study through the Phase 700 – Construction text of the Department's Standard Professional Services Contract.

The Professional firm's services shall be performed in strict accordance with this Professional Services Contract and follow the Department's approved and attached Project/Program Statement.

This Contract does not warrant or imply to the Professional design firm entitlement to perform any specific percentage (%) amount of compensation, work, or projects during the life of this four (4) year Contract.

This Contract will remain in effect for four (4) years from the date of this Contract award but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for one (1) additional year, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original four (4) year Contract period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that for this Professional Services Contract your permanent assigned ISID Contract No., as noted on page 1 of this contract, must be provided on all Project correspondence and documents.

The Professional is not to provide any professional services or incur expenses until individual ISID Projects are assigned to this Contract. (See Article 2 – Compensation and the Project/Program Statement attached to this Contract.)

NOW THEREFORE, the Department and the Professional in consideration of the covenants of this Contract agree as follows:

I. The Professional shall provide the services for the assigned Project in the study, design, and construction administration, Phase and Task sequence provided in this Professional Services Contract and to the extent authorized by the Department of Technology, Management and Budget State Facilities Administration (SFA), Design and Construction Division (DCD) [Department] and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with this Professional Services Contract and follow the Project/Program Statement.

II. The State of Michigan shall compensate the Professional for providing their professional architectural and/or engineering study, design, and construction administration services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed in blue ink, a scanned digital signature is also acceptable, by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received an electronic copy executed by the authorized State of Michigan representative(s) by electronic mail.

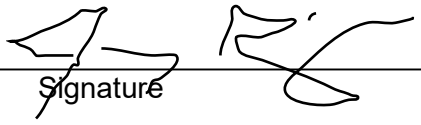
FOR THE PROFESSIONAL

Weston Solutions, Inc.

Firm Name

CV0007304

SIGMA Vendor ID Number



Signature

03/30/2023

Date

Program Manager

Title

FOR THE STATE OF MICHIGAN:

Director, DTMB | SFA | Design and Construction

March 31, 2023

Date

WHEREAS this Professional Services Contract constitutes the entire agreement as to the Project between the parties, any Contract Modification of this Contract and the Department's approved and attached Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional firm's final design Contract Documents/architectural and engineering design errors, omissions, or neglect on the part of the Professional**.**

ARTICLE I
PROFESSIONAL SERVICES SCOPE OF WORK

The Professional shall provide all professional services, technical staff, and support personnel necessary to achieve the Project as described in its Project/Program Statement, in the best interest of the State, and be within the Professional's fee(s) herein authorized by the State. Assigned project services shall comprise, without exception, every professional discipline and expertise necessary to meet all the requirements as described in the Project/Program Statement and be in accordance with the accepted industry standards for professional practice and services. The Professional's services include attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department. The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested Project and of the professional study, design and construction administration services required by the Department to provide it, and further agrees that the terms and conditions of this Professional Services Contract provide adequate professional fee(s) for the Professional to provide the requested Project scope of work requirements for each assigned project. No increase in fee to the Professional will be allowed unless there is a material change made to the Project as described in its Project/Program Statement and the change in scope to the Project/Program Statement is accepted and approved in writing, by the Project Director and the Professional. Professional services shall not be performed, and no Project expenses shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a Contract Order authorizing the Professional to start the Project work. Compensation for Department directed changes to the Project will be provided to the Professional by a Contract Modification and/or Contract Change Order signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director.

The Professional shall immediately inform the Department whenever it is indicated that the Professional's authorized not-to-exceed Budget for any of the assigned Projects may be exceeded.

The Professional shall make recommendations to the Department for revisions to bring the Project Cost back to the Professional's original authorized Budget amount. Any revision to the Project must be accepted and approved by the Department in writing.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

No substitution of any "Key Principal Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department. The Department will designate an individual to serve as the Project Director for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the construction administration services of the Project, the Professional shall be required to complete and submit, the on-site Inspection record form titled "DTMB-0452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The Professional's Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director and copies sent to the State/Client Agency and Construction Contractor. The Professional's Inspection Record shall accompany the Professional's monthly submitted payment request.

The "DTMB-0460, Project Procedures" documents package containing Department forms for use during construction administration shall be used by the Professional in the administration of this Contract. All professional services will be consistent with the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for each Phase of this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represents the Department's standard of care method for describing the Professional's responsibilities for providing the professional services of this Contract, but by inclusion, or omission, do not limit or exclude any regular or normal professional services necessary to accomplish the Project and be in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. However, all the services outlined in this Contract may or may not be applicable to the Project/Program Statement and will require the Professional to identify only the services that are applicable for the Project at hand. The Professional shall determine and coordinate the interface of the services required for the Project at hand and be responsible for identifying any additional services necessary to successfully complete their Project.

Soil Erosion and Sedimentation Control in the State of Michigan is regulated under the 1994 Public Act 451, as amended – The Natural Resources and Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

The following professional services, if they become necessary and essential for completing the Project, will be individually rendered by the Professional, only upon specific written authorization by the Department and the Project Director to the Professional and for the purpose and to the extent so authorized.

Should litigation occur because of this Project, only if through no fault of the Professional, the Professional firm shall be compensated by the Department on an actual hourly billing rate basis at the rate set forth in this Contract by a Contract Modification and/or Contract Change Order, if required to assist the Department of Attorney General, State Affairs Division in providing the professional services necessary during litigation.

LITIGATION: The Professional shall provide all information, presentations, depositions, testimony as "expert witness", and similar or related services, on behalf of the Department, as may be required in relation to the professional services of the study, design, and construction of this Project.

ACCOUNTING: The Professional shall provide all specialized categorizations and distributions of the costs of study, design and construction services, construction costs, and operational costs, as may be required according to purpose specific parameters.

PUBLIC AWARENESS: The Professional shall provide all design and construction related services to assist in and make presentations of the professional services of the study, design, construction, and operational aspects of the Projects as may be required for public meetings, hearings, and similar informational activities.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive architectural and/or engineering study consistent with the Project/Program Statement, with itemized construction cost estimates.

Task 101 COORDINATION: Meet with the Project Team and define all areas of investigation. Establish Project Team responsibilities and lines of communications. Review the status of the study efforts with the Project Team at such frequency and times as may be required to achieve the Project objectives.

Present study documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 102 RESEARCH: Gather and/or develop all data to evaluate and clarify the Project. Research existing data, analyze and refine the concepts of the Project/Program Statement. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the information required to complete the Study incorporating functional and operations needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance, and other support features. Identify all additional research, studies, and analysis necessary to express such objectives and requirements in terms of a fully operable facility or system which will acceptably serve its intended use.

Task 103 ANALYSIS: Analyze data, information and research gathered. Create draft recommendations or results of the study and research. Upon completion of all on-site field investigation activities prepare a complete architectural and/or engineering study report. If appropriate, provide itemized construction cost estimates. The analysis will correlate, describe, and record research findings and information for the Project Team's understanding and acceptance. Transcribe and consolidate all existing data, studies, and the research analysis of Task 102 into a draft study report. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments.

Task 110 STUDY REPORT: Incorporate the study review comments as directed by the Department into the final study report. Prepare and attend presentations to the Project Team and others for Study acceptance. The final report shall use the following outline and contain such detail as required for the Project Team's understanding and acceptance.

- Management Summary
- Problem
- Research Findings, Discussion and Details
- Conclusion
- Recommendation

Provide one reproducible original and an electronic copy suitable for legible reproduction. One study report presentation shall be considered basic services for this Task. Any additional study report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 200 - PROGRAM

Amplify the Project/Program Statement and, if available, final Study Report, to embody the physical, functional, and programmatic relationships required to achieve the Project objectives. The resultant program analysis, when accepted and approved by the Department, shall create the general scope of work of the Project. Such acceptance does not limit subsequent inclusion of minor, but essential, programmatic or design details whose necessity and arrangement may best become apparent during subsequent Phases of the Project's evolution.

Task 201 COORDINATION: Meet with the Project Team and establish lines of communication, authority, and responsibility. Establish a method for the Department and the State/Client Agency to formally sign off on data input, the program analysis, and appropriate elements of the resultant design.

Present proposed program analysis documents to the Project Team for review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 202 PROGRAMMING: Identify and develop data to evaluate and clarify the proposed Project. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the functional and operational needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance and other support features. Allocation of spaces shall be in accordance with the State of Michigan's current "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Service Contractors" and be consistent with the Project/Program Statement and Project Budget. Provide all additional research, studies, and program analysis necessary identify the objectives and requirements for a fully operable Project acceptably serving its intended use.

Task 203 DEVELOPMENT: Transcribe and consolidate all data, studies, and the analysis of Task 202 into a program analysis summarizing the complete program for the project, including spaces, physical features, systems, functions, capacities, relationships, and interactions required by the proposed Project. Revise the proposed program as required to achieve the Project objectives and incorporate review comments by the Project Team.

Obtain approval and sign-off of space allocations from the Project Director before providing the space allocations to the State/Client Agency for approval and sign-off of the complete program.

Task 209 PROJECT COST ESTIMATE: Provide an itemized cost estimate of the proposed Project program. Verify in writing that the Project Budget is adequate to achieve the proposed Project. Revise the program analysis documents as necessary to provide an acceptable program analysis design within the Department's authorized Project Budget.

Task 210 PROGRAM ANALYSIS REPORT: Prepare a draft program analysis report containing the program, cost estimate, signoffs and backup data and information. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments. Incorporate review comments as directed by the Department into the proposed final program analysis report. Provide one reproducible original and an electronic copy suitable for legible reproduction. One program analysis report presentation shall be considered basic services for this Task. Any additional program analysis report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 300 - SCHEMATIC DESIGN

Prepare progressive schematic design deliverables consistent with the Project/Program Statement, and approved program (if applicable). Diagrammatically depict the area(s) and relationship of the Project functions. Establish the design basis for and show principal building design elements and locations of the various structural, mechanical, heating, ventilating, and air conditioning (HVAC), electrical and other systems as necessary to completely achieve the Project. The Professional shall obtain Professional Consultant firms for civil/site survey, site geotechnical investigation analysis and soil testing as the Professional deems necessary to achieve a viable and economic Project design. Revise design as necessary to obtain approval from the Department and the State/Client Agency.

Task 301 COORDINATION: Meet with the Project Team to establish a physical size and arrangement of the Project and its principal systems. Include technical, human, and physical environment requirements consistent with the Project program as well as the functional interrelationships between spaces or systems. Determine any Project requirements as necessary to accommodate artwork.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project.

Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations.

Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the schematic design documents and assist in obtaining data and providing timely decisions. Present proposed schematic design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 302 CONSTRUCTION CODE AND DESIGN REVIEWS: Identify, list, and define for the Department, in writing, the impact of all applicable construction codes, rules, regulations, environmental requirements, design reviews, and permitting procedures current as of the start of this schematic design Phase that will apply to the design of the proposed Project. Review with the Project Team the principal impacts on Project planning and incorporate these into the schematic design report and the Project cost/proposed construction schedule of Task 309.

Task 303 CIVIL/SITE STAGING INVESTIGATION: The Professional shall retain a civil/site survey Consultant and a site geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services and prepare the site staging investigation survey instructions program(s) required to establish and execute a complete schematic site design appropriate to the Project/Program Statement. Analyze site staging investigation results and incorporate into the schematic site design. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and accurately specify contractual requirements. This includes, but is not limited to, access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work.

Provide the Department with copies of all site investigation geotechnical test reports. Review conclusions and, upon request, explain their influence on the Project schematic design. Define the impact of the Project on adjacent buildings.

Task 304 STRUCTURAL: Research, survey, define, and render all existing structural systems appropriate to the proposed Project. Show facility layout, applicable area floor loadings and basic elevations. Outline any existing principal structural system members and render and show the proposed structural system schematic design for renovations and additions.

Task 305 MECHANICAL/HVAC/PLUMBING/UTILITIES: Research survey, define and render the schematic design basis for all proposed mechanical, plumbing systems, and utility systems appropriate to the Project. This includes but is not limited to all plumbing, HVAC, and other mechanical systems, equipment, and their respective loads. Define and render the schematic design capacities, sources, flows, and functions of all existing and/or proposed utility systems, including but not limited to steam, water, fuel, storm and sanitary sewers, and fire protection. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, fees, and schedules.

Task 306 ELECTRICAL: Research, survey, define and render the schematic design basis for all proposed electrical systems appropriate to the Project. This may include, but is not limited to utility service systems, primary and secondary distribution systems, building control systems, security systems, elevators, fire alarms, television, data, communications, and similar systems. Define sources, equipment capacities, and loads, including those for open office workstation/partitioning systems. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, required easements, transformers, fees, and schedules.

Task 307 ARCHITECTURAL/ENGINEERING: Research, survey, define, and render the existing and proposed schematic design architectural and/or engineering building area layout appropriate to the Project/Program Statement. Show proposed applicable area/room space, finish treatment, uses, interrelationships, and principal building sections, elevations, and dimensions. Show principal building fire protection spaces and features. Consider sustainability in material, equipment, systems, and general design selections, provide LEED checklist, as applicable.

Task 308 DRAFTING: Prepare and render proposed schematic design documents appropriate to the Project, on sheet size approved by the Project Director. Include all principal building/site utility systems.

Coordinate the Project schematic design with all architectural and/or engineering design disciplines for completeness, accuracy and consistency, and conflict avoidance. The Professional shall field-check and verify the accuracy of all existing and proposed architectural and/or engineering drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

Task 309 PROJECT COST/PROPOSED CONSTRUCTION SCHEDULE: Evaluate the proposed schematic design against the estimated Project cost and design/construction schedule. Revise schematic design as required to produce a design within the Department's approved Budget. Prepare and submit a Project Budget based on the approved schematic design. Apply critical target dates to the Professional's Project Study, Design and Proposed Construction Schedule and submit to the Department for their review and approval.

Task 310 SCHEMATIC DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed schematic design documents, as necessary, to incorporate all requested design review comments. Obtain Department approval and sign-off prior to State/Client Agency sign-off, when requested by Project Director. Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the Department approved proposed schematic design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors".

Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional schematic design costs will be paid to the Professional by the Department with a Contract Change Order.

If Contract Services conclude with this Phase, provide bond prints and an indexed PDF of architectural and/or engineering drawings of the final approved schematic design, suitable for legible reproduction.

PHASE 400 - PRELIMINARY DESIGN

Prepare progressive preliminary design documents to develop the Project based on the Project/Program Statement, and the approved schematic design and program, if applicable. Refine the schematic design documents as necessary to produce an acceptable preliminary design. The preliminary design and outline draft specification shall be complete and detailed enough to define the size, function, arrangements, spaces, location and operations of equipment, and materials comprising the principal design details of structures and systems.

The proposed preliminary design documents and outline draft specifications shall clearly depict the Professional's proposed design intent of the Project's systems, materials, equipment, utilities, site improvements, and other elements through single-line diagrams, system layout drawings and developed plans and design details. The preliminary design thus achieved must constitute the complete basis for further detail into final design drawings.

Prepare in bar chart format, the proposed Project construction schedule. Prepare a complete estimated Project cost statement based on prevailing or predictable factors for the proposed construction bidding period. The Department's written acceptance of the estimated project cost statement will establish the authorized Budget for the Project. The Professional shall apply the means and methods necessary to achieve the proposed preliminary design within the authorized Budget for the Project.

Task 401 COORDINATION: Meet with the Project Team to review the Project/Program Statement, approved schematic design documents (if applicable), and refine the Project. Assist the Project Team to progressively review the proposed preliminary design, develop input, and provide timely decisions.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement, and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations. Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the preliminary design documents and assist in obtaining data and providing timely decisions. Incorporate design refinements consistent with the proposed Project scope. Establish equipment and/or materials to be furnished by the State. Present proposed preliminary design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 402 SPECIFICATIONS: Prepare proposed preliminary design outline draft specifications for Divisions 00 through 49, in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project. Outline specifications will address sustainable design in materials selection.

Task 403 CIVIL/SITE STAGING DESIGN/INVESTIGATION: If the Professional did not obtain a site-specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project.

Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Task 404 STRUCTURAL: Prepare structural calculations appropriate to the proposed Project and size major components. Prepare preliminary structural plans, sections, elevations, and details drawings, as applicable for the defined scope of work. Determine and prepare a list of required preliminary structural drawings as related to the proposed Project. Revise as required.

Task 405 MECHANICAL/HVAC/PLUMBING/UTILITIES: Identify existing mechanical/heating, ventilating, and air conditioning equipment, plumbing systems, and utility systems.

Calculate heat loss, heat gain, and other demands for all spaces. Determine ventilation requirements. Calculate total loads, identify, and size new equipment. Identify and/or calculate total utility loads. Include the needs of any existing building or system that is a part of, or interfaces with the Project, as well as those of the Project.

Provide basic engineering design appropriate for all principal building components, utility systems and building systems, and all pre-engineered equipment suitable and appropriate for the proposed Project. Field-check and verify clearances for all proposed equipment and systems proposed. Prepare preliminary HVAC, plumbing, and utility drawings. Determine and prepare a list of required preliminary design drawings as related to the proposed Project. Review current, mechanical, plumbing and utility system codes and incorporate applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utilities/suppliers.

Task 406 ELECTRICAL: Identify existing equipment and systems. Prepare load calculations, including electric loads for fixed, and movable, equipment, as appropriate to the defined Project. Determine electric service requirements and size major transformer and service equipment. Provide single line diagrams of primary service and distribution systems. Develop and outline basic equipment and distribution systems for lighting, power, building control, elevators, fire, security, television, data, communications, and other specialized systems of the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems.

Field-check and verify clearances for all proposed equipment and design systems proposed. Prepare preliminary electrical drawings. Determine and prepare a list of required preliminary design electrical drawings as related to the proposed Project. Review current electrical codes and incorporate all applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utility/suppliers.

Task 407 ARCHITECTURAL/ENGINEERING: Prepare preliminary architectural and/or engineering drawings, appropriate to the proposed Project, to detail and define the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems. Determine and prepare a list of required preliminary design architectural and/or engineering drawings. Drawings will include plans, elevations, sections, and critical construction details in order that an accurate and detailed construction estimate can be provided. Depict sustainable design criteria and energy efficient design features of the Project, provide LEED Checklist, and provide summary calculations to demonstrate applicable compliance with the State of Michigan's current Energy Code requirements. Revise as required.

Task 408 DRAFTING: Prepare and render the preliminary design architectural and/or engineering documents on sheet size approved by Project Director. Coordinate the preliminary design with related architectural and/or engineering design disciplines for completeness, accuracy and consistency and conflict avoidance. Prepare drawings using applicable State of Michigan standards as defined in the Department's "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors" and DTMB DCD "Design and Construction Standards for Office Construction and Tenant Fit out" for all Project design disciplines.

The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency, or any other Project related source.

Task 409 COST ESTIMATE AND CONSTRUCTION SCHEDULE: Prepare an itemized Project construction cost estimate based on prevailing or reasonably predictable factors for the proposed bidding period. Recommend construction strategies, methods, and phasing. Identify long-lead items and any State of Michigan-furnished materials, equipment, systems, and furnishings, with procurement deadlines consistent with the proposed schedule and phasing. Prepare in bar chart format a detailed schedule of the design and proposed bidding and construction schedule, incorporating the information listed above.

Task 410 PRELIMINARY DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments.

With the 50 percent review, provide design criteria and calculations of principal architectural, mechanical, plumbing, and electrical engineering systems demonstrating basic compliance with the State of Michigan's current Energy Code requirements.

For each review, present proposed preliminary design documents first to the State/Client Agency for programmatic design conformance review, then present to the Department for review, determination of required revisions, and acceptance. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments required for the Department’s written acceptance of the proposed Project preliminary design.

Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the approved proposed preliminary design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the “Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors”. Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional preliminary design costs will be paid to the Professional by the Department with a Contract Change Order. If Contract Services conclude with this Phase, provide bond prints, electronic CAD, and indexed PDF of architectural and/or engineering drawings of the final approved schematic design and outline specifications suitable for legible reproduction.

PHASE 500 - FINAL DESIGN

Prepare for progressive, periodic review, Final Design Documents which shall revise, refine, amplify, and depict, in detail, the Project as described and required by the Project/Program Statement and any approved preliminary design. Final Design Documents shall be prepared in Phases/Bid packages appropriate to the Project, schedule, and funding.

The proposed Final Design Documents shall document a complete and constructible Project. Final Design Documents shall incorporate and comply with all current, applicable regulations, ordinances, construction codes and statutes, and must have accomplished all reviews by appropriate federal, State or any local authorities having jurisdiction before presentation to the Department for acceptance and advertisement for bidding. Where design approvals are required, the Professional shall acquire and provide them. The Final Design Documents shall be without ambiguity and must be so complete that no significant design decision is left to the discretion of any Bidder, manufacturer, or supplier. The Final Design Documents will not define, quantify, or in any other way represent any work as being assignable to, or to be performed by, any Consultant or sub-consultant, except for fire suppression systems or other specialized system(s) if it is specifically authorized, in writing, by the department.

Bidding Documents shall consist of, but are not limited to, the Final Design Documents, including final architectural and/or engineering drawings and specifications, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to MICHSPEC or DCSpec documents provided by the Department. Such standard documents may consist of, but are not limited to, the project advertisement, the Instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the standard form of agreement between the Department and the Construction Contractor. The Professional may not substitute any other special, general, and supplemental conditions for the Construction Contract or other standard documents provided by the Department. The Professional may not revise, other than the fillable portions of the general conditions, or use any additional general condition requirements unless the revisions or requirements are accepted and approved by the Department in writing.

In addition to the requirements herein, the professional services for this Project shall include, but are not limited to, those set forth in the current version of MICHSPEC or the current DCSPEC as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department standard documents and general conditions as may be part of the Construction Contract.

The Contract Documents shall consist of the Bidding Documents and all Addenda and attachments necessary to provide a complete Construction Contract for the Project.

Task 501 COORDINATION: Review approved preliminary design drawings with the Project Team and solicit revisions. Incorporate any revisions and design refinements.

Present proposed final design documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 502 SPECIFICATIONS: Prepare final design specifications in the format defined below and with Phasing as appropriate for the Project. Include a schedule of all required submittals, a construction material testing schedule, and all other necessary schedules. Specifications shall be coordinated with the final design architectural and/or engineering drawings and shall be prepared in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.). The final design architectural and/or engineering specifications shall clearly define the Project design and construction requirements indicating the type and quality of materials, products, and workmanship.

Sustainable Design shall be used wherever possible by the Professional in their Project design. The United States Green Building Council's (USGBC) LEED Green Building Rating System will be used as a convenient and industry accepted standard of reporting and measurement of the materials and design strategies used in the Project, but the USGBC certificate will not be required. Sustainable Design is defined in this Contract as the Professional's use of Project design resources with no negative impact to the natural ecosystems, an emphasis on overall energy efficiency, recycling, reduction of waste, and achieving a net enhancement of the Project.

Performance specifications shall be used when feasible. If not, the Professional shall name at least three (3) acceptable materials, products or systems and the specifications shall contain an "or equal" clause. Whenever possible, recycled materials and/or Michigan-manufactured products shall be named and given first preference. Proprietary specifications or allowances may be permitted with the Department's acceptance and written approval, but only for special, unavoidable conditions. Provide Project specifications to the Department for procurement of items to be pre-purchased through existing State contracts or separate bids.

Task 503 CIVIL/SITE STAGING DESIGN: If the Professional did not obtain a site-specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Soil Erosion and Sedimentation Control shall be implemented in accordance with the current edition of the Department's compliance manual and 1994 PA 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Submit final civil/site design drawings depicting Soil Erosion and Sedimentation Control measures to the Department's Soil Erosion and Sedimentation Control Program for review in accordance with 1994 PA 451, as amended. For DTMB managed projects, coordinate review submission with Project Director as plan review is completed within the Design and Construction Division.

Task 504 STRUCTURAL: Prepare and render complete structural final design documents.

Task 505 MECHANICAL/HVAC/PLUMBING/UTILITIES: Prepare and render complete mechanical, plumbing, and utility system final design documents.

Task 506 ELECTRICAL: Prepare and render complete electrical system final design documents.

Task 507 ARCHITECTURAL/ENGINEERING: Prepare and render complete architectural and/or engineering final design documents. Assist the Department in the determination of and specification of furnishings, colors, and finish selections. Provide material finish and color board for final acceptance as required for the defined Project.

Task 508 DRAFTING: Prepare complete final design architectural and/or engineering drawings for Bidding Documents on sheet size approved by Project Director using applicable State of Michigan standards as defined in the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Services Contractors." The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

The Project Bidding Documents derived from the Final Design drawings shall be made available and converted, if necessary, to the AutoCAD computer drafting system. Bidding Documents shall be provided electronically in pdf format to the Department for advertisement by the Department.

Provide one electronic copy of signed and sealed documents in addition to paper review and approval sets of the Contract Documents. The signed and sealed print sets are the controlling Contract Documents for this Project. The software name and release number used to produce the Design Contract drawings will be clearly identified on the electronic media.

Task 509 CHECKING CONTRACT DOCUMENTS: Check and coordinate all proposed Bidding and Contract Documents for completeness and accuracy. Prepare Bidding and Contract Documents that will protect the Department from unexpected construction cost increases, schedule delays or claims for reason of defective or incomplete rendering of the Professional's design, or for any delinquency by the Professional for performance of the professional design services under this Contract. Check the adequacy of all spaces and clearances.

Cross-check and coordinate the requirements of all proposed final design drawings between the architectural and/or engineering design disciplines for completeness, accuracy, and consistency, and conflict avoidance. Similarly, cross-check and coordinate all proposed final design drawings against the Project specifications. Mark each drawing with the name of the checker and with the written signature approval of the appropriate Professional "Key Principal Personnel/Employee."

Task 510 CONSTRUCTION CODES AND PERMITS: The Professional's Contract Documents shall comply with the State of Michigan Construction Code, 1972 PA 230, as amended, the State of Michigan Energy Code, the Americans with Disabilities Act (ADA) Accessibility Guide requirements, the State of Michigan Barrier-Free Access Code requirements, and all Project related construction code requirements in effect at the time of award of this Contract. Assist the Department in obtaining approval of the Project and its design by appropriate governmental regulating and/or code enforcement authorities.

Project Bidding Documents may not be advertised until plan review approval is obtained.

Except as otherwise provided for in this Contract, code compliance and plan review approval(s) shall be performed by the, the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plan Review Division, and the Bureau of Fire Services. Code compliance and plan review approval fees shall be paid by the Professional as a reimbursable expense, unless otherwise provided for. Submit all modeling, testing, design data, and appropriate drawings and applications for all permits, tests, and approvals, which the Department is required to secure as a prerequisite authorization for the Project's approval.

Submit Soil Erosion and Sedimentation Control plans/drawings to the Department's Soil Erosion and Sedimentation Control Program as the enforcing authority for this Project, no later than at the 90 percent final design stage.

Provide energy efficient design features and summary calculations to demonstrate Project compliance with the State of Michigan Sustainability requirements. Submit documents for review in a timely manner allowing appropriate time for review/permitting processes by respective authorities, such that the Project schedule is not unnecessarily delayed. Assist the State/Client Agency to secure any appropriate construction code waivers.

Incorporate all required modifications into the Bidding Documents. Follow through to ensure issuance of the construction codes and permits approvals. Secure all required design approvals before submitting the final design documents to the Project Team for the final design document review of Task 515. Any approval secured in initial plan review and permitting does not relieve the Professional from complying with code official's construction field inspections enforcement requirements.

Task 511 CONSTRUCTION TESTING PROGRAM: Coordinate Project on-site survey and appropriate research to identify site specific abnormal construction conditions. Coordinate site specific geotechnical testing program of areas, consistent with the design and siting requirements. Identify and confirm the site underground conditions sufficiently to accurately specify the construction contractual requirements. Establish the required construction quality control and materials testing program. Define and specify the types of Project construction tests required, the approximate quantities to be tested and the projected cost thereof. Prepare quality control and material testing services program Bidding Documents for the construction quality control and material testing services. Testing services shall be estimated and identified as an authorized reimbursable expense item in this Contract.

Task 512 HAZARDOUS MATERIALS: Where the Project involves work in an existing building and/or utility system, assist the Department to determine the scope of potential hazardous materials contamination that may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Hazardous materials testing and removal for this Project will be performed by the Department by separate Contract unless specifically noted in the project scope. Coordinate the professional design services of this Contract with any hazardous material removal services required to implement this Project. Include for the Department's use, architectural and/or engineering drawings and specifications for all restoration work necessary following completion of the removal/abatement Project. Revise the final design drawings, specifications, and schedule, if necessary, to reflect the impact of the hazardous material removal/abatement on the existing State/Client Agency facility operations.

Task 513 DESIGN AND CONSTRUCTION BUDGET: The Professional shall be responsible for all costs incurred by it, necessitated by for rebidding a Project if it is over Budget due to their design. Submit in writing the itemized estimate of the construction costs with each final design review. Include all construction Bid packaging and Phasing. Determine the amount and adequacy of any construction contingency. Upon submittal of the 90 percent complete final design documents, confirm an accurate itemized construction cost estimate in writing to the Department. Confirm that the total Project construction cost is estimated to be within the Project Budget.

Notify the Department in writing if it becomes evident during the final design phase that the Project cannot be constructed within the Professional's estimated construction Budget. Unless the Department determines the problem to be outside the control or responsibility of the Professional, the Professional shall revise their final design drawings and specifications to produce a complete design for the Project within the Professional's original estimated construction Budget cost and will otherwise be responsible for any costs incurred by the Department in rebidding the Project.

Assist the Department to rebid the Project in accordance with the Task 516 construction bidding/contracting procedures.

Task 514 CONSTRUCTION SCHEDULE: Determine the appropriate proposed construction schedule to be part of the Construction Contract. Consider all principal influencing factors, including, but not limited to, current and projected material delivery times, local labor contract periods, and other historical principal causes of delays.

Task 515 FINAL DESIGN BIDDING DOCUMENTS REVIEW: Provide complete final design documents review. When the final design is 50 percent complete, submit the final design documents to the Project team for their review. If the final design appears to exceed the Project Budget, review with the Department all cost reduction design options. Incorporate at 90 percent completion, all required design modifications applicable to the Project, and resubmit to the Project Director. Confirm in writing that the requirements of Tasks 509 and 510 have been met.

Submit 100 percent complete sets of Bidding Documents to the Project Team for their final review. Submit final design documents to the State/Client Agency and the Department for their final design review and revise as necessary to incorporate all review comments required for Department written acceptance of the Bidding Documents. Provide adequate time (minimum of 14 calendar days) for the reviews and implementation of any comments or modifications.

Task 516 CONSTRUCTION BIDDING AND CONTRACTING: Assist the Department in the construction bidding and contracting process. The State of Michigan will advertise for bids and issue construction documents on-line and award and hold the Construction Contract.

Prepare (maximum of 6mb electronic PDF files) and distribute Bidding Documents to the Project Director as required to accommodate predetermined construction Bid packages and/or Phases. Conduct pre-bid meetings and issue pre-bid meeting minutes and bidder's lists. Issue Addenda to the Project Director as required for posting. Include in each Addendum complete specifications for the Project if such specifications are not part of the Bidding Documents.

The Professional will be compensated by the Department with a Contract Change Order for providing the professional services necessary to rebid the Project for reason of defaulted or disqualified construction Bidder(s) or unacceptable price range as required by the design and construction Budget text of Task 513.

The Professional's construction bidding and contracting procedure services for Task 516 are not complete until: (1) The responsive, responsible, best value construction Bidder's Bid has been selected and accepted by the Department; and (2) The responsive, responsible, best value construction Bidder's Construction Contract has been executed. The PSC is to also incorporate any State required preferences with their review and recommendation.

Construction Bid Evaluation and Recommendation of Construction Contract Awards: Review and evaluate the submitted construction Bids. Provide the Department with a written recommendation for the apparent lowest responsive, responsible, best value construction Bidder for the Project Construction Contract award(s) within five (5) business days of the date of the Department's construction Bid opening. Exempt from recommendation any firm that in the Professional's opinion is unqualified for the Project (documentation required) or that the Professional has a business association with on this Project, and any firm, that the Professional has used in preparation of the Contract Documents or for any estimating work related to the Project.

The Professional shall conduct pre-contract meetings with responsive, responsible best value construction Bidder(s) to review the following items: (1) Understanding of the design intent of the Contract Documents; and (2) To advise and assist the Construction Contractor(s) in understanding the requirements of the Department's standard form of Construction Contract Documents, Project scope of work, and its Construction Contract award procedures.

Unless otherwise designated in the Department's Notice of Intent to Award letter to the recommended Construction Contractor within fifteen (15) calendar days from the date that the Notice of Intent to Award letter was mailed to the Construction Contractor, the Construction Contractor recommended for the award of the Construction Contract shall (a) Fill out and execute the Department's, current version of MICHSPEC standard form documents Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, electronically; (b) Execute Section 00610, Performance Bond, and the Section 00620, Payment Bond (and attach to each bond a separate, certified copy of

Power of Attorney); and (c) Return to the Department, the Construction Contractor's executed Section 00500, Contract Agreement, Section 00610, Performance Bond, and Section 00620, Payment Bond forms, evidence of Certificates of Insurance and any other legal documents required for submittal by the Department's, Notice of Intent to Award letter.

Task 517 FINAL DESIGN CORRECTION PROCEDURES: Correct at no additional cost to the Department any design errors or omissions and/or other Project related deficiencies identified during the 600 and 700 Construction Phase. All reproduction costs for design interpretations, clarifications, and Bulletins related to the Professional's final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Provide design clarifications and interpretations of the Contract Documents requirements necessary to: (1) Adequately describe the Project work; (2) Adapt architectural and/or engineering final design documents during construction to accommodate field conditions identified during construction; (3) Refine design details that are not feasible and identified during construction; and (4) Comply with current construction/building codes, and all other Project related design and construction matters as may be necessary to produce a complete Project.

Design Interpretations and Clarifications: For elements of construction having no change in cost to the State the Professional will: (1) Provide instructions, and/or design interpretations and clarifications for design details within five (5) business days of the Construction Contractor's request record same, in writing; and (2) Revise the Professional's original final design architectural and/or engineering drawings and specifications as appropriate to the Project. Marking and initialing of drawings is not an acceptable form of written instruction.

Bulletin Authorization: Request authorization from the Project Director to issue each individual Bulletin. The Professional's Bulletin Authorization request will: (1) Identify the problem requiring the change; (2) Describe clearly if such problem arises from the architectural and/or engineering final design errors or omissions; (3) Identify the anticipated design cost and the estimated construction cost to implement the change(s); and (4) Describe clearly in the Professional's opinion which part, if any, of the design and/or construction costs are the obligation of the State, the Professional or the Construction Contractor. Include a Contract Modification request for any work outside the Project. Identify any anticipated Project design or construction schedule implications.

Bulletins: All reproduction costs for design interpretations and clarifications and Bulletins related to the Professional's architectural and/or engineering final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Describe, by Bulletin, design revisions necessary to correct the architectural and/or engineering final design errors or omissions, to address previously unidentified on-site field design conditions, to reduce costs and for all other matters approved by the Department involving costs or credit to the State. Postponement of action on items to accumulate multi-item Bulletins is not permitted.

Prepare and issue Bulletins within ten (10) business days of receipt of the Department's authorization. Bulletins shall be in such form and detail as the Department may prescribe. The Professional shall incorporate all accepted Bulletin revisions or design interpretations into the appropriate originals of all applicable Contract Documents. Such revised drawings and specifications shall be issued as part of Bulletins. Each Bulletin shall prescribe a time schedule for the Construction Contractor's response. Provide one electronic copy of each Bulletin to the Department and distribute as the Department may direct.

Evaluate the Construction Contractor's price quotation(s) and review and attempt to negotiate with the Construction Contractor to provide the Department with costs that are consistent with the value of the Project Bulletin(s). Recommend appropriate action to the Department regarding the Construction Contractor's quotations within five (5) business days of receipt thereof.

PHASE 600 - CONSTRUCTION ADMINISTRATION - OFFICE SERVICES

During the construction Phase of this Project, the "DTMB-0460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract.

The Professional shall use the "DTMB-0452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The form shall be completed and signed by the Professional and compiled monthly with the original form document sent to the Department's, Project Director and a copy sent to the Construction Contractor. The on-site Inspection record standard document form shall be completed and accompany the Professional's monthly payment request.

The Professional shall provide all required construction administration services and timely professional and administrative initiatives as the circumstances of the Project construction may require to allow the design intent requirements of the Professional's Contract Documents to be successfully implemented into a completed Project through the Construction Contractor's completion of the Construction Contract work.

In observed cases which may involve danger to human life, immediate safety hazards to personnel, existing or impending damage to the Project, to State/Client Agency property or to other property; as may be impacted by the Project, the Professional shall inform the Construction Contractor(s) of the situation and their observations.

The Professional shall immediately record and report such situations to the Department and certify any accrued Project costs in writing. The Professional shall always have access to the Construction Contractor(s) work.

Establish and maintain effective construction administration office procedures, systems, and records to progressively, and exclusively, manage and control the Professional's obligations, commitments, achievements, and expenditures under this construction Phase administration.

Monitor the quality and progress of the Project construction Phase work. Maintain all necessary Project records, provide on-site visitation reports, and provide all administrative office action as may be necessary to inform the Construction Contractor(s), in writing, with respect to their compliance with the design intent of the Contract Documents.

Advise and assist the Department in taking all practical steps necessary to address and complete the Project in the event of performance delays or defaults by the Construction Contractor(s).

Task 601 COORDINATION: Coordinate the Professional's staff, Consultants, and all other Project related resources. Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting. Meeting minutes and agendas are to follow the order and outline of the Departments "Sample Progress Meeting Format" and include a summary of executed CCO's, pending CCO's, Shop and RFI Submittal Logs and statuses.

Task 602 SHOP DRAWINGS, SUBMITTALS, and APPROVALS: Monitor, evaluate, and provide administrative action as necessary to achieve timely processing of shop drawings and such other submittals and approvals that are the responsibility of the Professional. Maintain a record of all required, received, rejected, and approved submittals of shop drawings, color/material samples, finishes, and other items requiring the Professional's approval. Notify the Construction Contractor(s), in writing, (copy to the Department) of delinquent submittals, the consequences of such delays, and prescribe a time schedule for their submittal/resubmittal, which will not jeopardize the Construction Contract completion date.

No design revisions will be made as part of the Professional's review and approval of shop drawings, or other submittals. In addition to all other functions, the Professional's approval of shop drawings shall verify the submittals furnished by the Construction Contractor(s) conforms to the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements. Provide written approval or rejection of shop drawings within ten (10) business days of receipt in the Professional's office. Provide and distribute one electronic copy in PDF format of approved submittals as directed by the Department.

Task 603 PAYMENT PROCEDURES: Monitor, evaluate, and provide timely administrative action, as necessary, to certify or reject, as appropriate, and process the Construction Contractor's schedule of costs and monthly submitted payment requests. Review of Payment Requests are to be completed concurrently by the Professional and the Department's Field Representative in which the Professional is to then provide comments to the Contractor.

Payment by the State of Michigan to the Construction Contractor shall be based on the Construction Contractor's approved completion of Contract work performed prior to the date of each monthly submitted payment request. Payment to the Construction Contractor for each monthly submitted payment request invoice shall be made to the Construction Contractor within thirty (30) consecutive calendar days following the Department's receipt and approval of an approved payment request invoice from the Professional. Certification or rejection of all submitted payment requests will be made by the Professional, in writing, within ten (10) business days of receipt in the Professional's office. The Professional shall certify to the Department, in writing, the dollar amount the Professional determines to be due to the Construction Contractor for their monthly submitted payment request or the Professional shall return the payment request to the Construction Contractor indicating the specific reasons in writing for rejecting the Construction Contractor's monthly submitted payment request certification.

Issue an appropriate certificate for payment only pursuant to a correctly prepared and accurate payment request and only for acceptable Project work. Payment certification shall constitute a written representation by the Professional, to the Department, that based on their Construction Administration on-site field Inspections, and the Professional's evaluations of field reports, test results, and other appropriate and available factors, the quantity and quality of Project work for which the payment request is certified has been accomplished by the Construction Contractor in accordance with the design intent of the Contract Documents and that the payment request is consistent with the quantity and quality of acceptable Project work in place, and that the acceptable materials are properly stored on-site and/or off-site.

No payment request certificate shall be submitted that requests payment for disputed Project work or any Project work showing deficient test results. No payment request certificate may be submitted after the Construction Contract completion date which does not provide for withholding of assessable and/or projected liquidated damages.

Pursuant to the Department's notification, the Professional's certification shall reduce from the amount earned, two (2) times the amount of any current prevailing wage rate payment deficiency, as certified by the Department of Licensing and Regulatory Affairs, Wage and Hour Division against the Construction Contractor or any Subcontractor or supplier thereof. Payment request rejections shall be accompanied with a written explanation and a copy shall be submitted to the Project Director and Department Field Representative.

Task 604 CONSTRUCTION SCHEDULE PROGRESS: Monitor, evaluate, and provide timely administrative action, as necessary, to determine whether the Construction Contractor's construction work schedule and progress appear to be adequate to achieve the Project on time and on schedule. Notify the Department, in writing, within three (3) business days of receipt of the Construction Contractor's proposed Project construction schedule, or amendments thereto, if in the Professional's opinion such construction schedule will produce the Project within the allotted Construction Contract completion time. Notify the Construction Contractor and the Department, in writing, if in the Professional's opinion such schedule should be accepted or rejected. Revise the construction schedule of Task 514 to show that the proposed on-site visitations of Tasks 703-706 are consistent with the actual events of the Project construction schedule. Give prompt, written notification to the Construction Contractor(s) and to the Department of inadequate construction schedule progress.

Unless the Department determines that the needs of the Project require other action the Professional shall proceed as follows: (1) Investigate at the time of occurrence, any areas of inadequate progress whose consequence may be a delay in, or increased cost for, a work item; (2) Notify the Construction Contractor(s) and the Department of the Professional's opinion of the problem and responsibility for the delay and costs. Advise whether the delay in any work may result in delays in the Construction Contract completion date; and (3) Advise the Construction Contractor(s) and the Department, in writing, of recommended action(s) by respective parties necessary to facilitate actions by the Construction Contractor to complete the Project construction on schedule.

Bulletin Costs: During the 600 and 700 Construction Phase, review and evaluate the Construction Contractor's quotations for Bulletin work. Negotiate as appropriate to assure the Department's costs commensurate with the actual value of the Project work. Provide the Department with written recommendation(s) within five (5) business days of receipt of the quotation.

Evaluate any documentable impact on the Project construction schedule claimed by the Construction Contractor(s) arising from Bulletin work. Provide appropriate and timely action under terms allowable under the Construction Contract, to implement any Bulletin work which the Professional and the Department consider critical to the Project construction schedule, but whose cost is disputed.

Within ten (10) business days of its receipt, evaluate and provide the Department with appropriate written recommendations, along with an analysis of any request by the Construction Contractor(s) for a time extension of their Construction Contract completion date. No recommendation for a Construction Contract time extension may be submitted to the Department which is not substantiated by the Professional's technical review and evaluation of the Project construction schedule showing critical path work, noncritical path work, and float time for the complete Project and any work at issue and having such detail as to clearly document the Construction Contractor's claim.

Any recommendation for a time extension of the Construction Contractor's Contract completion date must include a complete analysis of all direct and indirect costs of the Construction Contractor, the Professional, and the Department regarding the time extension. Where the Project is not substantially complete on the Construction Contract completion date, notify the Construction Contractor and the Department, in writing, of the expiration of the Construction Contract completion date and of the assessment and/or withholding of liquidated damages.

Task 605 CONSTRUCTION TESTING PROGRAM: Monitor, evaluate, and provide timely administrative action as may be required in response to the results of the construction quality control and material testing program. In circumstances where the testing is not provided by the Department or the Professional, evaluate, and approve, or disapprove the Construction Contractor(s) work plan for providing all construction test reports.

Provide the Construction Contractor(s) and the Department with written evaluation of all construction test reports, copies of construction test reports, marked with the Professional's approval or disapproval within five (5) business days of receipt of the report.

Within five (5) business days of the receipt of any construction test reports not meeting the Construction Contract requirements direct the Construction Contractor(s), in writing, to take appropriate, corrective, or replacement measures within a prescribed time. Follow up, as appropriate, to require the Construction Contractor(s) to achieve the design intent of the Professional's Contract Documents and avoid delays to any element of work which may, in the Professional's opinion, result in a delay in the Construction Contract completion date. Notify the Construction Contractor, in writing, of any delinquent corrections/replacement and take administrative action in accordance with the Construction Contractor performance text of Task 606.

Task 606 CONSTRUCTION CONTRACTOR PERFORMANCE: Throughout the execution of the Project Construction Contract, monitor and evaluate the Construction Contractor(s) performance and quality assurance procedures and provide timely, administrative action to cause the Construction Contractor(s) to correct their construction deficiencies. With the Department's concurrence, the Professional may direct, in writing, the exposure and testing of any Project construction work, already in place or covered, which the Professional, and/or the Department, believes may not meet the design intent of the Professional's Contract Documents.

Notify the Construction Contractor, and the Department, in writing, within five (5) business days of its identification of any aspect of the Construction Contractor's performance which is inconsistent with the Contract Documents or which, in the Professional's opinion, is inconsistent with the design intent of the Professional's Contract Documents. Prescribe a reasonable time for correction which will not jeopardize the Project construction schedule completion date.

Exert all practical administrative means necessary to require the Construction Contractor to perform as required by their Construction Contract to meet the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements.

Deficient Performance: Upon identification of deficient performance, where the Project Construction Contractor fails to provide timely or acceptable performance, the Professional shall proceed as follows: (1) Notify within three (3) business days the Department, the Construction Contractor and any affected surety, in writing, and by registered mail delivery, of the potential for the Construction Contractor's default action and the Professional's recommendation; (2) Identify applicable Construction Contract references, with design interpretation of such references, and clearly explain where the Construction Contractor's performance fails to meet the design intent of the Professional's Contract Documents; and (3) Specify a time and date for the Construction Contractor to begin active and continuous work towards Contract compliance and a specific time and date for completion.

Potential Default: Upon notification by the Department of potential default by the Construction Contractor, where the Project Construction Contractor fails to adequately perform, the Professional shall proceed as follows: (1) Document the potential default, in writing, to the Construction Contractor, the Construction Contractor's surety and the Department; (2) Provide an explanation of the consequences of the potential default to the Project; (3) Provide the Department with a complete set of Project record documentation necessary to assist the Department in the legal implementation of the Construction Contractor's default action; (4) Establish an appropriate amount and withhold from payment certification of the associated line item(s), include a retainage consisting of any costs expended for testing and other investigations necessary to establish unsatisfactory performance plus a contingency amount, adequate for the Department to correct such unacceptable performance by means other than the Construction Contractor; and (5) Notify the Construction Contractor and their surety, in writing, of the withholding.

Default: Upon notification of the Project Construction Contractor's default, the Professional shall proceed as follows: (1) Identify the extent of defaulted and/or remaining Project work; (2) Recommend a procedural program for the Department to achieve the defaulted work within the remaining Project construction time schedule if possible; and (3) Provide modified Bidding Documents that will allow the Department to rebid the remaining portion of work using the Professional's recommendations. The Professional will be compensated by the Department with a Contract Change Order for providing the defaulted Construction Contractor assistance service.

Task 607 PUNCH LIST PROCEDURES: Prepare and distribute Punch Lists for each Construction Contract.

Prescribe a reasonable time schedule for completion of all construction Punch List items and identify an additional amount to be withheld from payment should standard closeout schedule of values be deemed insufficient to assure the Department sufficient funds to cover all costs as may become necessary to complete the remaining delinquent work. Distribute Punch Lists within five (5) business days of the final Inspection. Notify the Construction Contractor of any delinquent Punch List construction corrections and take appropriate action in accordance with Tasks 604 and 606.

Task 608 CLAIMS: Evaluate and respond to any claims (in whole or in part) against the Department within five (5) business days of the receipt of such claim, in the Professional's office. Where any element of claims or subsequent litigation, are based, in whole or in part, upon any deficiency or delinquency in the Professional's services, the Professional shall provide, in a timely manner, all professional services necessary to defend the claim issue(s). No payment will be due for claim defense services accumulated under this Task until settlement or judgment of litigation concludes the claim issue. The claim settlement or judgment decision will be used as the basis for determining the Professional's obligation, if any, for the costs of such professional services and/or for any costs incurred by the Department for which performance by the Professional may be responsible or contributory. Billing under this claims Task will be in accordance with an appropriate Contract Modification and/or Contract Change Order.

Task 609 AS-BUILT DOCUMENTS: Within forty-five (45) consecutive calendar days after receipt of properly prepared and submitted Construction Contractor annotated as-built documents, incorporate, and render them into the Professional's original Contract Documents for as-built documents. The Professional shall provide the Design and Construction Division with the following two (2) types of deliverable as-built documents for Project close-out: 1) One (1) set of legible/reproducible bond copy completely updated and corrected, as-built records of the Contract Documents/architectural and/or engineering drawings; and 2) Two (2) electronic sets of completely updated and corrected as-built record close- out documents and architectural and/or engineering drawings, one in .pdf format and one in Auto CAD format that is "Auto CAD readable" and conforms to the American Institute of Architects (AIA) National CAD Standard format.

The as-built documents shall depict all construction modifications, additions, and deletions made either by Addendum, Bulletin, supplemental written instructions, and the written notations shown on the Construction Contractor's as-built drawings. The Professional's as-built architectural and engineering drawings shall be of such clarity, detail, and completeness that reference to other documents will not be required to describe or depict, the Project. The as-built documents shall be free of the Professional's original architectural and/or engineering final design errors and omissions. The Professional shall revise the final design as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final on-site Inspection.

The Professional's services for the Task 609, As-Built Documents are not complete until: (1) The as-built architectural and engineering drawings have been verified, in writing, by the Professional to the Project Director as being accurate and complete; and (2) The as-built architectural and engineering drawings have been turned over and accepted by the Department's, Project Director in writing.

Task 610 CLOSE-OUT PROCEDURES: Maintain for the Project record a schedule of the Construction Contractor's required submittals for Project close-out. Review and approve or reject all submittals as appropriate. Within forty-five (45) consecutive calendar days after Substantial Completion of the Project, after building or Project occupancy, verify to the Department's, Project Director in writing, that the following documents have been received: (1.) All Project code compliance approvals; (2.) Final Inspections; (3.) Final occupancy permits; (4.) Construction Contractor's as-built final design marked-up architectural and engineering drawings; (5.) Copies of "Operation and Maintenance Manuals" of the Project systems; and (6.) Equipment warranties and guarantees.

Provide to the Design and Construction Division within forty-five (45) consecutive calendar days after Substantial Completion of the Project, three (3) copies of "Operation and Maintenance Manuals" of the Project systems and equipment. These close-out manuals shall include copies of reduced size, as-built architectural and engineering drawings, specifications, and all instructions published or furnished by respective manufacturers, construction code compliance certificates, equipment warranties, and guarantees. The manuals shall also include a complete description of the Professional's Final Design intent concepts, operation, and required maintenance of each system. Participate in the Construction Contractor's start-up and in the training instruction of State/Client Agency personnel in the operation and use of the Project systems.

PHASE 700 - CONSTRUCTION ADMINISTRATION - FIELD SERVICES

The Department may provide full or part-time Department Field Representatives to monitor the coordination and progress of the services of the Professional and the Project work of the Construction Contractor(s). Such Inspections may generate reports, minutes of meetings, notes, and documents, which will be available to, and may be useful for, the Professional. The Project Director, or Department Field Representative, has the authority to require the Professional to respond to and resolve design related problems, construction field problems and to attend Project related meetings. Unless delegated by specific written notice from the Department, the Department Field Representative does not have any authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

The Professional shall provide sufficient field Inspections of the Project to administer the construction Phase field services and its related construction Phase administration office services, as directly related to the degree of Project complexity and, up to and including full-time field Inspections. The construction field Inspections shall occur as the construction on-site field conditions and the Project may require and during the regularly scheduled twice a month progress meeting.

The Professional shall use for their construction field Inspection services, only personnel having such professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

The Professional shall review the Project construction work in place and that sequentially planned. The Professional shall determine whether the actual Project construction schedule progress appears to be in accordance with the approved Project construction schedule and whether the quality of the work appears to be in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and are without apparent defects or deficiencies. No on-site advertising by, or of, the Professional or Project signs other than those appropriate to locate an approved field office will be permitted.

Task 701 COORDINATION: Coordinate the Professional's staff, Consultant firm's staff, Construction Contractors, and all other Project related resources.

Task 702 PRECONSTRUCTION MEETING: Preside at and record preconstruction/organizational meetings for each Construction Contract. Issue meeting minutes and the completed "DTMB 0460, Project Procedures" documents package.

Task 703 CONSTRUCTION INSPECTIONS: The Professional and their Consultants shall conduct and record the principal events and status of the work of all scheduled and other on-site Project activities. The construction field Inspections shall occur as the field conditions and the Project may require and during the regularly scheduled progress and payment meetings.

All construction progress Inspections shall be recorded in the form of a written report to the Department and the Construction Contractor within five (5) business days of the Project construction progress Inspection. The purpose of such Inspection/visitations includes, but is not limited to: (1) Achieve and maintain a working familiarity with the status, quantity, and quality of the Project construction work in place; (2) Determine if the actual Project construction schedule progress is in accordance with the approved Project construction schedule; (3) Review the installation and determine the acceptability of preparations for, and installation of, pending critical construction components and activities; and (4) The Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify, in writing, to the Department's, Project Director and the Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements.

Task 704 PROBLEM SOLVING MEETINGS: Conduct and record problem solving meetings between the Professional and the Professional's Consultants, the Construction Contractor(s), their Subcontractors, the Department, the Project Director and the Department Field Representative, and any construction managers and other affected parties on-site or elsewhere to assess the construction work progress and provide design interpretation decisions to resolve problems affecting the construction work.

These problem- solving meetings shall be scheduled as the construction field conditions and the Project may require, and/or shall be at such time as the Construction Contractor(s), the Professional, the Department, the Project Director, the Department Field Representative, and any construction manager agree is appropriate to the Project construction work progress. Non-scheduled or emergency meetings shall be held at such time as necessary to maintain the schedule of various work items and to avoid delays in the Construction Contract completion date.

Task 705 PROGRESS MEETINGS: Conduct and record scheduled Project construction progress meetings (twice a month) with the Project Director, the Department Field Representative, the State/Client Agency, the Construction Contractor(s), and any construction manager. Assess Project construction work progress and provide timely, administrative actions as necessary to maintain the Project construction work on schedule and respond to and resolve all design related and construction items affecting the Project construction cost and be following the design intent of the Contract Documents, in accordance with Tasks 513 and 514.

Task 706 FINAL PROJECT INSPECTION: Conduct final construction field Inspections of the Project, in concert with the Construction Contractor(s), the Project Director, the Department Field Representative, the State/Client Agency, and any construction manager. Final Project field Inspections shall be conducted to witness and record equipment start-up and all testing, to verify, in writing, that each Construction Contractor has achieved Substantial Completion, to prepare Punch List(s) items, and to determine the status of any part of the Project construction work where the Department intends to take beneficial use or occupancy. Verify to the Project Director and Department Field Representative, in writing, the completeness and accuracy of the Construction Contractor's as-built drawings during the Project construction Phase Field Inspection(s) and identify any corrections required. The Professional shall revise the final as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final Inspection. Determine to the extent possible that the Project has been constructed in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and that all equipment and systems function without defects.

ARTICLE II
COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional, as compensation for professional services, an hourly billing rate for each employee providing a direct service to this Project, on a not-to-exceed basis as specified herein, subject to subsequent modification mutually agreeable to the parties hereto; provided, however, the Professional may not incur costs, or bill the Department, for professional services in excess of the estimates established for this Project without the prior written agreement of the Department.

The attached proposal prepared by the Professional in response to the Request for Proposal, by the Owner, may describe methodology, services, schedule, and other aspects of the work to be performed under the Contract but does not supersede the Contract.

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and non-technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order.

Professional services shall not be performed, and no Project expense shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a DTMB Form 0402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project work.

The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article.

This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor’s quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director. The Professional shall provide, at no additional compensation, professional services necessary to respond to and resolve all Construction Contractor design related claims arising wholly or in part from the Professional’s Contract Documents errors or omissions or other aspects of the Project’s design or the Professional’s performance which are inconsistent with the Professional or Construction Contract. Reproduction costs for the Professional firm’s interpretations, study/design clarifications, and Bulletins necessary to achieve the Contract scope of work final design requirements is not allowable for reimbursement and shall be accounted as part of the Professional firm’s lump sum fee of this Contract.

2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve this Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directed in writing by the Project Director.

2.2 EMPLOYEE HOURLY BILLING RATES: Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract. The Professional may not provide different hourly billing rates for the same individual for different Phases.

No lump-sum subcontracts for the professional services of any employee may be billed against this Contract. Any employee associated with this Project who performs the professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate.

The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification during the life of this Contract to account for normal personnel pay increases.

Hourly billing rates include but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, computer costs/operating costs and time, telephone, telephone-related services, and all reproduction services (except Contract Bidding Documents).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field Inspections), and all similar, or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rate.

All incidental postage, mail, or other shipping or delivery services, acquisition, bad debts, previous business losses, employment fees, depreciation, and operating costs for equipment, including computer design and/or computer drafting systems, and any specialized testing equipment are to be included. The hourly billing rate shall include, without exception, secretarial, computer/typing/word processing, editing, and clerical services utilized in any way for the Project as well as other non-technical and/or overhead employees. The hourly billing rate also includes all profit without regard to its form or distribution.

Items not allowable as part of the Professional's calculated hourly billing rate include but are not limited to: Any costs associated with litigation and settlements for the Professional, or other liability suits, out-of-state offices, and associated travel, bonuses, profit sharing, premium/overtime costs, public relations, entertainment, business promotion, contributions, and various speculative allowances.

The hourly billing rate for the Professional may not be applied to the work of the Professional's Consultant's staff. Each Consultant firm must submit a separate hourly billing rate with proper documentation for the Consultant services they will provide as part of the Proposal.

The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. The Professional's Consultant services shall be billed as an authorized reimbursable expense item at a direct cost times the Firm's mark-up percentage, not to exceed 5%, accepted by the Department.

2.3 RANGE OF EMPLOYEE HOURLY BILLING RATES: The Professional shall identify the service being provided and include the Professional's or Consultant's employee(s) full names and position classifications for the Project and their current hourly billing rates at the beginning and at the anticipated end of the Project. This hourly billing rate range shall reflect any anticipated pay increases over the life of the Contract. The range of hourly billing rates for any employee position or classification may not be changed without an approved Contract Modification.

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost times the firm's mark-up percentage amount approved by the Department, not to exceed 5%. Reimbursement of authorized expense items at direct cost times the firm's mark-up percentage amount is intended only to compensate the Professional for their direct costs. The Professional shall be responsible for the selection of the supplier of their professional services or materials, the coordination, adequacy, and application of their professional services, whether provided by the Professional's staff or provided by their Consultant, and therefore responsible for any Project costs that exceed the Contract per Phase reimbursement Budget.

For Projects further than 100 miles one-way from the Professional firm's office, travel expenses to the project site will be allowed as a reimbursable expense at the State of Michigan's rates, based on DTMB's Vehicle and Travel Services Travel Rate Reimbursement for premium mileage rates in effect at execution of this contract. Mileage allowed will be actual, less 100 miles each way. Other travel expenses are not to be included, unless specifically authorized in writing.

In addition, direct cost reimbursement items may include soil borings, site surveys and any required laboratory testing not performed in house, Design Code Compliance and Plan Review Approval Fees by the licensing agency; reproduction of documents for legislative presentation, artistic productions, mobilization of testing equipment, laboratory costs for testing samples, per-linear-foot cost of soil borings and specialized inspections of the structural, mechanical, electrical, chemical or other essential components of the Project.

Compensation for this Contract shall not exceed the amounts per Project Phase shown in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor their and their Consultant firms Project costs, activities, and progress and to give the Project Director timely notification of any justifiable need to increase the authorized fee. The Professional may not proceed with professional services that have not been authorized by the Project Director and shall immediately notify the Project Director if such services have been requested or have become necessary. Identification of Professional and Consultant staff, hourly billable rates, and an itemized list per Project Phase of authorized direct cost reimbursement items are identified in the attached Professional's proposal.

ARTICLE III
PAYMENTS

Payment of the professional services fee shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director on a payment request form (DTMB- 440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request.

Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase. Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require. Each of the Professional's Consultant's submitted payment request applications shall include similar information.

This includes, but is not limited to:

- Phase Numbers for the professional services provided.
- Professional's personnel and position/classification providing service and hours worked
- Current hourly billing rate charges for each individual position/classification.
- Copy of certified on-site visitation log or site visit report showing time on-site.
- Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
- Authorized reimbursable expense items provided with receipts and invoices.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify the Professional of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to the Professional's continuing obligations, including claims for deficiencies or substandard Contract Activities. The Professional's acceptance of final payment by the State constitutes a waiver of all claims by the Professional against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under the Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at http://www.michigan.gov/SIGMAVSS to receive electronic funds transfer payments. If Contractor does not register, the State is not liable for failure to provide payment. Without prejudice to any other right or remedy if may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

ARTICLE IV
ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, of hourly billing rates, authorized reimbursable expense items, and all other Project related accounting document to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of three (3) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE V
INSURANCE

The Professional shall purchase, maintain, and require such insurance that will provide protection from claims set forth below which may arise out of or result from the Professional firm's services under this Contract, whether such service is performed by the Professional or performed by any of the Professional Firm's Consultant's or by anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable. The following insurance policy limits described below are intended to be the minimum coverage acceptable by the State:

For this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

(a) The Professional must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Professional's or a consultant's performance, including any person directly or indirectly employed by the Professional or a Consultant, or any person for whose acts the Professional or a consultant may be liable.

(b) The Professional waives all rights against the State for the recovery of damages that are covered by the insurance policies the Professional is required to maintain under this Section. The Professional's failure to obtain and maintain the required insurance will not limit this waiver.

(c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self- insurance) carried by the State.

(d) The State, in its sole discretion, may approve the use of a fully funded self-insurance program in place of any specified insurance identified in this Section.

(e) Unless the State approves, any insurer must have an A.M. Best rating of "A-" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State.

To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at http://www.ambest.com.

(f) The Professional is responsible for the payment of all deductibles.

(g) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

(h) Workers' Compensation Insurance: The Professional must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Professional's domicile. If the applicable coverage is provided by a self-insurer, the Professional must provide proof of an approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of the Professional's domicile, the Professional must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

(i) Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant to purchase and maintain the insurance coverage required in this Article. Alternatively, the Professional may include a Consultant/Subconsultant under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subconsultant to comply with insurance requirements does not limit the Professional's liability or responsibility.

(j) If any of the required policies provide claims-made coverage, the Professional must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of Contract Activities; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, Professional must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

(k) Professional must: (a) provide insurance certificates to the Contract Administrator, containing the (1) project file number; (2) the project title; and (3) description of the program, at Contract formation and within 20 calendar days of the expiration date of the applicable policies; (b) require that consultants maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

Required Limits	Additional Requirements
Commercial General Liability Insurance	
Minimum Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Professional must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 20 10 12 19 and CG 20 37 12 19.
Umbrella or Excess Liability Insurance	
Minimum Limits: $2,000,000 General Aggregate	Professional must have their policy follow form.
Automobile Liability Insurance	
Minimum Limits: $1,000,000 Per Accident	Professional must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.
Workers' Compensation Insurance	
Minimum Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
Minimum Limits: $500,000 Each Accident $500,000 Each Employee by Disease $500,000 Aggregate Disease.	
Professional Liability (Errors and Omissions) Insurance	
Minimum Limits: $1,000,000 Each Occurrence $2,000,000 Annual Aggregate	

Environmental and Pollution Liability (Errors and Omissions) ***	
Minimum Limits: $1,000,000 Each Occurrence $2,000,000 Annual Aggregate	Professional must have their policy: (1) be applicable to the work being performed, including completed operations equal to or exceeding statute of repose; (2) not have exclusions or limitations related to Transportation (upset overturn, spills during loading or unloading, Hazardous Materials Handling, and Non Owned disposal site liability; and (3) endorsed to add "the State of Michigan, its departments, division, agencies, offices, commissions, officers, employees, and agents" as additional insured..

(***Professional to include Pollution Liability Insurance if needed ***)

Contractual Liability insurance for claims for damages that may arise from the Professional's assumption of liability on behalf of the State under Article VI concerning indemnification for errors, omissions, or negligent acts in the course of the professional service or other provision within this Contract to the extent that such kinds of contractual liability are insurable in connection with and subject to limits of liability not less than for the general liability insurance and the professional liability insurance and set forth in subsections (c) and (d) above.

Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant/Subcontractor to purchase and maintain the insurance coverage required in this Article. Alternatively, the Contractor may include a Consultant/Subcontractor under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subcontractor to comply with insurance requirements does not limit the Professional's liability or responsibility.

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance **will not** be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on the certificate in the oblong rectangle space labeled "Description of Operations/Locations/Vehicles/Exclusions Added by Endorsement/Special Provisions/Special Items" the following items: (1) The ISID Title; (2) The ISID Contract Number; and (3) The State of Michigan must be named as an "Additional Insured on the General Liability and Automobile Insurance Policy." The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

This Section is not intended to and is not to be construed in any manner as waiving, restricting, or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Professional to indemnify, defend and hold harmless the State).

The attached, Certificates of Insurance documents required for this Project shall be in force for this Project until the final payment by the State to the Professional is made and shall be written for not less than any limits of liability specified above. The Professional has the responsibility for having their consultant firms comply with these insurance requirements.

ARTICLE VI
INDEMNIFICATION

(a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subconsultants/Consultants, or by anyone else for whose acts any of them may be liable.

(b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subconsultants/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its Subconsultants/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

(c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subconsultants/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or services, or its operation, become or in the State's or Professional's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Professional, (ii) replace or modify to the State's

satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Professional, (iii) accept its return by the State with appropriate credits to the State against the Professional's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Professional shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Professional, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Professional under this Contract.

ARTICLE VII
OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared, and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion, and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation because of this Contract requirement. The Professional may retain a copy of all Project documents for their files. The professional is to provide unedited CAD files (without Professionals title block) to the Contractor as requested for use in creating Shop Drawings at no additional cost.

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional.

To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement. All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided. The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

The Contract deliverables, Contract Documents, or other documents produced under this Contract may be used by the Department, or others employed by the Department or State of Michigan, for reference in any completion, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without monetary compensation to the Professional.

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional.

Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan

ARTICLE VIII
TERMINATION

The State may, by written notice to the Professional, terminate this Contract in whole or in part at any time, either for the State's convenience or because of the failure of the Professional to fulfill their Contract obligations. Upon receipt of such notice, the Professional shall:

a) Immediately discontinue all professional services affected (unless the notice directs otherwise), and

b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.

8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.

8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been affected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.

The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX
SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that neither of the parties hereto shall assign this Contract without the prior written consent of the other.

ARTICLE X
GOVERNING LAW

This Contract shall be construed in accordance with the laws of the State of Michigan.

ARTICLE XI
NONDISCRIMINATION

In connection with the performance of the Project under this, the Professional agrees as follows:

- The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex *(as defined in Executive Directive 2019-09)*, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position.

- The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.

- The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; Executive Directive 2019-09; and all published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.

- The Professional will furnish and file nondiscrimination compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of the Professional and of each of their Consultant firms. The Professional will permit access to all books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain nondiscrimination compliance with this Contract and with rules, regulations, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended.

- In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission.

Notice of said declaration of future ineligibility may be given to any or all the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

- The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.

- The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations, or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII
CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of State Facilities Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of State Facilities Administration may be appealed to the Michigan Court of Claims within one (1) year of the issuance of the Director's decision. The Professional agrees that the Department's appeal procedure to the Director of State Facilities Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII
DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles 1 through 14 and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including architectural and/or engineering drawings, and specifications, by additions, deletions, clarifications, or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the SIGMA Funding Information, Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor. An Addendum issued after the competitive construction Bid opening to those construction Bidders who submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

BID: A written offer by a construction Bidder for the Department. Project construction work, as specified, which designates the Construction Bidder's Base Bid and Bid prices for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive Construction Bid directly to the Department.

BIDDING DOCUMENTS: The Professional's Project Contract Documents as advertised, and all Addenda issued before the construction Bid opening, and after the Construction Bid opening, if the Project construction work is rebid without re-advertising. Bidding documents shall consist of the Phase 500 - Final Design architectural and/or engineering drawings and specifications, any Addenda issued, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to standard forms provided by the Department. Such forms consist of the Project advertisement, the Instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the form of agreement between the Department and the Construction Contractor for the project work requirements.

BID SECURITY: The monetary security serving as guarantee that the Bidder will execute the offered Construction Contract or as liquidated damages in the event of failure or refusal to execute the Construction Contract.

BUDGET: The maximum legislatively authorized Budget amount to be provided by the State of Michigan and available for a specific purpose or combination of purposes to accomplish the project for this Contract.

BULLETIN: A standard document form (DTMB-0485, Bulletin Authorization No. and the DTMB-0489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department to describe a sequentially numbered change in the Project under consideration by the Department and the Professional and to request the Construction Contractor to submit a proposal for the corresponding adjustment in the Contract price and/or Contract time, if any. These standard document forms are a part of the "DTMB-0460, Project Procedures" documents package.

CONSTRUCTION CONTRACT: A separate written Contract agreement between the Construction Contractor and the Department for the construction, alteration, demolition, repair, or rebuilding of a State/Client Agency building or other State property.

CONSTRUCTION CONTRACTOR: Any construction firm under a separate Contract to the Department for construction services.

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the Department's, current version of MICHSPEC or DC Spec as adopted and modified by the State of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project Director and the Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements. The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled progress (twice monthly) meetings. The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve.

The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

CONSULTANT: Any individual, firm, or employee thereof, not a part of the Professional's staff, but employed by the Professional and whose professional service cost is ultimately paid by the State of Michigan, either as a direct cost or authorized reimbursement. This includes the recipient(s) of Contract Orders for material, support, and/or technical services. Also, included are persons and firms whose management and/or direction of services are assigned to the Prime Professional as may be provided elsewhere in this Contract.

CONTRACT CHANGE ORDER: A standard document form (DTMB-0403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Appendix 1 – Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design architectural and/or engineering plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages if applicable, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DTMB-0410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Appendix 1 – Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article 2, Compensation text of this Contract. Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents/architectural and/or engineering study/design errors, omissions, or neglect on the part of the Professional.

CONTRACT ORDER: A form (DTMB-0402) issued and signed by the State of Michigan. Once authorized to proceed by the Project Director, the Professional may: (1) Begin to incur Project expenses and proceed with the Project on-site; and (2) Provide professional services for the fee amount designated in the Phases of the Contract Order. Issuance of the DTMB-0402 certifies that: (1) The State has entered enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional's Professional Services Contract by the SFA, DCD Director.

DEPARTMENT: The Department of Technology, Management and Budget, State Facilities Administration, Design and Construction Division. The Department will represent the State of Michigan in all matters pertaining to this Project. This Professional Services Contract will be administered through the Department on behalf of the State of Michigan and The State/Client Agency.

DESIGN MANUAL: Provides the Professional with information regarding the Department's current "DTMB DCD Design and Construction Standards for Office Construction and Tenant Fit out" and Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Services Contractors" review process requirements regarding the uniformity in Contract materials presented to it by the Professional and the State/Client Agency(ies). This manual contains the following noted standards, instructions, and procedures information for: (1) General instructions for planning documents from Phase 100-Study through Phase 500-Final Design; (2) Net and gross area/volume; (3) Project cost format; (4) Outline architectural and engineering specifications; (5) Specifications in documentation Phase; (6) Instructions for proposal; (7) Bidders questionnaire; and the (8) Project job sign

DIRECTOR: The Director of the Department of Technology, Management and Budget or their authorized State of Michigan representative.

DIRECTOR-SFA: The Director of the Department of Technology, Management and Budget, State Facilities Administration, or their authorized State of Michigan representative.

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Department who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director. The Project Director, or the Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time. The Department Field Representative is be included throughout all other phases (100 – 400) to provide additional knowledge and input throughout the development of the project.

INSPECTION: The Professional and their Consultant firm's on-site and/or off-site examination of the Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's, Project Director and the Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: An individual employee of a Professional who is essential for the successful completion of the Project.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department accepting the Professional's written recommendation to award the construction Bid to the lowest responsive, responsible best value construction Bidder. The Notice of Intent to Award letter will also designate the Contract price and itemize the alternates that the Department, at its sole discretion has accepted.

PHASE: A discretely distinguishable step necessary to produce the Project during the Professional providing architectural and/or engineering study, design, and construction administration services.

PRIME PROFESSIONAL SERVICES CONTRACTOR/PROFESSIONAL: An individual, firm, partnership, corporation, association, or other legal entity who is legally permitted by law to sign and seal final design construction Contract Documents and licensed under the State of Michigan's professional licensing and regulation provisions of the Occupational Code (State Licensing Law), Act 299 of the Public Acts of 1980, Article 20, as amended, to practice architecture, engineering, environmental engineering, geology, civil, land surveying, or landscape architecture services in the State of Michigan.

The Prime Professional Services Contractor/Professional is also legally permitted by the State of Michigan's regulation provisions of the State Construction Code, Act 230 of the Public Acts of 1972, as amended, and designated in a Construction Contract by the Department to recommend construction progress payments to the Construction Contractor.

PROJECT: Any new construction, existing site, new utilities, existing building renovation, roof repairs and/or removal and replacement, additions, alteration, repair, installation, construction quality control and material testing services, painting, decorating, demolition, conditioning, reconditioning or improvement of public buildings, works, bridges, highways, or roads authorized by the Department that requires professional study/design services as part of this Contract.

PROJECT COST: The total Project cost including, but not limited to, site purchase, site survey and investigation, hazardous material abatement, construction, site development, new utilities, telecommunications (voice and data), professional fees, construction quality control and material testing services, testing and balancing services, furnishings, equipment, architectural and/or engineering plan(s)/drawing(s) design code compliance and plan review approval fees and all other costs associated with the Project .

PROJECT DIRECTOR: The professional licensed employee of the Department who is responsible for directing and supervising the Professional's services during the life of this Contract. The Project Director, or the Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project related meetings.

PROJECT/PROGRAM STATEMENT: The Project/Program Statement is provided by the Department and defines the scope of the problem, describes why this Project is desirable, and provides a preferred resolution of the problem.

PROJECT TEAM: The Professional, the Project Director, the Department Field Representative, a representative of the State/Client Agency, and others as considered appropriate by the Department.

PUNCH LIST: A list of minor construction Project items to be completed or corrected by the Construction Contractor, any one of which do not materially impair the use of the Project work, or the portion of the Project work inspected, for its intended purpose. A Punch List shall be prepared by the Professional upon having decided that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, the Project Director and the Department Field Representative, the State/Client Agency and any construction manager, is substantially complete and shall be attached to the respective DTMB-0455, Certificate of Substantial Completion form. This standard document form is a part of the "DTMB-0460, Project Procedures" documents package.

SOIL EROSION AND SEDIMENTATION CONTROL: The planning, design and installation of appropriate Best Management Practices (as defined by the most current version of the Department's Soil Erosion and Sedimentation Control Guidebook) designed and engineered specifically to reduce or eliminate the off-site migration of soils via water runoff, wind, vehicle tracking, etc. and comply with the Soil Erosion and Sedimentation Control in the State of Michigan as regulated under the 1994 Public Act 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department of Technology, Management and Budget, State Facilities Administration, Soil Erosion and Sedimentation Control Program.

STATE: The State of Michigan in its governmental capacity, including its departments, agencies, boards, commissions, officers, employees, and agents. Non-capitalized references to a state refer to a state other than the State of Michigan.

STATE/CLIENT AGENCY: A Department of the State of Michigan, for whose use the Project will ultimately serve, which requires professional architectural and/or engineering design services.

SUBSTANTIAL COMPLETION: The form (DTMB-0445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional's Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

SUSTAINABLE DESIGN: The Professional's use of a balance of appropriate materials, products and design methods that reduce the impact to the natural ecosystems and be within the Budget constraints of the Project. Sustainable Design shall be used wherever possible by the Professional in their Project design and an itemized list shall be provided with the Professional's Contract Documents that identifies the processes and products.

TASK: Shall mean the following: (1) A quantifiable component of design related professional architectural and/or engineering study/design Task services required to achieve a Phase of the Project; (2) The most manageable sub-element within a study/design Phase; (3) A unique item of work within a study/design Phase for which primary responsibility can be assigned; and (4) Has a time related duration and a cost that can be estimated within a study, design, and construction Phase.

ARTICLE XIV
COMPLETE AGREEMENT/MODIFICATION

This Professional Services Contract constitutes the entire agreement as to the Project between the parties. Any Contract Modification of this Contract and the Project/Program Statement must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered to compensate the Professional for correcting, or for responding to claims or litigation for the Professional's Contract Documents/architectural and/or engineering study/design errors, omissions, or neglect on the part of the Professional.

APPENDIX 1

PROJECT/PROGRAM STATEMENT

PROJECT STATEMENT

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, Michigan 48909

FILE NUMBER Various		PROPOSAL DUE DATE Thursday, January 19, 2023, at 2:00 p.m., EASTERN
CLIENT AGENCY Department of Technology, Management and Budget		
PROJECT NAME AND LOCATION 2023 Indefinite Scope Indefinite Delivery (ISID) for General Professional Architectural / Engineering Design Services		
PROJECT ADDRESS (if applicable) Various		
CLIENT AGENCY CONTACT Various		TELEPHONE NUMBER
DTMB - DCD PROJECT DIRECTOR Chris Parsons		TELEPHONE NUMBER 517.256.5677

WALK-THROUGH INSPECTION DATE, TIME, AND LOCATION:

NO Pre-Proposal Meeting or Walkthrough will be held

☐ **MANDATORY** (Check box if Mandatory)

PROJECT DESCRIPTION/SERVICES REQUESTED

Provide professional architectural, engineering, surveying, or landscape architectural ISID services for a variety of state funded construction projects.

Please NOTE:

- Proposal responses MUST be uploaded to SIGMA VSS. Please enter the total cost for all phases as the bid amount.
- Firms should only submit one (1) attachment (being less than 6 MB) for proposal submission. The attachment is to be the technical and cost proposal combined.
- Do not wait until just before the 2:00 p.m. solicitation deadline to submit your proposal response. SIGMA VSS will not allow a proposal to be submitted after 2:00 p.m., even if a portion of the proposal response has been uploaded.
- If you experience issues or have questions regarding your electronic submission, you **must** contact the SIGMA Help Desk for assistance prior to the 2:00 p.m., solicitation deadline. You may contact the SIGMA Help Desk by telephone at 517.284.0540 or toll-free at 888.734.9749. You may also email the SIGMA Help Desk at sigma-procurement-helpdesk@michigan.gov
- Please email the Design and Construction Contract Specialists if you are having SIGMA VSS issues. Please include your SIGMA ticket number and any supporting documentation (i.e., screenshots) to Anne Watros (WatrosA@michigan.gov) **and** Don Klein (KleinD4@michigan.gov).
- You may be asked by our contract specialists to email your proposal. Emailed submissions will require DCD approval and will be handled on a case-by-case basis.
- Approved emailed submissions MUST be received prior to 2:00 p.m. deadline to be considered responsive and responsible.
- Responses should not be emailed to the Project Director.

NIGP CODES
906, 90607, 90610, 90632, 90638, 90642, 90644, 90646, 90648, 90658, 90672, 925, 92507, 92531, 92540, and 92588.

DESIRED SCHEDULE OF WORK
Dependent on the assigned project

ACCEPTING RFP QUESTIONS UNTIL:
Please do not submit online questions via VSS. ALL questions should be emailed to Chris Parsons at parsonsc5@michigan.gov address no later than 12:00 p.m., Eastern on Thursday January 12, 2023

REFERENCE STANDARDS: This project will comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (EPA, OSHA, and DOT), state agencies (DHHS, EGLE, DNR, and MIOSHA), and any other local regulations and standards that may apply.

This form is required to be a part of the professional service contract. (Authority: 1984 PA 431)
Attachment(s)

DTMB-0430 ISID AE
Billable rate (R 02/22)

STATE CAPITAL OUTLAY PROJECTS

REQUEST FOR PROPOSALS
FROM
PROFESSIONAL SERVICE CONTRACTORS

(Authority PA 431 of 1984)

For Indefinite Scope Indefinite Delivery
Not-to-Exceed Fee, Billable-Rate

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Request for Proposal for
2023 Indefinite Scope Indefinite Delivery (ISID) for General Architectural / Engineering / Landscape Architecture Services
Various Locations, Michigan

PROPOSAL DUE DATE: Thursday, January 19, 2023, 2:00 p.m., Eastern Time

ISSUING OFFICE

Department of Technology, Management & Budget
State Facilities Administration
Design and Construction Division

Minor State Capital Outlay Projects
REQUEST FOR PROPOSALS

Part I - Technical Proposal
Part II – Cost Proposal

Professional Services for
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
2023 Indefinite Scope Indefinite Delivery (ISID) Contract
for General Architectural / Engineering / Landscape Architecture Services
Various Locations, Michigan

SECTION I GENERAL INFORMATION

I-1 Purpose

This Request for Proposals invites the prospective professional service contractor (Professional) to prepare a qualifications statement and proposal for an Indefinite Scope Indefinite Delivery (ISID) contract for general professional design services (architecture, engineering, landscape architecture) for State of Michigan facilities maintenance, alteration, and construction projects. ISID contracts provide the State of Michigan with a simple and streamlined qualifications-based selection process for obtaining professional architectural and engineering services for minor, emergency and / or routine professional services.

Projects will be located statewide, within both developed and undeveloped areas. Proposing firms must indicate regions in which they are willing to provide services, (refer to Questionnaire Article 3, Project Location). Project types expected include building alterations, additions, various facility upgrades and special maintenance projects. ISID contracts will be used for minor, emergency and / or routine projects, but client agency needs may require ISID contracting for other or specialized, projects. Most projects will be minor (below $500,000 total cost) in nature. The ISID contracts will supplement, but not replace, standard requests for proposals or qualifications as a method for obtaining professional services.

This selection round will supplement its roster of professional firms holding ISID contracts. The Department of Technology, Management and Budget (DTMB) currently holds several three-year and four-year term ISID contracts which will expire March 2023. This solicitation will add a certain number of firms to this roster so that a steady flow of firms is available.

The 2023 General Professional Design Services ISID contract will be limited to a term of four base years and one option year for assignments. A firm holding an ISID contract may not re-propose until their contract term is exhausted.

Firms with ISID contracts are eligible to participate in MIDeal, a cooperative purchasing program, local units of government, K-12 schools, state colleges and universities, and not for profit hospitals, may, if the firm agrees to participate, contract with an ISID contract holder at the billable rates specified in the ISID contract.

Please Note:

1. **FIRMS HOLDING ISID CONTRACTS ARE NOT GUARANTEED ANY ASSIGNMENTS**

2. **If your firm was awarded a 2021 General Architectural / Engineering/ Landscape Architecture ISID, you do not need to re-propose.**

3. **If your firm holds an ISID contract for environmental, testing or another variety of ISID contract and you wish to provide General Professional Design Services, please respond to this Request for Proposal.**

If DTMB, Design and Construction Division (DCD) determines that a particular project is suited to the ISID contracting method, The DCD Project Director will select an ISID Professional to provide a specific proposal of services and fee for that project. If the proposal is acceptable, the project will be assigned to that Professional under their ISID contract. DCD reserves the option of requesting such informal proposal from more than one professional for a particular project.

ISID contracts may include, but not be limited to, the following phase(s) from DTMB's attached Sample Standard ISID Contract for Professional services.

Phase–

100 Study
200 Program Analysis
300 Schematic Design
400 Preliminary Design
500 Final Design
600 Construction Administration - Office Services
700 Construction Administration - Field Services

The minimum professional qualifications to complete the scope of work for this project are demonstrated experience in the successful planning and execution of similar projects in full accordance with all applicable Local, State, and Federal regulations.

I-2 Project/Program Statement

See attached project/program statement for more detailed information. The Professional, by submitting a Technical (Part I) and Cost (Part II) Proposal to DTMB for evaluation, states that they can and will provide complete services when an individual project is assigned to them.

No increase in compensation to the Professional will be allowed unless there is a material change made to the scope of work of the project/program statement and the change to the project/program statement is approved in writing by DTMB, State Facilities Administration (SFA), Design and Construction Division (DCD).

I-3 Issuing Office

This RFP is issued by the Department of Technology, Management and Budget (DTMB), on behalf of the State of Michigan and its Client Agencies. PROPOSALS SHALL BE RETURNED TO THE ISSUING OFFICE via State of Michigan Procurement website – SIGMA VSS.

The point of contact for all other items in this Request for Proposal is:

Chris Parsons, Project Director
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Telephone Number: (517) 256-5677
Email: parsonsc5@michigan.gov

I-4 Contract Award

Professionals are requested to submit a two-part proposal, Technical Proposal - Part I, including a Qualifications Questionnaire, and Cost Proposal - Part II. Proposals will be evaluated by an Ad Hoc Advisory Committee based on the Technical Portion - Part I eighty percent (80%) and the Cost Proposal - Part II twenty percent (20%).

The professional firm must complete the Professional Questionnaire and select the Project Types and Project Locations they wish to be considered for.

DTMB will offer a contract to several professional firms recommended by the Ad Hoc Advisory Committee after evaluation of the proposal. Recommendation is expected within thirty (30) days following the due date of the proposal.

The Professional must include signed PSC Certification forms and the Addendum Acknowledgment form located at the end of this RFP as part of your proposal response.

I-5 Rejection of Proposals

The State of Michigan reserves the right to reject any or all proposals, in whole or in part, received because of this Request for Proposals.

I-6 *Incurring Costs*

The State of Michigan is not liable for any cost incurred by the Professional prior to acceptance of a proposal and the award and execution of a contract and issuance of the state's contract order.

I-7 *Mandatory Pre- Proposal Meeting*

NO MANDATORY PRE-PROPOSAL MEETING will be conducted by the Issuing Office for this Request for Proposal.

Questions that arise because of this RFP **MUST BE EMAILED to Chris Parsons at parsonsc5@michigan.gov** no later than **Thursday, January 12, 2022,** at **12:00 p.m.,** Eastern time (ET). If it becomes necessary to amend any part of this RFP, addenda will be posted on the SIGMA VSS website.

I-8 *Responsibilities of Professional*

The Professional will be required to assume responsibility for all professional services offered in their proposal whether they possess them within their organization or not. Further, the State of Michigan will consider the Professional to be the sole point of contact regarding contractual matters, including payment of all charges resulting from the contract. The prime professional shall possess a license to practice in the State of Michigan pursuant to the Occupational Code (PA 299 of 1980).

I-9 *Proposals*

The professional must submit a complete, straightforward response to this Request for Proposal. The proposal should describe the professional's ability to meet the requirements of the Request for Proposal.

The proposal must be submitted electronically through the State of Michigan Procurement System (SIGMA VSS). No other distribution of proposals will be made by the Professional. To be considered responsible and responsive, proposals must be uploaded to SIGMA VSS **on or before 2:00 p.m., Eastern time (ET), on Thursday, January 19, 2022.** Proposal must be signed by an official authorized to bind the professional firm to its provisions. NO FACSIMILES OR E-MAILS OF THE REQUEST FOR PROPOSAL WILL BE ACCEPTED.

The proposal and attachments must be fully uploaded and submitted prior to the proposal deadline. **Please do not wait until the last minute to submit a proposal**, as the SIGMA VSS system **will not** allow a proposal to be submitted after the proposal deadline identified in the solicitation, even if a portion of the proposal has been uploaded.

SIGMA has a maximum size limit on file uploads. When uploading, your attachment(s) the attachment must be 6mb or less.

Also, when entering proposal amount, please enter the total cost amount as $1.00. Bidder's failure to submit a proposal as required may result in being deemed nonresponsive.

Questions on vendor registration, proposal submissions, or navigation in the SIGMA VSS system can be answered by contacting the SIGMA Help Desk either by telephone at 517.284.0540 or toll free at 888.734.9749 or by email at sigma-procurement-helpdesk@michigan.gov

SECTION II PROPOSAL FORMAT - PART I – TECHNICAL

The Professional firm submitting a proposal must complete the Professional Questionnaire (see attached fillable form document in Microsoft Word format). This questionnaire must be accompanied by a narrative addressing the items below.

The proposal must be submitted in the format outlined below. Paginate proposals and ensure that the proposals refer specifically to the project at hand. Proofread proposals for language and mathematical errors. The items shown below are considered in the Ad Hoc Committee proposal review of technical qualifications.

II-I General Information and Project Team

State the full name, address, and SIGMA Vendor Number of the organization and, if applicable, the branch office, consultants or other subordinate elements that will provide or assist in providing the service. Indicate whether you operate as an individual, partnership, or corporation. If a corporation, include the state in which you are incorporated. State whether you are licensed to operate and practice in the State of Michigan.

II-2 Understanding of Project and Tasks

Outline your experience with governmental or institutional design and construction, particularly as it relates to small facility preservation, maintenance, and alterations projects. Address programming, schematic and design development phases, construction documentation and construction inspection.

Explain how your firm or project team is the best suited to provide the services required for this project and would provide the best value to the State of Michigan for this work.

II-3 Personnel

The professional must be able to staff a project team which has the qualifications and expertise necessary to undertake small facility preservation, maintenance, and alterations projects. Include the full names of all personnel by classification that will be employed in the project. Indicate which of these individuals you consider to be "Key Personnel" for the successful completion of these project types, identify them by position and classification and provide their resumes.

The Professional must identify all Key Personnel that will be assigned to this contract in the table below which includes the following:

a. Name and title of staff that will be designated as Key Personnel.

b. Key Personnel years of experience in the current classification.

c. Key Personnel's roles and responsibilities, as they relate to this RFP, if the Professional is successful in being awarded the Contract. Descriptions of roles should be functional and not just by title.

d. Identify if each Key Personnel is a direct, or consultant employee.

e. Identify where each Key Personnel staff member will be physically located (city and state) during the Contract performance.

The Professional must provide detailed, chronological resumes of all proposed Key Personnel, including a description of their work experience relevant to their proposed role as it relates to the RFP. Qualifications will be measured by education and experience with particular emphasis to experience on projects similar to that described in the RFP.

Provide an organization chart outlining authority and communication lines for each professional firm, including Key Personnel, including sub-consultants, client agency, and DTMB.

II-4 *Management Summary, Work Plan, and Schedule*

The Professional must outline their work plan and methodology so that it is understood what services and deliverables will be provided, and the quality of the services and deliverables as well. Describe in detailed narrative form your plan for accomplishing the projects of the type expected. Describe clearly and concisely each professional task, event, and deliverable required for project completion. Do not simply reiterate language and tasks from the DTMB Professional Services Contract. Describe your constructability review and quality control plan.

II-5 Questionnaire

The professional firm submitting a proposal must complete the Professional Questionnaire (refer to attached fillable form in Microsoft Word format).

II-6 References

Provide references, with contact information of previous clients, particularly for similar projects. Outline your experience with similar projects, sites, and contacts.

SECTION III PROPOSAL FORMAT - PART II - COST

III-1 Instructions and Information – Billable Rate

The Part II - Cost Proposal for the ISID contract shall outline the billable ranges for each of the Professional firm's positions / classifications. Specific cost proposals for individual projects will be obtained at the time of individual project assignment and shall identify specific personnel assigned and carefully interface with all phases/tasks of the work plan requested at that time. If sub-consultants are used, their fees shall be provided. A mark-up of the Professional consultants' fees or billing rates will be allowed; indicate the percentage of the mark-up within the tables, not to exceed 5%.

Reimbursable Expenses: The DTMB will reimburse the Professional for the actual cost of printing and reproduction of project deliverables such as survey and/or study reports. DTMB will also reimburse for U. S. Mail regular shipping or postage. A mark-up of reimbursable expenses will be allowed for services not performed in house; indicate the percentage of the mark-up within the tables, not to exceed 5%.

All other costs, such as fringe benefits, vacations, sick leave, insurance, meals, lodging, travel, all computer time, and clerical/secretarial services (not project related), telephone services, miscellaneous travel, reproduction services for other than bid documents, employees not providing a direct service, other indirect costs, overhead and profit, shall be included in the calculation of the Professional's billing rates.

If the project is further than 100 miles one-way from the Professional firm's office, travel expenses to the project site will be allowed as a reimbursable expense at the State of Michigan's rates, based on DTMB's Vehicle and Travel Services Travel Rate Reimbursement for premium mileage rates in effect at execution of the contract. Mileage allowed will be actual, less 100 miles each way. Other travel expenses are not to be included, unless specifically authorized in writing. Provide an estimated allowance of reimbursable costs for travel expenses to the project site, in your proposal response.

Completeness of Proposal: The design phase services shall cumulatively include any services required for subsequent issuing and processing of bulletins arising from, but not limited to, design errors and/or omissions, code compliance (precipitating either from plan

review or on-site/field observations), or modification of existing structures or systems necessary to achieve the intent of the project statement.

The design phase services shall include, either by cumulative allowance or by specific task, the furnishing of all project data and services necessary to legally implement the project. his includes but may not be limited to, code reviews and/or interpretations, project meetings, presentations, hearings, utility allocations requests, and/or connections, easements, or permits.

Any contract issued by the state pursuant to this proposal anticipates that the Professional will provide, but shall not seek compensation for, services necessary to respond to and resolve contractor claims arising wholly or in part from the Professional's design errors or omissions or other aspects of the design or for any aspect of the professional's performance which is inconsistent with the professional or construction contracts. No task or part thereof may include costs for such efforts.

Cost Review: Cost Proposals are reviewed on Interface and Total Fee. Interface refers to how the effort proposed (defined as the numbers of hours per phase, considered with the staff and classification assigned to that phase) relates to the effort the DTMB and the Client Agency expect or estimate to be required to deliver the project successfully. Total Fee refers to the total of the prime Professionals' fee, sub-consultants, travel, and other reimbursable expenses.

III-2 *Identification of Personnel and Estimated Compensation*

Provide compensation information for the Professional as well as any Sub-consultants. Note that employees of a separate professional firm or consultant, if proposed, should also be included, and noted.

A. Primary Professional and Sub-consultant(s) – Position, Classification & Employee Billable Rate Information

Using the format of Form II-2-A (attached), identify the service being provided and the Sub-consultant's employee(s) names and position classifications. It is not required to provide a team that covers all disciplines.

List current hourly billable rate ranges for each year / classification, from the beginning to the end of the contract This range of current and anticipated hourly billing rates shall include any anticipated pay increases over the life of the Professional's four-year ISID contract duration. Sub-consultant fees will be included in individually assigned project contracts as not-to-exceed reimbursable amounts, including a reasonable mark-up to be specified, mark-up not to exceed 5%.

To determine your current billing rates, use the attached guideline page for information regarding the "Overhead Items Used for Professional Firm's Billing Rates Calculation," and

the web-link to “Sample Standard ISID Contract for Professional Services,” Article 2 – Compensation.

Consultants providing professional services must submit separate billing rates for services that they will provide. A reasonable mark-up of the consultants billing rates, not to exceed 5%, will be allowed. ALL other costs, such as indirect labor, telephones, miscellaneous reproduction, travel, etc. shall be included in the professional’s billing rate.

For individual assigned projects the proposal will identify, for each task, the estimated cost. The combination of all phases/tasks shall become the professional’s maximum not-to-exceed cost for all services. Compensation for each phase will be in accordance with the “Sample Standard ISID Contract for Professional Services,” Article 2 – Compensation. The following Items B, C and D will be required only at the time a proposal for an individual assigned project is requested.

B. Fee with Anticipated Hours by Phase for Individual Assigned Projects

Using the format of Form II-2-B, identify for each phase the estimated hours for each employee and include the billable rate for each employee. Provide totals.

C. Reimbursable Expenses for Individual Assigned Projects

Using the format of Form II-2-C, identify the phase number, firm name and description of sub-consulting services expressed as a not-to-exceed amount. Identify the phase number, firm name, and description of all reimbursable direct expenses expressed as a not-to-exceed amount (travel over 100 miles one-way, printing, tests, etc.). Note the mark-up(s) for handling reimbursable expenses is not to exceed 5% Provide totals.

D. Total, Summarized by Phase for Individual Assigned Projects

Using the format of Form II-2-D, provide a total of the fees and reimbursable expenses, by phase, as outlined in items B and C above. The total of all phases shall become the Professional's maximum not-to-exceed contract for all design services. Compensation for each phase will be in accordance with the "Sample Standard ISID Contract for Professional Services."

Use the attached forms to establish your total compensation and trade contract reimbursables.

The following instructions are to be used by the Professional Services Contractor firms to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional consultant services they will provide for State of Michigan Projects. A moderate mark-up, not to exceed 5%, of the Professional's Consultant services hourly billing rates will be allowed.

The Department will reimburse the Professional for the actual cost of printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. **No mark-up of these Project costs will be allowed if services are performed in house.**

2023 HOURLY BILLING RATE
Based on 2022 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:	**EMPLOYEE BENEFITS:**	**INSURANCE:**
Principals (Not Project Related)	Hospitalization	Professional Liability Insurance
Clerical / Secretarial	Employer's Federal Insurance Contributions Act (FICA)Tax	Flight and Commercial Vehicle
Technical (Not Project Related)	Unemployment Insurance	Valuable Papers
Temporary Help Tax	Federal Unemployment	Office Liability
Technical Training	Disability	Office Theft
Recruiting Expenses	Worker's Compensation	Premises Insurance
	Vacation	Key – Personnel Insurance
	Holidays	Professional Liability Insurance
	Sick Pay	
	Medical Payments	
	Pension Funds	
	Insurance - Life	
	Retirement Plans	

TAXES:	**SERVICES (PROFESSIONAL)**	**EQUIPMENT RENTALS:**
Franchise Taxes	Accounting	Computers
Occupancy Tax	Legal	Typewriter
Unincorporated Business Tax	Employment Fees	Bookkeeping
Single Business Tax	Computer Services Bond)	Dictating
Property Tax	Research	Printing
Income Tax	Project / Contract Bond	Furniture and Fixtures
		Instruments

OFFICE FACILITIES:

Rents and Related Expenses
Utilities
Cleaning and Repair

LOSSES:

Bad Debts (net)

Uncollectible Fee
Thefts (not covered by Project / Contract)
Forgeries (not covered by Project / Contract)

FINANCIAL:

Depreciation

SUPPLIES:

Postage

Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

PRINTING AND DUPLICATION:

Specifications (other than Contract Bidding documents)
Drawings (other than Contract Bidding documents)
Xerox / Reproduction

Photographs

SERVICES (NONPROFESSIONAL):

Telephone and Telegram

Messenger Services

TRAVEL:

All Project – Related Travel*

MISCELLANEOUS:

Professional Organization Dues for Principals and Employees
Licensing Fees

III-2-A. Position, Classification and Employee Billing Rate Information

Firm Name **XYZ, Inc.**

Yearly Hourly Billing Rate Increase **≈4%**

Position/Classification	Year 2023	Year 2024	Year 2025	Year 2026
Principal/Project Manager**	$100.00	$105.00	$110.00	$116.00
Senior Architect	$100.00	$105.00	$110.00	$116.00
Quality Control/Assurance	$100.00	$105.00	$110.00	$116.00
Licensed Surveyor**	$90.00	$95.00	$99.00	$104.00
Project Engineer**	$90.00	$95.00	$99.00	$104.00
Mechanical Engineer**	$90.00	$95.00	$99.00	$104.00
Sr. Structural Engineer	$80.00	$84.00	$88.00	$92.00
Electrical Engineer	$80.00	$84.00	$88.00	$92.00
Scientist/Surveyor	$65.00	$68.00	$71.00	$75.00
Staff Engineer	$65.00	$68.00	$71.00	$75.00
Staff geologist	$65.00	$68.00	$71.00	$75.00
CAD Operator	$75.00	$79.00	$83.00	$87.00
Technician	$65.00	$68.00	$71.00	$75.00
Field Technician	$50.00	$53.00	$56.00	$59.00
Technical Support	$35.00	$37.00	$39.00	$41.00

*Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

III-2-B. Fee with Anticipated Hours and Billing Rate

	POSITION/ CLASSIFICATION	TOTAL HOURS	BILLING RATE	TOTAL
	Principal/Project Manager	30	100.00	3,000.00
	Senior Architect	17	100.00	1,700.00
	Licensed Surveyor	9	90.00	810.00
	Project Engineer	8	90.00	720.00
	Mech. Engineer.	8	90.00	720.00
	Sr. Structural Engineer	8	80.00	640.00
	Electrical Engineer	22	80.00	1,760.00
	Draftsperson	40	35.00	1,400.00
	Quality Control	2	100.00	200.00
	CAD Operator	42	35.00	1,470.00
	SUBTOTAL	186		$10,667.50

III-2C. Authorized Reimbursables -- Sub-consultants, Testing and Expenses

***Firm's Mark-Up Percentage:_____**

PHASE	NAME OF FIRM	DESCRIPTION OF SERVICES PROVIDED	TOTAL AMOUNT* (Including mark-up)
Phase 400	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
Phase 500	XYZ Productions, Inc. Lansing, Michigan	Printing and reproduction of bidding documents	500.00
Phase 500	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
	SUBTOTAL		$ 1,500.00

III-2D. Total, Summarized by Phase

PHASE	Phase 300	Phase 400	Phase 500	Phase 600	Phase 700	TOTAL
Professional Fee	1,597.50	2,820.00	3,970.00	1,120.00	1,160.00	10,667.50
Reimbursable Expenses	0.00	750.00	1,250.00	0.00	500.00	1,500.00
SUB-TOTAL	1,597.50	3,570.00	5,220.00	1,120.00	1,660.00	
TOTAL CONTRACT AMOUNT						$ 12,167.50

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application of State Preference/Reciprocity Provisions)

To qualify as a Michigan business:

Vendor must have, during the 12 months immediately preceding this bid deadline:
or
If the business is newly established, for the period the business has been in existence, it has:

(Check all that apply):

- ☐ Filed a Michigan single business tax return showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ˜208.1 – 208.145: or
- ☐ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or
- ☐ Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

Bidder shall also indicate one of the following:

- ☐ Bidder qualifies as a Michigan business (provide zip code: _____)
- ☐ Bidder does not qualify as a Michigan business (provide name of State: _____).
- ☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code: _____)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Bidder: _____

_____
Authorized Agent Name (print or type)

_____
Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN $25,000 and subject to debarment under MCL 18.264.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

(a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.

(b) Has not had a felony conviction in any state (including the State of Michigan).

(c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.

(d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

(e) Has not been terminated for cause by the Owner.

(f) Has not failed to pay any federal, state, or local taxes.

(g) Has not failed to comply with all requirements for foreign corporations.

(h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.

(i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:

   i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
   ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.

iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.

iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).

v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.

vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.

vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).

(j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder: _____ _____
Authorized Agent Name (print or type)

_____
Authorized Agent Signature & Date

☐ I am unable to certify to the above statements. My explanation is attached.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

ACKNOWLEDGMENT OF ADDENDUMS

PSC acknowledges receipt of Addenda: No. ___ dated: _____,

No. ___ dated: _____ No. ___ dated: _____

Questionnaire for Professional Services
Department of Technology, Management and Budget
2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: Click or tap here to enter text.
   Address: Click or tap here to enter text.
   Telephone and Fax: Click or tap here to enter text.
   Website: Click or tap here to enter text. E-Mail: Click or tap here to enter text.
   SIGMA Vendor ID: Click or tap here to enter text.

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: Click or tap here to enter text.

   If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)? Click or tap here to enter text.

   Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number. Click or tap here to enter text.

2. Check the appropriate status:

   ☐ Individual firm ☐ Association☐ Partnership☐ Corporation, or ☐ Combination – Explain: Click or tap here to enter text.

   If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Click or tap here to enter text.

   Include a brief history of the Professional's firm: Click or tap here to enter text.

3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company. Click or tap here to enter text.

5. Provide a four year rate schedule per position.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify **ALL** project types and professional services for which your firm is exceptionally qualified and experienced.

Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types but will assist the DCD Project Directors in matching firms with projects.

☐ ADA facility assessment and remodeling
☐ Boilers and steam systems
☐ Bridges – pedestrian and vehicular
☐ Building and structure additions

☐ Building envelope investigation, repair, upgrade

☐ Correctional facilities
☐ Door and window replacement
☐ Elevators
☐ Fire and security alarm systems
☐ Fish passage structures

☐ General architectural and/or engineering design

☐ Historical Preservation

☐ HVAC equipment replacement, upgrade, selection

☐ HVAC controls replacement, upgrade, selection

☐ Interior remodeling and renovation
☐ Laboratory facilities
☐ Landscape architecture
☐ Land Planning

☐ Locks, Dams, Water Diking Systems and Water Control Structures

☐ Maintenance and facility preservation

☐ Marine work - boat launch facilities, docks, harbors

☐ Parking and paving
☐ Recreation and Sports Facilities / Fields

☐ Roof repair, restoration and/or replacement design

☐ Soil Erosion Sedimentation Controls
☐ Site surveying

☐ Stormwater management and drainage plans

☐ Structural investigation and assessment
☐ Toilet and/or shower room remodeling or design.

☐ Trail design and development
☐ Wastewater systems
☐ Water supply systems

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

☐ Western Upper Peninsula (west of Marquette)

☐ Eastern Upper Peninsula (east of Marquette)

☐ Northern Lower Peninsula (north of Grayling)

☐ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)

☐ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)

☐ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)

☐ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)

☐ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

ARTICLE 4: CONTRACT UNDERSTANDING

The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as larger projects?

Yes ☐ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?

Yes ☐ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?

Yes ☐ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)

Yes ☐ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?

Yes ☐ No ☐

4.6 Is your firm familiar with Design and Construction's MICHSpec and DCSpec contracts and the enforcement of such?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

4.7 Doesyour firm have prior experience working with the State of Michigan?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.

Click or tap here to enter text.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

5.3 Will there be a key person who is assigned to a project for its duration?

Yes ☐ No ☐

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.

Click or tap here to enter text.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.

Click or tap here to enter text.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

Click or tap here to enter text.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

Click or tap here to enter text.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?
Yes ☐ No ☐

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.

Click or tap here to enter text.

5.10 Describe your approach to minimizing construction cost over-runs.

Click or tap here to enter text.

5.11 What percentage of the PSC cost should be devoted to construction administration (office and field)?

Click or tap here to enter text. %

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?

Click or tap here to enter text. %

5.13 On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? (A typical project might be one involving several disciplines and in the neighborhood of a $25,000 fee.)

Click or tap here to enter text. Days/Weeks

5.14 How do you assess whether a construction bidder is responsive and responsible?

Click or tap here to enter text.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.

Click or tap here to enter text.

5.16 Describe your experience with similar open-ended contracts.

Click or tap here to enter text.

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.

Click or tap here to enter text.

5.18 Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.

Click or tap here to enter text.

5.19 Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

Click or tap here to enter text.

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

2023 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name _____
Yearly Hourly Billing Rate Increase _____
Mark-up for Sub-Consultants (not to exceed 5%) _____
Mark-up for Reimbursables (not to exceed 5%) _____

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4

*Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division

REQUEST FOR PROPOSAL
ADDENDUM NO. 1

This form identifies an Addendum to a Request for Proposal for Professional Services, and incorporates interpretations or clarifications, modifications, and other information into the Request for Proposals. Addenda will be numbered by the Project Director and distributed through SIGMA Vendor VSS as an attachment.

TO: ALL PROPOSERS	DATE ISSUED December 8, 2022
PROJECT NAME 2023 General Architectural / Engineering Services Indefinite Scope Indefinite Delivery (ISID)	FILE NUMBER
PROJECT DIRECTOR Chris Parsons	PROPOSAL DUE DATE: January 19, 2023

ADDENDUM ITEMS: (attach additional sheets and drawings if required)

This addendum is to clarify the contract term listed in the Request for Proposal and in the Sample Contract. The term of this contract will be for a period of four (4) base years with **no** option year.

End of Addendum 1

APPROVED BY:
Chris Parsons

PROJECT DIRECTOR DATE 12/7/2022

APPENDIX 2

PROFESSIONAL'S PROPOSAL

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

Request for Proposal for

2023 INDEFINITE SCOPE INDEFINITE DELIVERY (ISID) FOR GENERAL ARCHITECTURAL / ENGINEERING / LANDSCAPE ARCHITECTURE SERVICES, VARIOUS LOCATIONS, MICHIGAN

PART I – TECHNICAL PROPOSAL

PART II – COST PROPOSAL

19 January 2023

Submitted by:

Weston Solutions of Michigan, Inc.
2501 Jolly Road, Ste 100 • Okemos, MI 48864
Phone: 517-381-5920

23P-0004

Weston Solutions of Michigan, Inc.
Suite 100
2501 Jolly Road
Okemos, MI. 48864-3515
517-381-5920 • Fax 517-381-5921
WestonSolutions.com

19 January 2023

Chris Parsons, Project Director
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
3111 W. St. Joseph Street
Lansing, MI 48909

Re: **Technical and Cost Proposal**
2023 Indefinite Scope Indefinite Delivery (ISID) for Architectural/Engineering/Landscape Architecture Services
Various Locations, Michigan

Dear Mr. Parsons:

Weston Solutions, Inc. (Weston) is pleased to submit the attached Technical and Cost Proposal in response to the *Request for Proposals from Professional Service Contractors for 2023 Architectural/Engineering/Landscape Architecture ISID Contract RFP.*

Weston is best suited to provide the required services to the State on this ISID Contract because of our dedicated staff, broad range of experience, and most importantly, because of our long-term trusted relationship with the State of Michigan. Weston will serve as prime contractor, supported by Partner Engineering & Sciences, Inc. (PESI), our exclusive teaming partner. The Weston team has the existing capabilities and experience to meet the requirements of this contract and is prepared and committed to begin providing requested services upon contract execution and project assignment. We are confident that based upon our proven record of performance on multiple programs and numerous projects across Michigan, we are uniquely positioned to deliver quality professional services to the State.

Weston acknowledges receipt of Addendum No. 1, dated 8 December 2022. As Weston's proposed Program Manager, I am authorized by Weston to execute the contract.

Should you have any questions or require additional information regarding our submittal, please feel free to contact me at 773-315-1959.

Very truly yours,
Weston Solutions, Inc.

Joseph Ruiz
Program Manager

TABLE OF CONTENTS

LIST OF FIGURES

Title **Page**

LIST OF TABLES

Title **Page**

Part I - Technical

1. GENERAL INFORMATION AND PROJECT TEAM

Weston Solutions of Michigan, Inc. is the organization submitting this proposal as a wholly owned subsidiary of Weston Solutions, Inc. (Weston), a nationally recognized environmental engineering and consulting firm with extensive experience providing sustainable solutions to the State of Michigan (State) and many other state and federal agencies and private organizations. More than 85% of our new business opportunities are derived from satisfied customers that recognize the sustainable value Weston provides in solving complex problems.

1.1 COMPANY NAME AND ADDRESS

Weston Solutions of Michigan, Inc.
2501 Jolly Road, Suite 100, Okemos, MI 48864-3677

SIGMA Vendors No.: CV0007304

1.2 CONTACT INFORMATION

Joseph Ruiz, Program Manager
j.ruiz@westonsolutions.com
Mobile: (773) 315-1959

1.3 BRANCH OFFICES

Figure 1. Weston Midwest Regional Offices

Weston Solutions, Inc. has 26 offices in the United States, including the offices of several wholly owned subsidiaries. Weston Solutions of Michigan, Inc. can access resources from any of these offices to support our work for the State, bringing more than 1,115 professional and technical resources to bear, as needed, to resolve any challenges you may encounter on your projects. Regionally, three of our branch offices are well situated to support the State:

Weston Solutions of Michigan, Inc. - Okemos, Michigan
Weston Solutions, Inc. - Dayton, Ohio
Weston Solutions, Inc. - Lincolnshire, Illinois

Additionally, as an employee-owned company, Weston has found that we can serve many of our clients more effectively and efficiently by enabling employees to work from virtual offices. In addition to the "brick and mortar" offices identified in **Figure 1**, Weston personnel are located in virtual offices in Ann Arbor, Dearborn, Grand Rapids, Houghton, and Traverse City, MI. Regardless of their location, the project-related activities of these employees are directed by Weston Project Managers to ensure that our clients receive exceptional and cost-effective service.

1.4 SUB-CONSULTANTS AND OTHER SUBORDINATE ELEMENTS

PARTNER Engineering and Science, Inc.

Weston will serve as prime contractor, supported by Partner Engineering and Science, Inc. (PESI), our exclusive teaming partner. PESI is an international engineering and assessment company with the added benefit of full-service engineering, construction, energy, and environmental service capabilities. PESI offers the full spectrum of multidisciplinary engineering and assessment personnel, including licensed civil and environmental engineers; registered architects and construction professionals; licensed structural, mechanical, energy, and forensic engineers; certified roof and envelope professionals; and zoning and survey professionals.

PESI brings the resources of more than 1,330 personnel in 40 offices across the United States, including more than 60 employees in the Great Lake States, located in Farmington Hills, MI; Lombard, IL; Chicago, IL; and Cincinnati, OH.

The Weston team has the existing capabilities and experience to meet the requirements of this contract. Weston and PESI have a long-standing relationship completing over 150 projects together for the United States Postal Service (USPS). Our client-centric business model prioritizes building teams around our clients to enhance delivery excellence. The team we have assembled for this contract is aligned from the field level up through engineering, project and program management, and senior management, with clear lines of communication and division of resources established to provide the Department of Technology, Management & Budget (DTMB) seamless project execution. Weston, as prime contractor, will be responsible for overall performance of the contract and will serve as the point of contact (POC) for DTMB.

Weston also anticipates requiring the use of highly qualified, specialty subcontractors (e.g., geotechnical drilling, surveyors, sewer camera inspection) to assist with conducting project-specific field activities under Weston supervision. These specialty subcontractors will be procured on a competitive, project-specific basis, in accordance with Weston and State procurement processes.

1.5 TYPE OF OWNERSHIP

Weston is an employee-owned corporation headquartered in West Chester, PA. The company operates in all states and territories of the United States.

1.6 STATE OF INCORPORATION

Weston is incorporated in the Commonwealth of Pennsylvania.

1.7 LICENSED TO OPERATE AND PRACTICE IN MICHIGAN

Weston is licensed to operate and practice in Michigan. Projects will be performed by Weston Solutions of Michigan, Inc., a wholly owned subsidiary of Weston Solutions, Inc.

2. UNDERSTANDING OF PROJECT AND TASKS

Weston understands that the DTMB is seeking qualified firms to provide professional services under the 2023 Indefinite Services Indefinite Delivery (ISID) for General Architectural/Engineering/Landscape Architect Services contract. These professional services are for statewide general design services for State of Michigan facilities, and the contract scope may include maintenance, alteration, and construction projects.

Weston is currently managing multiple ISID/open-ended contracts that are similar to this procurement and is capable of managing multiple, complex design and construction projects across multiple service lines while meeting quality performance objectives and deadlines. Our current experience on other ISID contracts with the State, as well as previous other contract vehicles with DTMB and various State agencies, will enable us to "hit the ground running" on this 2023 ISID contract without a learning curve on either the contractual portion or the technical execution of projects. We understand the full dimensions and requirements for the work to be performed under this contract, having delivered professional services to the State over the past 30 years.

The Weston team is fully committed to providing all selected services and meeting all requirements outlined in the Request for Proposal (RFP) and subsequent project assignments. Our pledge to the State of Michigan begins with our Chief Executive Officer, Mr. Larry Bove, and extends down through all levels of the organization. Weston commits to providing this project team with resources necessary to meet DTMB expectations, with the highest levels of quality, safety, efficiency, and cost-effectiveness. Weston's teaming agreement with PESI ensures the same commitment carries through to our partnership, minimizing any risk to the State in terms of contract performance.

2.1 EXPERIENCE WITH GOVERNMENTAL/INSTITUTIONAL DESIGN AND CONSTRUCTION

The Weston team will draw upon our broad range of experience completing facility/infrastructure design and construction projects for governmental and private clients across the United States, carrying forward "lessons learned" and best practices gleaned from this experience to benefit the State under this contract. Our experience

spans all project types and services selected by the Weston team in Article 2 of the Questionnaire. The Weston team has provided a wide range of services for federal, state, and local government clients, including design, construction implementation (self-performed), procurement of construction general contractors and subcontractors, and construction management.

> ***"Weston's development/utilization of a web-portal to streamline communication and Bill of Material approvals was a great benefit to client personnel and USACE COR....open communication, and bi-weekly meetings kept all parties up to speed on project execution... Weston completed 273 site assessments and security mitigation installations at more than 210 facilities located in 5 USACE Districts/16 states/103 cities during this evaluation period."*** — Assessing Official, CPAR rating for USACE Facilities Repair and Renewal (FRR) Contract (D-B Recruiting Facilities Program Priorities), 2020.

Under previous and existing contracts with federal government clients such as the U.S. Army Corps of Engineers (USACE), Air Force, Navy, Washington Headquarters Services (WHS), and USPS, Weston successfully delivers time-critical design, design-build, and design-bid-build services for facilities, utilities, infrastructure, and building systems to allow for critical upgrades, reduce vulnerability to hazards, and minimize operational impacts to the end-user. Our construction and renovation project experience specific to **small facility preservation, maintenance, and alterations projects** includes office buildings and complexes, barracks, dining facilities, medical clinics, warehouses, administrative office space, youth centers, child development centers, fitness centers, hangars, security gates, parking lots, storage facilities, automotive and repair facilities, industrial warehouses and manufacturing facilities, parks and recreation facilities, county operations facilities, educational facilities, and medical and life science campuses.

Weston has developed its turnkey capabilities through the successful completion of more than $1B in design, design-build, and design-bid-build construction services as prime contractor since 2002. We bring to this contract a seasoned cadre of project managers, construction managers, site superintendents, safety and health managers, construction quality control (QC) managers, design engineers, assessors, estimators, permitting/regulatory compliance specialists, project controls specialists, subcontracts managers, contract managers, computer-aided design and drafting (CADD) specialists, and other construction administration support staff, as necessary, to provide whatever services are necessary to meet the State's needs while remaining compliant with local, state, and federal regulatory requirements.

Select examples that demonstrate our capabilities and resources to deliver on assignments requiring general professional design and construction services under this ISID contract are summarized below.

As DOR on our USACE FRR Contract, Weston is providing turnkey D-B repairs of gravity sewer lines and potable water distribution lines to improve operational efficiencies and reliability of critical infrastructure at Fort Detrick, MD.

Facilities Repair and Renewal (FRR) Multiple Award Task Order Contract, Nationwide. As prime contractor under this construction Indefinite Delivery Indefinite Quantity (IDIQ) contract for USACE Omaha, Weston completed design-build, repair/alteration task orders to provide physical security enhancements and hardening at occupied military services recruiting facilities across the United States. Our work under this contract successfully demonstrates our ability and capacity to manage and implement design and construction projects across more than 200 facilities. We have successfully delivered surveys; facility condition assessments; incidental design (architectural, civil/structural, electrical, mechanical (HVAC, piping, fire protection); communications; specialty security; and commissioning services.

General Office Renovations, Secured U.S. Government Facility. For USACE Omaha, Weston managed design/abatement/renovation/infrastructure upgrade services in 65 spaces of an active, mission-critical National Continuity of Government (COG) Facility, including operating centers, auditorium, conference rooms, offices, bathrooms, dining facilities, corridors, and storage spaces. We developed 100% renovation designs and performed asbestos abatement/demolition/renovation/construction, including architectural; mechanical, electrical, and plumbing (MEP)/heating, ventilation, and air conditioning (HVAC); security; telecommunications; and fire alarm/fire protection systems. We fast-tracked our design to allow for an earlier construction start and expedited a standardized design for less complex office/hallway spaces. This expedited office/hallway design underwent

submittal/comment response process with stakeholders while our design team concurrently prepared basis of design (BOD)/design documents for more complex dining area/bathroom renovations, allowing construction operations for offices/bathrooms and the dining area to proceed concurrently. Earned "Exceptional" CPAR ratings for Schedule, Cost Control, Management, and Safety.

> ***"Over the course of the past year, you have brought a lot to the table, responding to our challenges in ways that go far beyond typical off the-shelf solutions. Your commitment to excellence was instrumental in helping us deliver convenience and value to our customers."*** *—Megan J. Brennan, Former Postmaster General/CEO, 2019.*

USPS Contracts, Nationwide. For more than 35 years, Weston has served as prime contractor on multiple USPS contracts, successfully delivering on more than 1,000 task orders annually nationwide (including numerous projects in Michigan). We perform a broad scope of facility-related services, including structural/building assessments, time-critical renovations, hazardous building materials survey/abatement, and minor repairs/alterations of post offices, processing and distribution centers, and administrative facilities to meet USPS project-specific quality, safety, and schedule performance requirements.

Air Force Center for Engineering and the Environment (AFCEE) Barrack Facilities Improvement Program, Fort Bragg, NC. When additional troops were scheduled for deployment to Fort Bragg, the installation was under pressure to ensure the barracks were upgraded in time to accommodate incoming soldiers. Weston was initially engaged as general contractor to upgrade seven barracks. As we continued to exceed our customer's expectations, our assignment was increased from the original 7 to 18 barracks. Specific upgrades required for each barrack varied, but the mission was constant: extend useful life an additional 5 to 10 years, pending new construction, and perform upgrades on each unit within a critical interim milestone 4 months of turnover to Weston. Completion of this time-critical project required expedited resource planning, procurement, and pricing to successfully deliver the facility upgrades, and Weston met the challenges of each phase within an extremely compressed schedule, completing all work on time and overseeing more than 200,000 labor hours without a single lost-time accident.

Facility Integrity and Life Safety Phase 3, Secured U.S. Government Facility. Weston successfully led the design and construction of critical life-safety improvements at a confidential location. This project was the third phase of a multi-year program to clean up asbestos contamination from roof and cavity areas and to make necessary repairs and improvements to facility infrastructure. Weston provided engineering services to design four pedestrian cross-over bridges at various roof locations, as well as a new safety rail along the roof perimeter in accordance with Engineering Manual (EM) 385-1-1 and Occupational Safety and Health Administration (OSHA) requirements. The infrastructure improvements were completed on time, on budget, and with minimal disruption to ongoing mission-critical activities at this secure facility.

Design-Build of a Leadership in Energy and Environmental Design (LEED®) Gold-Certified, Multi-Function Administration Building, Active Military Installation, Randolph Air Force Base (AFB), TX. For the U.S. Air Force, Weston completed a design-build project of a two-story, 33,000-square-foot (sf) Base Realignment and Closure (BRAC) Administrative Center (Building 667). Our project team phased the implementation of demolition, renovation, and construction to minimize work interruptions at the active facility. We also performed the interior demolition and renovations of 2,500 sf of temporary lodging facility (TLF) units.

Design-Build of the LEED® Gold-Certified Mundelein Village Hall/Office Complex, IL. The Village of Mundelein in Illinois needed a new Village Hall, envisioning the building as the beginning of a true mixed-use downtown area. Weston was seeking a new Chicago-area office location and saw the development potential and mutual benefits of partnering with the Village. Weston helped the Village through the entire development process, including upfront planning assistance design and construction of related infrastructure work as well as an environmental investigation and cleanup. The project has been highlighted by the Urban Land Institute as a particularly unique and creative approach to suburban brownfield and transit-oriented development.

Weston's LEED® Gold-certified Design-Build Project in Mundelein, IL

San Antonio Water System (SAWS) Wastewater and Water Supply Projects, San Antonio, TX. Weston has successfully delivered 33 wastewater/water supply projects for SAWS in the past 20 years, with challenges such as major highway crossings that required extensive Texas Department of Transportation (TxDOT) coordination, work in a floodplain that required USACE coordination/permits, and development of complex bypass plans to keep sewers in service during construction. Weston has delivered the following Texas projects for SAWS and other municipal clients: Over 24 miles of pipelines and 10 miles of trenchless methods (cured-in-place pipe [CIPP], pipe bursting, micro tunneling), including rehabilitation of one of the largest sewer tunnels (132 inches) in the country; 145 lift stations assessment and design (0.1 to 28 million gallons per day [MGD]); 13 metering stations from 2 to 200 MGD capacity; and 27 wastewater treatment plant (WWTP) upgrades, including the largest WWTP capacity of 200 MGD.

Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) Projects, Albuquerque, NM. We have worked with AMAFCA since 2006, delivering over 20 projects at Kirkland AFB, and currently hold on-call contracts for both Engineering Services and Stormwater Quality and Environmental Engineering. Our experience includes surface water infrastructure design, and with a broad technical competence in civil and environmental engineering, compliance/permitting, and restoration work. We have successfully delivered surface water design engineering consulting services to numerous municipal clients as well as state and federal agencies.

2.2 PROGRAMMING, SCHEMATIC, AND DESIGN DEVELOPMENT

The Weston team's extensive experience providing similar services to governmental clients documented in the previous section allows us to have a deep understanding of how to successfully approach a project and provide value to the State under this 2023 ISID. Weston's experience includes all phases of a project's lifecycle and includes many instances where Weston is able to take over the project from another entity and drive the project to successful completion. We recognize that not every project starts at the study phase, and we also know that not every project has the funding to complete every study, collect all relevant data, or complete every phase and subphase included in the DTMB Professional Services Contract (PSC). However, the Weston team takes pride in developing streamlined solutions to accomplish the State's goals with the budget available. That mission has involved many different approaches on similar programs, such as Weston's multiple ISIDs with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and our contract with the Illinois Department of Transportation (IDOT). Through our experience working with the State on a variety of ISID-type contracts for more than 30 years, we have learned how to use State funds wisely and get the most return for a project on limited expenditures. Weston frequently identifies cost savings or reprioritizes project tasks to reach project goals on a limited budget and is very familiar with scenarios where we work closely with the State's Project Manager to redistribute funds or reprioritize tasks given funding constraints or based on changed conditions within a project. Since 1999, we have been working with IDOT to accomplish their goals with limited budget on many occasions, including restarting projects that were discontinued due to lack of funding and finding creative solutions for projects, such as the reuse of excess material generated during grading activities in a highway reconstruction project.

2.2.1 Programming

The study and development of the project/program statement is critical in developing the ultimate objectives of the project. In order for the State to proceed with the subsequent phases of work and ultimately "solve" the issue, Weston's team will identify key data, provide a cost estimate to establish the project budget (and determine if funding is available), and provide a clear summary of the objectives and requirements for an operational project. Weston's key to success on similar programs involves close coordination with the State's project team. For example, our extensive experience providing services to IDOT has shown us that proper development of project statements is key in using funds wisely. Once the end goals, as well as potential risks associated with non-action, have been clearly identified, the stakeholders and Weston can evaluate the priority of projects. Documentation of the project/program statement is also key in case the project is not deemed a priority and has to be delayed. In this instance, the clear identification of the problem, the estimated cost, and relevant data are summarized for future use in project prioritization and for an easy resumption of activities once the project is identified to proceed.

2.2.2 Schematic and Design Development

Regardless of the project type, the schematic and design development process is intended to be an iterative process. Weston's team conducts design reviews and incorporates feedback from quality reviewers and the client to ensure the final design incorporates relevant data and meets the ultimate project objectives. A graphic illustrating the design process is included in Section 4.4, Plan for Accomplishing the Work (see **Figure 4**). This figure is drawn from Weston's Engineering Design Quality Management Plan (DQMP). This document is used as internal guidance for Weston employees involved in engineering design projects; from the program manager to drafters, everyone on the team is familiar with the process and procedures laid out in the DQMP. Weston's team incorporates our internal processes and the detailed descriptions of deliverables, review points, and task breakdown in the DTMB PSC and the project-specific details to provide work products, review schedules, and level of communication necessary for a successful project.

2.3 CONSTRUCTION DOCUMENTATION AND CONSTRUCTION INSPECTION

Weston ensures that success starts with the project management approach and personnel. Providing the right systems with the right people who are knowledgeable and experienced in project planning and oversight of the scope is paramount to meet the State's objectives for a successful project.

Weston's approach to construction documentation and inspection builds upon the previous phases of work and is intended to ensure successful delivery of a complete project to DTMB and the State. The following key project delivery requirements are critical to the success of any construction project.

- Detailed schedule and communications planning to ensure completion of work within the expected period of performance.
- Construction phasing either to minimize impacts or to keep the facility in operation throughout the project, including use of temporary elements (e.g., facilities, infrastructure) and coordinated changeover for use of temporary elements.
- Key personnel and staffed roles matched to each project's individual scope and complexity.
- Zero safety incidents and a well-managed safety program to keep all State, subcontractor, and Weston staff safe throughout the project.

2.3.1 Construction Documentation

The level of documentation required during construction varies depending on the Scope of Work (SOW) and complexity of the project. Weston understands the documentation requirements listed in the DTMB PSC and will provide high-quality documentation on every project. The keys to ensuring this documentation is high quality involves clearly defined responsibilities, frequent check-ins on updates, detailed verification, and communication with the client. Prior to mobilization for any construction oversight project, the field team is provided a set of project instructions (PIs). The PIs provide field personnel a detailed set of instructions to complete the work, as well as a comprehensive list of reference materials. The instructions start with contact information, include safety requirements, provide testing frequency, and detail communication procedures, including how daily/weekly reports are to be shared with stakeholders. The reference materials include the plans and specifications, relevant building codes, standard testing methods, and roles and responsibilities for recordkeeping. Weston's experience has shown that providing comprehensive PIs prior to mobilization confirms alignment between the design team and the oversight team and ensures personnel arrive at the construction site fully prepared. In addition, having written PIs allows for an easy way to integrate additional oversight personnel or transition between oversight personnel if necessary. The oversight personnel frequently check in on construction documentation during the project to ensure changes are properly documented and required records are being maintained. Weston's experience with construction management has shown us that critical tracking records (bills of lading, waste disposal records, inspection documentation) are easy to maintain if they are obtained and filed as the project proceeds. Also, red-line of construction drawings as items are installed takes minimal effort, but when ignored until the end of a construction phase can lead to delays. Weston's experience has shown us that delays are likely to occur if red-lines of a system are delayed to the end of a phase, especially when the next phase of work requires covering the prior phase (i.e., MEP behind drywall or pipes in excavations requiring backfill).

2.3.2 Construction Inspection

Weston uses a multi-phase QC process to ensure that activities are conducted in compliance with the requirements of the contract documents. This system of management will address each Definable Feature of Work (DFOW), beginning with the early planning stage requirements and ending with the finished work. Each phase will allow the opportunity to prevent problems and deficiencies and ensure that the accident prevention program is implemented. The control phases and the final inspection are discussed in the following subsections.

Phase 1: Preparatory Phase

This phase will be performed prior to beginning work on each DFOW. A preparatory meeting will be conducted involving the Weston team, State agency representatives, and the contractor's supervisor/crew involved in the particular work feature. The meeting will include the following:

- Review the applicable section of the specifications and contract drawings.
- Review the submittal register to ensure that required submittals are approved and corrective action is taken when necessary. Submittal data will be discussed to acquaint team members with technical aspects and points particular to the work feature.
- Check to ensure that materials and equipment are in compliance with approved submittals and specifications. Verify that required materials and equipment are on hand and properly stored.
- Review control-testing requirements and verify that testing facilities are approved. Verify that necessary provisions are made for testing.
- Review the planned construction procedures and the required level of quality to meet contract specifications.
- Review required deliverables and daily QC and safety requirements.
- Review appropriate Activity Hazard Analysis (AHA) to ensure safety requirements are met.
- Review requirements under permits and environmental protection.

Phase 2: Initial Phase

This phase is performed once a representative portion of work has taken place for each DFOW, typically 1 to 3 days after the work begins. An initial inspection meeting will be conducted by the Weston team, State agency representatives, and the contractor's supervisor/foreman involved in the particular work feature. An inspection of the work will be performed to:

- Ensure that preliminary work is completed.
- Verify that materials/equipment and construction procedures are in compliance with the contract documents.
- Review and verify inspection and testing requirements for environmental monitoring and survey control.
- Set standards of quality required to meet contract specifications.
- Ensure safety requirements are met and that the AHA is updated as required to accurately reflect any change conditions and site-specific hazards. Check equipment for safety provisions.

Phase 3: Follow-Up Phase

The follow-up phase is accomplished through the daily inspections (frequency may vary depending on project details) by Weston's QC Manager, or designee, and through performance of the required control testing and survey documented in the project specifications. The follow-up phase efforts will ensure a continuation of the quality and safety standards established during the preparatory and initial phases until completion of the work feature. The QC team's follow-up phase activities will be recorded in the Data Quality Control Report (DQCR), including deficiencies noted, corrective actions taken, and control-testing results.

Processes for Lapses and Deficiencies in Quality

There are several mechanisms used to identify services or activities that do not comply with the contract requirements. These mechanisms include the following:

- Inspections
- Tests
- Notification from DTMB

In each case, noncompliance issues will be specifically identified in documents generated as a result of construction inspections. It will be the responsibility of the QC Manager or designee to notify the relevant parties of the noncompliance condition and to ensure that corrective action is taken as soon as possible.

A deficiency is defined as a quality or condition that is incomplete, inadequate, or not in compliance with the accepted submittal. As deficiencies are noted, they will be documented in written reports provided to DTMB, the State agency, and the contractor.

Inspection and Testing

Where applicable, specified tests and required monitoring instrumentation or tests will be performed to verify that control measures are adequate and to provide conformance with the contract. When required by the specifications, the QC Manager will furnish DTMB or the State agency with duplicate samples of test specimens for possible testing by a third party. Weston's QC Manager will perform the following activities:

- Verify that the testing standard or procedures are compliant with contract requirements.
- Verify that facilities, instruments, and testing equipment are available and comply with testing standards.
- Check the test instrument calibration data against certified standards.
- Verify recording forms and test identification control number system, including the test documentation requirements.
- Record and report the results of tests and monitoring instruments, both passing and failing. Actual test reports will be submitted later with a reference to the test number and date taken. An information copy of tests performed by an off-site or commercial test facility will be provided directly to DTMB and/or the State agency.

Testing activities will be recorded in inspection reports, indicating the name of the test performed, specification paragraph referenced, and location of the test performed. Results of the test will be recorded on the daily report and logged. Actual test reports will be furnished promptly to DTMB and the State agency.

Acceptance of Closeout Procedures

At substantial completion, the DTMB and/or the State agency representative will be notified to conduct a post-construction survey and inspection in conjunction with Weston to ensure contract conformance. A joint inspection will be performed to ensure the contractor has achieved substantial completion, to prepare punch-list items, and to evaluate occupancy.

Phase 4: Equipment Startup and Commissioning

Manufacturer's startup procedures will be followed for new equipment.

Phase 5: Pre-Final Inspection

At substantial completion of the project, the DTMB and/or State agency representative and Weston will conduct a pre-final inspection. In addition to this inspection, DTMB and/or the State agency representative and Weston will inspect demobilization of temporary facilities and cleanup of staging areas to ensure contract conformance. Any items noted during the pre-final inspection will be corrected in a timely manner.

Phase 6: Final Inspection

Final inspection will be scheduled by Weston in coordination with DTMB and/or the State agency representative based upon results of the pre-final inspection. Assurance will be provided that the work will be completed and acceptable by the scheduled final inspection date. Weston's QC Manager will attend the final inspection.

Phase 7: Training Procedures and Training Log

Personnel training procedures (when applicable) for State agency personnel or outside vendors will be documented and included in the project documents for each subtask. Procedures and format of the documentation will depend on the project SOW.

2.4 WHY WESTON IS BEST SUITED TO PROVIDE THE REQUIRED SERVICES AND HOW WE WILL PROVIDE THE BEST VALUE TO THE STATE OF MICHIGAN

Weston is best suited to provide the required services to the State on this 2023 ISID Contract because of our experienced staff who will be assigned to this program; knowledge of regulatory requirements; established track record of providing reliable, high-quality service and value to the State; and, most importantly, our commitment to continued excellence in helping DTMB and various State agencies meet your missions into the future. Weston has held contracts with the State for over 30 years and we are committed to keeping our long-term working relationship with the State strong, flexing to the specific needs of each project and situation. We have the right mix of staff of varying levels of experience, expertise, and capabilities needed to achieve the State program's objectives of today and the foreseeable future (see **Section 3**). Weston will begin providing requested services upon contract execution and project assignment immediately upon authorization to do so. The following subsections expand on why Weston is best suited to provide services to the State under the 2023 ISID.

2.4.1 Program Familiarity

Weston has demonstrated on all previously held State contracts that we can provide the resources necessary for efficient program management, as well as successful and timely project completion. Having supported the State on similar projects for over 30 years, our team knows what it takes to successfully complete a project. Weston currently holds an Environmental ISID contract with DTMB, where Mr. Joe Ruiz serves as the Program Manager. We are committed to continuing the dedication of Mr. Joe Ruiz, a highly skilled and experienced Program Manager with a track record of success with our current contract, to serve in this role for the 2023 General Architecture/ Engineering/Landscape Architecture ISID Contract. Weston is familiar with the required DTMB forms for PSC contracts as well as standard forms for invoices and contract modifications. DTMB can be assured that Mr. Ruiz will continue to provide the required level of management time to make this program successful on all levels, including cost, schedule, and quality. Mr. Ruiz's proven track record of Program Management experience is further detailed in his resume in **Appendix A**. Leveraging Mr. Ruiz as Program Manager and the experience of the Weston team on other similar ISIDs allows for program continuity and avoidance of any type of "learning curve" in implementing the 2023 ISID Contract. Weston performs and understands the State Procurement Procedures applicable to ISID contracts and we currently hold several contracts for other state agencies where we have provided services on open-ended contracts. Examples of our open-end project experience are further detailed in the Article 5 of the Questionnaire.

2.4.2 Organizational Structure Advantages

One of Weston's key strengths is our ability to discern and employ the optimum staff resources and technique for each assignment, based on specific site conditions, necessary disciplines, schedule, and budget. Our single-profit-center organizational structure means that our firm does not internally compete for resources. This means that we can draw from more than 1,115 technical resources companywide as necessary—ensuring direct access to the firm's top talent when supplemental staff expertise is required. This organizational structure and internal emphasis on professional development allows for direct "reach-back" to subject-matter experts (SMEs) and additional resources,

as needed. Our technical resources are managed by discipline-specific practice leaders who promote staff development and sharing of qualified resources. Team development and learning are touchstones within our corporate quality program, and we regularly share technical and regulatory updates, lessons learned, best practices, and webinars/training experiences companywide to facilitate professional growth as well as deepen and diversify our bench strength.

Weston's capabilities are expanded even further with the resources of PESI on our team and our extensive teaming experience, having completed more than 150 projects of similar scope together within the last 5 years. PESI brings to the team the resources of 1,330 personnel companywide, including 60 employees in the Great Lakes States, who we can mobilize as needed.

> ***"Weston has done a very good job following all applicable codes and regulations during the project. Weston has abided by their Accident Prevention Plan and had zero reporting accidents or injuries during the project. Safety reporting and updates were discussed during teleconferences to keep the team informed."*** — Assessing Official, USACE, CPAR rating Repair/Replacement of Sanitary Sewer Lines, Fort Detrick, 01/05/2021.

2.4.3 Broad Range of Services

The Weston team has worked on projects of varying complexity and at applicable facilities ranging in size, and we understand how to service areas involving large portfolios in high population areas or in specific remote locations. We work from the Detroit Metro Area to the Upper Peninsula, and we understand and have experience assessing large office complexes or buildings and parking lots, storage facilities, manufacturing facilities, industrial warehouses, parks and recreation facilities, educational facilities, processing and distribution centers, vehicle maintenance facilities, and medical and life science campuses.

The Weston team is one of a few select groups with specialized, in-house, multidisciplinary capabilities to carry out diverse engineering and architecture solutions—with engineers, building and construction specialists, and an energy efficiency/sustainability team that can assist with energy goals and associated public messaging. With an integrated, internal workflow that seamlessly combines a broad range of disciplines, we will bring efficiency and a guaranteed level of consistency and customer service to our communications for deliverables for this contract. We are fully prepared to deliver and bring the following strengths and value-added services in support of various State agency planning efforts:

- **Extensive Facility Condition Assessment (FCA) Experience.** FCAs are a core service area for PESI, with more than 25 years in the industry as a company. With a track record of performing local, multidisciplinary FCAs on all building types at various State-owned properties, by a team with a range of 10 to 30 years' experience in the industry, PESI has performed over 2,000 FCAs in the last 5 years throughout the State.
- **Experienced in Serving Municipal, City, Government, and Private Clients.** The Weston team offers our strong, local presence (as shown in **Figure 1**) with 30 staff based out of our Michigan offices, which allows for immediate response to contract demand. Our key personnel have extensive experience providing program, project, and data management, along with building assessment services for municipal, city, county organizations, schools, boards of education, state and local agencies, corporations, and other client types. As a result, we are well versed with a variety of processes, which allows us to hit the ground running—saving you time and money.
- **Delivering Efficiencies through an Integrated Multidisciplinary Assessment, Planning, and Design Team.** The Weston team has proven experience working together on assessments of Midwest regional buildings and multi-site portfolios, including in-house roofing, MEP, fire protection, engineering, Americans with Disabilities Act (ADA) compliance, and LEED® Accredited Professional (LEED® AP) certified energy efficiency and sustainability experts.
- **Prioritizing Safety** and **Risk Management.** Our professionals currently work with public agencies and municipalities. We are familiar with the safety, secure workplace procedures, standard terms and conditions, and insurance requirements. Personnel assigned to the project can and do undergo comprehensive law enforcement and security background checks, are drug screened, and will meet security clearance requirements.

- **Energy and Sustainability Solutions that Drive Low-Impact Designs.** We bring to this Contract a team who specializes in determining areas for energy efficiency and sustainable modifications for your buildings and can provide long-term estimates of benefits.

The Weston team will work as a seamless entity, providing clear, complete, and accurate information that will help DTMB and various State agencies maintain their facilities and reach their objectives in an efficient and cost-effective manner by developing innovative approaches to challenges, thinking outside of the box, and soliciting input from our diverse and qualified staff.

3. PERSONNEL

With over 2,446 staff across the United States, over 125 professionals in the Great Lakes states, and 30 professionals located in Michigan, the Weston team is prepared to meet all of the State's project staffing requirements, with the understanding that the project objectives are to efficiently and effectively evaluate, design, and procure and supervise the construction on State-owned properties.

The Weston team currently has seven total Project Managers (four based in Michigan) that have been identified to support the 2023 ISID Contract, along with additional technical staff to assume lead field roles and execute project assignments.

Weston's Michigan-based proposed program/project management and senior technical staff have nearly 100 combined years of experience in the engineering and architectural fields. This knowledge of design and construction practices gained over the years is significant and will provide a valuable resource to the State.

Our Program Manager has the authority to access and assemble the right team resources from across our firm. Our design team is flexible and has the ability to structure leads or resources to provide the best value for the project, and to adjust resources required due to members' experience of analyzing the situation and understanding the scope and objectives.

3.1 PERSONNEL BY CLASSIFICATION

Key personnel will provide the State with a wealth of relevant experience and project support in accordance with the anticipated contract assignments. Key Personnel were identified for the 2023 ISID Contract based on their applicable experience and relevant qualifications and are denoted with a * symbol in **Table 1** on the following page. **Appendix A** contains the resumes for Key Personnel.

Our proposed team has a successful track record of performance on similar project types that may be assigned as part of this 2023 ISID Contract.

Table 1. Personnel by Classification

Name[1]	Title[2]	Physical Location	P-Level Classification[3]
*Joe Ruiz	Program Manager/Project Manager	Ann Arbor, MI	P4
*Chris Douglas	Project Manager	Okemos, MI	P3
*Spencer Eldredge, CQM-C	Project Manager	Lakewood, CO	P3
*Julian Bielawski, P.E., CAPM	Project Manager	San Antonio, TX	P4
*Sam Irrinki, P.E.	Project Manager	Austin, TX	P4
*Wes Skinner, CHMM	Project Manager	Farmington Hills, MI	P3
*Victor Tvedten, AIA, LEED® AP	Project Manager	Grand Rapids, MI	P3
*Herold Hannah, CIH, CSP	Health & Safety Manager	Pittsburgh, PA	P4
*Megan Abbott, P.E.	Lead Engineer/Quality Manager	Lincolnshire, IL	P3
*Adam Brown, P.E., CQM-C	Lead Engineer	Austin, TX	P4
*Dain Chernick, P.E.	Project Engineer	Austin, TX	P4
*Natalie Harkins, P.E., CQM-C	Project Engineer	West Chester, PA	P3
*Rob Ederer, P.E., CQM-C	Project Engineer	Albuquerque, NM	P3
*Nancy Koch, P.E., CAPM	Project Engineer	Austin, TX	P3
*Craig Burt, P.E.	Project Engineer	West Chester, PA	P3
*Ann Civitano, P.E., LEED® AP	Technical Lead	Denver, CO	P3
*Michael LaFalce, R.A.	Senior Architect	White Plains, NY	P4
*Matthew Miller, R.A., PP	Senior Architect	Eatontown, NJ	P4
*Rob Intveld, PE	Project Engineer	Los Angeles, CA	P4
*Michael Bock, RRC, CCCA	Technical Lead	Kansas City, KS	P4
*Nate Benton, PE	Project Engineer	Denver, CO	P4
*Christy Kim, AIA, CASp	Senior Architect	Santa Ana, CA	P4
*Greg Souder, PE	Project Engineer	Denver, CO	P4
*Mark Major, CQM-C	Construction Manager/Superintendent	Concord, CA	P3
*Suraj Shankar	Cost Estimating Lead	Houston, TX	P3
Lindsey Blanchette, P.E., CQM-C	Engineer	West Chester, PA	P2
Dylan Borger, P.E., CQM-C	Engineer	West Chester, PA	P2
Mike Stratton, P.E.	Scheduling Lead	West Chester, PA	P2
Antonio Thomas, CQM-C	Project Controls Lead	Houston, TX	P2
Dave Hernandez	CADD Lead	Lincolnshire, IL	T3
Stephanie Staudt	Designer	Houston, TX	T3
Jack Lupo	Assessor	Grand Rapids, MI	P3
Steve Cooper	Assessor	Farmington Hills, MI	P3
Halie Foster	Assessor	Farmington Hills, MI	P2
Yuriy Zajac, R.A.	Assessor	Chicago, IL	P4
Felix Condurat, P.E., RRO	Assessor	Chicago, IL	P4

* Key Personnel

NOTE: [1] Employee identified as direct or consultant employee in Appendix A, Resumes

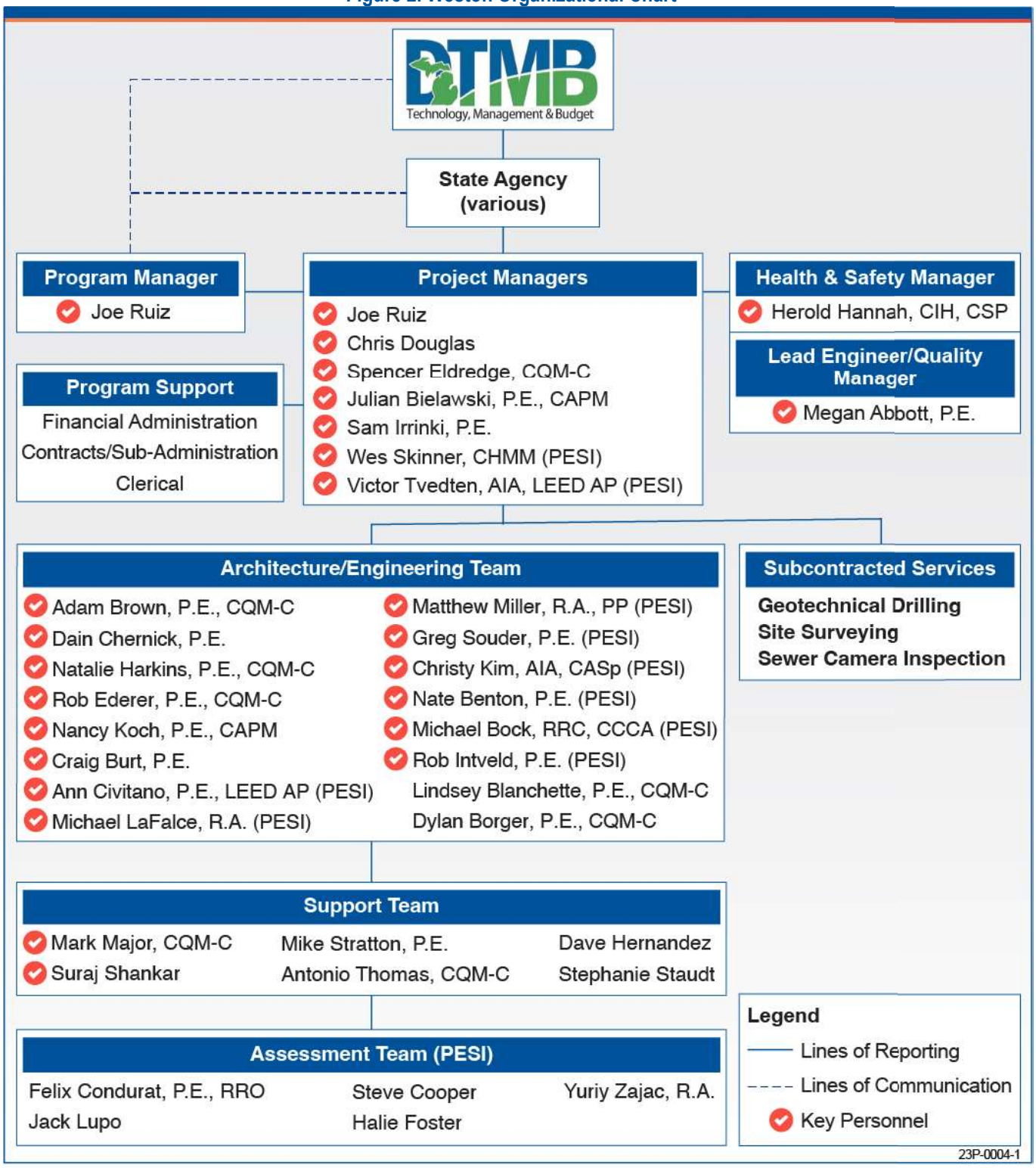
[2] Functional roles and responsibilities included in more detail in Appendix A, Resumes

[3] Years of experience in P-Level Classification included in Appendix A, Resumes

3.2 ORGANIZATIONAL CHART

The Organizational Chart for Weston under the 2023 ISID Contract is presented in **Figure 2** below.

Figure 2. Weston Organizational Chart



4. MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE

Weston understands that although the diverse range of projects covered under this ISID will require a variety of approaches during the project execution phase, common elements will be shared between projects. The following sections detail Weston's approach to key elements within the phases of work detailed in the DTMB PSC. We have not included phase descriptions, task details, or deliverables as these are clearly defined in the DTMB PSC.

"Management team for Weston has consistently been proactive, responsive and transparent for all contract integration, coordination and execution activities, exceeding Government expectations."— Assessing Official, USACE, CPAR rating, 11/2021.

4.1 PROJECT MANAGEMENT

We recognize the assignments under this ISID Contract may require delivering a range of services efficiently to meet deadlines and produce high-quality deliverables within a given budget and schedule. The key to successfully completing these services is staffing the project with the right team—assembling an experienced, responsive project manager, qualified project engineers and professionals, and a proven successful approach to project delivery. Weston's goal for providing the required services is to:

- Be highly responsive to your needs.
- Maintain continuous communication.
- Implement your feedback.
- Use our national experience to provide innovative solutions and deliver excellent results.
- Produce quality constructible and operable sets of design plans and documents.
- Use our management tools to meet your schedule and complete the work within budget.
- Exceed your expectations, every time.

Figure 3. Weston's Project Lifecycle Approach

Weston's Project Lifecycle Approach

The Team's management capabilities include proven processes, procedures, and tools that will be executed by the management team to clearly communicate with the DTMB and State agency project team, manage all the essential functions, and provide the optimum technical resources throughout the duration of the project to meet project objectives. Weston, as the prime contractor, will rely on our Project Lifecycle (PLC) program (**Figure 3**) to define lines of communication, authorities, and coordination and to effectively address essential management functions, integration, and resources. This PLC program has been used successfully with our other State contracts for more than 20 years.

The PLC program guides project teams through a consistent management approach across the total lifecycle of each project. This approach reduces our clients' risks as well as our own. From project scoping to turnover/closeout, Weston's multi-phased PLC program defines the decisions common to each phase and establishes the appropriate decision makers accountable for consistently delivering exceptional projects for our clients. The up-front agreement of all key parties enables our teams to meet win-win goals, such as budget, schedule, quality, and safety.

Key goals of our PLC process include the following:

- Integrate stakeholders and collaborate on the best solutions for all parties—clients, regulatory agencies, public stakeholders, subcontractors, and Weston.

- Ensure staff availability and accountability at every phase of a project, from client and subcontractor selection to project closeout, as appropriate.
- Implement lessons learned from project proposals and execution and incorporate them on future efforts.
- Focus project teams on environmental protection, implemented consistently throughout each project's lifecycle.
- Optimize value creation for our clients.
- Ensure each project is executed safely and securely and is compliant with regulatory requirements.

4.2 SCHEDULE MANAGEMENT

Although the scheduling requirements detailed in the DTMB PSC provide very thorough expectations on schedule development, deliverables, and timing of schedule updates, Weston's team can provide value to the State in terms of schedule management. Weston's team tends to focus on three key elements when managing project schedules: work sequencing, transitions between work phases, and identification of potential issues and mitigation strategies. Each of these is summarized below.

4.2.1 Work Sequencing

Weston's experienced design and construction teams recognize that the construction sequence can be vital to project success and can frequently result in cost savings to the client. Weston's process for schedule development and continued evaluation throughout the project involves an overall review by design engineers, construction managers, and procurement personnel. The schedule review team's objectives are to ensure that the most logical and economical sequence of work is identified based on a variety of factors, such as active operations at a site, seasonal variations of use or access, limits on working hours, availability of equipment/supplies, and a variety of other factors depending on the project specifics. Even after a preferred sequence of work is identified and approved by the client, Weston's team continues to revisit the sequence to ensure outside factors (e.g., supply chain, economic factors, weather, operational changes) have not impacted the work sequence.

4.2.2 Work Phase Transitions

Transitions between phases of work can have a significant impact on overall project success, and Weston's team performs a thorough evaluation to ensure client expectations and needs are met. In the cases where a project will only include one phase of work, or involve new construction, this task is generally not required. However, when a project is more complex, such as repairs or alterations to part of a building with active operations, transitions between phases must be carefully considered and integrated into the project plans. Weston's team has significant experience focusing on work phase transitions because we frequently conduct projects at sites with active operations with critical functions, such as a post office or an active military base. The transition between work phases may include use of temporary facilities, temporary power, temporary heating or cooling, or partition of spaces to allow continued use/occupancy and to minimize impacts to facility occupants. Any critical work phase transitions will be identified by discussions with DTMB, the State agency, and any end-user. Weston's thorough understanding of your needs and our team's plan for smooth work phase transitions can be incorporated into the design documents and ultimately implemented by the construction contractor.

4.2.3 Issue/Risk Identification and Mitigation

Weston's ability to effectively manage project scheduling is driven by the early identification of shifting conditions and our adaptation to/mitigation of these conditions. For example, during the pandemic, many projects were delayed due to public safety measures, supply chain disruptions, or unanticipated material shortages/unavailability. Although the worst of the pandemic-related delays have passed, Weston's team continues to be diligent in proactive issue identification and mitigation of these risks to successfully complete project delivery. When developing a construction schedule, Weston's procurement team provides valuable input to the design team regarding current conditions in the marketplace. Due to Weston's extensive design-build business sector, we know which items are experiencing delays or have longer lead times and can incorporate this knowledge into a project schedule without extensive marketplace-based research. Another issue that we frequently encounter that has the potential to affect

the schedule is a site with a limited amount of space for storage. Weston frequently manages similar situations at Post Office facilities, and we know that careful planning is required to order material and supplies with adequate time in excess of the minimum, or "float," but also to avoid having equipment or supplies delivered too early, resulting in unacceptable storage conditions, a cramped or unsafe working environment, or disruption to facility occupants/operations. Weston frequently builds in contractor-required storage at an off-site location, such as the contractor's yard/shop, into the procurement package to avoid a situation where storage can negatively impact the project.

4.3 COST TRACKING

We have 10 cost trackers/project controls specialists who specialize in design, design-build, and design-bid-build projects. The specialists are responsible for monitoring field timesheets and daily costs/schedules; monitoring subcontractor progress; analyzing critical path; assisting with subcontractor procurement; verifying subcontractor pay requests; and revising cost approaches as appropriate, with the goal of saving our clients money. Our cost/project controls staff work on a project-specific basis to develop and calculate project metrics for dashboard reporting and trend analysis and to support project review meetings on progress, cost, risk assessment, and risk management. The Weston team is experienced in scope control and change management, and in evaluation of labor cost and hour and manpower requirements against budget constraints. Our cost trackers/project controls specialists support review and evaluation of vendor purchase orders, cost proposals, and invoices, as well as implement and ensure cost control processes to report on expenditures and cost commitments accurately.

4.4 PLAN FOR ACCOMPLISHING THE WORK

Although the plan to accomplish the project significantly varies between the project types listed in Article 2 of the Questionnaire, many common elements are shared throughout our approach. To demonstrate Weston's understanding of typical projects under this 2023 ISID, the remainder of this section presents a narrative summary of the effort that may be required.

4.4.1 Work Plan

Following assignment of a project, Weston will develop a Work Plan, listing all tasks/deliverables, project team components, project critical path schedule, and a cost estimate, and provide it to DTMB/State agency for approval. This will set the foundation for performance expectations and establishment of scope with DTMB and the State agency.

4.4.2 Project Kickoff Meeting

Weston will conduct a project kickoff meeting to align expectations. This meeting will be attended by all identified project participants, including the appropriate State agency Project Manager, project engineers from required disciplines, the Project Quality Representative (PQR), and other facility stakeholders. The project team will discuss and confirm all project-specific quality assurance (QA)/QC requirements, as well as the roles and responsibilities of each project participant. The Project Manager or Engineer of Record (EOR) will explain the project QA/QC process and submittal requirements to the design team members. Client requirements, special technical needs, contractors, or technologies will be communicated to establish a clear understanding of these requirements.

4.4.3 Design Basis Document

A Design Basis Document (DBD) is a living document that establishes the design criteria (i.e., regulatory standards, code requirements, and Michigan specifications) for the project. The DBD is the principal guidance document ensuring that the performance and stakeholder requirements are communicated to all parties. The DBD will outline the design, equipment, design features, and performance requirements consistent with the State agency goals and objectives. The DBD is intended to establish the components of the design and to create the framework for the detailed design, construction documents, and construction specifications. The DBD is reviewed and/or discussed with the State agency prior to initiating design work. This ensures that the DBD's content identifies all requirements and risks associated with the project. The DBD is customized for each project but may include the following:

1. Discuss the purpose and scope of the document.

2. Describe the document's intended audience.
3. Identify risks related to the design and implementation.
4. Identify deliverable reviews.
5. Describe operation and maintenance (O&M) goals and key use-cases.
6. Identify key stakeholders and constituents.
7. Identify all codes and standards, including the edition or date of issue to be used in the design.
8. Provide references to pertinent documentation.

4.4.4 Project Progress Meetings

Project progress meetings are held as determined in the DBD, as defined at the project kickoff meeting, or as requested by the State agency Project Manager. Project participants track the scope of services with progress reports, which include the effort to complete the remaining work on both a technical task and a budget-related basis. The number of drawings and specifications and the planned content of each document are the normal milestones in evaluating progress on a design project technical task. The design team provides the information to the Project Manager and EOR on a monthly basis, or more frequently, as determined during the project kickoff meeting.

4.4.5 Design Deliverable Reviews

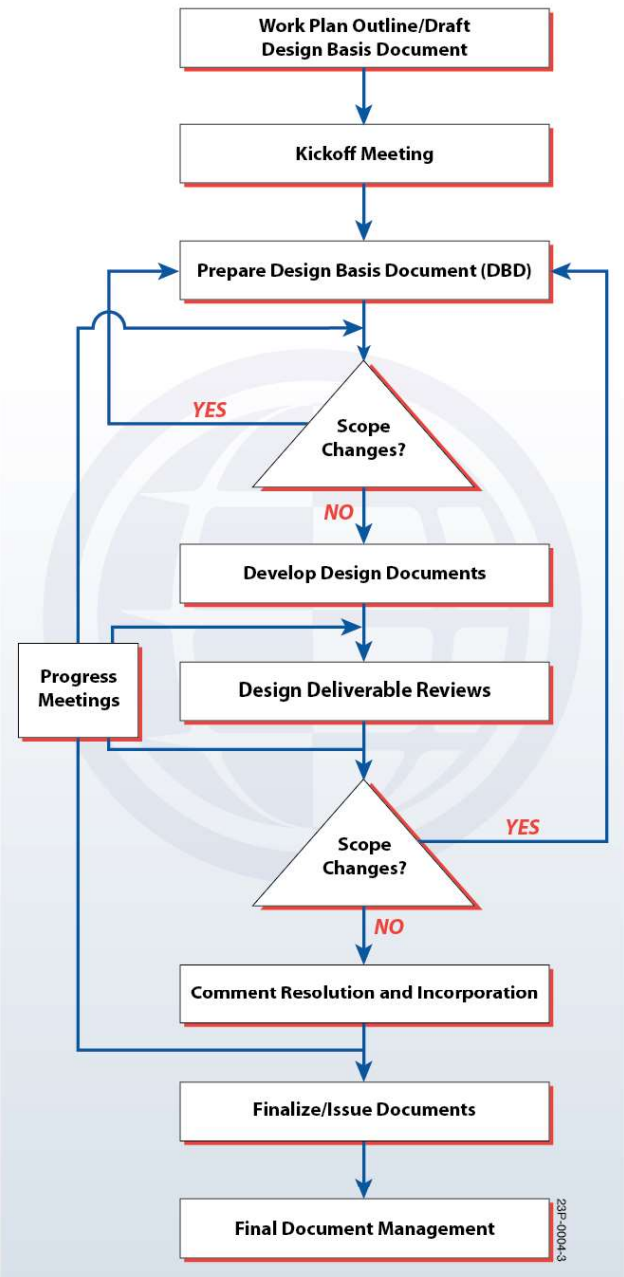
Deliverables produced by Weston undergo internal reviews for QA before submittal to the Project Manager or EOR. These interim reviews ensure that products are solving the correct problem and satisfying project/contract requirements as defined in the DBD.

Engineering design projects may require some or all of the following reviews for each deliverable as defined in the DBD. These reviews are scheduled and coordinated by the project engineer and the assigned PQR, or other individuals as assigned in the DBD.

The following is a selected list of reviews that may be required for projects under this ISID:

- Sustainability review may be included to address the features of the project that relate to sustainability, the impact-to-cost, and the environment that those features affect.
- Value engineering review may be included as part of the project. This could be a formal value engineering study, a review of estimated construction costs to comply with a fixed capital budget, or a general review of the project to ensure that the client will receive a workable and cost-effective design product.

Figure 4. Weston's Design Phase Process



- Design reviews are conducted at the completion of various design phases of the project (approximately 30%, 60%, 90%, and final design, or as specified by DTMB or the State agency) prior to submittal. The project engineer conducts this review in conjunction with the EOR. The purpose of these reviews is to ensure that the project is being conducted in a manner that meets the required quality standards in accordance with the DBD.
- Constructability review may be conducted to adjust the design so that the project can be conducted with minimal practical difficulty and with limited potential for conflicts.
- Operability review may be conducted to verify that the project will operate properly and is controllable.
- Maintainability review may be conducted to adjust the design so that the installed facility can be maintained with a reasonable minimum level of difficulty, in a cost-effective manner, and without requiring an unacceptable level of shutdown.
- Design technical reviews are conducted at milestones as scheduled in the DBD and/or as needed throughout the design phase of the project. These reviews are conducted and documented by the EOR. The purpose of these reviews is to ensure that the quality of the design project is being met in accordance with the scope of services, proposal, and/or contract for this project. Corrective actions are defined and documented.

4.5 CONSTRUCTABILITY REVIEW AND QUALITY CONTROL PLAN

Our basic quality management philosophy at Weston is "quality is owned by all." Our in-place policies and procedures help ensure that all activities performed in support of this contract are conducted safely, technically sound, completed on time, properly documented, and consistent with our shared goals. The following subsections focus on constructability reviews and the overall quality controls associated with the 2023 ISID.

Weston's on-site supervisor displayed exceptional attention to detail resulted in a very high quality end product... (Exceptional)...Weston continually exceeded expectations with regards to execution of plans and specifications. The end product provided great value to the installation (Exceptional)...[Weston] kept all files and documentation accessible and up to date throughout the construction period. Inspection items were documented and corrected quickly. All reports were accurate and delivered to the COR and uploaded to RMS daily (Very Good)." – Assessing Official, CPAR rating for USACE Omaha District's D-B POL Contract (D-B Repairs to 25,000 Gallon AST Containment and Subsequent Repair/Renewal Tasks)

4.5.1 Constructability Review

Weston staff who are experienced with construction management of the type of project being designed will conduct constructability review of project designs. The purpose of the review is to obtain feedback on the design's accessibility, staging and storage, installation equipment opportunities/limitations, traffic impacts, and impacts to residents in the project area. The feedback will be addressed prior to the submittal of the 100% design.

The goal of the constructability review is to identify construction alternatives that may offer savings on construction costs. The review will consider specific construction equipment that may be used and associated limitations on access, work areas, disruption to the public, and traffic control. The reviews can streamline the construction schedule by incorporating feedback on actual versus estimated working days calculations. Weston's constructability review provides value to the State by ensuring that impacts to the public or operations are limited and ensures any type of specialty equipment or accommodations to accomplish the work are incorporated into the project cost estimate. This ensures that the State will have an accurate estimate of the project's total cost (and adequate funding) prior to soliciting public bids by contractors.

4.5.2 Quality Control Plan

Weston's QC program is detailed in Article 5 in the Questionnaire.

5. QUESTIONNAIRE

Weston's completed Professional Questionnaire can be found on the following pages.

Questionnaire for Professional Services
Department of Technology, Management and Budget
2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: Weston Solutions of Michigan, Inc. (Weston)
   Address: 2501 Jolly Road, Suite 100, Okemos, MI 48864-3677
   Telephone and Fax: (T) 517-381-5920 | (F) 517-381-5921
   Website: www.westonsolutions.com E-Mail: j.ruiz@westonsolutions.com
   SIGMA Vendor ID: CV0007304

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work:

   Branch offices
   Weston Solutions of Michigan, Inc. - Okemos, Michigan
   Weston Solutions, Inc. - Dayton, Ohio
   Weston Solutions, Inc. - Lincolnshire, Illinois

   Virtual offices: As an employee-owned company, Weston has found that we can serve many of our clients more effectively and efficiently by enabling employees to work virtually. In addition to the "brick and mortar" offices identified above, Weston personnel are located in "virtual offices" in **Ann Arbor, Dearborn, Grand Rapids, Houghton, and Traverse City**, Michigan. Regardless of their location, the project-related activities of these employees are directed by Weston Project Managers to ensure that our clients receive exceptional and cost-effective service.

   Our presense in the Midwest also includes offices in Ohio and Illinois. As a company, Weston maintains 26 full-service offices and two laboratories with more than 1,115 employees. In addition to our regional offices, Weston has an extensive network of remote resources based

out of home offices. Our company structure includes a nationwide technical group that has no constraints, and our single-profit-center organization allows Weston PMs to reach back into our nationwide bench of technical staff to identify and assign the "right" resources regardless of location. Resources from the nationwide techincal group as well as our three Midwest regional offices can be used on an as-needed basis to provide the State with the specialized expertise and technical support necessary to complete assignments under this 2023 ISID contract.

Subconsultant and Other Subordinate Elements

Weston will serve as prime contractor, supported by Partner Engineering and Sciences, Inc. (PESI), our exclusive teaming partner. PESI is an international engineering and assessment company with the added benefit of full-service engineering, construction, energy, and environmental service capabilities. PESI offers the full spectrum of multidisciplinary engineering and assessment personnel, including licensed civil and environmental engineers; registered architects and construction professionals; licensed structural, mechanical, energy, and forensic engineers; certified roof and envelope professionals; and zoning and survey professionals.

PESI brings the resources of more than 1,330 personnel in 40 offices across the U.S., including more than 60 employees in the Great Lake States, located in Farmington Hills, MI; Lombard, IL; Chicago, IL; and Cincinnati, OH.

The Weston team has the existing capabilities and experience to meet the requirements of this contract. Weston and PESI have a long-standing relationship completing over 150 projects together for the United States Postal Service (USPS). Our client-centric business model prioritizes building teams around our clients to enhance delivery excellence. The team we have assembled for this contract is aligned from the field level up through engineering, project and program management, and senior management, with clear lines of communication and division of resources established to provide DTMB seamless project execution. Weston, as prime contractor, will be responsible for overall performance of the contract and will serve as the point of contact (POC) for DTMB.

Weston also anticipates requiring the use of highly qualified, specialty subcontractors (geotechnical drilling, surveyors, sewer camera inspection, etc.) to assist with conducting project-specific field activities under Weston supervision. These specialty subcontractors will be procured on a competitive, project-specific basis, in accordance with Weston and State procurement processes.

If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)?

2501 Jolly Road, Suite 100, Okemos, MI 48864-3677

Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number.

Joseph Ruiz, Program Manager, 2501 Jolly Road, Suite 100, Okemos, MI 48864-3677, j.ruiz@westonsolutions.com, 773-315-1959

2. Check the appropriate status:

☐ Individual firm ☐ Association☐ Partnership☒ Corporation, or ☐ Combination – Explain: N/A

If you operate as a corporation, include the state in which you are incorporated and the date of incorporation:

Roy F. Weston, Inc. – Pennsylvania – January 2, 1957. In 2001, Weston became an employee-owned company and the corporation's name changed to Weston Solutions, Inc.

Include a brief history of the Professional's firm:

Weston delivers integrated sustainable, environmental, redevelopment, and construction solutions. Founded in 1957 as Roy F. Weston, Inc., our history and growth within the State demonstrates our commitment to the State. Weston began assisting clients in Michigan in 1978 when we became involved with a waste-to-energy facility owned by the Greater Detroit Resource Recovery Authority. In 1982, Weston opened a project office in southeast Michigan to support our Region V Technical Assistance Team Contract activities for EPA. These activities provided for increased interaction between Weston and State personnel, initially with the Michigan Department of Natural Resources (MDNR), and later with the Michigan Department of Environmental Quality (MDEQ). With the award of the initial Level of Effort (LOE) Contract in 1989, Weston again expanded by opening an office in the Lansing area (Okemos) to provide support to the State and has continued to expand our client base to include state, federal, and private clients throughout Michigan. Weston has made a difference for over 65 years by providing a myriad of engineering services, including project planning and design, permitting, environmental services, construction, and construction oversight and management. Across the country, Weston is supporting our state government clients who are embracing aggressive sustainability and infrastructure development agendas and seeking partners to help them achieve their short- and long-range goals. Weston affirms its commitment to work hand-in-hand with state governments to find the most creative, efficient, and cost-effective solutions to meet their needs. Weston staff have a long record of supporting the State and are prepared to provide continued services under this 2023 ISID contract.

3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

Refer to **Section 3.2 of Part I – Technical Proposal** for the organizational chart.

4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company.

No changes

5. Provide a four year rate schedule per position.

   Refer to **Part II – Cost Proposal** for Billable Rate Schedule

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify **ALL** project types and professional services for which your firm is exceptionally qualified and experienced.

Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types but will assist the DCD Project Directors in matching firms with projects.

Refer to **Appendix B** for examples of successful projects performed in the last 5 years for each project type category that is checked below.

☒ ADA facility assessment and remodeling
(Appendix B-1)
☐ Boilers and steam systems
☒ Bridges – pedestrian and vehicular
(Appendix B-2)
☐ Building and structure additions

☒ Building envelope investigation, repair, upgrade
(Appendix B-3)

☐ Correctional facilities
☐ Door and window replacement
☐ Elevators
☒ Fire and security alarm systems
(Appendix B-4)
☐ Fish passage structures

☐ General architectural and/or engineering design

☒ Historical Preservation
(Appendix B-5)

☒ HVAC equipment replacement, upgrade, selection
(Appendix B-6)

☒ HVAC controls replacement, upgrade, selection
(Appendix B-7)

☐ Interior remodeling and renovation
☐ Laboratory facilities
☐ Landscape architecture
☐ Land Planning

☒ Locks, Dams, Water Diking Systems and Water Control Structures
(Appendix B-8)

☒ Maintenance and facility preservation
(Appendix B-9)

☐ Marine work - boat launch facilities, docks, harbors

☒ Parking and paving
(Appendix B-10)
☐ Recreation and Sports Facilities / Fields
☒ Roof repair, restoration and/or replacement design
(Appendix B-11)

☒ Soil Erosion Sedimentation Controls
(Appendix B-12)
☒ Site surveying
(Appendix B-13)

☒ Stormwater management and drainage plans
(Appendix B-14)

☒ Structural investigation and assessment
(Appendix B-15)
☐ Toilet and/or shower room remodeling or design.

☒ Trail design and development
(Appendix B-16)
☒ Wastewater systems
(Appendix B-17)
☒ Water supply systems
(Appendix B-18)

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

☒ Western Upper Peninsula (west of Marquette)

☒ Eastern Upper Peninsula (east of Marquette)

☒ Northern Lower Peninsula (north of Grayling)

☒ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)

☒ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)

☒ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)

☒ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)

☒ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

ARTICLE 4: CONTRACT UNDERSTANDING

The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as larger projects?

Yes ☒ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?

Yes ☒ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?

Yes ☒ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)

Yes ☒ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?

Yes ☒ No ☐

4.6 Is your firm familiar with Design and Construction's MICHSpec and DCSpec contracts and the enforcement of such?

Yes ☒ No ☐

If yes, explain:

Weston's familiarity and use of MICHSpec and DCSpec includes performance of hundreds of construction-related projects completed for the State in the past 30+ years, under our previous and current State contracts, including similar ISID contracts. The Weston team understands how to adapt standard specifications like MICHSpec and DCSpec to specific project needs and to ensure procurement of construction contractors result in the best value to the State. On other projects performed for the State, Weston has used MICHSpec or DCSpec along with our engineering design documents to procure construction services through DTMB for public bidding. Once the procurement has been awarded to a construction firm, Weston's experienced construction managers work with the engineering team to ensure compliance during construction. This begins with evaluation of post-bid submittals and ends with contract close-out. The amount and type of reviews of submittals, shop drawings, material certifications, and other items required by the specifications will depend on the type of construction project being performed. Weston's goal when developing specifications is to ensure the SOW is clearly detailed with adequate requirements to ensure quality. This will result in a successful public procurement process where the contract value is fixed, and the State ultimately results with an excellent end product at the best value.

4.7 Does your firm have prior experience working with the State of Michigan?

Yes ☒ No ☐

If yes, explain:

Weston's experience in the State began in 1978. We opened our first office in the State in 1982 and won our first major State contract just a few years later in 1989. With more than three decades of Michigan experience, we understand the nuances, expectations, and processes of working with Michigan state agencies and departments. Having maintained contracts with the State since 1989, Weston has substantial, local governmental and institutional experience at various sites throughout the State. Weston's Michigan operations have worked on more than 500 projects in the past 30+ years as part of State contracts and for private industry. Combined, between Weston and PESI, we have completed over 3,000 projects across Michigan.

Weston's exclusive teaming partner, PESI has had significant experience in Michigan and the Midwest region since 2010. PESI has worked on projects of varying complexity and applicable facilities ranging in size and service areas involving large portfolios to individual sites in high population areas or specific remote locations from the Detroit metro area to the Upper Peninsula (e.g., large office complexes or buildings and parking lots, storage facilities, automotive and repair facilities, industrial warehouses and manufacturing facilities, parks

and recreation facilities, county operations facilities, educational facilities, and medical and life science campuses).

Over our greater than 30-year history of providing environmental services to the State, Weston has gained extensive understanding and insight into DTMB methodologies, contracting, and objectives. Weston is thus able to offer experienced staff with Michigan-specific regulatory and technical knowledge unmatched by most other firms. Notably, Weston has also gained valuable insight into DTMB policies and procedures, having conducted a number of projects directly for DTMB and other State agencies contracted through DTMB.

Weston annually contracts with hundreds of specialty firms across Michigan and the United States and maintains a rigorous procurement system designed to ensure the highest standard of work at our client sites. All subcontractors are required to complete thorough prequalification questionnaires as part of our due diligence.

Similarly, Weston performs and understands all of the required State Procurement Procedures applied to the various contracts issued by the State. By applying these procurement practices to our performances on State contracts since 1989, Weston has continuously exemplified the management and accounting protocols necessary to comply with and promote correct State Procurement Procedures.

Weston and its employee-owners are committed to safety first, every minute of every day, at work and at home. We actively care for the wellbeing of ourselves, our coworkers, our families, our clients, and our subcontractors. We will never compromise on safety—it is our first thought. We enable a safety-first and all-the-time culture wherever we live and work around the country. We are able to do this because we have embraced the principles of behavior-based safety.

The Weston team is committed to maintaining knowledgeable professionals. As licensed engineers and architects, our team is responsible to complete continuing education credits as part of their licensing process. Additionally, our experienced team completes internal training including annual safety refreshers, construction-specific training (ladders, fall protection, confined space entry, etc.). Our staff actively engages in workshops and trainings via professional associations (e.g., American Institute of Architects [AIA], Society of American Military Engineers [SAME], etc.).

We are fully prepared to deliver and bring these strengths and value-added services in support of DTMB's planning efforts.

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.

Weston strives to embody our core value of "Exceptional Quality"—delivering products and services that meet the highest standards possible, every time. We believe that QC is the result of intentional, sincere, and directed policies and procedures and that exceptional quality is achieved through a thorough understanding of the project expectations as defined by both Weston and the client. Our personnel understand that they are each individually responsible

for quality, and we routinely seek to identify and understand our clients' exceptional performance expectations and execute projects according to those expectations. By weaving the fundamentals of exceptional quality into the fabric of our culture, Weston provides services that consistently meet agreed-upon requirements of our clients, and ensures that the services and deliverables we provide are technically, scientifically, and professionally ethical and defensible.

Weston's Quality Management Program is designed to provide systems, processes, and procedures, with the ultimate goal of consistently providing high-quality deliverables and services. At the program level, we accomplish this through three basic approaches. First, we prioritize appropriate levels of client communication and staff/technology capabilities so that work is performed to meet client needs. Second, we remain dedicated to the development and application of improved technology in all aspects of environmental professional services. Third, we use internal controls to provide reasonable assurances that activities are proceeding as planned and quality objectives are being met.

At the project/task level, there are four key elements used to ensure QC of the services and deliverables we provide to our clients:

Quality Roadmap: After communicating with the State and other key stakeholders to gain a comprehensive understanding of the scope of each project assigned, the schedule requirements, budget constraints, risks, and other concerns, Weston will prepare an internal Quality Roadmap for the project. The Quality Roadmap will identify the most important quality outcomes and outline key requirements for the Weston team to ensure success. The Quality Roadmap will be developed collaboratively by the Program Manager, the Quality Manager, and key staff and will be reviewed and signed by the Weston team to ensure staff understand the State's desired outcomes and what will be required to exceed these expectations.

Project Instructions: Weston prepares internal project instructions for every project. The instructions expand on the project SOW, document roles and responsibilities for project implementation, and detail the quality review process to ensure every member of the project team understands his/her role in achieving exceptional quality. The instructions provide contact information for key personnel and subcontractors, as well as client site representatives. They include specific details regarding field activities, including maps, sample locations (when applicable), type and number of samples to be collected, laboratory analytical methods, laboratory shipping information, and instructions for completing the chain of custody. The instructions include Standard Operating Procedures (SOPs) for tasks to be performed.

Kickoff Meetings: Weston holds project kickoff meetings at the beginning of projects, before field activities, and before the preparation of deliverables. The personnel attending the meetings may vary depending on the pending activity but will include the State Project Manager, the Weston PM, field team members, design team members, and Quality Manager. The kickoff meeting agenda will include a detailed review of the project instructions, schedule for field work and reporting, design team organization, QC requirements, field documentation, and the project budget. Specific experience and licensing requirements will be reviewed to ensure that the right professionals are engaged in the project at the right time.

Project Deliverables: Weston implements a time-tested process to ensure the quality of deliverables. The primary tool of this process is the Deliverables QC Form. The form lists the team members who a PM must engage to review and sign off on a team's work before submittal to the State.

- Primary Author – The engineer who leads the development of the deliverable. This person will understand the QC review process and will initiate and implement the use of the QC form.
- Data/Calculations Checker – A technical staff member assigned to check data transcription and calculations for accuracy. This is not the person who did the initial data input and calculations.
- Editorial Reviewer – A technical editor who reviews the document for items such as reading clarity, grammar, typos, professional document formatting, and consistency. This person is not responsible for technical QC. Weston employs multiple technical editors who perform this service full-time across the organization.
- Technical QC Reviewer – An independent senior technical QC officer (the Quality Manager) on the project. This role is to constructively challenge the work as an independent reviewer and ensure that client objectives for the report are met.
- Project Manager – The PM of Record with ultimate responsibility for the work delivered to the client. The PM must review the deliverable and approve its release, whether submitted electronically or in hard copy.

In addition to the project-specific roles assigned above, Weston has a designated employee with quality responsibilities across the program. Ms. Megan Abbott, P.E., is responsible for overseeing engineering and design-related work and will also provide overall QA across the entire program, ensuring consistency between deliverables as well as an overall review of regulatory compliance. Ms. Abbott's experience coupled with her designated quality-related role allows her to provide significant contributions to ensure Weston's team is performing all quality checks and work is performed in compliance with the rules and regulations.

During the implementation of the project, Weston will capture and share quality lessons learned and best practices using our online system to capture and disseminate the information. On a corporate level, Weston has implemented a system to track and learn from quality incidents. When a quality issue or near-miss is observed, the issue is evaluated, and "lessons learned" are shared across the firm using the Weston Portal (online business networking website). These tools combine to ensure Weston provides quality services, on time, on every task.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?

Yes ☐ No ☒

If yes, explain:

5.3 Will there be a key person who is assigned to a project for its duration?

Yes ☒ No ☐

The Weston PM, along with the Program Manager, is responsible for assembling a project team to support the aspects of the project throughout its duration. The Quality Manager is also assigned to the project for the duration to ensure consistency across project phases and the overall program. Team members may vary based on specific project needs/requirements and project phases. For assignments that require licensed engineers, one or more (depending on the disciplines required) P.E.s will be identified as a critical member of the project team. The Weston PM will be assigned to the project for its duration and will receive support from the Program Manager, as necessary.

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.

Over our greater than 30-year history of providing services to the State, Weston has gained extensive insight and understanding into State methodologies, contracting, and objectives. Weston is able to offer experienced staff with Michigan-specific regulatory and technical knowledge unmatched by other firms. Notably, Weston has also gained valuable insight into DTMB policies and procedures, having conducted project work directly for Facilities Administration since 1999 and having worked with various agencies (DTMB, MDNR, EGLE, MDOT) throughout our history. Weston's Program Manager will serve as the main point of contact (POC) for the DTMB Design and Construction Division, ensuring that DTMB policies and procedures associated with the ISID Contract are implemented. Weston's Program Manager and assigned PM will maintain contact with the State Agency lead, ensuring that project-specific goals and objectives are achieved in accordance with the contract terms and conditions. Weston's Program Manager, Mr. Joe Ruiz, has demonstrated State contract experience, including program management of State contracts for four different ISID contracts, as well as two site-specific Professional Services Contracts (PSCs). This experience is critical in maintaining a positive working relationship between all parties anticipated to be involved in this ISID Contract.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.

Weston uses a two-step review process for design plans and specification to evaluate biddability and constructability before advertising for bid. The review is performed by a technical review team comprised of the PM, applicable engineers (various disciplines), and other technical reviewers, including cost estimating, design, specifications, permitting, procurement, and project controls (cost/scheduling). As such, Weston is exceedingly prepared to address bidder proposals for substitution of a specified material during bidding. If a bidder identifies substitution of a specified material during bidding, Weston will initially evaluate the substantiating information provided by the bidder for the substitution and determine whether the substitution is equal to the specified material, is compatible with the intended application, and is in the best interest or of value to the State. Any potential

substitutions are discussed with the SPM. If the specified material substitution is approved by the SPM, Weston will then provide a notice to potential bidders, via Bid Addendum (via the Sigma VSS website), that they can use the specified material or the approved substitute.

If a bidder proposes a substitution of a specified material in their submitted bid and has not previously identified this substitute during the bidding process, Weston will evaluate the bid based on original bid specifications and not the specified material substitute. Weston will, however, notify the SPM of the substitution and decide whether further evaluation is necessary to determine whether the specified material substitution is in the best interest or of value to the State. Weston will also require a post-bid addendum to the bid specifications and additional bid solicitations.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

Weston's approach has been and will continue to be requesting the contractor to provide information for substantiation of the savings to the State, or proof that the substitution is in the best interest of the State by use or acceptance of the substitution of a specified material or detail. Generally, the substitution should either improve the functionality and/or reduce the cost of the specific item. However, based on current economic conditions, sometimes material substitutions are required based on purchasing lead times and require evaluation based on schedule considerations. Following contractor submittal of this information and Weston and SPM evaluation of the information, Weston would then prepare a bulletin for the contractor to document the savings. Following receipt of the priced bulletin, Weston would submit the appropriate paperwork to the SPM and DTMB for adjustment of the contract values (Contract Modification) in accordance with the change.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

Weston PMs will maintain consistent and continuous communication pertaining to project activities and project status via routine verbal or electronic mail (email) updates, adjusting the frequency and mode of communication to the intensity of the work and need for more rapid decision-making. Typically, Weston PMs will provide weekly updates to the SPM for ongoing projects during active work periods. However, we will ensure alignment with the SPM at the project kick-off meeting to ensure the communication frequency is adjusted to their preference. Just before and during field work, the frequency of that routine communication may be increased to daily, if needed during fast-track work or if supporting emergency work. In addition to verbal communications and at the discretion of the SPM, on construction projects, field staff have provided daily/weekly progress reports that contain a summary of work completed, problems encountered or anticipated, budget status, upcoming activities, and photographic documentation of work completed.Weston also prepares and submits monthly progress reports for every active project. These monthly reports are submitted with the monthly project invoice, and include information on completed, ongoing, and future project activities along with a summary of the financial status of the project.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?
Yes ☒ No ☐

Weston uses Kiteworks, a file transfer protocol (FTP) platform that allows users to share files that otherwise are too large to share using email or text messaging platforms. This becomes very useful in allowing the SPM and other stakeholders to access large numbers of photographs, AutoCAD drawings, and other sizeable files. Our company also routinely uses a variety of other platforms to facilitate seamless data sharing, collaboration, and project communications, such as Huddle, a secure software as a service (SaaS) client collaboration portal; SharePoint; and Microsoft® Teams.

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.

Weston's methods of estimating construction costs vary depending on the scope of the project and are prepared by our in-house estimating team led by Mr. Suraj Shankar. Mr. Shankar has over 12 years of experience related to engineering project cost estimating. Mr. Shankar is supported by 9 professionals dedicated to estimating as well as 10 professionals dedicated to project controls (schedule and cost management during project execution). Our estimating group frequently develops conceptual and detailed cost estimates for a variety of construction, demolition, and facility repairs and alterations projects using Timberline Estimating Software, RS Means Cost Works, and RIB Construction Suite along with historical cost databases developed and collected by Weston.

Validity of each estimate is demonstrated by the following:

- Direct comparison with Weston's experience with self-performing or implementing similar projects as General Contractor. Weston's construction teams implemented an average of $60M per year of successful construction projects within the past 3 years.
- Direct comparison to previous bid results for similar scopes.
- Vendor-provided quotes on major items in a construction bid package.
- Thorough peer-reviews with experienced construction managers.

5.10 Describe your approach to minimizing construction cost over-runs.

Weston's approach to minimizing construction cost over-runs begins with ensuring accurate and comprehensive data are produced prior to the construction bidding process. The data collection then leads to preparation of biddable specifications (DCSPEC) that are concise and accurately address the construction scope. Weston works with DTMB/State Agency to develop a bid table with a mixture of lump sum and unit price items to ensure anticipated aspects of the work are not only included but are bid in a way that ensures minimal cost and prevents over-runs. During the contractor procurement process, Weston will work with DTMB/State Agency to set up a comprehensive site visit to ensure bidders are aligned on the SOW. Following the site visit, Weston will assist DTMB/State Agency in answering questions and preparing addendums to provide clarifications to the bidders and ensure

equivalent bids from interested contractors (i.e., “apples to apples”). The next step is to complete thorough reviews of contractor bids and pre-award submittals to ensure that the contractor will meet the requirements of the project within the proposed cost.

Once the construction contract has been awarded, Weston assigns qualified oversight personnel (resident construction managers or resident engineers) to conduct field oversight of contractor tasks and to manage the contractor overall performance to ensure the State’s objectives and interests are fulfilled. The amount of field oversight necessary will vary depending on the nature of the work being performed, with critical activities frequently requiring full-time oversight. Weston field staff work under the direction of the P.E. assigned to the project, and we fully enforce the biddable specifications prepared for each project, providing field oversight and thorough documentation of the entire field phase of work and ensuring the field work is completed as intended, project objectives are attained, trade contractor budgets are adhered to, quantities are documented, and waste handling and disposal protocols are followed and documented. Weston also conducts routine health and safety (H&S) activities (e.g., daily safety tailgate meetings, jobsite inspections, permit requirements) during oversight as well as reviews to ensure compliance with applicable OSHA rules and regulations. If a serious issue is identified during the work, Weston will notify the SPM and work with the contractor to remedy the situation. If necessary, Weston will stop work until the problem is addressed. However, contractors are required to operate under their own H&S program and are responsible for the safety of their own personnel. Project requirements may include submittal of daily construction reports as well as weekly summaries. Weston leads construction progress meetings to review the project status and any potential changes in site conditions, where meeting agenda items include the identification of real and potential problem areas. Weston then issues progress meeting notes to the SPM and other stakeholders that document ongoing construction progress, changed conditions if any, and resolutions on a continuous basis. While keeping the SPM informed of the current project status, Weston understands that the State relies on Weston to manage construction projects in a manner that minimizes the need for State intervention should problems be identified, and Weston strives to provide solutions that are beneficial to the State in that regard.

5.11 What percentage of the PSC cost should be devoted to construction administration (office and field)?

Between 5 to 15% (dependent on the total project size; smaller projects may require a higher percentage, whereas larger projects may require a lower percentage).

Construction management (administration) services may include contractor procurement, contractor pre-work submittal reviews, field oversight, documentation, engineering inspection of construction and system startups, review of requests for changed conditions or contract changes, preparation of contract bulletins, and review of contractor invoices and project record documents. Weston is experienced with the administration of DTMB contracting procedures, resident engineering services, and services such as engineering support, operational verification (for mechanical/electrical/plumbing systems), and O&M support. Weston has successfully completed more than 65 construction projects in support of the State since 1997. Weston’s objective is to provide the construction management

services necessary to ensure construction is executed in accordance with approved design requirements, at costs that equate to the standard percentage range of 5 to 15%. The range varies depending on total project size, project complexity, and amount of oversight required during construction.

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?

Between 20 to 90% by Weston staff.

Weston is a full-service engineering consulting provider and has supplemented our expertise with our exclusive teaming partner PESI for some of the contract-required professional services. The exact mix of staff between Weston and PESI will vary depending on the project type and the disciplines needed to execute the work. A detailed breakdown of personnel will be submitted with proposals for specific project assignments. Weston, acting as prime contractor will be responsible for overall performance of the contract and performance of all project assignments and will serve as the point of contact.

Weston anticipates requiring the use of highly qualified specialty subcontractors (e.g., drilling firms, specialty laboratory services, surveys, waste disposal firms) to assist with conducting project-specific field activities. These specialty subcontractors will be procured on a competitive, project-specific basis in accordance with Weston and State procurement processes. Weston has demonstrated on other State contracts that we can provide the required resources necessary for efficient project management and successful and timely project completion.

5.13 On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? (A typical project might be one involving several disciplines and in the neighborhood of a $25,000 fee.)

Approximately 2 to 3 calendar days.

Weston anticipates that within 2 to 3 days of receiving a project assignment (Contract Order receipt), the Weston Program Manager and PM will hold a kickoff meeting with the SPM and initiate project assignment activities (i.e., planning for the investigation or initiating the design work).

Weston has taken steps to ensure that the required managerial, technical, and administrative personnel and resources are brought together to provide superior support to the State on this 2023 ISID contract. Weston will carefully review the technical, programmatic, and logistical demands of each project assignment in finalizing our approach to organizing, mobilizing, and executing the work.

5.14 How do you assess whether a construction bidder is responsive and responsible?

Weston follows applicable State statutes and utilizes our Michigan-licensed P.E.s for final design work products. Weston has utilized DCSPEC on State projects, and we are very familiar with the bidding process implemented for all public bid opportunities. Additionally, Weston has routinely requested bid specification documents that require bidders to provide

project references and to demonstrate project experience on similar types of projects. Weston developed two checklists that we routinely employ during the evaluation of bids. Weston provides the SPM and Contract Manager with a copy of the evaluation documents along with the recommendation for award. Importantly, Weston is practiced in the use and application of Public Act 430 of 2012 for State Agency bid solicitations and contracting, where best value contract awards made by the State include the evaluation of bidders' responsiveness, responsibility, price, and quality.

Weston evaluates all bids received using the following approach:

- Evaluate the pricing of the proposal, including checking the arithmetic, line item comparison between bidders, and individual pricing comparison between the three lowest bidders for similarities and anomalous differences that may suggest a misunderstanding or other concern (Weston checklist).
- Ensure inclusion of required submittals and evaluate the required bid submittal documents, including acknowledgement of any addenda issued (Weston checklist).
- Contact/validate references provided in bid submittal.
- Evaluate demonstrated project experience on similar projects.
- Conduct a pre-award conference call with the apparent low bidder, the SPM, and the Contract Manager to evaluate the bidder's understanding of the SOW and ability to successfully perform the work.
- Complete DTMB Best Value Construction Bidder Evaluation forms.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.

The Weston team has performed thousands of projects nationwide utilizing innovative approaches and incorporating energy conservation, sustainability, and green practices as a hallmark of our services. We integrate sustainable strategies and green remediation technologies to create environmental and infrastructure solutions that optimize performance and value. The sustainable design services we provide are centered in environmental stewardship—minimizing air pollution and greenhouse gas emissions; curbing water usage and impact to water resources; cutting total energy use and maximizing renewable energy; reducing, reusing, and recycling material and waste; and driving environmental justice. From greening a supply chain to the design/implementation of sustainable remediation technologies, we know how to create innovative solutions that reduce projects' environmental footprint and provide long-lasting value.

Weston is the manufacturer and O&M service provider of the GreenGrid® green roof system, which launched in 2002 as the nation's first modular vegetative roof. To date, we have designed and installed over 6 million SF of green roof projects installed across nearly every state, including Michigan. We have installed GreenGrid roofs on municipal and state government buildings; schools, colleges, and universities; hospitals and medical complexes; corporate offices; police stations; sports/recreation complexes; retail stores; warehouses; and various other facilities. Notable examples include Barclays Center, New

York, NY; Michigan Avenue Apple Store, Chicago, IL; Rockefeller Center, New York, NY; Princeton University, Princeton, NJ; Miller Coors Brewing Company, Milwaukee, WI; University of Virginia, Charlottsville, VA; Dade City Municipal Building, Dade, FL; Milwaukee Housing Authority, Milwaukee, WI; U.S. Environmental Protection Agency Region 8 Headquarters Facility, Denver, CO; Ball Memorial Hospital, Muncie, IN; New Britain Police Department Building, New Britain, CT; Beloit Hospital, Beloit, WI; and the Great Lakes Water Institute, Milwaukee, WI.

Weston GreenGrid® roofing systems, Michigan Avenue Apple Store, Chicago, IL; Miller Coors Brewing Company, Milwaukee, WI; and the famed Barclays Center, New York, NY.

Benefits recognized by our GreenGrid clients include stormwater management; energy savings; noise reduction; reduction of the "urban island heat effect"; extended roof life; potential tax incentives; LEED credits toward accreditation. GreenGrid also contributes to sustainability and environmental, social, and corporate governance (ESG) reporting metrics. Weston provides turnkey support services for GreenGrid project development, including design, installation/construction, accessories, O&M, repairs, and restoration.

We also provide associated consulting services for landscape design, stormwater management, restoration and maintenance, as well as product selection and architectural/engineering support.

The Weston team makes every effort to conduct our business in an environmentally responsible way, exemplified by several former Weston LEED Gold-certified offices, designed and constructed by Weston (Mundelein, IL; Concord, NH; and Lakewood, CO), as well as our PESI's national headquarters (Torrance, CA) that was designed and rehabilitated by PESI to obtain LEED certification.

The Weston team has experience working with government agencies as well as building owners and managers to identify, capitalize, and implement accretive energy efficiency, renewable energy, sustainability, and climate risk and resiliency projects.

5.16 Describe your experience with similar open-ended contracts.

Weston performs and understands the State Procurement Procedures applicable to ISID contracts. Through real-time work experience applied since our initial contract with the State in 1989 and through the application of procurement practices used in the performance of all State contracts since that time, Weston has continuously exemplified the management and accounting protocols necessary to comply with and promote compliant contractor procurement, project execution, and project completion procedures.

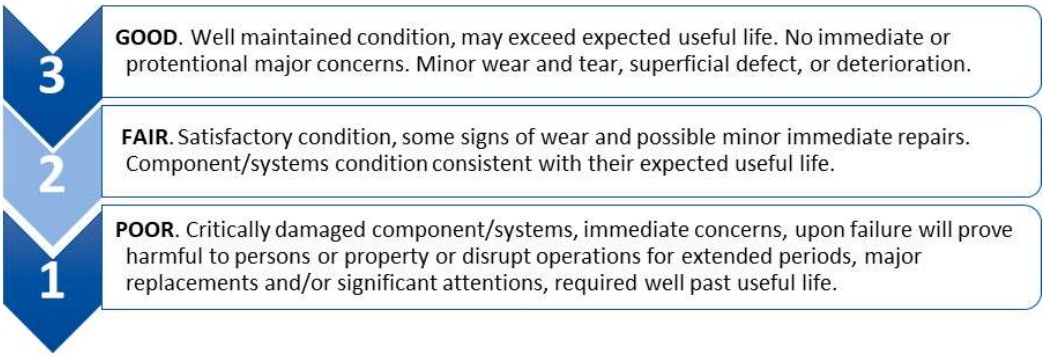
Weston currently holds several contracts for state agencies where we have provided services on open-ended contracts at hundreds of sites in Michigan and across the country. Presented below are contracts similar to the 2023 ISID that Weston holds in other states.

- Illinois Environmental Protection Agency (IEPA) – Weston provides investigative through remedial professional services through a similar contract vehicle to IEPA throughout Illinois. Weston's contract with IEPA started in 1985 and includes work at environmental sites in various stages of the project lifecycle on state-owned properties.
- Illinois Department of Transportation (IDOT) – Weston provides full-service site inspection and environmental services through a similar contract vehicle to IDOT in multiple regions and under a state-wide contract. Weston's contract with IDOT started in 1999 and includes work across Illinois on state-owned properties with potential or existing environmental impacts.
- Pennsylvania Department of Environmental Protection (PADEP) – For more than 34 years, Weston has provided professional environmental services to the Commonwealth of Pennsylvania, including our PADEP Interim Response and Remediation Services Contracts (1999–2022) and other previous contracts with PADEP, providing hazardous, toxic, and radioactive waste (HTRW) management and emergency response services.
- New Hampshire Department of Environmental Services (NHDES) – Weston has held an Environmental Consulting Services Contract with NHDES consecutively since 1998. Under this contract, we provide sustainable solutions to complex environmental challenges while driving operational efficiencies that result in a best value to the State of New Hampshire.
- New Jersey Department of Environmental Protection (NJDEP) – For the past 8 years, Weston has held an RI/RD/RA Services Contract with NJDEP, providing a broad range of relevant services, including preliminary assessments, site inspections, RIs, and unknown source investigations, and remediation projects at sites throughout the state.

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.

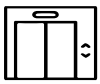
Evaluation of Facilities Systems and Components. Components and systems will be assessed for present condition and estimated life expectancy based on accepted industry standards, useful life criteria, and the types of components identified. Where possible, recommendations to prolong the useful life will be included. Interviews with facility staff and maintenance personnel will be conducted to determine factors that may contribute to increased or decreased useful life. Additional factors such as environment will also be considered. As part of the assessment, equipment inventory data will be collected for substantial pieces of equipment. Components/systems will be identified during the walk-through surveys and prioritized based on observed conditions using the ranking system.

CONDITION PRIORITIZATION



Identification of Deficiencies. The site visit will be used to identify observed deficiencies and general existing conditions of major building components and systems. Deficiencies identified during the site surveys will be documented. Corrective actions will be assigned to each deficiency along with an opinion of cost to correct the item noted. Deficiency reporting will include description, recommended remediation, and associated costs for repair or replacement. In addition, deficiencies will be categorized and prioritized. When applicable, reference to the available documents and data will be incorporated into the description and/or corrective action.

Systems and Components to Be Assessed

	**Site Systems:** Above grade site features will be assessed including walks and railings, paved areas, site lighting, landscaped areas, drainage systems (visible only), fencing and outdoor facilities. Other items may be added per agreement between Partner and your project team.
	**Structural Systems:** Structural systems including foundation, tunnels, load-bearing walls, and structural floor and roof systems. Structural systems are frequently concealed and may be inaccessible during our assessment. When this occurs, Partner's assessment will be limited to the identification of readily visible indicators of common problems.
	**Building Exterior Elements:** Facades or curtain wall system, glazing system, exterior sealants, exterior balconies, doors, stairways, and parapets. Observation of the building envelope will be limited to vantage points that are on-grade or from readily accessible balconies or rooftops accessed during the reconnaissance.
	**Roof Systems:** Material roof systems (exposed membrane and flashings) including parapets, slope, and drainage. Roof assessments will be limited to roofs safely accessible via ladder. Pitched roof systems will not be accessed and will be observed from ground-level.
	**Conveyance Systems:** Identify, assess, and report equipment type, number of cabs/escalators, capacity, finishes, call and communication equipment, and existing maintenance contracts.
	**Interior Finishes:** Interior walls, ceiling and floor finishes, partition walls, visible framing, doors/frames, stairs, and signage.

	Mechanical: Heating, Ventilation and Air Conditioning (HVAC), exhaust system, ventilation, ducts, controls, and instrumentation. Verify apparent or reported age of the equipment, past material component replacements/upgrades, and reported maintenance contracts. Review documents related to such equipment to determine apparent level of maintenance exercised.
	Electrical: Electrical service and distribution systems including distribution panels, transformers, meters, emergency generators, general lighting systems (interior and exterior), exposed wiring, building security, emergency power and lightning protection.
	Plumbing: Sanitary and domestic water piping, fixtures, domestic hot water production, visible water service meters, and backflow preventers (interior and exterior) and identification of any special or unusual plumbing systems.
	Fire and Life Safety Systems: Fire sprinklers and standpipes (wet and dry), fire hydrant locations, fire alarm systems, water storage, smoke detectors, fire extinguishers, and emergency lighting.
	Americans with Disabilities Act (ADA). ADA will be assessed based on visual observations during the site visit. Assessment of ADA will include parking areas, access to, around and through the site building entrance, interior routes in public areas, and public restrooms.

Deliverables. Evaluation of systems and reporting will be conducted using an approach that evaluates building systems and compares to expected baseline performance metrics. The information collected during the walk-through survey will be compiled into a dataset that can be sorted by building, building systems, and components and estimated useful life expectancy.

Reporting will include a description of the work performed, description of improvements, overview of condition of building systems and components (life cycle analysis), identification of deferred maintenance and immediate needs, our opinion of probable costs to remedy the identified concerns, equipment inventory, and the capital plan. Anticipated operations and maintenance (O&M) costs will also be provided as part of the capital planning exercise. Digital photos will be included of major systems and components and identified deficiencies.

An equipment inventory (including manufacturer's model and serial number of significant equipment) primarily for significant site, exterior lighting, shell, interiors, fixed furnishings, and movable furnishing will be captured onsite and tabulated in each assessment and report.

Additional inventory information can be collected during the site survey if requested prior to the site visit.

Capital planning schedules will be provided. Prioritization of recommendations will also be included in the summary tables. A year-by-year capital needs analysis will be summarized in the report. The capital plan will be made available in an interactive dashboard format, if requested.

5.18 Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.

For any project obtaining the required authorizations in a timely manner is of critical importance. For new projects, Weston will typically prepare a permitting roadmap that identifies Federal, State, and Local permits and authorizations that may be required. The permitting authority is identified, the steps required to obtain the authorization is identified along with the cost, time period and whether any additional stakeholders may be involved.

Additionally, Michigan Department of Environment, Great Lakes, and Energy (EGLE) has a very useful Permit Information checklist that provides guidance for campgrounds construction permits (EQP2280, Rev. 07/2022); critical dunes (Sand Dune Mining Program, administered by the Oil, Gas, and Minerals Division [OGMD], with Designated and Critical Sand Dune Areas) as well as many other activities. The Michigan Coastal Zone Management (MCMP) provides regulatory support for building in critical dune and regulated high-risk erosion areas, dredging, shore protection and coastal wetlands.

These resources, and others, would be used to prepare the regulatory roadmap that would be used to identify critical path permitting needs on a project. Weston's experience with working with a multitude of regulators and the regulated community would be leveraged for these projects.

5.19 Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

On each construction project, Weston's objective is to provide the construction management services necessary to ensure that construction is executed in accordance with approved design requirements. During construction execution, Weston provides qualified field oversight personnel to observe and document the contractor's activities and adherence to the specifications. In addition, Weston resident engineering or construction management personnel lead weekly construction progress meetings to formally review the project status, including any potential changes in site conditions; therefore, Weston remains aware of any changes in project conditions and/or scope, ensures the SPM receives current status updates, and minimizes the frequency and magnitude of increased construction costs due to project scope changes.

If Weston becomes aware of any legitimate changes in the project scope, primarily through trade contractor formal notification, Weston will notify the SPM and Contract Manager and develop a contract bulletin to detail the changes. Weston would request pricing on the bulletin from the trade contractor. Following receipt of the priced bulletin and subsequent evaluation, Weston would submit the appropriate paperwork to DTMB for augmentation or adjustment of the contract values (Contract Modification) in accordance with the change in project scope.

6. REFERENCES

Refer to **Appendix B** for the contact information of individuals who can provide reference on the quality service that we provide to our State clients on their critical projects and for detailed experience on similar projects.

Weston's experience with similar sites and clients is detailed in Section 2.1, Experience with Governmental/Institutional Design and Construction.

Part II - Cost

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

PROFESSIONAL SERVICES - 2023 General Architectural/Engineering/Landscape Architecture Services ISID

Professional's Name	**Weston Solutions of Michigan, Inc.**
Yearly Percentage Billing Rate Increase	**4.50%**
Mark-up for Sub-Consultants (not to exceed 5%)	**5.00%**
Mark-up for Reimbursables (not to exceed 5%)	**5.00%**

Level	Employee(s) Name	Classification	Year 2023	Year 2024	Year 2025	Year 2026
P3	Abbott, M., P.E.**	Certifying Engineer	$ 140.00	$ 146.30	$ 152.88	$ 159.76
TS	Behrens, B.	Sub-Adminstrator	$ 90.00	$ 94.05	$ 98.28	$ 102.70
P4	Benton, N. (PESI)	Project Engineer	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P4	Bielawski, J.**	Project Manager	$ 165.00	$ 172.43	$ 180.18	$ 188.29
P2	Blanchette, L.	Project Engineer	$ 135.00	$ 141.08	$ 147.42	$ 154.06
P4	Bock, M. (PESI)	Technical Lead	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P2	Borger, D.	Engineer	$ 125.00	$ 130.63	$ 136.50	$ 142.65
TS	Boyd C.	Contracts/Sub-Administrator	$ 90.00	$ 94.05	$ 98.28	$ 102.70
TS	Brandt V.	Financial Administration	$ 75.00	$ 78.38	$ 81.90	$ 85.59
P4	Brown, A.**	Project Engineer	$ 175.00	$ 182.88	$ 191.10	$ 199.70
P3	Burt, C.**	Project Engineer	$ 160.00	$ 167.20	$ 174.72	$ 182.59
P4	Chernick, D.**	Project Engineer	$ 165.00	$ 172.43	$ 180.18	$ 188.29
P3	Civitano, A. (PESI)**	Technical Lead	$ 157.50	$ 164.59	$ 171.99	$ 179.73
P4	Condurat, F. (PESI)	Assessor	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P3	Cooper, S. (PESI)	Assessor	$ 157.50	$ 164.59	$ 171.99	$ 179.73
P3	Douglas, C.**	Project Manager	$ 165.00	$ 172.43	$ 180.18	$ 188.29
P3	Ederer, R.	Project Engineer	$ 155.00	$ 161.98	$ 169.26	$ 176.88
P3	Eldredge, S.**	Project Manager	$ 155.00	$ 161.98	$ 169.26	$ 176.88
P2	Foster, H. (PESI)	Assessor	$ 126.00	$ 131.67	$ 137.60	$ 143.79
TS	Gibson, T.	Clerical	$ 75.00	$ 78.38	$ 81.90	$ 85.59
P4	Hannah, H., CIH**	Health and Safety Manager	$ 145.00	$ 151.53	$ 158.34	$ 165.47
P3	Harkins, N.	Project Engineer	$ 150.00	$ 156.75	$ 163.80	$ 171.17
T3	Hernandez, D.	CAD Designer	$ 120.00	$ 125.40	$ 131.04	$ 136.94
P4	Intveld, R. (PESI)	Project Engineer	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P4	Irrinki, S.**	Project Manager	$ 189.00	$ 197.51	$ 206.39	$ 215.68
TS	Johnson, K.	Sub-Adminstrator	$ 90.00	$ 94.05	$ 98.28	$ 102.70
P4	Kim, C. (PESI)	Senior Architect	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P3	Koch, N.	Project Engineer	$ 155.00	$ 161.98	$ 169.26	$ 176.88
P4	LaFalce, M. (PESI)**	Senior Architect	$ 189.00	$ 197.51	$ 206.39	$ 215.68
TS	Lewis, B.	Clerical	$ 80.00	$ 83.60	$ 87.36	$ 91.29
P3	Lupo, J. (PESI)	Assessor	$ 157.50	$ 164.59	$ 171.99	$ 179.73
P3	Major, M.**	Construction Manager	$ 145.00	$ 151.53	$ 158.34	$ 165.47
TS	Mello, J.	Clerical	$ 75.00	$ 78.38	$ 81.90	$ 85.59
P4	Miller, M. (PESI)**	Senior Architect	$ 189.00	$ 197.51	$ 206.39	$ 215.68
P4	Ruiz, J.**	Program Manager	$ 190.00	$ 198.55	$ 207.48	$ 216.82
P3	Shankar, S.**	Cost Estimating Lead	$ 155.00	$ 161.98	$ 169.26	$ 176.88
P3	Skinner, W. (PESI)**	Project Manager	$ 157.50	$ 164.59	$ 171.99	$ 179.73
P4	Souder, G. (PESI)	Project Engineer	$ 189.00	$ 197.51	$ 206.39	$ 215.68
T3	Staudt, S.	CAD Operator	$ 115.00	$ 120.18	$ 125.58	$ 131.23
TS	Stefanowski, K.	Clerical	$ 75.00	$ 78.38	$ 81.90	$ 85.59
P2	Stratton, M.	Schedule Manager	$ 140.00	$ 146.30	$ 152.88	$ 159.76
P2	Thomas, A.	Project Controls	$ 115.00	$ 120.18	$ 125.58	$ 131.23
P3	Tvedten, V. (PESI)**	Project Manager	$ 157.50	$ 164.59	$ 171.99	$ 179.73
TS	Winter, P.	Clerical	$ 75.00	$ 78.38	$ 81.90	$ 85.59
P4	Zajac, Y. (PESI)	Assessor	$ 189.00	$ 197.51	$ 206.39	$ 215.68

*Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the attached "Sample Standard Contract for Professional Services," Article II, Compensation.

** Key Project Personnel

Appendix A: Key Personnel Resumes

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Joe Ruiz, Program Manager/Project Manager	4 (P4)	22

c. Roles and Responsibilities as They Relate to the RFP

Responsible for overall management of contract and project assignments. Will serve as main point of contact (POC) with Department of Technology, Management & Budget (DTMB), driving cost-effective and efficient contract execution, preparing/submitting contract modifications as needed, and assisting PMs with financial, client communication, and staff related matters.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Ann Arbor, Michigan

Other Relevant Professional Qualifications

Education:

B.S., Civil Engineering and Environmental Engineering – University of Michigan

Training/Certifications:

40-Hour/8-Hour Hazardous Waste Site Training Course, Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.120(e)(3); 8-Hour Site Manager and Supervisor Course (SHSC), OSHA 29 CFR 1910.120(e)(4)

Experience Summary:

22 years of experience in environmental engineering, construction management, and consulting, with 4 years of program management experience. Experienced in evaluating remedial alternatives and preparing Resource Conservation and Recovery Act (RCRA) corrective measures studies, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) feasibility studies (FSs) and focused FSs (FFSs), and engineering evaluations/cost analyses (EE/CAs). Experienced in the Illinois Environmental Protection Agency (IEPA) Voluntary Cleanup Program preparing Comprehensive Site Investigation Reports, Remedial Objective Reports, Remedial Action Plans (RAPs), and Remedial Action Completion Reports (RACRs).

Relevant Project Experience

Program Management for Various Contracts, State of Michigan (01/2022–Ongoing), Program Manager. Provides program management for State of Michigan contracts, including four Indefinite Scope Indefinite Delivery (ISID) contracts and two site-specific professional service contracts. Responsibilities include contract management and administration, scheduling and organizing resources for projects, reviewing all technical and contractual deliverables for quality assurance (QA), budgeting and tracking project costs, and communicating with EGLE and DTMB regarding technical and contractual information.

Municipal Wastewater Treatment Plant (WWTP) Upgrades, Multiple Locations in Wisconsin, CLEARAS Water Recovery, Inc. (10/2019–12/2022), Program Manager. Program Manager for three design projects and one design/construction management project providing tertiary treatment upgrades to municipal WWTPs. Responsibilities included contract, client, and team communication across the program during design and construction management phase for biological treatment of wastewater, which included using algae growth in photobioreactors to reduce phosphorus concentrations in effluent water. Additional responsibilities included loan reimbursement, change order management, and subcontracting on behalf of the municipality.

Industrial Wastewater Upgrades, Multiple Locations, Confidential Client (08/2018–10/2022), Program Manager. Program Manager for three concurrent design-build projects in Florida, Massachusetts, and Georgia to treat industrial wastewater associated with food and beverage production. Responsibilities include contract, client, and team communication across the program during design and construction. Wastewater treatment included pH adjustment, phosphorus removal, odor controls, and closure of an activated sludge pond.

Hudson Truck Stop Wastewater Membrane Bioreactor (MBR) Design, Hudson, WI, Confidential Client (08/2018–12/2022), Project Manager. Managed the design, permitting, and construction of the new 10,000-gpm MBR packaged treatment plant consisting of a mixed industrial and municipal influent that is treated and discharged to an on-site drain field. Treatment plant upgrades were necessary due to excess nutrients being

released to the drain field. Based on Wisconsin regulations, the amount of nitrogen being released to the groundwater (confirmed by groundwater sampling) was above the limit. Weston assessed the treatment system effluent sample results, as well as the groundwater samples, and recommended upgrading to treatment using an MBR system. The permitting included coordination with both the Wisconsin Department of Natural Resources and the Wisconsin Department of Safety and Professional Services. Coordinated vendor and general contractor package development, awarded the contracts, and managed a team of engineers providing startup and troubleshooting services. The existing treatment plant was kept operable until the new treatment system was constructed and ready for startup to prevent impacts to facility operations. Following startup of the new treatment system, Weston collected effluent and inter-process samples to verify chemical dosing and optimize treatment efficiency.

Groundwater Extraction and Treatment: Confidential Manufacturing/Chemical Facility, Chicago, IL, Confidential Client (01/2001–Ongoing), Project Manager. Coordinated project from design through construction and operation and maintenance (O&M). Managed pre-design investigation, coordinated design, procured subcontractors, held weekly status meetings, assisted with permitting, and led communications with stakeholders, including community groups, local businesses, local elected representatives, and community organizations. Managed project throughout O&M, including permit renewal. Weston designed and installed a groundwater containment, extraction, and treatment system as part of a remedial action (RA) required under a Consent Decree with the State of Illinois. The groundwater containment system includes approximately 100,000 square feet (sf) of soil-bentonite slurry wall, installed to depths up to 30 feet below grade. Slurry wall design was based on chemical compatibility testing with existing soil, and as-built permeability testing showed a permeability of 5.4×10^{-8} centimeters per second. The soil-bentonite slurry wall was constructed around two existing stormwater discharge lines and included installation of six penetrations through the wall. Penetrations included newly installed stormwater management piping, extraction water conveyance lines, and a treated water effluent discharge line. The groundwater extraction system includes underground water conveyance conduits, 15 precast vaults, and housing extraction wells/pumps/manifolds. Extraction pumps are operated using compressed air supplied by a central compressor. The extraction system spatially covers over 30 acres and is designed to extract 20 gallons per minute (gpm). The groundwater treatment system includes an iron removal unit, bag filters, centrifugal filter, granular activated carbon (GAC), air stripper, organoclay filtration system, and an activated alumina system (metals removal). The system is monitored remotely using a programmable logic controller (PLC) system and is operated year-round. Water is discharged through underground piping to an outfall in a nearby ditch. The discharge at this outfall is monitored under an NPDES permit.

Tech Town (Former General Motors Property), Dayton, OH, City of Dayton (03/2012–Ongoing), Project Manager. Organized and managed the team to deal with Polychlorinated Biphenyl (PCB)-contaminated areas. Responsibilities included coordination with stakeholders, including municipal leaders, contractors working for the municipality, and utility contractors. Evaluated contractor bids, procured a contractor, and supervised excavation of PCB-contaminated soil from the site for off-site transportation and disposal. The excavation activities were conducted in accordance with Toxic Substances Control Act (TSCA) guidelines. The work was coordinated with ongoing road widening work (by others) to avoid disturbing the new road after installation. The expedited schedule met the demands of the ongoing construction schedule, causing no delays to the other contractor's work.

Quinn Road Grosse Pointe Dump Site, Clinton Township, MI, EGLE (06/2018–Ongoing), Project Manager. Supervised a site investigation at a former quarry that was reportedly used as a dump site and now operates as a public park, located immediately next to an elementary school in a residential neighborhood. The initial investigation focused on identifying the presence of waste, soil contamination associated with the waste, and the potential for methane generation from waste degradation. Following the initial mobilization when waste was identified and soil and soil-gas samples were collected, the focus shifted to risk mitigation due to extremely elevated levels of methane from the waste. Assisted EGLE in assessing risk by installing vapor wells to monitor methane on the edges of the waste, as well as by selecting and procuring indoor methane alarm systems for residents and the school. Weston continues monitoring the vapor wells to establish seasonal fluctuations in concentrations and ensure the gas vents were effectively reducing off-site migration risks.

a. Name and Title	b. Years of Experience in Current Classification	Total years of experience
Herold Hannah, CIH, CSP, Health & Safety Manager	20 (P4)	34

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the overall health and safety (H&S) program as it relates to company policies and associated project work. Will be in charge of H&S personnel assigned to specific projects and will provide guidance and resources for specific H&S concerns.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Pittsburgh, Pennsylvania

Other Relevant Professional Qualifications

Education:

B.S., Biology/Microbiology – University of Pittsburgh

Training/Certifications:

Certified Industrial Hygienist (CIH) (#CP 6854); Certified Safety Professional (CSP) (#14282); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour SHSC, OSHA 29 CFR 1910.120(e)(4)

Experience Summary:

34 years of direct experience with safety and occupational health at environmental, construction, remediation, and hazardous waste sites. Actively manages corporate safety program, building a safety culture of hazard recognition, hazard mitigation measures, and best practices resulting in exceptional safety statistics. Manages 34 H&S professionals for a broad range of environmental and construction work. Conducts project planning and execution to ensure hazards are clearly understood and safe work practices are appropriate and effective. Developed/audited more than 150 site-specific H&S programs, including developing federal- and state-compliant specifications for personal protective equipment (PPE), confined space entry, lock-out/tag-out, hazard communication, Hazardous Waste Operations and Emergency Response (HAZWOPER), and construction safety for sites in 20 states. Oversees incident investigations and implements corrective actions across the organization.

Relevant Project Experience

Weston Corporate H&S Officer (03/2015 – Ongoing). Provides program support across all Weston programs/projects and employee support regarding environmental health and safety (EHS). This includes written compliance programs and procedures; development and implementation of training programs; technical review of project-specific safety planning documents (e.g., Accident Prevention Plans [APPs], Health and Safety Plans [HASPs], Activity Hazard Analyses [AHAs]); and technical support and subject matter expertise regarding industrial hygiene and safety. Supports and directs safety for multiple projects and clients. Implements Weston's EHS standards/policies/ procedures. Enforces compliance with internal policies or government laws/regulations. Clearly communicates safety updates/challenges on programs.

USPS EPRRS Contracts, Various Locations, USPS (03/2015–Ongoing), Corporate H&S Officer. Provides H&S expertise at both the corporate and project level on over 5,000 projects. Oversees additional project CIHs and provides interpretations, expert guidance, and approval of delegated work. Additional corporate responsibilities include programmatic consultation, direction, and oversight of Weston's USPS safety regulations and alignment of these regulations with Weston's high standards for H&S to help streamline the program. Ensures OSHA compliance as it relates to health protection/communication regarding asbestos-containing material (ACM), lead-based paint (LBP), and UST projects; preparation of HASPs; H&S-related training; and risk assessment and communication.

Various Remediation Contracts, Multiple Locations, U.S. Department of Defense (DoD) (03/2015–Ongoing), Corporate H&S Officer. Responsible for overall H&S program for multiple DoD contracts at installations nationwide. Indefinite Delivery Indefinite Quantity (IDIQ) contract scopes range from hazardous,

toxic, and radioactive waste (HTRW) and Military Munitions Response Program (MMRP) remediation through construction at secure facilities. Reviews APPs; performs safety audits, ensuring compliance with U.S. Army Corps of Engineers (USACE) safety requirements, OSHA, and other requirements; provides EHS training regarding programs and safety processes for on-site personnel; and mentors Weston Site Safety and Health Officers (SSHOs) for projects under the USACE Omaha District Security, Disaster, Infrastructure Construction (SDIC) and Rapid Disaster Infrastructure programs. Provides oversight for stand-alone contracts such as cleanup at Camp Bonneville, for which he reviewed APPs and performed safety audits. He also provided site-specific training regarding EHS programs and safety process training for workers. Reviewed APPs and provided technical direction and guidance for various sites under a Performance Based Contract at Tinker AFB, FL.

Fuels Programs, Multiple Locations, USACE (03/2015–Ongoing), EHS Program Manager. Primary USACE Special Projects Office contact for all program activities. Task Orders (TOs) include construction with incidental design services for sustainment, restoration, and modernization-funded construction in support of facility infrastructure for petroleum, oil, and lubricants operations. Includes 10 TOs valued at over $35M and 1 cost plus TO valued at over $11M. Projects performed at various Continental United States locations, including in the Eastern, Central, Mountain, and Western time zones. Safety support includes confined spaces, work at height, scaffolding, electrical services, Level C and B PPE, and HAZWOPER.

Emergency Response Services Contract, Nationwide, USACE Omaha District (08/2016–08/2021), Corporate Safety Officer. Responsible for overall H&S program for a wide range of activities at Formerly Used Defense Sites (FUDS) and various known or suspected HTRW and MMRP sites. One project involved RA at former Camp Croft where advanced geophysical classification was used to detect anomalies resulting from discarded military munitions, unexploded ordnance (UXO), and other metallic debris, often in remote work locations. Conducted project status checks with on-site SSHO/UXO Safety Officer to proactively address/anticipate work hazards. Directed the development, maintenance, and implementation of the Site Safety and Health Plan and consults with field teams managing hazardous waste during assessments conducted at four operational ranges. Ensured that all field activities were conducted in accordance with military, federal, state, and local requirements regarding environment, safety, and health, as well as Weston's corporate COVID-19 protocols.

Environmental Investigation and Remediation Contracts, DoD Agencies (06/2006–10/2013), Program H&S Manager. Program safety, health, and environment manager for federal IDIQ contracts managed from Mid-Atlantic District. Responsible for development/review of program and site-specific HASPs and oversight of implementation of safety programs. Clients included AFCEE (4P A-E, 4P A-E 08); U.S. Air National Guard (ANG) (Environmental Engineering, Professional, Technical, and Remediation Support Services); U.S. Air Force (USAF) Air Combat Command; Naval Facilities Engineering Systems Command (NAVFAC) Washington (Facilities Planning and Natural/Cultural Resources Management Program Support); U.S. Army Space and Missile Defense Command; and EPA (Emergency and Rapid Response Services).

AFCEE 4P A-E 08, Multiple Sites, Nationwide, AFCEE (01/2006–08/2009), H&S Program Manager/CIH. Responsible for overall H&S program for multi-disciplinary environmental and Architect-Engineer services contract. Led development/review of program and site-specific HASPs and oversight of implementation of safety programs.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Megan Abbott, P.E., Lead Engineer/Quality Manager	3 (P3)	13

c. Roles and Responsibilities as They Relate to the RFP

Responsible for overall project quality, including adherence to applicable State of Michigan and/or federal rules and regulations. Will oversee and/or facilitate review of project deliverables, project work, and project staff to ensure that a high level of quality is maintained throughout the duration of the project.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Lincolnshire, Illinois

Other Relevant Professional Qualifications

Education:

M.S., Environmental Engineering – Michigan Technological University

B.S., Chemical Engineering – University of Missouri

Training/Certifications:

Professional Engineer (MI #6201063681); (IL #062067878); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour SHSC, OSHA 29 CFR 1910.120(e)(4); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926

Experience Summary:

13 years of broad environmental engineering experience, including over 5 years of experience preparing and certifying stormwater pollution prevention plans, facility response plans, and SPCC plans for a variety of state, municipal, and private clients. Over 5 years of experience in groundwater treatment system design, construction support, startup, troubleshooting, and O&M at hazardous and non-hazardous waste sites on a variety of industrial and municipal wastewater treatment system design, upgrade, and construction projects. Over 2 years of professional experience in the U.S. Peace Corps in water distribution system modeling and community health education.

Relevant Project Experience

Roberts Wastewater Treatment Plant Upgrades, Roberts, WI, Village of Roberts (07/2018 – 12/2020), Engineer of Record/Project Manager. Prepared a full set of design and bid documents that included drawings, specifications, and basis of design report for upgrades to the existing wastewater treatment plant. Performed bid review, awards, and construction engineering services including RFI response, submittal review, scheduling, change orders, reviewing invoicing, and tracking conformance with American Iron and Steel rules. Completed final project review and certification for the state of Wisconsin. The upgrades included the addition of an advanced biological nutrient removal (ABNR) for the reduction of phosphorus through controlled growth of algae. Algae is then harvested and sold for profit.

Emergency Levee Rehabilitation, Missouri River, L-550/575, Atchison County, MO; Nemaha County, NE; and Fremont County, IA, USACE Omaha SDIC Program (10/2011–06/2014), Engineer. Used geographic information system (GIS) software to produce maps identifying levee breach locations, locations of rehabilitated and abandoned relief wells, and other levee features for the project closeout reports.

Mundelein Village Hall, IL, Village of Mundelein (07/2012 – 02/2015), Engineer. Completed a variety of tasks associated with the construction of the Mundelein Village Hall and the surrounding development, such as assisting in the development of final design drawings for utilities, roads, and stormwater infrastructure and in the preparation of operations and maintenance (O&M) manuals for the Village Hall.

SPCC and SWPPP Writing and Revisions, Confidential Client, Multiple Locations (10/2017 – 04/2018), Engineer. Reviewed and updated the SPCC Plan and SWPPP documents based on site visits for five Air National Guard bases in the Midwest. Site visits were conducted to evaluate the completeness of existing plans and to identify any updates to be included associated with storage of oil-containing materials, stormwater runoff,

or documentation of SWPPP and SPCC compliance with state and federal requirements. Provided certification for the facilities within IL and coordinated certification for facilities in other states.

Groundwater Extraction and Treatment, Confidential Manufacturing/Chemical Facility, Chicago, IL, Confidential Client (07/2012–Ongoing), Engineer. Provided field engineering for the startup operations of a groundwater extraction and treatment system. The extraction system consisted of 17 pneumatic extraction wells. The groundwater treatment system consisted of particulate filtration, iron removal units, air strippers, activated carbon, activated alumina, associated backwash, and flocculation systems. Responsibilities included troubleshooting system operations, optimizing use of chemicals, establishing O&M and sampling procedures, performing routine sampling, and establishing a system operations database. Certified Class K Operator of the groundwater treatment plant responsible for normal O&M, repairs, monthly reporting, and NPDES sampling and reporting. Identified inefficiencies in the treatment system process and designed and implemented solutions. Prepared an O&M manual to detail normal maintenance activities and the required frequency.

Residential Wells-Holly Road Site, MI, EGLE (01/2018–Ongoing), Engineer. Prepared specifications and design documents for the rehabilitation and augmentation of an Soil Vapor Extraction (SVE) system for treatment of tetrachloroethylene (PCE) and TCE vapors. This included the selection and sourcing of equipment, improved blowers, and piping manifold design. The system rehabilitation/optimization allowed reuse of portions of the historical SVE system that were still functional, and the remaining items were upgraded to minimize the cost impact to the client while mitigating vapor intrusion (VI) concerns.

Industrial WWTP Upgrade Design and Construction, Atlanta, GA, Confidential Client (05/2016 – 12/2017), Engineer. Prepared civil, mechanical, and process drawings and specifications, and performed design related construction engineering support for the upgrades of a wastewater pre-treatment system. Included 3-stage pH adjustment, and phosphorus removal system. This project included designing upgrades to an existing pH treatment system and a new phosphorus removal system. Tasks included design drawings, assisting in equipment selection, procurement, equipment and construction scheduling, coordination with on-site construction staff, and construction and startup on-site support. The design included the addition of an influent wet well; upgrades to equalization tanks; installation of three-stage pH treatment system; phosphorus removal system; and associated transfer pumps, piping, and appurtenances.

Combine Industrial/Domestic Wastewater Treatment Plant Design, Hudson, WI, Confidential Client (08/2018–12/2022), Engineer. Design of a new site wastewater treatment system (combined industrial and municipal flows). Treatment plant was a biological system consisting of nitrification, denitrification, and a membrane bioreactor. Responsible for construction management and startup assistance.

USPS Sustainability IDC, Stormwater Management System Investigations, Various Locations, USPS (09/2013 – 09/2015), Engineer. Assisted in the inspection of stormwater management systems at USPS facilities. Determined the condition and functionality of all stormwater ponds, pumping stations, and intake structures. Recommended necessary improvements to the stormwater systems and operational procedures based on federal, state, and local regulations, and prepared operations and maintenance (O&M) manuals for the facilities.

Coe's Cleaner Site, Milford, MI, EGLE (06/2016–Ongoing), Engineer. Completed bid review and award recommendation for the O&M contract. Assisted with reviews of groundwater treatment system upgrades, including equipment specifications, alternative treatment methods, and the use of sequestration agents.

Philadelphia Street Site, Detroit, MI, EGLE (04/2017–04/2020), Engineer. Reviewed bid specifications and contract documents for clarity and alignment to technical specifics. Participated in excavation activities to achieve the EGLE goal of removing petroleum-impacted source area soils to allow for redevelopment of the site. Reviewed deliverables for a site investigation characterizing soil and groundwater contamination to complete the biddable specifications and develop quantities of material requiring removal.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Chris Douglas, Project Manager	23 (P3)	31

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Okemos, Michigan

Other Relevant Professional Qualifications:

Education:

B.S., Biology – Western Michigan University

Training/Certifications:

40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour SHSC, OSHA 29 CFR 1910.120(e)(4); 10-Hour Construction Safety Training, OSHA 29 CFR 1926

Experience Summary:

Over 31 years of experience managing large and small State-funded projects involving site surveying, remedial design and implementation; site/facility demolition; soil excavation; remedial system upgrades, including evaluation, design, installation, O&M and long-term monitoring (LTM). Manages projects for industrial and commercial clients conducting property transfers, site development, and liability protection throughout the Midwest. Managed 15 projects for the State in the last 5 years. Extensive experience providing direction and oversight of specialty subcontractors in (e.g., UST removals, drilling, demolition, and soil excavation) and preparing biddable specifications for procurement.

Relevant Project Experience:

Philadelphia Street Site, Trade Contractor (TC) Procurement/Oversight to Support Excavation/Backfill, Detroit, MI, EGLE (04/2017–04/2020), Project Manager. Managed removal of contaminated soil at former gas station facility to facilitate EGLE's redevelopment/reuse of the property. Prepared biddable specifications using DCSPEC and assisted EGLE during the advertisement and bidding process to procure a qualified TC to complete the soil removal activities. Coordinated with the City of Detroit and EGLE in obtaining appropriate permits. Provided direction and oversight of the TC, including review of project plans, invoices, and final closeout documents. Managed and oversaw the TC in the excavation, transportation, and disposal of 3,900 tons of petroleum-contaminated soil. Performed site survey/investigation to characterize soil and groundwater contamination at the site and complete the biddable specifications and determine the quantities of material requiring removal. Following the excavation and prior to backfilling, conducted VSR sampling. Managed the project to completion, under an accelerated schedule and within the budget, to meet EGLE objectives.

Mack Avenue Site TC Procurement/Oversight to Support Excavation/Restoration, Detroit, MI, EGLE (04/2017–04/2018), Project Manager. Supported the State of Michigan throughout the bidding process to procure a qualified TC to complete the soil removal/disposal activities at this former City of Detroit Police Station. Prepared biddable specifications using DCSPEC, assisted in the advertisement and bidding process, coordinated with the selected TC, and provided on-site management/oversight of the excavation, transportation, and disposal of petroleum-contaminated soil. Coordinated with Weston's Certifying Engineer obtain requisite review/approval of all bid specifications and contract documents. Performed a site survey to characterize the soil and groundwater contamination for use in completion of the biddable specifications and development of quantities of material requiring removal. Following excavation, conducted VSR sampling to ensure all successful removal of contamination. Prepared a comprehensive Construction Summary Report documenting project activities, which as designed and implemented by Weston under Mr. Douglas's management, successfully removed 2,592 tons of impacted soil and eliminated potential risks to human health and the environment.

Managed the project to completion, under an accelerated schedule and within the budget. Completion of excavation and restoration activities have allowed the beneficial reuse and redevelopment of the Mack Avenue Site to move forward.

USPS Facility Repairs/Upgrades and Survey/Abatement of Hazardous Building Materials, EPRRS Contracts, Various Locations including MI, USPS (06/2006–Ongoing), Project Manager. Assisted the program manager with multiple Michigan USPS facilities requiring various response actions. Tasks included coordination of contractors and Weston field personnel to complete the assigned tasks. Budget tracking, subcontracting, and SOW development were required for successful completion of the work. Also responsible for coordinating with USPS personnel throughout the project duration. Responsibilities included final reporting, subcontractor invoice review, and Weston invoicing and follow-up.

Design/Construction/O&M of Remediation Systems, Coe's Cleaner (Former Dry-Cleaner Facility) Site, Milford, MI, EGLE (08/2009–Ongoing), Project Manager. Managed the designed and implementation of upgrades to the groundwater extraction and treatment system at this former dry-cleaning facility site. Goals of the upgrade included meeting the updated discharge criteria, reducing maintenance effort/cost, improving system operational flexibility, improving remote monitoring and pumping controls, and improving treatment flow capacity and efficiency. Recommended replacing various system components, including a new Carbonair® STAT 400 air stripper unit, new blower, and variable frequency drive units; cleaning the well screens and drop piping; and replacing conveyance piping inside the treatment building, including the discharge line where large amounts of scale restricted the discharge of treated groundwater. Managed the design of the system upgrades and provided on-site oversight/direction of the TC during construction of the upgrades. Under Mr. Douglas's management, Weston has improved the system's operational flexibility and efficiencies, ultimately reducing EGLE's level of effort/cost required to maintain it.

Residential Wells-Holly Road Site, Brighton, MI, EGLE (01/2018–Ongoing), Project Manager. Managed design and installation of a pump-and-treat groundwater recovery system to intercept a groundwater plume before it reaches a nearby school. Continues to manage O&M oversight of the treatment system. Activities include coordinating with the O&M contractor, reviewing invoices and monthly reports, and preparing NPDES reports. In addition, Weston is also monitoring indoor air quality and sub-slab vapor concentrations beneath the school to evaluate potential exposure risks. Additional activities have also included VI evaluation of numerous residential homes and the installation of multiple vapor mitigation systems. O&M of the systems and residences is ongoing. Managed design and installation of an SVE system at the location of the release and conducted oversight of the operation and shutdown of the system. Additional evaluation of the system and remaining soil contamination is ongoing.

Site Survey, Installation/O&M of Vapor Mitigation Systems, Snedicor's Dry Cleaning Facility, Howell, MI, EGLE (03/2019–Ongoing), Project Manager. Managing the investigation of a former dry cleaner site that released cleaning solvents into the soil and groundwater. The release has resulted in high levels of PCE that are present beneath and adjacent to the former dry cleaner building. Initial site investigations determined the presence of contamination directly beneath the dry cleaner building and adjacent buildings with operating businesses. A VI investigation was conducted that determined high levels of PCE vapors were entering the buildings. Subsequently, two vapor mitigation systems were installed in two of the adjacent buildings to address exposure risks. Weston coordinated the installation of the systems and is currently conducting O&M monitoring of the systems. In addition to the VI issues, it was also determined that groundwater was contaminated with PCE. Currently managing the completion of investigation and delineation of the groundwater plume. Vertical aquifer sampling (VAS) and the installation of six permanent monitoring wells were recently completed. Sampling and evaluation of the groundwater plume is ongoing.

Underground Storage Tank (UST) Removal, Multiple Locations, MI, DTMB (09/2002–12/2005), Project Manager. Prepared preliminary work plans, file reviews, and request for proposal documents for ten (10) UST removal sites. Selected qualified consultants (QCs) based on technical approach and evaluation of cost proposals. Performed oversight of the preparation of bid specifications and selection of trade contractors (TCs) to perform the UST removals. Provided oversight of both the QCs and TCs during the project including field work, report preparation, invoicing, and health and safety requirements.

Chapel Landfill Site Surveying, White Lake, MI, EGLE (05/2018–Ongoing), Project Manager. Managed a site survey/investigation of the former landfill to characterize contamination Project management duties included coordination/setup of the project via discussions with the client to develop and refine a SOW designed to meet the EGLE objectives. Oversaw preparation of the work plan and site-specific HASP, led procurement of drilling subcontractors, managed scheduling of appropriate Weston staff. Successfully completed the project within a limited budget and under an accelerated schedule.

Site Demolition/Excavation/Restoration, Midwest Aluminum/Viking Die Cast, Kalamazoo County, MI, EGLE, Site, Senior Project Scientist. Conducted oversight of final demolition and site cleanup/restoration activities at the Midwest Aluminum/Viking Die Cast Part 201 Site in Kalamazoo County, Michigan. Activities included demolition of buildings, foundations, and concrete slabs; production well abandonment; debris excavation and removal; contaminated soil excavation and disposal; hazardous waste removal and disposal; and backfilling and final grading. Oversight activities included documentation of all on-site activities, coordination with subcontractors, directing site restoration activities, and communications among the State, office, and site personnel.

Former Buck Mine Site Drainage/Control, Caspian, MI, EGLE (04/2010–Ongoing), Project Scientist. Assisted the Weston project manager with evaluation of technologies to manage local beaver population and mitigate damage in order to maintain the site drainage and control structures. Also provided reviews of surface water quality data related to the mine discharge and the effectiveness of the leachate settling ponds. Evaluations included effectiveness of meeting surface water discharge requirements and adherence to Rule 57 water quality standards.

Manistique River and Harbor Sediment Site Survey/Investigation, Manistique, MI, EPA Great Lakes National Program Office (05/2010–12/2012), Project Manager. Coordinated and conducted sediment sampling activities in the Manistique River and adjacent harbor to determine the extent of sediment contamination with PCBs. Field activities included sediment sampling (coring) in the harbor in deeper water using an EPA research vessel and sediment sampling using smaller vessels in the shallow river areas. Activities included processing sediment cores, collecting samples for laboratory analysis, and submitting samples for analysis through the Contract Laboratory Program.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Spencer Eldredge, CQM-C, Project Manager	7 (P3)	15

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Lakewood, Colorado

Other Relevant Professional Qualifications

Education:

B.S., Civil & Environmental Engineering - University of Wisconsin

Training/Certifications:

USACE - Construction Quality Management for Contractors - #784, USACE Chicago; 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926; 8-Hour Managers and Supervisors Course (SHSC), OSHA 29 CFR 1910.120(e)(4); Confined Space Training, OSHA 29 CFR 1910.146; Shipping and Transporting Dangerous Goods, OSHA 49 CFR 172 Subpart H

Experience Summary:

15 years of professional experience in construction management and oversight, civil engineering, and on-site management experience coordinating with multiple subcontractors across concurrent projects. Experienced and knowledgeable in federal and Michigan State regulations, EM 385-1-1, and OSHA. His experience also includes projects involving secure access, including federal government and confidential clients. Understands the processes, operational needs, and challenges that come with construction of occupied facilities and prioritizes the minimization of disruption to building tenants and facility operations during construction.

Relevant Project Experience

Upstream Embankment Repairs, Lake Whitney Dam, Whitney, TX, USACE Omaha RDI Program (01/2019–Ongoing), Project/Construction Manager. Time-critical repairs consisting of soil embankment excavation, reconstruction, and rip rap replacement on 6,400 linear feet of the upstream side of Lake Whitney Dam. Responsibilities included solicitation/selection of vendors and subcontractors, management of Weston self-perform personnel, cost management and reporting, and QC direction.

Project/Construction Manager, Design-Build LEED Gold Mundelein Village Office Complex, IL (08/2011–10/2014), Project/Construction Manager. Managed the design-build (D-B) construction and infrastructure improvements of the 32,000-square foot (sf) Mundelein Village Hall and the surrounding development. Responsible for effective communications with the client to confirm design details throughout construction. Responsible for solicitation and procurement of vendors and subcontractors, management of Weston self-perform personnel, cost management and reporting, and quality control direction. Integrated sustainable construction elements such as green demolition and drove construction phasing/schedule. Managed development of final design drawings for utilities, roads, and stormwater infrastructure. Led the LEED certification documentation and submittal process. Responsible for coordinating building commissioning, owner training, and warranty work. *This project has been highlighted by the Urban Land Institute as a particularly unique and creative approach to suburban brownfield and transit-oriented development.*

Bardwell Lake Dam Slide Repairs, Bardwell Dam Repair, Ennis, TX, USACE (03/17–10/2017), Project Manager/Quality Control Manager. Served as Project Manager and QC Manager for the repair of two slide areas on the landside of the Bardwell Lake Dam. The project involved removal of embankment slide material, amendment of soil with lime, and replacement of soil to restore the embankment to pre-slide conditions. Responsibilities included solicitation and selection of vendors and subcontractors, management of Weston

personnel, cost management and reporting, quality control direction, and inspection of material and soil replacement process. *"The on-site Project Manager exhibited superior decision-making abilities, was effective under pressure, diligent when responding to customer needs, and could be trusted to make the right decisions when no one was watching." – USACE Assessing Official, CPAR evaluation, 2017.*

Armed Forces Recruiting Center Facility Security Upgrades (Comparable Project #2), Omaha, NE, USACE Omaha District (09/2018–09/2020), Project Manager. Managed facility assessments and standardized security upgrades at over 200 Armed Forces Recruiting Centers. Drove development of a secure online organizational portal, which allowed for near-real-time tracking and visibility of individual facilities' required improvements, scheduling, and completion status. Responsible for oversight of procurement, including all required materials and field staff, as well as the identification/coordination of local subcontractor efforts.

L550 RDI II - Final Levee Repairs, Hamburg, MO, USACE Omaha District (02/2020–09/2022), Project Manager. Managed subcontractor equipment and effort to restore damaged sections of 31.6 miles of Missouri River Levee in northwest Missouri. Responsible for leading multiple daily client meetings, subcontractor scheduling, field supervision management, overseeing daily cost tracking, preparing estimates to complete, preparing estimates for additional work and client invoicing.

L550 - Interim Levee Repairs, Rockport, MO, USACE Omaha District 06/2019–07/2020), Assistant Project Manager. Assistant PM for large scale interim levee repairs which required 24-hour field operations. Coordinated subcontractor equipment and effort to ensure consistent field progress. Coordinated cost reporting and financial forecasts. Coordinated client invoicing and subcontractor payment assurance. Project successfully closed two inlet breaches and one large outlet breach allowing the follow-on contract to meet a key milestone of full-height protection by March 1, 2020.

L575 - Interim Repairs, Percival, IA, USACE Omaha District (07/2019–01/2020), Project Manager. Collaborated with USACE PDT to substantially increase level of protection at L-575 A and B inlet breaches. Managed interim repairs for increased level of protection at three levee breaches and numerous crest repair sections. Coordinated scheduling of Weston and subcontractor resources, procurement, cost tracking, forecasting, and in-field estimating. Also oversees and supports Weston safety and QC field personnel. Project successful maintained and improved the damaged levee's level of protection while final repairs where designed.

USACE Emergency Drainage Repairs, Wharton, TX, USACE (04/2022–12/2022), Project/Construction Manager. Managed time-sensitive repairs to the critically scoured embankments and channel bottom on the Santa Fe Drainage Structure to prevent a potential breach and damage to FM 1299 and nearby housing.

Design-Build Construction, Upgrade of Parking Lots, Sidewalks, and Ramps, Air Force Civil Engineer Support Agency, Peru, IN, Sustainment/Restoration and Modernization Acquisition Task Order Contract, U.S. Air Force (08/2010–06/2011), Project Engineer. Member of a design-build project team tasked to replace several asphalt parking lots and install Americans with Disabilities Act (ADA) compliant sidewalks and ramps. Performed daily reporting, design document compliance, issue resolution, and subcontractor and office coordination. Assisted with bids, scope development, and solicitation of subcontractors.

Design-Build Renovation/Addition, Petroleum, Oil, and Lubricants (POL) Building, U.S. Air Force Reserve Compec U.S. Air Force Reserve Command (USAFRC), Minneapolis, MN, Project Engineer. Member of a design-build project team tasked to renovate existing POL building and add a 1,200-sf addition. Team lead for prequalification, solicitation, scope of work (SOW) creation, and management of 16 Weston subcontractors and equipment vendors. SOW includes new heating, ventilation, and air-conditioning (HVAC) systems, fire suppression, and construction of new locker room facilities. Daily duties include daily reporting, safety compliance, and submittal and specification compliance.

Erosion Control/Landfill Repair at Badger Army Ammunition Plant, North Freedom, WI, USACE, Omaha District (07/2014–01/2015), Project Manager. Managed material and subcontractor procurement and coordination, cost tracking and reporting on this project to repair erosion to topsoil and rooting zone layers of a landfill cap. Quality control included work plan compliance verification, field measurements using transit, material verification, and daily report writing.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Julian Bielawski, P.E., CAPM, Project Manager	32 (P4)	47

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	San Antonio, Texas

Other Relevant Professional Qualifications

Education:

B.S., Civil Engineering and Sanitary Engineering – University of Massachusetts at Lowell

Training/Certifications:

Professional Engineer (TX # 84456); Corrective Action Project Manager (CAPM) (No. CAPM01527), TX; 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3)

Experience Summary:

Licensed PE with over 40 years' water/wastewater experience. Designed/managed numerous projects in south central Texas. His strengths include lift station design, troubleshooting WWTP compliance issues, and providing solutions to bring WWTPs into compliance. Experience also includes design of siphons and large-diameter sewer rehabilitation using trenchless methods.

Relevant Project Experience

Phase 4 Lift Stations Rehabilitation Program, San Antonio, TX, San Antonio Water System (SAWS) (01/2016–12/2019), Construction Manager. Project involved preliminary engineering, design, and construction phase services for the rehabilitation of six LSs. Performed QA/QC on the final construction contract documents and assisted in the final design of oversized wet wells and emergency storage facilities for rehabilitation of six lift stations. Managed construction phase services for this project and coordinated the reviews and approvals of contractor submittals and RFIs with sub-consultants. Performed appropriate reviews of contractor documents to ensure compliance with engineering specifications.

Phase 5 Lift Station Preliminary Engineering Design, San Antonio, TX, SAWS (07/2016–12/2017), Senior Project Manager. Produced a draft Preliminary Engineering Report which summarized existing conditions and evaluated alternatives for the rehabilitation or replacement of 16 wastewater lift stations located within Joint Base San Antonio and the Port of San Antonio. Also acted as Project Engineer, writing the text of the report. Rehabilitation options had to meet TCEQ regulations as well as SAWS standards. The elimination of certain lift stations on was also considered during site visits and report development. Recent site visits also focused on available wet well size and storage capacity, force main capacity limitations, estimated sewer shed acreages fore each station, access and security conditions, 100-year flood plain elevations at station sites, identification of specific site conditions that will be challenging for future construction and identification of design alternatives.

Rittiman Road Bridge-Grantham to Holbrook Water and Sewer Relocations, San Antonio, TX, SAWS (09/2010 – 04/2015), Project Manager. Managed the water and wastewater adjustment portion of the bridge installation project. Design included a jack-and-bore crossing for a new 16-inch water main beneath Salado Creek and connections to the existing water system beyond the limits of bridge construction. Adjustments and relocations of 8-inch sewer mains on both sides of the creek were also needed, which included design of a "dog house" manhole over an existing 48-inch sewer main.

Dos Rios Water Recycling Center Digester Gas Utility Transfer Project, San Antonio, TX, SAWS (03/2009 – 12/2011), Project Manager/Engineer of Record. This project consisted of three main phases: engineering design that temporarily stabilized the dewatered sludge loading; an Engineering Report on the Analysis and

Recommendations for Permanent Building; and the engineering design for permanent stabilization of the Dos Rios Sludge Loading Building. Managed production of the engineering designs of the digester gas transfer line, relocation of a 7,500-gallon liquid propane tank, water main extensions, and sewer line for construction of gas scrubbing facilities on leased property within the Dos Rios Water Recycle Center plant site. A 16-inch stainless steel Schedule 10, 316 L above ground pipeline with valves, expansion joints, fittings, and moisture traps was installed to deliver digester gas for additional treatment and conveyance into the nearby CPS Energy gas distribution system. Responsible for completion of the engineering report and coordinating with the client and structural engineering staff during all phases of the project including task sequencing challenges during construction.

Highway 97 Water Supply Well Improvements, Gonzales, TX, City of Gonzales (07/2011 – 06/2013), Project Manager. Managed this project which consisted of completing pilot study and receiving TCEQ design approval for the installation hydrogen sulfide removal facilities at an abandoned well site. Pilot study results recommended lowering the pH of the raw water and directing it through an existing cooling tower that would liberate the hydrogen sulfide. Engineering design included new or renovated chemical feed systems (gaseous chlorine, hydrochloric acid and ammonium sulfate), structurally designed pads and electrical systems. Installation of improvements has provided 1.0 m.g.d. of additional water supply to the City and allowed construction phasing of new surface water treatment plant improvements.

Olmos Basin Central Watershed Sewer Relief Line (C-3), UIW Line B (18-inch, 15-inch, 54-inch, Lower Segment CIPP and Pipe Bursting), San Antonio, TX, SAWS (07/2016–03/2017), Senior Project Manager. Managed and designed CIPP rehabilitation of 550 ft of 15-inch and 760 ft of 18-inch gravity line, and 865 ft of pipe-bursting replacement of an 18-inch gravity main on UIW campus. Prepared detailed bypass pumping plans for the project, which is in a 100-year floodplain. Closely coordinated with stakeholders, including UIW for a sewer going underneath a building, the Headwaters Sanctuary established by the Sisters of the Charity of the Incarnate Word, and the City of Alamo Heights. Worked with COSA on tree and floodplain development permits. As Construction Lead, reviewed submittals, participated in meetings, responded to RFIs, and conducted regular site visits to check construction progress. The construction contractor had issues finding available high-density polyethylene (HDPE) piping due to production schedules. Provided alternate solutions that enabled the construction contractor to complete the project on schedule.

W1 Temporary Flow Diversion to Medio Creek WRC-Emergency Bypass Project, San Antonio, TX, SAWS (10/2018 – 05/2019, Project Manager. At the Pinn Tank Site location, designed approximately 700 LF of bypass pumping operations from the existing 42-inch sewer main to the existing 30-inch CSC Recycled main. At the Medio Creek Water Recycling Center designed tie into the existing CSC recycled main to discharge the flows through approximately 2,400 LF of above ground 34-inch DR17 HDPE pipe to the facility. Also, Led the design of a 20-MGD lift station (16-ft-diameter wet well; 60 ft deep) to temporarily divert W1 flows to Medio Creek WRC. The Phase I of this project design and bid was completed on fast-track, and Phase II only design was completed.

Asbestos Cement Water and Sewer Pipeline Replacement Project, Austin, TX, City of Austin (COA) (10/2017–09/2020), Quality Manager. The project included the replacement of 6,600 LF of 8" to 10" asbestos cement waterlines in four areas and cast-iron water mains in a fifth area. Reviewed design documentation that was prepared for open trench construction for asbestos mains in those four areas. Conducted quality reviews throughout design, bid, and construction phases of the project.

Highway 16 Water Main Project, Helotes, TX, City of Helotes (11/2015 – 11/2016, Project Manager/Engineer of Record. Managed potable water improvements that consisted of approximately 1.4 miles of a 12"-diameter water main, service connections, tie-ins, and associated appurtenances. Significant challenges were overcome, including meeting Texas Department of Transportation (TxDOT), CPS Energy, and SAWS design expectations for the installation of both water and sewer lines within a space-constrained right-of-way (ROW). Coordinated sub-consultant and schedules during design phase services for the 60%, 90%, and 100% design completion. Developed construction schedule.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Sam Irrinki, P.E., Project Manager	20 (P4)	33

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Austin, Texas

Other Relevant Professional Qualifications

Education:

M.E., Environmental Engineering – University of Maine

B.S., Civil Engineering – Indian Institute of Technology

Training/Certifications:

Professional Engineer (TX #84348); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3)

Experience Summary:

33 years of successful project management and engineering experience in design and construction administration on water projects. He has worked on water main projects in central Texas, including projects for SAWS, San Marcos, the City of Austin, and projects in El Paso and the Dallas/Fort Worth area. Mr. Irrinki has designed 10+ miles of pipelines and his capabilities include condition assessment of waterlines, evaluating capacity and sizing of pipelines, and design of waterlines including trenchless technologies.

Relevant Project Experience

Fountain View Regional Lift Station Construction and Abandonment of Westheimer No. 1 Lift Station Construction Management & Inspection, Houston, TX, City of Houston (12/2021 – 12/2022), Project Manager. The project consists of construction of the Fountain View Regional Lift Station (23.5 MGD, 40-foot ID and 50-foot Deep wet well). The work also includes drainage improvements, site paving, and sidewalk improvements along the site's frontage along Fountain View and Skyline Drive. Work at the Westheimer No. 1 lift station site includes the complete demolition of the station, the relocation of a 24-inch storm sewer and 8-inch and 12-inch waterlines, and site restoration. Responsibilities include facilitation construction project meetings, coordinating with client staff, managing budget and schedule.

Heavy Civil Works and Facilities Upgrades Construction Management & Inspection, El Paso, TX, USIBWC (11/2010 – 10/2016), Project Manager. Provided construction management of administration buildings at South Bay International WWTP, and at Amistad Dam. Also, provided Construction Management of 200 miles of levee reaches in Hatch, Canutillo, El Paso, Presidio, Hidalgo, and Brownsville.

Asbestos Cement Water and Sewer Pipeline Replacement Project, Austin, TX, City of Austin (COA) (10/2017–09/2020), Project Manager. Managed the design, bid, and construction phases of this project to replace approximately 8,500 LF of waterline and approximately 3,100 LF of wastewater line at five different project areas. Supervised the design effort and managed field personnel during construction phase.

Design/Construction, Sunset Oaks Treatment Facility (250-KW Generator), San Marcos, TX, Aqua America, Inc. (10/2019–11/2021), Project Manager. Provided design alternatives to provide sufficient wastewater treatment capacity for the planned community. Supervised design, bid, and construction phase services package plant (concrete). The existing Texas Commission on Environmental Quality (TCEQ) permit was submitted with major amendments, and the ultimate buildout flow increased to 5 million gpd, location of the plant moved approximately 0.4 mile southeast, and effluent outfall location was moved closer to the treatment plant.

Phase 4 Lift Stations Rehabilitation Program, San Antonio, TX, SAWS (01/2016–12/2019), Project Manager. Managed performance of analysis of lift station capacity to provide data related to 1) future development, 2) lift station elimination, 3) evaluation of force main, 4) verification of minimum flows, 5) evaluation of backup storage capacities, 6) system upgrades, 7) lift station and force main retention time, and 8) surge analysis. Responsible for design, bid, and construction phase services for the rehabilitation and expansion of six lift stations (capacities ranging from 100 gpm to 3,600 gpm). Also included meter vaults.

Phase 5 Lift Station Preliminary Engineering Design, San Antonio, TX, SAWS (07/2016–12/2017), Project Manager. Project involved completing preliminary design work for the rehabilitation of 16 lift stations (100 to 1,500 gpm). Managed preparation of the Engineering Design Report, which detailed proposed rehabilitation improvements, evaluations of the existing facilities, cost estimates, pump selections, construction phasing and scheduling, and other design considerations.

McKie and Lee Street 12" Waterline Improvements, San Marcos, TX, City of San Marcos (11/2015 – 12/2017), Project Manager. Project consisted of design and construction services for upgrades of 2,100 LF of 12" waterlines along McKie, Lee, and Love Streets. Design considerations included minimizing disruption to businesses and driveways, pavement repair, and maintaining service to residents. Services included completion of bid documents and bid- and construction-phase. Also prepared all the required permits. Opinion of Probable Construction Cost (OPCC) was within 10% of the low bidder, and there were no construction change orders. Also included obtaining TxDOT permit to tie existing water main on TxDOT road. Managed design and construction at 2.8% under budget and on schedule.

Design/Construction, Barton Creek Lakeside Treatment Facility (80-KW Generator), Spicewood, TX, Aqua America, Inc. (10/2019–12/2021), Project Manager. Supervised design and construction management for demolition of existing package plant and replaced with 160,000-gpd-capacity steel package plant.

Lindshire and Lockheed Lift Station Sewer Relief Projects, Austin, TX, COA (02/2016–04/2017), Project Engineer. Supervised construction phase services, including request for information responses, substantial completion, and one-year warranty assessment, and preparation of record drawings as part of project to abandon and demolish existing lift stations and plan for a 1,166-LF gravity relief line that will convey inflow to an existing collector line. Reviewed submittals for quality and accuracy.

Southland Oaks Lift Station and Force Main Improvements, Austin, TX, COA (11/2020–Ongoing), Project Manager. Project involves rehabilitation of existing wastewater lift station involving replacement of pumps and motors, rehabilitation of wetwell, demolition of drywell, new valve vault, piping, tie into existing force main, new jib crane, new gas-powered generator, and associated electrical improvements. Reviewed calculations, preliminary engineering report, and plans, specifications, and cost estimate during design phase.

Olmos Basin Central Watershed Sewer Relief Line (C-3), UIW Line B (18-inch, 15-inch, 54-inch, Lower Segment CIPP and Pipe Bursting), San Antonio, TX, SAWS (07/2016–03/2017), Project Manager. Project demonstrates trenchless design experience and working in a time-sensitive environment with multiple stakeholders. Project included 550 ft of 15-inch and 760 ft of 18-inch gravity line CIPP rehabilitation and 865 ft of pipe-bursting replacement of an 18-inch gravity main on UIW campus. Numerous site construction constraints existed, such as protected trees, construction in a 100-year floodplain, a structure built over an existing sewer, and several protected springs. Coordinated with COSA on tree and flood plain development permits. Provided quality control reviews on plans, specifications, permit applications, OPCC, bid evaluation letter, and record drawings.

Design/Construction of Martin Hill 54-inch Water Transmission Main – Segment B, Austin, TX, Austin Water (02/2013–12/2015), Project Engineer. Project included design of 5,000 LF of 54-inch water transmission main (bid alternates steel/cement mortar lining, ductile iron pipe/double wrap coating) from preliminary through construction phases. Also, included isolation, drain, combination air/vacuum release valves, valve vaults, jack/bore, and tunnels with 72-inch casing. Supervised construction substantial and final walk-through, Managed preparation of record drawings, warranty walk-through, and project closeout.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Wes Skinner, CHMM, Project Manager	7 (P3)	19

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Farmington Hills, Michigan

Other Relevant Professional Qualifications

Education:

M.B.A., Business Administration – Michigan State University

B.S., Environmental Geosciences – Michigan State University

Training/Certifications:

Certified Hazardous Materials Manager (#15324); 40-Hour/8-Hour Hazardous Waste Site Training Course, Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.120(e)(3);

Experience Summary:

19 years in the environmental and engineering consulting fields; Management and execution of transactional due diligence services in 46 states and numerous provinces; Development of specialized assessment and solution services for equity investors, CMBS lenders, Real Estate, Investment Trusts, and traditional lenders; Significant experience with numerous property types including large-scale industrial properties, golf courses, high-rise office buildings, retail centers, super-regional shopping centers, and multi-family residential properties

Relevant Project Experience

Construction Risk Management, Parking Garage and Mobility Hub, Detroit, Michigan (10/2021-Ongoing), Client Manager. Performed construction risk management services during the construction of a 6-story, approximately 440,000-square foot parking garage and mobility hub inclusive of retail, lobby, vending, and restrooms spaces.

Phase I ESAs, PCAs, and Zoning Reports, Hospitality Portfolio, Traverse City, Michigan (08/2022-09/2022), Client Manager. Expedited execution of Phase I ESAs, PCAs, and Zoning Reports on a portfolio of three hotel properties in Traverse City, Michigan.

Phase I ESAs and PCAs, Multi-Family Apartment Portfolio, Detroit, Michigan (10/2021-11/2021), Client Manager. Expedited execution of Phase I ESAs and PCAs on a 27-property apartment portfolio in the Greater Detroit market totaling almost 8,000 individual apartment units.

Phase I ESAs, Industrial Property Portfolio, Livonia, Michigan (12/2019-01/2020), Client Manager. Executed Phase I ESAs on a 17-site industrial property portfolio in Livonia, Michigan.

Due Diligence, 49-Story High-Rise Office Building, Manhattan, New York (05/2019-06/2019), Senior Project Manager. Client-facing senior project manager for the execution of environmental and engineering due diligence on a Midtown Manhattan Class A high rise office building in support of a single-asset conduit offering exceeding one billion dollars.

Phase I ESAs and PCAs, Retail Property Portfolio, National (06/2016-07/2016), Senior Project Manager. Client-facing senior project manager for the expedited execution of Phase I ESAs and PCAs on a 123-site retail property portfolio stretching across 29 states.

Phase I ESAs and PCAs, Super-Regional Shopping Center Portfolio, National (01/2017-02/2017), Senior Project Manager. Client-facing senior project manager for the execution of Phase I ESAs and PCAs on a 10-site super-regional shopping center portfolio, with assets averaging over 700,000 square feet each, in support of a conduit offering totaling over one billion dollars.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Victor Tvedten, AIA, LEED AP, Project Manager	15 (P3)	25+

c. Roles and Responsibilities as They Relate to the RFP

Responsible for the successful planning, execution, and completion of assigned projects. Directs project team and manages scope, schedule, and budget, aligned with client needs and achievement of project objectives. Provides direct and ongoing communication with State Project Manager, at a frequency supportive of timely decision-making and paced according to work intensity.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Grand Rapids, Michigan

Other Relevant Professional Qualifications

Education:

M.S., Architecture – University of Michigan
B.S., Architecture – Lawrence Technical University

Training/Certifications:

Associate AIA; LEED Accredited Professional, USGBC; Home Energy Rating System (HERS) Rater; Licensed Asbestos Inspector in State of Michigan; Licensed Radon Measurement Specialist; HUD Multifamily Accelerated Processing (MAP) Project Capital Needs Assessment (PCNA) training; Fannie Mae Property Condition Assessment (PCA) training; ASTM Property Condition Assessment training

Experience Summary:

Over 25 years in the Architecture & Engineering Industry with over 15 years' experience in design and new construction, 13 years of experience performing architectural due diligence for a wide range of property types including Property Condition Assessments (commercial, office, retail, hospitality, medical, institutional, and industrial), Capital Needs Assessments (multifamily residential like HUD, Fannie Mae, and Freddie Mac), and is experienced in sustainable architecture and green building techniques such as LEED building certification.

Relevant Project Experience

Facility Condition Assessment, Hospital, Louisiana, Confidential Client (01/2023-Ongoing), Senior Project Manager. Facility condition assessment for a hospital and medical office building in Louisiana of approximately 350,000 and 18,000 square feet, respectively. The assessment includes an in-depth assessment of the façade, roof, mechanical, electrical, plumbing (MEP), elevator and fire/life safety systems. The specialty assessments are performed by subject matter experts in these trades. The remainder of the building systems and components are assessed by a Generalist. Mr. Tvedten is responsible for all coordination among the team, QA/QC, and communications with the client. The specialist reports are incorporated into a single FCA report for the Client which takes in-depth general knowledge of all building systems which are being assessed by the team. The information is combined into a single cost table for the client to utilize for capital planning and identification of immediate needs.

Condition Assessments, Medical Office and Senior Living, Various sites AZ, UT,TX, IL, PA, VA, Confidential Client (09/2022-10/2022), Senior Project Manager. Mr. Tvedten was the Project Manager for an 11 site condition assessment to support our client with a large acquisition. The properties were located throughout the country with one in AZ, UT, TX, IL, PA and VA and five in MO. The acquisition encompassed over 400,000 square feet of building of various construction types and use. Mr. Tvedten was the lead on the project coordinating the various assessments and responsible for all communication with the client throughout the duration of the project. The Client asked for an expedited timeline which Mr. Tvedten accommodated and delivered on time. The condition assessments included assessment of site features, structure, façade, roof, mechanical, electrical, plumbing, fire/life safety systems and interiors. Cost tables were provided for deferred maintenance, immediate needs and a 12-year reserve.

Condition Assessment, Renaissance Hotel, Chicago, IL, Confidential Client (11/2022-12/2022), Senior Project Manager. Condition assessment for a 28-story, 460,000 square foot Renaissance hotel in Chicago. The property was utilized for hospitality as well as retail space on the main floor. The mechanical systems were composed of a central plant and there were 12 elevators. Mr. Tvedten was responsible for all coordination among the assessment team, QA/QC, and communications with the client. The condition assessments included assessment of site features, structure, façade, roof, mechanical, electrical, plumbing, fire/life safety systems and interiors. Cost tables were provided for deferred maintenance, immediate needs and a 12-year reserve.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Adam Brown, P.E., CQM-C, Lead Engineer	8 (P4)	20

c. Roles and Responsibilities as They Relate to the RFP

Responsible for coordinating and completing project-related engineering tasks. The Lead Engineer is a P.E. and will oversee completion of tasks such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Austin, Texas

Qualifications

Education:

M.E., Geotechnical Engineering – Drexel University

B.S., Civil Engineering – Drexel University

Training/Certifications:

***Professional Engineer (MI #6201069885)*;** USACE Construction Quality Management for Contractors (CQM-C) Certification; 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour Site Manager and Supervisor Course, OSHA 29 CFR 1910.120(e)(4); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926

Work Experience Relevant to Proposed Role:

20 years of experience in soils/geotechnical engineering, investigation, and design on 300+ projects and over 10 years of experience as design EOR for waste management projects. Extensive experience in detailed design of earthwork and excavations involving deep excavation, retaining structures, sheet pile, and geostructural engineering. Performed field investigations as EOR for geotechnical, hydrological, and environmental analysis and designed/developed design-drawing details incorporating soil/structural member/geosynthetic components. Provided construction oversight/field engineering for various construction projects, including earthwork, piping, remediation, vertical construction, heating, ventilation, and air conditioning (HVAC), retrofits, communications, and power. Also experienced in environmental/construction industry requirements, including OSHA 29 CFR 1926, DOT, IBC, ASCE 7, USACE EMs, RCRA, CERCLA, and TSCA. Additionally, provides geotechnical/civil engineering expert testimony

Experience on Projects Similar to that Described in the RFP:

Flood Recovery, Upstream Embankment Repairs, Lake Whitney Dam, TX, USACE Omaha RDI Program (01/2019–Ongoing), Project Engineer. Performed real-time slope stability evaluation and modeling with the finite element, limit-equilibrium modeling software, Geostudio®, using direct read soil strength measurements from test excavations. Provided guidance as to the safe removal of impervious core material while maintaining a safe work environment for workers performing the excavation of the more than 60-ft engineered slope with an active highway at the top. Cut slopes ranged from 2H:1V to 0.5H:1V to achieve safe removal requirements of previously failed materials.

L-550 2019 Missouri River Levee Repairs, Atchison, IA, USACE Omaha RDI I Program (06/2019–07/2020), Lead Engineer. Mobilized with first response site team to lead technical effort related to the critical inlet breach closures that occurred as part of the spring 2019 flood season. Procured and coordinated material sourcing, initial and follow-up surveys, material handling, borrow, and fill plans. Worked in conjunction with USACE PDT to understand the intent and execution goals of project DMs. Mentored team members and subsequent contract personnel on important of aspects of DMs and critical interactions of work elements as related to continued flooding that created a submerged work environment during and after closure. Performed program-level QA for engineering aspects of continued execution of the project.

Emergency Levee Rehabilitation, Missouri River, L-550/575, Atchison County, MO; Nemaha County, NE; and Fremont County, IA, USACE Omaha SDIC Program (10/2011–06/2014), Project Engineer. Maintained geotechnical investigation database for all soil boring investigations performed to support the

failure evaluation and reconstruction of the levee system. Created custom fence and gINT® template to enhance review of both CPT and SPT datasets in an efficient and repeatable manner. Performed QC of data entry to ensure interpretation of field logs was performed accurately.

Gate Removal and Installation, Stillhouse Hollow Lake, Belton, TX, USACE Omaha (11/2018–01/2021), Project Engineer. Hydraulic control for water levels inside Stillhouse Hollow Lake is provided by a singular water control structure and an emergency spillway. The water control structure is constructed with two sets of sluice ways, with each sluice way having an emergency sluice gate and a service sluice gate. Each sluice way is closed with one bulkhead. The project includes an earth fill embankment and dike, an uncontrolled spillway, and gated outlet works. Replaced two existing water control gates and associated hydraulics systems for operational improvements. Identified a procedure to modify the hydraulic system to maintain operation of one set of open sluice way gates while closing off another set for replacement, saving the project time and costs associated with lowering the lake.

Tech Town (Former GM Property), Dayton, OH, City of Dayton (03/2018–Ongoing), Project Engineer. Performing detailed geotechnical analysis of complex subgrade environment to provide a value engineering solution for the foundation construction and to limit generation of spoils and limit potential hazards. Continues to provide guidance for closure of various phases of property. Leads civil and stormwater design engineers in analysis of sitewide capping alternatives.

Rose Valley Pump Station and Force Main, Rose Valley, PA, DELCORA (11/2014–11/2017), Project Engineer. Developed geotechnical investigation program to support new force main construction by open excavation, directional drilling, and microtunneling methods. Prepared technical specifications for trenching, directional drilling, and microtunneling methods. Prepared design drawings and construction specifications for gravity retaining and sheetpile walls to support construction of new access way along a river with a flood elevation above the toe of the walls. Performed construction inspection of wall construction and tunneling methods.

START III Contract (IL, IN, MI, OH, MN, and WI), EPA Region 5 (09/2006–12/2015), Project Engineer. Performed geotechnical and civil engineering design, construction phase services, and technical guidance on a variety of projects within the region. Performed complete analysis and design of a CERCLA landfill cap (Milton, OH) to withstand aggressive harsh Midwest winter freeze-thaw cycles and flood inundation and to provide scour protection during snow melt. Performed technical review, engineering guidance, and expert testimony on large-scale NAPL remediation (Ashland, WI) involving dredging, wave and flood protection, slurry wall, engineered capping, pump-and-treat, and beneficial reuse. Performed independent engineering analysis to verify PRP claims during RD. Prepared state-of-the-art technical analysis and design report involving innovative finite element modeling of stress states on the confining unit of an artesian aquifer during different stages of excavation. Worked closely with the U.S. Department of Justice (DOJ), EPA, and Wisconsin Department of Natural Resources (WDNR) leaders as a technical expert and value engineer to develop protective and achievable remediation goals using best available technologies to achieve site closure on multiple sites.

RD and Remediation, Fords, NJ, Confidential Client (01/2010–Ongoing), EOR. Performed construction monitoring and design engineering for stream bank repair and geosynthetic landfill cap to ensure compliance with New Jersey Department of Environmental Protection (NJDEP) and EPA requirements for closure and mitigation. Reviewed work and provided expertise on geotechnical stability, erosion mitigation, earthform design, and soil and erosion Best Management Practices (BMPs) related to all phases of environmental remediation and soil removal on a PCB-contaminated site.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Dain Chernick, P.E., Project Engineer	4 (P4)	12

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Austin, Texas

Other Relevant Professional Qualifications

Education:

B.S., Civil Engineering – University of Florida

Training/Certifications:

Professional Engineer (TX #130249); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour SHSC, OSHA 29 CFR 1910.120(e)(4)

Experience Summary:

12 years of engineering experience, including sewer and lift station design, permits and compliance work related to infrastructure design and construction, and SWPPPs, including compliance work related to Spill Prevention Control and Countermeasure (SPCC) plans, SWPPP, NPDES, and Texas Pollutant Discharge Elimination System (TPDES) permitting, compliance reporting, and air permitting. Experienced in remediation strategies and systems and in water and wastewater transmission design for municipal clients, including design plans, specifications, cost estimates, schedules, bid assessments, and request for information responses.

Relevant Project Experience

Asbestos Cement Water and Sewer Pipeline Replacement Project, Austin, TX, City of Austin (COA) (10/2017–09/2020), Lead Project Engineer. Responsible for the design, bid, and construction phases of this project to replace approximately 8,500 LF of waterline and approximately 3,100 LF of wastewater line at five different project areas. Led the design effort and managed field personnel during construction phase.

Phase 4 Lift Stations Rehabilitation Program, San Antonio, TX, SAWS (01/2016–12/2019), Project Engineer. Supported preliminary engineering, detailed design, and construction phase services for the rehabilitation of six lift stations. Project objectives included improving lift station reliability, operation, ease of maintenance, site accessibility, emergency reliability (i.e., onsite generators, transfer switches, and bypass quick-connections), remote communication (SCADA), security and safety controls, and flood protection. Prepared specifications, OPCC, and the documents required for permits, including tree, site, building, and flood plain development permits. Supported preliminary engineering, design, and construction phase services for the rehabilitation of six lift stations (100 to 3,600 gpm).

Phase 5 Lift Station Preliminary Engineering Design, San Antonio, TX, SAWS (07/2016–12/2017), Project Engineer. Project involved completing preliminary design work for the rehabilitation of 16 lift stations (100 to 1,500 gpm). Responsibilities included assisting in preparation of the Engineering Design Report, which detailed proposed rehabilitation improvements, evaluations of the existing facilities, cost estimates, pump selections, construction phasing and scheduling, and other design considerations.

Highway 21 Water Line Extension Project, San Marcos, TX, City of San Marcos (05/2020–12/2021), Design Lead. Served as design lead for this water line extension, including approximately 9,000 LF of a new 12-inch water main adjacent to the City of San Marcos Regional Airport that will serve an adjacent fire training facility. Led the design effort from 30% to 100%, including preparation of preliminary engineering report, plans, project manual, OPCC, and schedule. Efforts also included coordination with the airport staff and the designers of the new fire training facility. Installation was performed using primarily open cut trenching with an approximately 400-LF segment of jack and bore at a runway lighting crossing.

Design/Construction, Sunset Oaks Treatment Facility (250-KW Generator), San Marcos, TX, Aqua America, Inc. (10/2019–11/2021), Site/Civil Engineer. Project included design of Tier 2, 250-KW diesel generator, diesel storage tank, Automatic Transfer Switch, and all the controls for remote operation. Provided site/civil design support, including grading design, drainage calculations, and oversaw construction of the facility.

Design/Construction, Barton Creek Lakeside Treatment Facility (80-KW Generator), Spicewood, TX, Aqua America, Inc. (10/2019–12/2021), Site/Civil Lead Engineer. Led design of Tier 2, 80-KW diesel generator, Automatic Transfer Switch, and all the controls for remote operation. As site/civil design lead, completed grading design and drainage calculations for the County permit and oversaw facility construction.

Lindshire and Lockheed Lift Station Sewer Relief Projects, Austin, TX, COA (02/2016–04/2017), Project Engineer. Provided construction phase services, including request for information responses, substantial completion, and one-year warranty assessment, and preparation of record drawings as part of project to abandon and demolish existing lift stations and plan for a 1,166-LF gravity relief line that will convey inflow to an existing collector line. Also reviewed submittals for quality and accuracy.

Southland Oaks Lift Station and Force Main Improvements, Austin, TX, COA (11/2020–Ongoing), Project Engineer. Project involves rehabilitation of existing wastewater lift station involving replacement of pumps and motors, rehabilitation of wetwell, demolition of drywell, new valve vault, piping, tie into existing force main, new jib crane, new gas-powered generator, and associated electrical improvements. Responsibilities included reviewing preliminary engineering report and reviewing plans and specifications during design phase.

Olmos Basin Central Watershed Sewer Relief Line (C-3), UIW Line B (18-inch, 15-inch, 54-inch, Lower Segment CIPP and Pipe Bursting), San Antonio, TX, SAWS (07/2016–03/2017), Project Engineer. The project included trenchless rehabilitation, including 15-inch, 18-inch and 54-inch sewers; evaluation of sewer line capacities and conditions; and review of options to cause the least disruption to the UIW and adjacent facilities, including sensitive features. Responsibilities included preparation of all required permits.

Westgate Neighborhood Wastewater Pipeline Renewal, Austin, TX, City of Austin (10/2020–Ongoing), Project Engineer. This project included the design of approximately 10,000 LF of 8-inch, 12-inch, and 15-inch wastewater line and 500 LF of 12-inch water line in five different areas of the City of Austin. Installation was primarily open cut trenching with pipe bursting and cured-in-place pipe installation methods. Led the design effort from 30% to 100%, including preparation of preliminary engineering report, plans, project manual, OPCC, and schedule. Efforts also included environmental assessments, TXDOT coordination and permitting, and tree preservation and mitigation in wastewater easement areas.

Primrose Oaks South Water Pipeline Improvements, San Antonio, TX, SAWS (04/2021–Ongoing), Water Pipeline Design Lead Engineer. Provided design of approximately 20,500 LF of 12" water mains via open cut, replacing the existing water mains in two neighborhoods located about 2 miles south of the Atascosa County line near Hwy 16. Performed a detailed cost-benefit analysis for the various pipe materials available (DI, PVC, HDPE). The analysis included, but was not limited to, capital cost, annual operation and maintenance costs, and life cycle costs, advantages, disadvantages, useful life, maintenance requirements, operational requirements, health and safety considerations, environmental considerations, installation methods, soils and groundwater conditions, depth of installation, and other critical factors influencing the decision regarding the most cost-effective pipe material(s) for the intended application. Made a final recommendation regarding the materials of construction and other basis of design criteria for this project.

Design/Construction of Martin Hill 54-inch Water Transmission Main – Segment B, Austin, TX, Austin Water (02/2013–12/2015), Project Engineer. Project included design of 5,000 LF of 54-inch water transmission main (bid alternates steel/cement mortar lining, ductile iron pipe/double wrap coating) from preliminary through construction phases. Also, included isolation, drain, combination air/vacuum release valves, valve vaults, jack/bore, and tunnels with 72-inch casing. Completed construction substantial and final walk-through, prepared record drawings, warranty walk-through, and project closeout.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Natalie Harkins, P.E., CQM-C, Project Engineer	6 (P3)	12

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	West Chester, PA

Other Relevant Professional Qualifications

Education:

M.E., Civil/Geotechnical Engineering – Villanova University

B.S., Civil Engineering – Villanova University

Training/Certifications:

Professional Engineer (IL # 062.072527); USACE Construction Quality Management for Contractors (CQM-C) Certification; 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour Site Manager and Supervisor Course, OSHA 29 CFR 1910.120(e)(4); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926

Experience Summary:

12 years of civil and geotechnical engineering experience at hazardous and industrial waste sites with experience in geotechnical evaluation and design for linear construction projects, including utilities and roadways, for public, federal, and industrial owners. Experienced performing modeling for slope stability and ground settlement analysis and field investigations for geotechnical, hydrological, and environmental analysis and designs. Experienced working with EPA, state, and DoD regulatory and permitting requirements, such as CERCLA projects; obtaining PADEP General Construction Permit (PAG-02) and individual NPDES permits; and obtaining E&S Pollution Control Plan certification on a county level.

Relevant Project Experience:

L-550 2019 Missouri River Levee Repairs, Atchison, IA, USACE Omaha RDI I Program (06/2019–07/2020), Engineer. Oversaw emergency response levee closures and rehabilitations along the Missouri River. Provided calculations and design memo responses to USACE regarding methodology of closing an active levee breach with on-site and imported materials, slope stability, and seepage modeling. Provided incidental design, grading plans, and next-day on-site implementation. Site was surveyed using real-time kinematic Global Positioning System (GPS), material inspections, and daily progress reporting to USACE.

Remedial Design and Remediation, Fords, NJ, Confidential Client (12/2011 – Ongoing), Project Engineer. Aided in the design, permitting and implementation of an emergency streambank stabilization effort. Submitted permits to NJDEP (Flood Hazard Individual Permit) and Freehold conservation district (Soil Erosion and Sediment Control Plan Certification) regarding work in the floodplain and work in a stream. Provided direction and contractor oversight of site stream stabilization.

Ashland/NSP Lakefront Superfund Site, Ashland, WI, U.S. EPA Region 5 (01/2015 – 12/2015), Civil Engineer. Oversight and inspection of remedial activities, which included sheet pile and tieback installation, slurry wall construction, and excavation of contaminated soils and subsequent Medium Temperature Thermal Desorption treatment. Oversight of geotechnical investigation (Hollow Stem Auger drilling and Cone Penetration Testing) in Lake Superior/Chequemagon Bay. Tasks included creating daily field construction reports for management and client review and on-site materials delivery inspections.

Pump Station Replacement, Marietta, PA, GlaxoSmithKline (08/2018 – 01/2019), Project Engineer. Reviewed construction techniques to determine compliance with Weston's design drawings and specs, as well as on-site sinkhole mitigation. Also served as QA/QC lead for construction materials testing on separate warehouse renovation project on same facility campus. Responsibilities included scheduling and oversight of

concrete/compaction/bearing/structural inspections and testing, as well as reviewing specs and determining if testing results met design requirements.

START III Contract (IL, IN, MI, OH, MN, and WI), EPA Region 5 (12/2011–12/2015), Civil Engineer. Performed oversight/ inspection and construction phase services of remedial activities, which included sheet pile and tieback installation, slurry wall construction, and excavation of contaminated soils and subsequent Medium Temperature Thermal Desorption treatment. Conducted oversight of geotechnical investigation (hollow stem auger drilling and cone penetration testing) in Lake Superior/Chequemagon Bay. Tasks included creating field construction reports for documenting daily activities, material deliveries, and deficiencies for EPA review.

Fort Detrick Sanitary Sewer Repair, Fort Detrick, MD, U.S. Army Engineering and Support Center, Huntsville (09/2020 – Ongoing), Civil/Geotechnical Project Engineer. Prepared geotechnical investigation program for Fort Detrick sewer repair design report. Tasks included developing the drilling scope of work, geotechnical sampling program and formalization of WESTON-created boring logs. Prepared and sealed Maryland Department of the Environment (MDE) construction permit plan set for Erosion and Sediment Control approval by MDE.

Site-Wide Remedial Action, Public Safety Building, Spring Valley Formerly Used Defense Site (FUDS), DC, USACE Baltimore (07/2019 – Ongoing), Geotechnical Engineer. Developed design and analysis to ensure safe cut slopes and safety during excavation of UXO and potentially hazardous materials at the Public Safety Building (PSB) located on American University and at FUDS across 92 private residential properties and 13 federal/city lots. EOR for design drawings/plans and permit package regarding the PSB excavation. Design/analysis included using GeoStudio Slope/W® software to analyze steepest cut slope with adequate factors of safety as recommended by EM 1110-2-1902. Developed SOP for dewatering necessitated by high groundwater table and deep excavations. Assisted in creation of PMP, APP/SSHP, and UFP-QAPP. All documents were submitted for USACE review. Conducted construction phase service and field audits against permits and design. Drove field adjustments to the slope stability model to provide evidence that adjustments in slope design due to field conditions still provide a safe slope to continue excavation, eliminating potential for stop works due to unsafe conditions.

Letterkenny Army Depot Landfill Closures, Chambersburg, PA, U.S. Army Environmental Command (USAEC), Letterkenny Army Depot (10/2012 – 08/2017), Project Engineer. Aided in conceptual layout of Landfill Area A and developed design to include a series of soil amendments and a cap configuration IAW federal, state, and local guidelines. Obtained LEAD, EPA, PADEP, and Franklin County Soil Conservation District plan approval for Landfill Area A, which meets the substantive requirements of the NPDES permit. Submitted E&S control drawings and storm water design for regulatory review and subsequent approvals. Assisted with development of CERCLA RDs and completion of remedial action, construction, and design optimization for cover construction and drainage channel repairs at Landfill J. Oversaw E&S control installation/construction including excavation, grading, and performance of grade checks during construction. Implemented a field program to determine landfill extents and developed construction drawings and bid specifications for a legacy landfill closure. Assisted with development of the RAWP/UFP-QAPP IAW the current version of the QSM. Used knowledge of previous earthworks projects and permitting experience to expedite the design. Aided in discussions with Weston team and regulators to save time by eliminating a review period (approximately 30 days).

Fritz Island Wastewater Treatment Plant (WWTP) Upgrades, Reading, PA, City of Reading (03/2017 – 04/2018), Construction Inspector. Conducted QC and inspection of WWTP upgrades and new construction. Responsibilities included concrete placement inspection, micropile installation oversight, new construction inspection of office building, and treatment plant process mechanical upgrades. Provided QA/QC for on-site materials delivery, materials testing, and overall construction techniques. Daily on-site actions included drawing review, contractor submittal and specification review, as well as aiding in daily construction and materials testing reports.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Robert Ederer, P.E., CQM-C, Project Engineer	30 (P3)	37

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Albuquerque, New Mexico

Qualifications

Education:

M.S., Civil Engineering – California State University

B.S., Environmental and Systematic Biology – California Polytechnic State University

Training/Certifications:

***Professional Engineer (CO #0059526)*;** Certified Cost Engineer (CCE) (No. 1783); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour Site Manager and Supervisor Course, OSHA 29 CFR 1910.120(e)(4); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926; 10-Hour Construction Safety Training, OSHA 29 CFR 1926

Work Experience Relevant to Proposed Role:

37 years of experience in civil, environmental, and water resource engineering. Experience includes engineering design, design calculations, construction drawings and specifications, construction cost estimates, cost proposals, and construction oversight. Experienced technical resource manager responsible for supervising engineering staff, and monitoring and reporting project revenue, and project health and safety. Designed final cover systems and drainage controls for waste caps such as mine waste tailing piles and solid waste landfills. Provided P.E. sealed certification for Design Packages and Final Stormwater Completion Reports. Experience analyzing existing water quality and soil data, identifying gaps, and recommending suitable modeling approaches. Is skilled in the following software: AutoDesk Civil 3D, EPA SWMM, AutoDesk Storm and Sanitary Sewer Analysis, USACE HEC-HMS and HEC-RAS hydrologic and hydraulic modeling software, and WaterCAD, EPANET 2.0. Knowledgeable of A.R.S. §49-232 – 49-234, A.A.C. Title 18, Chapter 11, Water Quality Standards, and Clean Water Act regulations.

Experience on Projects Similar to that Described in the RFP:

Webster Lake Dam Engineering Support, Cimarron, NM, Boy Scouts of America (04/2017 – 12/2022), Senior Project Engineer. Prepared engineering reports and plans to address deficiencies identified by the New Mexico Office of the State Engineer-Dam Safety Bureau including vegetation removal, seepage monitoring, and outlet structure design. Designed preliminary outlet works improvements to replace an aging valve, pipeline, and manhole. Supervised the first phase of vegetation removal

Santa Fe River Greenway (Santa Fe River Trail Phases 1-4), Santa Fe, NM, County of Santa Fe (02/2016 – 06/2018), Project Engineer. Certifying engineer for the preparation of a FEMA Conditional Letter of Map Revision. Determined 100-year flood water surface elevations and sediment transport in a 2.8-mile reach of the Santa Fe River for purposes of recommending channel and recreational trail improvements. Prepared HEC-RAS hydraulic model.

Tijeras Arroyo Sedimentation Retention Project, Tijeras, NM, Bernalillo County (09/2015 – 08/2019), Project Engineer. Responsible for conducting H&H analysis and preparing a design analysis report. Recommended the H&H modeling approach to the County. The project is intended to restore the existing creek alignment, create overbanks vegetated with native plants, and prevent bank erosion. Conducted engineering analysis using USGS regression method for flow calculations, USACE HEC-HMS hydraulic and sedimentation model, and HY-8 culvert analysis program.

Kittimac Tailings Repository Area Floodplain Alameda Drain Trail Phase I and II BMP Design, Albuquerque, NM, Bernalillo County (03/2017 – 02/2018), Project Engineer. Prepared design drawings and construction plans in Autodesk® Civil 3D for structural best management practices (BMPs) in the Alameda Drain, an irrigation channel that flows through the North Valley area of Albuquerque. The BMPs consisted of 4 types of green stormwater features (log check dams, stepped riprap drop structures, tree well filtration structures, and lateral drain outlet trash screens) used to improve water quality in the drain. Attended stakeholder and public meetings . Developed supplemental technical specifications and engineer's estimate of construction cost for the Drain BMPs. Provided engineering during construction and monitored performance during first year.

Analysis, Silverton, CO, EPA Region 8 (06/2019 – 12/2020), Project Engineer. Prepared a floodplain analysis for an existing mine tailings repository within the Animas River to determine the effect of site reclamation activities on the 100-year flood elevations. Recommended the H&H modeling approach to EPA. Delineated drainage basins, flow paths, and times of concentration. Designed the hydrologic basin model using the USACE HEC-HMS (4.3) computer program to estimate the flow entering the Animas River reach at the Kittimac project site in comparison to the USGS regression equations.

Stormwater Compliance Program, Los Angeles, CA, UCLA (04/2019 – 12/2019), Project Engineer. Served as Project Engineer for NPDES and IGP Compliance Program for the UCLA Campus, including stormwater collection analysis for Co-Gen, stormwater BMP Feasibility Study (FS) for the Transit Operations Maintenance Yard, and trash Best Management Planning. Evaluated and sized effective BMPs to comply with the IGP requirements.

Cimarroncita H&H Analysis, Cimarron, NM, Philmont Scout Ranch (03/2020 – 07/2020), Project Engineer. Directed the completion of hydrologic and hydraulic analysis to determine flooding potential of the creek due to impacts to the watershed from the 2018 Ute Park Fire. Recommended the H&H modeling approach as part of the scope of services to address post-wildfire burn conditions. Reviewed existing data and analysis prepared by the NRCS for comparison. Supervised the analysis that used NRCS curve number method in HEC-HMS and a 1-D hydraulic analysis using HEC-RAS.

Klau-Buena Vista Mine Site Drainage Improvements, Paso Robles, NM, EPA Region 9 START (10/2021 – 05/2022), Project Engineer. Designed drainage improvements for the Klau-Buena Vista Mine site to provide conveyance of stormwater, passive mine drainage treatment, and mitigation of existing erosion. Performed an existing conditions hydrology analysis using the Curve Number method in the AutoDesk Hydraflow Hydrographs program, evaluating the hydraulics of proposed drainage features, and designing features in Civil 3D. Designed the toe drain at the base of the mine repository, a riprap rundown channel, a transition basin from an existing pond outlet, a storm drain pipe, and a gabion stilling basin.

Facilities Repair/Renewal Potable Water Distribution System, Ft. Detrick, MD, USACE Huntsville (02/2020 – Ongoing), Project Engineer. Coordinated the design-build repairs and renewal of approximately 12,775 LF of 8-to-12-inch diameter ductile iron (DI) pipe within Area A of the Fort Detrick federal installation. Prepared the field investigation and design basis reports that included fire hydrant performance assessment, leak detection surveying, subsurface utility surveying, and water distribution network modeling using EPANET. Used the model to analyze the proposed improvements and determined that the increasing pipe diameters will improve water pressure problems. Developed technical specifications in the Construction Specifications Institute format using the USACE sponsored SpecsIntact (SI) program.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Nancy Koch, P.E., CAPM, Project Engineer	18 (P3)	37

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Austin, Texas

Other Relevant Professional Qualifications

Education:

M.S., Environmental Engineering - University of Connecticut

B.S., Chemical Engineering - Arizona State University

Training/Certifications:

Professional Engineer (NE #E-18093); (TX #76946); (AR #012911); (SD #15079); (LA #0033186); Corrective Action Program Manager (CAPM) (#01092); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour Managers and Supervisors Course (SHSC), OSHA 29 CFR 1910.120(e)(4); Global Harmonization System Hazard Communication Training

Experience Summary:

Seasoned project manager highly skilled in the coordination of multiple subcontractors across concurrent projects. Specializes in wastewater treatment facilities, SPCC planning, permitting, regulatory compliance.

Relevant Project Experience

Flood Recovery, Upstream Embankment Repairs, Lake Whitney Dam, TX, USACE Omaha RDI Program (01/2019–Ongoing), Project Engineer. Provided key technical support of Weston's time-critical incidental design and infrastructure construction as part of USACE's flood control efforts at Whitney Lake Dam, with repairs consisting of soil embankment excavation, reconstruction, and rip rap replacement on 6,400 linear feet of the upstream side of Lake Whitney Dam.

L-550 2019 Missouri River Levee Repairs, Atchison, IA, USACE Omaha RDI I Program (06/2019–07/2020), Project Engineer. Mobilized with first response site team to provide USACE with emergency levee closures/rehabilitation along the Missouri River.

Sheldon Road Wastewater Treatment Plant, Houston, TX, National Oilwell Varco, L.P. (10/2022–Ongoing), Project Manager. Managing ongoing preparation of the Texas Pollutant Discharge Elimination (TPDES) application for this wastewater treatment facility. During the permitting process, reviewing the draft permit, and, after the application is declared administratively complete, will submit to TCEQ's Water Quality Section, coordinating response to any technical questions that arise during this period.

Clear Lake Facility Decommissioning, Pasadena, TX, Calpine Operating Services Company, Inc. (01/2017–03/2017), Project Manager. The Clear Lake facility is/was an industrial process cogeneration plant burning pipeline quality natural gas and has a nominal generation capacity of 344 MW. The facility ceased operations on 2 February 2017, turned over the site on 1 April 2017, and decommissioning activities were required to be completed by 17 March and included removal of oil from equipment and associated piping, removal of sludges from sumps, removal of water from underground piping, and removal of solids from the cooling towers. Managed solicitation and selection of bids, ensuring the best qualified team was assigned, and managed cost controls. Coordinated activities with the facility, subcontractor, and site supervisor. Finalized the technical execution plan and project schedule for Calpine approval.

Asbestos Cement (AC) Water Line Replacement, Austin, TX, City of Austin (01/2018–12/2020), Project Engineer. Provided technical and permitting/regulatory compliance support for preliminary and final design of the replacement of approximately 7,000 linear feet of 6-inch, 8-inch, and 12-inch water main and appurtenances by open cut and trenchless methods, removal of approximately 5,500 linear feet of 6-inch, and 8-inch asbestos

cement pipe, and installation of approximately 2,000 linear feet of 8-inch wastewater main by open cut and trenchless methods. Ensured compliance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 Code of Federal Regulations (CFR) 61, OSHA 29 CFR1926.1101, and all Texas State codes and regulations.

Emergency Infrastructure Repairs, Military Ocean Terminal Sunny Point (MOTSU), USACE Omaha District (09/2018–03/2020), Project Engineer. Member of the team who mobilized to provide repair of critical infrastructure to re-establish mission-critical USACE operations in response to the impacts of flooding resulting from Hurricane Florence.

Linden Tank Expansion Project, Linden, NJ, NuStar Logistics (10/2015–03/2017), Project Manager. Managed permitting needs for a terminal expansion in a waterfront development and flood hazard area. The scope of the project included identification of all required permits and entailed complex negotiations on the regulatory applicability as they related to a groundwater infiltration impoundment to avoid the need for an individual wetland permit and pervious and impervious areas related to landscaping requirements. Managed a project team that developed a Multi-Permit Application including a Waterfront Development Permit, Flood Hazard Area Permit, Transition Area Waiver Permit, and General Permit No. 21, which was submitted to the New Jersey Department of Environmental Protection. Prepared and submitted a Stormwater Permit Modification request to authorize new outfalls. Obtained a *de minimis* permit for dewatering activities and a construction general permit. Devised compliance strategies for discharges that commingled dewatering, construction stormwater, and stormwater associated with industrial activity. Project included submittal of Soil Erosion Control Plans, development of a Waste Control Plan, and providing notifications as required.

Wastewater Permitting, Applications and Compliance Strategies, Multiple Locations (OH, WV, OK, TX, LA), Permitting Lead. Prepared 67 permit applications under the NPDES program for over 37 facilities in five states. Many facilities were large industrial complexes; however, applications were prepared for smaller manufacturing facilities, new power plants, and municipal facilities. Evaluated water quality issues and physical constraints affecting permit limits and issuance. Provided water balance calculations for evaporation ponds. Identified options for increased permit limits for copper for two facilities: one required that the outfall be moved, and the other required a major amendment to use segment-specific water quality criteria. Identified compliance strategies for complex issues related to water reuse, compliance points, numerical effluent limitations, by-pass issues, etc.

Bardwell Lake Dam Slide Repairs, Bardwell Dam Repair, Ennis, TX, USACE (03/17–10/2017), Project Engineer. Provided key technical support for removal of embankment slide material, amendment of soil with lime, and replacement of soil to restore the embankment to pre-slide conditions.

USPS EPRRS Contract, Regulatory Compliance Assessments, MN, IA, MS, FL, USPS (09/2013–04/2022), Regulatory Specialist. To support facility repairs and hazardous building materials survey and abatement at USPS facilities, researched sampling requirements for lead and asbestos in multiple states to determine if there were specific requirements for grab vs. composite samples. Reviewed regulations and guidance, which varied significantly from state to state, and prepared a regulatory summary with the requirements for the team's use.

Energy Facility Cooling Tower BioControl Evaluation, Austin, TX, City of Austin/Austin Energy, Project Manager. Project Manager for the review and evaluation of the bio-control of cooling towers at five Austin Energy facilities (District Cooling Plant #1, DCP#2, Mueller, Sand Hill Energy Center, Domain and Mueller Energy Center. Conducted site visits, collected data, interviewed site personnel and specialty chemical providers, and the Austin Energy Utility Consultant. Navigated City of Austin/Austin Energy and COA subcontractor relationships and contractual restraints.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Craig Burt, P.E., Project Engineer	38 (P3)	44

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	West Chester, PA

Qualifications

Education:

B.S., Civil Engineering - Lafayette College

Training/Certifications:

***Professional Engineer (PE #PE033667Y)*;** USACE Construction Quality Management for Contractors (CQM-C) Certification; 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 2-Hour Asbestos Awareness Training, 40 CFR 763

Work Experience Relevant to Proposed Role:

44 years' experience in construction, design, engineering, and management of industrial and municipal wastewater plants, groundwater and air emission treatment systems, aircraft fueling systems, and power plant projects. More than 32 years' experience in preparing engineering designs. Provided engineering and technical expertise on 8 PADEP projects over the past 22 years. Managed retrofit of existing facilities to comply with latest codes and regulations. Responsible for conceptual design and engineering of piping systems and associated structures.

Experience on Projects Similar to that Described in the RFP:

Facilities Repair/Renewal Potable Water Distribution System, Ft. Detrick, MD, USACE Huntsville (02/2020 – Ongoing), Senior Mechanical Engineer. Provided MEP technical leadership and design expertise to the project team on this D-B water distribution system repair project task order at Fort Detrick, MD under the FRR MATOC. Work involved a field investigation to document current condition of potable water distribution system, design replacement piping and appurtenances, and construction work to replace 12,775 linear feet of water mains, the associated service connections, fire hydrants, valves, and appurtenances. The existing cast iron piping is over 50 years old in many places and the facility had been experiencing frequent leaks and unplanned maintenance work. The design evaluated HDPE, PVC, and ductile iron pipe to replace the cast iron piping, with the ductile iron option selected as the most suitable for this application.

Rose Valley Pump Station and Force Main, Chester, PA, DELCORA (08/2014 – 11/2017), Mechanical Engineer. Responsible for all aspects of the detailed design of 3,000 LF of new 6-inch HDPE wastewater force main in public right-of-way. To minimize traffic disturbance and pavement restoration, horizontal directional drilling (HDD) was used to install the majority of the piping in the existing roads.

Utility Water Design, Chester, PA, DELCORA (01/2014 – 12/2017), Mechanical Engineer. Responsible for all aspects of the design of a new redundant utility water distribution system to multiple buildings at a treatment plant to replace an outdated system. Design consisted of approximately 1 mile of pile-supported water distribution main and service laterals consisting of 24-inch- through 6-inch-diameter ductile iron piping.

Potable Water Main Extension Design, Montgomery County, PA, Aqua Pennsylvania (06/2006 – 09/2006), Senior Project Engineer/Mechanical Engineer. Project involved the engineering and design of a 1.0-mile long 16-inch diameter ductile iron potable water main along County Line Road in Valley Forge National Park. Project included tie-in to an existing water main, installation of fire hydrants, isolation valves and blow-offs, and abandonment of an old existing 8-inch cast iron pipe. Project also involved meetings with the National Park Service, as well as a detailed survey of the new water main route.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Ann Civitano, P.E., LEED AP, Technical Lead	2 (P3)	16

c. Roles and Responsibilities as They Relate to the RFP

Provides direction and guidance to subject matter experts including engineers and architects with varying degrees of expertise. Technical team lead for the various phases of work that adds resources as the project lifecycle continues.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Denver, Colorado

Other Relevant Professional Qualifications

Education:

B.S., Civil Engineering – University of Colorado, Boulder

Training/Certifications:

Professional Engineer (CO #PE.0048816); LEED AP; 40-Hour Hazardous Waste Site Training Course, Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.120(e)(3); ISO 14001 Lead Auditor; Certified Renewable Energy

Experience Summary:

16 years in civil engineering, environmental consulting, and asset management industries including project management, report writing, field assessments, cost estimating, and database management; 12 years performing Facility Condition Assessments and Property Condition Assessments. Conducts FCAs to gather support data for various asset management applications, including reporting, cost estimating and maintenance planning.

Relevant Project Experience

Condition Assessments with Historic Preservation Component, Various Locations (MI, WI, OH, CA), Catholic Funeral and Cemetery Services (11/2021–Ongoing), Project Manager. Ms. Civitano was the project manager for the condition assessments of historic cemetery & mausoleum properties which included other structures to evaluate such as mausoleums, chapels, offices, and maintenance buildings. Partner has performed these services on dozens of other projects for this client across the country.

Partner's geotechnical services include performing PASER style analysis of the pavement condition.PASER style analysis of the pavement condition, in order to estimate life-cycle costs, and qualify areas for needed repairs and replacement of existing asphalt pavements. Following the PASER results, Partner performs geotechnical exploration, laboratory testing, and pavement design. Partner also assists in the preparation of civil drawings, cross sections, and recommended specifications used to bid the work. During construction, Partner provides oversight and quality control testing of repaired soil subgrade, roadway basecourse aggregate (Class II), and pavement surface materials.

Reports were provided that detailed immediate and short-term repair items due to potentially unsafe conditions, code violations, or any other physical deficiencies that would be expected to result in a significant increase in remedial costs. Project is expected to continue beyond the Midwest to the Eastern region and is currently supporting Roofing System design, plans, bid specifications, and construction support.

Facility Condition Assessments, Nationwide, YMCA (06/2020–Ongoing), Project Manager. Ms. Civitano was the project manager and program lead for facility condition assessments for the YMCA in conjunction with their capital planning and budgeting initiatives. In many cases, the YMCAs operate in a "reactive" mode, i.e., items are repaired and/or replaced when a problem occurs. Information collected in Partner's FCAs allow the YMCA to operate in a "proactive" mode, i.e., various repairs and/or replacements can be scheduled over a period of time, typically 10- to 12-years or more if required. The projects provide the YMCA with the information they need to plan for major expenses and set aside the needed funds as needed.

Feasibility Study, Strategic Planning Study – CIP, Marion County, FL (08/2021–11/2021), Technical Lead. A Strategic Planning Study and FCAs/PCAs of the County buildings. The County was looking for the proper planning techniques to assess the feasibility of building a single government complex by consolidating several of their occupied properties. Ms. Civitano served as the Technical Lead for the project including QA/QC, data management and

technical support. Goals for the project included providing a high-level Rough Order of Magnitude (ROM) assessment of County-owned facilities; identifying ROM deferred maintenance and long-term capital planning items; and to providing costing based on observed and building use of typical items within each property and to provide metrics and recommendations for the identified items above and to Condition Index each facility based on the Estimated Replacement Value.

Multi-Scope Condition Assessment – Bank of America Tower, Chicago, IL, Callahan Capital Partners (12/2021-01/2022), Project Manager. Partner provided Facilities Condition Assessment for Bank of America Tower, Chicago in 2021 for an Equity Institutional Investor client. Bank of America Tower Chicago was built in 2020, a 56-story, Class A office building with two below-grade levels, roughly 1.5-1.7 MSF. The scopes included building systems assessment, structural assessment, property condition assessment, façade assessment, and Phase I Environmental Site Assessment Report. The facility condition assessment reports provided immediate and long-term system repair opinions, cost estimates for facility maintenance and capital investment planning purposes.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Michael LaFalce Jr, RA, Senior Architect	10 (P4)	28

c. Roles and Responsibilities as They Relate to the RFP

Responsible for designing and overseeing facility assessments and architecture-related tasks. Works with engineering team to develop design, biddable specifications, and evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	White Plains, New York

Other Relevant Professional Qualifications

Education:

B.S., Architecture – New York Institute of Technology

A.S., Architectural Technologies – Dutchess Community College

Training/Certifications:

Registered Architect (NY #028830); Harvard Manage Mentor – Manager Training Program, 2017; Certification – Mold Assessment and Remediation in Buildings (Certificate with the Environmental Institute; Certification – 2012 Wood Destroying Organisms, US Inspect; Certification – 2014 Masonry Wall Construction, Analysis, Design, and Inspection

Experience Summary:

Michael brings over 28 years of combined experience in architecture, design, management, investigation, peer review, detailing and monitoring the construction, operations and assessment of multiple large-scale projects, facilities, and clients. Michael has performed and managed over 1,000 Condition Assessment and Solutions.

Relevant Project Experience

Comprehensive Facility Condition Assessment, Emmett County, MI (03/2021-04/2021), Project Manager. County leadership contracted with Partner to complete a Comprehensive Facility Condition Assessments (FCA) for a county-owned medical facility to understand the general condition of all buildings and components. The goal of this assessment is to provide the County with a roadmap for current immediate facility needs, a capital planning program for future expenditures and preventative maintenance best practices, and a guideline for soliciting and appropriating funds for anticipated future needs. We worked directly with the County and provided multiple Senior Assessors, Generalists and MEP specialists to document current facility conditions.

Comprehensive Plan, Asset Inventory, Strategic Planning and Redevelopment Advisory, City of Mobile, AL (05/2018-08/2018), Project Manager. Michael provided the management and implementation of strategic assessment and condition indexing of 236 buildings including office, fire, police, distribution, waterfront, convention, and museums located on 126 municipal owned properties located throughout Mobile, AL, in collaboration with CBRE who was providing multiple real-estate services to the City of Mobile. The scope included participation in multiple meetings and presentations with the Mayor, Engineering, City Council members, Architect, and the client real estate team to develop the assessment scope, deliverables, and to provide metric indexing of each property condition for future evaluation of use or disposition. Developed FCA based on conducting the initial inspections with the client and debriefing of issues to better the assessment structure and delivery. Worked directly with national architecture firm to assist in development of Civic Center condition to aide with future re-development plans.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Project Manager. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. Short-term/immediate and long-term/capital expenditure cost schedules were provided, including descriptions of deficiencies, recommended

remediation and cost for repair/replacement and cost schedules including a description of the building systems, age, remaining useful life and cost projects for replacement and maintenance. Once the acquisition was complete, the County would be a landlord and a tenant within the building**.**

Condition Analysis and Feasibility Study, County of Santa Cruz, CA (07/2021-09/2021), Project Manager. The County contracted with Partner to conduct a Feasibility Study and Condition Analysis for the County Animal Shelter JPA. The scope of work included a multiple phase project including a Condition Assessment of an existing Veterinary Facility, condition indexing of the facility as it relates to replacement value and deferred maintenance and the feasibility of completing a new facility. We also provided rough order of magnitude cost estimating and programmatic development of a new facility for comparisons.

Strategic Facility Master Plan Update, State of North Carolina, Raleigh, NC (03/2022-05/2022), Project Manager. Partner provided strategic assessments of four state-owned buildings in collaboration with CBRE who has an ongoing relationship with the State of NC. The primary objective of the Facility Master Plan is to identify and evaluate opportunities to cost-effectively reduce occupancy costs for a portfolio of State-owned office facilities including consolidation through employee relocations, and the subsequent sale or lease of excess property. The focus of the assessments was to update their existing Master Plan and to provide CBRE strategic data to aide in the Master Plan Update. The report data will be used better understand the current condition of the facilities, the deferred maintenance and long-term costs needed to sustain the current building operations. Additionally, the reports will be used to provide leverage for the State of North Carolina to conduct consolidation and utilization efforts for the buildings and to aide in long term planning. The four buildings totaled over 770,00 gross square feet.

Feasibility Study, Strategic Planning Study – CIP, Marion County, FL (08/2021-11/2021), Project Manager. The County was looking for the proper planning techniques to assess the feasibility of building a single government complex by consolidating several of their occupied properties. Partner worked with Marion County to provide a Phased Strategic Planning Study. The specific Scope of Work was to provide a high-level Rough Order of Magnitude (ROM) assessment of 15 County-owned facilities; identify ROM deferred maintenance and long-term capital planning items and to provide costing based on observed and building use of typical items within each property; provide metrics and recommendations for the identified items above, and to Condition Index each facility based on the Estimated Replacement Value.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Matthew Miller, RA, PP, Senior Architect	16 (P4)	30

c. Roles and Responsibilities as They Relate to the RFP

Responsible for designing and overseeing facility assessments and architecture-related tasks. Works with engineering team to develop design, biddable specifications, and evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Eatontown, New Jersey

Other Relevant Professional Qualifications

Education:

B.A., Business Administration – Rutgers College
Bachelor of Architecture – Drexel University

Training/Certifications:

Registered Architect (NJ #21AI01113600); (PA # RA013186B);
Professional Planner License (NJ # 33LI00491700)

Experience Summary:

Over 30 years of professional architecture and planning experience in building design and documentation, construction management, site and building analysis, and construction administration; 15+ years as a municipal planner; and 20+ years of real estate experience including full analysis of real estate transactions including leasing, acquisition, and divestiture, as well as financial analysis. He is involved with facility management and maintenance analysis and repair, vendor and contractor management, and building envelope investigations, as well as providing due diligence and consulting services for our clients. Also has over 10 years forensic investigation experience for property damage causation analysis and building defects, working closely with owners, attorneys, and insurance carriers.

Relevant Project Experience

Comprehensive Facility Condition Assessment, Emmett County, MI (03/2021-04/2021), Lead Reviewer. County leadership contracted with Partner to complete a Comprehensive Facility Condition Assessments (FCA) for a county-owned medical facility to understand the general condition of all buildings and components. The goal of this assessment is to provide the County with a roadmap for current immediate facility needs, a capital planning program for future expenditures and preventative maintenance best practices, and a guideline for soliciting and appropriating funds for anticipated future needs. We worked directly with the County and provided multiple Senior Assessors, Generalists and MEP specialists to document current facility conditions.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Lead Reviewer. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. Short-term/immediate and long-term/capital expenditure cost schedules were provided, including descriptions of deficiencies, recommended remediation and cost for repair/replacement and cost schedules including a description of the building systems, age, remaining useful life and cost projects for replacement and maintenance. Once the acquisition was complete, the County would be a landlord and a tenant within the building.

Strategic Facility Master Plan Update, State of North Carolina, Raleigh, NC (03/2022-05/2022), Lead Reviewer. Partner provided strategic assessments of four state-owned buildings in collaboration with CBRE who has an ongoing relationship with the State of NC. The primary objective of the Facility Master Plan is to identify and evaluate opportunities to cost-effectively reduce occupancy costs for a portfolio of State-owned office facilities including consolidation through employee relocations, and the subsequent sale or lease of excess property. The focus of the assessments was to update their existing Master Plan and to provide CBRE strategic data to aide in the Master Plan Update. The report data will be used better understand the current condition of the facilities, the deferred maintenance and long-term costs needed to sustain the current building operations. Additionally, the reports will be used to provide leverage for the State of North Carolina to conduct consolidation and utilization efforts for the buildings and to aide in long term planning. The four buildings totaled over 770,00 gross square feet.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Christy Kim, AIA, CASp, Senior Architect	8 (P4)	21

c. Roles and Responsibilities as They Relate to the RFP

Responsible for designing and overseeing facility assessments and architecture-related tasks. Works with engineering team to develop design, biddable specifications, and evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Santa Ana, California

Other Relevant Professional Qualifications

Education:

B. ENVD, Architecture, University of Colorado, Boulder, Colorado
Master of Heritage Conservation, Architecture, University of Southern California, Los Angeles, CA

Training/Certifications:

RA, Registered Architect, State of California; CASp, Certified Access Specialist, State of California

Experience Summary:

Ms. Kim serves as a National Technical Director of Accessibility for Partner Engineering and Science, Inc (Partner), performing and overseeing various levels of Accessibility Consulting to a multitude of accessibility laws, codes, and standards (including Americans with Disabilities Act, Fair Housing Amendments Act, Section 504 of the Rehabilitation Act, and state and local building code requirements.) Ms. Kim also works with the Historic Architecture Solutions practice to provide historic reports that meet the Secretary of Interior Standards requirements and the Investment Advisory Group to provide Property Conditions Assessments in accordance with American Society of Testing and Materials (ASTM) standards. She has 16 years of experience in the architectural, engineering, and construction service industry and 14 years performing Property Condition Assessments, Construction Loan Monitoring, Limited Owners Representation, and Accessibility Reviews.

Relevant Project Experience

14982 N. Prospect Avenue – ADA Assessment & Architectural Drawings, Maxson Cooney, Tustin, CA (02/2020-04/2020), Project Manager. The purpose of the project was to create architectural drawings including site plan and tenant improvement work for a new tenant. Architectural drawings were provided for an ADA compliant restroom at the property. Two existing restrooms accessed from the exterior were converted into a single restroom accessed from the interior. ADA improvements included providing minimum number of parking spaces with accessible parking space and pedestrian ramp to provide an accessible route to the building entrance. Closing exterior doors to restroom and creating one single-user accessible toilet room. Widening doors throughout the space to provide minimum 32" wide clear doors, providing a pedestrian ramp at the interior to address the change in level in order to compliant accessible route through the space. Installing gypsum wall board at interior walls.

Breezewood Apartments – ADA Assessment and Design/Alteration, VPM Management, Riverside, CA (08/2021-11/2021), Project Manager. The project consisted of a multi-family residential existing structure which was originally constructed in the 1960's. The property underwent alterations to provide 10% of the residential dwelling units which would be considered adaptable. Alteration work will be completed to the maximum extent feasible and will be based on the requirements set forth in the California building code (CBC) Chapter 11b. An agreed upon number of units were equipped with new communication elements that meet the requirements in CBC 11b (2% per CBC 11b and 4% per the California tax credit allocation commission). Communication upgrade for 4% of the units will include fire alarm appliances with the residential dwelling units as part of the building fire alarm system that comply with chapter 9, section 907.5.2.3.3. Also included was a smoke detection and carbon monoxide system, along with a hardwired notification device and visual notification device at the front door. The scope of work for this project includes alteration work to dwelling unit floor plans.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Technical Lead ADA. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan. Ms. Kim was the Technical Lead for the ADA assessment portion of the project responsible for QA/QC, costing and general oversight.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Greg Souder, PE, LEED AP, MBA, Project Engineer	5 (P4)	37

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as treatment system design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Denver, Colorado

Other Relevant Professional Qualifications

Education:

Bachelor of Science, Civil / Structural Engineering, with minor studies in Geotechnical and Construction Engineering, 1984, Purdue University-West Lafayette

Masters Business Administration, Finance and Services Marketing, 2004, University of Colorado-Colorado Springs

Training/Certifications:

Professional Engineer, LEED AP

Experience Summary:

Mr. Souder is the Senior Managing Director of the Integrated Facilities Solutions team at Partner. He has over thirty-seven (37) years of experience in the engineering industry. He leads teams of subject matter experts who provide due diligence and capital planning consulting for a wide variety of clients and properties. In addition, he provides structural engineering specialty services and guidance for during the due diligence phase, as well as, specific structural assessment and reporting for existing conditions of commercial properties. Mr. Souder also performs forensic investigations of structural building elements and provides remedial recommendations and specifications for structural repairs, alterations and additions. Other due diligence activities include construction progress evaluations for payment, and peer review of construction level plans to be issued for bid or construction.

Relevant Project Experience

Structural Assessment Services – Retail Building, Madison Heights, MI, Madison Heights, MI, The Dufresne Spencer Group, LLC (04/2022-05/2022), Technical Lead. Partner was engaged to perform a structural assessment/investigation for a retail property in Madison Heights, MI. The scope included a site visit to do the following: Review any provided construction, as built, or construction improvement documents; Perform a walk-through survey of the subject property to observe the current condition of the existing structural systems in addition to any adjacent impactful site improvements and site drainage; Provide recommendations for remediation of any structural deficiencies or distress observed; and Provide order of magnitude opinion of costs for recommended repairs. Present recommendations in narrative, graphic, and photographic format.

Structural Assessment/Investigation – Bank of America Tower, Chicago, IL, Callahan Capital Partners (12/2021-01/2022), Technical Lead Structural Assessment. Partner provided Facilities Condition Assessment for Bank of America Tower, Chicago in 2021 for an Equity Institutional Investor client. Bank of America Tower Chicago was built in 2020, a 56-story, Class A office building with two below-grade levels, roughly 1.5-1.7 MSF. The scopes included building systems assessment, structural assessment, property condition assessment, façade assessment, and Phase I Environmental Site Assessment Report. The facility condition assessment reports provided immediate and long-term system repair opinions, cost estimates for facility maintenance and capital investment planning purposes. Partner provided a structural assessment/investigation report that included a summary of findings, recommendations for remediation of deficiencies and distress and order of magnitude costs for the recommended repairs. The property was located on the River and contained a below grade parking deck along the River which initiated additional concerns around the building structural. Partner identified maintenance

over the reserve period as well as several immediate issues which were further evaluated with the General Contractor and were corrected. All of the specialty reports were incorporated into the condition assessment.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Technical Lead Structural Assessment. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. Short-term/immediate and long-term/capital expenditure cost schedules were provided, including descriptions of deficiencies, recommended remediation and cost for repair/replacement and cost schedules including a description of the building systems, age, remaining useful life and cost projects for replacement and maintenance. Once the acquisition was complete, the County would be a landlord and a tenant within the building. Mr. Souder was the Technical Lead for the structural assessment providing oversight, QA/QC and cost input for the project.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Mike Bock, RRC, CCCA, LEED AP, Technical Lead	3 (P4)	20

c. Roles and Responsibilities as They Relate to the RFP

Provides direction and guidance to subject matter experts including engineers and architects with varying degrees of expertise. Technical team lead for the various phases of work that adds resources as the project lifecycle continues.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Kansas City, Kansas

Other Relevant Professional Qualifications

Education:

Civil Engineering, University of Missouri-Columbia

Training/Certifications:

Accredited Professional (LEED AP), IIBEC, Registered Roof Consultant, Certified Construction Contract Administrator

Experience Summary:

Mr. Bock is the Managing Director of the Building Envelope Solutions team at Partner Engineering and Science, Inc. (Partner). Our team provides a full range of roof, exterior wall, waterproofing, and pavement consulting services across North America. Mr. Bock has over 20 years of experience in the engineering industry, including performing building envelope and roof testing and assessments. Mr. Bock is responsible for the overall quality and consistency of technical reports, which includes efforts in quality assurance, quality control, staff training, process and policy development and implementation, and managing client relationships.

Relevant Project Experience

YOUnion Student Housing – Forensic Façade Investigation, Fayetteville, AR, SmartStop Asset Management, LLC (07/2022-08/2022), Technical Lead. The purpose of this project was to describe the exterior finish materials and waterproofing, to identify defects or material deferred maintenance within those systems, recommend remediations, and to present order of magnitude opinions of cost to remedy the observed defects. There were several phases of the project which included investigation, test cuts, and a limited moisture intrusion baseline survey.

The Edge Student Village – Façade Investigation and Repairs, Philadelphia, PA, EMET Capital (04/2021-Ongoing), Technical Lead. This project included multiple phases of façade work: An assessment/investigation to determine condition; Performing façade drops to comply with local ordinances; Load testing of the tie back system on the roof; Visual observation of the tie back system; Exterior façade forensic investigation with test cuts; Preparation of the scope of work, technical specifications, and specific details for the building envelope remediation project; Bid phase services for the remediation project; Construction oversight; Project closeout – final walk and punchlist. The building consisted of a two-wing structure with one wing containing 4-stories and one with 12-stories. The façade with brick veneer and prefabricated modular insulated panels with integral window system. Partner's capacity to perform various phases of façade investigation, design and construction oversight provided the client with a one-stop shop to remediate the façade issues identified at the property. The client was able to work with one team throughout the duration of the project from pre-acquisition assessments through construction project closeout.

Dallas Data Center, Roof Assessment and Design Solution, Dallas, Texas, Evoque Data Center Solutions (12/2021-02/2022), Technical Lead. The project consisted of a roof assessment and design solution for a 366,000 SF data center with low-slope roof system. The scope for work included the following: Perform a visual roof survey of each of the roof areas; Observe and comment on each completed roof section, roofing materials, flashings, penetrations, expansion joints, underside of the roof deck and drainage; Complete test cuts (core

sampling) of existing roof system; and determine possible solutions for roof replacement and/or recommended repairs. Pros/Cons were offered for each system, as well as estimated budgets.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Technical Lead Roof Assessment. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. Short-term/immediate and long-term/capital expenditure cost schedules were provided, including descriptions of deficiencies, recommended remediation and cost for repair/replacement and cost schedules including a description of the building systems, age, remaining useful life and cost projects for replacement and maintenance. Once the acquisition was complete, the County would be a landlord and a tenant within the building. Mr. Bock served as the Technical Lead for the roof assessment portion of the project providing oversight, QA/QC and cost estimates.

Condition Assessments, Pavement Evaluation and Remediation, Roof Design, Various Locations (WI, OH, MI, CA), Catholic Funeral and Cemetery Services (11/2021-Ongoing), Technical Lead Roof Assessment. Mr. Bock was the Technical Lead for the roof assessment and design portions of these projects. Mr. Bock provides general oversight and guidance for the roofing team members selected for these projects. The condition assessments consist of historic cemetery & mausoleum properties which included other structures to evaluate such as mausoleums, chapels, offices, and maintenance buildings. Partner has performed these services on dozens of other projects for this client across the country. Reports were provided that detailed immediate and short-term repair items due to potentially unsafe conditions, code violations, or any other physical deficiencies that would be expected to result in a significant increase in remedial costs. Project is expected to continue beyond the Midwest to the Eastern region and is currently supporting Roofing System design, plans, bid specifications, and construction support.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Nate Benton, PE, CEM, Project Engineer	4 (P4)	18

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Denver, Colorado

Other Relevant Professional Qualifications

Education:

B.S. Mechanical Engineering with Minor in Business & Economics – Colorado School of Mines, Golden, CO

Training/Certifications:

Professional Engineer, Certified Energy Manager (CEM) – Association of Energy Engineers (AEE)
Leadership in Energy and Environmental Design - Accredited Professional (LEED AP)

Experience Summary:

Mr. Benton is the Director of MEP Solutions with Partner with 18 years in the engineering industry, specializing in mechanical engineering, evaluation, and analytic experience with a focus on due diligence consulting and energy efficiency analysis services, and 7 years performing energy management consulting. Mr. Benton leads a team of mechanical engineers specializing in MEP condition assessments and asset data collection services. Mr. Benton excels in delivering valued consultation, leading challenging and difficult projects, using communication and problem-solving skills to facilitate coordination between technical teams and clients. Mr. Benton has an advanced understanding of building systems gained through his due diligence consulting experience where he advised governmental, commercial real instate investors, institutional investors, insurance companies, and capital market investors on the physical condition and operating performance of HVAC, electrical, and plumbing systems.

Relevant Project Experience

Cold Storage Solutions Building – HVAC Retrofit, Lakeville, MA, Confidential, (12/2021-01/2022), Project Manager. The purpose of this project was to provide consulting for the Client on a retrofit of a cold storage building to a cannabis cultivation site which required a significant upgrade to HVAC controls and commissioning work. On site visits were performed to observed ongoing commissioning work associated with the start-up of two 1.871 MW cogeneration machines and gather additional information for central chilled water plant and outside air intake systems. The primary goals in completing the project were to determine the power output capacity of each cogeneration machine when operating at full load; determine whether the systems were being commissioned for concurrent/parallel operation; determine the approximate fuel consumption rate for each machine when operating at full load to approximate daily fuel demand; inspect the central chilled water plant; and determine if the machines were sized appropriately for the new use.

The Palms on Lamar– Domestic Hot Water System Assessment and Construction Status, Austin, TX, Benefit Street Partners, (07/2022-08/2022), Project Manager. The purpose of this project was to assess the heating hot water system as the property was having issues with calcification/scale build-up in distributed hot water loop. The goal was to observe and review ongoing repair work to determine if it was sufficient to address the issues and recommend additional repairs if needed. A variety of repairs had reportedly been performed to alleviate problems with hot water including localized plumbing section replacements, repairs to boilers, boiler control and sensor upgrades, circulation pump replacement, electrical supply system repairs and miscellaneous plumbing repairs. The primary issue identified by maintenance personnel and past consultants is scale build-up within the copper distribution piping systems supplying domestic hot water to individual apartment buildings. Inspection of past pipe section extractions and replacements reportedly revealed scale build-up to the point that a hole the size of a straw was available for hot water distribution.

T-Mobile - HVAC Retrofit, Albuquerque, NM, Sentinel Net Lease LLC, (07/2022-08/2022), Project Manager. The purpose of the project was to aid in the retrofit of the HVAC system in an office call center building constructed in 2004. The building had chronic leaks developing in heating hot water lines at suspended fan powered boxes which was a serious disruption to the activities being performed in the building.

The project entailed as assessment, feasibility study and energy survey to determine alternate solutions to the current HVAC system. The study developed basic economic viability of implementation costs and energy cost savings measures for up to three different HVAC systems.

Multi-Scope Acquisition, County of Santa Cruz, CA (04/2021-06/2021), Technical Lead MEP Assessment. The County of Santa Cruz engaged Partner to conduct an FCA for an acquisition of a multi-tenant industrial building consisting of 121,491 SF, set on 8.27 acres. The project included an inhouse multidisciplinary assessor team for MEP, thermographic roof scan and assessment, fire and life safety, accessibility assessment, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. Short-term/immediate and long-term/capital expenditure cost schedules were provided, including descriptions of deficiencies, recommended remediation and cost for repair/replacement and cost schedules including a description of the building systems, age, remaining useful life and cost projects for replacement and maintenance. Once the acquisition was complete, the County would be a landlord and a tenant within the building. Mr. Benton served as the Technical Lead for the MEP assessment on this project.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Rob Intveld, P.E., Project Engineer	10 (P4)	30

c. Roles and Responsibilities as They Relate to the RFP

Responsible for completing project-related engineering tasks, such as design, biddable specification development, and engineering evaluations of work completed by others.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Consultant employee – Partner Engineering & Sciences, Inc.	Los Angeles, California

Other Relevant Professional Qualifications

Education:

H.T.S.: Mechanical (equivalent to United States B.S. degree), Hogere Technische School--Rijswijk, Netherlands

Training/Certifications:

Professional Engineer (CA); Plumbing Design Certification, Project Management training by PSMJ, Advanced Technical training, HVAC utilities in buildings

Experience Summary:

Mr. Intveld is a Director at Partner Energy with 30+ years of mechanical and plumbing system design for newly constructed and existing commercial projects (offices, industrial, hospitals, hotels etc.) and 30+ years of experience in energy auditing, Retro-Commissioning, commercial and industrial systems He oversees and manages energy efficiency projects that help clients qualify for funding based on verified energy savings. Mr. Intveld will focus on the design and analysis of HVAC, mechanical, electrical, and plumbing (MEP), and renewable energy systems. He leads ASHRAE energy audits, retro-commissioning projects, and cogeneration studies for clients at commercial properties nationwide. Mr. Intveld's technical guidance in data modeling and analysis lead to recommended measures that meet client criteria for return on business investment and reduce energy usage and costs.

Relevant Project Experience

1900 Pacific Avenue – HVAC Commissioning, Dallas, TX, Crain Mortgage Group, LLC (06/2018-08/2018), Technical Lead. Corrigan Tower at 1900 Pacific Ave in Downtown Dallas was built in 1952 as office space and was originally a 20-story tower designed in the modernist style by architect Wyatt C. Hedrick. It had stood vacant since 2003, until developer John Kirtland worked to renovate it into luxury apartments with ground floor retail space and state-of-the-art amenities. This impressive gut renovation was an important leader in the overall community effort to revitalize the Downtown Dallas Historic District.

The client secured Partner's services to help qualify for the HUD Green Mortgage Insurance Premium Reduction Program ("Green MIP"). The Green MIP program grants projects a discounted annual MIP to reward meaningful investments in environmental sustainability and energy efficiency. 1900 Pacific was one of the first projects to participate in the program shortly after it was developed by HUD. In order to qualify, the building needed an ENERGY STAR SEDI score of 75 or above and a HUD- Recognized Green Building Certification.

Partner generated energy models to simulate energy usage based on project plans in order to obtain an ENERGY STAR SEDI report and made recommendations for design changes based on the SEDI analysis, eventually achieving a score of 85.

Rampart Mint Apartments – HVAC Commissioning, Los Angeles, CA, West Hollywood Community Housing Corporation (04/2021-05/2021), Technical Lead. Rampart Mint is a 23-unit new construction multifamily property in Los Angeles, California that provides permanent supportive housing for formerly homeless individuals with disabilities whose income are less than 30% of the area median income. The property was uninhabited for 30 years before being transformed into an all new, amenity-rich, affordable apartment community.

West Hollywood Community Housing Corp secured Partner's services in the beginning of the construction phase, including a targeted LEED Gold certification under the LEED Homes Mid-Rise Rating System.

Partner provided Title 24 Energy Modeling on the property, including a review of the architectural and mechanical drawing, and developing Title 24 compliance model per the 2013 Energy Code. Partner provided HERS performance testing to ensure energy performance is as desired and modeled. The tests included duct leakage testing, quality insulation inspection, and refrigerant charge.

As part of the LEED certification, Partner assisted the client on compliance documentation during the design and construction process, which included a LEED certification plan based on the targeted points. Partner provided design assistance to identify materials, systems, and other methods that were needed for LEED compliance. Additionally, Partner provided commissioning (Cx) and performed functional performance testing for all central systems. The property was awarded the LEED-Homes Gold certification by The U.S. Green Building Council in May 2021.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Mark Major, CQM-C, Construction Manager/Superintendent	24 (P3)	40

c. Roles and Responsibilities as They Relate to the RFP

Construction Manager/Site Superintendent drives compliance with design/construction specifications and program guidance to ensure field crews adhere to industry standards and project/contract requirements. Interprets critical path schedule and construction drawings. Coordinates daily and project-specific logistics with facility management/tenants and supervises on-site field crew activities to ensure all contract requirements are met. Maintains effective communication with PM, the State agency, and all associated stakeholders for all on-site activities. Leads construction activities with a focus on safety and efficiency.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Concord, CA

Other Relevant Professional Qualifications

Training/Certifications:

USACE Construction Quality Management for Contractors (CQM-C) Certification; 40-Hour EPA Asbestos Hazard Emergency Response Act (AHERA) Asbestos Contractor/Supervisor Initial Course, Toxic Substances Control Act (TSCA) Title II); 40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour Site Manager and Supervisor Course, OSHA 29 CFR 1910.120(e)(4); 30-Hour Construction Safety and Health Training Course, OSHA 29 CFR 1926; RCRA Basics Refresher; Trenching/Excavation Competent Person; Rigging Safety; Fall Protection Recognition and Avoidance; Confined Space Entrant, Attendant Supervisor Performance Level; Global Harmonization System Hazard Communication Training

Experience Summary:

40 years' construction experience; 20 years as Superintendent. Experienced in heavy earthmoving projects and construction of mechanical and electrical systems in a variety of site/project types and in accordance with federal, state, and local. Provides on-site leadership of major construction projects involving architectural, structural, landscape/civil, MEP, security, sustainability, and fire protection system work; supervises on-site personnel and subcontractors; implements project controls, documentation, budgets, scheduling; creates daily reports; performs submittal reviews; negotiates contract mods; leads weekly synchronization meetings; implements 3-Phase QC Process. routinely leads construction teams in excess of 90 personnel, with daily work scheduling and equipment management. He is an experienced heavy equipment operator, manager, and site safety and health (S&H) officer. As SSHO, he is responsible for managing occupational S&H and industrial hygiene on renovation/construction and demolition projects. He develops S&H programs and Health and Safety Plans (HASPs) addressing hazard communication, personal protective equipment (PPE), confined-space entry, fall protection, hearing conservation, respiratory protection on demolition/construction projects. Oversees assessment and abatement, removal, and disposition of hazardous building materials such as lead-based paint, asbestos, and mold.

Relevant Project Experience:

Stillhouse Hollow Lake Dam Equipment Bridge Evaluation and Repairs, Benton, TX, USACE Omaha District (03/2019–09/2020), Construction Superintendent. Provided on-site direction and oversight for specialty subcontractors in the execution of time-critical repairs to the flawed sluice gate system at the Stillhouse Hollow Lake Dam Water Control Structure. The scope of work for this task order included the removal and replacement of four sluice gates located at the bottom of the water control structure, extending 180 feet from top of structure to the bottom of the reservoir, and replacement of associated hydraulics systems and controls. Work activities included placement of a bulkhead gate to seal off each sluiceway from the lake, draining and dismantling of hydraulic cylinders used to operate the gates for off-site rehabilitation, removing hydraulic systems from bottom of structure through to top of bridge with crane, disassembly and removal of bonnets and service and emergency gates for each of two sluiceways to the top of the water control structure, manufacture of new service and emergency gates, reinstallation of the new gates back into structure and

included installing new hydraulic tank, motors, pumps, and replacing hydraulic pipe and pipe fittings. Removal and placement of equipment required dozens of critical lifts. Seals for the gates required replacement, this work required workers to access the gate locations through the 4,000-ft-long water discharge tunnel of the dam. Work was completed without any injuries or lost-time incidents.

L-550 2019 Missouri River Levee Repairs, Atchison, IA, USACE Omaha RDI I Program (06/2019–07/2020), Construction Superintendent/Foreman. Oversaw emergency response levee closures and rehabilitations along the Missouri River. Provided calculations and design memo responses to USACE regarding methodology of closing an active levee breach with on-site and imported materials, slope stability, and seepage modeling. Provided incidental design, grading plans, and next-day on-site implementation. Site was surveyed using real-time kinematic Global Positioning System (GPS), material inspections, and daily progress reporting to USACE.

R616-613 Santa Fe River Levee Repairs, Bellevue, NE, USACE Omaha RDI Program (04/2022–12/2022), Construction Superintendent. repairing erosion within the levee critical section, ramps, and appurtenant structures; reconstruction of the levee crest; relief well pump testing, abandonment, and replacement; drainage structure and channel cleanout, regrading; removal and replacement of concrete bike path panels on the levee crest; and sediment and debris removal on the levee slopes, crest, and berms.

Phase I at Camp Bonneville, Vancouver, WA, Clark County, (04/2014–04/2017), Construction Superintendent. Directed a crew of seven operators and technicians to excavate soil and process over 30,000 cubic yards of material through a mechanical screen system to remove metal and ordnance items. The plant was equipped with magnets to facilitate separation of the metal items from other reject items which sped the inspection process.

550-575 Levee Construction, Atchison, IA, USACE Omaha SDIC Program (02/2011–06/2014), Construction Superintendent/Foreman. Oversaw 90+ personnel and all equipment. Coordinated schedules with other contractors and scheduled daily workforce. Led daily health and safety briefings. Restored infrastructure through immediately building temporary protective measures around the town, including an earthen levee and the placement of 5-foot tall, 3-mile long HESCO barrier; raising and reinforcing the 9,000-linear foot levee by constructing 8 feet of levee wall using 10,000 cubic yards of earthen material/soil/borrow material; and reinforcing weakened spots, replacing flood-damaged drainage pipes, and rebuilding earthen berms using multiple levee construction technologies.

L611-614 Levee Repairs, Mills/Pottawattamie Counties, IA, USACE Omaha District (10/2020–12/2021), Construction Superintendent. Directed field crews and subcontractors performing critical levee section repairs, and other damage area repairs on the Missouri River Levee Unit L611-614. The purpose of this work was to clear the levee crest of debris, construct a breach closure levee section, and make permanent levee repairs, as necessary, and provide continuous access for vehicular traffic along the levee crest. Activities included placement of cohesive fill to repair critical cross-section damage, topsoil and rip rap placement, and involved the construction of large concrete drainage control structures and 6-ft diameter reinforced concrete pipes. Also rehabilitated and/or replaced several relief wells.

Hills Creek Dam Infrastructure Support for Site Investigation, CA, USACE Omaha District (10/2016–12/2017), Construction Superintendent. Directed operators and operated heavy equipment on steep slopes to install temporary access roads and test pits on a dam face to allow site investigation using large drill rigs. On the water side, the road construction required removal and placement of riprap. Reduced schedule and costs by approximately 50% by directing/coordinating installation of both roads simultaneously rather than sequentially as originally planned Removed/placed riprap on water side due to road construction.

a. Name and Title	b. Years of Experience in Current Classification	Total Years of Experience
Suraj Shankar, Cost Estimating Lead	6 (P3)	16

c. Roles and Responsibilities as They Relate to the RFP

Responsible for preparing and reviewing cost estimates that may be required for project sites. The Cost Estimating Lead will assist the project team in developing accurate and detailed cost estimates for various project related tasks such as O&M, RAs, and remedial system designs.

d. Direct or Consultant Employee	e. Physical Location (City, State)
Direct employee of Weston	Houston, TX

Other Relevant Professional Qualifications:

Education:

M.S., Geographic Information Systems – University of Southern California
M.S., Civil Engineering and Water Resources/General – University of Southern California
M.S., Environmental Engineering – University of Southern California
B.E., Environmental Engineering – Visveswaraiah Technological University

Training/Certifications:

40-Hour/8-Hour Hazardous Waste Site Training Course, OSHA 29 CFR 1910.120(e)(3); 8-Hour SHSC, OSHA 29 CFR 1910.120(e)(4); Bloodborne Pathogens, OSHA 29 CFR 1910.1030

Experience Summary:

Over 16 years of environmental experience, including 10 as a cost estimator of remediation and facility upgrades. He has prepared, directed, or overseen cost estimates for over 500 remediation projects in the last 5 years and now leads Weston's Cost Estimating Group. Prior to focusing on cost estimation, he served as an engineer and construction QC manager on remediation projects, gaining valuable perspective on construction challenges, practical implementation approaches, risks, and cost control management. This early career experience is often drawn upon when considering constructability and cost projections.

Relevant Project Experience:

LS167 Elimination and Gravity Sewer Line, San Antonio, TX, SAWS (02/2016 – 07/2019), Cost Estimator. Developed engineering cost estimates during design phases (30%, 60%, 90%, and final phase) and independent estimates during construction phase to validate change order costs from the construction contractor.

Environmental Surveys and Facility Assessments, Various U.S. Locations, USPS (01/2012–12/2017), Cost Estimating Lead. Performed facility assessments and developed estimates on more than 50 building facility assessments, benefit-cost-analyses (BCAs), and facility re-inspection assessments for the USPS. Developed estimates for facilities impacted by natural disasters, hurricanes, rain infiltration, earthquakes, and fires. Estimates included storm damage from floods, dry-outs, mold and debris cleanup, tree removal, and temporary facility protection, along with any required disposal. BCAs also included thorough architectural, structural, civil, HVAC, plumbing, and electrical evaluation of a facility, comprising all interior and exterior components of the building, parking area, and utility and operating systems.

Missouri River Levee Emergency Repair and Restoration, SDIC Contract, Various Locations, USACE Omaha District (01/2014–12/2014), Cost Estimating Lead. Supported several TOs under the SDIC contract for USACE. Successfully bid several TOs and provided support to the team with value engineering and detailed estimation during the construction phase. Developed cost estimates and technical execution strategy or repair and emergency maintenance of levee structure, including reconstruction of degraded levees in the flood season. The time-critical construction work was cost optimized to provide USACE best value, achieving the primary objective of protecting life and property along the banks of the Missouri River. Completed more than $120M of work spanning over 40 miles of levee on time and within budget.

Gravity Sewer Line with Jack and Bore, San Antonio, TX, SAWS (01/2016 – 12/2019), Cost Estimator. Design included gravity sewer relief line of 553 LF by open cut and 132 LF installation using trenchless

construction method (Jack and Bore) at an existing low water crossing. Assisted with review of independent cost estimates for construction change orders.

Far West Inter-Basin Force Main and Lift Station Transfer System, San Antonio, TX, SAWS (10/2007 – 10/2018), Cost Estimator. Project included four lift stations, 24,000 LF of 10-inch and 14-inch parallel force mains, and 18-inch sanitary sewer. Developed engineering estimates during design phase for capacity increase in four in-series LSs and force mains to 10 mgd with future expandability to 20 mgd.

Olmos Basin Central Watershed Sewer Relief Line (C-3), San Antonio, TX, SAWS (04/2009 – 12/2018), Cost Estimator. Developed engineering cost estimates during design for rehabilitation and/or replacement of approximately 50,000 LF of sewer line ranging from 12-inch to 66-inch. Included open cut as well as trenchless rehabilitation for up to 66-inch pipe and six siphon structures. Also, assisted with independent cost estimates using RS Means for construction change orders on Line C.

Western Watershed Sewer Relief (Upper Segment), San Antonio, TX, SAWS (12/2015 – 07/2018), Cost Estimator. Developed engineering cost estimates for approximately 20,000 LF of new 54-inch, 84-inch, and 90-inch gravity sewer lines. Construction methods included open cut as well as trenchless construction and three siphon and junction structures. Supported with cost estimates for rerouting sewer along Westover Road and cost estimates for sliplining existing 54-inch with a smaller line to carry only JBSA flows.

Water Treatment Plant Upgrades, DE, Delaware County Regional Water Quality Control Authority (12/2010–11/2017), Cost Estimating Lead. Developed several cost estimates and scenarios from design to construction along with feasibility estimates. Estimates included facility expansion and upgrades with combined sewer system modeling and its corresponding waste load management.

Facility Upgrades, National Guard Recruitment Centers, USACE (12/2012–08/2017), Cost Estimating Lead. Developed estimates and logistics for site assessment, data management, and renovation/upgrades of more than 330 national guard recruiting facilities across various locations in the country. Logistics was a significant portion of developing reasonable estimates. Led verification and updating of the estimates based on individual site conditions on a fast-paced project that was successfully completed with an extended estimating team.

Development of 5-Year Strategic Best Management Practice (BMP) Implementation Plan, San Diego, CA, City of San Diego (05/2007–12/2009), Project Engineer/Cost Engineer. Developed a strategic plan to meet NPDES and total maximum daily load requirements for BMP implementation for the City of San Diego Stormwater Division. Developed several concept designs for pilot implementation. Also conducted desktop-based property evaluation for implementation of several different kinds of BMPs within the City.

CNALF Remedial Investigation, Charlestown, RI, USACE Baltimore District (09/2019–Ongoing), Cost Estimating Lead. Supported and developed detailed cost estimates, including but not limited to feasibility estimates associated with RI of three landfills, three former boiler houses, a transformer pit, and a burn pit area of the World War II-era naval air training facility that closed in the early 1970s. Project includes RCRA evaluation of residual soil contamination at the boiler house and CERCLA evaluation of PCBs at the transformer pit as well as sampling of nearby on-site and off-site drinking water sources to assess DoD-related PFAS impacts.

Groundwater Extraction and Treatment, Confidential Manufacturing/Chemical Facility, Chicago, IL, Confidential Client (12/2010–Ongoing), Cost Estimating Lead. Supports development of cost estimates through design development. Develops multiple scenarios and alternatives of cost estimates for sheet pile installation. Evaluates subcontractor bids for cost reasonableness.

CERCLA Environmental Services, Letterkenny Army Depot, Chambersburg, PA, U.S. Army Environmental Command (USAEC) (01/2013–12/2013), Cost Estimator. Utilized historical data, RSMeans, and RACER® to develop and update estimates for investigation and remediation of 45 sites tracked under 15 separate OUs across two NPL sites with commingled, multimedia contaminants. Also supported cost estimate development during the conceptual design process, constructability review and feasibility analysis, and construction.

Appendix B: Project Types and Services Offered

APPENDIX B-1: ADA FACILITY ASSESMENT AND REMODELING

Project/Reference #1. 14982 N. Prospect Avenue, ADA Assessment & Architectural Design Drawings (PESI)

Project Address: 14982 N. Prospect Avenue

Key Personnel: C. Kim

Project City / State / Zip: Tustin, CA 92780

Reference Contact Name / Phone No. / Email: Maxson Cooney (contact information may be available upon request)

Project Description: PESI created architectural drawings, including site plan and tenant improvement work for a new tenant. Architectural design drawings were provided for an ADA-compliant restroom at the property. Two existing restrooms accessed from the exterior were converted into a single restroom accessed from the interior. ADA improvements included providing minimum number of parking spaces with accessible parking space and pedestrian ramp to provide an accessible route to the building entrance. Closing exterior doors to restroom and creating one single-user accessible toilet room. Widening doors throughout the space to provide minimum 32" wide clear doors, providing a pedestrian ramp at the interior to address the change in level in order to create an ADA-compliant, accessible route through the facility. Completion date: 2020.

Project/Reference #2. Breezewood Apartments, ADA Assessment and Design/Alterations (PESI)

Project Address: 3893 Kirkwood Avenue

Key Personnel: C. Kim

Project City / State / Zip: Riverside, CA 92501

Reference Contact Name / Phone No. / Email: VPM Management (contact information may be available upon request)

Project Description: The project consisted of a multi-family residential existing structure, which was originally constructed in the 1960's. The property underwent alterations to provide 10% of the residential dwelling units which would be considered adaptable (i.e., ADA-compliant). Alteration work will be completed to the maximum extent feasible and will be based on the requirements set forth in the California building code (CBC) Chapter 11b, *Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Public Housing*.

An agreed-upon number of units were equipped with new communication elements that meet the requirements in CBC 11b (2% per CBC 11b and 4% per the California tax credit allocation commission). Communication upgrade for 4% of the units will include fire alarm appliances with the residential dwelling units as part of the building fire alarm system that comply with Chapter 9, section 907.5.2.3.3. Also included was a smoke detection and carbon monoxide system, along with a hardwired notification device and visual notification device at the front door. The scope of work for this project includes alteration work to dwelling unit floor plans.

Alteration design to 10% of the mobility units, which are required to comply with 2016 CBC Chapter 11b. Existing dwelling units were altered to the maximum extent feasible in order to provide adaptable units. Completion date: 2019.

Project/Reference #3. Facility Condition Assessment, ADA Assessment, Office and Distribution Center for the County of Santa Cruz (PESI)

Project Address: Santa Cruz County, CA

Key Personnel: M. LaFalce, C. Kim

Project City / State / Zip: Santa Cruz County, CA (multiple zip codes)

Reference Contact Name / Phone No. / Email: Nicole Steel, County of Santa Cruz / 831-419-7804 / Nicole.steel@santacruzcounty.us

Project Description: PESI was engaged to perform an FCA of an office building consisting of 121,491 SF, set on 8.27 acres. The project included an ADA assessment and a fire and life safety accessibility assessment,

along with MEP assessment, thermographic roof scan and assessment, and seismic evaluation. The accessibility portion of the project an analysis of public areas relative to compliance with ADA accessibility. ADA accessibility deficiencies were detailed along with costs and photos and were incorporated into the Capital Plan.

The County was able to engage us for additional scopes to suit their current needs beyond an FCA, without the need to contract with another firm, such as more in-depth reconnaissance of sites including seismic retrofit design, radon screenings, roof, and infrared scanning. Our proximity to the site was key to providing the client with immediate turnaround of critical scope items for this acquisition. Completion date: 2021

APPENDIX B-2: BRIDGES – PEDESTRIAN AND VEHICULAR

Project/Reference #1. Former Camp Bonneville Military Reservation, Utility Terrain Vehicle (UTV) Bridge Installation (Weston)

Project Address: 23201 NE Pluss Road

Key Personnel: A. Brown, M. Major

Project City / State / Zip: Vancouver, WA 98682

Reference Contact Name / Phone No. / Email: Grant DeJongh, Clark County / 564-397-1681 / Grant.DeJongh@clark.wa.gov

Project Description: Weston held a contract to provide remedial action to facilitate reuse of the property for recreational use and wilderness conservation under a CERCLA early property transfer from the Army to Clark County. A perimeter road and surfacing (3-inch minus compacted crushed rock), fencing and two stream crossings were installed to provide access for the Northern Central Impact Target Area Expansion. One small stream crossing (28 foot span) was completed using a structural engineered wood (glulam) using concrete "ecology blocks" for the abutments. The second stream crossing required a longer span (80 feet) which was performed using a fiberglass bridge design adequate for UTV traffic with concrete wingwalls for the abutments. Placement of the UTV bridge required using an 80 ton crane due to the extent of the boom reach. The bridge abutments were designed to avoid compensatory wetland mitigation. Work involved performing soil borings to evaluate soil geotechnical properties, and a seismic safety analysis, to support the design of bridge abutments for stream crossings. prepared permit applications with the Department of Natural Resources (DNR) and the preconstruction notification under a USACE Nationwide Permit 14 and obtained permits to clear trees for installation of the road and construct the two small bridges across the Class F waters. Several undiscovered archeological sites were encountered during the remedial action. Weston and our archeologist subcontractor coordinated with Clark County, the Cowlitz Indian Tribe, and WA Dept. of Archeology (Historic Preservation), to adjust work areas until permission was obtained to complete clearance in the designated archeological sites. Completion date: 2021.

Project/Reference #2. Stillhouse Hollow Lake Dam Equipment Bridge Structural Evaluation and Repairs (Weston)

Project Address: 4050 Simmons Road

Key Personnel: A. Brown

Project City / State / Zip: Belton TX 76513

Reference Contact Name / Phone No. / Email: Lawrence Woscyna, USACE Omaha District / 402-299-52580 / lawrence.j.woscyna@usace.army.mil

Project Description: Weston performed time-critical repairs to the outdated and leaking sluice gate system that also functions as a bridge at the Water Control Structure at Stillhouse Dam. Hydraulic control for the water levels inside Stillhouse Hollow Lake is provided by a singular water control structure and an emergency spillway. The water control structure is constructed with two sets of sluice ways, with each sluice way having an emergency sluice gate and a service sluice gate. The gates are located at the bottom of the water control structure approximately 150 feet below normal pool water level. Each sluice way was alternately closed with a temporary bulkhead gate. Design elements included an evaluation and design of the system to remove and install the gate structures as well as structural analysis of the embankment and bridge structure to increase allowable capacity. Weston replaced the four existing water control gates and associated hydraulics systems for operational improvements, and refurbished the hydraulic cylinders and pistons used to operate the gates. *"This was a very complicated project and the contractor performed well. Work involved almost 100% critical lifts, work was over water, and much of the work was 60 feet below the water surface. The mechanical work involved high precision steel gate fabrication and precision millwright installation and hydraulic system refurbishment, all in a very confined space. All work was well done and had a high level of fit and finish." – USACE Assessing Official, CPAR evaluation, 2021.* Completion date: 2021.

Project/Reference #3. Emergency Infrastructure Repairs, Military Ocean Terminal Sunny Point (MOTSU): Land Bridge Repair (Weston)

Project Address: 6280 Sunny Point Army Terminal

Key Personnel: A. Brown, L. Blanchette, N. Harkins

Project City / State / Zip: Southport, NC 28461

Reference Contact Name / Phone No. / Email: Tim Gouger, USACE Omaha / 402-995-2191 / timothy.p.gouger@usace.army.mil

Project Description: MOTSU is a 16,000-acre, Army-owned site providing worldwide trans-shipment of ammunition/explosives/other dangerous cargo. Weston was tasked to repair critical infrastructure to re-establish mission-critical operations in response to the impacts of flooding resulting from Hurricane Florence. Work included Land Bridge repair of damaged embankment in accordance with as-built configuration and armor the bank with riprap, in addition to repair of damaged fire protection lines, a damaged section of earthen embankment, and eroded an section of Brunswick Road/shoulder. Weston mobilized a team of seven professionals within 2 days of award to conduct an initial site assessment/kick-off and to determine the extent of required repairs. Weston used our in-house design specialists to collaboratively work with the USACE Omaha District Designer of Record to effectively make rapid decisions regarding project details. Our team was able to identify and implement efficiencies that resulted in a cost savings to the client of approximately $2.5M. *"The contractor has a well-executed three phase Quality Control Program. Weston quickly worked with their subcontractors to resolve any quality issues and effectively communicated any issues with the Government. Weston provided full time cost control personnel to ensure costs were accurately tracked and forecasted to provide the Government needed information. The work was completed under budget. Weston worked well with local MOTSU and USACE personnel and exceeded project goals." – USACE Assessing Official, CPAR evaluation, 2019.* Completion date: 2019.

APPENDIX B-3: BUILDING ENVELOPE INVESTIGATION, REPAIR, UPGRADE

Project/Reference #1. YOUnion Student Housing, Forensic Façade Investigation (PESI)

Project Address: 376 W. Watson St.

Key Personnel: M. Bock

Project City / State / Zip: Fayetteville, AR 72701

Reference Contact Name / Phone No. / Email: SmartStop Asset Management, LLC (contact information may be available upon request)

Project Description: As part of the building envelope investigation, PESI described the exterior finish materials and waterproofing to identify defects or material-deferred maintenance within those systems, recommend remediations, and present order-of-magnitude opinions of cost to remedy the observed defects. There were several phases of the project: investigation, test cuts, and a limited moisture intrusion baseline survey.

The forensic investigation included the following:

- A visual investigation of the exterior building façade (cladding and window) systems at the property from roof and ground level.
- A visual investigation of interior dwelling units and the cause for organic growth.
- Use of a specialist to perform infrared moisture surveys of each of the exterior elevations. Digital photographs of anomalies encountered during the survey were taken.
- Providing an I.R. Thermographer and camera to document moisture accumulation.
- Test cuts and patching of select areas to verify components of exterior wall assembly and underlying conditions.

The forensic investigation identified over $2M in exterior work that needed to be completed and developed a plan for completing these repairs so the client could allocate proper funding for the repairs. Completion date: 2022.

Project/Reference #2. The Edge Student Village, Façade Investigation and Repairs (PESI)

Project Address: 1601 North 15th Street

Key Personnel: M. Bock

Project City / State / Zip: Philadelphia, PA 19121

Reference Contact Name / Phone No. / Email: Ira Haynie, EMET Capital / 415-509-5577 / ihaynie@emetcap.com

Project Description: This project included multiple phases of façade work as detailed below.

- An assessment/investigation to determine facility condition.
- Performance of façade drops to comply with local ordinances.
- Load testing of the tie back system on the roof.
- Visual observation of the tie back system.
- Exterior façade forensic investigation with test cuts.
- Preparation of the scope of work, technical specifications, and specific details for building envelope repair.
- Bid phase services.
- Construction oversight.
- Project closeout – final walk and punchlist.

The building consisted of a two-wing structure with one wing containing four stories and one with 12-stories. The façade was brick veneer and contained prefabricated modular insulated panels with an integral window system. PESI's capacity to perform various phases of façade investigation, design, and construction oversight provided the client with a one-stop shop to remediate the façade issues identified at the property. The client was able to work with one team throughout the duration of the project from pre-acquisition assessments through construction project closeout. Completion date: Ongoing.

Project/Reference #3. St. Peter's Recovery Center MOB, Façade Assessment (PESI)

Project Address: 3 Mercycare Lane

Key Personnel: M. Bock

Project City / State / Zip: Guilderland, NY 12084

Reference Contact Name / Phone No. / Email: Ventas, Inc. (contact information may be available upon request)

Project Description: This project consisted of a condition assessment with specialty façade assessment on a 30,000-SF, two-story medical office building constructed in 1990. The façade assessment scope is detailed below.

- Assessment of the facade cladding at the perimeter walls to determine attachment, moisture content and overall condition, and source(s) of optional leaks.
- A digital moisture meter was used to determine moisture content.
- Preparation of a schematic plan detailing the approximate location of identified leaks.
- PESI will provide a written summary debrief of our findings within 48 hours of the site visit.

Client was provided with a written report that contained the findings made by the Consultant regarding the alleged moisture intrusion locations, to include an opinion regarding the cause of the moisture intrusion, and adequacy of the repairs and recommendations for any required corrective action. Completion date: 2022.

Project/Reference #4. St. Vincent's East Medical Office Building #52, Construction Documents and Construction Oversight for Façade Repair (PESI)

Project Address: 52 Medical Park Drive East, Suite 152

Key Personnel: M. Bock

Project City / State / Zip: Birmingham, AL 35235

Reference Contact Name / Phone No. / Email: Littlebridge Healthcare Services, Inc. (contact information may be available upon request)

Project Description: This project resulted from an initial condition assessment. As a result of the findings in the condition assessment report, façade repairs were needed. PESI prepared the construction documents for the façade repair, prepared the bid solicitation for the repairs, performed construction oversight and the project close out and final punchlist. The scope items were as follows:

- Preparation of the baseline technical specification with scope of work.
- Conducting an on-site meeting with project team (Client's representatives, Qualified Bidders) to review initial construction documents, verify site conditions, and project coordination/scheduling.
- Reviewing/evaluation of the proposals obtained from Contractor(s) and provide Client with recommendation for selection of the contractor.
- Pre-Installation Meeting
- Make periodic visits to the site during the construction phase of each section. Observe the progress and quality of the work as was reasonably necessary to determine if it is proceeding in general accordance with the construction documents.
- Review shop drawings, submittals, RFI's and change orders.
- Project Close Out - Final Inspection and Report on completed restoration work.

PESI's capacity to perform various phases of façade investigation, design and construction oversight provided the client with a one-stop shop to remediate the façade issues identified at the property. The client was able to work with one team throughout the duration of the project from pre-acquisition assessments through construction project closeout. Completion date: ongoing

APPENDIX B-4: FIRE AND SECURITY ALARM SYSTEMS

Project/Reference #1. Uninterruptible Power Supply System Design/Replacement (including Fire Alarm Systems), Secured U.S. Government Facility (Weston)

Project Address: Confidential U.S. Government Secured Facility

Key Personnel: M. Stratton

Project City / State / Zip: Confidential

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: As prime contractor, Weston implemented a successful approach to replace a mission-critical uninterruptible power supply (UPS) system, which was carefully coordinated with Weston, USACE, and the secure facility to minimize outages and downtime of critical loads in the active, occupied, secured government installation. This project demonstrates Weston's capability to effectively execute construction projects involving repair/alteration work, major electrical distribution upgrades, electrical coordination, and incidental design (including Fire Alarms/Fire Protection) in an occupied building. Complexities involved coordination in an active, secure facility and management of concurrent construction teams, including strategic phasing that enabled mission-critical functions to continue without impact while transferring loads, etc.

Weston's technical staff (Superintendent, CQC System Manager and SSHO) worked on-site to refeed existing critical and non-critical loads with temporary/permanent UPS power; install transformers, switches, and panel boards to pick up and redistribute existing loads (once the re-distribution of existing loads was completed and demolition of the existing conduit, wire, filters, UPS gear, and other electrical support equipment began); install new UPS equipment and output switchboard; perform ancillary electrical work, including new lighting, relay for HVAC controls, and circuit breaker; bank test new UPS system load; and re-distribute the existing loads. As part of this scope, electrical studies were conducted on the new equipment, including a short circuit, overcurrent coordination, and arc flash analyses. Studies were performed (IAW) the National Electrical Code (NEC), National Fire Protection Association (NFPA) 70E, and other pertinent standards.

Weston modified Fire Protection sprinkler systems and the Fire Alarm smoke device systems to accommodate the new equipment. We performed a survey to document existing conditions for both Fire Alarms and Fire Protection systems. A code review of the existing installation was conducted, and Fire Alarm/Fire Protection installation drawings were completed. Hydraulic calculations were also completed as part of the incidental design for Fire Protection. The Fire Protection modifications included demolition of portions of the existing Fire Protection system; installation of the new Fire Protection system including new 4" double interlock electric/pneumatic Trim Pre-action Valve and associated air compressor; and new Fire Protection piping/associated supports & braces/new sprinkler heads. Weston completed 11,347 man-hours without a safety violation/lost-time incident. Completion date: 2018. *"This project has had an impeccable safety record during this performance period. SSHO and other project personnel make safety a top priority in every aspect of the job." – Assessing Official, USACE, Final CPAR rating, 2018.*

Project/Reference #2. Facility Integrity and Life Safety Phase 3 (FILS Phase 3) Design/Construction of Infrastructure Improvements (including Fire Alarm Systems), Secured U.S. Government Facility (Weston)

Project Address: Confidential U.S. Government Secured Facility

Key Personnel: C. Burt, M. Stratton

Project City / State / Zip: Confidential

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: Weston provided life-safety infrastructure improvements completed on time, on budget, with minimal disruption to ongoing mission-critical activities at this secure facility. Our team led the design and construction of facility improvements as part of the third phase of a multi-year program to clean up asbestos contamination from the roof and cavity areas and to make necessary repairs and improvements to the infrastructure, including fire alarm systems.

Work was considered highly complex and required innovative approaches to transport material within the active secure mission-critical facility. We provided engineering services to design four pedestrian cross-over bridges at various roof locations, as well as a new safety rail along the roof perimeter in accordance with EM 385-1-1 and OSHA requirements. Work was performed in accordance with National Fire Protection Association (NFPA) 70E, and other pertinent building design standards. Fire protection (FP) sprinkler systems, HVAC support structure, and electrical conduits were modified to accommodate the new bridges. A new lighting system was designed which consisted of installing new light fixtures, light circuits and feeders, and Uninterruptable Power Supply (UPS). A new drainage system was designed to control and direct water from the roof. Detailed site surveys were completed to identify and confirm existing field conditions to ensure appropriate accommodations were made due to obstructions, roof condition, and equipment capacity, as appropriate. Weston's field staff (Superintendent, SSHO) worked onsite to coordinate and oversee construction activities among architectural, mechanical, electrical, mining, fire protection, and asbestos abatement subcontractors. Maintaining schedule was of critical importance to the customer, and Weston successfully managed both cost and schedule to complete the project on-time and on-budget. This was a highly complex project at an active, secure facility that required well-orchestrated, concurrent execution among all subcontractor teams. Crew sizes ranged from 60-100 people working on the building exterior (roof, cavity, and siding), some conducting high-noise activities that could disturb tenants inside. Weston ensured preemptive coordination with the customer and the secure facility to reduce disruptions during ongoing mission-critical activities. Completion date: 2022.

Project/Reference #3. Design-Build Repair by Replacement of Power Plant Fire Protection System at Kaena Point Satellite Tracking Station (Weston)

Project Address: 1 Kaena Point

Project City / State / Zip: Waialua, HI 96791

Reference Contact Name / Phone No. / Email: U.S. Air Force Air Force Civil Engineering Center / 808-679-4312

Project Description: In this repair-by-replacement design-build project, Weston completed repairs to the fire protection and suppression systems and HVAC system and replaced 3 Computer Room Air-Conditioning (CRAC) units at the Uninterruptible Power Supply (UPS) buildings. The project site was at the Kaena Point Satellite Tracking Station (KPSTS), remotely located at the farthest point between Oahu's West and North facing shores, atop Kuaokala Ridge. Outdated as-built drawings provided by the facility proved to be unreliable sources during the initial site survey. As such, the Weston project team conducted a thorough engineering assessment of the facilities, ensuring any and all material selected for the project met current safety codes and regulations. Following the approval of the final design, we followed through with coordination with subcontractors regarding equipment, personnel, and material access. Fire protection upgrades included fire alarm and notification systems using wireless technology to transmit and receive signals. These signals were sent to a central monitoring station within the communication support area. Logistics concerning transportation and delivery of equipment to the facility proved to be challenging; however, Weston offloaded all equipment in an efficient manner and initiated the renovations. Weston also upgraded the cooling capacity within the Uninterruptible Power Supply (UPS) buildings by installing CRAC units rated at 15-ton nominal capacity to meet the heat load demands. Weston also Replaced the existing condensing and air handler unit with a system meeting a minimum Energy Efficiency Rating (EER) of 11.2 to meet cooling demands of working switchgears, operations control room, and other administrative areas. Completion date: 2018.

APPENDIX B-5: HISTORICAL PRESERVATION

Project/Reference #1. The Old Post Office and East Annex Redevelopment, Property Conditions Assessment, Zoning Report, Asbestos O&M, Roofing, Construction Project Management (PESI)

Project Address: 1100 Pennsylvania Avenue NW

Key Personnel: J. Gajewski

Project City / State / Zip: Washington, DC 20004

Reference Contact Name / Phone No. / Email: Johnathon Pavlov / 561-752-6635 / jpavlov@altadevelopment.com

Project Description: Having supported CGI Merchant Group (CGI) since 2018 with its growing hospitality portfolio, PESI's Historic Architecture Solutions division was contracted to provide a suite of technical due diligence and construction project management services in association with the high-profile lease acquisition of this prestigious historic federal government property. The Old Post Office and Clocktower is recognized on The National Register of Historic Places as a Category II landmark of historic and architectural importance and was recently converted/rebranded into one of the top luxury hotels in the United States, the Waldorf Astoria Washington DC.

The professional services for this project included Property Condition Assessment (structural, façade assessment, roofing, interior finishes, mechanical, electrical, plumbing, fire alarm and suppression, vertical transportation systems, ADAs), along with a zoning report. PESI completed detailed specialist investigations of the roofing system over the Presidential Ballroom and provided Owner's Representative Services/construction project management of the professional project/design team and specialist fabrication/install contractors. PESI developed a deep understanding of the building and its systems and identified a quantity of issues and repairs that needed to be attended to. The initial Property Condition Assessments and further investigations assisted the client in acquisition evaluation and future capital planning. Partner's expertise in managing historic building construction projects in sensitive, high-profile environments helped the client deliver a successful rebranding project in changeable circumstances, while minimizing disturbance to hotel operations. Completion date: 2022.

Project/Reference #2. Historic Mission Point Resort, Equity Property Condition Assessment (PESI)

Project Address: One Lake Shore Drive

Key Personnel: J. Gajewski

Project City / State / Zip: Mackinac Island, MI 49757

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: Constructed in 1954, Mission Point Resort is a National Historic Landmark and consists of a total of nine main buildings plus garden structures, comprising a total of over 400,000 SF across 18.2 acres, located on the shoreline in the southeast corner of Mackinac Island. The total property is comprised of 241 guestrooms and suites and 126 employee housing units, a 40,000-SF conference center, three restaurants, four shops, one spa, one gym, a 200+-seat theater, and a 1950s-era television studio sound stage. The buildings vary in size and construction type, with construction dates ranging predominantly from 1955 to 1968 with subsidiary additions since that period.

PESI performed a pre-acquisition property assessments on the historic property, identifying a significant backlog of maintenance and capital underinvestment, with extensive projects and rehabilitations required, including whole-system replacements, structural works, ADA improvements, and other deficiencies. Our expert advice informed the client's decision not to proceed with the purchase, due to the risk and expense involved. Completion date: 2021.

Project/Reference #3. The Gallery at Three Arts Club, Condition Assessment, Façade Assessment and Zoning Compliance Report (PESI)

Project Address: 1300 N Dearborn Street

Key Personnel: J. Gajewski

Project City / State / Zip: Chicago, IL 60610

Reference Contact Name / Phone No. / Email: Tambre Ruud, Fundamental Income / 480-618-0224 / tambre@fundamentalincome.com

Project Description: Fundamental Income, a private real estate investment firm, engaged PESI to perform engineering due diligence to support acquisition of this historic site, currently used as a retail center. The condition assessment included an evaluation of the interior finishes, doors and walls to report condition, useful life analysis, and detail description of deficiencies, recommended repairs, deficiency costs, photos, a capital planning schedule for the next 12 years.

The property is a 65,000-SF, four-story building constructed in 1914 and is listed on the National Register of Historic Places. Our client anticipated a lease wherein they retained responsibility for the historic façade; therefore, they required an enhanced façade assessment. PESI's PCA team included in-house experts in both historic architecture and building façades. John Gajewski, head of PESI's Historic Architecture Solutions practice, served as point of contact for the entire project, and using his expertise, ensured the report contained both business-friendly and historically appropriate recommendations. *"Thank you for the great work on this project. Your team helped us navigate a key issue given the landlord responsibilities which are outside our normal box." – partner of Fundamental Income, 2021.* Completion date: 2021.

APPENDIX B-6: HVAC EQUIPMENT REPLACEMENT, UPGRADE, SELECTION

Project/Reference #1. USPS HVAC Equipment FCAs and Temporary Heating and Cooling Equipment Support (Weston & PESI)

Project Address: nationwide – multiple facilities

Key Personnel: J. Ruiz, M. Abbott, H. Hannah, C. Douglas, S. Eldredge, A. Brown, D. Chernick, N. Harkins, R. Ederer, N. Koch, C. Burt, D. Borger, M. Major, S. Shankar, D. Hernandez, S. Staudt

Project City / State / Zip: nationwide – multiple facilities

Reference Contact Name / Phone No. / Email: Jeremy Merlo, USPS / 860-285-7024 / JeremyJMerlo@usps.gov

Project Description: Under a nationwide contract with USPS for consulting services/minor construction/repairs, Weston (Prime) and PESI (Subcontractor) worked together to provide Supplemental Heating and Cooling Services at USPS facilities in 11 states nationwide.

Weston has provided temporary heating and air conditioning support on an emergency basis at USPS facilities in 11 states following equipment failure or equipment being taken offline for repairs or replacement. In each instance, Weston mobilized within hours, evaluated the heating/cooling needs and available electrical power, submitted a heating/cooling plan and cost estimate, and sought to expedite approval of the plan on the same day. Upon plan approval, the specified equipment and installation staff were procured and rapidly mobilized to the site. Weston oversaw equipment installation for compliance with the approved plan and to minimize impact to USPS operations. Weston has completed 65+ temporary heating/cooling services assignments under this contract.

PESI supported this work by performing industry-standard Facility Condition Assessments to assist in the evaluation of the physical aspects of subject properties and how the condition may affect the soundness of their financial decisions over time. The condition assessments included an evaluation of the HVAC equipment for condition, useful life analysis, and detail description of deficiencies, recommended repairs, deficiency costs, photos, a capital planning schedule. PESI goes beyond ASTM E2018-08 and S&P guidelines to create a more comprehensive deliverable report. The additions to ASTM E2018-08 include the following: a threshold value $1,000, less than the threshold $3,000 ASTM value; flood zone, wind, and seismic zone information; an estimated Annual Reserve Replacement Budget Table, which is modified for the client based on the evaluation period, inflation costs, and requests of the client; and a Short-term Analysis is incorporated in the Immediate Repairs and Deferred Cost Estimate Table. Completion date: ongoing. *"Weston's temporary HVAC support has helped HUB / R&A East continually improve average days-to-comfort performance, achieving 0.36 and 0.81 days-to-comfort in HUB East in 2020, respectively. Our goal for 2020 was 2.3 days or less. We have far exceeded this again year-to-date. Thanks for all your help making this happen!" – USPS*.

Project/Reference #2. Design-Build Repair by Replacement of Power Plant HVAC System at Kaena Point Satellite Tracking Station (Weston)

Project Address: 1 Kaena Point

Key Personnel: M. Stratton

Project City / State / Zip: Waialua, HI 96791

Reference Contact Name / Phone No. / Email: U.S. Air Force Air Force Civil Engineering Center / 808-679-4312

Project Description: In this repair by replacement design-build project, Weston completed repairs to the HVAC system at the power plant facility, along with repairs to the fire protection and suppression systems, and replaced 3 Computer Room Air-Conditioning (CRAC) units at the Uninterruptible Power Supply (UPS) buildings for AFCEC. The project site was at the Kaena Point Satellite Tracking Station (KPSTS), remotely located at the farthest point between Oahu's West and North facing shores, atop Kuaokala Ridge. Outdated as-built drawings provided by KPSTS proved to be unreliable sources during the initial site survey. As such, the Weston project team conducted a thorough engineering assessment of the facilities, ensuring any and all material selected for the project met the current safety code and regulations. Following the approval of the final design, we followed through with coordination with subcontractors regarding equipment, personnel, and

material access at KPSTS. Logistics concerning transportation and delivery of equipment to KPSTS proved to be challenging; however, Weston offloaded all equipment in an efficient manner and initiated the renovations. Fire protection upgrades included fire alarm and notification systems using wireless technology to transmit and receive signals. These signals were sent to a central monitoring station within the communication support area. Weston also upgraded the cooling capacity within the Uninterruptible Power Supply (UPS) buildings by installing CRAC units rated at 15-ton nominal capacity to meet the heat load demands. Weston also Replaced the existing condensing and air handler unit with a system meeting a minimum Energy Efficiency Rating (EER) of 11.2 to meet cooling demands of working switchgears, operations control room, and other administrative areas. Completion date: 2018.

Project/Reference #3. Uninterruptible Power Supply System Design/Replacement (including HVAC), Secured U.S. Government Facility (Weston)

Project Address: Confidential U.S. Government Secured Facility

Key Personnel: M. Stratton

Project City / State / Zip: Confidential

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: As prime contractor, Weston implemented a successful approach to replace a mission-critical uninterruptible power supply (UPS) system, which was carefully coordinated with Weston, USACE, and the secure facility to minimize outages and downtime of critical loads in the active, occupied, secured government installation. This project demonstrates Weston's capability to effectively execute construction projects involving repair/alteration work, major electrical distribution upgrades, electrical coordination, and incidental design (including HVAC) in an occupied building. Complexities involved coordination in an active, secure facility and management of concurrent construction teams, including strategic phasing that enabled mission-critical functions to continue without impact while transferring loads, etc.

The scope included extensive HVAC upgrades, including the following mechanical work elements: demolition of portions of the existing HVAC system; installation of new duct and liner, drum louvers, dampers, and fans; and installation of sheet metal deflection shields over the new UPS units. At the completion of the installation, preliminary testing and balancing of the system was completed. HVAC controls were required to be performed to integrate the new components and included: installation of temperature controls, including a new control panel, controller(s), and local human machine interface (HMI) screen for the new system; communication; final connections to the control system and field mounted devices; and conduit and wiring associated with High Temperature Switch.

Weston's technical staff (Superintendent, CQC System Manager and SSHO) worked on-site to refeed existing critical and non-critical loads with temporary/permanent UPS power; install transformers, switches, and panel boards to pick up and redistribute existing loads (once the re-distribution of existing loads was completed and demolition of the existing conduit, wire, filters, UPS gear, and other electrical support equipment began); install new UPS equipment and output switchboard; perform ancillary electrical work, including new lighting, relay for HVAC controls, and circuit breaker; bank test new UPS system load; and re-distribute the existing loads. As part of this scope, electrical studies were conducted on the new equipment, including a short circuit, overcurrent coordination, and arc flash analyses. Studies were performed (IAW) the National Electrical Code (NEC), National Fire Protection Association (NFPA) 70E, and other pertinent standards. Weston completed 11,347 man-hours without a safety violation/lost-time incident. Completion date: 2018. *"Well executed three phase Quality Control program.* ***Management in the field was exceptional.*** *This project has had an impeccable safety record during this performance period. SSHO and other project personnel make safety a top priority in every aspect of the job." – Assessing Official, USACE, Final CPAR rating, 2018.*

Project/Reference #4. Cold Storage Solutions Building, HVAC Retrofit (PESI)

Project Address: 310 Kenneth W. Welch Drive

Key Personnel: N. Benton

Project City / State / Zip: Lakeville, MA 02347

Reference Contact Name / Phone No. / Email: Confidential (contact information may be available upon request)

Project Description: PESI provided consulting on a project to retrofit a cold storage building into a cannabis cultivation site, which required a significant upgrade to HVAC controls and commissioning work. On-site visits were performed to observed ongoing commissioning work associated with the start-up of two 1.871-MW cogeneration machines and gather additional information for central chilled water plant and outside air intake systems. The primary goals in completing the project were to determine the power output capacity of each cogeneration machine when operating at full load; determine whether the systems were being commissioned for concurrent/parallel operation; determine the approximate fuel consumption rate for each machine when operating at full load to approximate daily fuel demand; inspect the central chilled water plant; and determine if the machines were sized appropriately for the new use.

PESI provide a report detailing the findings from the HVAC commissioning effort to support the client's goals in converting the cold storage building to a cannabis cultivation site. Completion date: 2022.

Project/Reference #5. T-Mobile, HVAC Retrofit (PESI)

Project Address: 5421 Jefferson Street NE

Key Personnel: N. Benton

Project City / State / Zip: Albuquerque, NM 87109

Reference Contact Name / Phone No. / Email: Sentinel New Lease, LLC (contact information may be available upon request)

Project Description: The purpose of the project was to aid in the retrofit of the HVAC system in an office call center building constructed in 2004. The building had chronic leaks developing in heating hot water lines at suspended fan powered boxes which was a serious disruption to the activities being performed in the building.

The project entailed as assessment, feasibility study and energy survey to determine alternate solutions to the current HVAC system. The study developed basic economic viability of implementation costs and energy cost savings measures for up to three different HVAC systems.

The project consisted of the following to help the Client achieve their goals.

- Perform site visit to assess the MEP-FLS systems and HVAC zoning
- Create MEP-FLS assessment report including existing conditions, analysis, cost for like to like replacement.
- Utility meter evaluation of all meters serving the building for electrical and gas.
- Create monthly profiles for usage and costs based on most recent 14 months of readily available utility bill data.
- Develop eQuest computer energy model and compare with utility bills.
- Evaluate cost/benefit of converting to different HVAC systems such as packaged RTUs with gas heat, split systems, water cooled systems.
- Identify energy saving measures, cursory estimate the value of savings and implementation costs. Calculate simple payback time and identify applicable utility incentives or tax credits.
- Review compliance with energy regulations per local city, state and federal rules and laws.

All findings and recommendations were summarized in a written report including opinions of cost for repairs or system replacements recommended. In addition, the study developed basic economic viability of implementation costs and energy cost savings measures for up to three different HVAC systems. Completion date: 2022.

APPENDIX B-7: HVAC CONTROLS REPLACEMENT, UPGRADE, SELECTION

Project/Reference #1. Corrigan Tower, HVAC Commissioning (PESI)

Project Address: 1900 Pacific Avenue

Key Personnel: R. Intveld

Project City / State / Zip: Dallas, Texas 75201

Reference Contact Name / Phone No. / Email: Crain Mortgage Group, LLC (contact information may be available upon request)

Project Description: Corrigan Tower at 1900 Pacific Ave in Downtown Dallas was built in 1952 as office space and was originally a 20-story tower designed in the modernist style by architect Wyatt C. Hedrick. It had stood vacant since 2003, until developer John Kirtland worked to renovate it into luxury apartments with ground floor retail space and state-of-the-art amenities. This impressive gut renovation was an important leader in the overall community effort to revitalize the Downtown Dallas Historic District.

The client secured PESI's services to help qualify for the HUD Green Mortgage Insurance Premium Reduction Program ("Green MIP"). The Green MIP program grants projects a discounted annual MIP to reward meaningful investments in environmental sustainability and energy efficiency. 1900 Pacific was one of the first projects to participate in the program shortly after it was developed by HUD. In order to qualify, the building needed an ENERGY STAR SEDI score of 75 or above and a HUD- Recognized Green Building Certification.

PESI generated energy models to simulate energy usage based on project plans in order to obtain an ENERGY STAR SEDI report and made recommendations for design changes based on the SEDI analysis, eventually achieving a score of 85.

PESI facilitated the administrative and project management process, as well as commissioning, in order to qualify for LEED New Construction, one of the most stringent and well-recognized green certification programs.

As part of the process, PESI oversaw pre-functional checks and functional performance testing of various systems and controls, including but not limited to various HVAC equipment including boilers, split systems, energy recovery ventilators, exhaust fans, heat pumps, and cooling towers. A few of the numerous improvements made during the project were potable water usage reduction of 45.5%, energy cost savings of 26%, and use of low-emitting construction materials.

As a result, 1900 Pacific was awarded a LEED certification by the U.S. Green Building Council, and successfully qualified for the HUD Green MIP Reduction. Energy cost savings are passed onto the residents, a draw for tenants who are looking to save money on utility costs but also positively impact the environment. Completion date: 2018.

Project/Reference #2. Rampart Mint Apartments, HVAC Commissioning (PESI)

Project Address: 1136 W 6th Street

Key Personnel: R. Intveld

Project City / State / Zip: Los Angeles, CA 90017

Reference Contact Name / Phone No. / Email: West Hollywood Community Housing Corporation (contact information may be available upon request)

Project Description: Rampart Mint is a 23-unit new construction multifamily property in Los Angeles, California that provides permanent supportive housing for formerly homeless individuals with disabilities whose income are less than 30% of the area median income. The property was uninhabited for 30 years before being transformed into an all new, amenity-rich, affordable apartment community.

West Hollywood Community Housing Corp secured PESI's services in the beginning of the construction phase, including a targeted LEED Gold certification under the LEED Homes Mid-Rise Rating System.

PESI provided Title 24 Energy Modeling on the property, including a review of the architectural and mechanical drawings, and developing Title 24 compliance model per the 2013 Energy Code. PESI provided

HERS performance testing to ensure energy performance is as desired and modeled. The tests included duct leakage testing, quality insulation inspection, and refrigerant charge.

As part of the LEED certification, PESI assisted the client on compliance documentation during the design and construction process, which included a LEED certification plan based on the targeted points. PESI provided design assistance to identify materials, systems, and other methods that were needed for LEED compliance. Additionally, PESI provided commissioning and performed functional performance testing for all central systems.

The property was awarded the LEED-Homes Gold certification by The U.S. Green Building Council in May 2021.Completion date: 2021.

Project/Reference #3. Cold Storage Solutions Building, HVAC Commissioning (PESI)

Project Address: 310 Kenneth W. Welch Drive

Key Personnel: N. Benton

Project City / State / Zip: Lakeville, MA 02347

Reference Contact Name / Phone No. / Email: Confidential Client (contact reference may be available upon request)

Project Description: The purpose of this project was to provide consulting for the Client on a retrofit of a cold storage building to a cannabis cultivation site which required a significant upgrade to HVAC controls and commissioning work. On site visits were performed to observed ongoing commissioning work associated with the start-up of two 1.871 MW cogeneration machines and gather additional information for central chilled water plant and outside air intake systems. The primary goals in completing the project were to determine the power output capacity of each cogeneration machine when operating at full load; determine whether the systems were being commissioned for concurrent/parallel operation; determine the approximate fuel consumption rate for each machine when operating at full load to approximate daily fuel demand; inspect the central chilled water plant; and determine if the machines were sized appropriately for the new use.

PESI provide a report detailing the findings from the HVAC commissioning effort to support the client's goals in converting the cold storage building to a cannabis cultivation site. Completion date: 2021

APPENDIX B-8: LOCKS, DAMS, WATER DIKING SYSTEMS AND WATER CONTROL STRUCTURES

Project/Reference #1. Lake Whitney Dam/Upstream Embankment Repair (Weston)

Project Address: 433 FM-1244

Key Personnel: A. Brown, L. Blanchette, N. Harkins,

Project City / State / Zip: Whitney, TX 76692

Reference Contact Name / Phone No. / Email: Lawrence Woscyna, USACE Omaha District / 402-661-4269 / lawrence.j.woscyna@usace.army.mil

Project Description: Under Weston's Rapid Disaster and Infrastructure (RDI) MATOC contract, we designed site civil improvements and oversaw construction of immediate repairs to provide time-critical incidental design and infrastructure construction to support USACE's flood control efforts at Whitney Lake. The work includes repairs to the Whitney Dam upstream embankment from the left abutment at Station 34+00 to Station 98+00; construction of temporary access roads; removal and disposition of vegetation, logs, driftwood and other debris; removal and placement of riprap within a 1-mile radius; removal and staging of bedding material within a 2-mile radius; excavation of embankment soil to benching requirements; staging of embankment soil for amendment with lime; importing and testing needed borrow material; amendment of soil with lime to meet performance requirements; compaction and testing of embankment subgrade; surveying; placement and compaction of amended soil to meet original grades; density and compaction testing per lifts; placement of new bedding material; placement and chinking of 30-inch riprap; and final report to include as-built drawings. Weston repaired over 5,000 LF of upstream embankment stabilization and earthen dam impervious core material and placed new bedding and 30-inch diameter rip-rap. We performed real-time slope stability evaluation and modeling using the finite element as well as limit-equilibrium modeling software Geostudio® using direct read soil strength measurements from test excavations. We provided guidance as to the safe removal of impervious core material while maintaining a safe work environment for workers performing the excavation of the over-60-foot engineered slope with an active highway at the top. Cut slopes ranged from 2H:1V to 0.5H:1V to achieve safe removal requirements of previously failed materials. The project also included amending borrow materials with lime, placement within damaged portions of the dam embankment, and quality control (QC) testing of all material placed.

Weston's in-house geotechnical engineers performed stability assessments to demonstrate that the stability of the structure during major flooding events would still allow the dam to contain more water, thus preventing any significant downstream flooding. Completion date: 2018. *"Weston Solutions' quality control efforts were exceptional. Their QC Manager produced and collected outstanding project documentation. The attention to detail in his daily reports, test data, correspondence, submittals, and photographs kept the project delivery team (PDT) thoroughly informed and facilitated critical flood control decisions in a timely manner. Weston's meticulous 3-Phase inspection process enabled the field team to successfully repair 6,400 LF of dam embankment, including the backfill and compaction of 107,000 tons of soil, placement of 19,000 tons of gravel, and 63,000 tons of riprap. This formidable effort has been applauded as outstanding work by the Ft. Worth District's regional flood control manager, Project Managers, Engineer of Record, and Civil Engineer Technicians." – USACE Assessing Official, CPAR evaluation, 2019.*

Project/Reference #2. Bardwell Lake Dam Slide Repairs (Weston)

Project Address: 4000 Observation Drive

Key Personnel: A. Thomas,

Project City / State / Zip: Ennis, TX 75119

Reference Contact Name / Phone No. / Email: Lawrence Woscyna, USACE Omaha District / 402-661-4269 / lawrence.j.woscyna@usace.army.mil

Project Description: Under Weston's Rapid Disaster and Infrastructure (RDI) MATOC contract, we performed a construction task order to provide time-sensitive infrastructure construction with incidental design in support of the Ft. Worth District flood control program. The project required implementation of stringent environmental protection measures, excavation of the dam embankment of the Bardwell Lake Dam at two locations to find and

repair embankment slides, restoration of landscape and roads, and delivery of as-built drawings and project final report. Historic drought conditions in the region, followed by extreme rainfall events, caused the saturation and eventual degradation of the earthen dam on Bardwell Lake, resulting in multiple embankment slides. As the Prime Contractor, Weston was tasked with executing time-critical repairs to two embankment slides that were susceptible to complete breach. Weston's embankment construction included amending existing embankment material with hydrated lime, water, and cure, surveying final excavation at the same cross sections, compacting subgrade to 95% standard proctor density. Weston also set grading stakes for placement control, maintained lifts and compaction, rebuilt embankment Areas 1 and 2, placed topsoil, and performed a final topographic survey. Partnership and cost reimbursable contract mechanism allowed the client to pivot scope in real time to mitigate change in site conditions without incurring costly change orders. *"Weston Solutions resource management is second to none. The on-site Project Manager exhibited superior decision-making abilities, was effective under pressure, diligent when responding to customer needs, and could be trusted to make the right decisions when no one was watching. Weston's transparent and meticulous cost control methods allowed the project management team to account for every dollar and forecast budget challenges. As a result, resources were allocated in the right places at the proper time to prevent wasteful spending, work stoppages, and allowed the completion of all features of work within budget. The Weston Solutions project team can be trusted to solve the complex problems and accomplish the difficult tasks." – USACE Assessing Official, CPAR evaluation, 2017.* Completion date: 2017.

Project/Reference #3. Webster Lake Dam (Weston)

Project Address: Webster Lake Dam

Key Personnel: A. Brown, L. Blanchette, N. Harkins

Project City / State / Zip: New Mexico 87714

Reference Contact Name / Phone No. / Email: David Kenneke, Director of Ranching and Conservation Philmont Scout Ranch BSA / (575) 376-2281 / Dave.Kenneke@scouting.org

Project Description: The Webster Lake Dam, located approximately 4 miles west of NM 21 on ranch property, is used to store water for irrigation purposes. Constructed in the early 20th century, the dam is filled through a diversion from Cimmaroncito Creek and appears to have been constructed as an earthen embankment and incorporates two small natural hills into the dam embankment. The dam has been inspected on numerous occasions by the Office of the State Engineer Dam Safety Bureau (OSE-DSB), which has assigned a "Poor" condition rating. The dam stores over 700 acre feet of water with a primary dam height of 36 feet and includes a primary spillway located along the alignment of the diversion channel. Weston engineers have been addressing numerous issues identified by the OSE-DSB, which include development and implementation of a seepage monitoring program, engineering and oversight of vegetation removal from the earthen embankment, and geotechnical investigation to characterize the earthen embankment and dam foundation and address replacement of the dam outlet work. Weston evaluated surface water systems, performed stream flow measurement and data collection, and provided modeling of reservoir operations, stream flow, and water routing alternatives. We also evaluated existing institutional frameworks, including interstate compact requirements. Completion date: 2022.

Project/Reference #4. CPS Energy Dam O&M Engineering Contract (Weston)

Project Address: 500 McCullough

Key Personnel: N/A

Project City / State / Zip: San Antonio, Texas 78215

Reference Contact Name / Phone No. / Email: Eric Olson – CPS Energy / 210-353-3677 / ERolson@CPSEnergy.com

Project Description: Weston has been tasked with performing monthly inspections of the Braunig and Calaveras Dams, associated with the CPS Energy coal power plants located at their respective lakes. Site inspections include to collection of piezometer data, vibrating wire piezometer data, inclinometer data, and lake level measurements to monitor to structural integrity of the dams. Quarterly reports documenting the data collected and any recommendations regarding dam maintenance and integrity is included in these reports. Completion date: Ongoing.

Project/Reference #5. Confidential Manufacturing Client (Weston)

Project Address: Confidential

Key Personnel: A. Brown, N. Harkins, M. Stratton

Project City / State / Zip: Confidential site in NJ

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: Weston is the primary environmental consultant for a large and complex CERCLA site in southern NJ encompassing over 2 miles of residential, commercial and government-owned properties with 5 distinct operable units (OUs). Discharges of process water and runoff/leaching from lagoons and land disposal areas impacted over 2 miles of 3rd party properties, waterbodies and streams with heavy metals including Lead and Arsenic, primarily. Weston designed a complex residential property remediation that involved the remediation of a 1-acre private pond, reconstruction of a dam, the remediation and temporary re-alignment of a creek and associated restoration. This property had extensive geotechnical and flood plain considerations as part of the design. Weston calculated the construction dewatering volume and rate as part of the Discharge to Surface Water permit equivalency application to NJDEP. This one residential property remediation was over $8M in construction costs due to all the complexities involved. The engineering effort on the residential properties includes the design of ingress/egress routes, staging areas, stockpile areas, excavation support footprints, and extensive property-specific restoration in-kind. Weston provides construction management and oversight for the remedial action on two OUs. There were numerous challenges including regulatory deadlines, threatened or endangered species habitat, pandemic conditions, small working areas, after hours responses, and extensive engineering controls to manage groundwater, waterbodies, and construction dewatering. Weston provided the engineering design plans for approximately 60 residential remediations. This extensive effort was complicated by the presence of lakes and creeks adjacent to or running through a large majority of these properties. Completion date: Ongoing.

APPENDIX B-9: MAINTENANCE AND FACILITY PRESERVATION

Project/Reference #1. Strategic Planning Study, Maintenance and Long-Term Capital Improvement Project (PESI)

Project Address: Marion County, Illinois

Key Personnel: M. LaFalce

Project City / State / Zip: Marion County, IL (multiple zip codes)

Reference Contact Name / Phone No. / Email: Jared Goodspeed, Director of Facilities Management, Marion County Board of City Commissioners / 352-671-8750 / Jared.Goodspeed@marioncountyfl.org

Project Description: The County was looking for the proper planning techniques to assess the feasibility of building a single government complex by consolidating several of their occupied properties. PESI worked with Marion County to provide a Phased Strategic Planning Study. The specific Scope of Work was to provide a Rough Order of Magnitude evaluation of the major building systems conditions and to report the condition indexing of the 15 proposed sites within the County. The County's goals were as follows:

- To provide a high-level Rough Order of Magnitude (ROM) assessment of 15 County-owned facilities.
- To identify ROM deferred maintenance and long-term capital planning items and to provide costing based on observed and building use of typical items within each property.
- To provide metrics and recommendations for the identified items above and to Condition Index each facility based on the Estimated Replacement Value.

We were instrumental in working with the County to provide the necessary recommendations to aid in securing shareholder confidence and approval for a new centralized County facility.

PESI was awarded the Master Services Agreement in 2020 to perform FCAs and feasibility assessments at all the County's facilities including offices, courthouses, detention facilities, fire and police stations. We have also provided Strategic Planning Study, an Expansion Study, and Security Photometric Analysis for this project, with possibly additional services. Completion date: 2021.

Project/Reference #2. Facility Condition Assessment, Maintenance and Facility Preservation, Office and Distribution Center for the County of Santa Cruz (PESI)

Project Address: Santa Cruz County

Key Personnel: M. LaFalce

Project City / State / Zip: Santa Cruz County, CA (multiple zip codes)

Reference Contact Name / Phone No. / Email: Nicole Steel, County of Santa Cruz / 831-419-7804 / Nicole.Steel@santacruzcounty.us

Project Description: PESI was engaged to perform an FCA of an office building consisting of 121,491 SF, set on 8.27 acres. The project included a MEP assessment, thermographic roof scan and assessment, fire and life safety accessibility assessment, ADA, and seismic evaluation. The report included deficiency costs and photos, a capital planning schedule for the next 30 years, and results of municipal research, along with recommendations for servicing and regular maintenance with associated costs as part of the Capital Plan, along with generator capacity and maintenance. PESI provided short-, immediate-, and long-term capital expenditure cost schedules, including descriptions of deficiencies, recommended remediation and cost for repair and/or replacement, and cost schedules including a description of the building systems, age, remaining useful life, and cost projects for replacement and maintenance.

The County was able to engage us for additional scopes to suit their current needs beyond an FCA, without the need to contract with another firm, such as more in-depth reconnaissance of sites including seismic retrofit design, radon screenings, roof, and infrared scanning. Our proximity to the site was key to providing the client with immediate turnaround of critical scope items for this acquisition. Completion date: 2021.

Project/Reference #3. Facility Condition Assessments, Maintenance and Facility Preservation, YMCA (PESI)

Project Address: Michigan / Nationwide

Key Personnel: A. Civitano

Project City / State / Zip: State of Michigan / Nationwide

Reference Contact Name / Phone No. / Email: Joseph Cerny, YMCA of Greater Cleveland / 216-263-6858 / jcerny@clevelandymca.org

Project Description: PESI works with YMCAs across the country to conduct FCAs and ADA surveys in conjunction with their capital planning and budgeting initiatives. In many cases, the YMCAs operate in a "reactive" mode whereas items are repaired and/or replaced when a problem occurs. Information collected in PESI's FCAs allow the YMCA to operate in a "proactive" mode, which allows prioritization of repairs and/or replacements scheduled over a period of time, typically 10- to 12-years or more if required. The FCA exercise provides the YMCAs with the information they need to plan for major expenses and set aside needed funds as needed. Our FCA exercises have also uncovered other issues the YMCAs may not have been aware of, like structural defects and mold/moisture intrusion issues. A sample list of YMCA associates served include the following:

- YMCA of Greater Houston – 30 Facilities
- YMCA of San Francisco – 10 Facilities
- Greater Wichita YMCA – 11 Facilities
- YMCA of the Okobojis – 1 Facility
- YMCA of Cass & Clay Counties – 2 Facilities + 1 Camp
- Oneonta Family YMCA (NY) – 1 Facility
- Pocono Family YMCA – 1 Facility
- The Community YMCA (NJ) – 7 Facilities
- Brown County YMCA – 1 Facility
- YMCA of Memphis and The Mid-South – 5 Facilities
- Ann Arbor YMCA – 1 Facility
- YMCA of the Rockies – 1 Facility
- Summit New Jersey YMCA – 1 Facility
- Taylor Family Branch YMCA – 1 Facility
- Grant County Family YMCA – 1 Facility
- Naugatuck YMCA – 1 Facility
- Lima YMCA – 2 Facilities
- Stamford Family YMCA – 1 Facility
- YMCA of Fanwood-Scotch Plains – 1 Facility
- YMCA of Central Virginia – 3 Facilities
- YMCA of Muncie – 3 Facilities
- Allegheny Highlands – 1 Facility

Information collected in PESI's FCAs allow the YMCA to operate in a "proactive" mode, which allows prioritization of repairs and/or replacements scheduled over a period of time, typically 10- to 12-years or more if required. The FCA exercise provides the YMCAs with the information they need to plan for major expenses and set aside needed funds as needed. Completion date: Ongoing.

APPENDIX B-10: PARKING AND PAVING

Project/Reference #1. Pavement Evaluation and Remediation, Archdiocese of Detroit (PESI)

Project Address: Various Locations (6 sites/cemeteries)

Key Personnel: J. Lupo

Project City / State / Zip: Detroit, MI; Southfield, MI; Monroe, MI; Wyandotte, MI; Pontiac, MI; Brownstown, MI

Reference Contact Name / Phone No. / Email: Catholic Funeral & Cemetery Services (contact information may be available upon request)

Project Description: PESI was selected to perform pavement condition assessments for the Catholic Diocese at 6 Michigan locations: Holy Sepulchre (Southfield, MI), Holy Cross (Detroit, MI), Sait Joseph (Monroe, MI), Mount Carmel (Wyandotte, MI), Mount Hope (Pontiac, MI), Our Lady of Hope (Brownstown, MI). PESI's geotechnical services include performing PASER style analysis of the pavement condition.

PASER style analysis of the pavement condition, in order to estimate life-cycle costs, and qualify areas for needed repairs and replacement of existing asphalt pavements. Following the PASER results, PESI performs geotechnical exploration, laboratory testing, and pavement design. PESI also assists in the preparation of civil drawings, cross sections, and recommended specifications used to bid the work. During construction, PESI provides oversight and quality control testing of repaired soil subgrade, roadway basecourse aggregate (Class II), and pavement surface materials. Completion date: 2022.

Project/Reference #2. Bay Area Rapid Transit (BART), New Parking Garage at Walnut Creek Transit Village (PESI)

Project Address: 200 Ygnacio Valley Road

Key Personnel: Matthew Marcus

Project City / State / Zip: Walnut Creek, CA 94596

Reference Contact Name / Phone No. / Email: Blake Griggs Properties (contact information may be available upon request)

Project Description: PESI was the geotechnical engineer on the design-build team. The team was tasked with the design and construction of Phase I of the transit facility upgrades, including a five-story, cast-in-place concrete parking garage for the Bay Area Rapid Transit (BART) stop at the Walnut Creek Transit Village in Walnut Creek, CA. The new parking garage was to be adjacent to an existing structure and would require the demolition of the existing, at-grade parking lot on the site. PESI's services included coordination of drilling permits, access with BAR, utility clearance by private and public locating services, drilling and logging of soil borings, laboratory testing, engineering analysis, background review, and report preparation. Site conditions indicated a highly variable depth to bedrock, expansive soils, perched groundwater, undocumented fills, and possible disturbance to adjacent structures. We provided solutions to these issues for the design team in an interactive, iterative process to arrive at the most cost-effective and efficient design. As a follow-up to our work, there were numerous comments and additional analysis required by BART and the City of Walnut Creek Building department.

Following the approval of the design by Walnut Creek and BART, PESI performed construction materials testing and special inspections on the project. The site material was found to contain lead contamination. PESI provided several rounds of testing to map the extent of the contamination and to provide a "Soil Management Plan" for the removal and proper disposal of the contaminated soil. PESI performed the oversight and testing of site earthwork and foundation preparation for the new building. This included nuclear density, Proctor, and index testing, along with approvals of select materials and review of RFI's during construction. PESI coordinated with stakeholder groups and integrated its services in a timely fashion to advance the project and keep to schedule. Before the construction phase began, PESI's Geotechnical team has provided geotechnical services to another client on the same site. PESI's Site Mitigation and Remediation team also provided environmental clean-up, asbestos screening at the existing property before its demolition. Completion date: 2019.

Project/Reference #3. Pavement Evaluation and Remediation, Catholic Funeral & Cemetery Services (PESI)

Project Address: Various addresses, 15 sites (CA, OH, WI, CO)

Key Personnel: A. Civitano, J. Lupo

Project City / State / Zip: Various Cities, CA, OH, WI, CO

Reference Contact Name / Phone No. / Email: Catholic Funeral & Cemetery Services (contact information may be available upon request)

Project Description: PESI was selected to perform pavement condition assessments for the Catholic Diocese at throughout the country in various states including CA, OH, WI and CO. PESI has performed these services on dozens of other projects for this client across the country. PESI's geotechnical services include performing PASER style analysis of the pavement condition.

PASER style analysis of the pavement condition, in order to estimate life-cycle costs, and qualify areas for needed repairs and replacement of existing asphalt pavements. Following the PASER results, PESI performs geotechnical exploration, laboratory testing, and pavement design. PESI also assists in the preparation of civil drawings, cross sections, and recommended specifications used to bid the work. During construction, PESI provided oversight and quality control testing of repaired soil subgrade, roadway basecourse aggregate (Class II), and pavement surface materials. Completion date: 2021.

APPENDIX B-11: ROOF REPAIR, RESTORATION AND/OR REPLACEMENT DESIGN

Project/Reference #1. Dallas Data Center, Roof Assessment and Design Solution (PESI)

Project Address: 11800 Web Chapel Road

Key Personnel: M. Bock

Project City / State / Zip: Dallas, Texas 75234

Reference Contact Name / Phone No. / Email: Evoque Data Center Solutions (contact information may be available upon request)

Project Description: The project consisted of a roof assessment and design solution for a 366,000 SF data center with low-slope roof system. The scope for work included the following.

- Perform a visual roof survey of each of the roof areas.
- Observe and comment on each completed roof section, roofing materials, flashings, penetrations, expansion joints, underside of the roof deck and drainage.
- Complete test cuts (core sampling) of existing roof system.
- Determine possible solutions for roof replacement and/or recommended repairs. Pros/Cons were offered for each system, as well as estimated budgets.

A single written report summarizing our observations and the findings. Possible roof replacement solutions along with pros/cons and budget were included in the report. Completion date: 2022.

Project/Reference #2. Roof Design – Catholic Funeral & Cemetery Services, Roof Assessment and Design Solution (PESI)

Project Address: Various addresses, 21 sites (CA, OH, WI, CO, MI)

Key Personnel: A. Civitano, M. Bock

Project City / State / Zip: Various cities, CA, OH, WI, CO, MI

Reference Contact Name / Phone No. / Email: Catholic Funeral & Cemetery Services (contact information may be available upon request)

Project Description: PESI was selected to perform pavement condition assessments for the Catholic Diocese at throughout the country in various states including CA, OH, WI, MI and CO. PESI has performed these services on dozens of other projects for this client across the country.

Summary: The project consisted of a roof assessment and design solution for various roofs of structures at cemeteries. The scope for work included the following.

- Perform a visual roof survey of each of the roof areas.
- Observe and comment on each completed roof section, roofing materials, flashings, penetrations, expansion joints, underside of the roof deck and drainage.
- Complete test cuts (core sampling), if needed, of existing roof system.
- Determine possible solutions for roof replacement and/or recommended repairs. Pros/Cons were offered for each system, as well as estimated budgets.
- Roof design diagram for the roof replacement.

A single written report summarizing our observations and the findings. Possible roof replacement solutions along with pros/cons and budget were included in the report and roof design diagram. Completion date: Ongoing.

Project/Reference #3. Facility Condition Assessment, Roof Assessment, Office and Distribution Center (PESI)

Project Address: Santa Cruz County, CA

Key Personnel: M. LaFalce, M. Bock

Project City / State / Zip: Santa Cruz County, CA (multiple zip codes)

Reference Contact Name / Phone No. / Email: Nicole Steel, County of Santa Cruz / 831-419-7804 / Nicole.steel@santacruzcounty.us

Project Description: PESI was engaged to perform an FCA of an office building consisting of 121,491 SF, set on 8.27 acres. The project included a MEP assessment, thermographic roof scan and assessment, fire and life safety accessibility assessment, ADA, and seismic evaluation. The condition assessment included evaluation of the roof and thermographic roof scan to report condition, useful life analysis, and detail description of deficiencies, recommended repairs, deficiency costs, photos, a capital planning schedule for the next 30 years.

The County was able to engage us for additional scopes to suit their current needs beyond an FCA, without the need to contract with another firm, such as more in-depth reconnaissance of sites including seismic retrofit design, radon screenings, roof, and infrared scanning. Our proximity to the site was key to providing the client with immediate turnaround of critical scope items for this acquisition. Completion date: 2021.

APPENDIX B-12: SOIL EROSION SEDIMENTATION CONTROLS

Project/Reference #1. Tijeras Arroyo Sedimentation Retention Project (Weston)

Project Address: Tijeras Arroyo

Key Personnel: A. Brown, N. Harkins

Project City / State / Zip: Albuquerque, NM

Reference Contact Name / Phone No. / Email: Kevin Troutman, Albuquerque Metropolitan Arroyo Flood Control Authority / 505-884-2215 / ktroutman@amafca.org

Project Description: The Tijeras Arroyo is located at the transition from an earthen channel to concrete conveyance draining runoff from over 100 square miles of watershed that the arroyo collects and conveys across a rural and urbanized area. The sediment retention project serves as the last line of defense in Albuquerque's lower valley. The solution provides protection from extreme flood events while also addressing the Middle Rio Grande Watershed Based Municipal Separate Storm Sewer System (MS4) permit total maximum daily load for sediment. Weston's design is based on a computational model (FLO-2D) and a physical model constructed in the University of New Mexico Hydraulics Laboratory. Directly downstream of the project area, the Tijeras Arroyo transitions from natural channel to a concrete-lined channel through two training dikes. The design provides the necessary hydraulics and storage to facilitate sediment deposition of various flow rates prior to entering the concrete-lined section of the channel with the objective of capturing 50,000 cy of sediment. The digital and physical modeling efforts specifically identified the need for slope and bank protection of the surrounding area and the riprap-armored training dikes that transition from the sediment ponds into the concrete channel. The modeling efforts produced a design that maximized sediment retention without impacting a USACE-constructed levee system. Allowable freeboard for the Standard Project Flood storm was maintained, and construction was completed.

Our unique approach to combining sediment transport analyses, a computerized 2D hydraulic model, and a physical bench scale models aided in designing a complex, large-scale sedimentation facility that addressed water quality issues originating from the largest watershed in Bernalillo County. *Weston's work on this project garnered honorable mention from the New Mexico Chapter of the American Council of Engineering Companies (ACEC) "2018 Engineering Excellence Awards."* Completion date: 2019.

Project/Reference #2. Confidential Manufacturing Facility Cleanup (Weston)

Project Address: Confidential

Key Personnel: A. Brown, N. Harkins, M. Stratton

Project City / State / Zip: Confidential site in NJ

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: Weston's dedicated team maintains a rigorous community outreach program due to the sensitivities of more than 100 separate third-party property owners across the residential and commercial properties that are directly impacted by the remediation efforts across all three sites. As part of this effort, creeks that run through two of the residential properties had to be temporarily re-routed and restored back to original conditions, along with the remediation and restoration of numerous wetlands and transition zones.

Weston manages the construction in such a way as to minimize impacts to the shareholders and the surrounding community to the least extent possible. There were numerous challenges including regulatory deadlines, threatened or endangered species habitat, pandemic conditions, small working areas, after hours responses, and extensive engineering controls to manage groundwater, waterbodies, and construction dewatering.

Weston has saved our client over $2.75M in construction costs since 2019 by negotiating contract terms, managing contractor change orders, reviewing proposals and invoices; as well as streamlining the work sequence. Many of the remediated properties are located within the local "historic district" and therefore had certain restoration requirements dictated by the local construction codes. In all, approximately 50,000 tons contaminated soil have been excavated from residential properties so far, and 35,000 tons of contaminated soil have been removed from 3 commercial properties and an unoccupied wooded property. Completion date: Ongoing.

Project/Reference #3. Santa Fe River Trail and Channel Restoration (Weston)

Project Address: Santa Fe River Trail, Santa Fe County

Key Personnel: L. Blanchette, A. Brown, M. Major

Project City / State / Zip: Santa Fe, NM 87010

Reference Contact Name / Phone No. / Email: Scott Kaseman, City of Santa Fe / 505-992-9868 / skaseman@santafecountynm.gov

Project Description: This river restoration and trail implementation project extends 1.3 miles through a very constrained reach of the Santa Fe River from Frenchy's Field to Siler Boulevard. The design included 10 large, grouted boulder grade control structures, 34 stacked boulder deflector structures, 300 feet of shotcrete and soil anchor bank protection, a 7-foot-diameter CMP and grouted rock arroyo crossing structure, and eight culvert outfall erosion protection structures. Weston designed the trail and river channel improvements in 2013; however, shortly afterward, large storm events altered the river channel before construction began.

At the request of Santa Fe County, Weston redesigned this segment utilizing new topographic data which was completed in 2017 including natural rock grade control structures, training dykes, vegetated bank stabilization, and a soil nail wall for a near vertical, unstable high bank bordering private property. Once the project had completed construction, a major storm event (1,000-year storm event) in July of 2018 damaged many of the recently installed river stabilization features. Weston worked closely with the County and the contractor to mitigate the damage and oversee reconstruction back to designed requirements. These services also required attending public meetings with County staff to present the extent and nature of the damage to local residents. The project is now complete and functioning effectively as stormwater travels down the revitalized river channel.

Development of the trail and river restoration elements required innovative and "real time" engineering solutions due to the discovery of in situ waste materials during construction within the river channel. Several existing car bodies, extensive quantities of construction rubble, solid waste, and existing utilities were mitigated during redesign of the historic overbank areas. Completion date: 2019.

APPENDIX B-13: SITE SURVEYING

Project/Reference #1. Site Survey to Support Repairs of L550 Missouri River Left Bank Levee System (Weston)

Project Address: Levee L-550, North of Highway 136

Key Personnel: A. Brown, D. Chernick, N. Harkins, M. Major, M. Stratton

Project City / State / Zip: Atchison County, MO

Reference Contact Name / Phone No. / Email: Timothy Davey, USACE Omaha District / 402-680-8002 / Timothy.J.Davey@usace.army.mil

Project Description: Upon mobilization, Weston performed a pre-construction bathymetric survey of the flooded landside borrow areas and compared results with pre-flood conditions. Three-dimensional surface models were used both to locate and map areas by sand depth to verify sufficient volume, prioritize and guide removal, and to visualize the breach geometry for optimal location of closure berm.

To achieve final closure of the larger inlet breach, Weston engineers prepared a Hydrologic Engineering Center's River Analysis System (HEC-RAS) model and performed analyses of different closure options based on the breach geometries and water velocity. Due to high water velocity, quarry shot rock was used to armor the floor of the remaining channel, and a combination of barge-mounted and land-based equipment was used to place large rip rap from both sides of the channel to complete the closure berm. Simultaneously, Weston recommended and obtained approval from USACE to construct a shot rock revetment across an eroded channel along the bank of the Missouri River channel to slow water flow through the second inlet breach. The shot rock was delivered and placed by river barge, which substantially accelerated closure of the second breach.

Closure of the largest outlet breach (1,500 feet wide) was completed on February 12, 2020, and more than three miles of the most severely damaged portion of the levee was restored to full pre-flood levee height on March 2, 2020. This accomplishment was recognized by the levee sponsors in a congratulatory e-mail to the USACE:

"Projects of this magnitude just don't happen. It takes the right plan, people with passion to execute and a group of individuals from multiple disciplines working together towards one common goal. Everyone involved in the project has gone above and beyond to be where we are today. At a time like this we wanted to say thank you and that your hard work has not gone unnoticed by us or all the stakeholders of the L-550 System." – Atchison County Levee District #1.

"Closure of the breach L550-A has been challenging from the very beginning due to site access restrictions, rapidly changing site water elevations, and the overall magnitude of the levee damage and repair…The level of camaraderie, coordination, and hard work on this project is beyond anything I have experienced in my time with USACE." – USACE Resident Engineer. Completion date: 2020.

Project/Reference #2. Topographic and Subsurface Utility Survey to Support Fort Detrick Potable Water Supply System Upgrade/Repair (Weston)

Project Address: 810 Schreider St Ste 1

Key Personnel: D. Borger, C. Burt, R. Ederer, N. Harkins, M. Stratton

Project City / State / Zip: Frederick, MD 21702

Reference Contact Name / Phone No. / Email: Laura Lokey-Flippo, Project Manager, USACE / 256-895-1205 / laura.lokeyflippo@usace.army.mil

Project Description: Weston is currently performing a site survey/field investigation to determine condition assessment, code and criteria compliance and design requirements to identify the location and severity of degradation of pipes within Fort Detrick's potable water system and support the design for upgrades/repairs to the system. Work involves a field investigation to document current condition of potable water distribution system, design replacement piping and appurtenances, and construction work to replace more than 15,000 LF of water mains, the associated service connections, fire hydrants, valves, and appurtenances. Specialty subcontractor RETTEW conducted a SUE Quality Level B survey for more than 15,000 LF of proposed potable water utility alignment. The location of identified utilities were field marked, and a topographic survey of the project route was conducted by survey crews. Employed air knife vacuum excavation methods to install test holes and obtain SUE Quality Level A information at more than 35 critical utility crossing locations. Produced

utility and topographic survey deliverables as well as a technical report with analysis of deficiencies and prioritization of recommended corrective improvements for effective and efficient long-term solutions to the current water quality and deteriorated infrastructure. The deliverables received little to no government comments. Completion date: Ongoing.

Project/Reference #3. Utility Survey, As-Built Survey, and Facility Condition Assessment to Support Design/Build Rehabilitation of Fort Detrick Sanitary Sewer System (Weston)

Project Address: 810 Schreider St Ste 1

Key Personnel: J. Bielawksi, D. Borger, A. Brown, C. Burt, N. Harkins, D. Hernandez, M. Stratton

Project City / State / Zip: Frederick, MD 21702

Reference Contact Name / Phone No. / Email: Laura Lokey-Flippo, Project Manager, USACE / 256-895-1205 / laura.lokeyflippo@usace.army.mil

Project Description: Weston is the Designer of Record and Prime to provide turnkey design-build services to rehabilitate the sanitary sewer system in Fort Detrick's main cantonment area. The project consists of a performing a condition assessment, providing recommendations, and designing and rehabilitating the system using trenchless technologies to support Fort Detrick's critical biodefense mission. Weston provided a Site Technical Lead and a SHSO to manage the site activities that began with a comprehensive field survey of all components of the sanitary sewer system performed by RETTEW. The sanitary system is comprised of 66,000 LF of sewer mains, 357 manholes, and multiple pump stations.

Field survey included surface topography, including stormwater drainage features, all physical improvements, and the marked location of all buried and aboveground utilities. Weston verified the location and identity of all buried utilities and provided direction/oversight of our qualified subcontractor in conducting a Subsurface Utility Engineer (SUE) Quality Level B survey for more than 34,000 LF of sanitary sewer alignment, using ground penetrating radar, along with inductive and conductive methods to locate, mark, and survey the location of all buried utilities. A SUE Quality Level A survey was also conducted using air-knife vacuum excavation methods to explore over 50 critical utility crossing locations. As-built drawings were delivered in AutoCAD and GIS files. A CCTV inspection and NASSCO condition assessment was also conducted on 34,000 LF of sanitary sewer mains and a NASSCO Level 1 inspection of more than 250 manholes to support the development of system rehabilitation recommendations. CCTV data was collected using the NASSCO grading system for rehabilitation. Pipe cleaning services were provided to facilitate CCTV and manhole inspections.

Weston presented the results of the utility survey and condition assessment to support recommendations to rehabilitate the system, including a comprehensive cost estimate. Rehabilitation recommendations were based on the results of the NASSCO grading system for sewer pipe and manholes, and a capacity assessment that found flow constrictions. USACE approved the recommendations and Weston commenced design services that included preparation of 65%, 95%, 100%, and Issued for Construction plans/specifications; a Basis of Design Report; detailed construction cost estimates and schedules; and obtaining permits. Design methods focused on in situ trenchless technologies to minimize operational impacts. Construction on the sanitary sewer began in Feb 2022. Completion date: Ongoing.

APPENDIX B-14: STORMWATER MANAGEMENT AND DRAINAGE PLANS

Project/Reference #1. Santa Fe River Repairs (Weston)

Project Address: Santa Fe River Trail, Santa Fe County

Key Personnel: A. Brown, M. Major

Project City / State / Zip: Santa Fe, NM

Reference Contact Name / Phone No. / Email: Scott Kaseman, City of Santa Fe / 505-992-9868 / skaseman@santafecountynm.gov

Project Description: Supported by a team of local subconsultants ranging from geomorphologists to public involvement specialists, Weston worked alongside USACE to analyze river conditions and address severe degradation of the channel to enable development of a key stretch of the long-sought Santa Fe River Trail. Weston designed localized drainage features and river stabilization structures according to green infrastructure practices, backed by sound hydraulic engineering principals. We also addressed mitigation and removal of abandoned vehicles, construction debris, and concrete rubble. Weston designed the Phase 4 trail and river channel improvements in 2013; however, shortly afterwards, large storm events altered the river channel before construction could take place. At the request of the county, Weston, with the assistance of Riverbend Engineering, has since redesigned the Phase 4 segment utilizing new topographic data. Several design adjustments were made to bank stabilization and grade control structures based on observations of the completed segments during those large storm events. Construction of Phase 4 was completed for this river restoration and trail implementation project, extending an additional 1.3 miles through a more open reach of the Santa Fe River from Camino Carlos Rael to the Siler Road bridge crossing. Once the project had completed construction, a major storm event (1,000 year storm event) in July of 2018 damaged many of the recently installed river stabilization features. Weston worked closely with the County and the contractor to mitigate the damage and oversee reconstruction back to designed requirements. This also required attending public meetings with County staff to present the extent and nature of the damage to local residents. The project is now complete and functioning effectively as stormwater travels down the revitalized river channel. Completion date: 2022.

Project/Reference #2. Levee Repairs L550 (Weston)

Project Address: Levee L-550, North of Highway 136

Key Personnel: A. Brown, D. Chernick, N. Harkins, M. Major, M. Stratton

Project City / State / Zip: Atchison County, MO

Reference Contact Name / Phone No. / Email: Timothy Davey, USACE Omaha District / 402-680-8002 / Timothy.J.Davey@usace.army.mil

Project Description: With rising Missouri River levels, an improved level of protection was required. Weston managed interim repairs for increased level of protection and managed the closure of two inlet breaches in the L-550 levee system, a 21-mile-long levee embankment at river mile (RM) 538.3 and at RM 542.8 to stop the flow of stormwater flooding into surrounding farmland, and four exit breach closures. Damage included levee crest erosion, critical section loss, rills and other slope erosion, control berm erosion, degradation of relief wells (232) and drainage structures (11). A custom fence and gINT® template was created to enhance review of both CPT and SPT datasets in an efficient and repeatable manner. Due to high water velocity quarry shot rock was used to armor the floor of the remaining channel, and a combination of barge-mounted and land-based equipment was used to place large rip rap from both sides of the channel to complete the closure berm. Simultaneously, Weston recommended and obtained approval from the PDT to construct a shot rock revetment across an eroded channel along the bank of the Missouri River channel to slow water flow through the second inlet breach. The shot rock was delivered and placed by river barge which substantially accelerated closure of the second breach.

After completion of interim repairs of the inlet breaches the USACE issued several scope changes (design memoranda) to include non-breach levee repairs. The design memorandum included a shift in priorities in late 2019 to focus on closure and repairs of outlet breaches and severe critical section loss along the southern

portion of the L550 levee system, with the goal to complete these repairs and achieve full levee height by March 1, 2020. The effort required extensive repairs and follow-on maintenance of 24 miles of haul roads damaged by the flooding to haul both non-cohesive and cohesive fill to the remote outlet breach location. To achieve the aggressive milestone the number of haul trucks operating between the borrow areas and the outlet breach repairs increased over time to 110 trucks operating both day and night shifts, resulting in over 53,000 truck-miles each 24-hour period with no injuries. Both dust control and icing were a concern during the winter months and was addressed using sand and periodic calcium chloride treatments.

Closure of the largest outlet breach (1,500 feet wide) was completed on February 12, 2020 and more than three miles of the most severely damaged portion of the levee was restored to full pre-flood levee height on March 2, 2020. *"Closure of the breach L550-A has been challenging from the very beginning due to site access restrictions, rapidly changing site water elevations, and the overall magnitude of the levee damage and repair…The level of camaraderie, coordination, and hard work on this project is beyond anything I have experienced in my time with USACE." – USACE Resident Engineer.* Completion date: 2020.

Project/Reference #3. Confidential Manufacturing Client (Weston)

Project Address: Confidential

Key Personnel: A. Brown, N. Harkins, M. Stratton

Project City / State / Zip: Confidential site in NJ

Reference Contact Name / Phone No. / Email: Confidential Client

Project Description: Weston is the primary environmental consultant for a large and complex CERCLA site in southern NJ encompassing over 2 miles of residential, commercial and government-owned properties with 5 distinct operable units (OUs). Discharges of process water and runoff/leaching from lagoons and land disposal areas impacted over 2 miles of 3rd party properties, waterbodies and streams with heavy metals including Lead and Arsenic, primarily. Weston completed the Remedial Investigation/Feasibility Study (RI/FS) to determine the horizontal and vertical extent of metals in soil, sediment, surface water, pore water and groundwater; and evaluate potential remedies. Weston also prepared the remedial design (RD) in one of the OUs. Weston provides construction management and oversight for the remedial action on two OUs. There were numerous challenges including regulatory deadlines, threatened or endangered species habitat, pandemic conditions, small working areas, after hours responses, and extensive engineering controls to manage groundwater, waterbodies, and construction dewatering. Weston provided the engineering design plans for approximately 60 residential remediations. This extensive effort was complicated by the presence of lakes and creeks adjacent to or running through a large majority of these properties. Weston designed new primary and secondary outfalls, including all structures associated with the outfalls, and also designed storm water conveyance/controls into a nearby pond. Weston is responsible for documenting the progress of the work, substantiating that work is completed in accordance with contract design drawings and specifications and ensuring that intrusive work is protective of the surrounding potential sensitive receptors. Completion date: Ongoing.

APPENDIX B-15: STRUCTURAL INVESTIGATION AND ASSESSMENT

Project/Reference #1. Structural Assessment Services, Retail Building (PESI)

Project Address: 32766 John R Road

Key Personnel: F. Condurat, G. Souder

Project City / State / Zip: Madison Heights, MI 48071

Reference Contact Name / Phone No. / Email: The Dufresne Spencer Group, LLC (contact information may be available upon request)

Project Description: PESI was engaged to perform a structural assessment/investigation for a retail property in Madison Heights, MI. The scope included a site visit to do the following:

- Review any provided construction, as built, or construction improvement documents.
- Perform a walk-through survey of the subject property to observe the current condition of the existing structural systems in addition to any adjacent impactful site improvements and site drainage.
- Provide recommendations for remediation of any structural deficiencies or distress observed.
- Provide order of magnitude opinion of costs for recommended repairs. Present recommendations in narrative, graphic, and photographic format.

PESI provided a structural assessment/investigation report that included a summary of findings, recommendations for remediation of deficiencies and distress and order of magnitude costs for the recommended repairs. Over $900k in recommended repairs in the 50,000-SF building were identified during the assessment. Completion date: 2022.

Project/Reference #2. Structural Assessment/Investigation, Bank of America Tower (PESI)

Project Address: 110 North Wacker Drive

Key Personnel: A. Civitano, N. Benton, G. Souder, Y. Zajac

Project City / State / Zip: Chicago, IL 60654

Reference Contact Name / Phone No. / Email: Eric Johnston, Callahan Capital Partners / 970-870-8750 / eric.johnston@callahancp.com

Project Description: PESI provided Facilities Condition Assessment for Bank of America Tower, Chicago in 2021 for an Equity Institutional Investor client. Bank of America Tower Chicago was built in 2020, a 56-story, Class A office building with two below-grade levels, roughly 1.5-1.7 MSF. The scopes included building systems assessment, structural assessment, property condition assessment, façade assessment, and Phase I Environmental Site Assessment Report. The facility condition assessment reports provided immediate and long-term system repair opinions, cost estimates for facility maintenance and capital investment planning purposes. PESI provided a structural assessment/investigation report that included a summary of findings, recommendations for remediation of deficiencies and distress and order of magnitude costs for the recommended repairs. The property was located on the River and contained a below grade parking deck along the River which initiated additional concerns around the building structural. PESI identified maintenance over the reserve period as well as several immediate issues which were further evaluated with the General Contractor and were corrected. All of the specialty reports were incorporated into the condition assessment. Completion date: 2022.

Project/Reference #3. Facility Condition Assessments and Structural Assessment of USPS Facilities Nationwide (PESI & Weston)

Project Address: Nationwide

Key Personnel: M. LaFalce, G. Souder

Project City / State / Zip: Nationwide

Reference Contact Name / Phone No. / Email: USPS Jeremy Merlo, USPS / 860-285-7024 / JeremyJMerlo@usps.gov

Project Description: Through a master agreement, the PESI team has successfully completed more than 20 facility assessments around the country for the U.S. Postal Service (USPS). USPS relies on PESI to provide industry-standard Facility Condition Assessments to assist in the evaluation of the physical aspects of subject properties and how the condition may affect the soundness of their financial decisions over time. The condition assessment included an evaluation of the structural systems for condition, useful life analysis, and detail description of deficiencies, recommended repairs, deficiency costs, photos, a capital planning schedule.

The Facility Condition Assessments performed by PESI is based upon, but not limited to, the guidelines set for by ASTM E2018-08 and Standard & Poor's (S&P) Guidelines that govern condition assessments. Our review of the subject property consists of a visual assessment of the site, the structure(s) and the interior spaces.

PESI is also providing roofing evaluations for USPS facilities nationwide.

Result/Benefit: PESI goes beyond ASTM E2018-08 and S&P guidelines to create a more comprehensive deliverable report. The additions to ASTM E2018-08 include the following: a threshold value $1,000, less than the threshold $3,000 ASTM value; flood zone, wind, and seismic zone information; an estimated Annual Reserve Replacement Budget Table, which is modified for the client based on the evaluation period, inflation costs, and requests of the client; and a Short-term Analysis is incorporated in the Immediate Repairs and Deferred Cost Estimate Table. Completion date: Ongoing

APPENDIX B-16: TRAIL DESIGN AND DEVELOPMENT

Project/Reference #1. Alameda Bosque Trail, Drain Trail Master Plan and Phase I BMP Design (Weston)

Project Address: 1401 New Mexico 528
Key Personnel: R. Ederer
Project City / State / Zip: Albuquerque, NM 87114
Reference Contact Name / Phone No. / Email: Zach Troncoso, Parametrix / (505) 998-5554 / ZTroncoso@parametrix.com
Project Description: The Phase 1 and 2 recreational trail parallels the Alameda Drain along Second Street from Paseo de Norte to Montano Avenue. Alameda drain is an irrigation and stormwater control channel managed by the Middle Rio Grande Conservancy District that receives stormwater from the Rio Grande Valley areas west of Interstate 25. Parametrix lead the design of the recreational trail. Weston was contracted to design stormwater improvements associated with the overall trail design to address water quality in the drain.

As part of the Master Planning team, Weston evaluated impacted storm water sources and developed suitable Best Management Practices (BMPs) to address improving dissolved oxygen levels, suspended solids and "floatable" waste within the drain. These details were developed to suit localized conditions but can be modified for application in other areas.

Our BMP concepts were refined for construction and include low impact water quality features such as permanent stepped drop structures at existing pipe outlets to reduce erosion, provide filtration and aeration and check dams that will be placed in the channel bottom to allow pooling and sedimentation, and engineered tree wells were included as filtration treatment structures between drain inlets and Second Street and outlets into the Drain. Weston also provided support during construction of Phase 1.

Weston continued to support the project with the detailed design of Phase 2A and 2B BMPs which further refined the log/rock check dams placed in the channel for settling and aeration, step drop structure at existing drainpipe outlets for debris removal and erosion/sediment control, and tree well filtration structures for metals and petroleum hydrocarbon removal installed on storm drainpipes. Weston provided construction phase services support during Phase 2A and is currently providing construction phase services for Phase 2B.

Phases 1 and 2 were within Bernalillo County jurisdiction. Working in parallel to those tasks, Weston also worked on the design of Segments 1 and 2 within the City of Albuquerque jurisdiction. This task involved preparing 90% construction drawings for those segments, which include similar BMPs as the previous phases. Completion date: 2021.

Project/Reference #2. Meadowlark Trail, Design of Road, Drainage, and Trail Improvements (Weston)

Project Address: Meadowlark Trail
Key Personnel: A. Brown, N. Harkins
Project City / State / Zip: Corrales, NM 87048
Reference Contact Name / Phone No. / Email: Lynn Siverts, Parks and Recreation Director, Village of Corrales / 505-899-8900 / LSiverts@corrales-nm.org
Project Description: For the Village of Corrales West Meadowlark design of road, drainage, and trail improvements the Weston team fulfilled the requirements of the multi-faceted design objectives while meeting the project deliverable obligations for Final Construction Drawings managed by the New Mexico Department of Transportation (NMDOT). The Weston team completed Final Construction Design Plan drawings to NMDOT specifications and performed professional services required to prepare Plans, Specifications and Estimate (PS &E) documents within the scheduled time. The Weston team worked with the Village, and user groups to validate and optimize the planned configuration of the trails/pathways relative to the roadway modifications. The proposed cross section of Meadowlark now accommodates all user requirements along with effectively managing traffic flows. Design elements used in this project include, crossings for bike riders and pedestrians and native plant materials as a traffic calming strategy. Other design elements include bioswales to

address storm water quality requirements and sharrows to give cyclists the ability to share the traffic lane when going eastbound. Completion date: 2019.

Project/Reference #3. Santa Fe River Greenway (Santa Fe River Trail Phases 1-4) (Weston)

Project Address: 2001 Agua Fria St

Key Personnel: A. Brown, R. Ederer, L. Blanchette, D. Hernandez

Project City / State / Zip: Santa Fe, NM 87505

Reference Contact Name / Phone No. / Email: Scott Kaseman, Project Manager, Trails Program, Santa Fe County / 505-992-9887 / skaseman@santafecountynm.gov

Project Description: Supported by a team of local subconsultants ranging from geomorphologists to public involvement specialists, Weston worked alongside USACE to analyze river conditions and address severe degradation of the channel to enable development of a key stretch of the long-sought Santa Fe River Trail.

Development of the trail itself posed significant challenges because of limited right-of-way and the desire to preserve as much existing vegetation as possible. Weston solved the problem by specifying a green wall reinforced fill system, never before attempted in New Mexico, to support the trail without the need to excavate footings for large retaining walls. Construction of Phase 3 was completed for this river restoration and trail implementation project, extending 1.3 miles through a very constrained reach of the Santa Fe River from Camino Alire to Camino Carlos Rael.

Weston designed localized drainage features and river stabilization structures according to green infrastructure practices, backed by sound hydraulic engineering principals. We also addressed mitigation and removal of abandoned vehicles, construction debris, and concrete rubble. Weston designed the Phase 4 trail and river channel improvements in 2013; however, shortly afterwards, large storm events altered the river channel before construction could take place. At the request of the county, Weston, with the assistance of Riverbend Engineering, has since redesigned the Phase 4 segment utilizing new topographic data. Several design adjustments were made to bank stabilization and grade control structures based on observations of the completed segments during those large storm events. Construction of Phase 4 was completed for this river restoration and trail implementation project, extending an additional 1.3 miles through a more open reach of the Santa Fe River from Camino Carlos Rael to the Siler Road bridge crossing.

Once the project had completed construction, a major storm event (1,000-year storm event) in July of 2018 damaged many of the recently installed river stabilization features. Weston worked closely with the County and the contractor to mitigate the damage and oversee reconstruction back to designed requirements. This also required attending public meetings with County staff to present the extent and nature of the damage to local residents. The project is now complete and functioning effectively as stormwater travels down the revitalized river channel. Completion date: 2019.

APPENDIX B-17: WASTEWATER SYSTEMS

Project/Reference #1. Village of Roberts Wastewater Treatment Plant Upgrades (Weston)

Project Address: 750 WI-65

Key Personnel: J. Ruiz, E. Coggin, M. Abbott, L. Blanchette

Project City / State / Zip: Roberts, WI 54023

Reference Contact Name / Phone No. / Email: John Bond, Village of Roberts / 715-760-1312 / rbtswwtp@baldwin-telecom.net

Project Description: For the Village of Roberts, Wisconsin, Weston performed design services from the initial reconnaissance and pilot test evaluation for Advance Biological Nutrient Recovery (ABNR), through pre-construction engineering and design for this 2019 *Environmental Business Journal* "Innovation Award" winning sustainable system, the first use of a full scale ABNR system in North America. The upgraded 0.465 MGD domestic WWTP plant reduced phosphorus 99% to meet a WQBEL total limit of 0.04 mg/L. Weston accelerated the design and worked closely with regulators to permit this new technology without established standards, allowing a construction start in time to meet regulatory deadlines. The ABNR system turns the problem of algae growth into a solution by employing a controlled algae growth in the wastewater treatment process to remove nutrients before discharge, thereby meeting discharge limits that prevent unwanted hazardous algae blooms in the receiving water. The controlled algae growth is accomplished in a tertiary treatment system added to the existing sequencing batch reactor (SBR) secondary treatment plant. The ABNR system, developed by Clearas Water Recovery, Inc. (CLEARAS), includes photo-bioreactors (PBRs) in a greenhouse followed by ultrafiltration membrane separation to permeate the final effluent and return the algae to the PBRs. Excess algae is harvested from the algae return to maintain consistent operating conditions. Light-emitting diode (LED) grow lights installed in the greenhouse allow 24-hour operations. Carbon for algae growth is supplied as carbon dioxide (CO2), a by-product of a nearby ethanol plant. This project began with an investigation/evaluation of wastewater treatment technologies that included pilot testing of chemical precipitation, biological, and membrane separation systems. The results of the investigation and pilot testing, along with the desire for a sustainable solution, led to selection of the ABNR system. The existing SBR system was evaluated using Bio-win modeling to estimate overall system performance under various operating scenarios. Various pumping systems were designed, including submersible EQ tank booster; positive displacement PBR feed; solids return; membrane permeate; and multi-stage centrifugal for effluent reuse. Weston performed all services and design except electrical, relying on CLEARAS for assistance on its proprietary system. O&M is ongoing. Completion date: Ongoing.

Project/Reference #2. San Antonio Water System (SAWS) Lift Station Design (Weston)

Project Address: six lift station locations, San Antonio

Key Personnel: D. Chernick

Project City / State / Zip: San Antonio, TX 78212

Reference Contact Name / Phone No. / Email: Ila Drzymala, Ph.D., P.E., SAWS / 210-233-3146 / Ila.Drzymala@saws.org

Project Description: Weston provided engineering design services for the rehabilitation of six lift stations in San Antonio. The project included rehabilitation design to improve or modify lift station reliability, capacity, operation, ease of maintenance, site accessibility, emergency reliability, remote communication Supervisory Control and Data Acquisition (SCADA), security and safety controls, and flood protection. Weston drafted a preliminary engineering report (PER) which detailed findings, proposed improvements, and our professional recommendations. We successfully mitigated several risks with the potential to impact project completion:

- For bypass pumping, where multiple lines were coming into a wet well, consideration was given to collecting the incoming flow into a single manhole for future ease of maintenance and bypass pumping, rather than having to manage and bypass flow from multiple incoming sewer inlet lines.
- In limited-site areas, cellular routers were provided in lieu of radio towers for SCADA communication.
- Where the lift station was below the 100-year flood elevation, electrical equipment was raised to keep above the flood elevation, and an access platform was designed to facilitate operation of the electrical equipment.

- When space was limited, new deeper wet wells were placed close to the existing wet well with tunnel liner plate shore protection designed to protect existing concrete structures.

Weston provided unique solutions to support existing structures near new deeper wet wells. The Engineers' OPCC was $2,997,000, and the low bid was $3,166,000, which was 5.6% higher than OPCC, which is within SAWS expectations on the OPCC. Completion date: 2019.

Project/Reference #3. Sunset Oaks Wastewater Treatment Plant Expansion (Weston)

Project Address: 720 River Road
Key Personnel: A. Brown, D. Chernick
Project City / State / Zip: San Marcos, TX 78666
Reference Contact Name / Phone No. / Email: Scot Folz, Aqua America Inc. / 512-990-4400 / swfoltz@aquaamerica.com
Project Description: The Sunset Oaks Wastewater Treatment Plant (WWTP) is located in Hays County approximately 0.5 mile north of the intersection of Highway 21 and Yarrington Road. Sunset Oaks is a new construction community development. The initial phase requires a treatment capacity of 0.27 million gallons per day (MGD) average daily flow (ADF), with a plan for a Phase II expansion to 0.54 MGD ADF. Phase III will increase to 0.895 MGD ADF, and the ultimate buildout will require a capacity of 1.25 MGD ADF. Sunset Oaks WWTP is a new WWTP with ultimate buildout for 5 MGD peak flow. Weston has been contracted by Aqua Texas Inc. (AQUA) to provide engineering services to provide design alternatives to provide sufficient wastewater treatment capacity for the planned community Provided design, bid and construction phase services for both the plants. The existing Texas Commission on Environmental Quality (TCEQ) permit will be resubmitted with major amendments—increasing the ultimate buildout flow from 0.54 MGD ADF to 1.25 MGD ADF; location of the plant moved approximately 0.4 mile southeast; effluent outfall location to be moved closer to the treatment plant. Prepared major modification permit for build out of 5 MGD, and relocation of outfall. The plant also included tertiary filtration to produce reclaim water that can be used for irrigation purposes. Weston provided planning, preliminary engineering, design, bid and award, permitting and construction phase services for this new WWTP. Completion date: 2021.

Project/Reference #4 Barton Creek Lakeside Wastewater Treatment Plant Expansion (Weston)

Project Address: 2101 Lauren Drive
Key Personnel: A. Brown, D. Chernick
Project City / State / Zip: Spicewood, TX 78669
Reference Contact Name / Phone No. / Email: Brent Reeh, Aqua America Inc. / 512-844-9699 / bcreeh@aquaamerica.com
Project Description: This project included expansion of the existing Barton Creek Lakeside WWTP capacity by 15%. Weston conducted a lift station inspection and facility condition assessment to determine lowest lifecycle cost and best-value improvements for the facilities. We then performed full design through facility startup/operations for the owner-selected improvements consisting of the demolition of existing lift station facilities and design of new facilities. A new emergency backup power was added to run all the critical loads and consisted of a tier 2, 80-kw diesel generator with integral dual-walled fuel storage tank and ATS. A soundproof enclosure (72 decibels at 7 meters) was designed to minimize noise levels for the residential neighborhood. The new lift station included fiberglass reinforced plastic wet well, pumps, force main, and electrical/I&C/SCADA systems. Triplex submersible pumps were installed to meet peak capacity of 0.5 MGD. Weston provided permitting and site/civil design along with structural design of the foundation for the generator and performed design and construction management for the demolition of the existing lift station with a phasing plan for operations and transition. Gravity sewer improvements were designed to connect to the new wet well. Weston designed an effluent metering station that consists of v-notch weir and an ultrasonic level sensor for recording plant effluent flows to report to TCEQ. The TCEQ permit for demolition of the existing plant and site development permits from Travis County and LCRA were completed in record time of one month. Completion date: 2021.

APPENDIX B-18: WATER SUPPLY SYSTEMS

Project/Reference #1. Asbestos Cement (AC) Water Line Replacement (Weston)

Project Address: Northeast Austin

Key Personnel: A. Brown, D. Chernick

Project City / State / Zip: Austin, TX 78758

Reference Contact Name / Phone No. / Email: Javi Gonzalez, P.E., City of Austin / 512-974-5635 / Javi.gonzalez@austintexas.gov

Project Description: Weston completed preliminary and final design of the replacement of approximately 7,000 linear feet of 6-inch, 8-inch, and 12-inch water main and appurtenances by open cut and trenchless methods, removal of approximately 5,500 linear feet of 6-inch, and 8-inch asbestos cement pipe, and installation of approximately 2,000 linear feet of 8-inch wastewater main by open cut and trenchless methods. We evaluated various trenchless methods and designed Horizontal Directional Drilling (HDD) for one of the segments under a drainage culvert. The scope included evaluation of trenchless construction methods and open trench replacement. Weston addressed special specifications for handling and disposal of asbestos, and trenchless methods design (both pipe bursting and HDD). The AC pipe removals consisted of 5500 LF of 6-inch AC pipe, which was abandoned and was specified to be grouted per City standards. The project site is located in a critical water quality zone that required special permitting from the City for construction. Weston performed all work in accordance with construction specifications for uncovering, dislodging, handling, removing, transporting, and disposing of AC piping, in compliance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 Code of Federal Regulations (CFR) 61, OSHA 29 CFR1926.1101, and all Texas State codes and regulations. Completion date: 2020.

Project/Reference #2. Highway 21: Water Service Line Design/Construction (Weston)

Project Address: Highway 21

Key Personnel: A. Brown, D. Chernick

Project City / State / Zip: San Marcos, TX 78666

Reference Contact Name / Phone No. / Email: Kirk Abbott, PE, Project Manager, City of San Marcos / 512-393-8130 / kabbbott@sanmarcostx.gov

Project Description: In preparation for construction of a new-build fire training facility along Highway 21, the City of San Marcos wanted to add a 12” water service line. Weston provided design, bid, and construction phase services for the installation of approximately 9,030 LF of 12” PVC water line on City of San Marcos Regional Airport property along State Highway 21, connecting to an existing line from Airport Drive to William Pettus Drive, to serve the new adjacent fire training facility. The majority of the installation consisted of open cut trenching, and 400 LF of the installation was performed by jack and bore. A review of the Critical Habitat for Threatened & Endangered Species from the U.S. Fish and Wildlife Service (USFWS) reveals the project area did not contain any critical habitats. Completion date: 2021.

Project/Reference #3. Drinking Water Treatment System Design, Construction, and O&M, Aliamanu Military Reservation, Red Hill Underground Fuel Storage Facility, and Joint Base Pearl Harbor-Hickam (Weston)

Project Address: 1250 South Drive

Key Personnel: A. Brown, E. Coggin

Project City / State / Zip: Honolulu, HI 96818

Reference Contact Name / Phone No. / Email: Timothy Gouger – USACE Omaha / 402-995-2191 / Timothy.P.Gouger@usace.army.mil

Project Description: Red Hill is a World War II-era facility carved into basalt rock and overlying Oahu’s primary aquifer, which supplies water to 93,000 residents. In November 2021, a fire-suppression drain line leaked 14,000 gal of a jet fuel/water mixture, which subsequently penetrated the potable water well, resulting in sickened and displaced military service members/families. Petroleum products were also detected in water

samples taken from the local Red Hill Elementary School. Weston mobilized 17 personnel and resources to the project site within 24 hours of project award to perform time-critical treatment of the Water Supply System to remove petroleum and petroleum-related contaminants. Treatment included design, construction, and operational phases of the commissioning process for three granular activated carbon (GAC) systems to provide safe drinking water to affected residents, schools, and businesses. Within 24 hours of project award, our team had begun construction of concrete pads for the treatment system vessels, in order to support urgent restoration needs and maintain an aggressive schedule.

Within the next week, the team organized the delivery of the GAC vessels to the site, working 24 hours a day, 7 days a week, with staff rotating on 12-hour shifts, and designated safety representatives to oversee each site, ensuring concurrent work between the sites, to construct, install, and commission the GAC treatment systems. By advancing this aggressive schedule, we provided USACE with two operationally ready GAC treatment systems within 8 weeks of award.

Additionally, we plumbed lead and return lines from existing tanks and pressure headers to the new systems; installed shore power as well as instrumentation panels and monitoring devices (flow meters, etc.) to the treatment units; performed system startup and calibration for pressure and flow; and implemented our Commissioning Plan in accordance with Hawaii Department of Health (HDOH) requirements.

Weston managed construction and demolition waste, aqueous waste, and activated carbon dust sludge. To install necessary piping, we dug up concrete and asphalt, which created construction and demolition waste. When we backwashed the carbon units to flush out dust and air, half a million gallons of water were generated. To properly dispose of this water, we filtered and discharged the aqueous waste via the sanitary sewer system. Activated carbon dust was vacuumed out of the vessels and transported to a hazardous waste landfill.

Weston obtained all applicable federal, state, and local permits, clearances, and certifications to perform the work. While a NPDES permit wasn't required because the work area was less than 1 acre, we were required to obtain an official COSA, which is authorization from the Army to take possession of the site and operate on behalf of the army on site. Our team also performed utility clearance and mark-outs prior to execution of intrusive activities, ensuring permits and dig tickets are in place prior to executing any intrusive work. When required, dig permits were refreshed throughout the duration of intrusive activities on USACE and Navy land.

Prior to construction, we conducted a test for compaction at each installation location to assess if the area would support the proposed treatment systems. An initial survey was also conducted for significant features within construction areas with a potential follow-up survey for verification prior to placement. Weston identified and established a suitable laydown yard and Command Post, including security features and lighting as necessary.

With GAC equipment reaching as high as 26 ft, we constructed the GAC treatment trains using a portable crane and installed shore power to treatment units, ensuring overhead lines met required height and that vegetative obstructions were removed before setting poles/lines. Leak tests on all fitting and piping connections were conducted as necessary. We also installed all instrumentation panels and monitoring devices prior to performing system startup and calibration for pressure and flow. We then implemented a commissioning plan for compliance with drinking water standards.

To achieve project closeout, we will execute all construction activities in a manner that minimizes disruption to facility operations and the public, and we will then restore all disturbed areas to previous conditions before demobilizing from the site. Ultimately, our successful commissioning of 3 GAC systems will reinforce the Navy's commitment to providing drinking water that is protective of human health for the 7,000+ military families using its water system. Completion date: Ongoing

Project/Reference #4. Emergency Infrastructure Repairs, Military Ocean Terminal Sunny Point (MOTSU): Brunswick Road Restoration/Water Line Extension and Repair (Weston)

Project Address: 6280 Sunny Point Army Terminal
Key Personnel: A. Brown, L. Blanchette, N. Harkins
Project City / State / Zip: Southport, NC 28461
Reference Contact Name / Phone No. / Email: Tim Gouger, USACE Omaha / 402-995-2191 / timothy.p.gouger@usace.army.mil
Project Description: MOTSU is operated by the 596th Transportation Brigade, on a 16,000-acre, Army-owned

site, and the facility is the key ammunition shipping point on the Atlantic Coast for the DoD. As the result of flooding from Hurricane Florence in September 2018, the MOTSU Army Installation had been inundated and damage to infrastructure occurred to the point of compromise for the National Defense Mission for worldwide trans-shipment of critical DoD resources. Weston was tasked to repair this critical infrastructure, enabling the re-establishment of mission-critical operations. Weston mobilized a team of seven professionals within 2 days of award to conduct an initial site assessment/kick-off and to determine the extent of required repairs.

Due to the Hurricane, heavy rainfall caused stormwater overtopping of the Brunswick Road, resulting in damage to the roadway. The Weston team repaired ~700 (linear feet) LF of the eastbound lane of Brunswick Road, and 2,800 LF of asbestos-cement waterline pipe was replaced with 12-inch diameter polyvinyl chloride (PVC) C-900 pipe. As part of the repair and reconstruction effort, over 3,600 cubic yards (yd3) of cohesive clayey sand material was imported and used to rebuild the road shoulder and embankment. In accordance with North Carolina Department of Transportation specifications, 1,700 yd3 of roadway subbase, 1,000 yd3 of aggregate base course (ABC) material, and 525 tons of asphalt was imported and used to reconstruct the road. In addition, 1,100 LF of new guardrail was installed along the south roadway shoulder.

The final inspection for the 2,100 LF waterline extension was conducted in January 2019, and punch list items identified during the inspections were addressed and documented in follow-up QC Daily Reports provided in Appendix A of the Final Report. Weston then procured a state-registered surveyor, who conducted field surveys following the final inspections and prepared as-built records drawings to document final conditions at the site. As a result of our emergency infrastructure repair at MOTSU, Weston was able to identify and implement efficiencies that resulted in a cost savings to the client of approximately $2.5M. *"MOTSU required a high level of professionalism as well as a clear understanding of military operations. Weston was able to perform within the guidelines set by MOTSU and USACE. There was several project locations within the MOTSU foot print. Weston personnel ensured 100 percent coverage and exceeded the installation and USACEs expectations. Weston maintain a positive construction schedule float throughout the construction period and provided full time cost control personnel to ensure costs were accurately tracked and forecasted to provide the Government needed information. The work was completed under budget." – Assessing Official, CPAR evaluation, 2019.* Completion date: 2019.

Appendix C: Contract Required Forms

R 08/20

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application
of State Preference/Reciprocity Provisions)

To qualify as a Michigan business:

Vendor must have, during the 12 months immediately preceding this bid deadline:
or
If the business is newly established, for the period the business has been in existence, it has:

(Check all that apply):

☒ Filed a Michigan single business tax return showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ˜208.1 – 208.145: or

☐ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or

☐ Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

Bidder shall also indicate one of the following:

☒ Bidder qualifies as a Michigan business (provide zip code: 48864)

☐ Bidder does not qualify as a Michigan business (provide name of State: _____).

☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code: _____)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Bidder: Weston Solutions of Michigan, Inc.

Joseph Ruiz, Program Manager
Authorized Agent Name (print or type)

1/18/2023
Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN $25,000 and subject to debarment under MCL 18.264.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

(a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.

(b) Has not had a felony conviction in any state (including the State of Michigan).

(c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.

(d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

(e) Has not been terminated for cause by the Owner.

(f) Has not failed to pay any federal, state, or local taxes.

(g) Has not failed to comply with all requirements for foreign corporations.

(h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.

(i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:

   i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
   ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.

iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).

v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.

vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.

vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).

(j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder: Weston Solutions of Michigan, Inc.

Joseph Ruiz, Program Manager
Authorized Agent Name (print or type)

1/18/2023
Authorized Agent Signature & Date

☐ I am unable to certify to the above statements. My explanation is attached.

ACKNOWLEDGMENT OF ADDENDUMS

PSC acknowledges receipt of Addenda: No. _1_ dated: 12/8/2022,

No. ___ dated: _____ No. ___ dated: _____

APPENDIX 3

PROFESSIONAL CERTIFICATION FORMS
(Please see pages 223 - 226)

APPENDIX 4

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

The following instructions are to be used by the Professional Services Professional firms to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional Consultant services they will provide for State of Michigan Projects. A moderate mark-up of the Professional's Consultant services hourly billing rates, not to exceed 5%, will be allowed.

The Department will reimburse the Professional for printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. **No mark-up of these Project costs will be allowed IF such items are provided in house by the Professional.**

2023 HOURLY BILLING RATE
Based on 2022 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:	**EMPLOYEE BENEFITS:**	**INSURANCE:**
Principals (Not Project Related)	Hospitalization	Professional Liability Insurance
Clerical / Secretarial	Employer's Federal Insurance Contributions Act (FICA)Tax	Flight and Commercial Vehicle
Technical (Not Project Related)	Unemployment Insurance	Valuable Papers
Temporary Help Tax	Federal Unemployment	Office Liability
Technical Training	Disability	Office Theft
Recruiting Expenses	Worker's Compensation	Premises Insurance
	Vacation	Key – Personnel Insurance
	Holidays	Professional Liability Insurance
	Sick Pay	
	Medical Payments	
	Pension Funds	
	Insurance - Life	
	Retirement Plans	

TAXES:	**SERVICES (PROFESSIONAL):**	**EQUIPMENT RENTALS:**
Franchise Taxes	Accounting	Computers
Occupancy Tax	Legal	Typewriter
Unincorporated Business Tax	Employment Fees	Bookkeeping
Single Business Tax	Computer Services Bond)	Dictating
Property Tax	Research	Printing
Income Tax	Project / Contract Bond	Furniture and Fixtures
		Instruments

OFFICE FACILITIES:

Rents and Related Expenses
Utilities
Cleaning and Repair

LOSSES:

Bad Debts (net)

Uncollectible Fee
Thefts (not covered by Project / Contract)
Forgeries (not covered by Project / Contract)

FINANCIAL:

Depreciation

SUPPLIES:

Postage

Drafting Room Supplies

General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

PRINTING AND DUPLICATION:

Specifications (other than Contract Bidding documents)
Drawings (other than Contract Bidding documents)
Xerox / Reproduction
Photographs

SERVICES (NONPROFESSIONAL):

Telephone and Telegram

Messenger Services

TRAVEL:

All Project – Related Travel*

MISCELLANEOUS:

Professional Organization Dues for Principals and Employees
Licensing Fees

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET,
VEHICLE AND TRAVEL SERVICES
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective January 1, 2023

MICHIGAN SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	
Breakfast	$11.75	$14.75
Lunch	$11.75	$14.75
Dinner	$28.00	$31.00

MICHIGAN IN-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	
Breakfast	$9.75	$12.75
Lunch	$9.75	$12.75
Dinner	$22.00	$25.00

Lodging	$51.00
Breakfast	$9.75
Lunch	$9.75
Dinner	$22.00
Per Diem Total	**$92.50**

OUT-OF-STATE SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	$15.00	$18.00
Lunch	$15.00	$18.00
Dinner	$29.00	$32.00

OUT-OF-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	$11.75	$14.75
Lunch	$11.75	$14.75
Dinner	$27.00	$30.00

Lodging	$51.00
Breakfast	$11.75
Lunch	$11.75
Dinner	$27.00
Per Diem Total	**$101.50**

Incidental Costs Per Day (with overnight stay) $5.00

Mileage Rates	**Current**
Premium Rate	$0.655 per mile
Standard Rate	$0.440 per mile

* See Select Cities Listing
** Lodging available at State rate, or call Conlin Travel at 877-654-2179 or www.somtravel.com

SELECT CITY LIST
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective January 1, 2023

Michigan Select Cities/Counties		
	CITIES	**COUNTIES**
	Ann Arbor, Auburn Hills, Beaver Island, Detroit, Grand Rapids, Holland, Leland, Mackinac Island, Petoskey, Pontiac, South Haven, Traverse City	Grand Traverse, Oakland, Wayne
Out of State Select Cities/Counties		
STATE	**CITIES**	**COUNTIES**
Alaska	All locations	
Arizona	Phoenix, Scottsdale, Sedona	
California	Arcata, Edwards AFB, Eureka, Los Angeles, Mammoth Lakes, McKinleyville, Mill Valley, Monterey, Novato, Palm Springs, San Diego, San Francisco, San Rafael, Santa Barbara, Santa Monica, South Lake Tahoe, Truckee, Yosemite National Park	Los Angeles, Mendocino, Orange, Ventura
Colorado	Aspen, Breckenridge, Grand Lake, Silverthorne, Steamboat Springs, Telluride, Vail	
Connecticut	Bridgeport, Danbury	
District of Columbia	Washington DC (See also Maryland & Virginia)	
Florida	Boca Raton, Delray Beach, Fort Lauderdale, Jupiter, Key West, Miami	
Georgia	Brunswick, Jekyll Island	
Hawaii	All locations	
Idaho	Ketchum, Sun Valley	
Illinois	Chicago	Cook, Lake
Kentucky	Kenton	
Louisiana	New Orleans	
Maine	Bar Harbor, Kennebunk, Kittery, Rockport, Sandford	
Maryland	Baltimore City, Ocean City	Montgomery, Prince George
Massachusetts	Boston, Burlington, Cambridge, Martha's Vineyard, Woburn	Suffolk
Minnesota	Duluth, Minneapolis, St. Paul	Hennepin, Ramsey
Nevada	Las Vegas	
New Mexico	Santa Fe	
New York	Bronx, Brooklyn, Lake Placid, Manhattan, Melville, New Rochelle, Queens, Riverhead, Ronkonkoma, Staten Island, Tarrytown, White Plaines	Suffolk
Ohio	Cincinnati	
Pennsylvania	Pittsburgh	Bucks
Puerto Rico	All locations	
Rhode Island	Bristol, Jamestown, Middletown, Newport, Providence	Newport
Texas	Austin, Dallas, Houston, L.B. Johnson Space Center	
Utah	Park City	Summit
Vermont	Manchester, Montpelier, Stowe	Lamoille
Virginia	Alexandria, Fairfax, Falls Church	Arlington, Fairfax
Washington	Port Angeles, Port Townsend, Seattle	
Wyoming	Jackson, Pinedale	

APPENDIX 5

CERTIFICATES OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/31/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh USA LLC
1717 Arch Street
Philadelphia, PA 19103
Attn: Philadelphia.certs@Marsh.com Fax: 212-948-0360

CN102357761-WS-COPS-23-24

CONTACT NAME:
PHONE (A/C, No, Ext): **FAX (A/C, No):**
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Greenwich Insurance Company	22322
INSURER B : XL Insurance America, Inc.	24554
INSURER C : XL Specialty Insurance Company	37885
INSURER D : Liberty Mutual Fire Insurance Company	23035
INSURER E : Liberty Insurance Corporation	42404
INSURER F :	

INSURED
WESTON SOLUTIONS, INC.
1400 WESTON WAY
WEST CHESTER, PA 19380

COVERAGES **CERTIFICATE NUMBER:** CLE-007018696-01 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			GEC300071708	01/15/2023	01/15/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	1,000,000 1,000,000 10,000 1,000,000 2,000,000 2,000,000
B	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY			AEC0062776	01/15/2023	01/15/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	1,000,000
C	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 10,000			UEC004535208	01/15/2023	01/15/2024	EACH OCCURRENCE AGGREGATE	$ $	2,000,000 2,000,000
D D E	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WA5-63D-477160-013 (AOS) WC5-631-477160-053 (WI) WC7-631-477160-063 (MA)	01/15/2023 01/15/2023 01/15/2023	01/15/2024 01/15/2024 01/15/2024	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
A	CONTRACTORS POLLUTION / PROFESSIONAL			PEC004536508 SIR: $500,000	01/15/2023	01/15/2024	EACH OCCURRENCE AGGREGATE		2,000,000 4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re:2023 Architectural and Engineering ISID Contract No. 999.
The State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents are included as additional insured, where required by written contract, with respect to General Liability and Auto Liability. Waiver of subrogation is applicable where required by written contract.

CERTIFICATE HOLDER

STATE OF MICHIGAN - DTMB
ATTN: SADI RAYAN
3111 W. ST. JOSEPH ST.
LANSING, MI 49817

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh USA LLC

APPENDIX 6

FEDERAL PROVISIONS ADDENDUM

(If your project is funding wholly or in part by federal funds, this appendix applies)

STATE OF MICHIGAN
PROCUREMENT
Michigan.gov/MiProcurement

FEDERAL PROVISIONS ADDENDUM

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required, and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in 41 CFR Part 60-1.3, and except as otherwise may be provided under 41 CFR Part 60, then during performance of this Contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

c. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

d. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

f. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

g. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

h. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contract** in excess of $2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act (40 USC 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

a. All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.

b. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

c. Additionally, contractors are required to pay wages not less than once a week.

3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of $2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work

Financed in Whole or in Part by Loans or Grants from the United States"), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

a. **Contractor**. The Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

b. **Subcontracts**. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

c. **Breach**. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of $100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5), as applicable, and during performance of this Contract the Contractor agrees as follows:

a. **Overtime requirements**. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

b. **Violation; liability for unpaid wages; liquidated damages**. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

c. **Withholding for unpaid wages and liquidated damages**. The State shall upon its own action or upon written request of an authorized representative of the

Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

d. **Subcontracts.** The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal "funding agreement" as defined under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of $150,000,** the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act (33 USC 1251-1387), and during performance of this Contract the Contractor agrees as follows:

Clean Air Act

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

Federal Water Pollution Control Act

1. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

7. Debarment and Suspension

A "contract award" (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (51 FR 6370; February 21, 1986) and 12689 (54 FR 34131; August 18, 1989), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

a. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

b. The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

c. This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

d. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of **$100,000 or more** shall file the required certification in *Exhibit 1 – Byrd Anti-Lobbying Certification* below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any

person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

9. Procurement of Recovered Materials

Under 2 CFR 200.322, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

i. Competitively within a timeframe providing for compliance with the contract performance schedule;

ii. Meeting contract performance requirements; or

iii. At a reasonable price.

b. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program.

c. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

a. Access to Records. The following access to records requirements apply to this contract:

i. The Contractor agrees to provide the State, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

ii. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

iii. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit

audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

b. Changes.
See the provisions regarding modifications or change notice in the Contract Terms.

c. DHS Seal Logo and Flags.
The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

d. Compliance with Federal Law, Regulations, and Executive Orders.
This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

e. No Obligation by Federal Government.
The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract."

f. Program Fraud and False or Fraudulent Statements or Related Acts
The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

EXHIBIT 1
BYRD ANTI-LOBBYING CERTIFICATION

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than $100,000.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

   This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, enter contractor name here, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

_____

Signature of Contractor's Authorized Official

_____

Name and Title of Contractor's Authorized Official

_____

Date

APPENDIX TO
FEDERAL PROVISIONS ADDENDUM

§ 200.322 Domestic Preferences for Procurements

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

FEDERAL STATE and LOCAL FISCAL RECOVERY FUNDS (SLFRF) PROJECT SPECIFIC REQUIREMENTS

The funding being used for this project is Federal State and Local Fiscal Recovery Funds (SLFRF). As a result, additional provisions apply and are included in this Attachment.

Each primary contracted contractor with the DTMB must register with the Federal System for Award Management (SAM) must register prior to contract execution. The SAM website is https://sam.gov/content/home. The direct hyperlink for SAM.gov registration is https://sam.gov/content/entity-registration

As of April 4, 2022, the Federal government will use a Unique Entity Identifier (UEI) created in SAM.gov as the official subrecipient identifier. All primary contracted contractors with the DTMB will be required to maintain an active registration on SAM.gov. To receive payment, all primary contracted vendors need to have a Unique Entity Identifier (UEI) number and have the UEI entered in their SIGMA account. Information on the UEI and sign up can be obtained at: https://www.gsa.gov/about-us/organization/federal-acquisition-service/office-of-systems-management/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-identifier-update

Contractor is to fill in and provide the following documentation for use in SLFRF reporting prior to Contract Execution for use in the reporting requirements:

Contractor's UEI

_____

Contractor's Full Legal Name

_____

Primary Point-of-Contact Email Address

_____

Business Address

_____

City Business is located

_____

State Business is located

_____

US Zip Code + 4 digits

_____