PSC-AE ISID Billing Rate
Rev 01/15/2021

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 16th day of April in the year two-thousand and twenty-one (2021), 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

G. H. Forbes Associates Architects, PC
816 E. Fourth St.
Royal Oak, MI 48067

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. 00881
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:

G. H. Forbes Associates Architects — Firm Name

CV0023309 — SIGMA Vendor Number

Teresa Solenty — Signature

4/16/2021 — Date

Principal Architect — Title

FOR THE STATE OF MICHIGAN:

Director, DTMB, State Facilities Administration

4/19/2021 — 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 as a result 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.

A. Management Summary
B. Problem
C. Research Findings, Discussion and Details
D. Conclusion
E. 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) provided that 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 in order 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 in compliance with 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:

a) Phase Numbers for the professional services provided.
b) Professional's personnel and position/classification providing service and hours worked
d) Current hourly billing rate charges for each individual position/classification.
e) Copy of certified on-site visitation log or site visit report showing time on-site.

f) Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
g) 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.

Commercial General Liability Insurance	
Minimum Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations Deductible Maximum: $50,000 Each Occurrence	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 2010 07 04 and CG 2037 07 04.
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 Deductible Maximum: $50,000 Per Loss	
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 ***)

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:

a) 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.

b) 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.

b) 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.

c) 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.

e) 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.

f) 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.

g) 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.

h) 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 price 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 authorizing a Professional to: (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 will enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper three (3) sets of 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 made a determination 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

DTMB-0427 (R 01/21)

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	ACCOUNTING TEMPLATE	PROPOSAL DUE DATE
Various	Various	Thursday, March 11, 2021

CLIENT AGENCY
Department of Technology, Management and Budget

PROJECT NAME AND LOCATION
2021 Indefinite Scope Indefinite Delivery (ISID) for General Professional Design Services

PROJECT ADDRESS (if applicable)
Various

CLIENT AGENCY CONTACT	TELEPHONE NUMBER

DTMB - DCD PROJECT DIRECTOR	TELEPHONE NUMBER
Tim Hall	517.881.4173

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 also be uploaded to SIGMA VSS. Please enter $1.00 total cost as proposal amount. Additionally, hard copy proposals MUST also be received by 2:00 p.m., local time on the date due to be considered responsive and responsible.
- Please remember that individual attachments can be no larger than 6mb.
- If you experience issues or have questions regarding your electronic submission, you must contact the SIGMA Help Desk for assistance. They can be reached by telephone at 888.734.9749 or by email at sigma-procurement-helpdesk@michigan.gov
- Vendors are reminded to keep our office apprised of SIGMA VSS issues and to include your SIGMA ticket number when communicating with our office. Emailed submissions will need prior 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.

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

DESIRED SCHEDULE OF WORK
Dependent on the assigned project.

ACCEPTING RFP QUESTIONS UNTIL: 12:00 p.m., local time on Thursday, March 4, 2021

Please do not submit online questions via VSS. ALL questions should be emailed to Tim Hall at hallt2@michigan.gov

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 (DCH, 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)

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:	DATE ISSUED
ALL PROPOSERS	February 2, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: Thursday, March 11, 2021

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

Please replace Questionnaire posted on January 25, 2021 with the Questionnaire posted today with a revision date of 210202

End

APPROVED BY:
Tim Hall
PROJECT DIRECTOR
DATE February 2, 2021

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

REQUEST FOR PROPOSAL
ADDENDUM NO. 2

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 March 5, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: March 11, 2021

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

Below are the questions received and Design and Construction's response

Q1 – Are we required to keep the questionnaire in the word document and format or can we recreate it to match our overall proposal style / font. No information will be cut or excluded.

Response – As long as the DTMB logo, wording, and order are maintained, you may modify the document to match your overall proposal style / font.

Q2 – Under the Article 1 Business Organization section requests submitting firms to list "partnering organizations". If one or more partnering organizations are listed and the intent is that those firms will be providing services beyond what the primary firm offers, should the resumes of team members from the partnering organizations be included in Part I Technical Proposal (II-2 Personnel)? Likewise, should cost information be provided for those team members?

Response – Yes

Q3 – In the Technical portion of the RFP, it appears there are two requests for similar information.

1. Address programing, schematic and design development phases, construction documentation and construction inspection.
2. Management Summary, Work Plan and Schedule

Response: There are two separate and distinct responses requested, first, as part of Understanding of Projects and Tasks it is requested that you address programming, schematic and design development phases, construction documentation and construction inspection as part of your broader understanding of the tasks and how they may be likely related to ISID project assignments expected by this RFP; second, is a broader and more detailed explanation of your Management Summary, Work Plan and Schedule to ensure the success of projects expected to result from this RFP.

APPROVED BY:

Tim Hall DATE: March 5, 2021

APPENDIX 2

PROFESSIONAL'S PROPOSAL

FORBES
ASSOCIATES ARCHITECTS

March 11, 2020

Ms. Anne Watros
Department of Technology, Management and Budget
State Facilities Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, Michigan 48909

Re: Transmittal Letter
2021 Indefinite-Service, Indefinite-Delivery
Professional Services

Dear Ms. Watros:

G.H.Forbes Associates Architects, PC (Forbes) is pleased to respond to the above referenced request for proposal (RFP) to perform design and construction services for various State Projects through an Indefinite-Service, Indefinite-Delivery (ISID) contract. We are confirming with the submittal of this proposal our keen interest in providing our support to the State of Michigan. We also agree to be bound by our proposal without modifications, unless mutually agreed upon by the Department of Technology Management and Budget (DTMB) and Forbes.

Forbes is incorporated in Michigan and has been providing professional architectural services for over forty-nine years. We provide innovative solutions for clients including Department of Technology, Management and Budget (DTMB) and General Services Administration (GSA). We are experienced in meeting design and technical requirements of various agencies including Department of Military and Veteran Affairs (DMVA), Department of Transportation (MDOT) and the Department of Natural Resources (DNR) as well as, the Federal Bureau of Investigations, United States Coast Guard, United States Marshals Service, Department of Homeland Security, and the Internal Revenue Service. Our past projects include interior office renovations, toilet rooms, storage areas, areas with special requirements such as vaults and SCIF or SIPR Rooms. Other projects include parking lots and roof repairs and replacements as well as building additions. We recently completed the Entrance Renovation at Cadillac Place for DTMB and structural repairs at the Belle Isle Conservatory with DTMB and DNR. Current DTMB projects include Renovations and Addition to the Lapeer Armory and the Camp Grayling Airfield Air Traffic Control Tower modification. We are also working on a design-build project to renovate Building 48M at Camp Grayling. We have received positive feedback from DTMB and agencies including DNR and DMVA regarding follow-through on meeting and field reports, project coordination and communication. Our office in Royal Oak is staffed with architectural designers, CAD professionals and project managers who are well experienced to manage the various projects for the State of Michigan.

Forbes confirms receipt of Addendum 1 dated 2/2/21 and Addendum 2 dated 3/5/2021.

This proposal is organized to be responsive to the Request for Proposal as follows:

- Transmittal Letter
- Technical Proposal
- Cost Proposal
- Appendices

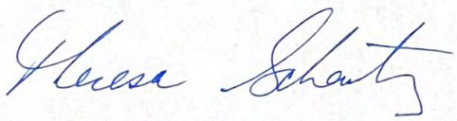
Forbes appreciates the opportunity to provide this proposal for consideration and looks forward to working with the State of Michigan. Forbes is willing to provide the requested services subject to the terms and conditions set forth in the RFP including, but not limited to, the State's mandatory contract clauses. This proposal is valid for 180 days. The principal contact information for this proposal is provided below:

Mrs. Theresa Scherwitz, AIA, LEED AP
G.H. Forbes Associates Architects, PC
816 E. Fourth Street
Royal Oak, Michigan 48067
Phone: 248.542.7866
Cell : 734.660.0606
Fax: 248.542.7909
Email: tscherwitz@ghfaa.com

Should you have any questions regarding this proposal, please contact us directly.

Sincerely,

G.H. Forbes Associates Architects, PC



Theresa Scherwitz, AIA, LEED AP
Principal

Attachment: Proposal

ORIGINAL

Submitted by:

G.H.Forbes Associates Architects, PC
816 E. Fourth Street
Royal Oak, Michigan 48067
248.542.7866
www.ghfaa.com

State of Michigan: Request for Proposal
2021 Indefinite-Scope, Indefinite-Delivery
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)
Various Locations, Michigan

Due Date: March 11, 2021
Time Due: 2:00pm Local Time

Submitted to:

Michigan Department of Technology, Management and Budget
Facilities and Business Services Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, Michigan 48917

Table of Contents

PART 1: TECHNICAL PROPOSAL

I – 1 Understanding of Project and Tasks

The State of Michigan Department of Technology Management and Budget (MDTMB) requests the services of a Professional Service Contractor (PSC) to design and provide construction services for various locations throughout the State of Michigan.

I-1A. Experience with Governmental or Institutional Design and Construction:

Forbes has been providing professional architectural services for over forty-nine years. We provide innovative and technical renovations for clients including the Department of Technology, Management and Budget (DTMB) and General Services Administration (GSA). We are experienced in achieving design and technical requirements of various agencies including the Department of Military and Veteran Affairs (DMVA), Department of Transportation (MDOT), the Department of Natural Resources (DNR), Federal Bureau of Investigations, United States Marshal Service, Department of Homeland Security and the United States Courts. Many of the federal agencies have requirements for SIPR rooms, vaults, supply storage and offices similar to requirements of DTMB's client agencies.

Forbes has recent and ongoing State Projects that focus on the preservation and restoration of facilities. Completed in 2020, the Entrance Renovation at Cadillac Place highly considered the preservation of the historic elements. Forbes conducted a thorough study for DTMB to evaluate accessibility and means of egress. The project progressed through Construction Documents where materials were highly considered and researched to be durable and historically appropriate. An example of restoration is the recent structural repairs to the Belle Isle Conservatory. Forbes worked with the team to locate and procure existing drawings of the facility from the New York Botanical Gardens.

Maintenance projects often require technical engineering, and Forbes has a strong relationship with PBA for mechanical and electrical engineering. Forbes strives to provide excellent coordination between engineering and architectural components and to accurately communicate with the project team. For example, Forbes coordinated with PBA to provide DTMB and DNR comparisons of heating and cooling system for the Belle Isle Aquarium PBA provided a comparison of cost, payback, energy savings, carbon emissions as well as other key advantages and disadvantages of five systems. DNR selected a closed loop water source heat pump system which is now under design. Forbes is skilled at consultant management, meeting facilitation and documentation of decision making. Together with PBA, Forbes provided an innovative lighting solution for a federal courtroom in Bay City. A stretched fabric ceiling system with LED lights was designed to replace seventy-two surface mounted fluorescent lights that had been added to the historic courtroom. Maintenance was greatly reduced since a lift was no longer required to change lamps in the fluorescent fixtures. The design restored the historic character of the space while saving energy and achieving required lighting levels.

We are familiar with the phases of work including the Study, Program Analysis, Schematic Design, Preliminary Design, Final Design and Construction Administration, both field and office. Studies that we have recently completed for DTMB include the New Center Rail Terminal, the Belle Isle Aquarium Mechanical System Evaluation and the Cadillac Place Entrance Study. We have collaborated with agencies to develop program and define project scope in the DNR Stewardship Renovation and Grayling ATCT Phase 2 for a building addition. Schematic, Preliminary, Final Design and Construction Administration are routinely part of our projects and many examples are included in the Appendix C. We understand how critical construction cost estimating is to assess and maintain budget throughout a project. We provide construction inspection and reports on both our federal and state projects. During past projects we have received positive feedback from both DTMB and DMVA regarding follow-through on meeting and field reports, project coordination and communication. We are confident that we can again meet the needs of the DTMB and their clients in a smooth and timely manner.

In addition to the renovation project mentioned above, we have several active projects with the DTMB, refer to Appendix C for select projects. Forbes is familiar with the process of submitting drawings for review by the State Department of Licensing and Regulatory Affairs (LARA). Forbes is also familiar with the DTMB bidding process and the best value evaluations and recommendations. We have experience managing construction and following the DTMB's procedures for a well-coordinated project.

Forbes has enjoyed six consecutive Indefinite Deliverables, Indefinite Quantities (IDIQ) Contracts with the General Administration Services (GSA). Each of these contracts is for one year with an option to be renewed for an additional four years. Our IDIQ contract began in 1995 and based upon successful performance, we have been awarded the IDIQ contract into 2024. Forbes has completed more than one-hundred seventy-five (175) projects for the GSA over the past 26 years and has earned exceptional ratings from project managers throughout GSA.

Forbes has successfully completed multiple projects on the current ISID contract set to expire this June. We have also partnered with PBA on their ISID contract. Together with PBA, Allied Building Services and Frederick Construction, we have completed design-build projects on an ISID – Design Build contract. We currently have active design-build contracts, and projects, with both Allied and Frederick Construction.

We have provided the full gamut of services for these GSA projects including feasibility studies, design intent documents, design review, procurement support, site investigations, project development studies, building evaluation reports, conceptual designs, renderings, construction drawings, specifications, record drawings, proposal evaluations, cost estimating, shop drawings and construction management and inspection. Our projects also have addressed historic preservation, multiple phases, sustainable design practices and GSA's Workplace 20/20 which rethinks office space to maximize resources and facilitate modern work practices. The GSA work varies widely from high-end design such as a Judge's Chambers to more engineering-centric projects like an electrical switchgear replacement and we treat each project with the utmost importance. Our successful history with GSA IDIQ contracts makes us well suited to offer superior service to the State of Michigan through the ISID contract.

We understand that the State of Michigan is dedicated to conserving energy. Often, projects do not attempt to achieve a certification in Leadership in Energy and Environmental Design (LEED) yet the principles are still applicable. Our project team has LEED Accredited Professionals for Architectural, Mechanical and Electrical disciplines and routinely incorporate water conservation, energy efficiency and finishes that promote indoor air quality in our designs. We are also interested in utilizing knowledge from LEED to design spaces that meet the particular needs of a client. For example, we designed the LEED Silver passport office for Department of State and utilized color temperature changing lights, acoustic wall and ceiling treatments and finishes with natural patterns to organize the public seating area and transaction counters.

Most of our work tends to be alterations and renovations of existing facilities, many of which are historic. We work with the Property Managers and consider maintenance needs during design. We work with GSA's Historic Preservation branch to ensure that the character of the facility is preserved. We work with clients including the Courts, Marshals and Department of Homeland Security to provide programming, schematic design and design development that reflects both the local agencies needs as well as the design guide standards that are specific to that agency. We also produce timely and thorough construction documents. We routinely perform construction management and inspection services and serve as the inspector for code enforcement when projects occur on federal property.

I-1B. Why Forbes is the best value to the State of Michigan:

Forbes is the best value to the State of Michigan due to past experience, understanding of the agency clients, dedication to responsive service and collaborative efforts.

Our experience with renovations is perhaps the most important component of our qualifications. Over the last 20 years, over 75% of our projects have been renovation projects; all with varying degrees of complexity. The renovations have included all aspects of interior and exterior construction and all disciplines including architectural, mechanical, electrical, civil, structural, environmental, acoustical and fire protection. Our typical project size is similar to the project size mentioned in the RFP; our professional fee is less than $35,000 on many of our projects. We understand the importance of prompt and thorough service on projects of all size.

Forbes is familiar with DTMB's procedures and client agency expectations and requirements. We are accustomed to all aspects of the design including DC Specifications and MICH Specifications. Forbes is seasoned at assisting DTMB in the bidding process and has conducted best value evaluations and recommendations. We are also familiar with construction services and have developed relationships with multiple contractors that typically perform State work.

We view our field survey as an essential component of a successful project and do not skimp on the hours spent in the building to thoroughly document existing conditions and to coordinate the renovation work. We have developed internal checklists to help ensure that all aspects of the existing conditions are investigated. These checklists facilitate thorough field work and help us to identify for the owner where potential risks or hidden costs may be. We have found that this approach to field investigation creates a great foundation for our construction documents and thereby reduces the number and cost of change orders that occur during construction. We have also developed an understanding of good renovation products such as patching materials. Through our experience and dedication, we have created the foresight to understand potential problems before they arise during construction.

We understand that projects will require close collaboration and frequent communication. Our design team includes architects and engineers that have successfully collaborated for many years. Even though our engineers are not in the same office, we communicate throughout the day, every day. Our team offices have a wealth of experience working together on projects.

Also, our team's knowledge and enforcement of the building codes is critical. On our multitude of Federal projects, we have been acting as their construction inspectors for the past thirty years.

Our office is located in southeast Michigan. Most project sites in the State are within 2 hours of driving time, which allows for us to make day trips during the design and construction phases. This means that our time can be spent directly interfacing with the State and managing the construction instead of traveling to and from the site. Our inexpensive billing rate also allows us to maximize our interface time without creating an exorbitant total fee.

Lastly, we believe that having a good working relationship with the general contractor is critical to a smooth and successful project. Our team believes in fostering an environment of mutual respect with the contractor which has paid dividends as evidenced by several design-build projects.

I – 2 Personnel

I – 2A. Key Personnel

The resumes of each member of Forbes's project team that are expected to participate on projects under this Contract are included as Attachment B. Emphasis has been placed on resumes for those personnel and specialists who will have major project responsibilities.

- **Project Manager/Principal Architect** (key employee) Theresa Scherwitz, LEED AP, AIA – Point of Contact
- **Principal Architect** (key employee) Scott Goodsell, AIA
- **Architect** (key employee) Allyson Clunis
- **Project Designer** (key employee) Daniel Jacobson
- **Principal Electrical Engineer** (key employee) Eric Graettinger, PE, LEED AP
- **Principal Mechanical Engineer** (key employee) David Conrad, PE
- **Mechanical Engineer** (key employee) Rebecca Tritt
- **Electrical Engineer** (key employee) Shai Bishop
- **Electrical Designer** (key employee) David Tetreau, LEED AP

I – 2B. Organization Chart

An Organization Chart (**Figure 1**) illustrates the proposed project leadership and reporting responsibilities with the lines of communication of our proposed project team. The individuals identified are key to the successful completion of these project types. Roles for a typically assigned project are noted in italics.

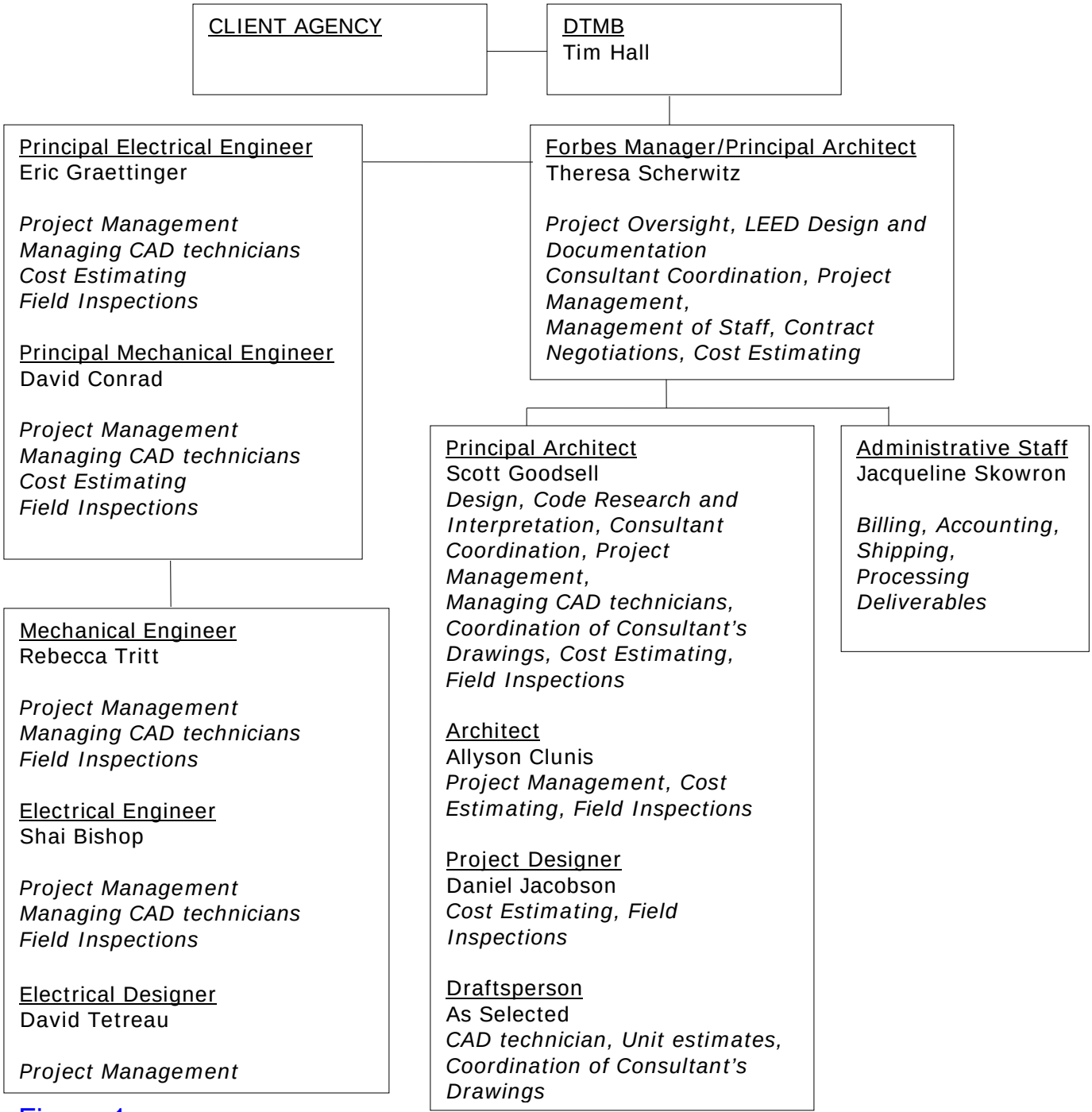


Figure 1 — Forbes Organization Chart

I – 3 Management Summary and Work Plan/Schedule

I-3A. Work Plan and Methodology

The work plan outlined below reflects a typical project plan based upon our previous related experience. For each project, we would develop a schedule through discussions with the MDTMB.

PHASE 100 – STUDY

Task 101 – Coordination: Project Kickoff Meeting — 1 Day

Forbes will meet with the Department of Technology, Management and Budget (DTMB) as well as the client agency to receive background information including design guides and existing drawings. Forbes will facilitate the meeting, and record and publish meeting minutes within 3 days of the meeting.

Task 102 – Research: Document Existing Conditions — 1-3 Weeks

Forbes and the project team will visit the site to document existing conditions. We will inquire with the State for relevant building drawings as well as survey results regarding asbestos containing materials (ACM) and lead based paint (LBP).

Task 103 – Analysis: Generate Report — 2-3 Weeks

Forbes will generate a report of the findings in Task 102. The report is anticipated to include architectural and engineering sketches, summary of spaces, physical features and systems. This report will be critical in laying the groundwork for the Design Charette.

2 Weeks Anticipated for State Review

PHASE 200 – PROGRAM ANALYSIS

Task 201 – Coordination: Design Charette — 1 Day

Forbes will facilitate a Design Charette with the entire project team to identify program. This Charette will be critical to define the scope requirements of each phase of the renovation.

Task 203 –Development: Options — 2-3 Weeks

Forbes will develop three options in response to the program elements identified in the Design Charette in Task 201.

Task 209 -Project Cost Estimate: — Concurrent

Forbes will develop itemized project budget information. In past projects, Forbes has authored an itemized matrix of options with a budget designation for general comparison. The costs are identified as either level one, two or three, with three being the least expensive. We have found this to be a useful tool to develop project scope.

Task 210 – Program Report: — 2-4 weeks each

Forbes will provide a draft 50 and 90 percent deliverable with program, cost estimate and narrative analysis. Forbes will present the information and facilitate a project review meeting identifying the decisions and input necessary to progress to the next developmental milestone.

2 Weeks Anticipated for State Review at each deliverable

PHASE 300 – SCHEMATIC DESIGN

Task 301 – Coordination: — 1 Day

Forbes will meet with the project team to develop schematic design. At this phase, the State may be considering options to achieve the identified program needs. Forbes will facilitate the meeting, and record and publish meeting minutes within 3 days of the meeting.

Task 302 – Code Review 1-2 Week
Forbes will review applicable codes and best practices applicable to the project. Forbes will document relevant requirements and any options for consideration by the State.

Task 307 – Architectural/Engineering: Survey & Design 1-2 Week
Forbes will research and field survey the existing conditions to verify scope of renovation and identify technical constraints for any options under consideration.

Task 308 – Drafting: 2-3 Weeks
Forbes will prepare CAD based drawings.

Task 309 – Project Cost: Concurrent
Forbes will provide a budgetary construction cost estimate.

Task 310 – Schematic Design Review: 2-4 Weeks each
Forbes will coordinate with engineers to provide 50 and 90 percent schematic design deliverables which will identify the feasibility and cost for options. Forbes will present the deliverables and facilitate a project review meeting identifying the decisions and input necessary to progress to the next developmental milestone.

2 Weeks Anticipated for State Review at each deliverable

PHASE 400 – PRELIMINARY DESIGN

Task 401 – Coordination: 1 Day
Forbes will coordinate with the project team to develop the preliminary design and incorporate schematic design and program information, as applicable to the project. Forbes will review any agency design guides and requirements and facilitate a design charrette to identify all project aspects for consideration.

Task 402 – Specifications: 1 Week
Forbes will prepare a preliminary design outline draft specification in C.S.I format.

Task 407 – Architectural / Engineering: 2-3 Weeks
Forbes will coordinate design. PBA will calculate loads and prepare the preliminary design for mechanical/heating, ventilating, and air conditioning as well as plumbing systems. PBA will determine electric service requirements and develop and outline basic equipment and distribution systems for lighting, power, fire, data and communications. Prepare preliminary design electrical drawings. Comments from the 50 and 90 percent submittal will be incorporated and engineering drawings will be coordinated with architectural. All comments will be responded to in narrative form.

Task 408 – Drafting: Concurrent
CAD based drawings will be prepared.

Task 409 – Project Cost: Concurrent
The budget construction cost estimate will be developed and itemized by specification section.

Task 410 – Preliminary Design Review: Concurrent
Forbes will submit the 50% and 90% Preliminary Documents for review. The specific deliverable components will be project dependent but the outline below is typical for many renovation projects.

The Drawing Components of the 50% and 90% Preliminary Review Documents will include:

- Architectural Plans, Sections, Elevations and Schedules
- Fire Alarm
- Plumbing
- HVAC
- Lighting (building interior, exterior lighting)
- Power and Data

The 50% and 90% Documents will include:

- Project Specifications
- CAD based drawings showing the above mentioned aspects
- Calculations/Supporting Design Data
  - Architectural Design Narrative
  - Life Safety Code Analysis
  - Mechanical Design Narrative
  - Design References including codes, design guides and publications
  - Cooling and Heating Load Calculations
  - Electrical Design Narrative
  - Illumination calculations / Photometrics
  - Product Information / Equipment Manufacturers' data
- Itemized Cost Estimate
- Finish boards

2 Weeks Anticipated for State Review at each deliverable

PHASE 500 – FINAL DESIGN

Task 501 – Coordination: Concurrent

Comments from preliminary design will be incorporated and developed into the final design. Forbes will facilitate project meetings as necessary to develop the project.

Task 502 – Specifications: 2-4 Weeks

Forbes will develop specifications to define type and quality of materials, products, and workmanship. Forbes will edit the State's front end DC Spec or MICH Spec, as selected for the project. Key dates will be identified as well as liquidated damages, project duration and any alternates that are either adds or deducts in order to provide flexibility for project award.

Task 507 – Architectural / Engineering: 2-3 Weeks

Forbes will refine the Preliminary Design to address DTMB's review comments and to bring forth sufficient detail for complete Construction Documents. All comments will be responded to in narrative form.

Task 508 – Drafting: Concurrent

CAD based drawings will be prepared.

Task 523 – Project Cost: Concurrent

The budget construction cost estimate will be developed. Forbes uses past projects to develop detailed cost estimates. Materials are quantified and labor is broken out. Means cost data is used for reference but we have found that historic information and bidding environments are more reliable than Means. General conditions cost is estimated and summaries are provided by CSI division, which is useful when reviewing contractor's bid breakdowns for completeness and project understanding.

Task 515 – Draft and Final Design Bidding Document Review: 1 Day

Forbes will submit the 50% and 90% Final Design for review. The specific deliverable components will be project dependent but the outline below is typical for many renovation projects.

Forbes will submit the Final Design 100% to DTMB and LARA and SHPO (as applicable) which will include:

- Architectural Plans, Sections, Elevations and Schedules
- Fire Alarm
- Plumbing
- HVAC
- Lighting (building interior, exterior)
- Power and Data
- Security

Components of the Submittal:

- Project Specifications
- CAD based drawings showing the above-mentioned aspects
- Final Calculations/Supporting Design Data
- Itemized Cost Estimate

2 Weeks Anticipated for State Review at each deliverable

Task 516 – Construction Bidding and Contracting Procedures: 5 Weeks
Forbes will assist the State in the construction bidding and contracting process for construction. Forbes will conduct a Pre-Bid meeting for each phase and issue any necessary addenda. Forbes will review and evaluate construction bids. Forbes will recommend bidder for Construction Contract Award.

PHASE 600 – CONSTRUCTION SERVICE OFFICE

Task 601 – Coordination: Concurrent
Forbes will facilitate project coordination throughout the construction.

Task 602 – Shop Drawing/Submittals/Requests for Information: Duration of Construction
Forbes will review shop drawings for accuracy and adherence to the design documents. Forbes will respond to Requests for Information (RFI) in a timely manner.

Task 603 – Payment Procedures: Duration of Construction
Forbes anticipates reviewing monthly payment requests. The review will be coordinated with construction inspections and evaluate percentage of work completed to percentage of work billed.

Task 604 –Construction Schedule Progress: Duration of Construction
Forbes will review construction progress and report on any delays to schedule. Forbes will review and negotiate the Contractor's quotations for Bulletin Work. Forbes will provide written recommendations to the State in a timely manner.

Task 607 –Punch List Procedures: 1 Week
Forbes will create a Punchlist that details errors and omissions to be corrected for each construction contract. Errors and omissions will reference the corresponding specifications section or relevant construction drawing.

Task 609 –As-Built Documents: 2-4 Weeks
Forbes will provide final as-built documents to reflect the final renovation.

Task 610 –Close-Out Procedures: 2-4 Weeks
Forbes will review Contractor's As-Built drawings, O&M manuals and warranties.

PHASE 700 – CONSTRUCTION SERVICE FIELD

Task 701 – Coordination: Concurrent

Forbes will facilitate project coordination throughout the construction.

Task 702 – Pre-Construction Meeting: 1 Day
Forbes will attend the Pre-Construction Meeting where they will present the project scope and address any questions.

Task 703 – Construction Inspections: Weekly or Bi-Weekly for the Duration of Construction
Forbes will conduct weekly inspections during the construction. Forbes will note the work completed, upcoming work, field questions and project schedule in a published report.

Task 705 – Construction Progress Meeting: Bi-Weekly or Monthly for the Duration of Construction
Forbes will attend bi-weekly progress meetings. Forbes will facilitate the meeting, take notes and publish reports within three days of the meetings.

Task 706 – Final Project Inspection: Punchlist 2 Weeks
Forbes will conduct a final walk-through to produce a Punchlist in item 607 above. Forbes will revisit the project to inspect the completion of the punchlist items.

I-3B. Constructability Review and Quality Control Plan

Forbes has continued to improve methods for project management over the past forty-nine years. The Office has developed templates for meeting reports and field reports which can be found in Appendix D of this proposal. Forbes values consistent and accurate documentation of design decisions, field conditions and construction progress. Our office consists of an open studio format instead of individual offices. We find this promotes collaboration, mentoring and quality control. The Principals and Project Managers are intermixed with CAD Technicians making them accessible for questions and support. All documents are reviewed by senior staff prior to publication. Regular updates are held for coordination, problem solving and proactive management. In our office, the lead architect and project managers carefully review the documents before they leave our office. They also review shop drawings for conformance to design; this process is not left to young interns as in many offices. Shop drawings are not just taken at face value but are carefully reviewed for coordination with other components.

We also utilize a number of checklists to ensure that all relevant information is included on the documents and examined during the design. Earlier we described checklists that we use during the initial field. We also utilize a Michigan Building Code construction documents checklist which describes the minimum submittal requirements as defined by the code. Finally, we have a number of internal instructions for personnel to follow such as very specific printing standards with a sequence of proper steps.

I – 4 Questionnaire

Please refer to Appendix A for the completed Professional Questionnaire.

PART 2: COST PROPOSAL

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

2021 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name	G.H. Forbes Associates Architects, P.C.
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	Not Applicable
Mark-up for Reimbursables (not to exceed 5%)	None

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4
Scott Goodsell - Principal Architect II**	140.00	144.20	148.53	152.98
Theresa Scherwitz - Principal Architect I**	140.00	144.20	148.53	152.98
Allyson Clunis - Project Manager**	95.00	97.85	100.79	103.81
Daniel Jacobson - Project Designer II**	86.00	88.58	91.24	93.97
Dima Toma - Project Designer I	75.00	77.25	79.57	81.95
Samantha Schuringa - Architectural Intern	62.00	63.86	65.78	67.75
Jacqueline Skowron - Clerical	55.00	56.65	58.35	60.10

*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

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

2021 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name	Peter Basso Associates, Inc.
Yearly Hourly Billing Rate Increase	3%
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
George Hopkins – Principal I	186.00	192.00	198.00	204.00
David Conrad – Principal I**	186.00	192.00	198.00	204.00
Eric Graettinger – Principal I**	186.00	192.00	198.00	204.00
Lindsey Stefaniak – Principal I	186.00	192.00	198.00	204.00
Aaron Frantz – Engineer III	105.00	108.00	111.00	114.00
Rebecca Tritt – Engineer III**	105.00	108.00	111.00	114.00
Carissa R. Hansen – Engineer II	97.00	100.00	103.00	106.00
John Hatsios – Engineer II	97.00	100.00	103.00	106.00
Shai Bishop – Engineer I**	88.00	91.00	94.00	97.00
David Tetreau – Designer V	126.00	130.00	134.00	138.00
Sue A. Mitchell – Designer V	126.00	130.00	134.00	138.00
Other – CADD II	54.00	56.00	58.00	60.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

Thank you for considering our proposal. We look forward to working with you.

Theresa Scherwitz, AIA, LEED AP
Principal
G.H. Forbes Associates Architects PC, Royal Oak, MI

Signature: _____ Date: 3/9/21

Appendix A – Questionnaire for Professional Services

Questionnaire for Professional Services
Department of Technology, Management and Budget
2021 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: G.H. Forbes Associates Architects, PC
   Address: 816 E. Fourth Street, Royal Oak, Michigan 48067
   Telephone and Fax: 248-542-7866 / 248-542-7909
   Website: www.ghfaa.com E-Mail: tscherwitz@ghfaa.com
   SIGMA Vendor ID: CV0023309

   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)? 816 E. Fourth Street, Royal Oak, Michigan 48067

   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. Theresa Scherwitz, Principal, 816 E. Fourth Street, Royal Oak, MI 48067, tscherwitz@ghfaa.com, 248-542-7866 Scott Goodsell, President, 816 E. Fourth Street, Royal Oak, MI 48067, sgoodsell@ghfaa.com, 248-542-7866

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: Michigan, 8/24/1972

   Include a brief history of the Professional's firm: Forbes has been providing professional architectural services for over forty-nine years. We provide innovative solutions for private clients as well as government clients. The firm began with innovative designs for branch banking and projects with the State of Michigan Department of Mental Health, State Police and Department of Corrections and Department of Social Services. Later, in 1995, the General Services Administration awarded Forbes a contract that has led to unprecedented renewals and extensions due to attention to customer's needs and prompt, accurate response. Recently, Forbes worked with DTMB to renovate buildings on Belle Isle and the entrances at Cadillac Place. Forbes is currently working with DTMB to renovate the Lapeer Armory as well as multiple buildings at Grayling.

3. Provide an organization chart depicting all personnel and their roles/responsibilities.

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

5. 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

6. 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
☒ Fire and security alarm systems
☐ Fish passage structures
☒ General architectural and/or engineering design
☒ 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: Forbes has performed construction management for over a dozen projects within the last five years. Appendix includes project examples. Forbes has used DCSpec on projects that are less complex and typically under $1,000,000. Forbes has used MICHSpec on projects that are more complex or sensitive and typically exceed $1,000,000. Forbes is accustomed to routine editing of these documents including working with DTMB to identify liquidated damages, allowances, contract dates, special agency requirements and

bidding schedules. Forbes is seasoned at contract administration including review of schedule of values, draft payment applications, bulletin authorization forms, review and recommendation of contractor pricing. We have also learned some of the nuances of these specifications including limitations to contractor mark-up particularly for items funded under the allowance. We are confident that our experience will facilitate a smooth and successful project.

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

Yes ☒ No ☐
If yes, explain: Forbes has held an ISID Contract with the State of Michigan since 2013.

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.
Forbes has continued to improve methods of project management over the past forty-nine years. The office has developed templates for meeting reports and field reports, examples are included in Appendix D. Forbes values consistent and accurate documentation of design decisions, field conditions and construction progress. Our office consists of an open studio format instead of individual offices. We find this promotes collaboration, mentoring, and quality control. Senior staff review all documents prior to publication and shop drawings for conformance to design and coordination with other components. Regular updates are held for coordination, problem solving and proactive management. We also utilize a number of checklists to ensure that all relevant information is included on the documents and examined during design. Checklists are used during field survey as well as document production.

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.
Forbes will report to the project manager at the DTMB. The State Agency for whom a project will be completed is the client. Our contract is with the DTMB. We will meet and coordinate with the State Agency as directe by the DTMB.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.
Information will be requested of the bidder and the substitution will be reviewed for an equal level of performance, cost, quality, durability, maintenance, aesthetics, availability, origin and warranty to the specified material. If the substitution is found to be equal, Forbes would recommend that the DTMB accept the substitution via addendum.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.
Forbes would require the General Contractor to submit an explanation in writing and assuming it has merit, evaluate the proposed for an equal level of performance, cost, quality, durability, maintenance, aesthetics, availability, origin and warranty to be specified. The substitution will also be reviewed for coordination with

other components. If the proposed material or detail is found to be equal, Forbes would approve the substitution with DTMB's acceptance, noting any coordination items necessary.

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?
Forbes will issue meeting minutes within three business days of meetings and teleconferences. With each submittal of construction documents, Forbes will issue written responses to review comments as well as questions to successfully complete the next design phase. During construction, Forbes will typically visit the construction site weekly and provide a written field report with photographs. As a policy, we do not have voicemail within the office; if you call the office, you'll get a live voice on the other end of the line. We feel this is important because while every project has a consistent key person, more than one person is assigned to the project so questions or concerns can be answered immediately. We also provide cell phone numbers to the Project Managers and General Contractor so that contact can be made at any time including weekends and after hours. Our project managements staff is armed with smart phones and laptops so that they're never out of touch even when they are away from the office.

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.
First, Forbes calls manufacturers for current pricing. Second, we use real bid figures from past projects and experience in cost estimating. We take into account the market conditions and bid method. We use an Excel workbook that calculates material and labor cost per quantity and each item is categorized by the CSI specification system. We also maintain a current edition of the R.S. Means construction cost estimating book although we tend to use it as more of a cross reference than a reliable estimating tool. Forbes routinely produces detailed cost estimates for both private and public sector work. We have received positive feedback from GSA that our construction cost estimates are often within 5% accuracy.

5.10 Describe your approach to minimizing construction cost over-runs.
Forbes will provide budgetary construction costs during the schematic design phase and continue to update cost estimates throughout the design to identify budget over-runs as early as possible. If a project is at risk for being over budget, Forbes will notify the State immediately and advise and work with the State to identify how best to bring the project back to budget and still achieve the goals. Some strategies that may be considered include value engineering, descoping and deductive alternates. Our thorough field work as described under item I-1B of the Technical proposal helps to reduce over-run costs and can at the very least help to identify unknown factors leasing into construction.

5.11 What percentage of the PSC cost should be devoted to construction administration (office and field)?
Construction Administration should constitute approximately 3% of the construction cost. Of the A/E fees, the amount for Construction Administration would be 20-25 %

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?
Forbes +/- 70%, Sub-Consultants +/-30 %

6.13 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.)
2 to 3 business Days

5.14 How do you assess whether a construction bidder is responsive and responsible?
Forbes will review the bid package for completeness, call references and inquire about past performances. Forbes will interview the bidder and review any evaluations available. Forbes will review the State's Non-Compliance Reports, the Federal System for Award Management exclusion list, MIOSHA violations, and outstanding Prevailing Wage violations. In addition, Forbes will compare the Contractor's bid breakdown with our cost estimate for components that seem disproportionately low or high. We will discuss our findings and recommendations with the State.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.
Sustainable Design is a broad term that means to design in such a way as to conserve energy and resources and to produce healthier more productive environments in which we live and work. Now in version 4, Leadership in Energy and Environmental Design (LEED) Certification is a rating system of the U.S. Green Building Council that incorporates a credit system to determine the environmental impact of a project. There are multiple rating systems depending upon the project type. For example, a small renovation project may use the Interior Design and Construction rating system rather than the Building Design and Construction rating system. Each system requires compliance with prerequisites and awards credits in eight major categories as well as impact categories. A minimum number of points is required for the project to be certified with more points earning silver, gold ad finally the highest platinum rating. Many organizations are choosing to document sustainable effort by using the LEED checklists without incurring the cost of certification. Forbes employs LEED accredited professionals and routinely incorporates sustainable strategies into our designs.

5.16 Describe your experience with similar open-ended contracts.
Forbes currently has an ISID contract with the DTMB which is set to expire in June of 2021. We have completed an ISID-Design Build contract with both Allied Building Services and Frederick Construction. Forbes has enjoyed multiple Indefinite Services Contract with the General Services Administration with the Federal Government. Our responsiveness and performance has resulted in an unprecedented number of contract renewals. In the last renewal, Forbes was the only firm renewed with the GSA for the region, other firms were new to the contract. Several project managers have told us that they recommended us for a contract renewal because we are thorough, responsive and provide a high quality service. We are accustomed to varying numbers of projects and workload. We are confident we can provide the same superior service to the State of Michigan.

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.
Forbes and our Engineers are active early in the design process to perform thorough field investigation. We also interview the facilities manager and long time building occupants to learn about existing conditions and any issues. We are accustomed to pouring through old drawings and seeking out relevant information. Forbes will document any issues and bring these to the DTMB for consideration. Forbes has developed checklists to guide field investifations as well as the production of documents.

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.
The DEQ, Water Resource Division (WRD) regulates activities in designated areas. In general, our approach to securing permits/approvals for campgrounds, critical dunes, coastal zone management and projects adjacent to Michigan lakes and rivers is to determine if critical areas present and what types of permits are required. We would develop a plan that eliminates or reduces the disturbance to critical areas as much as possible. After the critical area determination is made, a conceptual project plan with possible alternatives is developed. Then, a pre-application meeting with the MEQ's Land and Water Management Division (WMD) staff and other permitting agencies will be scheduled. During the pre-application meeting a plan will be agreed upon. Plans and permit applicatoins will then be finalized and submitted to the appropriate agencies for final review and approval. Additionally, the US Army Corps of Engineers (USACE) also regulates activities at the

Federal Level. To simplify the permit process a DEQ/USACE – Joint Permit Application with the DEQ and USACE can be used for a variety of regulated activities.

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

Forbes will review the issue to determine if they agree that there was a change in the project scope. Forbes will discuss this with DTMB and if it is agreed by all parties that there is a change in project scope, Forbes will work with DTMB to write a bulletin documenting the change. Forbes will perform an independent estimate of cost for the work and compare this to the Contractor's pricing. Forbes will negotiate the cost to obtain a fair and reasonable amount. Forbes will make a recommendation to the DTMB to accept the pricing once it is determined to be fair and reasonable. If a reasonable price cannot be obtained or the funding is not available, Forbes will work with the project team to develop alternatives to achieve the project goals without incurring additional costs.

Appendix B – Key Personnel Resumes

THERESA SCHERWITZ, AIA, LEED AP-ID+C, NCARB

PRINCIPAL ARCHITECT

G.H. Forbes Associates Architects, P.C.

PROJECT ROLE: ***Principal Architect***
EDUCATION: ***University of Michigan – Master of Architecture***
Bachelor of Science, Natural Resources & Environment
PROFESSIONAL REGISTRATIONS: ***Licensed Architect – MI, License No. 1301059775***
PROFESSIONAL MEMBERSHIPS: ***Leadership in Energy and Environmental Design Accredited Professional; MSHPO Historic Architect; National Council of Architectural Registration Boards; American Institute of Architects (AIA); AIA Building Codes and Regulations Committee; Historic Preservation Network***

Ms. Scherwitz has 14 years of professional experience and is a Principal Architect and owner at Forbes. She is responsible for project management and all aspects of design and construction services as well as mentoring staff. Her responsibilities include facilitating client meetings, managing consultants and CAD technicians, project planning, program and design, overseeing the production of construction documents, cost estimating and managing construction. She has served as the Designer of Record and field inspector on numerous projects for the General Services Administration and the State of Michigan. She is the primary designer for LEED related work.

Project Experience

State of Michigan

- Armory Building Addition and Renovation – Phases 1 & 2 – Lapeer
- Cadillac Place Freight Elevator – Detroit
- Cadillac Place Entry Study and Renovation – Detroit
- ASW Conservatory Structural Improvements – Detroit
- Boiler Replacement Belle Isle Casino – Detroit
- Sprinkler Replacement Belle Isle Casino – Detroit
- Structural Study Aquarium and Conservatory – Detroit
- New Center Rail Terminal ADA Remediation – Detroit
- DNR Stewardship – Howell
- Repair Cooling Tower/Air Compressor – Grand Ledge
- Fire Alarm Replacement – Design/Build – Grand Ledge
- Renovation of Building 48M – Grayling

General Services Administration

- USMS/USDC Renovation – Marquette
- National Labor Relation Board Consolidation, 5th Floor – Detroit
- PVM DOS – Passport Issuing Office, 3rd Floor – Detroit
- PVM DOS – Central Regional Director Office, 17th Floor – Detroit
- U.S. Marshal Service Office Building Renovation – Port Huron
- Theodore Levin Courthouse 8th Floor Chambers – Detroit
- Probation Office Renovation – Ann Arbor
- U.S. Marshal Service Office Building Renovation – Port Huron
- Levin Chambers 867 Modifications - Detroit
- Rosa Parks DHS ERO/OPLA Renovation – Detroit
- USDC Workplace 20/20 – Bay City

SCOTT W. GOODSELL, AIA, NCARB

PROJECT MANAGER/PRINCIPAL ARCHITECT

G.H. Forbes Associates Architects, P.C.

PROJECT ROLE: ***Project Manager/Principal Architect***

EDUCATION: ***University of Michigan – Bachelor of Science in Architecture, Master of Architecture***

PROFESSIONAL REGISTRATIONS: ***Architect – MI, OH, IL***
MI License No. 1301047664

PROFESSIONAL MEMBERSHIPS: ***American Institute of Architects; National Council of Architectural Registration Boards***

Mr. Goodsell has more than 20 years of combined professional experience as an architect working primarily in Michigan. He is the President of Forbes. Mr. Goodsell is responsible for project planning, program & design, coordination of consulting disciplines, field observation, management of contract document production, in-house task distribution and quality control. He has been involved in more than 80 remodeling projects for the General Services Administration and other government entities and his responsibilities have included management of professional activities, on-site investigations, technical evaluations of existing buildings systems, supervision of working drawings & specifications, and coordination & monitoring the construction administration activities. He has also provided design and construction administration services for several new building additions and stand-alone buildings including site improvements for the private sector.

Project Experience

General Services Administration

- Flat Roof Replacement, U.S. Customs Cargo Inspection Facility - Detroit
- Hydraulic Passenger and Traction Freight Elevator Modernization - Lansing
- Levin Prospectus Modernization - Detroit
- Fire Alarm System Replacements - Lansing
- FBI Tenant 3rd Floor Office Renovation - Ann Arbor
- Levin USDC 5th Floor Clerks Renovation - Detroit
- Levin USDC 5th Floor Clerks Renovation - Detroit
- Levin USCA 6th Floor Clerks Renovation - Detroit
- USCA 2nd Floor Judge's Chambers Renovation - Lansing
- USCA 2nd Floor Judge's Chambers Renovation – Ann Arbor
- Elevator Modernization - Battle Creek
- New Dedicated Passenger Elevator - Lansing
- Elevator Improvements – Ann Arbor
- USMS 5th Floor Detention & Administration Offices - Grand Rapids
- Levin USMS 3rd Floor Administration Offices - Detroit
- Levin USDC 7th Floor Judges Chambers Renovation - Detroit
- Exterior Restoration (Building 5 Windows) - Battle Creek
- USDC Chambers and Courtroom Renovation - Flint
- DMVA North Building Renovation - Lansing
- Levin New Fitness Center - Detroit

State of Michigan & Other Works

- Lapeer Armory Renovations – Lapeer
- MDOT Improvements - Coldwater
- Michigan Memorial Funeral Home and Additions - Flat Rock
- Washtenaw Armory Renovations - Ypsilanti
- New Administration Building and Fellowship Hall - Middleville, Ohio

ALLYSON CLUNIS

Architect

G.H. Forbes Associates Architects, P.C.

Ms. Clunis is an Architect at Forbes and is responsible for project management and aspects of design and construction services. Her responsibilities include facilitating client meetings, managing consultants and CAD technicians, project planning, program and design, overseeing the production of Construction Documents, cost estimating and managing construction.

PROJECT ROLE: Architect

EDUCATION: University of Michigan– Master of Architecture
Bachelor of Science, Architecture

Project Experience

State of Michigan

- ASW Conservatory Structural Improvements – Detroit
- Sprinkler Replacement Belle Isle Casino – Detroit
- Structural Study Aquarium and Conservatory – Detroit
- Scott Fountain Instruction Manual - Detroit

General Services Administration

- Theodore Levin U.S. Courthouse 8th Floor Chambers – Detroit
- Theodore Levin U.S. Courthouse 9th Floor Probation – Detroit
- Elevator/USMS/USDC – Marquette
- U.S. Marshals Service Office Building Renovation – Port Huron
- Third Street Perimeter Security Project – Marquette
- Theodore Levin U.S. Courthouse Prospectus Modernization – Detroit
- National Labor Relation Board Consolidation, 5th Floor – Detroit
- DOS – Passport Issuing Office, 3rd Floor – Detroit
- DOS – Central Regional Director Office, 17th Floor – Detroit

DANIEL JACOBSON

PROJECT DESIGNER

G.H. Forbes Associates Architects, P.C.

Mr. Jacobson is a Project Designer at Forbes and is responsible for project management and aspects of design and construction services. His responsibilities include facilitating client meetings, managing consultants and CAD technicians, project planning, program and design, overseeing the production of Construction Documents, cost estimating and managing construction.

PROJECT ROLE: Project Manager

EDUCATION: University of Michigan – Bachelor of Science, Architecture

Project Experience

State of Michigan

- Armory Building Addition and Renovation – Phase 1 & 2 – Lapeer
- DNR Stewardship - Howell
- Drainage Study Belle Isle Aquarium – Detroit
- Belle Isle Casino Sprinkler – Detroit
- Renovation of Building 48M - Grayling
- Modify Air Traffic Control Tower – Grayling
- Stand Alone Facilities – Detroit

General Services Administration

- PVM DOS CA 17th Floor – Detroit
- Hydraulic Passenger and Traction Freight Elevator Modernization – Lansing
- Building #2 Water Infiltration – Battle Creek
- PVM IRS TAC 5th Floor – Detroit
- Theodore Levin 2nd Floor Courtrooms – Detroit
- Lansing Drainage Study – Lansing
- Circle Drive Study – Battle Creek
- Building 8 Emergency Repairs – Battle Creek

Death Care

- Michigan Memorial Funeral Home – Flat Rock
- Ottawa Park Cemetery – Clarkston
- St. Hedwig Cemetery - Dearborn

Eric M. Graettinger, PE, LEED AP BD+C
Vice President

Eric's responsibilities as Lead Electrical Engineer include the technical production of a project, such as system design and layout, product research, documentation and drawing review submittals, and field investigations. He also monitors the budget and schedule throughout the course of a project.

Eric has been involved in the design of specialty indoor and outdoor lighting systems; medium- and low-voltage power distribution systems; fire alarm systems; emergency power distribution systems; power system evaluations; studies for existing primary and secondary distribution systems; and facility condition studies.

Eric's 23 years of electrical engineering experience includes both new construction and renovation of retail, commercial, institutional, government, corporate, and prototype facilities.

Project Role
Lead Electrical Engineer

Education
Bachelor of Science in Electrical Engineering, University of Detroit Mercy

Professional Registrations
Professional Engineer - MI, AZ, FL

Professional Accreditations
USGBC LEED Accredited Professional (LEED AP BD+C)

Professional Memberships
Illuminating Engineering Society - Board of Manager Member; Past-President of Detroit Section

Relevant Project Experience

- **State of Michigan, Detroit, MI**
  Belle Isle Casino Building Boiler Replacement
  Cadillac Building Tenant Improvements
  Department of Human Services Clark Street Office Tenant Improvements
  Detroit Detention Center Mound Correctional Facility Conversion

- **State of Michigan, Grand Ledge, MI**
  Army National Guard Grand Ledge Armory Cooling Tower Study

- **State of Michigan, Bay City, MI**
  Bay City Armory Renovations

- **General Services Administration,Various Locations, MI**
  Ann Arbor Probation Office Relocation - *Ann Arbor*
  Office Reno at Detroit Metropolitan Wayne County Airport - *Romulus*
  Theodore Levin Courthouse & Chambers 8th Floor Tenant Improvements - *Detroit*
  Theodore Levin Courthouse 7th Floor Judges' Chambers Renovations - *Detroit*
  U.S. Marshal Service Office Building Renovation - *Port Huron*
  Theodore Levin U.S. Courthouse Design Development - *Detroit*
  McNamara Federal Building Emergency Lighting Upgrades - *Detroit*

- **TACOM, Warren, MI**
  Building 212 Phase 2
  Building 212 Substation Replacement

- **United States Postal Service, Various Locations, MI**
  Alanson New Post Office - *Alanson*
  Bloomfield Hills Finance Station - *Bloomfield Hills*
  Fire Alarm Upgrade - *Northville*
  Building Renovations - *River Rouge*

- **City of Ann Arbor, Ann Arbor, MI**
  New Municipal Center, Police HQ, and 15th District Court Building

David A. Conrad, PE
Vice President

Project Role
Lead Mechanical Engineer

Education
Bachelor of Science in Architectural Engineering, Kansas State University

Professional Registrations
Professional Engineer - MI (PE)

Professional Memberships
American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE); Engineering Society of Detroit (ESD)

Dave is the Group Leader for the firm's Corporate Government Market. He participates in all phases of a project, and is responsible for understanding client expectations for the mechanical systems and ensuring these expectations are reflected in the final project design.

Dave is often responsible for production of the mechanical systems design in collaboration with the lead electrical engineer and architect. He has experience in building heating and cooling load analyses, ductwork layout and sizing, HVAC piping layout and sizing, piping hydraulic analyses, and field investigation.

Dave's 22 years of experience includes systems design for new construction and renovation of various types of facilities, with a particular emphasis on government and sports facilities.

Relevant Project Experience

- **State of Michigan, Detroit, MI**
  Department of Natural Resources Outdoor Adventure Center Sanitary Venting
  Department of Human Services Clark Street Office Tenant Improvements
  Detroit Detention Center Mound Correctional Facility Conversion
  Belle Isle Casino Building Boiler Replacement
  Belle Isle Aquarium Heating System Upgrades
  Belle Isle Aquarium MEP Renovations
  Belle Isle Radio Station Renovation

- **State of Michigan, Lapeer, MI**
  Dept of Military and Veteran Affairs Lapeer National Guard Armory Reno Ph 2

- **State of Michigan, Saline, MI**
  Center for Forensic Psychiatry Maintenance Projects

- **State of Michigan, Ypsilanti, MI**
  Washtenaw Armory Interior Renovations
  Washtenaw Armory Site Renovations

- **Department of Natural Resources, Brighton, MI**
  Stewardship Building Facility Condition Analysis and Design

- **General Services Administration,Various Locations, MI**
  Ann Arbor Probation Office Relocation - *Ann Arbor*
  Office Reno at Detroit Metropolitan Wayne County Airport - *Romulus*
  Theodore Levin Courthouse & Chambers 8th Floor Tenant Improvements - *Detroit*
  Theodore Levin Courthouse 7th Floor Judges' Chambers Renovations - *Detroit*
  U.S. Marshal Service Office Building Renovation - *Port Huron*
  Levin Courthouse Air Conditioning Units 6 & 8 Replacement - *Detroit*

- **Blue Cross Blue Shield of Michigan, Detroit, MI**
  Cornice and Slate Building Renovation
  Boiler Replacement Design/Build Project
  Jefferson Building Standby Power

Rebecca L. Tritt
Project Leader

Project Role
Education

Mechanical Engineering Support
Master of Science in Architectural Engineering, Lawrence Technological University

Serving as Mechanical Engineering Support, Becca's responsibilities include the production of mechanical drawings under the direction of the Lead Mechanical Engineer.

Becca's engineering experience includes equipment selection and layout, heating and cooling load analyses, HVAC system design, and plumbing design.

Becca has used several engineering-related software packages, including Revit, AutoCAD, and Google SketchUp.

In her 7 years at PBA, Becca has been involved in mechanical systems design for the renovation of existing buildings--with an emphasis on historic high-rise office buildings--and new athletic facilities.

Relevant Project Experience

- **State of Michigan, Detroit, MI**
  Cadillac Building Tenant Improvements
  Belle Isle Casino Building Boiler Replacement
  Belle Isle Radio Station Renovation
  Department of Human Services Clark Street Office Tenant Improvements

- **General Services Administration,Various Locations, MI**
  Ann Arbor Probation Office Relocation - *Ann Arbor*
  Office Reno at Detroit Metropolitan Wayne County Airport - *Romulus*
  Theodore Levin Courthouse & Chambers 8th Floor Tenant Improvements - *Detroit*
  Theodore Levin Courthouse 7th Floor Judges' Chambers Renovations - *Detroit*
  U.S. Marshal Service Office Building Renovation - *Port Huron*
  Levin Courthouse Air Conditioning Units 6 & 8 Replacement - *Detroit*
  McNamara Federal Building 3rd & 5th Floors Renovations - *Detroit*
  McNamara Federal Building 17th & 18th Floors Renovations - *Detroit*
  Kalamazoo Federal Building Chiller & Generator - *Kalamazoo*
  U.S. Trustees Office Renovation - *Grand Rapids*

- **Blue Cross Blue Shield of Michigan, Detroit, MI**
  Cornice and Slate Building Renovation

- **Blue Cross Blue Shield of Michigan, Southfield, MI**
  Blue Care Network Commons Renovation Master Plan
  Blue Care Network Office Building Infrastructure Upgrade

- **Bedrock Real Estate Services, Detroit, MI**
  1505 Woodward Core & Shell
  First National Building Domestic Water Piping Investigation and Evaluation

- **DTE Energy, Detroit, MI**
  Salvation Army Building Renovation

- **Time Equities, Southfield, MI**
  Travelers Tower I Tenant Improvements Floors 14 and 16
  Travelers Tower II 10th Floor Assessment and Supplemental Cooling

Shai M. Bishop
Electrical Engineer

Project Role
Electrical Engineer

Education
Master of Science in Architectural Engineering Lawrence Technological University

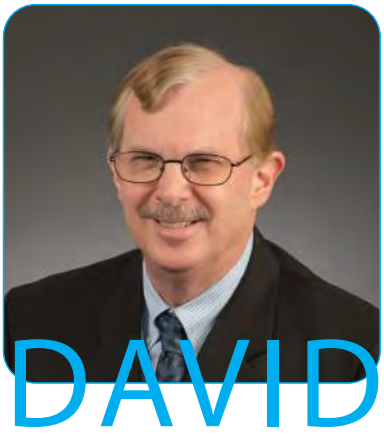
Shai assists with production of electrical project drawings, and also performs lighting calculations and lighting selection for lighting controls systems and power distribution systems.

Shai is a member of our Corporate/Governmental Group. Her 7 years of experience with PBA includes the design of systems for a variety of facility types such as fire stations, libraries, restaurants and corporate offices. She is well versed in several engineering software programs including AGI32, Revit, and AutoCAD.

Relevant Project Experience

- **General Services Administration,Various Locations, MI**
  Theodore Levin 1st Floor IT Renovation - *Detroit*
  U.S. Marshal Service Office Building Renovation - *Port Huron*
  McNamara Federal Building 3rd & 5th Floors Renovations - *Detroit*
  McNamara Federal Building 17th & 18th Floors Renovations - *Detroit*
  Kalamazoo Federal Building Chiller & Generator - *Kalamazoo*
  U.S. Trustees Office Renovation - *Grand Rapids*
  Chamberlain Federal Building Guard Booth Replacement - *Lansing*
- **State of Michigan, Detroit, MI**
  Belle Isle Radio Station Renovation
- **Gerald R. Ford International Airport, Grand Rapids, MI**
  New Operations Center
- **Bedrock Real Estate Services, Detroit, MI**
  1508 Woodward Core & Shell
  5725 W. Buhl Building MEP Infrastructure Upgrades
  One Campus Martius Addition Core & Shell
- **Blue Cross Blue Shield of Michigan, Southfield, MI**
  Detroit Headquarters Infrastructure Upgrade
- **Wurlitzer Building, Detroit, MI**
  Renovation and Adaptive Reuse for Hotel
- **WDIV-TV, Detroit, MI**
  Channel 4 News Room Relocation
- **Shelby Township, Shelby Township, MI**
  Police Station Addition & Renovation
  41-A District Court
- **GM Renaissance Center, Detroit, MI**
  GM World Creation

David J. Tetreau, LEED AP
Mechanical Designer



Project Role
Controls Engineer

Education
Associates in Applied Science - Electrical Engineering Technology, Michigan Technological University

Professional Accreditations
USGBC LEED Accredited Professional (LEED AP)

Dave Tetreau is a member of the firm's Controls Group, bringing over 40 years of experience to his role. He performs temperature control design integrated with the mechanical and electrical engineers on the project to incorporate schematic design, owner project requirements, and basis of design into the final control system design.

David is experienced with a multitude of systems including Building Automation; Niagara Tridium; Campus Central Monitoring; Laboratory Controls (Phoenix, Siemens, Price); and Direct Digital Controls - Stand Alone, with a BAS, or Integrated Lan (Honeywell, Johnson Controls, Siemens, Schneider).

Dave has designed controls for a wide variety of facilities including commercial office buildings, automotive test facilities, hospitals, labs, K-12 schools, and higher education facilities.

Relevant Project Experience

- **State of Michigan, Detroit, MI**
  Department of Human Services Clark Street Office Tenant Improvements
  Belle Isle Casino Building Boiler Replacement
  Belle Isle Radio Station Renovation
- **State of Michigan, Lansing, MI**
  Department of Management and Budget Surplus Building Renovations
- **General Services Administration,Various Locations, MI**
  McNamara Federal Building Renovations - *Detroit*
  U.S. Marshal Service Office Building Renovation - *Port Huron*
  Levin Courthouse Air Conditioning Units 6 & 8 Replacement - *Detroit*
- **Gerald R. Ford International Airport, Grand Rapids, MI**
  New Operations Center
- **Blue Cross Blue Shield of Michigan, Southfield, MI**
  Blue Care Network Office Building Infrastructure Upgrades
  Blue Care Network Commons Renovation Master Plan
- **Blue Cross Blue Shield of Michigan, Detroit, MI**
  Bricktown Lobby Security and Ventilation Upgrades
  Administration Tower Domestic Booster Pump System Replacement
- **Toledo Museum of Art, Toledo, OH**
  Temperature Controls Replacement
- **Time Equities, Southfield, MI**
  Travelers Towers DDC Infrastructure Project
  Travelers Towers Energy Conservation Measures
- **Beaumont Health, Southfield, MI**
  New Beaumont Service Center

Appendix C – Project Examples

PROJECT TYPES AND SERVICES OFFERED:

Below is an index of the Project Number projects by type. We have added an Environmental category since we have found that renovation projects often include the proper handling of hazardous materials including asbestos abatement and lead mitigation.

Levin Chambers 867 Modifications …… Project Number 20
Levin 9th Floor Probation …… Project Number 21
Levin Prospectus Modernization ……... Project Number 22
US Courts / US Marshals / Elevator Addition (Marquette) ……. Project Number 24
PVM DOS 3rd Floor……..…….. Project Number 27
PVM Director's Office Renovation (PVM DOS 17th Floor)……... Project Number 28

HVAC equipment replacement, upgrade, selection

Belle Isle Aquarium Mechanical System Evaluation and Construction Documents …… Project Number 4
DNR Stewardship …….. Project Number 11
National Labor and Relations Board Office Renovation……... Project Number 19
US Courts / US Marshals / Elevator Addition (Marquette)…….... Project Number 24
PVM Director's Office Renovation (PVM DOS 17th Floor) ……. Project Number 28

HVAC controls replacement, upgrade, selection

Lapeer Armory Renovation and Addition …… Project Number 1
National Labor and Relations Board Office Renovation…… Project Number 19
PVM DOS 3rd Floor ……. Project Number 27

Interior remodeling and renovation

Lapeer Armory Renovation and Addition ……..... Project Number 1
Bay City 2nd Floor Lighting ……. Project Number 2
Hydraulic Passenger and Traction Freight Modernization …….. Project Number 18
Levin Chambers 867 Modifications …….. Project Number 20
Levin 9th Floor Probation …… Project Number 21
US Courts / US Marshals / Elevator Addition (Marquette)……. Project Number 24
Funeral Home Addition ……. Project Number 25
PVM DOS 3rd Floor…….. Project Number 27
PVM Director's Office Renovation (PVM DOS 17th Floor)……. Project Number 28

Maintenance and facility preservation

Belle Isle Aquarium Mechanical System Evaluation and Construction Documents…….. Project Number 4
AWS Conservatory Structural ……... Project Number 6
Belle Isle Fountain Manual ……. Project Number 7
Cadillac Place Western Freight Elevator Modernization…… Project Number 9
Grand Ledge Cooling Tower ……. Project Number 12
Grand Ledge Fire Alarm Replacement …… Project Number 13
Grayling Renovation of Building 48M…… Project Number 14
Hydraulic Passenger and Traction Freight Modernization ……... Project Number 18

Parking and Paving

Lapeer Armory Renovation and Addition …… Project Number 1
Lansing Guard Booth Replacement and Security Upgrades…….. Project Number 17
Levin Prospectus Modernization……. Project Number 22
Marquette Third Street Perimeter Security Project …….. Project Number 23

Roof repair, restoration and or replacement design

Lapeer Armory Renovation and Addition …….. Project Number 1
Cargo Flat Roof Replacement …… Project Number 10
Grayling Renovation of Building 48M……. Project Number 14
Funeral Home Addition ……... Project Number 25

Toilet and / or shower room remodeling or design

Lapeer Armory Renovation and Addition…… Project Number 1
Courtroom 861 and Chambers 867 Modifications …… Project Number 20
US Courts / US Marshals / Elevator Addition (Marquette) …….. Project Number 24
PVM DOS 3rd Floor …… Project Number 27

Environmental – asbestos abatement/lead mitigation/hazardous materials

Bay City 2nd Floor Lighting …… Project Number 2
Grayling Renovation of Building 48M…….. Project Number 14
US Courts / US Marshals / Elevator Addition (Marquette) …….. Project Number 24

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: 1

21. TITLE AND LOCATION *(City and State)*

Lapeer Armory-Phase 1 and 2
Lapeer National Guard Armory, Lapeer Michigan

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if Applicable)*
Phase 1: 2016-2018 Phase 2: 2017-2020	Phase 1: 2017-2018 Phase 2: 2020-2021

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
State of Michigan - Department of Technology, Management & Budget	Jan Miller	(517) 284-7969

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Lapeer National Guard Armory was constructed in 1974 with the purpose of serving the Army National Guard and their duties. The current population at this Guard Post requires the facility to be expanded. The first phase of renovations included the replacement of boilers and other hydronic components; the upgrade of electrical systems; the addition of a new roof top air handling unit; the removal and replacement of interior lighting; the removal and replacement of ceilings; the remediation of hazardous materials; and the removal and replacement of the roofing system. The second phase of improvements to the armory includes both an interior renovation and an addition. The renovation includes the toilet, shower and locker room facilities as well as a physical training room, personal equipment storage room and private office. An addition to the building provides caged storage areas, a new vault and associated office as well as a new kitchen.

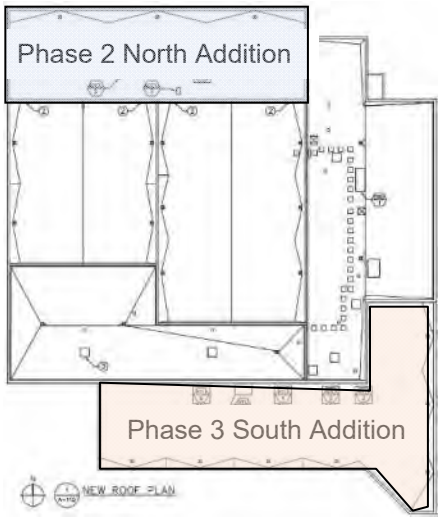
Design Services

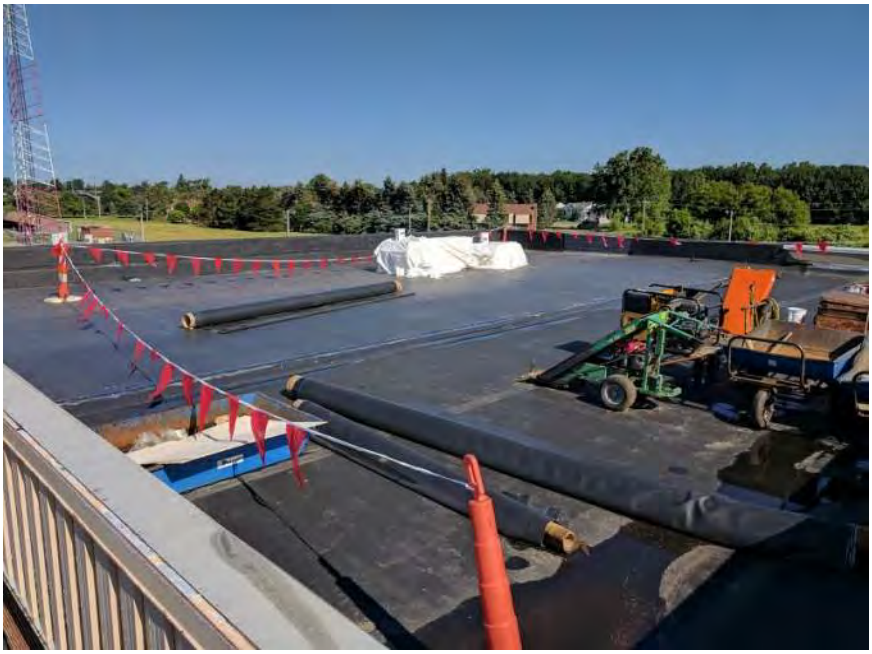
G.H. Forbes Associates Architects (Forbes) provided the following design services for the project: Field Investigation; Pre-Alteration Assessment Environmental Survey; Construction Documents; Cost Estimating; General Architectural and Engineering Design; Mechanical Assessment and Design; Electrical Assessment and Design; Plumbing; Fire Protection; Fire Alarm and Code Compliance.

Phase 1 Size: Boilers and Electrical Equipment; 19,500 sq.ft. Roof
Phase 1 Cost of Construction: $1,080,000
Phase 2 Size: 4600 SF Addition, 5200 SF Renovation
Phase 2 Cost of Construction: $2,500,000

PROJECT RELEVANCE:
Building and Structure Additions; Building Envelope Investigation; Door and Window Replacement; Fire and security alarm systems; HVAC controls replacement, upgrade, selection; Mechanical Assessment and Design; Plumbing; Civil Engineering; Electrical Assessment and Design; General Architectural and Engineering Design; Interior Remodeling and Renovation; Parking and Paving; Toilet and/or shower room remodeling or design; Roof Replacement; Blast and Force Protection anti-terrorism; and BAS.

Phase 3 Entrance Design





Roof Replacement

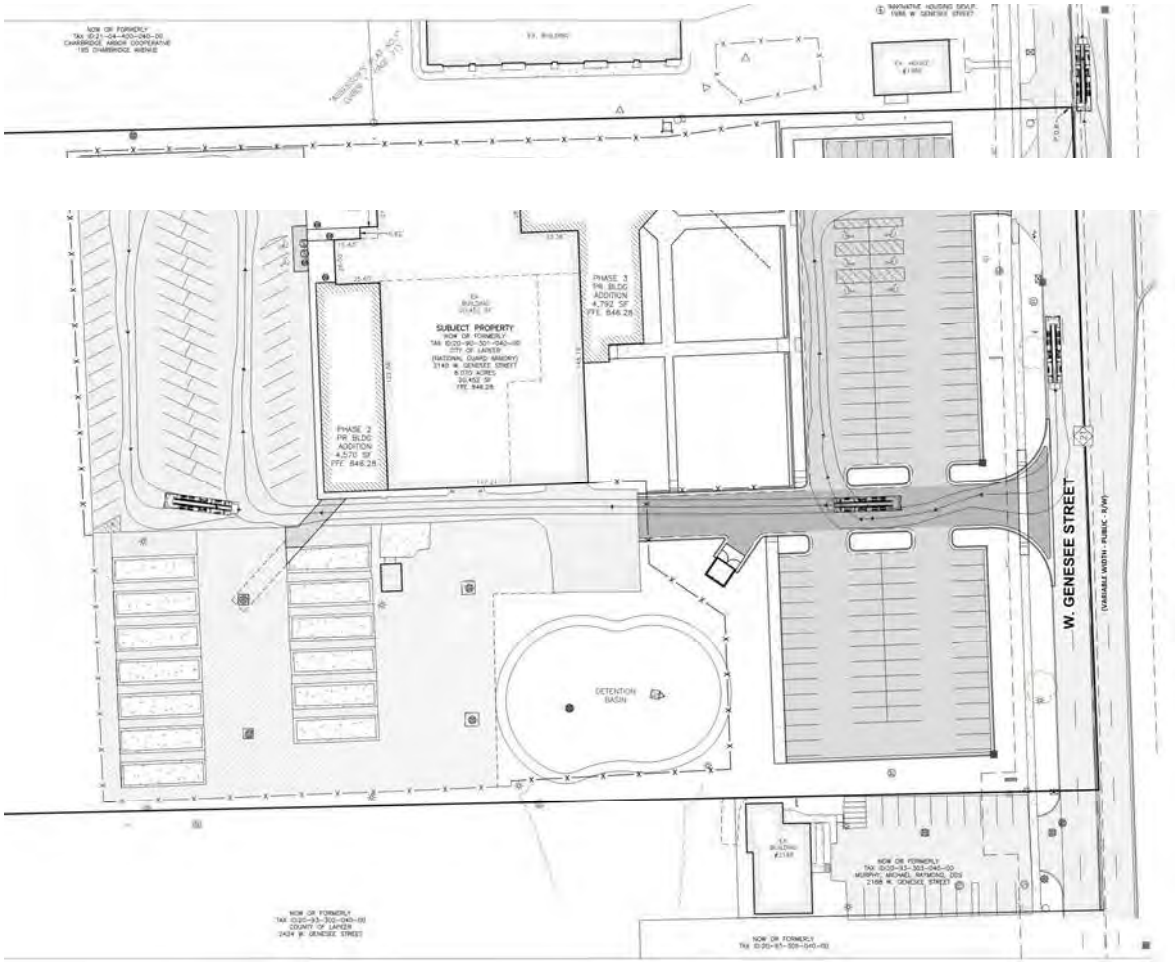
New Electrical Transformer

Future phase three of the project is also being designed by Forbes. Additional parking and another road access point accommodates both soldiers as well as civil functions such as, emergency services, postal deliveries and waste disposal. Included in the design for a new parking lot was the consideration and application of force protection and anti-terrorism regulations outlined in the National Guard Armory Design Guide. These same regulations were applied when designing the new addition and building envelope, where energy efficiency and cost savings were the primary drivers in design. New operations were added to the building with the increase in square footage, such as classroom and learning areas, and administration offices. For this future project in addition to the services listed above, Forbes will provide Conceptual Design; Space Planning; Interior Design; and 3D Rendering.

The renovation and additions will be conditioned and ventilated by rooftop units. Phase 1 includes one rooftop unit and Phases 2 and 3 will have approximately four rooftop units. The systems will be variable air volume with hot water reheat. DMVA asked that the design minimize the reheat and PBA noted that ASHRAE 90.1-2013 limits the amount of reheat and this is taken into account in the design. Phase 1 included the replacement of the hot water boiler and domestic hot water heater. PBA analyzed the systems and determined the most cost effective way is to provide domestic hot water from a separate water heater and not through a plate and frame heat exchanger. PBA noted that it is better to have multiple boilers since there is a level of redundancy. The new HVAC equipment was analyzed for life cycle cost by providing a simple payback. A new DDC control system was designed with Phase 1. The new Control system is based around LON. Based upon PBA's electrical analysis, it was determined that the existing electrical service would need to be upgraded during the first phase of the project.

North Wall Addition

Showers Installed



Parking addition showing emergency vehicle route

Construction Administration Services
Forbes provided field observation on a weekly and as-needed basis for the project. Professional services for the project also included consultant coordination, construction administration, shop drawing review, responding to contractor requests for information and record documents.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineers
c.	NTH Consultants	Northville, Michigan	Environmental Consultant
d.	Monument Engineering Group Assoc.	Fowlerville, Michigan	Civil Engineering

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	2

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
USPS Judge Ludington Ceiling & Lighting Upgrades U.S. Post Office – Bay City, MI	2016-2017	2018-2019

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Chris Yezbick	(216) 401 - 3192

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The objective for the project is to improve the lighting of the courtroom while maintaining and restoring the overall historical look of the courtroom. Forbes researched original 1931 drawings and authored a design intent narrative outlining our approach to replacing surface mounted fluorescent and incandescent fixtures with LED fixtures. We replaced 72 surface mounted fluorescent two-by-four lights with a single luminous panel comprised of LED lights and a stretched fabric ceiling. The innovative design saves energy and greatly reduced maintenance as the fluorescent fixtures routinely required a lift be used in the courtroom to change lamps. The LED lighting panel is dimmable from a warm glow to a brightly lit ceiling and is switched independently from other fixtures in the courtroom. The solution does not distract from the original courtroom design yet we were able to achieve the lighting levels required by the Court's Design Guide.



Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates provided field inspection for the project which began in 2018. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Cost of Construction: $ 335,000

PROJECT RELEVANCE: Interior remodeling and renovation; Environmental – asbestos abatement/lead mitigation/hazardous materials.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	NTH Consultants, Inc.	Northville, Michigan	Environmental Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	3

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
Building #2 Water Infiltration Hart-Dole-Inouye Federal Center, Battle Creek	PROFESSIONAL SERVICES 2018-2020	CONSTRUCTION (if Applicable)

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Daniel Koperski	(313) 226 - 2106

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project investigated the cause of the degradation of the plaster walls, water infiltration, and mortar cracking on the exterior facades of Building 2 of the HDI Federal Center. Forbes prepared a report detailing the issues uncovered and prioritizing the necessary corrections, provided proposed solutions and developed Order of Magnitude cost estimates required for this work.

Design Services
G.H. Forbes Associates provided field survey, written work plan for water testing analysis and cost estimating.

Cost of Construction: $200,000

PROJECT RELEVANCE: Building envelope investigation, repair, upgrade.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	RAM Construction Services	Kentwood, Michigan	General Contractor
c.	DesignSmiths	Rockford, Michigan	Historic Preservation

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	4

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Mechanical System Evaluation and Construction Documents Belle Isle Aquarium -Detroit, Michigan	2016-Ongoing	TBD

PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Department of Natural Resources	Scott DeKorte	(616) 490-6169

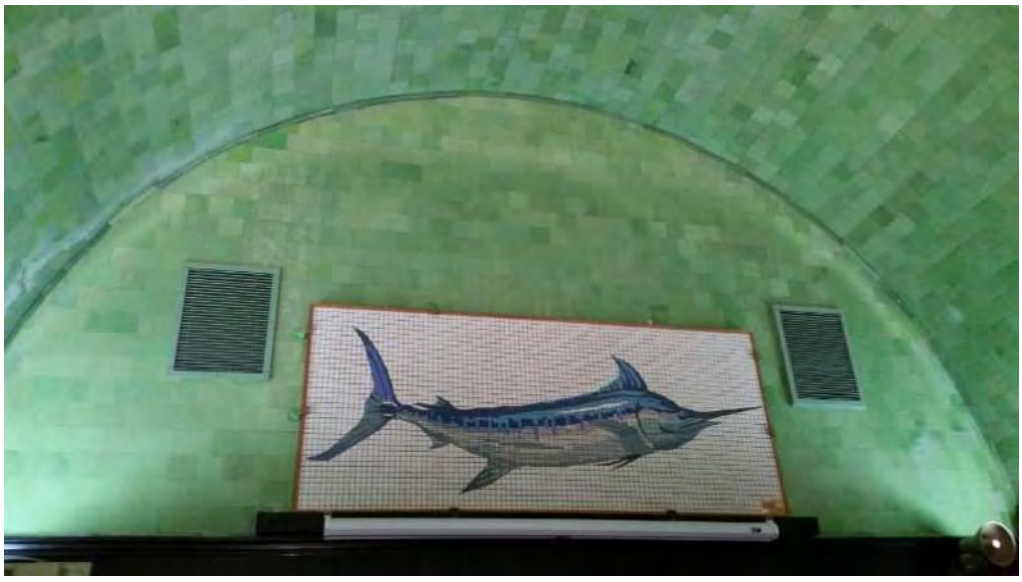
BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The 24,000 SF Aquarium was designed by Albert Kahn and built in 1904. The historic building uses a hot water heating system that is intertwined with the heating system in the adjacent Conservatory. Lack of maintenance and aging infrastructure has resulted in inadequate conditions.

Design Services
G.H.Forbes Associates provided field survey, and is participating in meetings to develop the scope of work for the heating system.

Phase 1 was to provide an Infrastructure Study to identify major code deficiencies related to the Mechanical System in the Aquarium.

Phase 2 is to provide the architectural, mechanical and electrical design for a new heating and cooling system for the Aquarium. The original intent was to incorporate existing hot water boilers. Together with the State, the design team has thoroughly evaluated the type of mechanical system to coordinate with other renovation plans, future uses and the best long-term solution. A Mechanical System Evaluation was recently completed that compared five types of systems including the feasibility of geothermal systems to both heat and cool the aquarium. The DNR has recently selected a closed loop water source heat pump system. The team is beginning the schematic design of the system.



Size: 24,000 sq.ft.
Estimated Cost of Construction: $5,800,000

PROJECT RELEVANCE
HVAC equipment and distribution replacement, upgrade, selection; Maintenance and facility preservation

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical/Electrical Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 5

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
Belle Isle Casino Sprinkler Replacement Belle Isle Casino, Detroit, MI	PROFESSIONAL SERVICES 2016	CONSTRUCTION *(if Applicable)* 2017

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology Management and Budget	Scott DeKorte	(616) 490-6169

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Belle Isle Casino opened in 1908 to replace the original wood casino building that was lost in a fire. In 2014 the state of Michigan leased Belle Isle from the city of Detroit and promised twenty million dollars in capital improvements within three years. The building name stems from the 19th century term "casino" meaning a public gathering place for dancing, music, not related to gambling. The State regularly rents the facility to the public for weddings, meetings and other events.

The project was driven by the need to replace a failing fire suppression system in the building. Inadequate maintenance and original installation errors had resulted in leaks and burst pipes. The existing protection was a dry pipe system throughout the building which required demanding maintenance especially draining each and every low point to prevent freezing pipes. The project included replacing all of the fire sprinkler pipes and heads on all floors, installing a new fire pump, compressor, and generator, and installing a new fire alarm system. The new generator required the gas service be upsized. Insulation was added and lighting replaced in 5,000 SF of the Second-Floor ceiling to comply with code and avoid adding sprinklers above the ceiling. This existing deficiency was identified during careful field survey, avoiding a change order during construction. In the main gathering areas where the original plaster ceilings remain, the design incorporated extended coverage sprinkler heads. This allowed for a reduction in the amount of exposed pipe within these historically significant areas. The pipe was arranged to maintain critical views within the space while providing code compliant coverage.

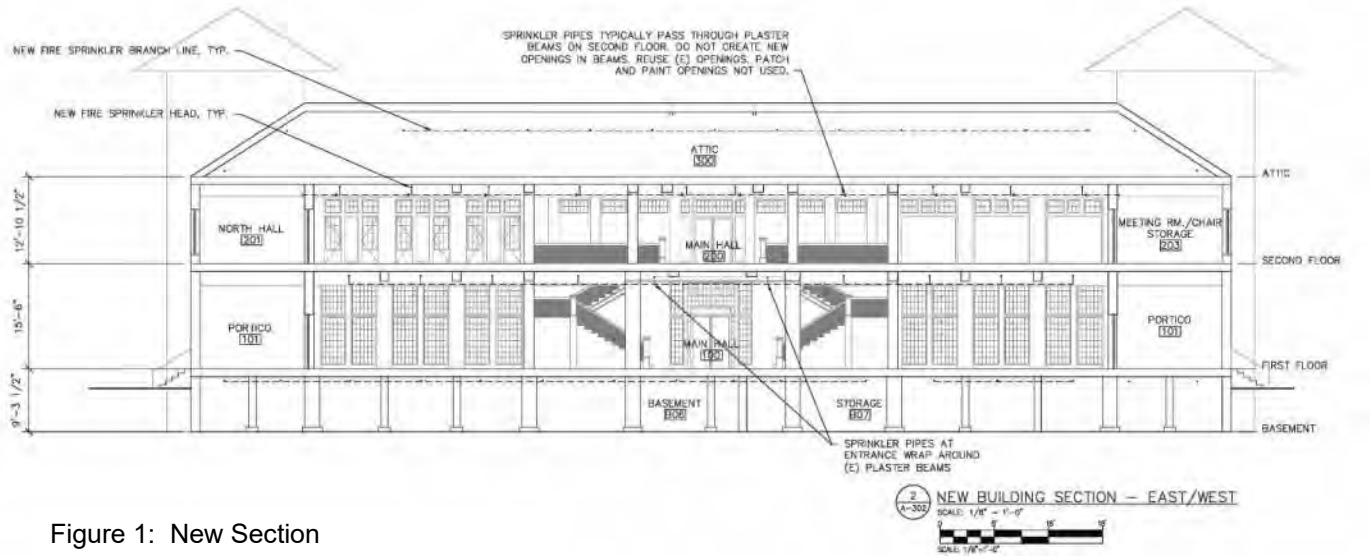


Figure 1: New Section

Size: 56,000 sq. ft
Belle Isle Casino Sprinkler Replacement—$570,000

PROJECT RELEVANCE:
Fire Protection; Historic Preservation; Timely Construction; On Budget

Prior to the sprinkler replacement, G.H. Forbes Associates Architects (Forbes) worked with PBA and Allied in a Design-Build project to replace the hot water boilers with new condensing boilers. Forbes and PBA compiled a pros and cons list to guide the State in determining whether to get new or reuse existing boilers elsewhere on the island. The team also provided information and recommendation to determine the type of boiler most appropriate for the Casino. A reliable heat source in the building was necessary to install a wet pipe sprinkler system throughout the basement, first and second floors.

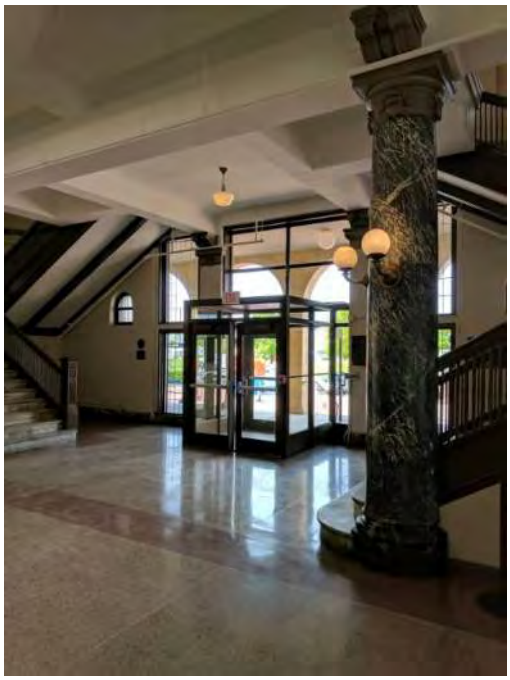


Photo 1: Entry

Photo 2: Plaster Repair

While most of the building could be protected with a wet-pipe system, the unheated attic space required a dry system. Maintenance considerations were of great concern since the State has limited staff and many buildings on Belle Isle that require significant repair as well as deferred maintenance. When the State's Department of Natural Resources (DNR) took over the management of the island from the City of Detroit they were overwhelmed with the needs of the structures, many of which are irreplaceable historic gems. DNR personnel in charge of the island said "we're just trying to eat the elephant one bite at a time". So, we designed the improvements for longevity and streamlined maintenance. The new dry pipe system was carefully installed to limit the drain points to ease maintenance. In addition, a new compressor was carefully located to improve effectiveness. Finally, drain points were considered and coordinated so that even yearly maintenance would be streamlined.

The budget and schedule both posed significant challenges on this project. A construction contingency was not available so the project was carefully managed to avoid change orders and target repairs of items like patching of the existing plaster ceiling. The construction schedule was highly condensed at 109 days to complete all of the work so that the organizers of the Grand Prix could set up for their event as pre-arranged with the State. The schedule was further complicated by events, including rehearsal dinners and weddings, that were scheduled throughout construction. This required detailed coordination and constant communication. Throughout the project, the Contractor was required to keep the fire suppression system active to protect occupants as well as the building itself. Through careful management, the project was a success and on time.

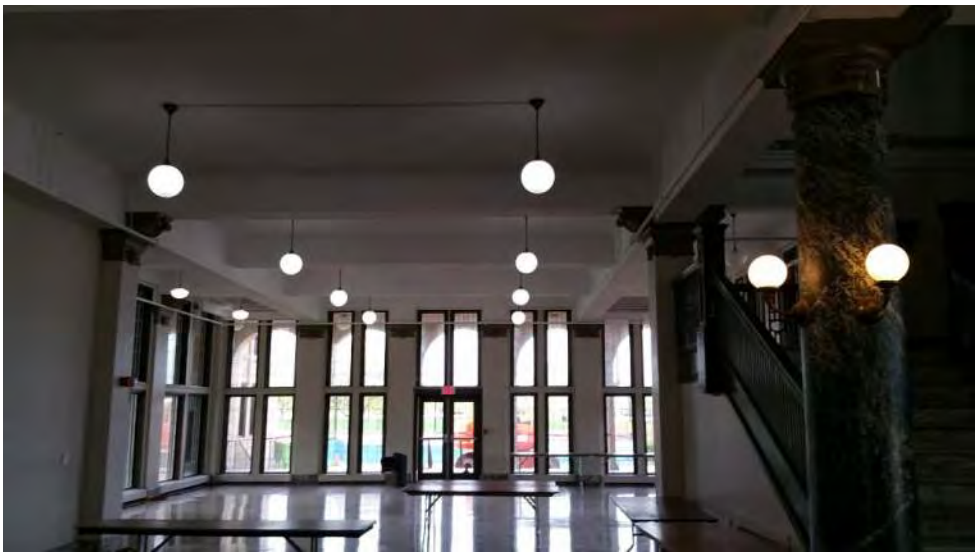


Photo 3: Sprinkler installation on the first floor

Photo 4: Fire Sprinkler Riser

Photo 5: New Generator

Design Services

Forbes provided field survey and architectural design and coordinated engineers. Construction documents included specifications and cost estimating. Bidding services included review of bids for Best Value, interviews and recommendation of award to the State.

Construction Administration

Forbes provided field inspection and reports, facilitated construction progress meetings and authored meeting reports. Forbes reviewed cost proposals, answered requests for information and provided Record Documents.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	(1) FIRM NAME Peter Basso Associates	(2) FIRM LOCATION (City and State) Troy, Michigan	(3) ROLE Mechanical and Electrical Engineer
c.	(1) FIRM NAME Jensen Hughes	(2) FIRM LOCATION (City and State) Lincolnshire, IL	(3) ROLE Fire Protection Engineer
d.	(1) FIRM NAME Allied	(2) FIRM LOCATION (City and State) Detroit, MI	(3) ROLE General Contractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 6

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
ASW Conservatory Structural Improvements Belle Isle Anna Scripps Whitcomb Conservatory, Detroit, MI	PROFESSIONAL SERVICES 2018-2019	CONSTRUCTION *(if Applicable)* 2019

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology Management and Budget	Scott DeKorte	(616) 490-6169

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The 15,000 SF Anna Scripps Whitcomb Conservatory was designed by Albert Kahn and built in 1904. The historic building is composed of the Palm House, North and South Wing, Show Room and Entrance Vestibule. Spanning over seventy feet across and nearly seventy feet in height, the main Palm House required immediate structural repairs due to deterioration of the original steel truss columns.

Picture 1: Palm Dome

Picture 2: Original truss column in the Palm House

The project scope included the replacement of the lower twenty-one feet of the twenty truss columns in the Palm House and assessment and replacement of the tension ring, gusset plates and lower three feet of the upper curved truss columns. To inform the design, we located and reviewed historic drawings and performed field survey to determine actual built conditions. We carefully selected materials to blend into the existing structure and reduce maintenance. Details including fasteners were highly considered for historic authenticity.

The project included two primary challenges. First, the plants within the Palm Dome remained during construction requiring shoring and scaffolding to be designed and constructed around the plants. Careful planning and coordination was required to disconnect heaters and maintain temperatures throughout the duration of construction. The second challenge was the presence of lead-based paint on the original steel members. The paint contained 50% lead which is about as high as it gets in the industry. The paint required proper removal where the members were to be cut. Also, members to be repainted required blasting to prepare the steel surface. We worked diligently with the contractor to ensure proper containments were setup, air monitoring was performed, proper cleaning and testing was completed prior to opening the conservatory to the public on the weekends during construction.

Historical items including thermostats from a 1953 renovation and an Anemometer were salvaged and reinstalled at the end of the project. The project construction was completed in June of 2019.

Picture 3: Column Base

Picture 4: Conservatory Repaired

Picture 5: Anna Scripps Whitcomb Conservatory

Size: 15,000 sq. ft
Belle Isle ASW Conservatory Structural — $1,270,000.00

PROJECT RELEVANCE:
Structural Repair; Historic Preservation; Maintenance and facility preservation; Hazardous Materials Mitigation; Timely Construction; On Budget

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	RSE	Port Washington, New York	Structural Engineer
c.	NTH Consultants	Northville, Michigan	Environmental Engineer
d.	Montgomery Smith, Inc.	Burlington, Kentucky	Historic Preservation Expert

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	7

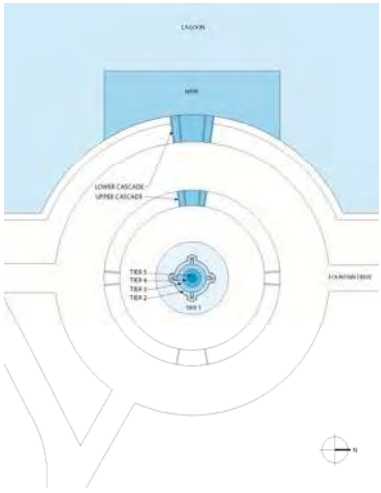
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
Scott Fountain Instruction Manual Belle Isle – Detroit, MI	PROFESSIONAL SERVICES 2019-2021	CONSTRUCTION (if Applicable)

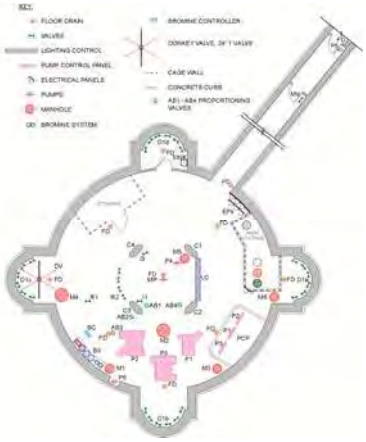
PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology, Management and Budget	Scott DeKorte	(616) 490-6169

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

DTMB selected Forbes for this project because of our technical writing and communication skills. For over a decade, the James Scott Memorial Fountain on Belle Isle has primarily had a single caretaker, Robert Carpenter, who retired from DTE in 2019. This project is a collaboration with PBA to document Mr. Carpenter's knowledge and to produce an Instruction Manual that can be referenced by a team of trained DNR staff to perform the operations of spring startup, winterization, ongoing maintenance, trouble shooting and repairs. The Instruction Manual includes mapping elements within the fountain and detailing step-by-step instructions necessary to operate the antiquated equipment.





Design Services
G.H. Forbes Associates is providing field surveys and documentation as well as interviews and meetings to develop the instruction manual.

Cost of Construction: NA

PROJECT RELEVANCE: Study Phase; Maintenance and facility preservation

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: 8

21. TITLE AND LOCATION *(City and State)*

Cadillac Place Building Entrance Renovation

Dept. of Technology Management and Budget, Detroit, MI

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if Applicable)*
2017-2020	2018-2020

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology Management and Budget	Chris Bahjet	(517) 749-7519

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Cadillac Place is a fifteen-story, mixed use building designed by Albert Kahn and completed in 1922. Formerly known as the General Motors Building, it served as the world headquarters for General Motors from 1923 to 2001 and was designated a National Historic Landmark in 1978. It underwent a massive renovation from 2000 to 2002 to accommodate the State offices. The building was purchased by the Department of Technology Management and Budget in 2011. The facility, which features almost 1.4 million square feet of total area, is open to the public and is home to retail spaces as well as State Agencies, including the Michigan Court of Appeals for District I.

The project is driven by the need for the main entrances to be accessible and compliant with egress codes. Prior to design of construction documents, G.H. Forbes Associates Architects (Forbes) conducted a study of all the building entrances for accessibility egress compliance. This study allowed the State to secure funding for the renovation scope which includes replacing the three revolving doors off of Grand Boulevard with swinging doors as well as replacing the bank of doors off Cass and Second Avenue. The decorative rotunda of the revolving doors will remain, and the new exterior doors will be centered in the rotunda with bronze panels on either side, respecting the symmetry of the original design. The rotunda will act as small vestibules, and new glass enclosures with interior doors were designed to be as transparent as possible so as not to detract from the original design.

The original drawings were reviewed and the new doors are detailed to be consistent with the original (which are still in place at the Cass Avenue entrance), including hardware components that were used to specify custom hardware.

Picture 1: Original revolving doors at the Grand Blvd entrance

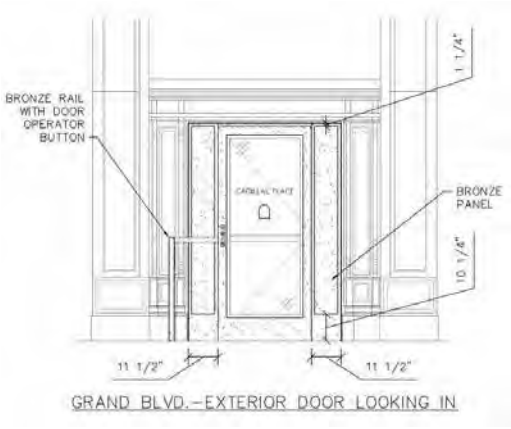
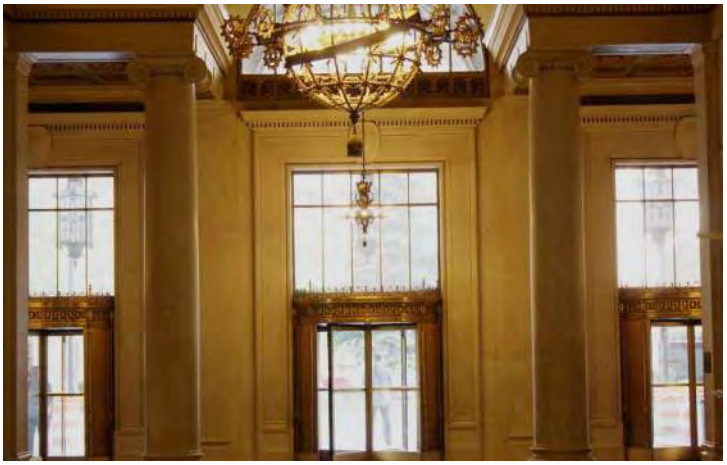


Figure 1: Elevation of new door centered in rotunda

Picture 2: New exterior door

Size: 2,300 sq. ft
Cost of Construction: $860,000

PROJECT RELEVANCE:
Feasibility/Pre-Design Study; Historic Preservation; ADA facility assessment and remodeling; Building envelope investigation, repair, upgrade; Door and Window Replacement; Façade Evaluation



Picture 3: Interior view of the Grand Blvd entrance

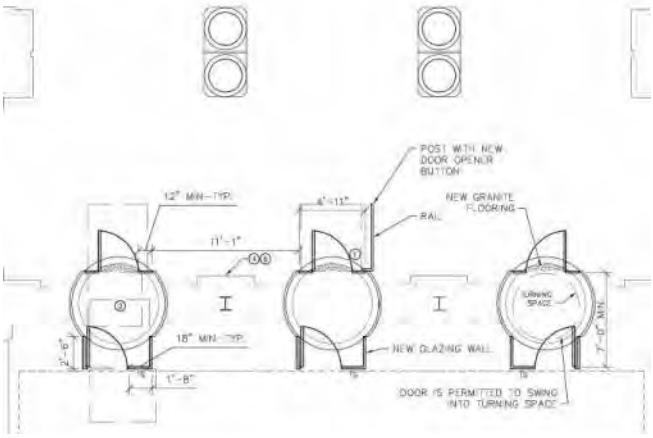


Figure 2: Plan of new doors at Grand Boulevard

Picture 4: Interior view of the Cass Avenue (East) entrance before renovation

Picture 5: Missing original brass hardware was replicated for the new doors

Picture 6: Handle

Picture 7: Cass Avenue entrance after renovation

Another issue addressed in the renovation of the west entrance is the strong winds that can make the doors difficult or impossible to operate. Automatic door operators were installed on the exterior doors to facilitate smooth door operation even in windy conditions. Care was taken during design not to obstruct any of the original ornamental bronze above the doorways.

In addition to replacing the doors, some of the original ornamental ironwork at the east and west entrances was repaired. The deteriorated stone at the Grand Boulevard Doors was replaced.

Picture 8: Before Stone Repairs

Picture 9: During Stone Repairs

Picture 10: After Stone Repairs

Picture 11: Interior view of the east entrance.

Picture 12: Renovated east entrance.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineers

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	9

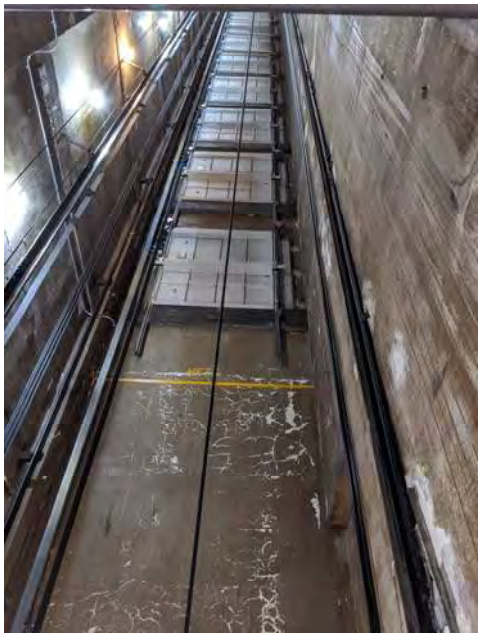
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Western Freight Elevator Modernization Cadillac Place – Detroit, MI	2017-2018	2018-2020

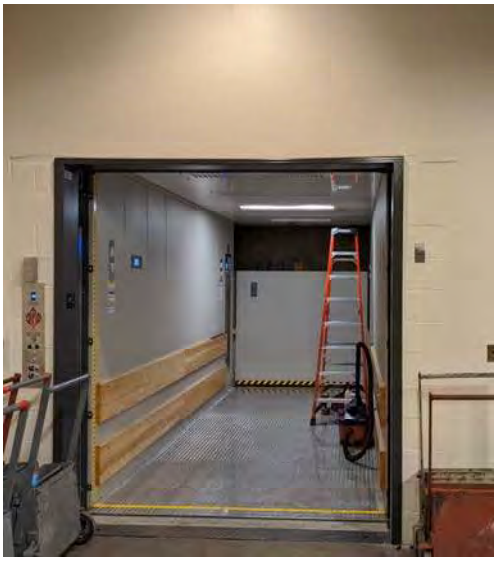
PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology, Management and Budget	Chris Bahjet	(517) 749-7519

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Cadillac Place is a 15-story – nearly a 1 million square foot state facility housing many state agencies. The building has two freight elevators, eastern and western. This project renovated the western freight elevator which required modernization to comply with the current code. The modernization very minimally impacted the historic corridors and finishes on the floors 1 through 15. The project had been previously designed by another professional but not built due to expensive modifications required at each floor due to modifications needed at the sills. Forbes and their team designed a way to affordably add structure to avoid cutting every sill.





Design Services

G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services

G.H. Forbes Associates provided field inspection for the project which began in 2018. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Cost of Construction: $1,200,000

PROJECT RELEVANCE: Building and Structure Additions; Maintenance and facility preservation; Experience with the State of Michigan Historic Preservation.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Vertran Enterprises, Ltd.	Annapolis, Maryland	Elevator Consultant

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	10

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Flat Roof Replacement U.S. Customs Cargo Inspection Facility – Detroit, MI	2018-2019	2019-2021

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Amanda Shelton	(313) 505-9085

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project included the full replacement of the flat roof system, including membrane, insulation, and fasteners as well as providing a new fully adhered, white EPDM membrane roofing system. It also included providing new metal flashing and secondary drainage overflow scuppers.

Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates provided field inspection for the project which began in 2019. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Cost of Construction: $617,450

PROJECT RELEVANCE: Roof repair, restoration and/or replacement design; Historic Preservation.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	NTH Consultants, Inc	Northville, Michigan	Environmental Engineer
c.	Restore Consulting, LLC	Macatawa, Michigan	Structural Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	11

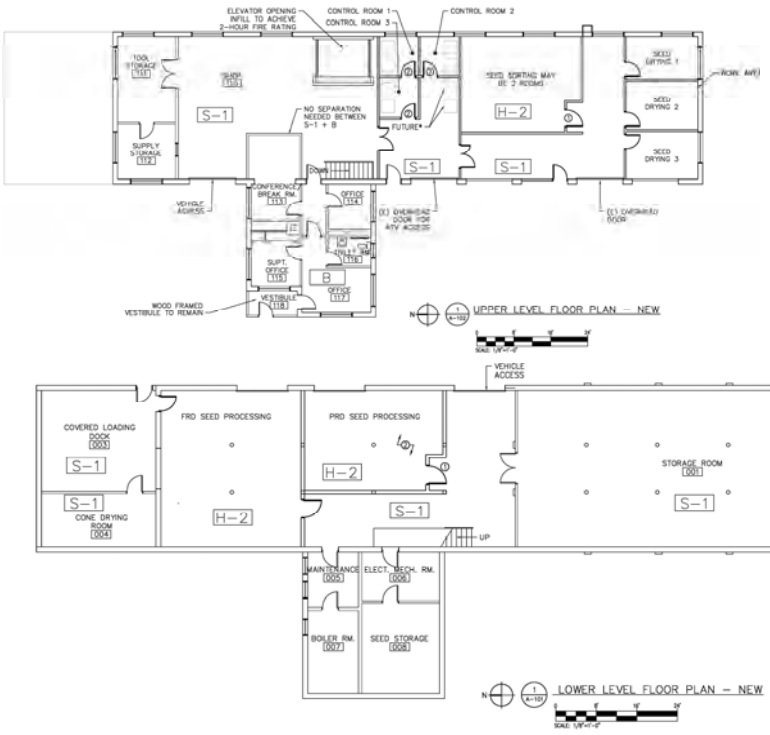
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
DNR Stewardship Stewardship building – Howell, MI	PROFESSIONAL SERVICES 2019-Ongoing	CONSTRUCTION (if Applicable)

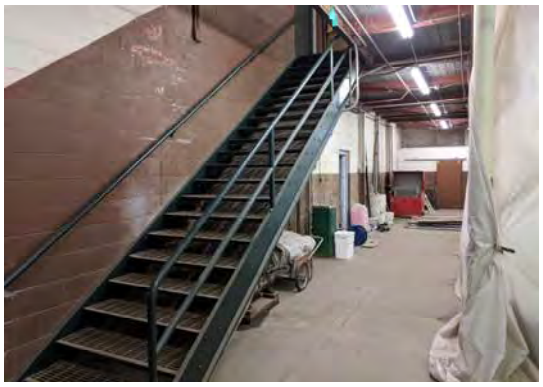
PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology, Management and Budget	Joel Gordon	(517) 242 - 0761

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Built in 1958, the lower level includes seed sorting, vehicle bay, two storage coolers and a mechanical and electrical room. The upper level includes a shop area with a vehicle bay and an adjacent tool and stock room, chemical storage, seed drying area and a recently renovated office area and toilet rooms. DNR desires new rooms within the seed sorting area on the lower level as well as the seed drying area on the upper level. The room will contain the sorting operation which produces dust. On the upper level, five rooms will be added; three rooms will be used to separate drying areas for various seeds. Two rooms will be for workers to hand clean seeds which produces dust. Modifications to the existing heating system will be required. Ventilation air will be required throughout the entire facility. Air conditioning would be limited to the front office area.





Design Services
G.H. Forbes Associates is providing field survey and schematic design documents.

PROJECT RELEVANCE: HVAC equipment replacement, upgrade, selection.

Cost of Construction: TBD

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	12

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Repair Cooling Tower/Air Compressor – Grand Ledge Dept. of Technology Management and Budget -Detroit, Michigan	2015-2016	2016-2017

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Military and Veteran Affairs	Brian Bushnell	(517)749-7519

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The project provides professional services to design modifications to the existing cooling towers, air compressor, intake air hoods and fire alarm system. GHFAA and PBA provided a study of the Aviation Support Facility outlining the existing condensing water system, air compressor system and air handling unit intake. The team made recommendations to address current issues. Modifications include raising the cooling towers, replacing the compressor and replacing the intake air hoods. G.H. Forbes Associates and Peter Basso Associates developed construction documents to address these items and documents were reviewed by LARA.

Cost of Construction: $300,000

PROJECT RELEVANCE Maintenance and facility preservation; Experience with the State of Michigan. Historic Preservation.

Design Services

G.H.Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services

G.H.Forbes Associates will provided field inspection for the project. Professional services for the project include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information and field inspection.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

EXAMPLE PROJECT KEY NUMBER: 13

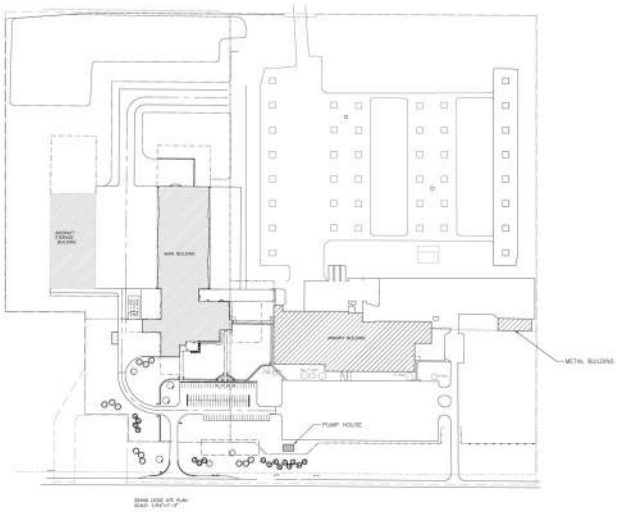
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Fire Alarm Replacement – Design-Build Grand Ledge Aviation Facility – Grand Ledge, Michigan	2015-2016	2016-2017

PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Department of Military and Veteran Affairs	Brian Bushnell	(517) 481-7561

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project required the replacement of the fire alarm system main panel and end devices at Grand Ledge Aviation Facility Main Building, Pump House and Aircraft Storage. The existing Fire Alarm system was not functioning. In addition to a new fire alarm head-end and end devices, voltage conditioner/surge protectors were added to protect the main fire alarm panels.



Design Services

G.H.Forbes Associates provided field survey, engineering and architectural design. Construction Documents were submitted to LARA.

Construction Administration Services

G.H.Forbes Associates provided review of shop drawings, RFIs, punch list inspection and Record Documents.

PROJECT RELEVANCE

Fire and security alarm systems; Maintenance and facility preservation

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical/Electrical Engineer
c.	Allied	Detroit, MI	General Contractor

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	14

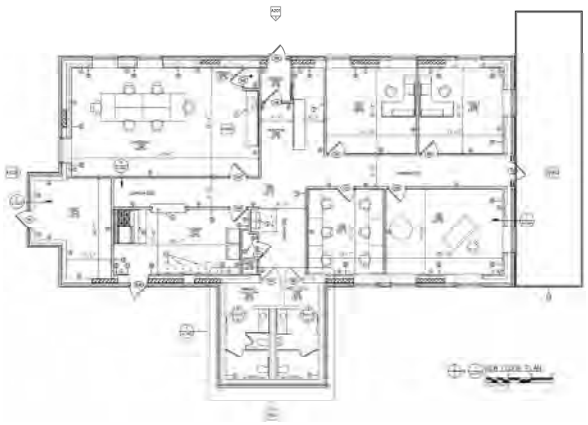
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Renovation of Building 48M Camp Grayling – Grayling, MI	2020	2021-Ongoing

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Department of Military and Veterans	Chris Kulhanek	(517) 749-2610

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The existing building was altered in 1952 as a Mess Hall on Camp Grayling and currently provides a large kitchen separated from a dining room with a serving area. The DMVA requires offices, conference space and a smaller kitchen. The improvements will include replacing an asbestos roof with structural insulated panels and adding insulation and masonry veneer to the existing exterior masonry walls. A new deck, patio, retaining wall and sidewalk will also be added and existing toilet rooms will receive a refresh with new finishes. This is a design-build project requiring careful coordination to meet a demanding schedule.



Design Services
G.H. Forbes Associates provided field survey, construction documents including plans and specifications.

Construction Administration Services
Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Size: Approx. 3,400 sq. ft.
Cost of Construction: $1,600,000

PROJECT RELEVANCE: Roof repair, restoration and/or replacement design; Maintenance and facility preservation; Door and Window Replacement; environmental – asbestos abatement/lead mitigation/hazardous materials

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Sheppard Engineering	Troy, Michigan	Structural Engineer
d.	Monument Engineering Group Associates	Fowlerville, Michigan	Civil Engineer
e.	Frederick Construction	Vicksburg, Michigan	General Contractor

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	15

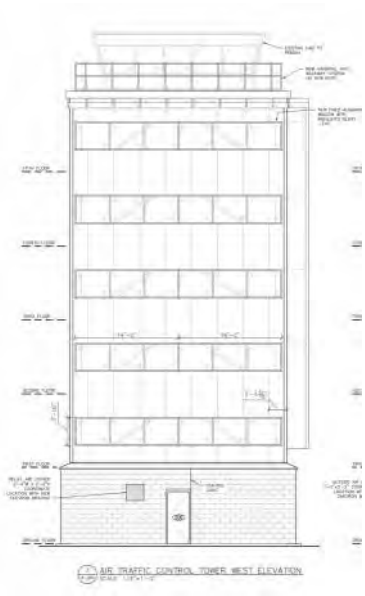
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Modify Air Traffic Control Tower Camp Grayling Airfield – Grayling, MI	2020-Ongoing	2020-Ongoing

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology, Management and Budget	Chris Kulhanek	(517) 284-7909

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project scope is divided into two phases – the first phase to provide design and construction administration services to enclose the existing Air Traffic Control Tower and provide useable space from the ground floor through level six. Phase two of the project is to provide a masterplan for the Airfield Operations Facility at the base of the tower. The new Operations Building will replace an existing building that is too close to the flight line. Together with Sheppard Engineering, Forbes designed significant structural improvements to the tower in order to achieve the agency's needs.



Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates provided field inspection for the project which began in 2020. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Approx. Size Phase 1: 5,600 SF Tower
Cost of Construction Phase 1: $1,800,000

PROJECT RELEVANCE: Building and Structure Additions; Fire and security alarm systems; Experience with the State of Michigan Historic Preservation.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Sheppard Engineering	Troy, Michigan	Structural Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 16

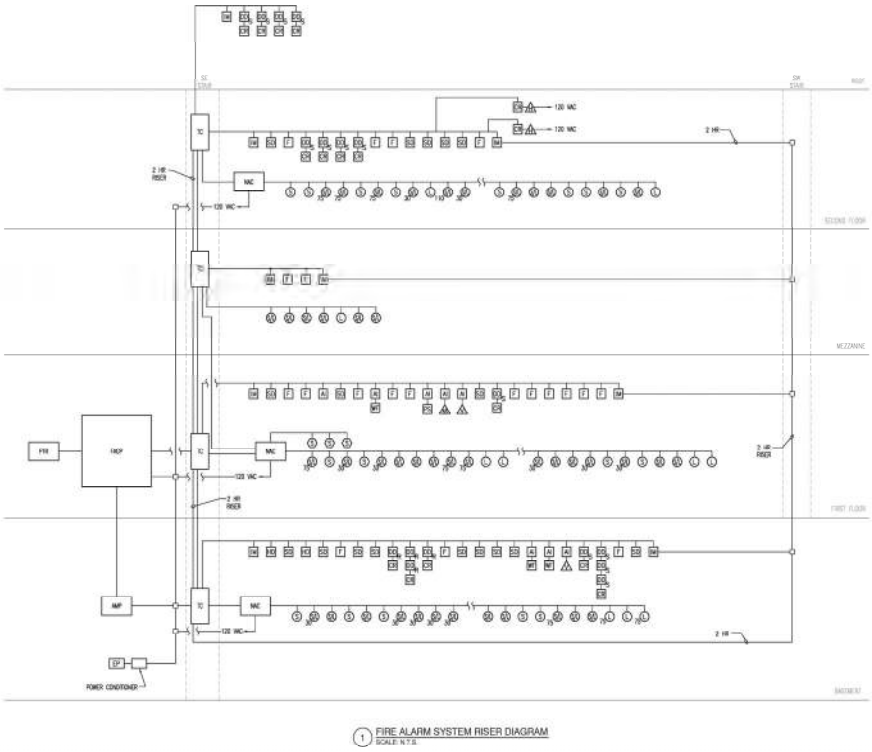
21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Fire Protection Improvements Charles Chamberlain Federal Building - Lansing, Michigan	2011	2017

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Thomas Monaweck	(616) 222-9151

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Lansing Federal Building is a two-story, office building, U.S. Courthouse and U. S. Post Office. The intent of the project was to provide a new addressable fire alarm system to protect the basement, first, mezzanine and second levels. The building is a historic structure. Care for historic materials and intelligibility were an important focus.



1 FIRE ALARM SYSTEM RISER DIAGRAM
SCALE: N.T.S.

Design Services

G.H.Forbes Associates provided field survey and construction documents with Jensen Hughes and EAM Engineers. G.H. Forbes worked with the GSA Historic Preservation Branch to review the installation of new, visible fire alarm devices and determine the best locations to minimize their impact on the historic nature of the building yet provide the proper level of safety for the occupants. Restoration of abandoned device locations were are also considered.

Construction Administration Services

G..H. Forbes Associates and Jensen Hughes provided field inspection for the project. Because the project occurs on Federal property, Forbes acted as the Inspector for Code Enforcement Duties for professional services for the project included consultant coordination, construction administration, shop drawing review, responding to contractor requests for information and field inspection.

Cost of Construction: $747,234
Size: 122,000 SF

PROJECT RELEVANCE:
Fire and security alarm systems

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
c.	Jensen Hughes	Glenview, Illinois	Fire Protection Engineers

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	17

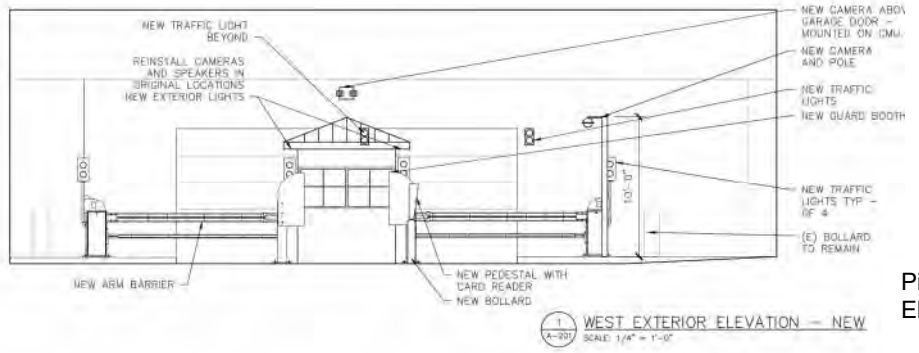
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
Guard Booth Replacement and Security Upgrades Charles Chamberlain Federal Building –Lansing, MI	PROFESSIONAL SERVICES 2019-2020	CONSTRUCTION (if Applicable) Expected 2021

PROJECT OWNER'S INFORMATION

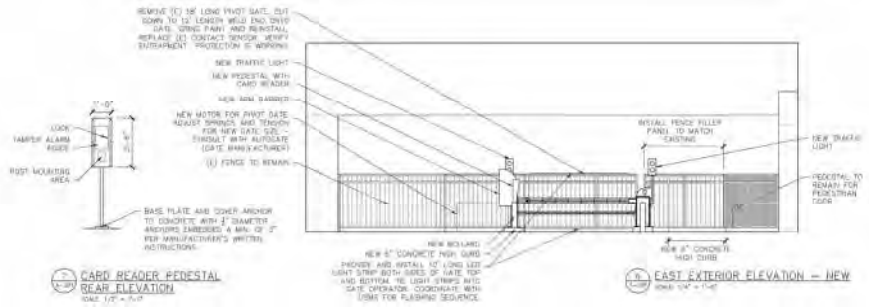
PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Vallabh Rao	(313) 269 - 1148

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The scope of this project included the replacement of the existing guard booth on the west side of the Chamberlain Federal Building with a new modern guard booth and enhanced security. Existing crash barrier arms will be replaced with new barrier arms and pedestals. A new barrier arm will be added at the existing pivot gate facing Townsend Street. Improvements for the rolling entrance and exit doors, rolling door/sally port inside the garage, as well as to the entry/exit area on the West side of the Chamberlain Federal Building were also implemented into the design. Changes to the building were careful to maintain the historic integrity of the building.



Picture 1: Booth Elevation



Picture 2: Gate Elevation

Design Services

G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services

G.H. Forbes Associates provided field inspection for the project which began in 2020. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Cost of Construction: $630.000

PROJECT RELEVANCE: Parking and Paving; Historic Preservation.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Willem Environmental Consulting	Ferndale, MI	Environmental Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 18

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
Hydraulic Passenger and Traction Freight Elevator Modernization Charles Chamberlain Federal Building and U.S. Courthouse, Lansing, MI	PROFESSIONAL SERVICES 2018-2020	CONSTRUCTION *(if Applicable)* On-going

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Thomas Monaweck	(616) 222-9151

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project was to modernize one hydraulic passenger elevator and one traction freight elevator in the historic Charles Chamberlain Federal Building located in Lansing, Michigan. The original two-story structure was constructed in the 1930's and included the freight elevator. An addition was added to the facility in the 1960's and included the passenger elevator.

Passenger and Freight Elevator Design Services

G.H. Forbes Associates Architects (Forbes) with Vertran Enterprises performed a Study for the two elevators in 2018 to determine the best types of new systems and establish a construction budget for the owner, the U.S. General Services Administration (GSA). Forbes provided field survey and published a 117-page report comparing the pros and cons of various options. Once GSA funded the project, Forbes with Vertran Enterprises and Peter Basso Associates provided field survey, design and construction documents for both elevators. Duties for professional services include design/analysis, drawings, specifications and detailed cost estimates.

The project is to modernize the Passenger Elevator to improve performance and safety. The elevator will be brought into compliance with the most current versions of ASME A17.1 - Safety Code for Elevators and Escalators, NFPA 70 – National Electric Code, the Americans with Disabilities Act (ADA), and any other applicable codes. The elevator operating and safety equipment, both mechanical and electrical, will be replaced or renovated as required. The elevator cab will be replaced with a new cab with new interior finishes, ADA-compliant handrails, cab lighting, emergency lighting, pushbutton stations, digital position and direction indicators and dedicated emergency phone lines. The elevator landings will receive new pushbutton stations and car position/direction of travel indicators. The machine room in the Basement will receive a new door and frame a new, code-compliant HVAC system and new lighting. The elevator pits will receive epoxy paint and new access ladders as required by code. A new sump pumpwill be installed in the elevator pit and connected to the building sanitary piping system. The hoistway will receive paint and new lighting.

Passenger Elevator Cab Finishes

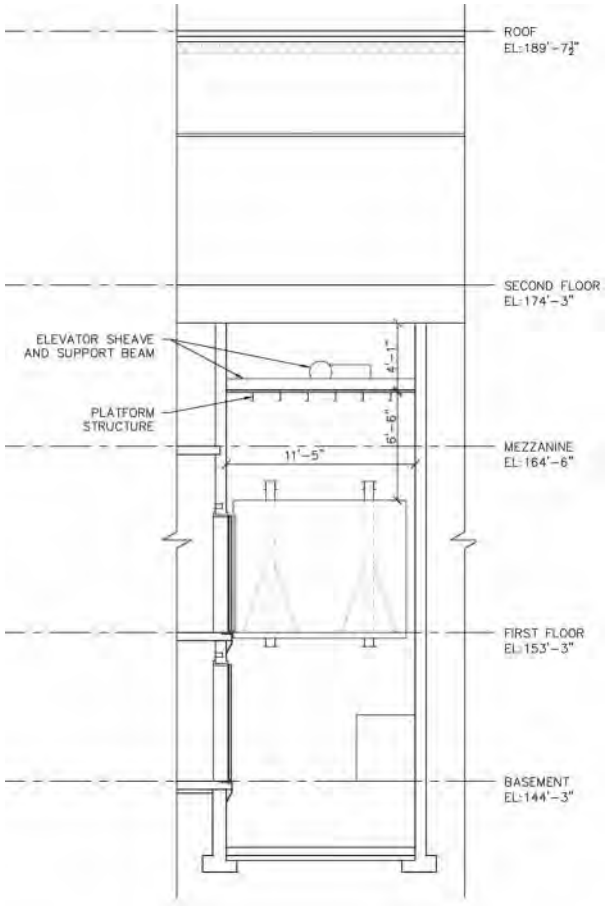
Size: One Passenger and One Freight
Cost of Construction: $1,453,320.00

PROJECT RELEVANCE:
ADA facility assessment and remodeling; Vertical Transportation; General Architectural and Engineering Design; Interior Remodeling and Renovation; Maintenance and facility preservation; Design-Build Experience; Feasibility Study; Historic Preservation; Code Compliance.

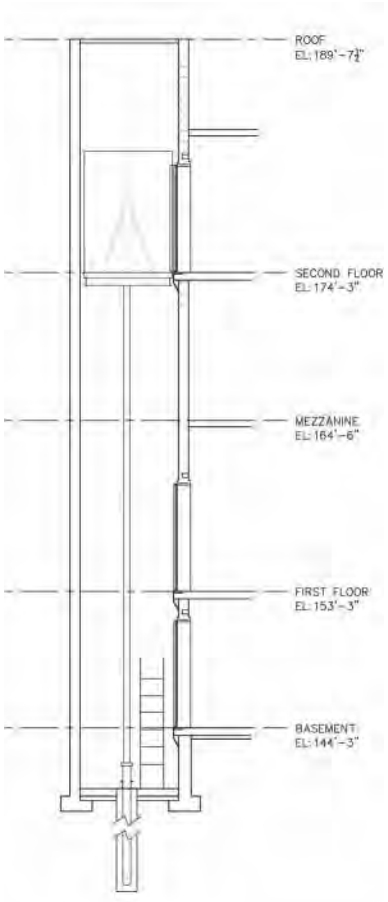
The project is to modernize the Freight Elevator to improve performance and safety. The elevator will be brought into compliance with the most current versions of ASME A17.1 - Safety Code for Elevators and Escalators, NFPA 70 - National Electric Code, the Americans with Disabilities Act (ADA), and any other applicable codes. The elevator operating and safety equipment, both mechanical and electrical, will be replaced or renovated as required. The elevator cab will be replaced with a new cab with new interior finishes, cab lighting, emergency lighting, pushbutton stations, digital position and direction indicators and dedicated emergency phone lines. The elevator landings will receive new pushbutton stations and car position/direction of travel indicators. The machine room in the attic will receive a new door and frame a new, code-compliant HVAC system and new lighting. The elevator pits will receive epoxy paint and new access ladders as required by code. A new sump pump will be installed in the elevator pit and connected to the building sanitary piping system. The hoistway will receive paint and new lighting.

Construction Administration Services

The Contractor is beginning onsite construction in early March 2021. G..H. Forbes Associates, Vertran Enterprises and Peter Basso Associates are providing field inspection for the project. Because the project occurs on Federal property, Forbes is acting as the Inspector for Code Enforcement Duties for professional services for the project included consultant coordination, construction administration, shop drawing review, responding to contractor requests for information and field inspection.



Freight Elevator Section



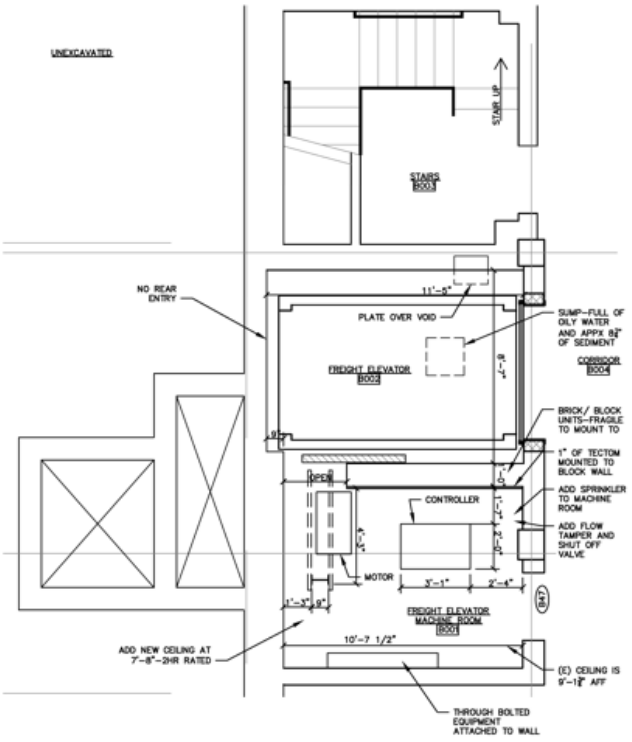
Passenger Elevator Section

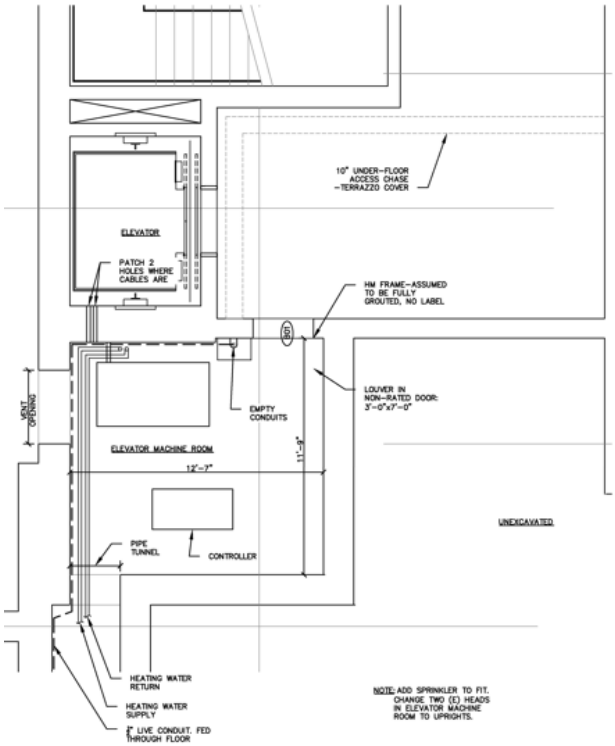
Existing Passenger and Freight Elevator Improvements Study
As of the writing of this project description, a Study is being prepared to illustrate the project scope and implications involved with replacing Passenger Elevator #3 and renovating Freight Elevator #4. The current submission is at 65% review.

In preparation of this report Forbes utilized the expertise of industry professionals. The efforts of Forbes have been combined with those of an elevator consultant (Vertran Enterprises) as well as electrical and mechanical engineers (Peter Basso Associates). The information gathered through this combined effort is being synthesized and structured into the report.

This report includes the following components:

- A description of traction and hydraulic elevators and the renovation process.
- An investigation of the existing hoistway to determine if it meets and can support current elevator codes.
- The construction of the existing hoistways and related components in the hoistway.
- An evaluation of construction feasibility and restrictions.
- A survey of the existing hoistways to the extent possible without the use of scaffolding or a lift.
- The approximate cost of construction for each elevator.





25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	Peter Basso Associates (Study Only)	Troy, Michigan	Mechanical and Electrical Engineers
c.	Vertran Enterprises	Annapolis, Maryland	Elevator Consultant
d.	NTH Consultants	Northville, Michigan	Environmental Consultant

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	19

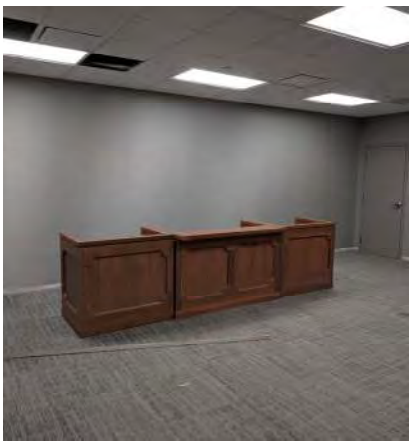
TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
National Labor Relation Board Consolidation, 5th Floor P.V. McNamara Federal Building – Detroit, MI	PROFESSIONAL SERVICES 2016, 2017-2018	CONSTRUCTION (if Applicable) 2018-2019

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Elbert Regacho	(312) 353-7504

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The McNamara Federal Building was built in 1976. This project worked within the existing space on the 5th floor to renovate offices space for the National Labor Relation Board. The scope included private and open offices, a communication closet, breakroom, conference space, a ballistic reception counter and a public hearing room. HVAC system modifications for the renovated area included controls. Other upgrades included mechanical piping and plumbing system modifications, electrical power, data/communication, fire alarm and lighting system modifications. Accessible design was required as well as sound attenuation and custom millwork.



Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates provided field inspection for the project which began in 2018. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Size: Approx. 11,350 sq. ft.
Cost of Construction: $1,820,000

PROJECT RELEVANCE: ADA facility assessment and remodeling; General Architectural and/or Engineering Design; HVAC equipment replacement, upgrade, selection; HVAC controls replacement, upgrade, selection.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: 20

21. TITLE AND LOCATION *(City and State)*

Chambers 867 Modifications

Theodore Levin U.S. Courthouse, Detroit, MI

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if Applicable)*
2015 - 2016	2016-2017

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Stephanie Golowacz	(312) 805-4134

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The project required design for a USDC Courtroom and Chambers within the existing space on the 8th floor of the Theodore Levin US Courthouse to renovate tenant offices and associated courtroom. Within the Chambers, all of the flush mounted fluorescent lights were replaced with pendants and custom surface mounted fixtures that were deemed period appropriate. New work included steel stud and gypsum board wall furring and finishes as well as woodworking to install new doors, frames and hardware. Original wood walnut paneling was restored and new built-in shelving added. In the Courtroom new Court Reporter and Deputy desks were added to match existing millwork.

The renovation required research of the original drawings and specifications as well as photographs during construction. Although many of the 1934 materials remained, the original lighting had been replaced with fluorescent fixtures mounted to the plaster ceilings. The objective of this project was to renovate the spaces for a new occupant and upgrade the lighting in a way that is sensitive to the original design while still being functional and energy efficient. The drawing set from the 1934 construction provides a significant amount of detail regarding the courtrooms and chambers as they were intended to be constructed. This includes reflected ceiling plans, interior elevations and lighting designs for the spaces with the highest level of finish. Drawings as well as photographs during the original construction indicate decorative plaster ornaments were located above pendant fixtures in the Courtroom. The Courtroom was one of three similar Courtrooms located on the east side of the building. Portions of the original plaster medallions remain in one of the adjacent courtrooms.

Photo 1: Corridor with Surface Mounted Fluorecent fixtures prior to renovation

Photo 2: Renovated Corridor with Pendant fixtures

Size: 4,200 sq. ft.
Cost of Construction: $900,000

Project Relevance: Historic Preservation; 3-D Rendering; Lighting improvements; ADA improvements; Plumbing and Mechanical Improvements, General Architectural and Engineering Design; Interior Remodeling and Renovation

G.H. Forbes Associates Architects (Forbes) collaborated with historic preservation consultant EYP to generate an Historic Lighting Report for the Courtroom and Chambers. The report summarized findings from the original drawings and specifications, existing conditions and included recommendations for replication as well as a modified custom fixture option. Forbes also collaborated with millwork consultant, Woody Vaughn, to perform field tests to determine the existing finish on the walnut wood wall panels and the ash wood wainscot. Using alcohol, acetone and 409, it was determined that a lacquer had been placed over the walnut wood panels throughout the chambers library while most of the remaining wood panels had a vanish finish. This information was used to inform the restoration specifications.

Photo 3: Library prior to restoration with bookcases attached to original wood Panels and surface mounted fluorescent lights.

Photo 4: Determining finish of walnut wood panels.

Photo 5: Walnut wall panels restored in the Library.

Photo 6: New custom light fixtures in Library.

The Documents included removing the surface mounted florescent light fixtures and installing new fixtures that responded to the original design, achieved required lighting levels and achieved energy efficiency standards. The Courtroom lighting design incorporated recessed down lights switched separately than the custom pendants which were designed and lamped in response to the original design. The intention was to provide the ability to recreate the original lighting within the Courtroom and also have the ability to supplement that light in order to achieve the Courts Design Guide.

Wood restoration included removing bookcases anchored into the original walnut wood panels. Anchor holes were repaired and the cracking lacquer finish stripped. New bookcases were designed to be removable as they are scribed around the fluting detail of the original panels. In other areas, walnut wood panels were cleaned, anchor holes patched, and areas refinished where either water or sun damage has occurred. Repairs were made to the decorative inlay of the original doors where pieces were missing. Specifications detailed procedures and mockup requirements.

Photo 7: Damage to wood door veneer

Photo 8: Wood veneer repaired on door and door refinished.

Photo 9: Bookcases in Judge's Office prior to restoration. Photo 10: Repair needed where bookcases were removed. Photo 11: Wood wall panels restored in Judge's Office.

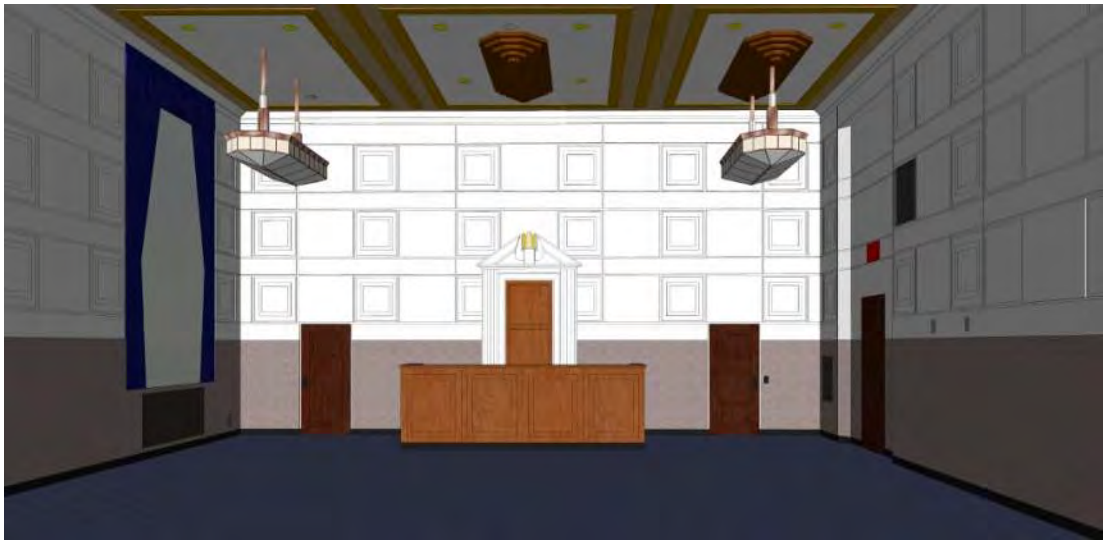


Photo 12, 13 & 14: Courtroom Lighting

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineers
c.	NTH	Northville, Michigan	Environmental Engineer
d.	Allied	Detroit, Michigan	General Contractor

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	21

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
9th Floor Probation Theodore Levin U.S. Courthouse - Detroit, Michigan	2016	2017

PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Michael Coker	(313)-234-5077

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Theodore Levin U.S. Courthouse was constructed from 1931-1934 and is a contributing building to the Detroit Financial District, a National Register Historic District. The Courthouse is a ten-story building with one basement level below ground. This project is a part of a larger renovation project, the Levin Prospectus project, looking at updating major building systems.

The intent of the project was to consolidate the Probation department from the 9th and 10th floors to a single floor. The consolidation to a single floor meant the elimination of private offices for field officers and all non-management personnel. To accomplish this, Workplace 2020 principles, such as lower cubicle heights and more collaborative spaces, were implemented into the design of the open office areas. Collaborative spaces were integrated as a new concept as many of the officers spent most of their days alone previously. These spaces took many forms – from on-on-one rooms to open office casual seating to conference rooms and break rooms. As a means to facilitate Probation's desired scope and remain within budget, the use of furniture-supplied glass partitions became a critical component of the design. The renovation also opened the ceilings to the original plaster ceiling height to restore a bit of history as well as introduce more natural daylight, thereby reducing lighting costs. This project was phased as part of the larger Levin Prospectus project, accommodating swing space for tenants while the building remained occupied during construction.



Photos: Break Room, Meeting Room, Open Office

Design Services

G.H. Forbes Associates is provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services

Professional services for the project included consultant coordination, construction administration, shop drawing review, responding to contractor requests for information and field inspection.

Size: 24,000 sq.ft.
Cost of Construction: $2,350,000

PROJECT RELEVANCE

Conceptual Design; General Architectural and/or Engineering Design; Historic Preservation; Phased Construction; Interior Remodeling; Lighting Improvements; ADA facility assessment and remodeling; Plumbing and Mechanical Improvements, Interior remodeling and renovation

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates, Inc.	Troy, Michigan	Mechanical / Electrical Engineering Consultant
c.	NTH Consultants	Northville, Michigan	Environmental Engineer
d.	ISCG	Royal Oak, Michigan	Interior Design Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: 22

21. TITLE AND LOCATION *(City and State)*

Prospectus Modernization
Theodore Levin U.S. Courthouse, Detroit, MI

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if Applicable)*
2014 - 2016	2016 - 2020

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Seth LaRocque	(313) 317-9622

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Theodore Levin U.S. Courthouse was constructed from 1931-1934 and is a contributing building to the Detroit Financial District, a National Register Historic District. The intent of this project is a Major Building Systems Renovation that would allow the courthouse to be updated, while occupied, to provide safe, efficient, effective, and comfortable housing for the U.S. Courts and related agencies. The Courthouse is a ten story building with one basement level below ground. Chief among the project goals to provide an upgraded facility that meets GSA's facility requirements, including: Accessibility criteria and is fully usable by the physically disabled; Compliance with applicable codes as well as GSA, Courts and DOJ Standards; Leadership in Energy and Environmental Design (LEED); Historic preservation requirements; Building Operational Goals for efficiency and cost savings. EYP of Washington DC is the Design Team Lead and G.H. Forbes Associates Architects (Forbes) served as the local Architect on the project, concentrating their efforts on the Basement and 9th Floor Probation Renovation and the 10th Floor Swing Fit Out.

For the Professional Services provided for the design of this project, Forbes provide the following: Field Investigation; Conceptual Design; Space Planning; Design Development; Construction Documents; Cost Estimating; Constructability Review; Historic Preservation; General Architectural and Engineering Design; Interior Remodeling and Renovation; Mechanical Assessment and Design (9th Floor Only); Plumbing (9th Floor Only); Electrical Assessment and Design (9th Floor Only); Security; Fire Protection (9th Floor Only); Life Safety; Interior Design; Furniture Design (9th Floor Only); Scheduling/Phasing Analysis; Quality Control Review; Building Information Modeling; 3D Rendering (9th Floor Only); Code Compliance; Work in Occupied Buildings; Holistic Approach - Seamless Architecture and Engineering Integration; Attractive Workplaces; ABA Barrier Free Accessibility; Sustainability; Energy Efficiency; Integration of Client's Program; and Tenant Design Standards Integration.

Basement Design Services

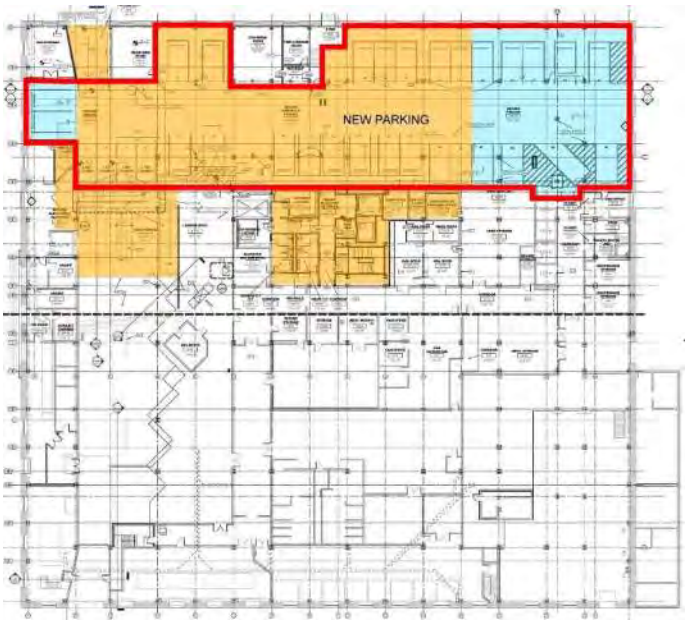
The architectural design and engineering coordination of the Basement level of the Courthouse was assigned to Forbes. The Basement houses a large mechanical room, several storage rooms, the O&M contractor, the USDC fitness center, the building's mail room, the main electrical switchgear equipment, the emergency power generator, a contaminated firing range, the loading dock, a CSO security booth and other miscellaneous rooms. The conceptual design began with analyzing what new functions and equipment replacement were going to take place in the basement as well as how and where to integrate that new work while allowing the building to continue to operate at full capacity. Besides the obvious review of physically fitting the work in the available locations, Forbes reviewed the existing functions that were intended to remain or to be relocated based on the GSA's feasibility study. Once Forbes determined that the CSO security booth, the fitness center, the newly renovated large freight elevator, and the mail room would all be very expensive to move, they went to work on new conceptual plans to save money and create functional efficiencies.

Size: Entire Building
Cost of Construction: $109,000,000

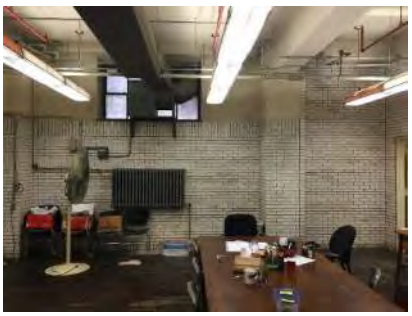
PROJECT RELEVANCE:
Conceptual Design; Parking and Paving; Historic Preservation; Construction Documents; Work in Occupied Buildings; General Architectural and Engineering Design; Interior Remodeling and Renovation; Holistic Design Approach; Innovative Design; BIM; Attractive Workplaces; Energy Efficiency; Integration of Client's Program.

One of the main challenges in the Basement was to separate three distinct functions that overlap in an inefficient and potentially dangerous manner. Within the loading dock and drive area, prisoners are transported in and out of the building directly adjacent to the open Judge's parking area and next to the loading dock which houses large dumpsters and materials arriving at the building. Another aspect of this was that the almost half of the judges were required to park off-site because there was not enough room in the Basement. Forbes' new design (shown on the right below) was able to address all of the overlaps by creating a separated area for the secured parking, by creating a location for a future USMS vehicle sallyport, and by leaving the loading dock largely intact. The new plan spared the expense of demolishing the large freight elevator and relocating the CSO security booth. The new plan also allowed for the expansion to gain an additional 12 parking spots (denoted in blue) over the original design of 20 (denoted in orange). The basement renovations remained on budget and the Courts elected to the pay for the construction of the additional parking spots. It's also noteworthy that the orange areas showing new architectural work are nearly identical in size further emphasizing the innovative design while remaining within the scope of the project.

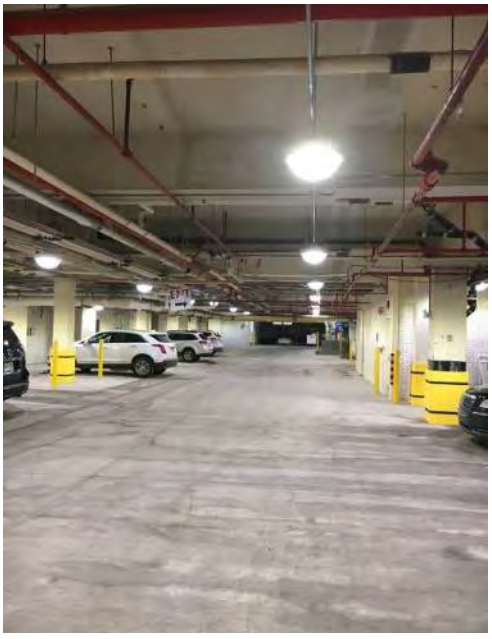
Original GSA Concept Parking



Final Construction Parking



Pre-Demolition O&M Space



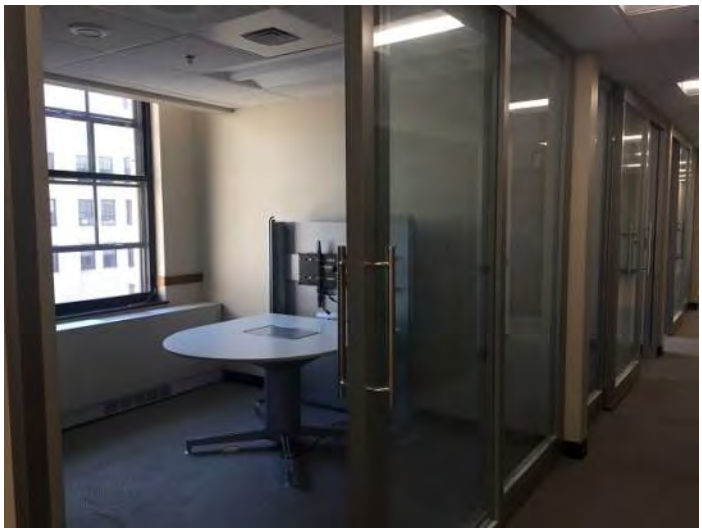
New Secured Parking

9th Floor Probation Design Services

For the consolidation of the Probation department from the 9th and 10th Floors to a single floor, Forbes was assigned to lead the design effort and the engineers involved in the renovation. The consolidation to a single floor was going to mean the elimination of private offices for the field officers and all non-management personnel. To accomplish this, a major shift in office culture was going to need to take place with an open office plan and new furniture. Workplace 2020 principles, such as lower cubicle heights and more collaborative spaces, were implemented into the design. Forbes facilitated field trips to various office furniture manufacturer showrooms to assist Probation in determining what furniture features best suits their needs. The architectural finishes and furniture finishes were carefully coordinated under Forbes leadership. As a means to facilitate Probation's desired scope and remain within budget, the use of furniture-supplied walls became a critical component that Forbes managed among the various interests – the Courts, the supplier, the installer, the general contractor and the manufacturer all played a role in the implementation of this furniture.

Because of the loss of private offices, a new centralized location for interviews needed to be created. These rooms were arranged for maximum efficiency relative to technology, proximity to the officers and the waiting area and for a direct connection to a urinalysis lab and sample room that emphasizes safety and secure observation. Collaborative spaces were also integrated as a new concept as many of the officers spent most of their days alone previously. These spaces took many forms – from one-on-one rooms to open office casual seating to conference rooms.

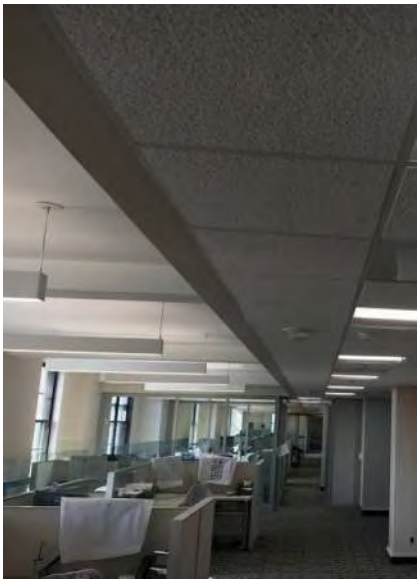
Conference Room adjacent to Open Office



Interview Rooms

A very important aspect to the renovations was an effort in the Open Offices to open the ceilings up to the original plaster ceiling height to restore a bit of history as well as to introduce more natural daylight, thereby reducing lighting costs. In order to maximize the open ceiling, two main elements drove this: one was the maximum spray distance of a side wall sprinkler and the other was the ability to fit all of the necessary building infrastructure inside a soffited ceiling next to the interior public corridor. Forbes was able to successfully coordinate all of these components in a holistic approach, resulting in an uncluttered open ceiling.

Restored ceiling height



Ceiling soffit with infrastructure

10th Floor Swing Fit Out Design Services

The architectural design and engineering coordination of the 10th Floor of the Courthouse was assigned to Forbes. Unlike other floors, about a third of this floor was being permanently abandoned by their tenants (in this instance, primarily Probation officers) and turned into temporary swing space for the Courts and others to use on a temporary basis. To facilitate this, phasing plans were developed and then required components, like a transaction window, were designed and detailed to accommodate the temporary tenant's needs. Forbes carefully reviewed standards and existing conditions so that the renovations did not unnecessarily exceed the cost commitment from GSA.

The main architectural issue on the 10th Floor was the demolition of the plaster ceiling separating the 10th Floor interstitial space and the 10th Floor acoustic tile ceiling plenum. Not only did this plaster ceiling act as deck for walls to terminate to for security reasons but it also helped prevent sound transmission. New mechanical penthouses are being constructed on the roof and their massive ductwork travels down in to the 10th Floor ceiling plenum. Because of the noise from these ducts, acoustic analysis showed that a barrier ceiling needed to be installed to satisfy the P-100 and Courts requirements for noise levels. Forbes spent an exhaustive amount of time working with the mechanical engineer to construct compact ductwork and the acoustical engineer to value engineer as much of the specialized ceiling out as possible without compromising the integrity of the space. These were in an effort to maximize ceiling height and to minimize the cost impact of the construction.

Construction Administration Services

Professional services provided by Forbes for the project during construction included consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field observation. Among the most critical items Forbes assisted on was the field design of the HVAC ductwork. The existing ceiling spaces are very limited. While the design did mirror the location and sizing of the duct that was installed, Forbes assisted the contractor in finalizing the location of ductwork so as to minimize the impact to the ceiling heights.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Local Architect
b.	Peter Basso Associates	Troy, Michigan	Plumbing and Lighting Engineers
c.	Peter Basso Associates	Troy, Michigan	MEP Engineers for 9th Floor Only
d.	NTH Consultants	Northville, Michigan	Environmental Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	23

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Marquette Third Street Perimeter Security Project Marquette Post Office and US Courthouse –Marquette, MI	2016-2017	2017-2019

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Stephanie Golowacz	(312) 805 - 4134

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The scope of this project included providing crash rated bollards, with decorative covers appropriate for the historic building. A metal fence enclosure to match the existing fence was provided around the existing gas main. A new flagpole was integrated with the perimeter bollards.

Photo 1: Bollards and Flagpole Before

Photo 2: Bollards and Flagpole After

Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates provided field inspection for the project which began in 2017. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

Cost of Construction: $230,000

PROJECT RELEVANCE: Parking and Paving; Historic Preservation.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Wiss, Janney, Elsner	Northbrook, IL	Structural Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 24

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
Marquette Elevator Addition / USMS Renovation / USDC Renovation Federal Post Office and Courthouse, Marquette, MI	PROFESSIONAL SERVICES 2016 - ongoing	CONSTRUCTION *(if Applicable)* 2018-2020: USMS 2018-2020: Elevator Ongoing: USDC

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Joseph Mulligan Sonya Griffin	(312) 886-9593 (312) 886-4107

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The United States Post Office and Court House was designed and constructed in the mid 1930's. The building is currently occupied by the Post Office, United States District Court, and United States Marshals.

The project is driven by the need to provide a Judge's elevator for the use by the United States District Court. As such, the scope includes the addition of an exterior Judge's Elevator which will dual as a Prisoner Elevator for use by the United States Marshals. This will improve safety as prisoners are currently transported to the front of the building and escorted in the public elevator. The new dedicated hydraulic elevator will allow the prisoners to be transported to a secure alley and escorted on a path separated from the public. Judges will also have improved security through use of the dedicated elevator.

Photo 1: View from across Washington St.

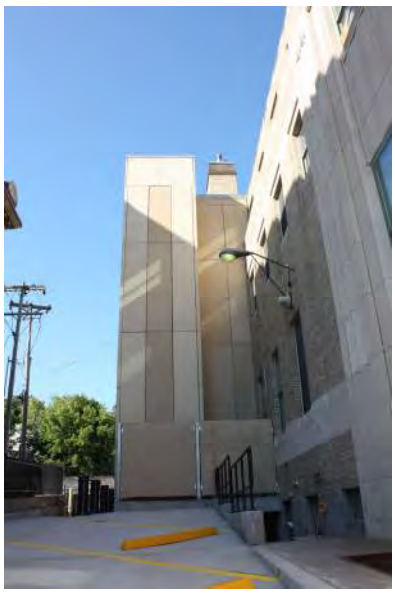


Photo 2: Elevator Tower Addition.

In addition to the elevator, the project reprograms the second and third floors to consolidate the Judge's Chambers space on the second floor with the Courtroom. As a result, the Clerks, USMS office, and holding cells are moved to the third floor. There are three Judges that use two Chambers within the Court House. One Chambers space is largely in-tact from the original layout which will be maintained in the renovation. The second Chambers space is more modern as it is taking the current location of the USMS holding cell and offices. In this area, much of the original wall layout, doors and hardware have been altered. Original wood doors are being reused and, where necessary, relocated.

Size: Elevator Addition—1,000 sq. ft
USMS Renovation—2,400 sq. ft
USDC Renovation—9,120 sq. ft

Estimated Cost of Construction:
Elevator Addition—$2,000,000
USMS Renovation—$1,700,000
USDC Renovation—$1,200,000

PROJECT RELEVANCE:
ADA facility assessment and remodeling; Building and structure additions; Door and Window Replacement; General Architectural and/or Engineering Design; HVAC equipment replacement, upgrade, selection; Interior remodeling and renovation; Toilet and/or shower room remodeling or design; Environmental – asbestos abatement/lead mitigation/hazardous materials

Early in the design process, G.H. Forbes Associates Architects (Forbes) authored a report of the historic elements to identify key items that would be impacted by the proposed renovation. The report notes any known modifications from past renovations that were identified through careful review of drawing archives and comparison with field survey. The report includes one or more suggestions for each major historic element to be preserved as-is or reused in the newly renovated spaces. Creative reuse included reusing a vault door that will be mounted as a sliding door to the Judge's Gallev.

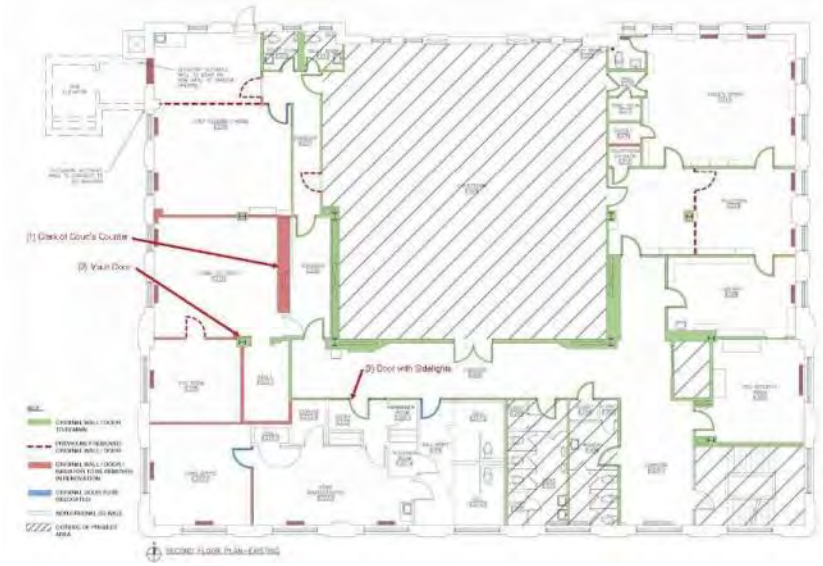


Figure 1: Second Floor Diagram from Historic Elements Report.

Photo 3: Original vault door.

The elevator was highly considered due to the historic significance of the building. The elevator is located near the back of the original building in an alleyway (Figure 1). The elevator is designed as a stand-alone structure to avoid transferring load to the original chimney or exterior building wall. The exterior cladding of the elevator addition consists of pre-cast concrete panels that include stainless steel reinforcing to allow the panels to be 2" thin. The thinner panels result in easier installation and less load applied to the structure. The design of the addition responds to detailing of the original building to maintain the rhythm of the original design throughout the addition. The colors of the concrete panels are coordinated so that the main color corresponds to the prominent limestone façade of the original building. The accent color is incorporated in recessed panels and pulls the darker tone of the building brick into the addition.

Photos 4 & 5: Samples of the concrete panels in front of the building.

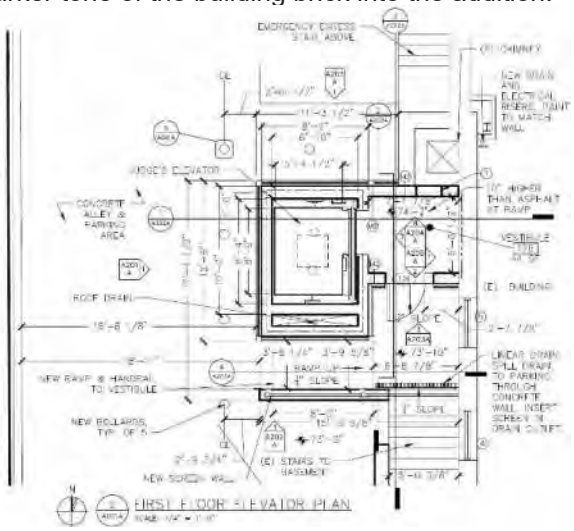


Figure 2: Plan of the Elevator Addition.

This project includes a comprehensive renovation the US Marshal Service spaces at the U.S. Post Office and Court House. The USMS portion of the renovation includes adding a new secure prisoner holding area on the third floor, new attorney-client interview rooms, prisoner processing room, a new command center, and new offices and facilities. Adding a new prisoner area to this historic building required intensive coordination with the US Marshals to ensure that it met their security requirements while being sensitive to preserve the historic elements of the building. For example, a new Energy Recovery Unit was required to serve the holding cell area. The design achieved the required air transfers, pressurization and other requirements to control airborne pathogens. The new ERU was located towards the back of the roof and massing diagrams were presented to GSA Historic Preservation. A custom color enclosure was indicated so that the ERU would blend with the building façade. Forbes carefully coordinated the requirements of the renovation with the limitations of the existing building. Steel wall panels and ceilings are used to create the holding cell areas. This was necessary to reduce the amount of extra weight added to the existing structure compared to a typical glazed block wall system. Even details were highly considered. The terrazzo floor within the detention area was matched to one of the original terrazzo colors present in the corridors of the building.

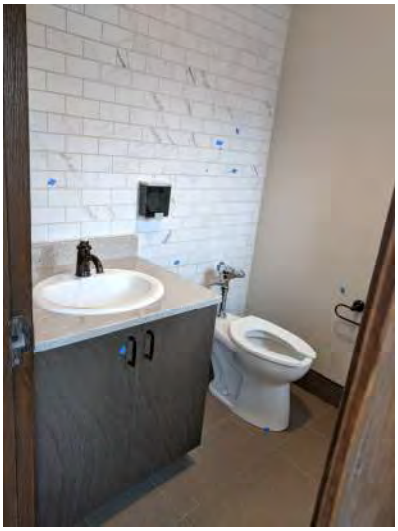
Photo 6: Elevator Cab

Photo 7: Elevator Interior

Photo 8: Holding Cell

Several judiciary spaces of the United States District Court are included in the project. The Clerk's offices move to replace a Bankruptcy Courtroom that had been built out in the early 1990's. An original door and associated sidelight is relocated from the future Marshal's space to the private office within the Clerk's space. Renovation of an existing Chambers space includes removing bookcases that were not original to the building. An original opening previously blocked off will be made active reconnecting one office with the original Chambers layout. The original wood doors had a variety of stain colors, many were faded and dry. Restoration of the wood doors, base and chair rail is included in the project scope. The design includes the removal of the existing USMS holding cells, that do not meet current design requirements, and construction of a new Chambers. The re-configuration of the Courts spaces included a new server room, installation of cabling and infrastructure for security. Since the building will continue to be occupied throughout the construction, multiple phases were required to shuffle program space.

The historic building poses many design challenges including how to rectify existing deficiencies with a limited budget. For example, the existing building does not have fire sprinklers or a complete fire alarm system. Adding these systems was outside of the project scope and beyond budget. Forbes modified the design to mitigate the deficiencies by arranging program to limit exit distances and extending the existing corridor walls to deck. Another common challenge in renovations that was also present here was asbestos and lead containing materials. We partnered with NTH to provide a pre-alteration assessment, GSA specifications as well as input on drawings to coordinate lead and asbestos work required throughout the phased project. Frequent communication was required with the Post Office, as the building owner, USDC, USMS, GSA Life Safety, GSA Structural, GSA Historic Preservation and Environmental and Elevator Subject Matter Experts in addition to the GSA Project Management Team. Forbes has successfully facilitated and documented correspondence to achieve an approved design within budget.



Photos 9 & 10: Toilet Room Renovation

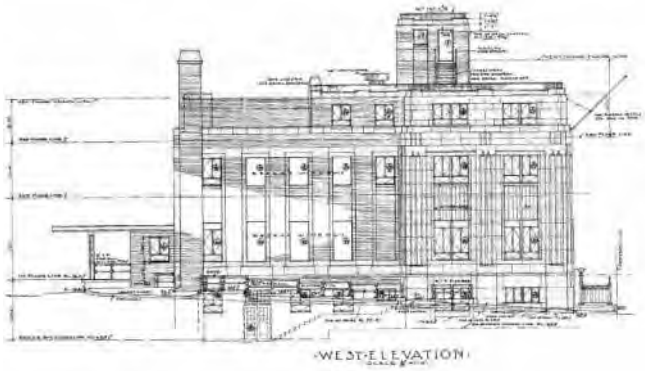


Figure 3 & 4: Scans of Original Drawings by Architect LeRoy Gaarder, dated 1934

Design Services
G.H. Forbes Associates provided field survey, programming, construction documents including plans, specifications, and cost estimating.

Construction Administration Services
G.H. Forbes Associates continues to provide field inspection for the project which began in 2018. Professional services for the project will include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects	Royal Oak, Michigan	Architect / Lead Designer
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineers
c.	Vertran Enterprises	Annapolis, Maryland	Elevator Consultant
d.	Monument Engineering Group, Assoc	Fowlerville, Michigan	Civil Engineer
e.	NTH Consultants, Ltd.	Northville, Michigan	Environmental Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	25

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Funeral Home Visitation Addition Michigan Memorial, Flat Rock, Michigan	2016-2019	2018-2019

PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Daniel Dwyer	Daniel Dwyer	(734) 783-2646

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project included the Design and Construction Administration of a Visitation Addition and associated site improvements at the Michigan Memorial Funeral Home, which was originally designed by Forbes in 1999 and completed construction in 2001. The Visitation Addition was designed to complement certain design elements of the existing building to provide continuity while also creating a new distinctive and identifiable segment of the building. The space was designed to keep building operations and visitation services separated from each other to maintain professionalism. There are several design elements included in the visitation area including a lobby, break room, toilet rooms and two large areas used for services and in some instances, luncheons. The lobby includes high ceilings and tall windows to maximize the amount of natural light and sense of grandeur. The visitation/luncheon areas are designed with a movable partition to provide simultaneous services or a single large space as needed. Within each area there is recessed ceiling complete with custom millwork and integrated lighting. Grand millwork details were designed to be economically constructed using small profiles of wood and layered gypsum board for an effect greater than the sum of its parts. Separation of families, sound attenuation and flexibility of use were key concepts that were incorporated into the design.

Design Services

G.H.Forbes Associates provided field survey, design and construction documents with Peter Basso Associates and Monument Engineering Group Associates for the Visitation addition to a funeral home. New work includes structural elements to accommodate a single-story addition; poured footings and foundation walls; concrete floors, steel beams and trusses; doors and hardware; painting; brick exterior to match existing; receptacles; lighting; fire sprinklers; plumbing; ductwork and HVAC controls. Duties for professional services include design/analysis, drawings, specifications, detailed cost estimates.

Cost of Construction: $2,294,370.00
Size: 8,250 sq. ft.

PROJECT TYPES:
Building and structure additions; Interior remodeling and renovation; Roof repair, restoration and/or replacement design.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineers
c.	Monument Engineering Group Associates	Fowlerville, Michigan	Civil Engineer

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	26

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
New Center Rail Terminal ADA Remediation Amtrak Rail Terminal Station – Detroit, MI	PROFESSIONAL SERVICES 2020-2021	CONSTRUCTION (if Applicable)

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
Dept. of Technology, Management and Budget	Chris Bahjet	(517) 749-7519

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Forbes provided an ADA remediation report for DTMB and MDOT for the Amtrak station is located at 11 W. Baltimore Avenue in Detroit. A previous survey approximately 10 years prior identified multiple deficiencies. Forbes confirmed the previous study, documented changes and further clarifying the scope of work to address the immediate needs of the temporary facility. This includes parking, accessible route, ramps, entrances and interior doors in public areas, elevator deficiencies, service counter and signage as it relates to accessibility.

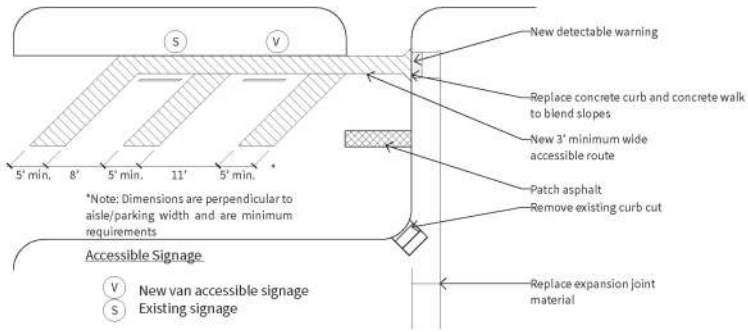


Figure 1: New Site Plan

Photo 1: Amtrak Station Detroit Terminal

Design Services

G.H. Forbes Associates provided Phase 100 study services and initial construction cost information.

Estimated Cost of Construction: $350,000

PROJECT RELEVANCE: ADA facility assessment and remodeling; Experience with the State of Michigan.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	27

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
Department of State – Passport Issuing Office, 3rd Floor P.V. McNamara Federal Building – Detroit, MI	PROFESSIONAL SERVICES 2019-2020	CONSTRUCTION (if Applicable) Recently Awarded

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Elbert Regacho	(312) 353-7504

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This LEED silver interior renovation will create the new passport office for the Department of State. Program space includes public waiting and transaction counters, private offices, open office space, conference rooms and a break room. The existing public restroom facilities will be renovated and divided into private employee restrooms and public restrooms. The renovation includes HVAC system modifications, mechanical piping and plumbing systems, fire sprinkler and electrical power, data, fire alarm, security infrastructure and lighting system and control modifications. The design addresses agency acoustic requirements. The existing perimeter air bars that are integral to the building riser will be carefully modified to reduce noise. A drywall barrier will be installed above the acoustic ceiling to mitigate noise from a gym immediately above. In addition, a sound masking system will be installed. In order to achieve the agency's LEED silver requirement, Forbes pursued pilot credits including biomorphic design.

Seating and Acoustic Wall Rendering

Lighting Seating Rendering

Design Services
G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services
G.H. Forbes Associates will provide construction administrative services including field inspection for the project when construction begins in 2021. Professional services include consultant coordination, shop drawing review, responding to contractor requests for information, review of payment applications and field inspection.

Approx. Size: 18,000 sq. ft.
Cost of Construction: $2,760,000

PROJECT RELEVANCE: ADA facility assessment and remodeling; General Architectural and/or Engineering Design; HVAC equipment replacement, upgrade, selection HVAC controls replacement, upgrade, selection; Interior remodeling and renovation; Toilet and/or shower room remodeling or design.

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer
c.	Sheppard Engineering	Troy, Michigan	Structural Engineer
d.	Kolano Saha Engineers	Waterford, Michigan	Acoustical Engineer
e.	Willem Environmental Consulting	Ferndale, Michigan	Environmental Consultants

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	EXAMPLE PROJECT KEY NUMBER
	28

TITLE AND LOCATION *(City and State)*	YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Department of State - Central Regional Director Office, 17th Floor P.V. McNamara Federal Building – Detroit, MI	2018-2019	2019-2020

PROJECT OWNER'S INFORMATION

PROJECT OWNER	POINT OF CONTACT NAME	POINT OF CONTACT TELEPHONE NUMBER
General Services Administration	Elbert Regacho	(312) 353 - 7504

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project required an existing facility survey and field measurements to determine present site conditions and improvements for the renovation of the DOS Consular Affairs Central Regional Director Office space. Improvements included new private and open office space, conference space, training room, new data room and new break room. The renovation required HVAC system modifications, mechanical piping and plumbing system modifications, electrical power, data/communication and lighting system and control modifications tied into the existing BAS. Modifications were made to the fire sprinkler and fire alarm systems. Sound attenuation and security infrastructure were required to meet the agency needs.

Photo 1: Interior Office

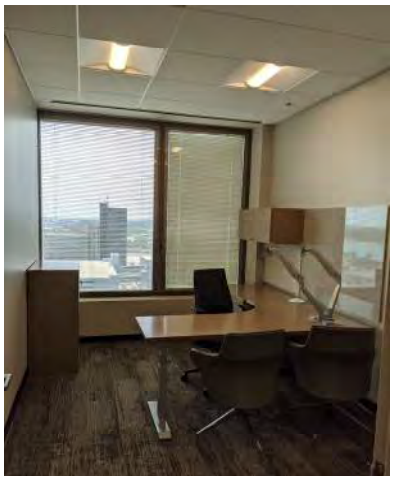


Photo 2: Private Office

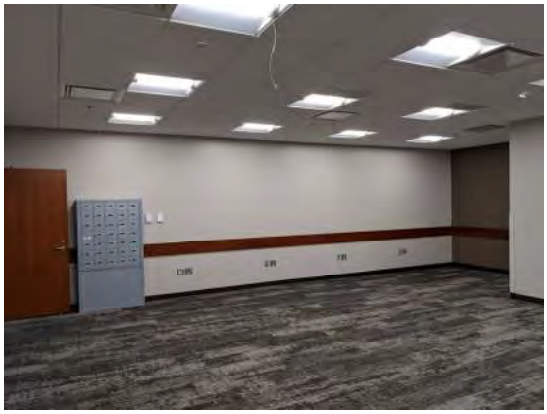


Photo 3: Training Room

Design Services

G.H. Forbes Associates provided field survey, construction documents including plans, specifications and cost estimating.

Construction Administration Services

G.H. Forbes Associates provided field inspection for the project which began in 2019. Professional services include consultant coordination, construction administration, shop drawing review, responding to contractor requests for information, and field inspection.

PROJECT RELEVANCE: ADA facility assessment and remodeling; General Architectural and/or Engineering Design; HVAC equipment replacement, upgrade, selection; Interior remodeling and renovation.

Size: Approx. 2,580 sq. ft.
Cost of Construction: $880.000

FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	G.H. Forbes Associates Architects, P.C.	Royal Oak, Michigan	Architect
b.	Peter Basso Associates	Troy, Michigan	Mechanical and Electrical Engineer

Appendix D – Quality Control Documents

- Sample Meeting Report Template
- Sample Field Report Template
- Michigan Building Code Construction Documents Checklist
- Checklist for Final Punchlist Inspections

FORBES ASSOCIATES ARCHITECTS G.H. Forbes Associates ● 816 East 4th Street, Royal Oak, MI 48067 ● www.ghfaa.com ● 248.542.7866

CONSTRUCTION MEETING

Project:	**Project Name**		
Location:	Address	Anticipated Completion Date:	
File #:		Contract Award:	$
Index #:		Contingency Allowance:	$
A/E File #:		Change Order Total:	$
Department:			
Agency:		Current Contract Amount:	$
Project Completion Date:			
Date:		Time:	

Participants: (Name *Agency)*

The purpose of this meeting was to review the progress of construction:

1. Construction progress was reviewed:
2. Two -week look ahead:
3. RFIs:
4. Submittals:
5. Bulletins:
6. Project Schedule:
7. Update on Open Items:
8. Any Safety Issues:
9. Payment Applications:
10. Coordination with site – access, cleanliness, etc.
11. Testing / Inspections
12. Other Items:
13. Action Items:

The next meeting is scheduled for *(date, time and location)*.

If there are any omissions or corrections to the report, please notify the Architect within five business days.

G.H. Forbes Associates (*staff initials*) *(date report was published*)

G.H. FORBES ASSOCIATES
816 E. Fourth Street
Royal Oak, Michigan 48067
248 542-7866 / Fax 248 542-7909

CONSTRUCTION PROGRESS REPORT

Project Name:
Project Location:
File Number:
Index Number:
General Contractor:
Date & Time of Inspection:

Inspected By:	**Company:**	**Schedule:**
Contractor's Superintendent and other Participants:		**Materials/Equipment on site:**
Clean Project? (Rate A-F): A	**As-Built Documents:**	

1. **Number and Trade(s) of Construction Workers on Site:**
   - **A.**
   - **B.**
   - **C.**
2. **Activities on Site During Inspection:**
   - **A.**
3. **Work Completed Since Last Inspection & Project Status:**
   - **A.**
   - **B.**
4. **Aspects of Construction Inspected:**
   - **A.**
5. **Discrepancies -Problems - Delays**
   - **A.**
6. **Are there any Safety Issues?**
   - **A.**
7. **Are there any outstanding RFI's / Field Questions**
   - **A.**
8. **Are there any outstanding Bulletins?**
   - **A.**
9. **Tests Witnessed:**

A.

10. New Issues?

A.

11. Further action(s) required by the Contractor, A/E, State, Tenant:

A.

12. Scheduled Work for the next 2 weeks:

A.

B.

C.

13. Site Photos:

Photo 1:

End of Report

CONSTRUCTION DOCUMENTS CHECKLIST

for the

2012 Michigan Building Code

Including Building Permit Application Checklist

*This checklist is a convenient reference to the 20012 Michigan Building Code. The checklist summarizes the **minimum** data required by the MBC to be on construction documents for the examination and approval of a building permit application for non-residential and multi-family projects. Depending on the type and complexity of the project, additional information not indicated on this checklist may be required by the MBC or the Building Official [105.3 (7),;107.1] Applicants are encouraged to indicate if the required data is applicable to the project, or not applicable, and attach a copy of the completed checklist to the construction documents.*

Please contact the local building department for requirements regarding phased construction or tenent finishes. Thank you for taking time to complete this checklist. Having the necessary information at the beginning of the plan review process will help expedite the issuance of a building permit.

DATE SUBMITTED
PROJECT NAME
PROJECT ADDRESS
JOB NUMBER/TRACKING NUMBER
CHECKLIST PREPARED BY
REPRESENTING

INFORMATION REQUIRED ON THE CONSTRUCTION DOCUMENTS; 105.3(4); 107.2

Provided dwg/spec	Not Applicable		
			Indicate the project name and address on the plans if available. (105.3.(2); 107.2.1)
			Owner's name and mailing address
			Name of the registered design professional
			Michigan license number of registered design professional
			Address of registered design professional
			Telephone number of the registered design professional
			Fax number of the registered design professional
			Name, Michigan license number, address, telephone number, and fax number of the registered design professional in responsible charge (unless waived by the Building Official) (107.3.4)
			Name of individual to receive review comments
			Address of individual to receive review comments
			Telephone number of individual to receive review comments
			The Michigan licensed Registered Design Professional must provide original signature, seal and date on all sheets of the drawings and specification manual or on the index sheet of the drawings and specification manual only when the index sheet covers all the sheets that makeup the drawing set and specifcation manual (107.1; 107.3.4)
			List code applicable to project (107.2.1) The MBC or the MBC Section 34, or the Michigan Rehab Code may be used for existing buildings . Only one code may be used
			List of all proposed deferred submittal documents (107.3.4.1)
			SITE PLANS (107.2.5)
			Identify all existing & proposed construction
			Show property lines; identify building distances from property lines and from other buildings on-site.
			Identify all structures to be demolished
			Identify the total number of parking spaces provided.
			Identify the total number of accessible parking spaces provided, including van accessible spaces.(1106.1; 1106.5)
			Show proposed finish grades, grade floor elevations, street elevations.
			Show flood plain elevations and boundaries.
			Indicate the location of all new and existing utilities, including the entrance points into the building and the FDC location

INFORMATION REQUIRED ON THE CONSTRUCTION DOCUMENTS; 105.3(4); 107.2 (CONT.)					
Provided dwg/spec	Not Applicable				
			Show site grading (slope away) of the ground immediately adjacent to the foundation of the building		
			Provide complete dimensions, running slope and cross slope of all accessible parking spaces and accessible routes from the accessible parking to the accessible entrances. (107.2.1; 1104.1)		
		BUILDING PLANS			
			Indicate Use Group. Indicate mixed use option if applicable (302.1)		
			Indicate Type of Construction (602.1)		
			Indicate the use of all rooms and spaces. Indicate number of occupants on every floor, room and space. Show method used to determine the occupant load and means of egress requirements. (107.2.1; 107.2.3; 1004.1)		
			Provide Key Plan if needed to identify the location of the proposed work (107.2.1)		
			Indicate total area of building, number of stories, and provide height and area calculations including open perimeter & fire suppression increases. (501.1; Table 503)		
			Indicate if a full or limited area Fire Suppression system & Fire Alarm system will be installed		
			Show location and provide details of all fire and smoke rated assemblies and protection of penetrations including permanent markings and identifications. Provide U.L. design number or other approval rating. (107.2.1; 703.7; 701.1; 703.2; 712.1)		
			Show location of portable fire extinguishers. (906.1)		
			Provide details showing the proposed assembly of all walls, floors roofs, and stairs (107.2.1; 107.2.3; 107.2.4)		
			Show location and hourly rating of all fire doors, fire dampers and fire windows (715.1) (716.1)		
			Provide details of room finishes including type of materials with flame spread and smoke development ratings indicated for all materials. (801.1) (107.2.1; 803.1) (2603.1) Documentation for the flame spread and smoke development of all materials must be provided at field inspection.		
			Provide flame spread and smoke development documentation for all foam plastics and details on the foam plastic insulation thermal barriers (107.2.1; 2603.1)		
			Provide complete dimensions for all rooms and spaces including stairs, aisles, passageways, corridors, areas around counters, fixtures, all circulation and egress paths, and maneuvering clearance at all doors (107.2.1; 1003.1) (1101.2).		
			Provide door hardware, door and window details including type, size, material, and hourly rating required. (107.2.1; 1008.1)		
			Show masonry sizes, grades,reinforcement, anchorages, loads and compressive strengths; provide masonry fireplace details and clearances. 2101.3(1) thru 2101.3.3 (9); 2101.3.1)		
			Provide stairway details with all guard and handrail details (1009.1)		
			Show location of all exit signs and means of egress lighting (1006.1; 1011.1)		
			Show type and thickness of all glazing materials and safety glazing where required (2401.1)		
			Provide accessibility details (107.2.1; 1101.2)		
				Provide dimensions and details for all interior accessible routes within the building. Include the maneuvering clearance required at all doors. (1104)	
				Indicate heights, clearances and turning radii along all accessible routes (1104)	
				Provide plumbing fixture and accessory details (1109)	
				Provide dimensions and details for all use group requirements. Including features and facilities required to be accessible (1107) (1108) (1109)	
				Provide signage details, including location, wording, size and mounting height. (1110.1)	
			Show exterior wall details (107.2.1; 107.2.4; 1401.1)		
				All base, sill, jamb and head flashings	
				Intersection with dissimilar materials	
				Corners	
				End conditions	
				Control joints	
				Intersection at roof, eaves or parapets	
				Details around openings	
				Construction space venting	
				Means of water drainage	
				Roof overflow drains [P] 1503.4	
				Water-resistive membrane	

INFORMATION REQUIRED ON THE CONSTRUCTION DOCUMENTS; 105.3(4); 107.2 (CONT.)

Provided dwg/spec	Not Applicable	
		STRUCTURAL PLANS (107.2.1; 1603.1)
		Indicate design loads (1603.1)
		Roof Live Load (1603.1.2)
		Floor Live Load (1603.1.1)
		Ground snow load (1603.1.2)
		Roof Snow Load (1603.1.3)
		Wind Design Data (1603.1.4)
		Earthquake Design Data (1603.1.5.1 thru 1603.1.5.11)
		Indicate load bearing value of soils (1603.1.6; 1801.2; 1803.6 (5))
		Guard & Handrail (1607.8)
		Indicate any special Loads (1603.1.8)
		Show foundation dimensions and details (107.2.1; 1603.1; 1801.2)
		List all Design/Construction Standards and material specifications (107.2.1)
		Indicate the location, size and cross section of all structural members with dimensions, column centers and offsets (1603.1)
		Identify lateral resistive system(s) including lateral bracing and transfer and collection systems (1604.8)
		ELECTRICAL PLANS (106.1.1)
		Electrical layout (Michigan Part 8 - 80.21)
		Wattage Schedule (Michigan Part 8-80.21)
		Short circuit calculations for circuit breaker installation
		Service Location and Riser Diagram (Michigan Part 8-80.21)
		Load Calculations (Michigan Part 8-80.21)
		Show lighting system design, circuits, switches, materials, equipment listing, light fixtures and installation instructions (2701.1 NEC 110.2, 110.3)
		Show power system design, circuits, materials, equipment listing and installation instructions (2701.1 NEC 110.2, 110.3)
		Single line diagram including available fault current and bus bracing
		Light fixture schedule
		Show exit signs and lighting and power supply (1006.1, 1011.1)
		Show egress emergency lighting (1006.1, 1011.1)
		Indicate ratings of materials installed in wet locations (NEC 358)
		Indicate wiring and materials in ducts, plenums and equipment
		Indicate wiring methods, conduits and materials (NEC 300)
		Show service conductors, conductor sizes, ratings and insulation (NEC 230)
		Indicate interrupting rating (NEC 110.9, 110.10, 230.205)
		Verify working space in front of equipment (NEC 110.26, 110.32, 110.34)
		Indicate means of disconnect and number and location (NEC 230.70, 240.13)
		Show ground fault protection (NEC 230.95)
		Show hazardous locations and materials used
		Indicate protection of conductors (NEC 240.3)
		Indicate grounding of electrical system (NEC 250)
		Show design of emergency electrical system (NEC 700)
		PLUMBING PLANS (P106.3.1)
		Show all underground plumbing and building riser diagram (P106.3.1)
		Show design of water supply and distribution including sizes, depths and materials (P601.1)

INFORMATION REQUIRED ON THE CONSTRUCTION DOCUMENTS 105.3(4) (CONT.)

Provided dwg/spec	Not Applicable			
			Show plumbing fixture layout (P401.1, P106.3.1)	
			Provide water use calculations (P106.3.1)	
			Show all backflow prevention devices and type of device (P106.3.1, 601.1, 608)	
			Provide occupancy calculations for plumbing fixtures provided (Table P403.1)	
			Show locations, equipment sizes and hookups for all boilers and water heaters (M1001.2)	
			Provide details of water system design (P601.1)	
				Indicate water temperature control devices (P607.1)
				Show hot water return circulation (if required) (P607.2; 607.2)
				Indicate control of thermal expansion (P607.3)
				Indicate hot water heater relief valve discharge (P504.1 to 504.4.1)
			Show design and location of sanitary drains and vent systems including sizes, depths, slopes, materials and cleanouts (P701.1)	
			Show details for any hazardous waste system (P702.5)	
			Show design of storm water management system including sizes, depths, slopes, materials and cleanouts (P1101.2)	
				Provide calculations for rainfall rates and water retention amounts (P1101.7;1105.1;1106.1; 1107.1)
		MECHANICAL PLANS (M106.3.1)		
				Show compliance with International Energy Conservation Code (M301.2)
				Show protection of penetrations through all rated assemblies (M302.2)
				Show equipment locations, service clearances and service access (M306.1)
				Provide heating and cooling load calculations (M106.3.1; 312.1)
				Provide calculations for combustion air and exhaust air (M701.1)
			Hydronic Systems	
				Show complete process piping diagram (M1201.1; 1201.2)
				Show provisions for combustion air supply and venting (M701.2)
			HVAC systems	
				Show provisions for ventilation air, natural or mechanical (M401.2; 401.4)
				Show energy loads, equipment locations and equipment specifications including cfm and system static (M301.4; 303.1; 304.1)
				Show fire/smoke damper locations and details including rating (M717.1)
				Show locations of smoke duct detectors in both return and supply ducts (M606.1)
				Show ductwork layout including gauges, hangers and sizing (M603.1)
				Show duct insulation details including R-factor and Perm. rating (M604.1)
				Show location of vents for all fuel fired appliances (M804.1 to 804.3.8)
			Fuel piping systems	
				Provide piping layout, load calculations and meter location (IFGC 402)
				Provide system operating pressure and pressure regulator detail (IFGC 402, 416)
			Exhaust and ventilation systems (M401.1; M501.1)	
				Show method of smoke control (M513.1)
				Provide documentation for Special Inspector (M513.3)
				Show hazardous exhaust systems (M510.1)
				Determine design class as hazardous or non-hazardous. Provide MCDS data sheets to support hazardous level indicated (M510.1)
				Show locations for inlets, outlets and heights for exhaust equipment and hoods (M502.1)
				Provide exhaust equipment specifications, cfm and static pressure (M106.3.1)
			Commercial kitchen hoods Type 1 and Type 2 (M507.1)	
				Provide duct layout, grease door location and method of attachment (M506.3)
				Provide velocity, cfm and location of ventilation equipment (507.13)
				Provide fire protection for Type 1 hoods (M509.1)
				Provide make-up air and equipment control diagram (M508.1)
				Provide hood sizing: show top, side and front views (M507.4, 507.5, 507.11, 507.12)

INFORMATION REQUIRED ON THE CONSTRUCTION DOCUMENTS 105.3(4) (CONT.)					
Provided dwg/spec	Not Applicable				
				Provide complete appliance lineup under Type 1 hoods (M507.12)	
				Provide Type 2 hoods for dishwashers (M507.2..2)	
				Provide ratings for all hoods (M507.1)	
			Refrigeration (1101.1)		
				Provide classification for refrigeration system (M1103.3)	
				Provide refrigerant classification (M1103.1)	
				Provide occupancy classification (M1103.2)	
				Provide quantity of maximum allowable refrigerant (M1103.1)	
				Provide details for refrigeration system enclosure requirements (M1105)	
				Provide pressure tests for all non-factory or field erected equipment and appliances (M1108.1)	
				Provide refrigerant piping diagram (1107.1)	

BUILDING PERMIT APPLICATION CHECKLIST

Provided	Not Applicable	
		Please contact the local jurisdiction to determine what additional information may be required, the number of sets of documents to be submitted and/or the requirements for phased construction or tenant finish permits.
		Contact information provided: Name, Address, Business phone , Cell phone, Fax number and Email address
		Building Permit Application filled out completely and signed by the Applicant (105.1; 105.3)
		Construction Documents and Specification Manual, if used - Signed, sealed and dated by a State Licensed Registered Design Professional (107.1).
		Describe the business use and its intended operation (105.3. 3)
		Statement of Special Inspections - Include a complete list of materials and work requiring special inspections, the inspections to be performed and their frequencies. Provide a list of agencies and firms you propose to conduct each of the inspections and the qualifications, credentials and experience for each of the individuals (1704.1; 1704.3)
		Soils Report - Prepared by a State Licensed Registered Design Professional. The reports must have the State Licensed Registered Design Professional's original signature, seal and date. (1803.1)
		Energy Calculations and details to show compliance to the Michigan Uniform Energy Code Part 10a rules R408.31087 to R408.31099. (1301.1.1)
		Structural Calculations - For all structural members and foundations. Include the deflection limits and all load calculations. All calculations must have the State Licensed Registered Design Professional's original signature, seal and date. (107.1)
		Hazardous Materials - If hazardous materials are to be stored, dispensed, or used for manufacturing or processing; describe the type, use, quantity, location, and method of storage of all materials. Material Safety Data Sheets (MSDS) must be submitted. The construction drawings shall address the requirements of the MBC for High hazard use if quantities above the exempt amounts are proposed. Hazardous materials will also be reviewed by the Fire Department. (107.2.1; 307.1)
		Valuation: State the valuation of the proposed work. (105.3, 5)

NOTE: The review of premanufactured housing requires a copy of the building systems approval report, a copy of the original plans and a site plan.

Last update 9-18-14

G.H. FORBES ASSOCIATES ARCHITECTS
Checklist for Final Punchlist Inspections

Project:

Project No.: | Date(s) of Inspection:

Participants:

Division 2 - Existing Conditions

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
02 40 00						Items properly disposed of
02 80 00						Hazardous materials removed from site
02 80 00						Lamps with mercury properly disposed of
02 40 00						Items reinstalled and cleaned
02 40 00						Items turned over to Owner in proper packaging and cleaned
02 40 00						Site returned to its original condition i.e. no new damage

Additional Notes on Division 2:

Division 3 - Concrete

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
03 30 00						Cast-in-place concrete properly installed and finished
03 30 00						Concrete repairs completed
03 30 00						Concrete floor leveling completed

Additional Notes on Division 3:

Division 5 - Metals

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
05 50 00						Lintels properly installed with adequate support on each end; painted
05 50 00						Support framing for equipment properly installed
05 52 00						Railings properly installed; 200 lbs of force; smooth finish - no sharp edges; extensions past treads at top and bottom meet ADA requirements
05 12 00						Columns properly installed; plumbed and anchored
05 12 00						Beams properly installed; bearing distance; bolted
05 21 00						Steel joists properly installed and spaced; bridging installed
05 31 00						Metal decking properly installed; welded/fastened; correct orientation

Additional Notes on Division 5:

Division 6 - Wood & Plastic

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
06 10 00						Wood installed in ceiling plenum fire retardant
06 10 00						Blocking and any other wood concealed in walls fire retardant
06 40 23						Casework: correct location and configuration

06 40 23						Casework: number of shelves / supports; finished on six sides
06 40 23						Casework: doors and drawers operate / correct drawer construction
06 40 23						Casework: correct hardware and pulls
06 40 23						Casework: plastic laminate - sharp edges, quality of installation, colors
06 40 23						Casework: transparent wood finish - stain even in color; gloss even in sheen
06 40 23						Casework: exposed pipes insulated under sinks if exposed
06 40 23						Casework: modesty panel removable / proper ADA clearance at sink
06 40 23						Casework: pass-thru counters and deal trays (non-ricochet) properly installed
06 40 23						Casework: Grain of cabinet veneer meets spec (i.e. bookmatch, quartersawn)
06 40 23						Casework: fasteners anchoring units to wall are not drywall screws; heads are properly concealed
06 40 23						Casework: countertops at wet locations are "finished" on underside
06 40 23						Casework: finish is "balanced" on all sides of casework i.e. sealed or laminated
06 40 23						Casework: doors flush and gaps even
06 40 23						Casework: openings cut into cabinets are sealed (carpenters glue is permitted)
06 40 23						Millwork: trim - base, chair rail, picture molding, crown molding, door casing, window casing: proper profile and proper finish on both sides
06 40 23						All work reviewed for nail and screw holes and their proper concealment
06 40 23						All joinery is in compliance with the AWI grade specified
06 40 23						Wainscot/Wall Panels: Base, stiles, rails and top rail/cap are properly installed and finished
06 40 23						Wainscot/Wall Panels: Devices and grilles are cut in level and flush
06 40 23						Wainscot/Wall Panels: Panels are finished completely (incl. concealed edges) and are finished on all sides
06 40 23						Wainscot/Wall Panels: Panels are allowed to "float" without restricted movement
06 40 23						Wainscot/Wall Panels: opening cut into panel are sealed
06 40 23						Wainscot/Wall Panels: Grain of cabinet veneer meets spec (i.e. bookmatch, quartersawn)

Additional Notes on Division 6:

Division 7 - Thermal & Moisture Protection

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
07 12 00						Thermal insulation installed in walls, at roof
07 84 13						Firestopping installed at all fire wall penetrations
07 92 00						Acoustic sealant at sound attenuated walls top and bottom
07 92 00						Acoustic sealant at all wall penetrations in sound attenuated walls including electrical back boxes, duct, pipe and conduit penetrations
07 92 00						Sealant at countertops - backsplashes, sinks
07 92 00						Sealant at material transitions / gap control
07 92 00						Sealant at control/expansion joints
07 92 00						Sealant at window frames
07 92 00						Sealant at exterior door and window frames
07 92 00						Sealant at exterior expansion joints
07 92 00						Sealant at paving joints
07 92 00						Maintenance stock of sealant delivered to the Owner (if required)
07 81 00						Replace / repair / install fireproofing (use blue tint in bldgs containing asbestos). Proper thickness and complete distribution

Additional Notes on Division 7:

Division 8 - Openings

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
08 11 13						Hollow metal door frames are anchored properly; sit flush and square in opening; strikes are in proper location; correct type (i.e. knock down vs welded); fire rated as required; sound rated as required; ballistic as required
08 13 00						Hollow metal doors close without binding; plumb and square in opening; fire rated and labeled as required; sound rated as required; ballistic as required
08 80 00						Glazing has proper labels (safety, tempered, fire, ballistic); correct thickness; proper tint; sealants; correct finish (smooth, sandblasted); no defects
08 80 00						Glazing film is applied properly w/o bubbles and cut or trim out at edges.
08 71 00						Complete list of hardware from schedule is installed at each door
08 71 00						Locksets - function confirmed; latches properly; operates without sticking
08 71 00						Closers operate within ADA requirements for opening force / Hold open if req'd
08 71 00						Review for any component that should be added i.e. closer, bumper, kickplate
08 71 00						Electric strikes, magnetic locks or electro-mechanical latches work properly - test from card readers, keypads, proximity sensors, remote releases
08 71 00						Transformers for hardware devices (i.e. electric strikes) are clearly labeled and accessible for maintenance
08 71 00						Hardware is correct finish and color
08 71 00						Double doors with two active leafs - coordinator and astragal may be required
08 71 00						Double doors with one active leaf - flush bolts / dust proof strikes top and bottom
08 71 00						Automatic door bottom makes complete and even contact with the floor/threshold
08 71 00						Door seals do not prevent the door from latching and make contact with the leaf
08 71 00						Magnetic door contacts sound alarm or "read" at security head end
08 71 00						Hinges are the type (typical ball bearing) and finish specified. Note non-rise pins.
08 71 00						Pushbutton combo locksets - provide programming instructions to reset combo
08 71 00						Roller latches sit in recessed pocket properly
08 71 00						Wall and floor bumpers are located correctly. Watch for tripping hazard
08 71 00						Thresholds are fastened securely and do not exceed ADA height requirements
08 71 00						Vision Scopes are at the proper height. Note: some reverse left and right
08 71 00						Weatherstripping and sweeps make sealed contact and do not bind
08 71 00						Contractor has supplied key cylinders (if req'd) for keying by 3rd party
08 71 00						Final keyed cylinders have been installed and keys distributed
08 41 13						Aluminum framed storefronts are properly assembled with glazing, fasteners and closure pieces
08 71 13						Automatic door openers operate smoothly and hold door open for the proper amount of time
08 83 00						Mirror is mounted and framed properly. Note one mirror must be mounted for ADA. Reflective backing is consistant.
08 90 00						correct finish/color; correct blade type; bird/insect screen; screens accessible for cleaning/repair
08 90 00						Door mounted louvers installed properly; correct size and free area; correct finish/color; fire dampers if required
08 90 00						Interior mounted louvers installed properly; correct size and free area; correct finish/color; fire dampers if required - check tamper proof fasteners

Additional Notes on Division 8:

Division 9 - Finishes

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
09 22 16						Non structural framing is stable and sound; wall does not move when doors are slammed; walls travel to deck where required; kickers are installed above ceiling where required; wall is properly framed for penetrations i.e. at air transfers
09 24 00						Plaster repairs are complete and match surrounding texture
09 29 00						Gypsum board control joints are installed where required (typically every 20 ft for uninterrupted wall)
09 29 00						Gypsum board finish is smooth and free of blemishes. Joints are not visible. Thickness is correct (5/8" is typical). Correct type (fire, moisture-resistant)
09 30 00						Stone/Ceramic tile joints are installed in the width as spec'd and are sealed.
09 30 00						Stone/Ceramic tile is installed flush without uneven edges.
09 30 00						Stone/Ceramic tile is installed with cleavage/waterproof membrane (if req'd).
09 30 00						Stone/Ceramic tile is non-slip for flooring.
09 64 00						Wood floor is sanded /properly finished; expansion (3/4"+/-) is provided at all walls
09 51 23						Acoustical tile ceiling grid meets ASTM Standard C636 for installation. Hangers 4' o.c. for mains; wires no more than 1/6 out of plumb; wire no.12 gauge or thicker; level within 1/8" over 12'; wire wraps around itself 3 full turns in 3" - cut excess or bent upward.
09 51 23						Acoustical tile rests properly in grid; no stains or surface damage; devices and elements (i.e. sprinkler, downlights) are neatly cut into the ceiling; cuts at perimeter are correct. Maintenance stock is provided in the qty req'd.
09 65 13						Resilient base is adhered fully and neatly to the wall. Confirm height - typ is 4" 6". As long of sections as possible have been installed to minimize joints. Maintenance stock is provided in the qty req'd.
09 65 19						Resilient tile flooring is installed in the pattern and orientation desired. Tiles are fully adhered without damage or unevenness. Maintenance stock is provided in the qty req'd.
09 65 19						Static disspative tile has the required copper strip running in the mastic below the tile to a building ground (typically an outlet)
						All existing mastic has been removed to assure that any flooring product using adhesive will properly adhere w/o a chemical reaction
09 68 00						Broadloom carpet is installed with no visible joints and no curled edges. No stains or marks. All material is from the same dye lot. Maintenance stock is provided in the qty req'd.
09 68 00						Tile carpet is installed in the pattern and orientation desired; installed with releasable adhesive; no curled edges. All material is from the same dye lot. Maintenance stock is provided in the qty req'd.
09 72 00						Wallcovering is installed neatly; joints are invisible; cut properly at trims, corners, etc.; no bubbles. Note: bubbles may requierd a couple of wks to subside. All material is from the same dye lot. Maintenance stock is provided in the qty req'd.
09 75 00						Stone facing is installed on proper substrate; joint width as required; installed plumb and level.
09 81 16						Acoustic insulation is installed in walls as required; correct type (fiberglass vs mineral fiber); above ceiling (if req'd) in poly-wrap
09 84 13						Ascoutical wall panels are installed plumb and level; no damage to fabric.
09 91 00						Maintenance stock for paint in each color used is provided in the qty req'd.

09 91 00						Label/stencil 3" high red letters within 15' of the end of each wall and at intervals not exceeding 30' "Fire Barrier - Protect All Openings" above the ceiling on every fire rated partition. (This is a requirement of 2012 IBC - 703.7.)
09 91 00						Pain smooth even finish, consistent over an entire section of wall or ceiling
09 91 00						Paint color code (if req'd) follows that of the building standard.
09 91 00						Paint exposed fire sprinkler pipe. Paint a stripe at all wall pentrations for sprinkler pipe. Paint a stripe every 10 feet where sprinkler pipe is concealed.
09 91 00						All existing items have been painted or touched up i.e. radiators, columns
						All transitions between flooring types are acceptable.

Additional Notes on Division 9:

Division 10 - Specialties

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
10 28 00						Grab bars are installed at locations required - measure to confirm. Provide sufficient support.
10 28 00						Toilet partitions are installed correctly; no surface damage - dents, finish; soundly affixed to wall or ceiling; locking mechanism; coat hook (if required); door is plumb and does not bind.
10 28 00						Paper towel dispensers installed correctly; no clearance issues; turn over key.
10 28 00						Soap dispensers installed correctly; no clearance issues; turn over key.
10 28 00						Electric hand dryer installed correctly and operable; observe water splashed on wall below - may need to add cleanable surface.
10 28 00						Toilet tissue dispensers are installed properly; turn over key.
10 28 00						Feminine napkin disposals are installed properly; has insert; turn over key.
10 28 00						Waste receptacle is installed properly; has insert; surface is not damaged.
10 28 00						Any paper products required by contract have been turned over.

Additional Notes on Division 10:

Division 11 -Equipment

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
11 52 13						Projection Screens

Division 12 -Furnishings

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
12 21 13						Window Blinds
12 26 13						Metal Countertops and Cabinets

Division 21 -Wet Pipe Sprinkler

Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected

21 13 13						Hydro Static Test
21 13 13						Material test and certificate and request for final test
21 13 13						Firestopping at sprinkler pipe penetrations of fire rated walls
21 13 13						Sleeves on pipe through masonry walls
21 13 13						No components attached to sprinkler lines
21 13 13						No components attached to sprinkler lines
21 13 13						Pipe in concealed areas painted with 4" wide red band placed no more than 10 feet on center and on each side of a wall penetration.

Division 22 -HVAC						
Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
22 05 00						Security bars installed in ducts where required
22 05 00						Air transfers installed between rooms, proper insulation, acoustic treatment, walls not to deck where air needs to travel over wall
22 05 00						Access panels installed where required for maintenance of equipment
22 05 00						Dampers (including fire) installed where indicated
22 05 00						Insulation complete, tape secured
22 05 00						Flex duct of proper length (less than 6') and not kinked.
22 05 00						Head end graphics programming complete
22 05 00						Ducts properly sealed
22 05 50						Valves installed on piping where required.
22 05 50						Insulation on piping complete
22 05 50						Gauges installed where indicated and at take off points from mains, individual equipment and at equipment bypasses
22 05 50						Provide pipe labels for flow directions
22 05 50						Pipes properly supported, secure and from structure
22 05 50						Inspect dielectric breaks between dissimiliar metals
22 05 50						Copper overflow pipes terminate at drain/sink
22 30 00						Floor drains adjusted for floor heights
22 30 00						Cleanouts provided
22 30 00						Water heaters have drain pan
22 40 00						Plumbing fixtures - function, sealed at edges

Division 26 -Electrical						
Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
26 05 00						Coverplates installed

26 05 00						Proper labeling on disconnects
26 05 26						Equipment is properly grounded
26 05 26						Conduit installed neatly and supported
26 05 33						Check receptacles for proper installation
26 24 00						Proper clearance in front of panels
26 24 00						Panel schedules updated
26 51 00						Light switching and motion sensors function properly, sensitivity appropriate for controls
26 51 00						Exit lighting
26 51 00						Emergency lighting
26 51 00						Light deflector are free of dings and dents
26 51 00						Light locations and orientations are correct
26 51 00						Measure light levels
26 51 00						Lamp color is consistent
27 30 00						Data faceplates labeled
27 30 00						Patch panels labeled

Division 27 -Communications						
Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
27 30 00						Data faceplates labeled
27 30 00						Patch panels labeled
27 41 00						Check speaker location, support and function

Division 28 -Security and Fire Alarm						
Section	Inspected	Partial Inspection	Not Inspected	N/A	Pass / Fail	Item Inspected
28 31 02						Checklists completed
28 31 02						Training provided
28 31 02						Panels properly labeled
28 31 02						Proper decibel levels
28 31 02						Horns sychronized
28 31 02						All exposed conduit painted
28 31 02						wire nuts are not allowed
28 31 02						Preliminary tests: loop resistance, loop capacitance

Appendix E – Addenda

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:	DATE ISSUED
ALL PROPOSERS	February 2, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: Thursday, March 11, 2021

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

Please replace Questionnaire posted on January 25, 2021 with the Questionnaire posted today with a revision date of 210202

End

APPROVED BY:
Tim Hall
PROJECT DIRECTOR
DATE February 2, 2021

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

REQUEST FOR PROPOSAL
ADDENDUM NO. 2

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 March 5, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: March 11, 2021

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

Below are the questions received and Design and Construction's response

Q1 – Are we required to keep the questionnaire in the word document and format or can we recreate it to match our overall proposal style / font. No information will be cut or excluded.

Response – As long as the DTMB logo, wording, and order are maintained, you may modify the document to match your overall proposal style / font.

Q2 – Under the Article 1 Business Organization section requests submitting firms to list "partnering organizations". If one or more partnering organizations are listed and the intent is that those firms will be providing services beyond what the primary firm offers, should the resumes of team members from the partnering organizations be included in Part I Technical Proposal (II-2 Personnel)? Likewise, should cost information be provided for those team members?

Response – Yes

Q3 – In the Technical portion of the RFP, it appears there are two requests for similar information.

1. Address programing, schematic and design development phases, construction documentation and construction inspection.
2. Management Summary, Work Plan and Schedule

Response: There are two separate and distinct responses requested, first, as part of Understanding of Projects and Tasks it is requested that you address programming, schematic and design development phases, construction documentation and construction inspection as part of your broader understanding of the tasks and how they may be likely related to ISID project assignments expected by this RFP; second, is a broader and more detailed explanation of your Management Summary, Work Plan and Schedule to ensure the success of projects expected to result from this RFP.

APPROVED BY:

Tim Hall DATE: March 5, 2021

APPENDIX 3

PROFESSIONAL CERTIFICATION FORMS

R 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services 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 of 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: 48067)
- ☐ 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: _____)

Bidder: G.H. Forbes Associates Architects

Theresa Scherwitz
Authorized Agent Name (print or type)

Theresa Scherwitz 4/16/2021
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.

R 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services 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 time 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)

Theresa Schenk 4/16/21

Authorized Agent Signature & Date

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

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 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 of the Professional's Consultant services hourly billing rates, not to exceed 5%, 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 such items are provided in house by the professional.

2021 HOURLY BILLING RATE
Based on 2020 Expenses

OVERH**EAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S** HOURLY BILLING RATE CALCULATION

SALARIES:
Principals (Not Project Related)
Clerical/Secretarial
Technical (Not Project Related)
Temporary Help
Technical Training
Recruiting Expenses

OFFICE FACILITIES:
Rents and Related Expenses
Utilities
Cleaning and Repair

SUPPLIES:
Postage
Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

SERVICES (PROFESSIONAL):
Accounting
Legal
Employment Fees
Computer Services
Research

FINANCIAL:
Depreciation

EQUIPMENT RENTALS:
Computers
Typewriter
Bookkeeping
Dictating
Printing
Furniture and Fixtures
Instruments

TRAVEL:
All Project-Related Travel*

MISCELLANEOUS:
Professional Organization Dues
for Principals and Employees
Licensing Fees

SERVICES (NONPROFESSIONAL):
Telephone and Telegram
Messenger Services

TAXES:
Franchise Taxes
Occupancy Tax
Unincorporated Business Tax
Property Tax
Single Business Tax
Income Tax

INSURANCE:
Professional Liability Insurance
Flight and Commercial Vehicle
Valuable Papers
Office Liability
Office Theft
Premises Insurance
Key-Personnel Insurance

EMPLOYEE BENEFITS:
Hospitalization
Employer's F.I.C.A. Tax
Unemployment Insurance
Federal Unemployment Tax
Disability
Worker's Compensation
Vacation
Holidays
Sick Pay
Medical Payments
Pension Funds
Insurance - Life
Retirement Plans

PRINTING AND DUPLICATION:
Specifications (other than Contract Bidding Documents)
Drawings (other than Contract Bidding Documents)
Xerox/Reproduction
Photographs

LOSSES:
Bad Debts (net)
Uncollectible Fee
Thefts (not covered by Project/Contract bond)
Forgeries (not covered by Project/Contract bond)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET,
VEHICLE AND TRAVEL SERVICES
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective October 1, 2020

MICHIGAN SELECT CITIES *

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	$85.00
Breakfast	$10.25	$13.25
Lunch	$10.25	$13.25
Dinner	$24.25	$27.25

MICHIGAN IN-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	$85.00
Breakfast	$ 8.50	$11.50
Lunch	$ 8.50	$11.50
Dinner	$19.00	$22.00
Per Diem	**$87.00**	
Lodging	$51.00	
Breakfast	$ 8.50	
Lunch	$ 8.50	
Dinner	$19.00	

OUT-OF-STATE SELECT CITIES *

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	Contact Conlin Travel
Breakfast	$13.00	$16.00
Lunch	$13.00	$16.00
Dinner	$25.25	$28.25

OUT-OF-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	Contact Conlin Travel
Breakfast	$10.25	$13.25
Lunch	$10.25	$13.25
Dinner	$23.50	$26.50
Per Diem	**$95.00**	
Lodging	$51.00	
Breakfast	$10.25	
Lunch	$10.25	
Dinner	$23.50	

Incidental Costs Per Day (with overnight stay) $5.00

Mileage Rates

Premium Rate	$0.575 per mile
Standard Rate	$0.360 per mile

* See Select Cities Listing

** Lodging available at State rate, or call Conlin Travel at 877-654-2179 or www.somtravel.com

SELECT HIGH COST CITY LIST

TRAVEL RATE REIMBURSEMENT FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective October 1, 2020

Michigan Select Cities/Counties

Cities	Counties
Ann Arbor, Auburn Hills, Detroit, Grand Rapids, Holland, Leland, Mackinac Island, Petoskey, Pontiac, South Haven, Traverse City	All of Grand Traverse, Oakland and Wayne

Out of State Select Cities/Counties

State	City/County
Arizona	Phoenix, Scottsdale, Sedona
California	Los Angeles (Los Angeles, Orange, Mendocino & Ventura Counties, and Edwards AFB), Eureka, Arcata, Mckinleyville, Mammoth Lakes, Mill Valley, San Rafael, Novato, Monterey, Palm Springs, San Diego, San Francisco, Santa Barbara, Santa Monica, South Lake Tahoe, Truckee, Yosemite National Park
Colorado	Aspen, Breckenridge, Grand Lake, Silverthorne, Steamboat Springs, Telluride, Vail
Connecticut	Bridgeport, Danbury
District of Columbia	Washington DC (also the cities of Alexandria, Falls Church and Fairfax, and the counties of Arlington and Fairfax, in Virginia; and the counties of Montgomery and Prince George's in Maryland) (See also Maryland and Virginia)
Florida	Boca Raton, Delray Beach, Jupiter, Fort Lauderdale, Key West
Georgia	Jekyll Island, Brunswick
Idaho	Sun Valley, Ketchum
Illinois	Chicago (Cook and Lake counties)
Kentucky	Kenton
Louisiana	New Orleans
Maine	Bar Harbor, Kennebunk, Kittery, Rockport, Sanford
Maryland	Counties of Montgomery & Prince Georges, Baltimore City, Ocean City
Massachusetts	Boston (Suffolk), Burlington, Cambridge, Woburn, Martha's Vineyard
Minnesota	Duluth, Minneapolis/St. Paul (Hennepin and Ramsey Counties)
Nevada	Las Vegas
New Mexico	Santa Fe
New York	Lake Placid, Manhattan (the borough of Manhattan, Brooklyn, Bronx, Queens and Staten Island), Riverhead, Ronkonkoma, Melville, Suffolk County, Tarrytown, White Plains, New Rochelle
Ohio	Cincinnati
Pennsylvania	Bucks County, Pittsburgh
Rhode Island	Bristol, Jamestown/Middletown/ Newport (Newport County) Providence
Texas	Austin, Dallas, Houston, L.B. Johnson Space Center
Utah	Park City (Summit County)
Vermont	Manchester, Montpelier, Stowe (Lamoille County)
Virginia	Alexandria, Falls Church, Fairfax
Washington	Port Angeles, Port Townsend, Seattle
Wyoming	Jackson, Pinedale

APPENDIX 5

CERTIFICATES OF INSURANCE

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY) 04/16/2021

PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
PH: 734-425-9710 **DESIGNPRO INSURANCE GROUP** **P.O. BOX 511106** **LIVONIA, MI 48151** **(734) 425-9710**	

INSURED	INSURERS AFFORDING COVERAGE	NAIC#
G.H. FORBES ASSOCIATES ARCHITECTS, P.C. 816 E. 4TH STREET ROYAL OAK, MI 48067	INSURER A: HANOVER/MASSACHUSETTS BAY INS. CO.	
	INSURER B: HANOVER/ALLMERICA FIN BENEFIT INS. CO.	
	INSURER C: RLI INSURANCE COMPANY	
	INSURER D:	
	INSURER E:	

COVERAGES Serial # 102154

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 POLICES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
A	X	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY ☐ CLAIMS MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC	#ODB-9001166-11	01-01-21	01-01-22	EACH OCCURRENCE	$ 2,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
						MED EXP (Any one person)	$ 5,000
						PERSONAL & ADV INJURY	$ 2,000,000
						GENERAL AGGREGATE	$ 4,000,000
						PRODUCTS - COMP/OP AGG	$ 4,000,000
A		**AUTOMOBILE LIABILITY** ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	#ODB-9001166-11	01-01-21	01-01-22	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
						BODILY INJURY (Per person)	$
						BODILY INJURY (Per accident)	$
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY ☐ ANY AUTO				AUTO ONLY - EA ACCIDENT	$
						OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS / UMBRELLA LIABILITY ☐ OCCUR ☐ CLAIMS MADE ☐ DEDUCTIBLE ☐ RETENTION $				EACH OCCURRENCE	$
						AGGREGATE	$
							$
							$
							$
B		**WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY** ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N ☐ **(Mandatory in NH)** If yes, describe under SPECIAL PROVISIONS below	#W2B-9004426-10	01-01-21	01-01-22	X WC STATU-TORY LIMITS ☐ OTH-ER	
						E.L. EACH ACCIDENT	$ 500,000
						E.L. DISEASE - EA EMPLOYEE	$ 500,000
						E.L. DISEASE - POLICY LIMIT	$ 500,000
C		**OTHER** ARCHTIECTS/ENGINEERS PROFESSIONAL LIABILITY	#RDP0042011	01-01-21	01-01-22	PER CLAIM LIMIT : $1,000,000 AGGREGATE LIMIT: $2,000,000	

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

RE: 2021 GENERAL ARCHITECTURAL / ENGINEERING DESIGN SERVICES ISID CONTRACT NO. 00881

THE STATE OF MICHIGAN, ITS DEPARTMENTS, DIVISIONS, AGENCIES, OFFICES, COMMISSIONS, OFFICERS, EMPLOYEES, AND AGENTS ARE INCLUDED AS ADDITIONAL INSUREDS WITH RESPECT TO THE GENERAL LIABILITY INSURANCE. COVERAGE IS PRIMARY AND NON-CONTRIBUTORY.
FIVE (5) DAYS NOTICE OF CANCELLATION APPLIES FOR NON-PAYMENT OF PREMIUM.

CERTIFICATE HOLDER	CANCELLATION
STATE OF MICHIGAN DESIGN AND CONSTRUCTION DIVISION ATTN: ANNE WATROS 3111W. ST. JOSEPH STREET LANSING, MI 48909	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ~~ENDEAVOR TO~~ MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, ~~BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.~~
	AUTHORIZED REPRESENTATIVE

ACORD 25 (2009/01)

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 forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty 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 forty 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.

EXHIBIT 1 - BYRD ANTI-LOBBYING CERTIFICATION

The Contractor, G.H. Forbes Associates Architects, PC, 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.

Theresa Scherwitz

Signature of Contractor's Authorized Official

Theresa Scherwitz, Principal

Name and Title of Contractor's Authorized Official

4/19/2021

Date