

# TASK ORDER NO. 11230.E

Pursuant to the

MASTER AGREEMENT FOR PROFESSIONAL SERVICES  
BETWEEN

**CITY OF MERIDIAN (OWNER) AND BROWN AND CALDWELL (ENGINEER)**

This Task Order is made this 26<sup>th</sup> day of October 2021 and entered into by and between the City of Meridian, a municipal corporation organized under the laws of the State of Idaho, hereinafter referred to as “City”, and accepted by Brown and Caldwell, hereinafter referred to as “Engineer” pursuant to the mutual promises, covenant and conditions contained in the Master Agreement (category 2a) between the above mentioned parties dated October 1, 2020. The Project Name for this Task Order is as follows:

## **WRRF AERATION BASIN 1-4 RETROFIT AND 9-10 UPGRADE PROJECT**

### **PROJECT UNDERSTANDING-SUMMARY**

During this phase, Consultant will conduct preliminary engineering and develop the Preliminary Engineering Report (PER) Documents to retrofit the existing Aeration Basins 1-4 (ABs 1-4) and expand new Aeration Basins 9-10 (ABs 9-10). The retrofit of ABs 1-4 will advance preliminary engineering on the recommended alternative developed in a separate Task Order. Preliminary engineering for ABs 9-10 will be in the greenfield area near Aeration Basins 5-8 (ABs 5-8).

The project will involve improvements related to the following WRRF processes:

- ABs 1-4 retrofit treatment capacity and associated hydraulic profile modifications including the Secondary Pump Station.
- A new blower building and blowers to service ABs 1-4 and the RAS/WAS Station 2 classifying selector zone.
- ABs 9-10 new treatment capacity will be planned based on expansion provided as part of the Liquid Stream Capacity Expansion project.
- Elutriation water redundant supply from the Post-Aeration tank.
- Mechanical Building electrical replacement.
- Secondary Pump Station and Primary Clarifier 3/4 Splitter Box re-coating.
- Primary Clarifier 3/4 structural condition assessment.

## **SCOPE OF WORK**

### **Task 1 – PER Design**

- Focus on advancing planning concepts that have been developed in the *WRRF FP* (December 2018) and the ABs 1-4 Retrofit Alternatives Analysis task order. Leading up to the PER Design milestone, elements of the work will be discussed and submitted separately for review by the City to confirm design direction (e.g., Coordination Meetings).
- Document the basis for final design for the Project scope of work to achieve the following objectives:
  - Form the basis for detailed design and preparation of contract documents and obtain City approval on general arrangement and direction of the proposed design.
  - Confirm technology and process decisions documented in the *WRRF FP* (December 2018).
  - Document compliance with regulatory requirements that pertain to the design of sewage treatment facilities.
  - Serve as a vehicle for City input to the preliminary design effort.
  - Use information provided by the survey and geotechnical subconsultants.
  - Review code compliance.
  - Update construction cost estimates.

### **1.1 Topographic Survey and Base Mapping Support**

- Review the existing base maps and as-built drawings that have been prepared for previous upgrade projects at the site and conduct additional surface/subsurface field surveys in the vicinity of proposed new facilities and improvements for the Project. Combine existing and new base map information to create a complete file of the mapping covering the areas affected by the proposed Project improvements.
- Surveying services will be contracted directly by the City and will consist of reviewing the base map and as-built documentation for the site, obtaining new field survey data, and combining existing/new information on the City's WRRF coordinate system and datum. The field survey will be coordinated at two different points during the PER Design period. Initial activities will focus on gathering data on readily visible above ground facilities not already depicted on the existing topographic map, obtaining surface topography and hydraulic profile features in the ABs 1–4 and ABs 9-10 portions of the site, and locating points for geotechnical investigations. Following completion of the initial field surveys, Consultant may identify up to 50 points including both surface and subsurface (rim to invert type measurements) requiring additional accuracy for Final Design phase tasks. It is assumed that potholing existing buried utilities will not be required for this task.

## Deliverables

City-contracted surveying firm:

- Reduced field data and base map information on the City's control network coordinate system and datum.
- Updated existing topographic survey map with revised line work and a legend of symbols and abbreviations for new topographic information, with new information clearly delineated.
- AutoCAD file of the base map (including surfaces, points, styles, etc. necessary for full reproduction), a sealed hard copy, a text file of the surveyed points, a field code list, field notes, and site photos.

### 1.2 Architectural Preliminary Design

- Perform a building code review and identify architectural treatment and materials for all new buildings associated with the Project to blend in with adjacent existing structures and prepare a preliminary architectural design of a new blower building for the selected alternative.
- Review the existing WRRF campus and match to the best extent possible architectural treatment and materials of the proposed structures. In addition, the following code review coordination activities will be completed:
  - Establish applicable codes for all buildings/structures with local code officials and fire marshals.
  - Complete building and fire code analysis and coordinate with design disciplines as follows:
    - Coordinate with the structural engineer to define the structural design concepts for the facilities.
    - Coordinate with the mechanical discipline to select heating/ventilation/air conditioning (HVAC) equipment, locate HVAC equipment rooms, determine space requirements, and route ductwork if required. Establish design R-values for all exterior walls.
    - Coordinate with I&C and electrical disciplines to size and locate electrical and control rooms.

## Deliverables

- Write-up for the PER to summarize the code review for architectural elements to be used for the final design.
- Prepare floor plans and elevations and identify the exterior material types and finishes. If pre-engineered buildings are utilized, elevations will not be shown, but the material types and finishes will be identified in the PER.
- Contribute PER Design elements on the architectural drawings, such as door and window locations and major access requirements.

### 1.3 Civil Preliminary Design

- Develop and coordinate general and civil site work information to the PER Design level and coordinate completion of survey/geotechnical subconsultant work products with other design disciplines.
- Develop updated site plan and preliminary civil design.

## Deliverables

- Site Plan including existing site features and boundaries, horizontal and vertical survey control, relocations and/or extensions of existing utilities, preliminary proposed yard piping locations, approximate new structure footprints and locations, preliminary layout of both vehicular and pedestrian pathways, and preliminary site stormwater treatment design concepts, if found to be substantial and required after performing the stormwater analysis for the site.
- Prepare preliminary site drainage calculations that will incorporate proposed site improvements. Findings, conclusions, and recommendations will be summarized within the basis of design report.
- Layout major utility corridors for the Project that accommodate future facilities proposed within the existing process footprint for the ABs 1-4 retrofit, new blower building, and greenfield ABs 9-10 expansion areas.

### 1.4 Structural Preliminary Design

- Establish the basis of design criteria which determines the boundary conditions for subsequent project design decisions. Establish the structural requirements in support of the overall process configuration from a schematic and spatial configuration. This includes establishing preliminary structural sizing and identification of major equipment and piping layouts, and site constraints that will affect the structural configuration and design. Develop structural design to the PER Design level and coordinate drawings with other disciplines.
- Develop the following elements for the ABs 1-4 retrofit, new blower building, and ABs 9-10:
  - Structural design criteria
  - Major structural components depicted on drawings including:
    - Coordinate process mechanical/structural requirements for major equipment
  - Coordinate electrical, HVAC, and process mechanical requirements:
    - Electrical/HVAC room sizes
    - Major equipment
    - Plenums/chases
  - Develop structural 3D model in support of process mechanical requirements.
  - Create preliminary plans and overall sections with dimensions and floor elevations.
  - Establish column grid and provide column lines and letters/numbers on plans.
  - Show major interfaces with existing structures.

## Deliverables

- Structural plans and sections showing preliminary building layout, dimensions, and coordinated with major process mechanical equipment. Demolition drawings and sections for demolished areas.

## 1.5 Process Mechanical Preliminary Design

- Develop the overall process configuration from a schematic and spatial configuration. Finalize wastewater treatment process calculations and parameters for sizing and locating facilities. Develop plans and sections to the preliminary design level. Coordinate with other disciplines to show key discipline components on the drawings. Develop major discipline process mechanical models.
- Develop the following elements for the ABs 1-4 retrofit, new blower building, and ABs 9-10:
  - Review available historical plant data related to aeration basins performance
  - Develop design criteria
  - Develop and confirm wastewater characteristic sampling plan for the City to complete additional testing
  - Refine major process calculations
  - Update process flow diagram to include new process units
  - Update biological modeling
  - Develop hydraulic profiles
  - Develop equipment list with documented equipment information
  - Select major equipment types and preliminary models for use in laying out equipment
  - Develop P&IDs to indicate the major process lines and mechanical equipment
  - Coordinate major utilities with the civil discipline
  - Coordinate model development
  - Coordinate area classifications per NFPA 820
  - Develop draft control narratives and coordinate instrumentation requirements

### Deliverables

- P&IDs
- Process flow diagrams
- Hydraulic models
- Plans and select sections showing major process mechanical equipment and piping
- Demolition drawings and sections for demolished areas
- Basis of Design TM for treatment processes

## 1.6 Building Mechanical Preliminary Design

- Develop the building mechanical design (which includes both HVAC and plumbing) to the PER Design level and coordinate drawings with all disciplines for a new blower building serving the ABs 1-4 retrofit.
- Develop the following elements:
  - Preliminary calculations for ventilation, heating, and cooling loads.
  - Preliminary HVAC equipment sizing and selection.
  - Preliminary air flow schematics.

- Preliminary HVAC and plumbing plans showing major equipment and ductwork.

#### Deliverables

- Equipment information documented in an equipment list
- Preliminary air flow schematics
- Drawings showing major building mechanical equipment locations and major ductwork
- Basis of design TM for building mechanical systems

### 1.7 Electrical Preliminary Design

- Develop electrical design to the PER Design level and coordinate discipline-specific requirements with other disciplines.
- Develop the following elements:
  - Preliminary service loads for all new equipment and evaluate the capacity of the existing electrical system.
  - Single-line diagrams.
  - Preliminary layout of electrical room and area space.
  - Preliminary heat loads.

#### Deliverables

- Preliminary power one-line diagrams (power distribution)
- Preliminary site electrical power plans drawings
- Preliminary electrical room layouts
- Demolition drawings and sections for demolished areas
- Basis of Design TM for electrical system expansion

### 1.8 Instrumentation Preliminary Design

- Develop instrumentation design to the PER Design level and coordinate discipline-specific requirements with other disciplines.
- Determine the scope of new instrumentation requirements and evaluate the capacity of the existing control system to accommodate the new devices.

#### Deliverables

- Control system block diagram
- Draft P&ID development to PER level
- Basis of Design TM for instrumentation and control system expansion

### 1.9 Elutriation Water for Fermentate Preliminary Design

- Develop process mechanical design to the PER Design level for a redundant source of elutriation water from the Post-Aeration tank.
- Develop the following elements:
  - New submersible pump sizing, control strategy, and layout in the Post-Aeration tank.
  - Plan for re-use of the existing Digester 3 mesophilic heat exchanger piping for supplying Post-Aeration water to the existing elutriation water pumps in the Fermenter Building.

- Identify tie-in location between the existing Digester 3 mesophilic heat exchanger piping and the elutriation water pumps.

#### Deliverables

- Process flow diagram depicting selected approach
- Alternatives description and recommendation write-up to be included in the Basis of Design TM for treatment processes

### **1.10 Existing Mechanical Building Electrical Replacement Evaluation**

- Develop electrical design to the PER Design level for replacement alternatives for the Mechanical Building electrical gear.
- Develop the following elements:
  - Mechanical Building long-term service plan.
  - Policies that factor into the problems being evaluated.
  - Two electrical gear replacement alternatives.
  - Selection criteria framework to use as a basis to evaluate the alternatives.

#### Deliverables

- Mechanical Building electrical one-line diagram, demolition, and building plans
- Alternatives description and recommendation write-up to be included in the Basis of Design TM for electrical system expansion

### **1.11 Secondary Pump Station/Primary Clarifier Splitter Box Coating Evaluation**

- Assess the existing coating/lining system in the structures and determine necessary terminations for relining.
- Assess condition of exposed concrete surfaces for deterioration.
- Assess condition of metal piping and equipment from a corrosion perspective.
- Inspection to include hammer sounding, non-destructive reinforcement depth and location assessment by pachometer, pH gradient testing by chipping hammer, pit depth measurements, photographs and written visual observations.
- Summarize findings and prepare Condition Assessment report recommendations for rehabilitation of structures (if necessary).

#### Deliverables

- Condition Assessment report to include as an appendix to the PER document.

### **1.12 Primary Clarifier 3/4 Structural Evaluation**

- Assess the existing primary clarifier structural concrete and locate cracks and/or other structural deficiencies.
- Site assessment field work will be coordinated with Task 1.11 coating evaluation (scheduled to occur at the same time) to capture any structural rehabilitation items in the Secondary Pump Station/Primary Clarifier Splitter Box.
- Summarize findings and provide recommendations for sealing cracks and/or rehabilitating deficiencies.

#### Deliverables

- Summary report to include as an appendix to the PER document.

## **Task 2 – Project Management and Design Support Services**

### **2.1 Document Preparation**

- Prepare the final PER Design package.
- Draft version of the PER Design will be prepared and submitted to the City in PDF format. The PER will be prepared in Microsoft Word and drawings will be prepared using Revit 2021 and Civil 3D (for civil drawings). Consultant will prepare electronic copies (pdf half-sized drawings) and four bound paper copies, of the PER for internal distribution to the City.

#### **Deliverables**

- Prepare a draft PER Design package (products from Task 1 activities) for City review. One electronic (PDF) and four hard copies will be provided.
- After incorporating City comments, prepare a final PER Design package for the City. One electronic (PDF) and four hard copies will be provided.

### **2.2 Project and Design Management**

- Provide management, direction, coordination, and control of all work associated with Project schedule, budget, subconsultants, technical quality, and monthly progress reports and invoices for the Project.
- This task includes the following activities:
  - Develop a Project Management Plan and Quality Plan for internal use.
  - Develop a Health and Safety plan for internal use.
  - Maintain critical-path schedules.
  - Prepare monthly project status reports. Progress reports will identify budget status, progress status, activities of the previous month, and upcoming activities.
  - Supervise project staff.
  - Manage in-house budget and schedule.
  - Procure, supervise, and coordinate the activities of subconsultants providing specialized or supplemental engineering services.
  - Coordinate design disciplines.

#### **Deliverables**

- Monthly progress reports and invoices

### **2.3 Coordination Meetings**

- Provide a regular forum for receipt, exchange, response, and documentation of Project planning, design, and management related issues and decisions during the Project.
- This task includes the following coordination meetings:
  - Four (4) workshops up to 3-hours in duration on-site at the City's WRRF or via MS Teams with PM, DM, and up to three additional design engineers (discipline leads) to present and review findings, discuss design issues/decision log progress, and obtain site access for information gathering.
  - Bi-weekly internal Project team meetings during the PER Design phase (1-hour duration teleconference between Consultant disciplines) for a



duration of up to four (4) months to discuss design issues, review schedule, review, and coordinate amongst discipline team members.

#### Deliverables

- Agenda and workshop presentation content to be distributed at all coordination meetings with City staff
- Issues/decision log updated following each coordination meeting with City staff
- Meeting notes for all coordination meetings with City staff

### **2.4 Construction Cost Estimate and Construction Schedule**

- Provide the probable construction cost and possible construction schedule estimates based on the PER Design submittals. A Class 3 estimate will be submitted in accordance with the Association for the Advancement of Cost Engineering Estimate Classification System for the recommended alternative.

#### Deliverables

- Cost Estimate for the PER Design will subdivide the cost estimate by process areas and by major engineering disciplines.
- Construction Schedule will include a basic work breakdown structure schedule estimate based on the PER Design submittal.

### **2.5 Quality Assurance/Quality Control (QA/QC)**

- Implement a QA/QC program as defined in the Quality Plan to review products from this scope. City and regulatory agency review comments will also be incorporated to prepare and complete the final PER Design documents. Additionally, the City is assumed to participate in this process and provide independent review of products.
- Consultant will provide appropriate calculation and deliverable QA/QC reviews by in-house, senior staff members. No external value engineering reviews are included in this scope.

#### Deliverables

- Issues/decision log

## **ASSUMPTIONS**

While preparing our scope of services and fee schedule, we have made the following assumptions:

### **Civil/Geotechnical**

- Existing topographical survey information and base mapping will be utilized for the design of new facilities and modifications of existing facilities.
- Additional topographical survey information to augment the existing base mapping will be identified by the Consultant to be obtained by the City for the design of new facilities and modifications of existing facilities.
- Legal, easement, and plat surveys for the WRRF site will not be required.

- Civil site work plans will only be provided for areas of the site that involve disturbance to existing grading and where site restoration is needed after demolition.
- Site drawings will only be prepared for areas in the WRRF where new facilities or major retrofits to existing aeration basins are to be constructed.
- It is assumed the site layout for new facilities associated with the Project will not require relocation of major utilities or structures required for continued or interim service of the WRRF.
- Landscaping plans will not be prepared.
- New access roadway work will be limited to the areas around new ABs 9-10 and existing ABs 1-4. No traffic analysis or traffic control design is required.
- The capacity of the existing fire protection system is adequate to handle the new construction.
- The foundation design of new or modified facilities will be based on geotechnical information obtained by the City for this Project.
- In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect the Project cost and/or execution. The conditions and cost/execution effects are not the responsibility of Consultant.
- New groundwater pumping facilities are not required.

### **Structural/Architectural/Geotechnical**

- Field work and associated travel from Consultant staff will be required to complete the structural condition assessment of the existing Primary Clarifier 3/4 concrete tanks and the coating system assessment of the existing Secondary Pump Station and Primary Clarifier Splitter Box.
- Conventional spread foundations will be required for all new facilities. Over excavation, preload, or piles will not be required. Underdrain systems for Aeration Basins 9-10 will match those constructed for Aeration Basins 5-8.
- Building architecture (materials, construction) will be like existing structures.
- No landscape architect services will be required for this Project.
- No retaining walls will be required
- Alternatives for retrofitting Aeration Basins 1–4 may require a permanent crane rail system for equipment.

### **Process/Mechanical**

- Design concerning “plant-wide” utility systems such as basin drainage, water and in-plant waste collection/disposal will be limited to extension of and/or changes to existing piping. No new structures or equipment will be needed.
- Corrosion control provisions will not be required for buried piping.

- Active cathodic protection will not be required for buried piping.
- Piping 2 inches in diameter and smaller will be field-routed 5-feet from entry point and 5-feet from end point.
- Pipe supports will be Contractor-designed based upon a performance specification which will be developed during the final design phase.
- Pipe expansion/contraction control measures will be Contractor-designed based upon a performance specification.
- Seismic bracing/control measures for piping will be specified for Contractor design
- An odor control system will not be provided.
- Blower requirements will be evaluated for ABs 9-10, for the alternatives for retrofits to ABs 1-4, and for the RAS/WAS Station 2 Classifying Selector zone.
- Blower type, diffusers, and other major process mechanical equipment will be the same type as the plant's existing blowers; no evaluation of blower technology is included in the PER Design.
- Manual valves 3 inches in diameter and below will not be tagged.
- Existing chemical (methanol and acetic acid) pumping and storage is adequate to supply chemicals without additional pumps. New piping distribution system required for ABs 9-10. New connection to capped piping required for ABs 1-4.
- Hydraulics will be evaluated/updated at ABs 1-4. Previous hydraulics work at ABs 5-8 will apply and is still current for new ABs 9-10.
- Existing RAS/WAS Stations 1 and 2 do not require any upgrades. Work associated with these facilities will be limited to a new blower and piping connection to the existing air piping serving RAS/WAS Station 2.

### **Electrical**

- An evaluation of the existing primary feed and standby power generation systems will be provided during the PER phase, with a recommendation of whether modification will be required during the Final Design phase to incorporate the additional loads identified during the PER phase. If modifications to the primary feed and standby generation systems are required, renegotiation of the fee will be required to accommodate the new system design and specification.
- Utility coordination will be provided during the Final Design phase for any modifications required to accommodate new loads.
- Fire alarm panel design is not included for a new blower building servicing ABs 1-4 and the RAS/WAS Station 2 Classifying Selector zone.
- A comprehensive power system study will be provided during the Construction phase. Code review will be limited to the City-adopted version at the time of initiation of contract of NFPA Sections 70, 820 and 497.
- Public address system design or modification will not be included.

### **Instrumentation and Controls (I&C)**

- I&C will match the existing system and components available during the Project.
- I&C will be similar in type and sophistication to what currently exists. Analog elements and components will be used, and no significant modifications to existing I&C equipment or systems will be needed.
- A design for modifying the existing programmable logic controller (PLC)-based supervisory control and data acquisition system will be provided for the process areas being modified. Significant modifications to existing I&C equipment or systems are not anticipated.
- The City will provide “as-built” documentation of the existing process instrumentation and control system. City-provided information will include, but not be limited to, existing motor and control circuit diagrams, panel shop drawings, process instrument information, and process control system software documentation.
- The new instrumentation and control system will be based on the use of PLCs. Plant status monitoring will be by the existing commercially available PC-based software package: Wonderware, by Schneider Electric Software. Remote access to plant components will not be provided.
- PER Design will include process & instrumentation diagrams (P&IDs), completed to a level enough to identify the primary processes and process equipment and extent of major modification of treatment process. P&IDs will be completed during the Final Design phase.
- PER Design will include a Control System Block Diagram drawing depicting the site’s major network modifications. Final Design will update the drawing to include all network modifications, in the Project-modified process areas only.
- Programming is excluded from this scope of work. This effort will be deferred to the construction phase of this Project and will assume that a subcontractor will be hired by the City to perform this work during the construction Project.
- Security system and video system design are excluded as part of this scope of work.
- Vendor-supplied control system packages will be interfaced through hardwired signals or networked signals, when available.

### **Project Management/General**

- Specifications will not be provided as part of the PER Design phase. Specifications to be provided during the Final Design phase.
- Decisions will be reached in the workshop setting and summarized in detailed TMs and/or documented and maintained in an issues/decision log.
- Design deliverable milestone reviews will be streamlined by using presentations and structured review meetings.
- The design will be based on federal, state, and local codes and standards in effect at the beginning of the Project. Any changes in these codes may necessitate a change in scope and will be subject to renegotiation. The existing plant facilities are assumed to be in full compliance with current drainage, electrical, building, mechanical, plumbing, seismic, and other codes that apply to

these types of facilities. Revisions and rehabilitation of existing plant facilities to achieve compliance with current codes are specifically excluded from this scope of work.

- Preparation of contract design drawings will be based on the use of standard Consultant document protocols, CAD standards, and formats like those which have been used on previous projects with the City. All drawings will be prepared with Revit 2021, except for civil drawings, which will be prepared with Civil 3D.
- City will not seek state or federal funding. City pre-purchase of equipment is not anticipated for this project.
- In providing opinions of probable cost, financial analyses, economic feasibility projections, and schedules for the Project, Consultant has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate Project cost or schedule. Therefore, Consultant makes no warranty the City's actual Project costs, financial aspects, economic feasibility, or schedules will not vary from Consultant's opinions, analyses, projections, or estimates.
- The City will provide computer files of all existing plant construction drawings. These drawings are considered record drawings and will be relied upon to be accurate for design purposes. City will provide to Consultant all data in City's possession relating to Consultant's services on the Project. Consultant will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by City. If provided documents are found to be erroneous in content, an adjustment to the work scope subject to renegotiation with the City may be required.
- Any investigation and remediation of possible hazardous waste, asbestos, lead paint, or other types of contamination will be conducted as a separate contract.

## **CITY RESPONSIBILITIES**

- City's Responsibilities Include:
  - Provide copies of available base maps, as-built data, and horizontal control and vertical datum points for the Project site.
  - Contract for survey services directly from the City's consultant roster and assist field survey crew to gain access to WRRF site for safe collection of field data.
  - Review and provide comments to the draft survey and base map.
  - Confirm site utility features through field locates or other methods where there are reasonable expectations the base map drawings may require additional information or verification.
  - Provide copies of available geotechnical data for the Project site.

- Provide operations and maintenance staff to support Consultant with on-site structural condition assessment of Primary Clarifiers 3/4 including dewatering existing tanks and safe access procedures for tank entry.
- Provide operations and maintenance staff to support Consultant with on-site coating system assessment of the Secondary Pump Station and Primary Clarifier Splitter Box including dewatering existing structures and safe access procedures for structure entry.
- Confirm design criteria for site improvements through review of the decision/issues log. Criteria for the PER Design will be discussed during a coordination meeting between the City and Consultant design lead and documented in decision/issues log.
- Provide available historical plant data related to the liquid stream biological treatment systems.
- Provide all necessary shop drawings, submittals, records, and operation and maintenance information necessary to establish the facilities conditions that the design is based on.
- Provide input on preferred equipment vendors.
- Provide input on vehicle and maintenance access requirements.
- Provide as-built P&IDs for existing plant systems to be upgraded.
- Provide load trending data for the MCC's serving process areas to be upgraded.
- Supply current as-built drawings for all buried and exposed power supply cables, duct banks, raceways, instrument cables, communication cabling, yard piping, process piping, and structures at the plant.
- Review PER Design submittal including summarized comments in a single file returned to Consultant, within 3 weeks of receipt of draft PER Design from Consultant.
- Coordinate interaction with the Idaho Department of Environmental Quality (IDEQ) for review of the PER Design submittal.
- Attend all Project coordination meetings to provide timely input on issues/decision log progress.
- Review and provide comments on meeting notes.
- Review cost estimates and construction schedule.
- Participate in QA/QC reviews and provide written comments and feedback regarding review documents.

## TIME OF COMPLETION and COMPENSATION SCHEDULE

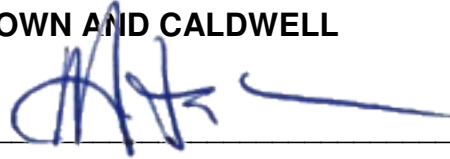
<b>COMPENSATION AND COMPLETION SCHEDULE</b>			
<b>Task</b>	<b>Description</b>	<b>Estimated Completion Date</b>	<b>Compensation</b>
1	PER Design	▪ February 28, 2022	\$325,678
2	Project Management and Design Support Services	▪ February 28, 2022	\$168,507
<b>TASK ORDER TOTAL:</b>			<b>\$494,185.00</b>

The Not-To-Exceed amount to complete all services listed above for this Task Order is (four hundred ninety-four thousand and one hundred eighty-five dollars) (\$494,185.00). No compensation will be paid over the Not-to-Exceed amount without prior written approval by the City in the form of a Change Order. No travel or expenses will be reimbursed through this agreement. All costs must be incorporated in the individual tasks within the Compensation and Completion Schedule above.

**CITY OF MERIDIAN**

**BROWN AND CALDWELL**

BY: \_\_\_\_\_  
KEITH WATTS, Purchasing Manager

BY:  \_\_\_\_\_

Dated: \_\_\_\_\_

Dated: November 2, 2021

City Project Manager:  
Tyson Glock