

First Second Third **Revised Attachment A: Tasks**

This Revised Attachment A is attached to the First Second Third amendment to Approved Service Order No. 1 issued pursuant to the Master Agreement having the above-referenced CPMS Contract No.

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's Contract Manager.

General Description of Project for which Consultant will Provide Services: The Blower Improvements Project includes engine replacements with electric motors, switchgear and motor control center modifications, mechanical modifications to process piping, and miscellaneous architectural, civil, instrumentation and controls, along with structural works, for ten existing blowers located throughout the RWF in three separate buildings: the Blower and Generator Building (Building 40); the Secondary Blower Building (SBB); and the Tertiary Blower Building (TBB). The Project also includes the decommissioning and demolition of four SBB blowers. Construction is scheduled to begin in January 2019 with a projected substantial completion in May 2023.

This Project requires special inspections and material testing during construction per the San José Municipal Code, the 2016 California Building Code (CBC), and the approved (Issued for Construction) and conformed Project plans and specifications. This Service Order No. 1 (SO1) consists of the following tasks:

- Task No. 1: Onsite Testing & Inspections
- Task No. 2: Offsite Testing & Inspections
- Task No. 3: Laboratory Testing, Engineering & Project Management

Task No. 1: Onsite Testing & Inspections

A. Services:

1. The Consultant shall conduct cast-in-place concrete and concrete reinforcing inspections and testing, as requested by the City, during the construction of the Project. The inspections and testing shall be performed in accordance with the approved Project plans and specifications, and Chapter 17 – Structural Tests and Special Inspections of the 2016 CBC. The concrete and rebar placement inspections shall include, but not be limited to the following activities:
 - a. Inspection of concrete, rebar, rebar couplers, post-installed dowels/anchors, field slump and air content testing, concrete sampling; and
 - b. Concrete sampling and transportation of such samples to the Consultant's laboratory for concrete compression tests.

Inspectors shall be certified by the American Concrete Institute (ACI) and International Code Council (ICC) for reinforced Concrete. The Structural Steel Inspectors shall be certified by American Institute of Steel Construction (AISC).

2. The Consultant shall conduct special masonry inspections, as requested by the City, during the construction of the Project. The special masonry inspections shall be performed in accordance with the approved Project plans and specifications, and Chapter 17 – Structural Tests and Special Inspections of the 2016 CBC.

Inspectors shall be certified by ICC for Structural Masonry

3. The Consultant shall conduct structural steel inspections, as requested by the City, during the construction of the Project. The structural steel inspections shall be performed in accordance with the approved Project plans and specifications, 2016 CBC Section 1705, including Sub-section 2, Steel Construction and American Welding Society D1.1. The structural steel inspections shall include, but not limited to, the following activities:

- a. Verification and inspection of field structural steel welding;
- b. Inspection of high strength bolting (A325);
- c. Testing of adhesive/expansion anchors; and
- d. Ultrasonic Testing (UT)/Non-Destructive testing (NDT) of structural welds.

Welding inspectors shall be certified by American Welding Society (AWS) and ICC for Structural Steel and Welding/Bolting.

4. The Consultant shall conduct soil compaction testing, observations and geotechnical engineering services, as requested by the City, during the construction of the Project. The soil compaction testing and observations shall be performed in accordance with the approved Project plans and specifications, and Chapter 17 - Structure Tests and Special Inspections of the 2016 CBC. The soil compaction inspections shall include, but not be limited to, the following activities:

- a. Soil observations, sampling, and in-place soil compaction testing during initial site work preparation for the structure base and sub-base, utility trench backfill and site paving; and
- b. Additional soil sampling and transportation of such samples to the Consultant's laboratory to test for soil compaction characteristics (e.g., moisture/density relationship testing).

Soils inspectors shall be certified by ICC for soils special inspection.

B. Deliverables: The Consultant shall provide the following deliverables in PDF format:

- a. Certification of inspectors;
- b. Daily Field Reports submitted to the City Project Inspector within 24 hours of inspection;
- c. Weekly Reports submitted to the City Contract Manager through EADOC within one week of observation; and
- d. Final Report/Affidavit submitted to the City Contract Manager upon completion of all soil placement observations and testing. The Final Reports/Affidavits shall include affidavits

of completion of testing and inspections, and describe the work inspected, material tested and period of inspection performed.

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: August 31, 2023.
- On or before ____ Business Days from _____.

Task No. 2: Offsite Testing & Inspections

A. Services:

1. The Consultant shall conduct structural steel inspections, as requested by the City, during the construction of the Project. The structural steel inspections shall be performed in accordance with the approved Project plans and specifications, 2016 CBC Section 1705, including Sub-section 2, Steel Construction and American Welding Society D1.1. The structural steel inspections shall include, but not be limited to, the following activities:

- a. Shop inspections;
- b. Verification and inspection of structural steel welding
- c. Ultrasonic Testing (UT)/Non-Destructive Testing (NDT) of structural welds.

Welding inspectors shall be certified by AWS and ICC for Structural Steel and Welding/Bolting.

2. The Consultant shall conduct precast concrete and concrete reinforcing inspections and testing, as requested by the City, during the construction of the Project. The inspections and testing shall be performed in accordance with the approved Project plans and specifications, and Chapter 17 – Structural Tests and Special Inspections of the 2016 CBC. The concrete and rebar placement inspections shall include, but not be limited to the following activities:

- a. Inspection of concrete, rebar, rebar couplers, post-installed dowels/anchors, slump and air content testing, concrete sampling; and
- b. Concrete sampling and transportation of such samples to the Consultant’s laboratory for concrete compression tests.

Inspectors shall be certified by the American Concrete Institute (ACI) and International Code Council (ICC) for reinforced Concrete. The Structural Steel Inspectors shall be certified by American Institute of Steel Construction (AISC).

B. Deliverables: The consultant shall provide the following deliverables in PDF format:

- a. Certification of inspectors;
- b. Daily Field Reports submitted to the City Project Inspector 24 hours of inspection;

- c. Weekly Reports submitted to the City Contract Manager through EADOC within one week of observation; and
- d. Final Report/Affidavit submitted to the City Contract Manager upon completion of all structural steel inspections. The Final Reports/Affidavits shall include affidavits of completion of testing and inspections, and describe the work inspected, material tested and period of inspection performed.

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: August 31, 2023.
- On or before ____ Business Days from _____.

Task No. 3: Laboratory Testing, Engineering & Project Management

A. Services: The Consultant shall provide laboratory testing and project management for all tasks listed. The project management shall include, but not be limited to, the following activities:

- a. Laboratory testing;
- b. Staffing assignments;
- c. Project administration;
- d. Coordination with City;
- e. Management of the budget, schedule and invoicing; and
- f. Review of final reports/affidavits.

The Invoices shall provide breakdown of labor cost and equipment cost by task and include task number and activities performed

B. Deliverables: The Consultant shall provide the following deliverables in PDF format:

- a. Laboratory test results;
- b. Monthly invoices;
- c. Monthly budget analysis.

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: August 31, 2023.
- On or before ____ Business Days from _____.

Additional Requirements

1. The Consultant shall perform all tasks listed during regular workdays. No overtime, holiday or weekend work is allowed unless authorized in advance by the City's Construction Manager.
2. The services to be provided under this Service Order shall include all labor, materials, equipment, sample storage, disposal, and project administration charges for the duration of this Service Order.