

Facilities Management Facilities Projects

Campus Services Building 1945 Wheeling Street Mail Stop F418 Aurora, Colorado 80045 (303) 724-0623

## **ADDENDUM 1**

#### Friday, September 8, 2023

## Request for Qualifications – Architectural/Engineering/Consulting Services

## Research 1 North – Vivarium Air Valve Replacement – Phase 1 of 2 / PN 23-180525

#### **RFQ CLARIFICATIONS:**

- 1. RFQ Appendix D The Acknowledgement and Attestation Form <u>must</u> be completed, signed and included with the A/E Qualification Submittals.
- 2. Existing record drawings for the Research 1 North Building will be made available to the selected A/E design team in both PDF and CAD formats. Copies of other available documentation for the original building construction will also be provided.

#### QUESTIONS/RESPONSES:

1. Depending on the accuracy of the existing drawings of the interstitial space or the existence of detailed shop drawings, should the design team be expected to create detailed, accurate ductwork plans of the interstitial space? This effort may not be strictly necessary to document the valve replacement scope, but this may be a good time to capture the existing conditions, given that an extensive survey effort will be required to document valve locations, design temporary scaffolding to reach inaccessible valves, etc.

**Response:** Yes, the university would like the selected architect/engineering team to prepare detailed and accurate ductwork plans of the R1N interstitial space to clearly document the work needed for air valve replacement and help assist the construction manager/general contractor (CM/GC) to obtain full and complete pricing for this work. We expect the design team to review, confirm, and build upon the existing record drawing documentation that currently exists for this building.

2. Would the Owner likely be interested in hiring a TAB contractor for a pre-TAB effort to measure and document existing space airflows and pressure differentials throughout the vivarium before construction begins? If fouling on the existing valves is preventing spaces from being provided with adequate supply or exhaust airflows, capturing the

"day one" overall system performance may provide helpful information for valve design and final TAB efforts.

**Response:** The university does not anticipate the need for a pre-Tab effort on this project. Our Building Maintenance and Operations (BMO) group take airflow readings on these air valves every 3-4 years for required AAALAC accreditation. A copy of this documentation will be made available to the selected architecture/engineering team for this project.

3. Is there a plan in place to address how many animal holding rooms can be taken offline at one time for the purpose of establishing how many sub-phases of construction will be required?

**Response:** There is currently no plan in place. The architect/engineering team selected for this project will need to assist the university in developing this plan with input from R1N vivarium operations staff, the construction manager/general contractor (CM/GC) and other project stakeholders. The plan that is developed will also need to consider work in future phase 2.

4. Are independent opinions of cost required outside of cost information as provided by the CM/GC during the design phase(s)?

**Response:** The university is not currently anticipating the need for additional construction cost estimating outside that provided by the CM/GC during preconstruction. However, this additional professional service may be discussed during fee negotiations with the selected A/E team for this project.

5. Will the replacement valves need to be specified as an open bid item or will the University desire to write a closed-specification for a preferred product?

**Response:** This issue will be a needed discussion that takes place with all interested parties during engineering design and documentation for the project. Generally, the university prefers to utilize a specification that is based on a preferred product (basis of design), but does not exclude other acceptable products of equal quality and performance. We would like to get the best long-term value based on quality, performance and costs.

6. Can you please confirm roughly the number of supply air valves and exhaust air valves that will be included in the Phase 01 replacement project? Numbers are provided in the RFQ, but it is not completely clear if that is the total number for the vivarium as a whole, or the total number to be replaced in the phase 01 scope.

**Response:** Since this is a two (2) phase project, it's anticipated that roughly half of the existing total air valves (both supply and exhaust) will be replaced during phase 1. The exact quantity of valves replaced will be determined during the design phase (with input from all parties) and is dependent on available phase 1 funding.

7. Will the project be fully designed for Phase 1 & 2 now, but constructed as 2 phases? Or, will the design stop somewhere in the middle for Phase 1. Then when funds become available for Phase 2 the design would then be completed for Phase 2?

**Response:** The university would like the selected architecture/engineering team to complete initial design and planning to encompass both Phase 1 and 2 work. An overall design and air valve replacement strategy must be developed to allow the construction work to be completed in two (2) separate and distinct phases. However, fully developed construction documents (drawings and specifications) will only be required for phase 1 of the project now.

8. What is the building square footage for Research 1 North? How much square footage does the vivarium space include?

<u>Response:</u> <u>Research 1 North Building – 303,000 ASF (assignable SF), 344,703 GSF (gross SF)</u>

Research 1 North Vivarium – 45,402 ASF, 53,804 GSF

9. When the project gets awarded will the design team be allowed to walk the vivarium space below the ceiling?

**Response:** With the exception of testing, adjusting & balancing (TAB), the university doesn't anticipate any work on this project will need to take place within the vivarium. All HVAC equipment being replaced is located within the interstitial level of the building. However, access to the vivarium for the selected architect/engineering team will be provided if there is a need to verify and/or document conditions as part of this project. These inspections will need to be approved, scheduled and coordinated by the R1N Vivarium operations staff.

10. Will the awarded team be allowed to survey the vivarium space below the ceiling to document lights, diffusers, fire alarm devices, security, lighting control devices, sprinkler heads or other devices in the ceilings? Or will the team be expected to design from as-built documents only?

**Response:** See response to question #9 above.

11. Are the ceilings in the vivarium space 2'x4' tiles, or is it hard lid ceilings?

Response: The vivarium spaces contain hard lid ceilings.

12. What are the approximate ceiling heights in the vivarium spaces?

**Response:** The ceiling heights in the vivarium spaces are approximately 8'-6".

13. Since some valves are not able to be reached via the catwalk in the interstitial space and scaffolding will be required, is demolition of ceilings, patch and repair expected as part of the architectural scope to be documented in the construction set?

**Response:** Scaffolding was not the best term to use in this RFQ. Instead, a work platform, or bridging spanning the catwalk provides a better description of what is needed. Some of the air valves are located too far away from the catwalk and will require a temporary work platform (bridging) to safely access. It's not expected that access to the air valves will be through the vivarium ceiling. All work related to the air valve replacement will be completed within the interstitial level. If there is any patching and repair work required in the interstitial space, this scope needs to be clearly documented in the construction documents.

#### ADDITIONAL INFORMATION:

- 1. A copy of the <u>**R1 Vivarium HVAC Study Program Plan</u>** dated June 22, 2022 is being provided for supplementary information and is attached to this addendum.</u>
- 2. A copy of the **P18 Vivarium General Exhaust Investigation** dated June 1, 2023 is being provided for supplementary information and is attached to this addendum.
- Add the attached <u>Supplementary General Conditions Federal Provisions</u> (SC-SGC) and the <u>SLFRF Federal Funds Contractor Terms and Conditions</u> (SC-6.23) to the Appendix B: "sample" Architect/Engineer Agreement Construction Manager/General Contractor under Exhibit: Supplementary General Conditions: Federal Provisions. These additional documents will be included in the actual architect/engineer agreement prepared for this project.

#### END OF ADDENDUM 1

(This addendum consist of 4 pages plus attachments)

# University of Colorado Anschutz Medical Campus

# **R1** Vivarium HVAC Study Program Plan

13001 E 17<sup>th</sup> PL Aurora, CO 80045



# **CU Anschutz Medical Campus**

# June 22, 2022 CRA# 2022-193



Cator, Ruma & Associates, Co. Colorado | Idaho | Wyoming

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#### 1. EXECUTIVE SUMMARY

1.1 CRA was hired to evaluate the cost to upgrade the ventilation system for the vivarium on Research 1. Two projects are needed, one to replace the 2 exhaust fans on the roof and the other to replace all of the supply and exhaust air valves and associated controls in the interstitial space above the vivarium.

The Primary components required to be upgraded are as follows:

- A. Exhaust Fans
- B. Supply and Exhaust Air Valves
- C. Reheat Coils and Piped Accessories
- D. Associated Controls

Following this summary, the report will identify the observations from plan review and site visits as well as two detailed cost opinions.

The proposed construction cost for these two projects are as follows:

- 1) Exhaust Fans = \$400,000.
- 2) Air Valves and Controls = \$2,600,000

Design, other soft costs and escalation should be added for the total project funding request.

#### 2. NOTED OBSERVATIONS FROM PLAN REVIEW:

2.1 The ventilation system for the vivarium resides in the interstitial space above the vivarium. There are 145 supply air valves with reheat coils, 114 general exhaust air valves, 39 cage rack exhaust valves, 16 Biosafety Cabinets exhaust valves and 5 other miscellaneous exhaust valves.

The existing air valves are pressure independent venturi style with internal plunger and spring.

These air valves do not have airflow measurement, therefore separate cross-ring airflow stations were provided to report airflow to the building automaton system (BAS).

There are two 34,300 CFM exhaust fans on the roof, in a parallel configuration. The connected load from all exhaust air valves for this system is 58,235 cfm. This puts the existing exhaust fans each at 60% of the connected load. If one fan is disabled, there may still be enough air to satisfy the spaces for a short period.

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When the energy recovery coils were added to these exhaust branches going to the fans, they were sized at 40,000 cfm each. Since the coils are sized larger, there is the possibility of increasing the size of the fans to get closer to N+1 redundancy.

#### 3. NOTED OBSERVATIONS FROM THE FIELD REVIEW:

3.1 The interstitial space above the vivarium is comprised of catwalks to service the ventilation system components and other equipment. Most of the air valves are located adjacent to the catwalk. Therefore, most air valves are readily accessible for replacement.

However, there are approximately 35 air valves that are too far away from the edge of the catwalk and will require scaffolding or other platforms to be installed to access air valves for replacement. Depending on how the contractor arranges scaffolding, there will likely need to be 20-30 areas of scaffolding or platforms constructed in order to replace these hard-to-reach air valves.

The reheat coils do not have true isolation valves since "valve packs" were used where balancing valves are also intended for isolation.

Therefore, drain-down of the heating water system and additional "quadrant" isolation valves are recommended to be installed for future isolation without having to affect other areas of the vivarium. Control valves for the coils, while still operational are beyond their useful life.

#### 4. ISSUES AND NEEDS:

- 4.1 There are two primary issues with the existing ventilation system.
  - A. Age. The system is over 20 years old and reaching the end of its useful life. As this is a critical system, for the welfare of animals, it must be reliable.
  - B. Clogging of the exhaust air valves and associated airflow measuring devices. The animal air and dander travel from the cage racks into the exhaust ducts. This then collects on the internal plunger and airflow measuring sensors causing them not to measure correctly. Maintenance to clean these components is difficult, time consuming and requires lengthy outages to the animal holding rooms.
- 4.2 The proposed replacement air valves use a type of airflow measuring called vortices shedding. This uses a "Bluff Body" that created vortexes that are frequencies measured by a microphone. These types of sensors are self-cleaning and do not clog like a pitot tube measuring device.

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- 4.3 The proposed air values by Accutrol also have access doors to easily clean the Bluff Body and blade dampers inside the value, compared to having to remove the air value to clean the plunger.
- 4.4 The proposed replacement of the exhaust fans is at a minimum to replace like for like, but increase the size of the two exhaust fans to 40,000 cfm to match the capacity of the energy recovery coil.
- 4.5 Another option to provide redundancy for the exhaust system is to add another equal sized exhaust fan at 40,000 cfm to create a true N+1 redundancy for the system. This would require a new stack, branch duct between one of the coil outlets to the fan, power connection, VFD, programming updates and roof repair.

#### 5. SCOPE OF WORK FOR THE PROJECT:

- 5.1 The scope of work required is as follows:
  - A. Exhaust fans: remove the existing fans and install the replacement fans in the same location. A large crane will be needed for this lift as the roof is 10 stories high (approximately 150 ft high).
    - Alternate add a 3<sup>rd</sup> fan of equal size to create the N+1 redundancy for the exhaust system. This is not currently budgeted.
  - B. Air Valves: Remove and replace all of the room supply and general exhaust valves. Since the new air valves take up less length, additional sheet metal will be required to make up this difference. A Laboratory Air Control System (LACS) will accompany these valves.
  - C. Reheat Coils: The goal is to replace these in the same location to minimize the cost of accessories. Additional isolation valves will be required for system isolation for future maintenance.
  - D. Controls: All of the reheat coil water control valves will be replaced with new Siemens valves. Siemens also provides the wiring and labor to install the wiring and sensors provided with the LACS. Upgrading of the controls for the new exhaust will also be required.

STC/bqg

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# P18 VIVARIUM GENERAL EXHAUST INVESTIGATION



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# **SUMMARY**

Recent issues with doors slamming and incorrect airflow in several rooms in vivarium suite 404 led to a wider investigation into the P18 general exhaust system to address similar issues that continue to recur over time throughout the vivarium.

Since exhaust air valves are typically implicated in these issues, an investigation was conducted to identify factors contributing to performance deficiencies in the P18 vivarium general exhaust system and associated venturi control valves.

Thermiq Services, LLC worked with CU's Building Performance Group who performed field testing and provided all data and trending for the investigation.

Multiple factors were identified that are likely contributing to performance issues in the problem spaces. Several exhaust air valves, or EAVs, are installed in the incorrect orientation, causing erratic or poor control of exhaust airflow in these spaces. Some EAV controllers are inaccurately sensing exhaust airflow due to sensors that have drifted out of calibration, and in some cases due to defective controllers. Many EAVs are out of range of the rated pressure differential required across the venturi valve, preventing proper valve performance and airflow control. These EAVs are likely affected by low fan-side static pressure, since all deficient EAV's identified are located on the same general exhaust trunk. There are indications that this duct trunk may be near capacity. A past project transferred a portion of the ABSL-3 exhaust load to the vivarium general exhaust system, further increasing load on the duct trunk in question.

Based on findings, several corrective measures have been identified that may mitigate or resolve vivarium exhaust issues. These are listed under the "recommendations" section in this report. Due to the age of vivarium systems and equipment, several recommendations involve a larger scope of recommissioning for the vivarium exhaust equipment.

Further investigation or sample testing may be warranted, depending on the implementation approach taken for the listed recommendations. See the "Recommendations" section for additional detail.

# **APPROACH**

For cost and time-efficiency reasons, a targeted approach was taken to isolate problem EAVs. Sample testing was then performed, typically on a subset of the problem EAVs.

Problem EAVs were isolated by using BAS trending to identify EAVs that failed to meet their airflow setpoints for a significant amount of time during the trending period of several months. 22 "problem EAVs" in the vivarium were identified on the P18 general exhaust (GEX) system through BAS trending. Trending showed negligible issues for SAV boxes.

Potential causes for the vivarium exhaust problems were investigated at both the fan systemlevel, and at the EAV component level with the objective of identifying contributing factors and ruling out others.

The following potential issues were investigated: installation deficiencies, failed components or maintenance-related issues, excessive pressure drop across duct or system components, air valve pressure drop outside of manufacturer's required range, installation deficiencies, sensor drift.

	EAV Box	Orientation	Valve PD (in.wc)	Silencer PD (in.wc)	Calibration	Setpoints
1	EAV 032	HORIZ	1.23			VERIFY
2	EAV 033	HORIZ	0.31	0.34	req. replacement	VERIFY
3	EAV 035	HORIZ	0.13	0.44	req. replacement	VERIFY
4	EAV 036	HORIZ	0.52			ОК
5	EAV 144	VERT	0.27			VERIFY
6	EAV 001	HORIZ	0.13			VERIFY
7	EAV 146	HORIZ	0.11			VERIFY
8	EAV 037	HORIZ	0.90			VERIFY
9	EAV 055	HORIZ	0.41		OUT OF RANGE	ОК
10	EAV 046	HORIZ	0.39		req. replacement	ОК
11	EAV 044	HORIZ	0.56	0.17	OUT OF RANGE	ОК
12	EAV 028	HORIZ	0.19		OUT OF RANGE	ОК
13	EAV 030	HORIZ	0.39			ОК
14	EAV 051	HORIZ	0.54		OUT OF RANGE	ОК
15	EAV 058	HORIZ	0.63		OUT OF RANGE	ОК
16	EAV 004	HORIZ	0.11			ОК
17	EAV 142	HORIZ	0.18			ОК
18	EAV 002	HORIZ	0.17			ОК
19	EAV 043	HORIZ	0.55		OUT OF RANGE	ОК
20	EAV 041	HORIZ	0.57	0.30		ОК
21	EAV 024	HORIZ	0.30	0.47		ОК
22	EAV 022	HORIZ	0.11		OUT OF RANGE	ОК

# **TESTING RESULTS**

\* --- indicates EAV was not included for that test type

#### FAN SYSTEM

#### Fan speed control

BAS trending of fan speed confirmed stable and correct fan control.

#### **GEX duct static pressure sensor accuracy**

Comparison of pressure sensor readings to calibrated manometer readings confirmed accurate pressure sensor readings.

#### Duct static pressure drop or duct constraints

All 22 EAVs were found to be connected to the same major duct "trunk" that serves the vivarium's north side. This trunk is one of three and represents approximately half of the vivarium's general exhaust capacity. A basic static pressure profile was developed by measuring static pressure at specified duct locations to quantify pressure drop through this trunk.

#### Changes in airflow capacity requirements

Drawings and field conditions show that a past project transferred 5 exhaust air valves from the ABSL-3 exhaust system to the GEX exhaust system, adding 730 cfm of demand on the strained capacity of this trunk.

#### COMPONENT LEVEL

#### **Controller airflow setpoints**

TEC controller subpoint reports were used to compare current CFM setpoint values with design CFM setpoint values. 7 of the 22 boxes had setpoints that deviated from design values and that may adversely affect space conditions or decrease available exhaust at nearby EAVs.

#### Actuator failure

One non-responsive actuator was determined to have failed and was replaced at EAV-IN 041.

#### Air valve installation orientation

8 of the 22 "problem boxes" are installed in the wrong orientation, causing erratic or poor control of airflow rates.

#### Pressure differential at air valve

The venturi air valves in the vivarium require a differential pressure across the valve in the range of 0.6 - 3.0 in.w.g. in order to control and perform correctly. 18 of the 22 "problem boxes" tested had differential pressures below the minimum required. Low

differential pressure at the valve can be caused by both excessive pressure drop on the room-side of the valve, as well as by inadequate exhaust static pressure on the fan-side of the valve.

#### Pressure drop at sound attenuator

To find a reason for high static pressures on the room-side of many venturi valves, pressure drop was measured at 5 of the 22 sound attenuators for the problem EAVs and compared to rated pressure drop from the manufacturer at the current air velocities. All of the boxes that were tested had pressure drops that exceeded the expected pressure drop by 2-4x the rated pressure drop.

#### Unknown restriction (i.e. exhaust intake filters)

No ceiling exhaust intake filters were found at any of the 22 boxes, and no other unexpected components or restrictions were found.

#### Airflow sensor accuracy

Controller airflow sensing accuracy was tested by taking pitot traverse airflow measurements at 10 of the 22 EAVs and comparing measured CFM values to CFM values sensed by the BAS system. 8 of the 10 EAVs tested were out range for calibration. 3 of these are suspected to be due to TEC controller failures. 6 of the 8 EAVs had higher airflow than what was measured by the BAS system, indicating that the system would likely benefit from a net gain in capacity if valves were calibrated.

# RECOMMENDATIONS

Due to the complexity and age of vivarium HVAC systems, a broader scope of recommissioning performed by a TAB firm is recommended to improve performance of the existing exhaust equipment. Several of the measures listed below that would best fit within a phased recommissioning of the vivarium exhaust system include calibration of box airflows, an audit of space pressure differential setpoints, and rebalance of exhaust inlet dampers where required.

Steps that can be taken to alleviate general exhaust system deficiencies for the vivarium are described below in order of importance.

For areas affected by incorrect venturi valve orientation, the priority should be to install a valve with the correct orientation. This is likely a major performance issue for these boxes since venturi valves are manufactured to work for a specified orientation (vertical or horizontal). Venturi valves use an internal valve spring calibrated for the intended orientation. Incorrect orientation will result in erratic or poor control of exhaust airflow cfm. A practical approach would likely require ordering and installing replacement venturi valves made for the current installation orientation.

Calibration of vivarium general exhaust EAV airflows is recommended to reclaim excess airflow from non-problem EAVs. 75% of EAV boxes out of calibration range were high in airflow, indicating that calibration of air valves will result in a net increase in available capacity as excess airflow is reclaimed by accurate calibration. Calibration could be conducted in phases, starting with the EAV boxes served by the north vivarium ducting. The 3 EAV controllers requiring unusually large calibration coefficients should be replaced due to the likelihood of a failed controller being at fault.

Some EAV setpoints may need to be reviewed and corrected to achieve desired space performance and pressure for the areas served by these EAVs.

There is capacity at the fan level for a small increase in fan speed. This is recommended as a last step to address EAV performance issues, as the small increase available is unlikely to resolve or mask the existing issues on its own. Implementing the other recommendations before modifying the exhaust fan setpoints will achieve the most effective and long-term improvement. When testing began general exhaust fans 6 and 7 were operating at a setpoint of 2.5" and a speed of approximately 83.5%. If required, an incremental increase in duct static pressure could be made until pressure requirements are met at the problem EAVs. It is not recommended to exceed 95% fan speed or to exceed 3" duct static pressure without verifying duct pressure class rating.

# POTENTIAL FOLLOW-UP

Duct leakage testing was not included in the investigation due to time and equipment constraints. Additionally, there were no indications of abnormal duct leakage. However, on a large ducting system leakage rate can be a relevant factor, especially if the system is near capacity. Qualitative testing using a smoke generator would be recommended initially, since a quantitative duct leakage rate test would require system shutdowns and may be impractical to implement.

The cause of high pressure drops through many of the sound attenuators is still unknown. Any follow-up investigation should include evaluating the installed configuration for system effects, comparing pressure readings with other non-problem EAV attenuators, and inspecting the interior condition of one or two sound attenuators to determine if debris buildup has contributed to higher pressure drop. Potential corrective action could be determined based on the findings.

The position of individual exhaust intake balance dampers could be surveyed in spaces served by EAVs with high room-side static pressure drop. A correctly balanced system should have at least one damper in the wide-open position. Excessively closed dampers could prevent an EAV box from operating within its design differential pressure range.

Correct vivarium space pressurization depends on the airflow differential between exhaust and supply air, as well as the space pressurization of adjacent spaces. An audit of the net pressure

gradient balance for larger vivarium suite sections may help identify additional pressurization issues, especially where suites adjoin corridors or adjacent suites.

The scope of testing already performed could be further expanded to other EAVs where useful. A broader recommissioning could implement the above recommendations in a systematic way to achieve the best performance improvement for the existing system.

Jordan Eads Thermiq Services, LLC

6/1/23

# SUPPLEMENTARY GENERAL CONDITIONS: FEDERAL PROVISIONS

#### **1. APPLICABILITY OF PROVISIONS.**

- 1.1. The Contract to which these Federal Provisions are attached has been funded, in whole or in part, with an Award of Federal funds. In the event of a conflict between the provisions of these Federal Provisions, the Special Provisions, the body of the Contract, or any attachments or exhibits incorporated into and made a part of the Contract, the provisions of these Federal Provisions shall control.
- 1.1. The State of Colorado is accountable to Treasury for oversight of their subrecipients, including ensuring their subrecipients comply with the SLFRF statute, SLFRF Award Terms and Conditions, Treasury's Final Rule, and reporting requirements, as applicable.
- 1.2. Additionally, any subrecipient that issues a subaward to another entity (2nd tier subrecipient), must hold the 2nd tier subrecipient accountable to these provisions and adhere to reporting requirements.
- 1.3. These Federal Provisions are subject to the Award as defined in §2 of these Federal Provisions, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institutions of higher education.

#### 2. DEFINITIONS.

- 2.1. For the purposes of these Federal Provisions, the following terms shall have the meanings ascribed to them below.
- 2.1.1. "Award" means an award of Federal financial assistance, and the Contract setting forth the terms and conditions of that financial assistance that a non-Federal Entity receives or administers.
- 2.1.1.1. Awards may be in the form of:
- 2.1.1.1.1. Grants;
- 2.1.1.1.2. Contracts;
- 2.1.1.1.3. Cooperative Contracts, which do not include cooperative research and development Contracts (CRDA) pursuant to the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. 3710);
- 2.1.1.1.4. Loans;
- 2.1.1.1.5. Loan Guarantees;
- 2.1.1.1.6. Subsidies;
- 2.1.1.1.7. Insurance;
- 2.1.1.1.8. Food commodities;
- 2.1.1.1.9. Direct appropriations;
- 2.1.1.1.10. Assessed and voluntary contributions; and
- 2.1.1.1.11. Other financial assistance transactions that authorize the expenditure of Federal funds by non-Federal Entities.
- 2.1.1.1.12. Any other items specified by OMB in policy memoranda available at the OMB website or other source posted by the OMB.
- 2.1.1.2. Award does not include:
- 2.1.1.2.1. Technical assistance, which provides services in lieu of money;
- 2.1.1.2.2. A transfer of title to Federally-owned property provided in lieu of money; even if the award is called a grant;

- 2.1.1.2.3. Any award classified for security purposes; or
- 2.1.1.2.4. Any award funded in whole or in part with Recovery funds, as defined in section 1512 of the American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111- 5).
- 2.1.2. "Contract" means the Contract to which these Federal Provisions are attached and includes all Award types in §2.1.1.1 of this Exhibit.
- 2.1.3. "Contractor" means a non-Federal Entity (or a Federal agency under an Agreement to a non-Federal Entity) receiving Federal funds through a Prime Recipient to support the performance of the Federal project or program for which the Federal funds were awarded. A Contractor is subject to the terms and conditions of the Federal Award to the Prime Recipient, including program compliance requirements. The term "Contractor" includes and may be referred to as "Subcontractor". The term does not include an individual who is a beneficiary of a federal program.
- 2.1.4. "Data Universal Numbering System (DUNS) Number" means the nine digit number established and assigned by Dun and Bradstreet, Inc. to uniquely identify a business entity. Dun and Bradstreet's website may be found at: http://fedgov.dnb.com/webform.
- 2.1.5. "Entity" means all of the following as defined at 2 CFR part 25, subpart C; 2.1.5.1. A governmental organization, which is a State, local government, or Indian Tribe; 2.1.5.2. A foreign public entity;
- 2.1.5.3. A domestic or foreign non-profit organization;
- 2.1.5.4. A domestic or foreign for-profit organization; and
- 2.1.5.5. A Federal agency, but only a Subrecipient under an Award or Subaward to a non-Federal entity.
- 2.1.6. "Executive" means an officer, managing partner or any other employee in a management position.
- 2.1.7. "Federal Award Identification Number (FAIN)" means an Award number assigned by a Federal agency to a Prime Recipient.
- 2.1.8. "Federal Awarding Agency" means a Federal agency providing a Federal Award to a Recipient as described in 2 CFR §200.37
- 2.1.9. "FFATA" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252. FFATA, as amended, also is referred to as the "Transparency Act."
- 2.1.10. "Federal Provisions" means these Federal Provisions subject to the Transparency Act and Uniform Guidance, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institutions of higher education.
- 2.1.11. "OMB" means the Executive Office of the President, Office of Management and Budget.
- 2.1.12. "Prime Recipient" means a Colorado State agency or institution of higher education that receives an Award.
- 2.1.13. "Subaward" means an award by a Recipient to a Subrecipient funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to the Award unless the terms and conditions of the Federal Award specifically indicate otherwise in accordance with 2 CFR §200.38. The term does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program.
- 2.1.14. Not used
- 2.1.15. "Contractor Parent UEI Number" means the subrecipient parent organization's 9-digit Universal Entity ID (UEI) number that appears in the subrecipient's System for Award Management (SAM) profile, if applicable.
- 2.1.16. "System for Award Management (SAM)" means the Federal repository into which an Entity must enter the information required under the Transparency Act, which may be found at http://www.sam.gov.
- 2.1.17. "Total Compensation" means the cash and noncash dollar value earned by an Executive during the Prime Recipient's or Subrecipient's preceding fiscal year and includes the following:
- 2.1.17.1. Salary and bonus;

- 2.1.17.2. Awards of stock, stock options, and stock appreciation rights, using the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2005) (FAS 123R), Shared Based Payments;
- 2.1.17.3. Earnings for services under non-equity incentive plans, not including group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of Executives and are available generally to all salaried employees;
- 2.1.17.4. Change in present value of defined benefit and actuarial pension plans; 2.1.17.5. Above-market earnings on deferred compensation which is not tax-qualified;
- 2.1.17.6. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the Executive exceeds \$10,000.
- 2.1.18. "Transparency Act" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252. The Transparency Act also is referred to as FFATA.
- 2.1.19. "Uniform Guidance" means the Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which supersedes requirements from OMB Circulars A-21, A-87, A-110, and A-122, OMB Circulars A-89, A-102, and A-133, and the guidance in Circular A-50 on Single Audit Act follow-up. The terms and conditions of the Uniform Guidance flow down to Awards to Subrecipients unless the Uniform Guidance or the terms and conditions of the Federal Award specifically indicate otherwise.
- 2.1.20 "Unique Entity ID" means the Unique Entity ID established by the federal government for a Grantee at https://sam.gov/content/home.
- 2.1.20. "Vendor" means a dealer, distributor, merchant or other seller providing property or services required for a project or program funded by an Award. A Vendor is not a Prime Recipient or a Subrecipient and is not subject to the terms and conditions of the Federal award. Program compliance requirements do not pass through to a Vendor.

#### **3. COMPLIANCE.**

- 3.1. Contractor shall comply with all applicable provisions of the Transparency Act, all applicable provisions of the Uniform Guidance, and the regulations issued pursuant thereto, including but not limited to these Federal Provisions. Any revisions to such provisions or regulations shall automatically become a part of these Federal Provisions, without the necessity of either party executing any further instrument. The State of Colorado may provide written notification to Contractor of such revisions, but such notice shall not be a condition precedent to the effectiveness of such revisions.
- 3.2. Per US Treasury Final Award requirements, programs or services must not include terms or conditions that undermine efforts to stop COVID-19 or discourage compliance with recommendations and CDC guidelines.

# 4. SYSTEM FOR AWARD MANAGEMENT (SAM) AND DATA UNIVERSAL NUMBERING SYSTEM (DUNS) REQUIREMENTS.

- 4.1. SAM. Contractor shall maintain the currency of its information in SAM until the Contractor submits the final financial report required under the Award or receives final payment, whichever is later. Contractor shall review and update SAM information at least annually after the initial registration, and more frequently if required by changes in its information.
- 4.2. UEI. Grantee shall provide its Unique Entity ID to its Prime Recipient, and shall update Grantee's information in SAM.gov at least annually after the initial registration, and more frequently if required by changes in Grantee's information.

#### **5. TOTAL COMPENSATION.**

- 5.1. Contractor shall include Total Compensation in SAM for each of its five most highly compensated Executives for the preceding fiscal year if:
- 5.1.1. The total Federal funding authorized to date under the Award is \$30,000 or more; and
- 5.1.2. In the preceding fiscal year, Contractor received:
- 5.1.2.1. 80% or more of its annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and
- 5.1.2.2. \$25,000,000 or more in annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and
- 5.1.3. The public does not have access to information about the compensation of such Executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d) or § 6104 of the Internal Revenue Code of 1986.

#### 6. REPORTING.

6.1. Contractor shall report data elements to SAM and to the Prime Recipient as required in this Exhibit if Contractor is a Subrecipient for the Award pursuant to the Transparency Act. No direct payment shall be made to Contractor for providing any reports required under these Federal Provisions and the cost of producing such reports shall be included in the Contract price. The reporting requirements in this Exhibit are based on guidance from the US Office of Management and Budget (OMB), and as such are subject to change at any time by OMB. Any such changes shall be automatically incorporated into this Contract and shall become part of Contractor's obligations under this Contract.

#### 7. EFFECTIVE DATE AND DOLLAR THRESHOLD FOR REPORTING.

- 7.1. Reporting requirements in §8 below apply to new Awards as of October 1, 2010, if the initial award is \$30,000 or more. If the initial Award is below \$30,000 but subsequent Award modifications result in a total Award of \$30,000 or more, the Award is subject to the reporting requirements as of the date the Award exceeds \$30,000. If the initial Award is \$30,000 or more, but funding is subsequently de-obligated such that the total award amount falls below \$30,000, the Award shall continue to be subject to the reporting requirements. If the total award is below \$30,000 no reporting required; if more than \$30,000 and less than \$50,000 then FFATA reporting is required; and, \$50,000 and above SLFRF reporting is required.
- 7.2. The procurement standards in §9 below are applicable to new Awards made by Prime Recipient as of December 26, 2015. The standards set forth in §11 below are applicable to audits of fiscal years beginning on or after December 26, 2014.

#### 8. SUBRECIPIENT REPORTING REQUIREMENTS.

- 8.1. If Contractor is a Subrecipient, Contractor shall report as set forth below.
- 8.1.1. To SAM. A Subrecipient shall register in SAM and report the following data elements in SAM for each Federal Award Identification Number no later than the end of the month following the month in which the Subaward was made:
- 8.1.1.1. Subrecipient UEI Number;
- 8.1.1.2. Subrecipient UEI Number + 4 if more than one electronic funds transfer (EFT) account;
- 8.1.1.3. Subrecipient Parent UEI Number;
- 8.1.1.4. Subrecipient's address, including: Street Address, City, State, Country, Zip + 4, and Congressional District;
- 8.1.1.5. Subrecipient's top 5 most highly compensated Executives if the criteria in §4 above are met; and
- 8.1.1.6. Subrecipient's Total Compensation of top 5 most highly compensated Executives if criteria in §4 above met.
- 8.1.2. To Prime Recipient. A Subrecipient shall report to its Prime Recipient, upon the effective date of the Contract, the following data elements:

- 8.1.2.1. Subrecipient's UEI Number as registered in SAM.
- 8.1.2.2. Primary Place of Performance Information, including: Street Address, City, State, Country, Zip code + 4, and Congressional District.

#### 9. PROCUREMENT STANDARDS.

- 9.1. Procurement Procedures. A Subrecipient shall use its own documented procurement procedures which reflect applicable State, local, and Tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in the Uniform Guidance, including without limitation, §§200.318 through 200.326 thereof.
- 9.2. Procurement of Recovered Materials (2 CFR 200.322). If a Subrecipient is a State Agency or an agency of a political subdivision of the State, its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- 9.3 Domestic preference for procurements (2 CFR 200.322). As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all Agreements and purchase orders for work or products under this award.

#### **10. ACCESS TO RECORDS**

10.1. A Subrecipient shall permit Recipient and auditors to have access to Subrecipient's records and financial statements as necessary for Recipient to meet the requirements of §200.331 (Requirements for pass-through entities), §§200.300 (Statutory and national policy requirements) through 200.309 (Period of performance), and Subpart F-Audit Requirements of the Uniform Guidance. 2 CFR §200.331(a)(5).

#### **11. SINGLE AUDIT REQUIREMENTS**

- 11.1. If a Subrecipient expends \$750,000 or more in Federal Awards during the Subrecipient's fiscal year, the Subrecipient shall procure or arrange for a single or program-specific audit conducted for that year in accordance with the provisions of Subpart F-Audit Requirements of the Uniform Guidance, issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507). 2 CFR §200.501.
- 11.1.1. Election. A Subrecipient shall have a single audit conducted in accordance with Uniform Guidance §200.514 (Scope of audit), except when it elects to have a program-specific audit conducted in accordance with §200.507 (Program-specific audits). The Subrecipient may elect to have a program-specific audit if Subrecipient expends Federal Awards under only one Federal program (excluding research and development) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of Prime Recipient. A program-specific audit may not be elected for research and development unless all of the Federal Awards expended were received from Recipient and Recipient approves in advance a program-specific audit.
- 11.1.2. Exemption. If a Subrecipient expends less than \$750,000 in Federal Awards during its fiscal year, the Subrecipient shall be exempt from Federal audit requirements for that year, except as noted in 2 CFR \$200.503 (Relation to other audit requirements), but records shall be available for review or audit by appropriate officials of the Federal agency, the State, and the Government Accountability Office.
- 11.1.3. Subrecipient Compliance Responsibility. A Subrecipient shall procure or otherwise arrange for the audit required by Part F of the Uniform Guidance and ensure it is properly performed and submitted when due in accordance with the Uniform Guidance. Subrecipient shall prepare appropriate financial statements, including the schedule of expenditures of Federal awards in accordance with Uniform Guidance §200.510 (Financial statements) and provide the auditor with access to personnel, accounts, books, records,

supporting documentation, and other information as needed for the auditor to perform the audit required by Uniform Guidance Part F-Audit Requirements.

#### **12. CONTRACT PROVISIONS FOR CONTRACTORS AND SUBCONTRACTORS**

- 12.1. Contractors shall comply with and shall include all of the following applicable provisions in all subcontracts entered into by it pursuant to this Contract and any provisions required by 2 CFR 200 Appendix II.
- 12.1.1. Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 shall include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.
- 12.1.1.1. During the performance of this contract, the contractor agrees as follows:
- 12.1.1.1. Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, 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, 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 by the contracting officer setting forth the provisions of this nondiscrimination clause.
- 12.1.1.1.2. 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, or national origin.
- 12.1.1.1.3. Contractor will send to each labor union or representative of workers with which he has a collective bargaining Contract or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 12.1.1.1.4. 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.
- 12.1.1.1.5. Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 12.1.1.1.6. In the event of Contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such 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 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.
- 12.1.1.1.7. Contractor will include the provisions of paragraphs (1) through (7) 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 may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

- 12.1.2. Davis-Bacon Act. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be 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. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and 3145), as Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or Subrecipient must be prohibited 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. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
- 12.1.3. Rights to Inventions Made Under a Contract or Contract. If the Federal Award meets the definition of "funding Contract" under 37 CFR §401.2 (a) and 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 Contract," Subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Contracts," and any implementing regulations issued by the awarding agency.
- 12.1.4. Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended. Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- 12.1.5. Debarment and Suspension (Executive Orders 12549 and 12689). 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 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "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.
- 12.1.6. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. 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 must 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 non-Federal award.
- 12.1.7. Prohibition on certain telecommunications and video surveillance services or equipment (2 CFR 200.216). Grantee is prohibited from obligating or expending loan or grant funds on certain telecommunications and video surveillance services or equipment pursuant to 2 CFR 200.216.
- 12.1.8. Never Contract with the Enemy (2 CFR 200.215). Federal awarding agencies and recipients are subject to the regulations implementing "Never Contract with the Enemy" in 2 CFR part 183. The regulations in 2 CFR part 183 affect covered Agreements, grants and cooperative agreements that are expected to exceed \$50,000 within the period of performance, are performed outside the United States and its territories, and

are in support of a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

- 12.1.9. Title VI of the Civil Rights Act. The Subgrantee, Contractor, Subcontractor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S. C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CRF Part 22, and herein incorporated by reference and made part of this Agreement of this Agreement.
- 12.1.10 Contract Work Hours and Safety Standards Act (<u>40 U.S.C. 3701-3708</u>). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with <u>40 U.S.C. 3702</u> and <u>3704</u>, as supplemented by Department of Labor regulations (<u>29 CFR Part 5</u>). Under <u>40 U.S.C. 3702</u> of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of <u>40 U.S.C. 3704</u> are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- 12.1.11 Procurement of Recovered Materials (2 CFR 200.323) See Section 9.2
- 12.1.12 Domestic preference for procurements (2 CFR 200.322) See Section 9.3
- 12.1.13 Real Property Disposition (2 CFR 200.311) When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity.

#### **13. CERTIFICATIONS.**

13.1. Unless prohibited by Federal statutes or regulations, Recipient may require Contractor to submit certifications and representations required by Federal statutes or regulations on an annual basis. 2 CFR §200.208. Submission may be required more frequently if Contractor fails to meet a requirement of the Federal award. Contractor shall certify in writing to the State at the end of the Award that the project or activity was completed or the level of effort was expended. 2 CFR §200.201(3). If the required level of activity or effort was not carried out, the amount of the Award must be adjusted.

#### **14. EXEMPTIONS.**

- 14.1. These Federal Provisions do not apply to an individual who receives an Award as a natural person, unrelated to any business or non-profit organization he or she may own or operate in his or her name.
- 14.2. A Contractor with gross income from all sources of less than \$300,000 in the previous tax year is exempt from the requirements to report Subawards and the Total Compensation of its most highly compensated Executives.

#### **15. EVENT OF DEFAULT AND TERMINATION.**

- 15.1. Failure to comply with these Federal Provisions shall constitute an event of default under the Contract and the State of Colorado may terminate the Contract upon 30 days prior written notice if the default remains uncured five calendar days following the termination of the 30 day notice period. This remedy will be in addition to any other remedy available to the State of Colorado under the Contract, at law or in equity.
- 15.2. Termination (2 CFR 200.340). The Federal Award may be terminated in whole or in part as follows:
  - § By the Federal Awarding Agency or Prime Recipient, if a Contractor fails to comply with the terms and conditions of a Federal Award;

- § By the Federal awarding agency or Prime Recipient, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
- § By the Federal awarding agency or Prime Recipient with the consent of the Contractor, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
- § By the Prime Recipient upon sending to the Federal Awarding Agency or Prime Recipient written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal Awarding Agency or Prime Recipient determines in the case of partial termination that the reduced or modified portion of the Federal Award or Contract will not accomplish the purposes for which the Federal Award was made, the Federal Awarding Agency or Prime Recipient may terminate the Federal Award in its entirety; or by the Federal Awarding Agency or Prime Recipient pursuant to termination provisions included in the Federal Award.

#### End of Supplementary General Conditions: Federal Provision

## SLFRF FEDERAL FUNDS CONTRACTOR TERMS AND CONDITIONS

Federal Awarding Office	US Department of the Treasury		
Grant Program	Coronavirus State and Local Fiscal Recovery Funds		
Assistance Listing Number	21.027		
Federal Award Number	SLFRP0126		
Federal Award Date *	May 18, 2021		
Federal Award End Date	December 31, 2024		
Federal Statutory Authority	Title VI of the Social Security Act, Section 602		
Total Amount of Federal Award (this is not the			
amount of this grant agreement)	\$3,828,761,790		
Approved Expenditure Category	61		

#### FEDERAL AWARD(S) APPLICABLE TO THIS GRANT AWARD

\* Funds may not be available through the Federal Award End Date subject to the provisions in §2 and §5 below.

Section 602(b) of the Social Security Act (the Act), as added by section 9901 of the American Rescue Plan Act (ARPA), Pub. L. No. 117-2 (March 11, 2021), authorizes the Department of the Treasury (Treasury) to make payments to certain recipients from the Coronavirus State Fiscal Recovery Fund. As a condition of your organization receiving federal recovery funds from the State, the authorized representative below hereby (i) certifies that your organization will carry out the activities listed in section 602(c) of the Act and (ii) agrees to the terms attached hereto. Your organization also agrees to use the federal recovery funds as specified in bills passed by the General Assembly and signed by the Governor.

Under penalty of perjury, the undersigned official certifies that the authorized representative has read and understood the organization's obligations in the Assurances of Compliance and Civil Rights Requirements, that any information submitted in conjunction with this assurances document is accurate and complete, and that the organization is in compliance with the nondiscrimination requirements.

Contractor Name

Authorized Representative:

Title:

Signature: \_\_\_\_\_

## SLFRF FEDERAL FUNDS CONTRACTOR TERMS AND CONDITIONS

- 1. Use of Funds.
  - a. Contractor understands and agrees that the funds disbursed under this award may only be used in compliance with section 602(c) of the Social Security Act (the Act) and Treasury's regulations implementing that section and guidance.
  - b. Contractor will determine prior to engaging in any project using this assistance that it has the institutional, managerial, and financial capability to ensure proper planning, management, and completion of such project.
- 2. <u>Period of Performance</u>. The period of performance for this agreement is shown on page one of this Agreement. Contractor may use funds to cover eligible costs incurred, as set forth in Treasury's implementing regulations, during this period of performance.
- 3. <u>Reporting</u>. Contractor agrees to comply with any reporting obligations established by Treasury as they relate to this agreement. Contractor also agrees to comply with any reporting requirements established by the Governor's Office and Office of the State Controller. The State will provide notice of such additional reporting requirements in writing.
- 4. <u>Maintenance of and Access to Records</u>
  - a. Contractor shall maintain records and financial documents sufficient to evidence compliance with section 602(c), Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing.
  - b. The Treasury Office of Inspector General and the Government Accountability Office, or their authorized representatives, shall have the right of access to records (electronic and otherwise) of Contractor in order to conduct audits or other investigations.
  - c. Records shall be maintained by Contractor for a period of five (5) years after all funds have been expended or returned to Treasury, whichever is later.
- 5. <u>Pre-award Costs.</u> Pre-award costs, as defined in 2 C.F.R. § 200.458, may not be paid with funding from this award.
- 6. <u>Administrative Costs.</u> Contractor may use funds provided under this agreement to cover both direct and indirect costs.
- 7. <u>Conflicts of Interest</u>. Contractors must disclose in writing to the contracting entity, as appropriate, any potential conflict of interest affecting the awarded funds in accordance with 2 C.F.R. § 200.112.

- 8. <u>Compliance with Applicable Law and Regulations</u>.
  - a. Contractor agrees to comply with the requirements of section 602 of the Act, regulations adopted by Treasury pursuant to section 602(f) of the Act, and guidance issued by Treasury regarding the foregoing. Contractor also agrees to comply with all other applicable federal statutes, regulations, and executive orders, and Contractor shall provide for such compliance by other parties in any agreements it enters into with other parties relating to this award.
    - i. Per US Treasury Final Award requirements, programs and services must not include terms or conditions that undermine efforts to stop COVID-19 or discourage compliance with recommendations and CDC guidelines.
  - b. Federal regulations applicable to this award include, without limitation, the following:
    - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200, other than such provisions as Treasury may determine are inapplicable to this Agreement and subject to such exceptions as may be otherwise provided by Treasury. Subpart F – Audit Requirements of the Uniform Guidance, implementing the Single Audit Act, shall apply to this award.
    - Universal Identifier and System for Award Management (SAM), 2 C.F.R. Part 25, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 25 is hereby incorporated by reference.
    - Reporting Subaward and Executive Compensation Information, 2 C.F.R. Part 170, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 170 is hereby incorporated by reference.
    - iv. OMB Guidelines to Agencies on Government wide Debarment and Suspension (Nonprocurement), 2 C.F.R. Part 180, including the requirement to include a term or condition in all lower tier covered transactions (Agreements and Subcontractors described in 2 C.F.R. Part 180, subpart B) that the award is subject to 2 C.F.R. Part 180 and Treasury's implementing regulation at 31 C.F.R. Part 19.
    - v. Subrecipient Integrity and Performance Matters, pursuant to which the award term set forth in 2 C.F.R. Part 200, Appendix XII to Part 200 is hereby incorporated by reference.
    - vi. Government wide Requirements for Drug-Free Workplace, 31 C.F.R. Part 20.
    - vii. New Restrictions on Lobbying, 31 C.F.R. Part 21.
    - viii. Uniform Relocation Assistance and Real Property Acquisitions Act of 1970

(42 U.S.C. §§ 4601-4655) and implementing regulations.

- ix. Generally applicable federal environmental laws and regulations.
- c. Statutes and regulations prohibiting discrimination applicable to this agreement include, without limitation, the following:
  - i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.) and Treasury's implementing regulations at 31 C.F.R. Part 22, which prohibit discrimination on the basis of race, color, or national origin under programs or activities receiving federal financial assistance;
  - The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability;
  - Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance;
  - iv. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance; and
  - v. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state and local governments or instrumentalities or agencies thereto.
- 9. <u>Remedial Actions</u>. In the event of any noncompliance with section 602 of the Act, other applicable laws, Treasury's implementing regulations, guidance, or any reporting or other program requirements, Treasury may impose additional conditions on the receipt of a subsequent tranche of future award funds, if any, or take other available remedies as set forth in 2 C.F.R. § 200.339. In the case of a violation of section 602(c) of the Act regarding the use of funds, previous payments shall be subject to recoupment as provided in section 602(e) of the Act and any additional payments may be subject to withholding as provided in sections 602(b)(6)(A)(ii)(III) of the Act, as applicable.
- Hatch Act. Recipient agrees to comply, as applicable, with requirements of the Hatch Act (5 U.S.C.§§ 1501-1508 and 7324-7328), which limit certain political activities of State or local government employees whose principal employment is in connection with an activity financed in whole or in part by this federal assistance.
- 11. <u>False Statements.</u> Recipient understands that making false statements or claims in connection with this award is a violation of federal law and may result in criminal, civil, or administrative

sanctions, including fines, imprisonment, civil damages and penalties, debarment from participating in federal awards or Agreements, and/or any other remedy available by law.

- 12. <u>Publications</u>. Any publications produced with funds from this award must display the following language: "This project [is being] [was] supported, in whole or in part, by federal award number SLFRF0126 awarded to the State of Colorado by the U.S. Department of the Treasury."
- 13. Debts Owed the Federal Government.
  - a. Any funds paid to the Contractor (1) in excess of the amount to which the Contractor is finally determined to be authorized to retain under the terms of this award; (2) that are determined by the Treasury Office of Inspector General to have been misused; or (3) that are determined by Treasury to be subject to a repayment obligation pursuant to sections 602(e) and 603(b)(2)(D) of the Act and have not been repaid by the Contractor shall constitute a debt to the federal government.
  - b. Any debts determined to be owed to the federal government must be paid promptly by the Contractor. A debt is delinquent if it has not been paid by the date specified in Treasury's initial written demand for payment, unless other satisfactory arrangements have been made or if the Contractor knowingly or improperly retains funds that are a debt as defined in paragraph 14(a). Treasury will take any actions available to it to collect such a debt.
- 14. Disclaimer.
  - a. The United States expressly disclaims any and all responsibility or liability to Contractor or third persons for the actions of Contractor or third persons resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this agreement or any other losses resulting in any way from the performance of this Agreement or any Agreement, or Subcontractor under this award.
  - b. The acceptance of this agreement by Contractor does not in any way establish an agency relationship between the United States and Contractor.
- 15. Protections for Whistleblowers.
  - a. In accordance with 41 U.S.C. § 4712, Contractor may not discharge, demote, or otherwise discriminate against an employee in reprisal for disclosing to any of the list of persons or entities provided below, information that the employee reasonably believes is evidence of gross mismanagement of a federal Agreement or grant, a gross waste of federal funds, an abuse of authority relating to a federal Agreement or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a federal Agreement (including the competition for or negotiation of an Agreement) or grant.
  - b. The list of persons and entities referenced in the paragraph above includes the following:
    - i. A member of Congress or a representative of a committee of Congress;
    - ii. An Inspector General;
    - iii. The Government Accountability Office;

- iv. A Treasury employee responsible for Agreement or grant oversight or management;
- v. An authorized official of the Department of Justice or other law enforcement agency;
- vi. A court or grand jury; or
- vii. A management official or other employee of Subrecipient, Contractor, or Subcontractor who has the responsibility to investigate, discover, or address misconduct.
- c. Contractor shall inform its employees in writing of the rights and remedies provided under this section, in the predominant native language of the workforce.
- 16. <u>Increasing Seat Belt Use in the United States</u>. Pursuant to Executive Order 13043, 62 FR 19217 (Apr. 18, 1997), Prime Recipient should encourage its Contractors to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented or personally owned vehicles.
- 17. <u>Reducing Text Messaging While Driving</u>. Pursuant to Executive Order 13513, 74 FR 51225 (Oct. 6, 2009), Prime Recipient should encourage its employees, Subrecipients, and Contractors to adopt and enforce policies that ban text messaging while driving, and Contractors should establish workplace safety policies to decrease accidents caused by distracted drivers.

#### ASSURANCES OF COMPLIANCE WITH CIVIL RIGHTS REQUIREMENTS

#### ASSURANCES OF COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

As a condition of receipt of federal financial assistance from the Department of the Treasury, through the Prime Recipient, the Contractor provides the assurances stated herein. The federal financial assistance may include federal grants, loans and Agreements to provide assistance to the Prime Recipient's residents, the use or rent of Federal land or property at below market value, Federal training, a loan of Federal personnel, subsidies, and other arrangements with the intention of providing assistance. Federal financial assistance does not encompass Agreements of guarantee or insurance, regulated programs, licenses, procurement Agreements by the Federal government at market value, or programs that provide direct benefits.

The assurances apply to all federal financial assistance from or funds made available through the Department of the Treasury, including any assistance that the Prime Recipient may request in the future.

The Civil Rights Restoration Act of 1987 provides that the provisions of the assurances apply to all of the operations of the Prime Recipient's program(s) and activity(ies), so long as any portion of the Prime Recipient's program(s) or activity(ies) is federally assisted in the manner prescribed above.

- 1. Contractor ensures its current and future compliance with Title VI of the Civil Rights Act of 1964, as amended, which prohibits exclusion from participation, denial of the benefits of, or subjection to discrimination under programs and activities receiving federal financial assistance, of any person in the United States on the ground of race, color, or national origin (42 U.S.C. § 2000d *et seq.*), as implemented by the Department of the Treasury Title VI regulations at 31 CFR Part 22 and other pertinent executive orders such as Executive Order 13166, directives, circulars, policies, memoranda, and/or guidance documents.
- 2. Contractor acknowledges that Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," seeks to improve access to federally assisted programs and activities for individuals who, because of national origin, have Limited English proficiency (LEP). Contractor understands that denying a person access to its programs, services, and activities because of LEP is a form of national origin discrimination prohibited under Title VI of the Civil Rights Act of 1964 and the Department of the Treasury's implementing regulations. Accordingly, Contractor shall initiate reasonable steps, or comply with the Department of the Treasury's directives, to ensure that LEP persons have meaningful access to its programs, services, and activities. Contractor understands and agrees that meaningful access may entail providing language assistance services, including oral interpretation and written translation where necessary, to ensure effective communication in the Contractor's programs, services, and activities.

- 3. Contractor agrees to consider the need for language services for LEP persons when Contractor develops applicable budgets and conducts programs, services, and activities. As a resource, the Department of the Treasury has published its LEP guidance at 70 FR 6067. For more information on taking reasonable steps to provide meaningful access for LEP persons, please visit <u>http://www.lep.gov</u>.
- 4. Contractor acknowledges and agrees that compliance with the assurances constitutes a condition of continued receipt of federal financial assistance through the Prime Recipient and is binding upon Contractor and Contractor's successors, transferees, and assignees for the period in which such assistance is provided.
- 5. Contractor acknowledges and agrees that it must require any sub-grantees, contractors, subcontractors, successors, transferees, and assignees to comply with assurances 1-4 above, and agrees to incorporate the following language in every Agreement or agreement subject to Title VI and its regulations between the Contractor and the Contractor's sub-grantees, Contractors, Subcontractors, successors, transferees, and assignees:

The sub-grantee, Contractor, Subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits Prime Recipients and Contractors of Prime Recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this Agreement or agreement.

- 6. Contractor understands and agrees that if any real property or structure is provided or improved with the aid of federal financial assistance by the Department of the Treasury, this assurance obligates the Prime Recipient and Contractor, or in the case of a subsequent transfer, the transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is provided, this assurance obligates the Contractor for the period during which it retains ownership or possession of the property.
- 7. Contractor shall cooperate in any enforcement or compliance review activities by the Department of the Treasury of the aforementioned obligations. Enforcement may include investigation, arbitration, mediation, litigation, and monitoring of any settlement agreements that may result from these actions. The Contractor shall

comply with information requests, on-site compliance reviews and reporting requirements.

- 8. Contractor shall maintain a complaint log and inform the Department of the Treasury of any complaints of discrimination on the grounds of race, color, or national origin, and limited English proficiency covered by Title VI of the Civil Rights Act of 1964 and implementing regulations and provide, upon request, a list of all such reviews or proceedings based on the complaint, pending or completed, including outcome. Contractor also must inform the Department of the Treasury if Contractor has received no complaints under Title VI.
- 9. Contractor must provide documentation of an administrative agency's or court's findings of non-compliance of Title VI and efforts to address the non-compliance, including any voluntary compliance or other agreements between the Contractor and the administrative agency that made the finding. If the Contractor settles a case or matter alleging such discrimination, the Contractor must provide documentation of the settlement. If Contractor has not been the subject of any court or administrative agency finding of discrimination, please so state.
- 10. If the Contractor makes sub-contracts to other agencies or other entities, the Contractor is responsible for ensuring that sub-contractors also comply with Title VI and other applicable authorities covered in this document Contractors that make sub-contracts must have in place standard contract assurances and review procedures to demonstrate that they are effectively monitoring the civil rights compliance of sub- contractors.

The United States of America has the right to seek judicial enforcement of the terms of this assurances document and nothing in this document alters or limits the federal enforcement measures that the United States may take in order to address violations of this document or applicable federal law.