



# State of Alaska

Department of Public Safety  
Division of

## Administrative Services

Bill Walker, Governor  
Gary Folger, Commissioner

**TO: Bidders**

**DATE: 3/17/2015**

**FROM: Frank D. Whittington**  
Building Management Specialist

**STATEMENT OF WORK**  
**ABI Building HVAC Upgrades**  
**Anchorage, Alaska**  
**Project RFQ # 12-133443F**  
**DPS/SUPPLY SECTION**

**SW-1 SCOPE:** The work to be completed by this project consists of upgrades to the HVAC system as noted in SW-3. The work will be completed for Administrative Services – Supply Section of the Department of Public Safety (DPS) 524 E. 48<sup>th</sup> Avenue, Anchorage, Alaska 99503.

**SW-2 LOCATION:** The work site is located at the Department of Public Safety, Alaska Bureau of Investigation (ABI) facility located at 5500 Tudor Road, Anchorage, Alaska 99507.

**SW-3 PRINCIPAL ITEMS OF WORK:** The principal items of work to be completed by this project consist with upgrades and/or replacement of the HVAC system or components. See detailed list below of primary work. DPS will present work for a base bid with several add alternates that will be evaluated and awarded if funding allows.

**Primary Work:** The primary work requires the contractor to provide all materials, labor, permitting, engineering if needed, tools, equipment, supervision, and overhead to complete all work as stated in SW-1 through SW-6.

**Background overview from Crime Lab to Office Environment:** The building is currently served by three primary air handling units (AHUs) as well as several smaller ventilation units. Several are 100% outside air units that were dedicated to providing make-up air for the former laboratory spaces. AHU-1 is a variable air volume (VAV) system with a design load of 15,655 CFM. In the laboratory setting it was intended to serve the exterior zones as well as jointly serve the lab and corridor spaces along with AHU-2 and AHU-3. Return air fan (RAF-1) returns 8,785 CFM to AHU-1 from the corridors and other spaces throughout the building. AHU-2 is a

100% outside air unit that supplies 3,420 CFM to the original laboratory spaces in the core and west side of the building as well as the east and west corridors. Similarly, AHU-3 is dedicated to providing 2,950 CFM as make up air to other core area laboratories and spaces on the west side of the building, bringing the total supply air introduced by these three AHU's to 22,025 CFM. There are currently 23 exhaust fans (EFs) totaling 11,735 CFM that currently remove air from the facility. It is anticipated that the office building should require approximately 17,000 CFM to deliver the necessary amount of ventilation to the building's occupants. We (DPS) anticipate that most of the existing supply air ductwork can be reused by rerouting the supply air ducts from AHU-2 and AHU-3 into the supply plenum of AHU-1. We anticipate that most, if not all of the VAV terminal boxes, can be reused in their current locations. The constant air volume (CAV) boxes will be driven "wide open" and install a motorized zone damper for each box so that it can operate like a VAV terminal box. The zone dampers would have integral flow monitoring probes, which would eliminate the need to re-pipe the hot water reheat coils.

1. Decommission and abandon AHU-2 and AHU-3 in place.
2. Upgrade AHU-1's components so it can provide 10% more supply air for a new rated capacity of 17,222 CFM.
3. New VFD for AHU-1 to replace the one that has failed and reconfigure the outside air dampers on AHU-1 as needed.
4. Modify existing supply air ductwork to create supply ductwork for the zones served by AHU-2 and AHU-3 to be tied into ductwork on repurposed AHU-1.
5. Modify existing exhaust ductwork to create return ductwork for the zones served by AHU-2 and AHU-3 for repurposed AHU-1.
6. All occupied rooms (approximately 7 or 8) will need to ensure proper ventilation per all codes and modified accordingly with the existing systems including several new VAV boxes, ducting, terminations, or piping as needed for those spaces. Example, this will include rooms 119 & 116 (evidence rooms' east corridor), 160, 161, 164, & 165 (along west corridor) and 179, 180, 181, & 182 (center core). Confirm all areas are accounted for.
7. RAF-1 would be upgraded to a larger fan or paired with a second return fan to increase the system's return airflow to the anticipated 15,300 CFM needed.
8. The roof and/or wall penetrations of any decommissioned equipment would be sealed to prevent infiltration and exfiltration of the building envelope.
9. CAF-1 Heating coil would be valved off since it would no longer be needed.
10. With the changes to this facility from the laboratory to office environment numerous ventilation and exhaust systems were decommissioned. Because of that the building will be out of air balance so proper ventilation, return, and exhaust requirements will need to be determined and the building rebalanced to achieve the desired airflow and proper building pressurization.

11. Exhaust Fan's (EF-9, EF-11, EF-15, EF-22, & EF-23) would remain fully functional.
12. **Add Alternate # 1** The eighteen (18) other exhaust fans would be removed since no longer used. See # 08 for penetration requirements.
13. **Add Alternate # 2** Currently the Computer Lab (Room 136) overheats due to the servers and other equipment. This area will need to be modified to add additional cooling with a supplemental system (such as a Mr. Slim) for increased cooling capacity. (This lab backs up to the boiler room so gravity drain and condensing unit installation are nearby.)
14. Provide any drawings and acquire any permits needed for completion of project.
15. Original building drawings and schedules will be provided to the contractor.
16. Contractor shall provide construction submittals of all equipment, schedule of work to meet the required completion date, and schedule of values.
17. If design engineering is required, approval of design must be State approved before any equipment is ordered.
18. It is anticipated that 65% of this work can be accomplished during normal hours but there will be after hours work needed for the ventilation systems (ductwork) for this project. We anticipate this work to be done after the heating season is over and started in mid-May. The work would be staged in four zones within the building and work scheduled sequentially by zone so only one part of the building would be affected at any given time. In addition, each area would be targeted for completion within one week.
19. Ceiling tiles and some of the grid will need to be removed. They can be stored in the vehicle bay on site. Document any previously damaged ceiling components to avoid and condition discrepancies after they are reinstalled. Any ceiling grid or tiles that are damaged by contractors during this project will also be replaced.
20. Due to the nature of this facility any anticipated scheduled shut down of utilities or services requires prior notice to DPS project manager so notification may be made to the staff working in the building.
21. Bonding will be required for this project. See attached forms.
22. This will be an accelerated project and work will need to be coordinated with other ongoing projects within the building. There will be joint weekly meetings with all project contractors attending so effective communication between contractors, trades, and DPS to ensure the ABI office staff is aware of the work schedule, affected areas, and coordination between all parties.
23. **Substantial completion must be achieved by June 26, 2015 due to funding expiration.**

All questions pertaining to this contract and the administration of said contract will be sent via email to ([frank.whittington@alaska.gov](mailto:frank.whittington@alaska.gov) )

**SW-4 TOUR OF JOB SITE:** Site tour will be conducted on **Tuesday, March 24, 2015 at 10:00 a.m.** at 5500 Tudor Road, Anchorage, Alaska 99507. Interested parties must be accompanied so confirmation of participation must be arranged by either email, fax or calling Mr. Frank D. Whittington, Building Management Specialist at (907) 929-8952 prior to time of walkthrough.

**SW-5 SPECIFICATIONS:** Contractors must comply with OSHA safety standards. All work is to be performed in accordance with industry standards and all requirements of the State of Alaska, UL, NFPA, & IFC Standards, or applicable codes. The contractor will be required to submit product submittals prior to purchase or installation. Contractor will provide all labor, materials, permitting, tools, equipment and supervision to complete this work. Dumpster will be contractor provided but placement location will be given by DPS. All materials removed during project will be the responsibility of the contractor to remove from job site and be properly disposed. **Contractor and subcontractor personnel are required to complete background checks of all personnel upon award and prior to working within the facility.**

**SW-6 BID DEADLINE:** You must contact Mr. Frank D. Whittington, Building Management Specialist at (907) 929-8952, or Fax: 907-561-9178 or email ([frank.whittington@alaska.gov](mailto:frank.whittington@alaska.gov)) with your bid. **The Bid Deadline for this project will be Tuesday, March 31, 2015 at 1:00 pm AST.**