

Questions and Answers for RFB N84914C, “WIYN Renovation”

1. Warranty period is stated once as one (1) year and then again as two (2) years. Which is correct?
Warranty required is two (2) years.
2. Specs call for sealing existing ducts?
No, you will only be required to seal the new ducts you install, and the end panel at the duct removed on sheet MD1.1, note 9.
3. Will exterior wall panels need to be removed?
No, only interior wall panels at work area will be removed to allow for additional insulation. Only penetrations through panel are for duct supply and return.
4. Will there be a staging area provided?
A small interior and exterior staging area will be made available at the site.
5. Restroom facilities available at the site?
No restroom facilities will be available at the site. Public restrooms at the Visitor Center (near the public parking) are available. Contractor may bring a portable toilet for use near the site. Note: The portable toilet MUST BE ANCHORED TO THE GROUND for safety purposes due to possible high winds.
6. Will “cut sheet” be provided for the SES being purchased by owner?
Amendment #1 to the RFB states that the SES equipment will be purchased by the owner and contractor will need only install the equipment. Owner has requested the cut sheet and will provide to the winning bidder. See attached.
7. What about water lines?
Small insulated humidifier water line to run external to concrete pier, either above or below door. See sheet M1.1.
8. What are the current Davis Bacon requirements?
Updated 7/21/17 Davis Bacon information is now loaded onto our website: <http://auracas.astronomy.org/sites/default/files/Davis%20Bacon%20Pima%20County%2007-2017.pdf>
9. Phase 2, exterior work spray on insulation, exterior wall and ceiling. Plan shows wall but not ceiling? If spraying ceiling, should a thermal barrier paint be used on the material for fire?

Yes, provide a fireproofing paint for passive fire protection at roof deck, prior to spray foam. Deck will require 2" of closed cell spray foam at all ceiling cavities

10. Base on the thickness of the spray foam, should we figure open cell spray foam?

Due to temperature requirements, please figure closed cell foam.

11. In the plans, the rigid boards show a 2" and 4" thickness. Is this a polyiso type material? And does it need to be a type that can be left exposed (vent side might be considered exposed)?

Polyiso is acceptable. Rigid Insulation would need an FRP style face per wall types.

12. Considering the HVAC for this project: will the owner furnish the glycol solution for the new chiller and piping?

Vendor will fill new system (owner will provide specification on the glycol mixture). Owner will provide water only and vendor will be responsible for startup.

13. HVAC: where will the gas cylinders be re-located? And is there a diagram for piping and manifold referred to (MD1.1, note 4)?

Placement of cylinders is not yet determined and piping is not involved. Vendor is only installing piping shown and owner provided connection items (as shown on sheet M2.1).

14. What is the anticipated completion date needed for the project?

End of December 2017 or early January 2018.

15. Provide information on dorm rooms at the site that can be made available for crew overnighting.

A dorm room is \$90/night for a single occupant (which includes 3 meals, breakfast, lunch and dinner). \$60/night per person for a double occupant room (also includes meals for each person). Number of rooms available varies. Contractor staff may also obtain lunches in dining facility for \$8/meal (soup, sandwich, salad) without staying in dorm rooms.

16. Please clarify working hours and notes in RFB re: day sleepers.

Normal daylight work hours are preferred, no work or travel to/from the site in non-daylight hours.

17. Clarify "thoroughly prepare" noted in reference Plan Sheet AD-2.1-Demo General Notes, Note D. Is the area to be isolated with dust barriers, floors covered with "hard surface protection tape," enveloped, inclusive of negative air machines and HEPA filters, etc...? Is there airborne particulate matter index that has to be maintained during construction? Please provide some guidelines to clarify "thoroughly prepared".

During Phase 1 (demolition) – particulate matter will need to be cleaned up each day to reduce particles in other areas of the observatory. Vendor to provide dust barrier to protect instrument during modifications of bench spectrograph wall.

During Phase 2 (construction) – outside activities will not be a problem, inside construction particulates will need to be contained within construction area and bay.

During Phase 3 (demolition and reconstruction of removable spectrometer wall, Detail 9, page A2.2) – During the work, a barrier will need to be added to keep the two rooms at their specified clean room criteria. Dust barriers are required to/from adjacent rooms, floor covers are not required as it is exposed concrete. Concrete does need to be prepared for epoxy flooring as indicated on plans. No hepa filtration system or negative air machines are required during initial construction. However, both will be required after monitoring phase is complete and Spectrograph has been installed.

18. Reference Door Schedule on sheet A2.2., a. Door #103, provide spec for insulated door and b. Door #104, provide manf. and spec for the “cooler/freezer style barn door”.

Door 103 to be a standard 3'x7' Hollow metal insulated door. Door hardware to include door bottoms and Pemko seals. Door #104 to be cooler style, bases of design: (Paylon PC-2000 Series Sliding cooler door, non-motorized, with Embossed white galvanized finish, Internal PVC Frame, Foam Core, and Heavy duty Track w/ Sealed rollers) or equal.

19. Hoist: Reference Sheet A-2.3 – RCP Keynote 9: provide manf, model # and/or complete criteria for the hoists and their support assembly. Indicate if installation is design/build. Provide structural context on existing beams from which the hoist(s) will be supported so as to allow design/building if such is the choice.

Please see the attached SK-1 for structural attachment detail of the connections of our trolley support beam to the existing structure. Contractor to provide and install (2) low headroom trollies with (2) low profile hoist capable of 1/2 total lifting capacity each. Refer to sections for hoist length requirements. Basis of Design: CM Manguard Electric Chain Hoist with 1/2 ton capacity.*

****This attachment will be sent on Monday, 7/31.***

20. Do we need to worry about the fire sprinkler system?

There is no fire sprinkler system in the facility.

21. Regarding accuracy readings required for Lakeshore sensors, are these provided by owner?

Vendor to provide all sensors and control equipment (Lakeshore and Jace) as noted on sheet M7.4.

22. On the above sensors, what accuracy is required?
- A. Full calibration has an absolute accuracy of +/- 0.025C
 - B. Uncalibrated sensors have an absolute accuracy of +/- 0.5C (+/- 0.9F)
 - C. 3 point "soft calibration" has an absolute accuracy of +/- 0.25C

Sensors should be capable of ensuring room control criteria as noted on sheets M7.1 and M7.2 in AHU diagrams. The full calibration sensors are what is needed to have Nyquist rate to measure incursions in the spectrometer room.

23. Clarify the plan for purchasing the SES equipment.

The SES will be purchased by the owner and delivered to the site for Contractor to install. "Cut Sheet" for the equipment will be provided (see attachment to this document).

23. Generator and building power questions:

The building will be shutdown and all instrumentation turned off for the scheduled SES replacement period (8/21/17 to 8/31/17). The only power need is what the vendor deems necessary for their work so they will need to provide a small work generator to meet their work requirements.

24. Keynote 1, sheet M1.2 requires "complete" service on existing Legacy Chiller. Please provide more definition of service required, model and serial number of existing chiller.

Contractor to provide a typical preventive maintenance on the unit once it has been relocated per plans. Contractor is to assure the unit is in full working order with refrigerant, oils, system controllers, checked for leaks and all other components for a fully functional unit as it stands prior to the move

If the existing lines need to be extended and/or terminated the glycol in the system will need to be drained into a hazardous container and disposed. After relocation is complete, new glycol will be added to system as appropriate.

*Legacy Chiller Systems
Model No. PACT36S3-T4-Z
Serial No D12D0368*

25. Are there any low voltage Specs available for this Project Or do I just use the UofA cabling Specs?

Drawing # E1.2 Note #2 references Fiber to the Pier. Are we installing the fiber and is there any more information on the fiber?

Contractor to install standard "plenum rated" Cat 6 cable with terminations from 4 identified locations in new area to location identified inside pier on sheet E1.2. Quantity of data jacks/cables at locations noted by number. Cat 6 cables to penetrate pier at one of existing

holes. Contractor shall also provide cat 6 cable (with terminations) for any bacnet connections to chiller and air handling units.

Contractor will not be installing telescope fiber, that is the responsibility of WIYN instrumentation.

26. Installation change:

Sheet E1.1 Power Plan Drawing 1 : Exterior duplex GFCI receptacle shown at air handler location, circuit LC-16.

Contractor can omit new receptacle and conduit installation and replace existing exterior receptacle with GFCI receptacle, no panel circuit change required.

27. Epoxy Flooring: Basis of Design?

Key Resin Company – Key thin Film coating systems, Polyurethane coating or equal