RFI's with Responses

Updated September 27, 2023. REVISED 11/7/2023

- Which spaces are categorized as critical?
- A. IDOT considers all the fumes hoods as critical functions; thus the laboratories they are in are critical (for the fume hoods only). The Salt Scale Freezer Room 2.43 would be critical to maintain freezing temperatures. The Freeze Thaw system is critical in that the cabinets need to be able to be safely drained, cabinets opened and specimens removed by crane during a power outage. All data must be kept and stored during an outage.
- 2. Which spaces will require 50% redundancy according to the program?
- A. See answer below about redundancy. IDOT does not have a preference. Refer to revised Room

 Data Sheets for information on which spaces require redundancy.
- 3. Which spaces, if any, require 24/7/365 operation and maintenance of associated pressure relationships, noting chemical and material storage will require full time exhaust. Is it possible pressure relationships and HVAC are only required when tests are being conducted?
- A. The room pressurization is only required during normal working hours, when tests are being conducted. The range for both the Pipe Cutting and Storage (2.24) and Miscellaneous Products Testing (2.22) areas needs to be 73.4 degrees F with a tolerance of 3.6 degrees F (69.8 to 77.0 degrees F) with Humidity of 50% with a tolerance of +/- 5%. This needs to be maintained at all times to properly condition the plastic pipe samples. For the Machine Shop (2.23), humidity would need to be at a level low enough to limit corrosion of machining equipment. From a very quick search online I found mention of specifying a maximum of 45% humidity to limit corrosion of steel components. For the Cement Lab (2.51), humidity needs to be 50% or higher during working hours. For the remaining lab areas, a range of 68-82 F for unoccupied hours would be acceptable.
- 4. Will it be possible to observe all areas in operation during tests and otherwise?
- A. The areas were observed during the tour on September 18th.
- 5. Will the testing environment or associated procedures be modified from the current conditions in the proposed building.
- A. Some internal procedures may be changed in the proposed building; however, the testing methodologies will remain the same (e.g. ASTM testing methods and procedures) for purposes of building design.
- 6. Please confirm, D6 does not need separate utilities, but do need their own control of their own lab spaces.
- A. Correct
- 7. Section 00 21 16, Item .6 states "Funds available for design and construction: \$ 63,400,098.00.". Does this amount include the 3% CDB Administration Fee per Section 00 21 40?
- A. No
- 8. Section 00 21 40, Item .1 states "Offerors shall include an allowance for the CAF (3% Contract Administration Fee) assessment in their Phase II cost proposal. " But Design Building Pricing Schedule (DBPS states "CONTRACT ADMINISTRATIVE FEE is not included in the DBPS but will still be applied to the project.") Please clarify.
- A. The 3% CAF will be added to the overall proposal amount and included in the contract when executed. It should not be added into the bid amount by the offeror.

- 9. SECTION 00 42 10 SUBMISSION REQUIREMENTS AND INSTRUCTIONS, Volume 3 Technical Data Proposal, Element 3-7: Energy Analysis, Economic Analysis & Control Systems Design, Item 10.b (page 21) states " description of all HVAC systems to be considered in a life cycle cost analysis (LCCA). The LCCA is to be submitted by the successful contractor. " Are offerors requited to submit the HVAC LCCA with its Phase II Proposal on 11/16/23?
- A. The RFP states: "A description of all HVAC systems to be considered in a life cycle cost analysis (LCCA). The LCCA is to be submitted by the successful contractor." This is indicating that all offerors should include a description of all HVAC systems that will be considered in an LCCA in their proposals. However, only the successful team will need to provide the LCCA after award of the contract.
- 10. APPENDIX III-5 STANDARD DOCUMENTS FOR DESIGN-BUILD PROJECTS, Section 00 72 10 Time, Item .5 No Compensation for Delay states " The DB entity shall not be entitled to payment or compensation of any kind from CDB for any alleged damages, costs or expenses whatsoever. This includes but is not limited to costs of acceleration, arising in any manner because of hindrance or delay from any cause whatsoever, whether such hindrances or delays are reasonable, foreseeable or avoidable, and claims for loss of efficiency whether or not characterized as delay damages." Please confirm that this Clause is applicable to this project.
- A. This clause is applicable.
- 11. APPENDIX III-5 STANDARD DOCUMENTS FOR DESIGN-BUILD PROJECTS, Section 00 72 75 LIQUDATED DAMAGES. We did not notice any liquidated damages listed in the RFP. Are liquidated damages applicable to this project?
- A. There are no liquidated damages on this project.
- 12. APPENDIX III-5 STANDARD DOCUMENTS FOR DESIGN-BUILD PROJECTS, Section 01 75 00 & Bridging Documents, II-8 Basis of Design: HVAC, General Design Criteria, Item 4.k. Please confirm the Owner has hired the Commissioning Agent (CxA) directly under separate contract.
- A. CDB has contracted directly with the Farnsworth Group as the Commissioning Agent for this project.
- 13. Appendix III–1 Owner's Project Requirements (OPR) lists a "Appendix B 01 91 13 Draft Commissioning Specification" but was not included in the RFP, please provide.
- A. This has been provided.
- 14. Appendix III—1 Owner's Project Requirements (OPR). Typically this document include a narrative of the project but all that is listed on this 1-page document in the RFP is Appendix A LEED Requirements (included in RFP) and Appendix B 01 91 13 Draft Commissioning Specification. Please provide the actual Owner's Project Requirements (OPR) narrative document if one exists.
- A. This has been provided.
- 15. Bridging Documents, Item I–1 Executive Summary & Project Overview lists several separate projects that the Owner has begun under separate contracts that affect this new materials lab project (south warehouse demo, tree clearing, new East access road, new warehouse, several utility projects). Please provide a milestone schedule that lists when each of these projects will be completed.
- A. This file has been shared.
- 16. Please provide as-built drawings of the existing northern storage warehouse that is to be demolished within the scope of the new materials lab project.
- A. This file has been shared.

- 17. Has a hazardous materials survey been completed for the existing northern storage warehouse that is to be demolished within the scope of the new materials lab project? If so, please provide to all offerors. If not, we suggest this is completed ASAP by the Owner so as to provide a level playing field for all offerors and avoid any construction change order regarding hazardous materials discovered post-award.
- A. An asbestos survey was completed in 1990, see attached. IDOT will be abating any asbestos containing material prior to the successful D-B contractor beginning demolition.
- 18. Bridging Documents, Item II-4 BASIS OF DESIGN ARCHITECTURE, Interiors General Considerations, Ceiling Heights lists "1. Metals & Miscellaneous Products Lab 16' min." Room Data Sheet (2.21 Metals Lab for instance), however, state ceilings must be 18' clear from finished floor. Which is correct?
- A. Roll-up doors into this lab must be 12' tall and the ceiling height must not be less than 16' ceiling accommodate a hoist/crane system with a hook height of 16'. The 600K Universal Testing Machine has a crane/hoist attached to the equipment. See the equipment matrix survey sheet for a picture of the system. The 600K universal Testing equipment is serviced from the top of the unit, so providing some additional height above the equipment for this to occur would be ideal.
- 19. Bridging Documents, Item II-4 BASIS OF DESIGN ARCHITECTURE, Interiors Program Spaces, Huddle Spaces, Workrooms, and Break Rooms denotes STC 50 55 wall ratings but does not mention recessed door bottom, jamb/head compressible sound gasketing for the doors/door hardware. We presume these items will be required for these rooms with doors. Please confirm.
- A. Reference acoustical requirements pages 4 & 5 of Architecture BOD and program space descriptions beginning on page 8.
- 20. Bridging Documents, II-8 Basis of Design: HVAC, General Design Criteria, Item #3 states "Redundant systems may be required for critical spaces. Redundant systems shall have at least 50% extra capacity to accommodate any down time in units serving the space.". Please provide a list of all spaces/rooms the Owner considers "critical spaces".
- A. IDOT considers all the fumes hoods as critical functions; thus, the laboratories they are in are critical (for the fume hoods only). The range for both the Pipe Cutting and Storage (2.24) and Miscellaneous Products Testing (2.22) areas needs to be 73.4 degrees F with a tolerance of 3.6 degrees F (69.8 to 77.0 degrees F) with Humidity of 50% with a tolerance of +/- 5%. This needs to be maintained at all times to properly condition the plastic pipe samples. For the Machine Shop (2.23), humidity would need to be at a level low enough to limit corrosion of machining equipment. From a very quick search online I found mention of specifying a maximum of 45% humidity to limit corrosion of steel components. For the Cement Lab (2.51), humidity needs to be 50% or higher during working hours. For the remaining lab areas, a range of 68 82 F for unoccupied hours would be acceptable. Refer to revised Room Data Sheets for information on which spaces/rooms are deemed critical.
- 21. Bridging Documents, II-9 Basis of Design: Electrical + Lighting, 1) Power Distribution, Item, b states in part "An emergency generator shall provide back-up power to life safety loads as well as EQUIPMENT as requested by IDOT. "Please confirm that the generator should be sized based on the life safety loads plus the only equipment noted in Appendix III-4 Lab Equipment Matrices as needing Emergency Power and that the entire room listed in the BOD where this equipment sites does not need to be on emergency power.
- A. See page 1 of Basis of Design: Electrical & Lighting. Section b and g. Also see 'Lab equipment matrices' for which areas require backup power.

- 22. Room Data Sheets Many rooms call for sealed or polished concrete floor but then also indicate an "Integral Coved" wall base is also required. Typically, with a sealed/polished concrete floor a standard non-integral coved wall base is utilize. Please confirm a non-integral coved wall base is acceptable in rooms with sealed/polished concrete floors.
- A. Non-integral base is acceptable.
- 23. Room Data Sheets Under Visual, some rooms call for "Monitors". Please confirm these are A/V flat screen monitors/displays, not computer monitors which we assume will be OFOI (Owner Furnished Owner Installed).
- A. Correct flat screen monitor/display. CFCI (Contractor Furnished/Contractor Installed) coordinate with Using Agency and DoIT during design/construction. Reference IT Basis of Design.
- 24. Room Data Sheets please confirm that mobile casework including mobile tall shelving in the LAB SPACES is to be included as part of the scope of this project (CFCI Contractor-Furnished, Contractor-Installed)
- A. Yes, the Lab mobile casework and tall shelving is CFCI. Refer to the Laboratory BOD under Manipulated/Adjusted Cabinetry.
- 25. IDOT Equipment Matrix, 2.1 TRAFFIC INSTRUMENTATION shows all equipment is "Existing to be relocated" but does not state if it is OFOI or OFCI. Please confirm all the Traffic Instrumentation equipment is OFOI (Owner-Furnished, Owner-Installed).
- A. All ESD tall cabinets and tall shelving are new and CFCI. Snorkel and canopy are new and CFCI. ALL ESD casework and ESD countertops workstations are new and CFCI.
- 26. Room Data Sheets, 2.12 Traffic Instrumentation Storage Room. Under storage lists Tall Cabinets and Tall Shelving is required but on the IDOT Equipment Matrix it appears this is existing to be relocated. Is the Design-Build Contractor required to provide any new shelving or steerage cabinets in this room?
- A. Note all the casework, tall cabinets and shelving shall be new and be provided by the design bid contractor as indicated on the RDS sheet. **See revised equipment matrix.**
- 27. Room Data Sheets, in the rooms requiring built -in cranes or hoists, please provide the required coverage area and capacity of each crane/hoist or provide the weights and locations of the materials needed to be hoisted.
- A. a. Freeze Thaw Hoist- Refer to Lab BOD Freeze-Thaw System section. Refer to layout in RDS 2.45.

 The hoists need a capacity of at least 500lbs to lift sample racks with 18 concrete beams.
 - a. Freeze Thaw 2.45: Contractor to provide a 1 ton hoist system, motor driven trolley attached to a bridge crane system mounted to structure above. Refer to layout in RDS 2.45 for coverage in room. The hoist shall move a sample racks with 18 concrete beams.
 - b. Material lab-Refer RDS 2.21: Hoist is attached to column would not be relocated to the new building. Portable hoist system is preferred for this space. Hoist needs capacity to lift 3 tons for the bridge bearing pads and other samples.
 - b. Metals lab RDS 2.21: The existing Universal Testing Machine hoist attached to column would not be relocated to the new building. Contractor to provide a 4 ton hoist system, motor driven trolley attached to a bridge crane system mounted to structure above. This hoist system/ crane system shall transport samples from the loading/sorting area in the Metals lab area 2.21 to the machine shop 2.23. The hoist system hook height shall be 16' A.F.F. in both rooms.
 - c. Soils open lab-Triaxial Area, see RDS 2.61: Mobile crane needs capacity to lift 500 lbs. to lift larger rock samples. **All mobile cranes shall be owner furnished owner installed.**

d. Concrete open lab mixing Area, see RDS 2.41- hoist ceiling mounted. Hoist to have capacity to lift 1,000 lbs. for the larger aggregate containers. It should have access to allow loading from bins into adjacent containers that would then be lifted and moved to mixing area.

d. Concrete lab areas (2.41, 2.41.1, 2.41.2, 2.41.3, 2.41.4, 2.41.5, 2.41.6): Contractor to provide a 1 ton hoist system, motor driven trolley attached to a bridge crane mounted to structure above. This hoist system/ crane system shall transport samples/and raw materials from the sample receiving area 2.41.5 to the mixing area 2.41 to casting area/molding 2.41.2. The hoist system hook height shall be 12' A.F.F. in all rooms.

- 28. Room Data Sheets, 2.21.2 Metals Lab-Universal Testing Machine Area, F. General Notes #1 states "Presently, IDOT have four Universal Testing Machines (UTM). The 600K Universal Testing Machine (OFCI), however it is the only one that requires a pit. Provide a 5' deep pit, refer to the sketch provided in the equipment matrix". IDOT Equipment Matrix, however, states this piece of
 - equipment is OFOI (Owner-Furnished Owner-installed). Please confirm that this piece of equipment is OFOI.
- A. Yes, the 600K universal testing Machine is the only existing universal testing machine that has a pit. The design team shall provide the required pit and the required utilities for the equipment to be relocated to the new building. Client to confirm if the GC to shall be responsible for relocated these UTM equipment or would the owner be responsible for the equipment relocation. Using Agency will relocate the Universal Testing Machine to the new building (OFOI). Coordinate with Using Agency during equipment relocation.
- 29. Room Data Sheets. Please confirm that forklifts called out in Room Data Sheets are OFOI (Owner-Furnished, Owner-Installed) and will be electric, not propane.
- A. Correct
- 30. Room Data Sheets, 2.23 Machine Shop, E. General Notes #1 states "Open configurable space preferred." Program Area Table Note for this room states "Create partitions to control noise". Does this indicate 'industrial' demountable partitions' are desirable?
- A. Yes, Machine shop prefers an open layout, refer to the concept diagram. The comment related to "create partitions to control noise" relates to adjacent spaces near the machine shop. Provide suitable partition types to avoid transfer of noise to adjacent spaces.
- 31. Please confirm that furnishings such as tables, desks, chairs, artwork, task lighting, refrigerators, microwaves, vending machines, copies, printers, computers, computer monitors, and demountable partitions for open offices will be OFOI (Owner Furnished, Owner-Installed) outside of the listed Project Budget, and only "loose" items a such as tall mobile casework, carts, shelving, and floor mats identified on the Room Data Sheets in the Lab are to be CFCI (Contractor-Furnished, Contractor-Installed) within the scope of this project.
- A. Correct
- 32. Room Data Sheets & Bridging Documents Flow Diagrams Concrete 2.4. Is an exterior area for Aggregate Bulk Storage requested or will trucks deliver the bulk aggregate periodically to be transported to the Bulk Aggregate Storage Bins located in Rooms 2.41.5 Concrete Open Lab Sample Receiving & 2.41.6 Concrete Open Lab Sorting & Logging via the aggregate delivery system described on PDF pages 81 & 81 of 281 of the Room Data Sheets?

- A. Refer to the adjacency diagram which indicated what spaces requires access to the loading dock.
- 33. Room Data Sheets. 2.51 Cement Open Lab, note A Adjacencies states ": Access to loading dock is not high-priority." But under 1. Main areas of Open Lab, 2.51.1 Sample Logging/Breakdown & 2.51.8 Disposal it states, "Access to loading dock." Please confirm intent of these statements.
- A. The sample logging/breakdown 2.51.1 and disposal 2.51.8 have more of an adjacency/priority to the loading dock, rather than all the open lab 2.51.
- 34. Room Data Sheets, Power and Data. If the box is checked for "floor mounted" does this mean the Owner request floor boxes for power (& data?) receptacles?
- A. No, it does not mean that the client requested floor power boxes. The equipment layout within the room would allow the design team to determine the best location for the utilities. Refer to the equipment Matrix for the requirement for the equipment. Please note that any existing equipment that does not have the power requirement the deign team would have to verify with the client.
- 35. Room Data Sheets, 2.61 Soils Open Lab, indicated CMU walls "with wall protection". Typically 'hard walls' such as CMU provide a durable wall finish. Please clarify what the owner is requesting I regards to "Wall protection" (stainless steel corner guards, steel guard rail?, locations?)
- A. Although CMU is a durable wall finish, overtime the wall will get damaged due to carts and equipment etc. hitting the walls. Providing wall protection like corner guards will extend the durability of those wall partitions. **Reference Laboratory Basis of Design II-5 for corner protection.**
- 36. Room Data Sheets, 2.61.1 Soils Classification Areas, 2.61 Soils Open Lab, B Equipment, Item 2, 2.61.1 Classification Area states "client indicated that they are expecting new equipment, like a maryann chamber. IDOT Equipment Matrix lists all equipment as "Existing to be Relocated". Please confirm if any new equipment is to be provided in this room, it will be OFOI (Owner-Furnished, Owner-Installed). Also please clarify of any utility rough-in requirements for this possible new equipment.
- A. Some users mentioned new equipment, but they were not able to provide any additional information. The design bid team shall coordinate with the client and update the equipment matrix during the Design Phase. Using Agency was not able to confirm new equipment information during bridging documents phase. Assume 'Mary-Ann' chamber will be Owner Furnished, Owner Installed (OFOI). Assume electrical requirement 120V, 15A. Confirm with Using Agency during design phase.
- 37. Room Data Sheets, 2.71 Instrument Lab. Please confirm what is the required scope for the specialty gases (nitrogen, helium, hydrogen, and P10 gases). Is it only to provide space for the gas cylinders that the Owner will then wheel over to the locations when and where they are needed or is the Design-Build Contractor to include a gas piping system that attached to the gas cylinders?
- A. The gases listed on the RDS are the gases requested by the client. One option is to provide a cylinder closet for the gas cylinders to be near the instrument room. The Design-Build Contractor shall provide the manifold and the piping from the cylinders to the gas valves and equipment within the room. Design build contractor would have the opportunity to validate the requirement for the room with the users.
- 38. Room Data Sheets, 2.73 Chemistry Analytical Lab, lists a quantity of 3, Area = 1,452 SF. Program Area Table only indicates 1 EA of the Room 2.73 Chemistry Analytical Lab at 1,452 SF is required. Please confirm only one (1) 2.73 Chemistry Analytical Lab is required.

- A. There should only be 1 analytical lab.
- 39. Room Data Sheets, 2.75 Chemistry PPE Storage (Shared) indicates epoxy flooring and compressed air are required in this room. Please confirm these requirements for this room.
- A. Yes, the epoxy flooring is an option, but the Design-Build Contractor shall have an opportunity to discuss the interior finishes with client and select the most suitable finishes during the design Phase.

 Compressed air psi requirement can be provided by the client. Flooring: Sealed concrete per Laboratory Basis of Design II-5. Compressed air is not required for this space.
- 40. Room Data Sheets, 2.76 Chemistry Cylinder Storage (Shared) indicates tall cabinets, tall shelving. Please confirm these requirements for this room.
- A. Refer to F.1 thru f.3 on RDS 2.76. **Provide gas cylinder restraints with gas manifolds.** for requirements. If tall cabinets are required, the design build team can confirm during the design phase.
- 41. Room Data Sheets, 2.81.1a&b HMA Open Lab Mix (Compacted and Loose), G. RDS Notes, #2 states " Provide overhead door to loading dock/shipping double door to HMA open lab ". Since the ,2.81.1a&b HMA Open Lab Mix (Compacted and Loose) is not required to be immediately adjacent to the Shipping/Loading Dock, is this requirement referring to providing and overhead door to 2.83 Receiving Room INSIDE of the HMA Lab
- A. Refer to note G.2 for location of doors and refer to the concept diagrams as a reference.
- 42. Room Data Sheets. If mobile carts are requested in a Lab Spaces and is not listed on the IDOT Equipment Matrix as being "Existing To Be Relocated", is the Design-Build Contractor to include
 - providing these mobile carts under the scope of this project (CFCI Contractor-Furnished, Contractor-Installed?)
- A. The design build team should confirm quantities of mobile carts for all departments to make sure that spaces is allocated for them. As for OFOI or CFCI, confirm with the client on their preference of procurement. Mobile carts shall be OFOI.
- 43. Room Data Sheets. 2.81.4 HMA Open Lab Testing Microsurfacing/Instrument. A Adjacencies refers to Rooms 2.82.1.1 and 2.82.1.b. Presume these numbers should be 2.82.4.a and 2.82.4.b?
- A. The microsurfacing and instrument room IDs are 2.81.4.a (Microsurfacing) and 2.81.4.b (Instrument).
- 44. Room Data Sheets. 2.94.5.a Aggregate Open Lab Soundness Test Moisture Room. F. General Notes states "Provide a IP 65 Rated—Level 6 (need for specific test ratings-indicates a precise level of protection against moisture ingress under specific test scenarios)". Please clarify requirements for this space.
- A. IP is Ingress Protection. IP65 is the ingress protection standard for 'water resistance'. Level 6 describes the resistance to moisture intrusion. The requirement is an ISP65- level 6 rated moisture room.
- 45. Room Data Sheets. 7.15 Shared Hazardous Material Storage. Calls for ACT ceiling but B.2 General Notes states "Walls extend from deck to deck or provide hard lid ceiling to encapsulate fumes for exhaust. Please confirm a GWB ceiling is acceptable in this room.
- A. GWB is acceptable as long as code requirements are met. The intent is to control exhaust.

- 46. Room Data Sheets. 8.16 Core & Shell Mechanical Room, 8.17 Core & Shell Electrical Room, & 8.18 Core & Shell IDF/MDF Rooms list Ceiling finish as GWB. It would appear that a painted 'exposed to structure' ceiling finish in these rooms is more appropriate. Is that acceptable?
- A. Open to structure is acceptable as long as code requirements are met.
- 47. V–1 Conceptual Drawings, Sheets EXH-001, EXH-002, and EXH-003. Can the western portion of the dashed ";Scope Limits" line be adjuster further to the West if can provide a better site layout?
- A. IDOT is amenable to moving the western limits of construction but requires a buffer of tree for visual screening from Dirksen Pkwy.
- 48. Room Data Sheets. 2.11 Traffic instrumentation Open Lab, A. Adjacencies states "Directly adjacent to Loading Dock, Storage, and Metals and Miscellaneous Products -Machine Shop; Truck Storage and Offices have relationship to the Traffic Instrumentation Open Lab." Bridging Documents Basis of Design Adjacency/Flow Diagrams for 2.1 show dock access through the Metal & Misc Products Machine Shop. Please confirm the arrangement shown on the Body Adjacency/Flow Diagrams is acceptable and 2.11 Traffic instrumentation Open Lab is NOT required to be directly adjacent to the loading dock.
- A. Traffic instrumentation receives product on a regular basis and packages and ships out product and needs to be in close proximity to the loading dock. Traffic instrumentation also uses the Metal & Misc Products machine shop and the pipe cutting equipment.
- 49. Bridging Documents, II-9 Basis of Design: Electrical + Lighting, 1) Power Distribution, Item, b states in part "An emergency generator shall provide back-up power to life safety loads as well as equipment as requested by IDOT. The exterior generator shall be natural gas, 480/277V, 3PH, 4W, in weatherproof skin-tight enclosure with sound attenuation in accordance with local jurisdiction requirements." Has the AHJ signed off on not providing propane as a backup fuel source for the generator since the generator is serving life safety loads or will propane backup be required?
- A. The AHJ has not been contacted.
- 50. Bridging Documents, II-1 Basis of Design: Sole Sourcing. Is a sole source for the Building Automation System required?
- A. Reference HVAC BOD page 6 of 17, item I. Building Management & Controls.
- 51. Bridging Documents, Basis of Design: HVAC, Where a range of temperatures and humidity are given for a lab area such as 68 F 72 F and relative humidity 23% -55%, are the lower temperature and humidity target setpoint for winter heating operation and the upper setpoints targets for summer operation or will there be a requirement to be able to control to any point (temperature or humidity) within this range at any time of the year, such as controlling to 68 F and 23% RH in summer and 72 F and 55% during winter?
- A. OPR references ASHRAE 55 or room requirements whichever more stringent. There is no lower bound on RH per Std 55 so 23% indicated in the bridging docs would be the low in this case. Note the OPR does call out year-round 45% RH +/- 5% for Analytical Chemistry
- 52. Bridging Documents, II-9 Basis of Design: Electrical + Lighting, Is UPS power required to be a single, centralized system or can it be distributed?
- A. The UPS power should be a single, centralized system. Refer to revised Electrical BOD & Room Data Sheets for UPS power requirements.

- 53. Bridging Documents,II-11 Basis of Design: IT/COMM. Per the basis of design, the contractor is to supply and install Switches and Processors. Are these to be Layer 2 or Layer 3 Switches? Preferred switch vendor? What processors are being referenced in this line item?
- A. IDOT/DoIT will provide and install the switch(es) into the contractor-supplied rack with contractor-supplied patch panels, cabling and accessories.
- 54. Room Data Sheets. 2.41 Concrete Open Lab. Under Flooring, both sealed concrete & rubber mats are checked. We presume the rubber mats are only required at certain locations for slip resistance and are not intended to cover the entire room. Please confirm. If this is correct, please provide guidance as to requested locations of the mat such as "provide (1) 3' x 6' rubber drainage mat in front of each sink in this room."
- A. No, the intent was not to have the rubber mats cover the entire room. They presently have rubber mats located at benches where repetitive activities take place. Rubber mat (Anti-Fatigue mats) reduces the stress and strain on the feet and legs and in some areas like soils Breakdown the mesh mats are used for slip resistance.
- 55. Room Data Sheets, 2.81 HMA Open Lab. Under Flooring, both Epoxy and Sealed conc rete boxes are checked. What is the required floor finish for room 2.81 HMA Open Lab
- A. These are two good options for the floor finish. The design team will have an opportunity to coordinate final selection of finishes with the client. Flooring: Sealed concrete per Laboratory Basis of Design II-5.
- 56. Room Data Sheets, 1.17 Nuclear Workstation, RDS reference power and data at perimeter bench, but there is only one portion of bench in one wall shown on the concept drawing), Do RDS take precedent and we provide benches around the room?
- A. Location of the electrical and data outlets is based on the layout of the nuclear.
- 57. Room Data Sheets, 1.17 Nuclear Workstation. RDS note that we should comply with IEMA nuclear equipment storage requirements. Can the Owner provide a specific published guideline/document that the design must comply with?
- A. Please see IDOT Radiation Safety Requirements and Accident Procedures Policy Memo provided in the shared file labeled "Informational Files"
- 58. Room Data Sheets, 1.11 District 6 Open Lab. It is not clear where or what % of casework is mobile as indicated on page 1. Please clarify.
- A. Design Build contractor shall discuss with the users the casework types during the design phase. Lab preference is primarily fixed casework. Verify configurations with Using Agency during design phase.
- 59. Room Data Sheets, 1.11 District 6 Open Lab & 1.15 District 6 Soils Isolation Room. Under interior finishes, references note C.1, but there is no C.1 note associated with finishes.
- A. Floor finish option is concrete with a sealer, note on the RDS floor and wall finishes refers to G.1. "Final interior finishes to be selected by the Design Team selected for this project.
- 60. Room Data Sheets, 1.11.4 District 6 Soils Lab. This room indicates need for natural light. Can it be provided from borrowed lights from the corridor?
- A. It is an option to get natural light into a space.

- 61. Room Data Sheets, 1.11.5 District 6 Sort/Log. if sink present in this room is a hand wash, should that be a wall hung unit instead of part of the bench as shown on the concept diagram?
- A. Design Build contractor shall discuss this with users during the design phase. Reference Plumbing Basis of Design II-7 for lab hand wash sinks.
- 62. Room Data Sheets, 1.11.6 District 6 Concrete Lab. Under interior finishes, references Note 1, could not be located. There is reference to a floor sink and hose bib in this room. In sort /Log there is also a reference to floor drain. Is it a standard to provide a source of water in those rooms with floor drains to facilitate cleaning?
- A. Refer to D.2 and D.4 on room data sheet 1.11.6.
- 63. Room Data Sheets, 1.12 District 6 Aggregate Isolation Room. Confirm that casework material is stainless steel or if stainless is just countertop.
- A. Stainless steel casework w/ stainless tops were preferred option, however the design team will have an opportunity to coordinate final selection of finishes with the client during the design phase. Lab preference is heavy duty casework with stainless steel countertops.
- 64. Room Data Sheets, 1.13 District 6 Repair Isolation Room. Indicates Radioactivity as special requirements. Do we need to provide a sink for handwashing?
- A. No sink required
- 65. Room Data Sheets, 1.15 District 6 Soils Isolation Room. Requirement of snorkel references note F.1. There is no section F on this RDS. Missing requirements for casework in this room, mobile or fixed?
- A. See notes C, D.3, and E.5 about the snorkel, as well as the equipment matrix. As for the casework types, the design team shall have an opportunity to discuss the casework with the client during the design phase. Disregard note F.1. Space is primarily for mixer/crusher equipment. Fixed countertop area will be required to accommodate required equipment. Coordinate configuration with Using Agency during design.
- 66. Room Data Sheets, 1.18 District 6 Storage: Tall cabinets and heavy duty shelving is indicated. Confirm if 50/50 is a good starting point for provision of Tall cabinets and shelving.
- A. On your site visit to the existing IDOT buildings you will observe the casework distribution for each room, recommend you use that as your starting point and also reference the concept diagrams.

 Design-Build Contractor shall have an opportunity to discuss the casework with client during the design Phase. 90%/10% split. 90% heavy duty open shelving. Shelving depth: 24".
- 67. Room Data Sheets, 1.24 District 6 HMA Extraction/Ignition Room: RDS is indicting that a case opening is required, but a single door is indicated on the concept diagram. Please clarify design intent.
- A. Use the concept diagrams for door type location
- 68. Room Data Sheets, 1.25 District 6 Calibration/Repair Room Cased opening and door are checked as required. Is the case opening to storage and the door to calibration?
- A. Use the concept diagrams for door type locations

- 69. Room Data Sheets, 2.91 Aggregate Staging Door is indicated to be a 6'x8'. The concept diagram also indicates an overhead door. Is an OH door required in addition to a 6'x8' double man door? Task lighting is also indicated as a requirement, is this dedicated to some areas, if so, which ones? There is a requirement for a hand wash sink and sediment trap at sink. Is this sink to be located between staging and exit or staging and breakdown?
- A. **Door: 6' wide x 8' high clear access required either as double doors or overhead door. If overhead door is used, code compliant egress is also required.** Location of the sink would need to be coordinated with-users-Using Agency during the design phase of the project. Task light would be located under wall cabinets where required., provided, final location is based on layout and should be verified with users-Using Agency during design phase.
- 70. Room Data Sheets, 2.93 Aggregate Specific Gravity (SPG). Please provide desired size for heavy-duty stainless-steel shelving.
- A. Design build team would have an opportunity to discuss casework and shelving with users during the design phase of the project. Heavy duty shelving used for drying of soils and aggregate, 30"D x 6'-11"H x Lengths determined by room configuration and equipment locations.
- 71. Room Data Sheets, 2.11 Traffic Instrumentation Open Lab. Notes on adjacencies: "Open lab must have access to the roof to service Antenna." Confirm that this is a requirement as it is different from bridging documents concept.
- A. Refer to the RDS sheet 2.11 for antenna information. It is the responsibility of the design bid contractor to locate the antenna on the roof allowing for easy access by the traffic instrumentation users.
- 72. Bridging Documents BOD Floor diagrams Traffic Instrumentation 2.1. 2. Flow diagrams indicate offices to have a direct relationship with lab, we interpret this as close proximity. Please confirm this is acceptable.
- A. Direct connection is not indicated on the Flow Diagram, and close proximity is acceptable.
- 73. Bridging Documents BOD Floor diagrams Metals & Miscellaneous Products Labs. Flow diagrams indicate offices to have a direct relationship with lab, we interpret this as close proximity. Please confirm this is acceptable.
- A. Direct connection is not indicated on the Flow Diagram, and close proximity is acceptable.
- 74. Room Data Sheets. 2.21.2 Metals & Misc. Products Lab Metals Lab-Universal Testing Machine Area. reference to note G.8 that does not exist (door note for "other"). This RDS is also referencing RDS 2.21, but no additional information is provided on that sheet. (lighting, security). Please clarify design intent.
- A. On RDS 2.21.2 Metals & Misc. Products Lab: Security category instead of G.8 Note it should be F.5 Lighting category- fc information provided on RDS. Sprinklers and fire extinguisher categories the system would be the same as RDS 2.21 additional information was provided on that sheet.
- 75. Room Data Sheets. 2.21.5 Metals & Misc. Products Lab Metals Lab Metals Lab Failed Storage. Note G.3 reference the user desire to double capacity of existing storage area. Please clarify what is the existing capacity.
- A. See Equipment list and the room data sheet notes (B.2 and F.1-F.5 Notes)
- 76. Are there page limit requirements for Volumes 2, 3 & 4?
- A. There are no page limits.

- 77. Can the Project Manager & Construction Manager be the same person?
- A. Yes as long as the person can fulfill all duties and roles for a successful project.
- 78. Please confirm if an on-site Project Manager is required?
- A. CDB requires a DB PM on-site at minimum one to two days a week to monitor activity and meet with CDB PM and the U/A. A qualified Site Superintendent will be required daily while work is being performed. In the event, the project performance is a concern, the CDB PM may instruct the DB to provide a PM on-site additional days to bring the project back on track.
- 79. TECHNICAL PROPOSAL: VOLUME 2 MANAGEMENT & EXECUTION PLAN request information relating to our Team's Key Personnel. This appears to be the same information provided in our Phase 1 proposal in documents "DB Entity Qualifications Statement" & "Offeror's Team Experience". Would the CDB consider removing this section of Volume 2 due to redundancy?
- A. In the Phase I proposal this information typically focuses more on the design team and the offerors management team. Because of the amount of time that transpires during the procurement process this information should be updated and provided again to ensure it is current.
- 80. Room Data Sheets, 2.85 HMA Extraction Lab. Note B.2 calls for six (6) new fume hoods, but Appendix III–2 Program Area Tables calls for five (5) fume hoods in this room. Which is correct?
- A. Use the information provided on the RDS sheet 2.85.
- 81. Appendix III–2 Program Area Tables lists quantities of Fume Hoods and Snorkel Exhaust but is missing several of the of the fume hoods & snorkel exhausts called out on the Room Data Sheets. Do the Room Data Sheets take precedence?
- A. The Room Data Sheets contain the more detailed and comprehensive requirements.
- 82. Room Data Sheets, 2.95 Aggregate Count Lab, indicates a Fume Hood and "Note E.2". There is no note E..2 for this room. Please clarify fume hood requirements for Room 2.95.
- A. Refer to RDS 2.95 count Lab- Note B.2 for fume hood requirements.
- 83. Room Data Sheets, Traffic Instrumentation, Rooms .11.2 Soldering, 2.11.3 Rework, and 2.11.4 Permanent Counters. Please clarify snorkel and canopy exhaust requirements for these 3 rooms.
- A. See Equipment list and the room data sheet 2.1 -Notes B.2 and F.1-F.5 for the snorkel and canopy exhaust. The design work to determine the cfm requirement are based on the selected snorkel and canopy and shall be determined by the Design Build Team.
- 84. Room Data Sheets lists the quantity of rooms and the required programmed area of each room. This same information is also listed in Appendix III–2 Program Area Tables. Please confirm that these space requirements are the firm requirements of the RFP and that the V–1 Conceptual Drawings, Conceptual Lab Diagrams are to be adjusted as needed to fit inside the programmed space.
- A. The Program Area Tables, Adjacency Diagrams and Room Data Sheets contain the spatial requirements for the project. The conceptual drawings are an initial attempt at a possible solution used for 'Proof of Concept' purposes. Certain lab concept diagrams have been indicated as 'User Preferred Options'. While not the required solutions, they indicated arrangements that reflect the intent of the bridging documents. Other configurations may work.
- 85. We have never had to pay permit fees on past CDB projects. On the last design build project, we did for CDB there was some confusion on this with the local municipality regarding fees and

- inspections. Please confirm that there are no permit fees required and that CDB will be the AHJ for this project when it comes to inspections and approval.
- A. Part 1. In most instances the State of Illinois is not required to comply with municipal codes and/or ordinances, usually in the form of permits and associated fees. A municipal permit may be proper in some instances, but each case has to be reviewed on an individual basis. Therefore, do not apply for any municipal permit relating to the project unless you have approval from the CDB PM to do so. In which case, CDB will write a CO to cover the associated costs with the permit. Part 2. CDB nor IDOT are the AHJ. You will need to conform to normal regulations and those that have local jurisdiction. OSFM, Plumbing Inspector, etc.
- 86. Since most utility companies will not provide any costs for engineering or hook up charges until they get final construction drawings and loads, can we assume all these fees will be paid by CDB. If not, we would recommend having an allowance that all DB firms would include in their pricing.
- A. We encourage you to reach out to the local utility companies to determine if they will have engineering and hook up charges based on the description and location of the new building and include the allowance in your bid package. In the event, the allowance would not cover, CDB would write a CO to cover the additional charges. Proof of bid package allowance would be required.
- 87. Room Data Sheet, 2.21 Metals & Misc.. Products Lab Note G.2 states "Gantry crane located between roll-up door and equipment. Room 2.21.2 Metals Lab-Universal Testing Machine Area Note B.1 states "gantry crane/hoist supported by building structure" and note F.3 states "Provide a new portable hoist." Bridging Room 2.21.4 Metals Lab Sort/Lag, Note B states "Gantry crane/hoists". Documents Flow Diagrams for the Metals & Misc./ Products Lab has a note that states "Need to discuss details. Do we need separatee Hoists doe different areas". Please clarify crane/hoist requirements for the Metals & 2.21 Misc. Products Lab and its 'sub areas'.
- A. See response below. Metals Lab and Department: Contractor to provide a 4 ton hoist system, motor driven trolley attached to a bridge crane mounted to structure above. This hoist system/ crane system shall transport samples from the loading/sorting area in the Metals lab area 2.21 to the machine shop 2.23. The hoist system hook height shall be 16' A.F.F. in both rooms.
 - 2. No crane/Hoist system is required in the Misc. product lab 2.22.
 - 3. No mobile gantry cranes are required in the Metals & Misc. Product labs.
- 88. Room Data Sheet 2.23 Metals & Misc.. Machine Shop, Note B states in part "Gantry crane/hoist supported by building structure, option for portable hoist." Also, Note F.2 states "Need for portable hoists." Does this mean the Owner's preference is for a gantry crane supported by the structure, but they are OK with a portable hoist instead? OR is the option/need for a portable hoist is addition to the requirement for the gantry crane supported by the structure? Also, is the portable hoist to be CFCI (Contractor-Furnished, Contractor-Installed) or OFOI (Owner-Furnished, Owner-Installed)?
- A. They would like a gantry crane/hoist (attached to the structure) in the Metals Lab-Universal Testing-Machine Area. In the sort and Log and failed storage a portable hoist might be an option based on layout of space. Client to confirm with the Metals & Misc. Products Lab user if this is an acceptable option. The gantry crane/hoist shall be CFCI if the portable hoist is an option confirm if this would be provided and installed by the owner. No portable hoist or mobile gantry cranes are required in the Machine shop or Metal Lab, see response above for the crane/ hoist system requirements.

- 89. Room Data Sheet 2.24 Metals & Misc.. Products Lab -Pipe Storage and Cutting, Note F.2 states "Gantry crane/hoist supported by building structure, option for portable hoist..." Does this mean the Owner's preference is for a gantry crane supported by the structure but they are OK with a portable hoists instead? OR is the option for a portable hoists is addition to the requirement for the gantry crane supported by the structure? Also, is the portable hoist to be CFCI (Contractor-Furnished, Contractor-Installed) or OFOI (Owner-Furnished, Owner-Installed)?
- A. See Response above. Pipe Storage & Cutting 2.24 Any mobile gantry cranes shall be owner furnished owner installed.
- 90. Room Data Sheet, 2.64 Soils Open Lab Vibratory Lab, Note B states in part "and gantry crane or hydraulic table." It appears that the Equipment Matrix includes a "2000LB GANTRY w/ 1 TON
 - ELECTRIC HOIST" that is to be OFOI/"Existing To Be Relocated". Please confirm that the Design-Build contractor is not required to provide any new cranes or hoists in Room 2.64 and that the OFCI crane to be relocated will not require any structural framing.
- A. The D-B contractor is not required to provide any new crane or hoist in Vibratory Lab 2.64. IDOT will be relocating the existing gantry crane. The existing crane has no specific requirement for structural framing.
- 91. SECTION 00 42 10 SUBMISSION REQUIREMENTS AND INSTRUCTIONS, Item .3, B.3

 MBE/WBER/VBE Construction Goals state "The CDB MBE/WBE/VBE Construction Goals are as follows: 23% of the construction value with 16% to minority-owned businesses, 5% to womenowned businesses and 2% to veteran-owned businesses. These goals include both Tier 1 and Tier 2 subcontractors. The form included shall demonstrate the intent to comply with the stated goals."

 SECTION 00 51 02 PHASE II EVALUATION CRITERIA, Item .8.C Evaluation of Proposed Utilization Plan lists various point possibilities for meeting or
- A. Each individual goal should be met and the scoring will be based upon the overall 23% overall construction goal.
- 92. Please confirm that all building permit/inspection fees along with utility connection and impact fees will be waived for this project.
- A. In most instances the State of Illinois is not required to comply with municipal codes and or ordinances. Many municipalities are not aware of this and may require CDB to abide by such codes and ordinances, usually in the form of permits and associated fees. A municipal permit may be proper in some instances, but each case has to be reviewed on an individual basis. Therefore, do not apply for any municipal permits related to this project unless you have approval from the CDB PM. In which case, CDB will write a CO to cover the costs associated with the permit.
- 93. As of 9/5/23, it appears that the existing ravine on the west side of the site is currently being filled in as part on work IDOT is having performed under a separate contract. Please provide an updated as-built grading plan as soon as this work is completed since this will be the existing grades once the site is turned over to the Lab contractor. Also, please have the Solicitation Geotechnical Engineer, GSG Consultants, Inc. provide an Amendment to their 8/9/22 Geotechnical Investigation Report including additional soil borings of the area of the filled-in ravine and additional recommendations based on this material.
- A. The D-B teams are to assume the Geotechnical report recommendations stand as-written. IDOT will-provide an updated topographic survey of the fill sites when available.
- 94. Room Data Sheet 2.21 Metals Lab. Is it acceptable to have the 16' high roll up door opening to the exterior service yard instead of the central corridor or Shipping & Receiving, to assist in moving equipment in and out of the lab and removing metal scraps directly to the dumpster?

- A. Yes, it is acceptable, but is just depends on your building layout. 12' high roll-up door in lieu of 16' is acceptable in Metals Lab- 2.21.
- 95 Bridging Documents BOD, II-5 Basis of Design: Laboratory, Wall Protection (page 3 of 18) states "Bumper Guards: Aluminum, bracket-mounted, Life Science Products, Inc. "Sani-Rail," on all walls without casework at labs". Please confirm that only (1) row of Sani-Rail, mounted at between 30" to 36" A.F.F will be required.
- A. One may be adequate; however, it is based on the layout and the equipment in the room. Design build contractor to confirm during the design phase. Coordinate bumper guard locations with room layouts and equipment requirements.
- 96. Bridging Documents BOD, II-8 BOD HVAC, General Design Critera #3 states is part "Redundant systems MAY be required for critical spaces. Redundant systems shall have at least 50% extra
 - capacity to accommodate any down time in units serving the space. "Please provide a complete list of what spaces are deemed critical that WILL required redundant HVAC systems.
- A. IDOT considers all the fumes hoods as critical functions; thus the laboratories they are in are critical (for the fume hoods only). The range for both the Pipe Cutting and Storage (2.24) and Miscellaneous Products Testing (2.22) areas needs to be 73.4 degrees F with a tolerance of 3.6 degrees F (69.8 to 77.0 degrees F) with Humidity of 50% with a tolerance of +/- 5%. This needs to be maintained at all times to properly condition the plastic pipe samples. For the Machine Shop (2.23), humidity would need to be at a level low enough to limit corrosion of machining equipment. From a very quick search online I found mention of specifying a maximum of 45% humidity to limit corrosion of steel components. For the Cement Lab (2.51), humidity needs to be 50% or higher during working hours. For the remaining lab areas, a range of 68-82 F for unoccupied hours would be acceptable.
- 97. Bridging Documents BOD, II-5 BOD Laboratory. A central RO system under a DI system. Is both RO and DI required or just DI from a central system that is locally polished?
- A. Refer to the Lab BOD narrative under the deionized section- a table indicated those departments requiring type III(RO) and or type II (DI water).
- 98. Bridging Documents BOD, II-7 BOD Plumbing, General Items 7 and 8. Underground waste and storm piping as cast iron underground would typically be PVC. Is PVC acceptable?
- A. For the lab waste, utilize polypropylene piping. A deviation for PVC drainage and vent would be considered.
- 99. Bridging Documents BOD, II-7 BOD Plumbing. Is a central or localized in-floor solids interceptor acceptable or does each sink listed required an interceptor?
- A. *Each sink listed requires an interceptor.*