August 5, 2021 General Site - New Indoor Practice Facility Project Number: CP210981

Re: CP210981 New Indoor Practice Facility - Addendum 03 Summary

- 1. Addendum 03 includes changes to the following drawings. All changes have been clouded and tagged.
 - i. C102 Added pavement and gravel demolition east of the driveway onto Champions Drive. ii. C401
 - 1. Revised the water line pipe size annotations from Wd1 Wd2.
 - Added 10" x 6" Tee at Wd1.
 Added 2 10" Gate valves at Wd1.
 - 4. Added 8"x6" reducer near Wb2.
 - 5. Added callout for new 8"x6" tee at Wb1.
 - 6. Revised the size of the gate valve at Wc1.
 - iii. C411 Revised the limits of the MODOT rock ditch liner at A1.
 - iv. C416 Revised the pipe size callout from A4 RD2.
 - v. C413
 - 1. Added the existing steam chase to the water line profile near Wd1.
 - 2. Revised the pipe size from Wc1 Wc2.
 - 3. Revised the pipe size from Wd1 Wd2.
 - vi. A005 Clarification on painting of exposed steel.
 - vii. A201 Revised exterior material legend.
 - viii. A301 Gypsum wall board type clarification.
 - ix. A451 Revised general notes.
 - x. A502 Gypsum wall board type clarification and exposed steel paint clarification.
 - xi. A503 Detail 2 material call-out and elevation noted.
 - xii. P500 Revised plumbing fixture connection schedule.

2. Addendum 03 includes Project Manual changes. Tracked changes are visible for clarity of review. The following sections include modifications and updates:

- i. _TOC
- ii. _1.A Bid for Lump Sum Contract
- iii. _1.E Special Conditions SC
- iv. 033000 Cast in Place Concrete
- v. 074113.16 Standing Seam Metal Roof Panels
- vi. 074213.19 Insulated Metal Wall Panels
- vii. 112429 Facility Fall Protection
- viii. 133419 Metal Building System
- ix. 312000 Earth Moving
- x. 316616 Soil Nail
- The following sections were removed from the Project Manual:
 - i. 074293 Soffit Panels
- 3. Reference the attached RFI Log including entries #094 #167 documenting Requests for Information and corresponding responses.

Thank you, Kristen Harrelson HOK



The University of Missouri 07/29/2021 CP210981-New Indoor Practice Facility HOK Project 20.70064.00 1200 S. Providence Rd. Columbia, MO 65201 In working with VP Buildings for procurement of the metal building system, 094 Acceptable as long as all requirements within 2.4.B on site we have the below requests for their specific system. Please confirm if fabrication are met. Options of the substitution request are to meet these are acceptable options. all requirements of the contract documents. b. Roof panels: Division 07 41 13.16, section 3 notes the basis of design as Berridge panels. VP Buildings requests to substitute 22 gage AEP Span Curved Span-Loc HP. Panel profile is similar to what is specified. The panel will be curved on site. In working with VP Buildings for procurement of the metal building system, 095 All requirements of the contract documents must be met. .034" is we have the below requests for their specific system. Please confirm if a minimum thickness for galvanized metal panel. Kingspan is these are acceptable options. listed as an acceptable manufacturer for this project. c. Wall panels: Division 07 42 16.19 section 4. The basis of design is a Centria Formawall panel with a specified thickness of 0.034". VP Buildings requests to substitute the Kingspan panel with 20 gage exterior and interior faces. KingSpan is an acceptable substation per the specifications. In working with VP Buildings for procurement of the metal building system, Section 07 42 93 has been deleted. Insulated metal wall panel is 096 we have the below requests for their specific system. Please confirm if used as soffit panel. these are acceptable options. d. Soffit panels: Division 07 42 93 has the basis of design as Centria panels with a 0.034" thickness. Acceptable substation is a Morin panel. VP requests to substitute Morin panels in 20 gage. 097 Soil Nail substitution - Williams Grade 80 All-thread soil No objections to requested substitution for use in rock. Note that thread bars shall incorporate Class I corrosion protection per 316616 spec section 1.1B of the spec. Substitution request forms received. Project manual updated in Addendum 03. 098 Not all PEMB manufacturers make radiused (curved) structural roof beams. Duplicate #049 Addressed in Addendum 02. Please verify segmented structural roof beams are acceptable, along with a clip system that will form the exterior radius (curve) of the roof. 099 On page A201 the west elevation (3), and the north elevation (4). Do not Duplicate #050 Addressed in Addendum 02. have any letter heights noted in the drawings. Can you provide those measurements for us?



100	In the specs it refers to "land scape work 32 90 00" along with "turf seeding and sodding 32 92 00" are both missing from the specs. I was hoping to get some clarification on this.	Duplicate #051 Addressed in Addendum 02.
101	Are you able to share CAD files (civil, arch, struct) with the bidders?	Duplicate #052. Addressed in Addendum 02.
102	Please provide a list of approved installers in this area for Specification 32 18 23.19 - Synthetic Turf Playing Field System.	Duplicate #053. Addressed in Addendum 02.
103	Volume 1 Specifications include 09 77 23 Fabric Wrapped Panels and 09 78 00 Interior Wall Panel Systems. Please verify where these products are located, neither product is shown on the drawings.	
104	PEMB manufacturers are estimating material lead times of between 42 and 45 weeks from contract award. This long lead time equates to PEMB material being available for on-site erection no earlier than Mid-July 2023. Please review and revise bid form to allow GCs to fill in substantial completion date for the building.	Please refer to revisions to division 01 special scheduling and bid form.
105	The 0881013 Decorative Glass Glazing spec only has one item in it, which is 'back painted glass". There is no basis of design or vendor listed for it, just to 'provide product indicated on the drawings'. We have not found anything in the plans showing or describing 'back painted glass'. Where is this material used, and what is the basis of design?	Duplicate #056. Addressed in Addendum 02.
106	The water line Wd1-Wd2 at the SW corner of sheet C401 is noted as an 8" pipe, but the profile on sheet C431 shows the line is 6". Please verify the water line size on sheet C401 should be 6".	Duplicate #043. Addressed in Addendum 02.
107	Please verify it's acceptable for PEMB manufacturers to factory bend standing seam roof panels on this project.	Refer to standing seam metal roof specifcations.
108	Girts; per specification division 13 34 19 section 2.4 a, are noted as 12 inches deep. Our buildings do not have a 12-inch deep cold formed section. Request to substitute our standard 10-inch sections. This will allow the use of 10-inch HSS sections alongside the cold formed sections as noted in the structural drawings.	Duplicate #093 Addressed in Addendum 02.
109	 The glass spec mentions heat soaking. This would be an unusual added expense for the standard glass sizes on this project. Is heat soaking of the glass truly intended, or can tempered be used? The ceramic coated glass described in 08800-3.10-C references 'match architect's sample'. Is this supposed to be a silk screen or just a standard spandrel frit? What is the intent of the ceramic coated glass? 	 Heat soak testing is required for fully tempered float glass per specification. was addressed by RFI 040 in addendum 02



110	Please verify ice machines will be elements of contractors scope. 4/A402 in Exam 111 marked NIC, and 2/A401 in Exam Stor. 106 states "ICE".	Addressed in RFI 050
111	Roof panels: Division 07 41 13.16, section 3 notes the basis of design as Berridge panels. Request to substitute 22 gage AEP Span Curved Span-Loc HP. Panel profile is similar to what is specified. The panel will be curved on site.	Duplicate #094
112	Wall panels: Division 07 42 16.19 section 4. The basis of design is a Centria Formawall panel with a specified thickness of 0.034". Request to substitute the Kingspan panel with 20 gauge exterior and interior faces. KingSpan is an acceptable substitution per the specifications.	
113	Soffit panels: Division 07 42 93 has the basis of design as Centria panels with a 0.034" thickness. Acceptable substation is a Morin panel. Request to substitute Morin panels in 20 gauge.	Duplicate #096
114	Gutters: On sheet A210 of the drawings, the gutters are noted as minimum 7 inch x 7-inch. Request to substitute standard gutters to match that attach to the roof panel with standard gutter straps.	Duplicate #090 Addressed in Addendum 02.
115	Downspouts: On sheet A201 of the drawings the downspouts are called out as minimum 5-inch x 5-inch. Request to substitute subcontractor's standard gutters at 5-inch by 4-inch.	Duplicate #091 Addressed in Addendum 02.
116	Specification section 07 41 13.16 standing seam metal roof panels does not list a weather tightness warranty as being required but there is a form on page 127 for 20 yr NDL weather tightness warranty. Is this warranty required for the curved roof area panels?	Yes, the warranty is required.
117	Will end laps be acceptable for roof panels or will roof panels need to be rolled to full length onsite?	Refer to article 3.3 Metal Panel Installation of 074113.16 in the Project Manual
118	Specification section 07 42 13.19 calls for Centria Form-a-wall panels – is there a specific profile required? (There are several different profile types in this series).	See revised specification section in addendum 03 074213.19
119	Specification section 07 42 13.19 lists Kingspan – is there a specific profile required?	Profile to match the one listed in the revised Insulated Metal Panel spec
120	(8) High Volume Low Speed (HVLS) Fans. I would like to request an addendum be made to include Rite-Hite as an acceptable manufacturer for this project.	Rejected.
121	074113.16 Standing Seam Metal Roof Panels - Substitution request AEP Span Curved Span-Lok	See RFI 094
122	074293 Soffit Panels - Substitution request AEP Span Prestige Series	See RFI 096.



123	Can you please provide a detail for the 4' mulch strip called out on plan sheet C051.	This is the "super mulch" to be procured and installed by owner (MU). Reference sheets L300-L301 (NIC).
124	Boring Logs #3 & #16 are missing from the Geotech Report. Can you please provide those?	Regarding boring logs #3 and #16, although these borings were originally planned, due to the inability for the drill rig or backhoe to reach the sites, these borings were never drilled.
125	Geotech report calls for 2' LVC layer under building pad. Please confirm 1) is 2' LVC layer required under building slabs. 2) Is the 2' LVC layer required under the building synthetic turf? If so, are the granular courses under these items part of the 24" layer?	2' LVC is required under the entire building area. Refer to the
126	What is the granular course thickness under the building slabs?	2. A response could not be provided by ESS prior to issuing Addendum 03
127	We don't find a schedule for building tie beams or grade beams. Please direct us to where that is located.	Tie beam and grade beam schedule is provided on sheet S531.
128	Is slot rock acceptable for LVC material?	Yes, refer to the revised Earthmoving specification.
129	Is the 2' building LVC layer required at solid subgrade areas?	Yes, refer to the revised Earthmoving specification.
130	Is providing and placing topsoil in planters and yard areas part of this contract?	Yes, providing and placing topsoil is part of the contract. Location and depth is identified on sheet L200
131	Can a detail for the proposed synthetic turf in the building be provided?	A detail section of the synthetic turf has been provided in the latest set.
132	Voicemail - Roofing Sales STL Firestone has a PVC product, How do we get this into the specifications? 636-946-0100	Voicemail received for bidder clarification. Corresponding email was not received by HOK.
133	Substitution request: Sure-Flex PVC rib roof instead of standing seam metal roof	
134	Voicemail - Regina-River City 309-635-1951. When is another addendum or addendum coming? Is the bid date changing?	Reference Addendum 02 documents
135	Are you able to confirm that the turf only, will be contracted by the Owner. And Installation of said turf is still being requested as part of this bid package?	The turf and the shock pad would be purchased by the owner. The install of the turf and pad would be in the requested bid package.
136	1. What is the slab thickness and drainable base thickness for the indoor facility? 2. Also, will the drainable base be considered part of the LVC layer?	1. There is no structural slab on grade on the field portion of the
		2. A response could not be provided by ESS prior to issuing Addendum 03
137	The Civil sheets and Layout sheets aren't matching for removals and replacements for Alternate 2. Could you clarify?	Refer to civil drawings for pavement removal and replacement for Alternate 2.

138	For the shot rock fill beneath the footings and floor slab, can this material be broken, left in place, and compacted? Or are we required to break, excavate out, place back, and then compact? Please clarify.	
139	Due to the fact that all trench rock is now unclassified, how are we to correctly quantify this quantity when all borings are in and around the vicinity of the new building and not along some of the utility runs, i.e. Storm Run B and the storm sewer in the alternate for Lot G? Please clarify.	All rock above subgrade is unclassified. Bidders must include removal of material above subgrade regardless of character in their base bid.
140	084513 Structural Polycarbonate Panel Assemblies - Can your team please confirm if the aerogel is a requirement for this project as it will impact the pricing of the polycarbonate bids. The corresponding email offers some items for consideration to review and add for quality assurance under the current project spec section provided by HOK.	Aerogel is not required. It was removed from the section during addendum 02.
141	Re-address RFI 083 now that bid date has extended - In working with Butler for procurement of the metal building system, they have notified us that the specified roof panel VSR cannot be installed on a curved roof. Please confirm if the attached NV667 MR-24 Standing Seam Roof panel would be an acceptable option.	Rejected. 22 gage is the minimum requirement for standing seam metal roofing per the specifications



143	In working with VP Buildings for procurement of the metal building system, we have the below requests for their specific system. Please confirm if these are acceptable options. a.In specification 13 34 19 section 2.4 a, the girts are noted as 12 inches deep. VP Buildings does not have a 12-inch deep cold formed section. VP Building requests to substitute our standard 10-inch sections. This will allow the use of 10-inch HSS sections alongside the cold formed sections as noted in the structural drawings. b.Specification 07 41 13.16 section 3 notes the basis of design as Berridge panels. VP Buildings requests to substitute 22 gage AEP Span Curved Span-Loc HP. Panel profile is similar to what is specified. The panel will be curved on site. c.Specification 07 42 16.19 section 4 basis of design is a Centria Formawall panel with a specified thickness of 0.034". VP Buildings requests to substitute the Kingspan panel with 20 gage exterior and interior faces. KingSpan is an acceptable substation per the specifications. d.Specification 07 42 93 has the basis of design as Centria panels with a 0.034" thickness. Acceptable substitution is a Morin panel. VP requests to substitute Morin panels in 20 gage. e.On sheet A210 of the drawings, the gutters are noted as minimum 7-inch x 7-inch. VP will provide VP standard gutters to match that attach to the roof panel with standard gutter straps. f.On sheet A201 of the drawings the downspouts are called out as minimum 5-inch x 5-inch. VP standard gutters are 5-inch x 4-inch. VP requests to use their standard size gutters.	See RFI 094-096. Highlighted questions 4a., 4e., and 4f. within substitution request were addressed in Addendum 02
144	Substitution request: 084513 Structured Polycarbonate Panel Assemblies - Skyview 40 translucent wall panel system	Rejected. Submitted documents do not demonstrate compliance with specification.
145	Can you send me a copy of the renderings from the preview meeting?	Renderings will not be provided as they are not included in the contract documents.
146	RE: RFI 020 from Addendum 02 - I wanted to check in on our approval request. I am going through addenda #2 and in the RFI log is states that EXTECH was rejected because they are unable to meet the glazing panel performance, which is incorrect, they can meet the performance. Was this a typo, is our full request being review and will it be approved in Add. #3?	See response in addendum 02.



147	Substitution requests for specifcation section 033000	All requested substitutions acceptable except OverCrete. Substitution request forms received. Project manual updated in Addendum 03.
148	We would appreciate consideration and approval of the Stanley QDC100 Series Closer for the MU New Indoor Practice Facility. The QDC100 is a cast iron closer with a lifetime mechanical warranty.	Received Monday after Bid Extension closed
149	Please see the original substitution request that I sent in dated 7/19/2021. It was approved in Add. 2 for section 033000 2.3 M. d. page 21	Rejected. Product acceptable as a permeability-reducing admixture (033000 2.3.M) as previously approved.
	That is great and MVRA 900 works in that application also (Permeability- Reducing Admixture), but I made a mistake and was supposed to be addressing: 033000 2.3 Q. page 22.(Porosity Inhibiting Admixture). I have attached a new substitution request for the new request. Since MVRA 900 has already been approved in the other section can we please expedite this for approval?	
150	 The pads that are specified call out z clips, grommets and Velcro. None of these should be used these pads should be mechanically fastened to the walls. The foam that is specified is for outdoor use for indoor a standard 2.5 ILD urethane should be used it will save you a lot of money. Also I see no field goal netting behind the hanging goals this needs to be there to protect building and for safety in the observation mezzanine Also the option of a middle divider net system needs to be discussed along with other protective netting that we normally see in these structures 	Please refer to the Basis of Design Product for the wall padding as listed in article 2.5; it is not being changed. At this time, protective netting behind the goal posts nor divider nets are not included in the project. Feel free to include a voluntary alternate with your bid, describing the proposed netting system in its entirety (products, supporting system, control, sizes, etc.)
151	230700-page 4, 2.2 (External Ductwork Insulation Materials): Material to be "Rigid Mineral Fiber" and "board type". The expectation is that this is intending for fiberglass board type insulation based on the rest of the descriptions in subsection 2.2.	Per Section 230700.2.2-A and Detail 5 on Sheet M300, external ductwork insulation shall be 2" thick rigid mineral fiber board (rock, slag, or glass) with field-applied aluminum outer jacket.



152	 230700-page 12, 3.7.E states that exterior supply and return duct are to be externally insulated but it calls out to use "cellular glass" which is different from "mineral fiber". It also states to not insulate phenolic foam ductwork and fittings and to refer to Division 23 section "nonmetal ducts". a.Is the intent to externally insulate with fiberglass board and not cellular glass? b.I did not see a nonmetal ducts section in the spec book. Will the exterior ductwork be phenolic foam? 	a. Yes b. No nonmetal ducts. Per Section 233113.3.1-A and Detail 5 on Sheet M300, all ductwork installed exterior to the building shall be minimum #18 gauge galvanized steel with longitudinal and transvers joints welded or sealed airtight as specified under Paragraph "Seam and Joint Sealing".
153	Are the fire hydrants on this project to be 8" Commercial Hydrants or should we reduce the 8" lines down to 6" and install 6" Fire Hydrants?	Install 6" fire hydrants per detail 5 / C502. Sheet C401 has been revised to show the locations of the 6" leads to fire hydrants.
155	Can you please confirm that that this project is tax exempt?	See Information For Bidders article 4.4
156	 1.Is Synthetic Turf Material at Indoor and outdoor and shock pad is already brought by Owner or it going to be a separate bid from rest of the Indoor Facility Project to provide and install turf and shock pad? If it is going to be bid which person, we need to send out our bid to? 2.If Turf and Shock pad already brought by owner, do we need to need to include turf installation only in this indoor facility Project? 	 The University has directed the design team that Astroturf will be product purchased for this installation and it will be purchased directly, by the Owner. Yes, please include turf installation only in the bid.
157	Steel Tech Building Systems Substitution Request	No exception. Substitution request forms received. Project manual updated in Addendum 03.
158	Midwest Block Voicemail	Voicemail received, no follow up written correspondence received
159	Per the Plumbing Fixture Schedule on sheet P500, there is a hot water connection size listed for the lavatory, the janitor's sink, and the sink. However, there is no hot water piping shown for these fixtures on either the plan view or the isometric view. Please confirm.	Hot water is only provided to the sink in Exam 111 and to the dishwasher in Exam Stor 106 by instantaneous water heaters at both locations. No other hot water provided to any fixtures. The Plumbing Fixture Connection Schedule was not revised to reflect this decision late in the design process.
160	Could you please send me a GC bid list for this job bidding 8/10?	GC Bid list cannot be provided



The University of Missouri CP210981-New Indoor Practice Facility 1200 S. Providence Rd., Columbia, MO 65201

161	There is no specification for the Fall Arrest System. However, the Structural drawings mention a Davit System multiple times but give no additional details. Multiple suppliers/subcontractors have stated that a Davit system is not the best system to be used for a Standing Seam Metal Roofing System. Please confirm that it will be acceptable to use the following systems in lieu of the Davit system: a.Guardian System b.KeeLine System	Provide a fall arrest system appropriate with the roofing system indicated with loads imposed to be coordinated with the selected Pre-Engineered Metal Building provider. See added specification section 112429
162	The specs call for exterior painting (099113) that includes Cut Precast, Concrete (including hazard striping), Concrete Masonry Units, Steel and Iron, Galvanized metal, Aluminum (not anodized or otherwise coated). In a previous RFI question #075, we were told to refer to sheet A011 but no exterior painting is called out or shown. Can you please provide further clarification for each location called for location and dimension (if needed)?	See specification for items to be painted. See revised sheets issued in Addendum 03
163	2/A503 and 3/A502 shows the continuous air and vapor barrier as well as the 1-1/2" foil-faced polyisocyanurate insulation extending from the bottom of the wall to just above the roof metal deck. Please confirm that the air and vapor barrier as well as the rigid insulation is required behind all facades (concrete curb, brick veneer, metal panels, etc.) and terminates at the metal deck.	In this question, only two of several details are referenced. The wall sections sheets describe the assemblies at various conditions around the building, and the enlarged details are devloped from the wall sections. Unfortunately, your question cannot be answered with a 'yes / no' as it seems to be asked. We suggest careful study of the contract documents to determine limits of any particular material.
164	A431 shows wall sections of the building. It has been brought to our attention by the wall pad manufacturers and installers that the wall pads cannot be installed directly to the shotcrete and CMU walls as shown on details 1 & 2 & 6. They are recommending that the 1-1/2" galvanized pipe fence that is necessary for install of the wall pads and that is shown in details 4&5 extend to all locations where the wall padding is required. Please advise	HOK has no objection to that approach. However, we have designed many projects where wall pad systems as specified for this project are attached directly to a typical 'wall substrate' such as CMU, concrete, plywood, etc.



165	A301 details 1 & 2 calls out for Gypsum Board to be used (at two different locations) but does not clarify the type of Gypsum to be used. Please advise the type of Gypsum board to be used.	See revised drawings issued in Addendum 03.
166	A003 calls out 6 different types of partition. Type S, H, and E are not found on the drawings. Please provide location and dimensions (if any).	If partition types are not tagged in the plans, they are not applicable to the project.
167	Access Doors (083113) are called out in the specs but not shown in the drawings. Please provide locations and Dimension.	The drawings typcially do not show locations of access panels, per say. The number and location would be determined by coordinating the access panel scope with a requirement for access to equipment or services that might be hidden above a ceiling or behind a wall. In our experience, and as an example of what we have seen in the past, the access panel scope might be included with a mechanical or plumbing contractor, since at bid time they would have the best understanding for the access panel scope.