ADDENDUM 02

TO THE

DLR Group 100 East Pine Street Suite 404 Orlando, FL 32801 Phone 407-648-1331 Fax 407-648-1433

PROJECT MANUAL AND DRAWINGS

FOR

January 5, 2021

FLORIDA GATEWAY COLLEGE NEW STEM FACILITY 149 SE COLLEGE PL. LAKE CITY, FLORIDA 32025

DLR Group Project No. 36-17116-00

FOR SEPARATE CONTRACTS

NOTICE TO BIDDERS: The Question and Answer Log is attached for bidders' reference.

NOTICE TO BIDDERS: The Project Manual and Drawings for the above referenced project are hereby amended as follows:

PROJECT MANUAL

ITEM NO. 1 TABLE OF CONTENTS

- a. Division 06: Delete "062023 INTERIOR FINISH CARPENTRY."
- b. Division 08: Add the following:
 - "083324 OVERHEAD COILING FIRE DOORS"
- c. Division 10: Delete "107113 EXTERIOR SUNSHADES."

ITEM NO. 2 SECTION 002600 - PROCUREMENT SUBSTITUTION PROCEDURES

a. Add Section 002600 attached to Addendum 02 dated January 5, 2021. Section was listed in the Table of Contents but inadvertently omitted from Volume 1.

ITEM NO. 3 SECTION 004393 - BID SUBMITTAL CHECKLIST

a. Add Section 004393 attached to Addendum 02 dated January 5, 2021. Section was listed in the Table of Contents but inadvertently omitted from Volume 1.

ITEM NO. 4 SECTION 012300 – ALTERNATES

a. Delete Section in its entirety and substitute Section 012300 attached to Addendum 02 dated January 5, 2021.

ITEM NO. 5 SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION

a. Add Section 013100 attached to Addendum 02 dated January 5, 2021. Section was listed in the Table of Contents but inadvertently omitted from Volume 1.

ADDENDUM 02 Page - 1

ITEM NO. 6 SECTION 014000 - QUALITY REQUIREMENTS

a. Add Section 014000 attached to Addendum 02 dated January 5, 2021. Section was listed in the Table of Contents but inadvertently omitted from Volume 1.

ITEM NO. 7 SECTION 062023 – INTERIOR FINISH CARPENTRY

a. Delete Section 062023 in its entirety.

ITEM NO. 8 SECTION 083324 – OVERHEAD COILING FIRE DOORS

a. Add Section 083324 attached to Addendum 02 dated January 05, 2021.

ITEM NO. 9 SECTION 092400 - CEMENT PLASTERING

a. Section modified to include cement plaster finish. See Section 092400 attached to Addendum 02 dated January 5, 2021.

ITEM NO. 10 SECTION 107113 - EXTERIOR SUNSHADES

a. Delete Section 107113 attached to Addendum 02 dated January 05, 2021.

DRAWINGS

ITEM NO. 11 SHEET CP1.1 - CODE PLAN FIRST LEVEL

- a. Revised misspelling in note regarding fire rating in convenience opening for stair.
- b. Updated extents of fire rating for all primary and secondary structure in convenience opening for stair to include elevator shaft.

ITEM NO. 12 SHEET CP1.2 - CODE PLAN SECOND LEVEL

- a. Revised misspelling in note regarding fire rating in convenience opening for stair.
- b. Updated extents of fire rating for all primary and secondary structure in convenience opening for stair to include elevator shaft.

ITEM NO. 13 SHEET 0.2 – PARTITION TYPES

a. Revised P-type naming nomenclature to match reference floor plans.

ITEM NO. 14 SHEET A1.3 – REFERENCE FLOOR PLAN FIRST LEVEL

- a. Revised keynote regarding exposed column finish.
- b. Added keynote regarding exposed fire-rated column finish.

ITEM NO. 15 SHEET A1.4 - REFERENCE FLOOR PLAN SECOND LEVEL

- a. Revised keynote regarding exposed column finish.
- b. Added keynote regarding exposed fire-rated column finish.

ITEM NO. 16 SHEET A2.4 – LARGE SCALE PLANS

- a. Added countertop material tags.
- b. Added reference detail for casework at countertop.

ITEM NO. 17 SHEET A3.1 – REFLECTED CEILING PLAN FIRST LEVEL

- a. Revised Ceiling Plan Notes.
- b. Revised fixture spacing in soffit across at Study Banquets.

ADDENDUM 02 Page - 2

ITEM NO. 18 SHEET A3.2 - REFLECTED CEILING PLAN SECOND LEVEL

Revised Ceiling Plan Notes.

ITEM NO. 19 SHEET A3.3 - REFLECTED CEILING PLAN DETAILS

- Delete ceiling detail 26.
- b. Revised ceiling detail 31 at Study Banquets.
- c. Revised ceiling details 33 and 36 at Multipurpose Room.
- d. Revised ceiling detail 35 at double soffit condition.

ITEM NO. 20 SHEET A4.1 - ROOF PLAN AND DETAILS

- Added walkway pad locations to roof plan and legend.
- b. Revised Roof Plan Legend to indicate walkway pads and coverboard in roof types.

ITEM NO. 21 SHEET A9.1 – DOOR AND FRAME SCHEDULE & TYPES

- a. Revised door schedule information about fire shutter.
- b. Added missing detail references.

ITEM NO. 22 SHEET A9.3 – INTERIOR DOOR AND FRAME DETAILS

- a. Sheet A9.3 is revised and reissued with Addendum 02 dated January 05, 2021.
- b. Added details for the Overhead Coiling Fire door.

ITEM NO. 23 SHEET A10.2 - SECTION DETAILS

a. Revised windowsill details to show solid surface.

ITEM NO. 24 SHEET A10.5 – GENERAL BUILDING DETAILS

a. Revised Detail 31 to show acoustical sealant.

ITEM NO. 25 SHEET A11.1 - CASEWORK ELEVATIONS

a. Revised Detail 33 to clarify countertop material.

ITEM NO. 26 SHEET A12.0 - FINISH SCHEDULE

a. Revised Room Finish Schedule and General Notes.

END OF ADDENDUM 02

ADDENDUM 02 Page - 3

No.	Spec/Sheet	Question/Clarification	Date	Ву	Response	Ву	ADD
1		Do you have a potential start date for this project?	12/15/2020	Foresight	College is targeting a February board approval of the bids and want construction to start ASAP.	DLR Group	1
2		012100 Allowances is not in the spec book, will this be provided?	12/15/2020	Foresight	This section will be provided as an Addendum.	DLR Group	1
3		Do you have an RFI deadline?	12/15/2020	Foresight	In the Div 1 specs there's a date of 01/07/2021 by 12pm to submit questions by.	DLR Group	1
4		Once RFI's come in, do you have a specific form, or we can use our own RFI Log to send your way?	12/15/2020	Foresight	This is the format for the Pre-Bid Q&A. Two addendums will be issued.	DLR Group	
5		Are you the contact to send any RFI's?	12/15/2020	Foresight	Yes, but copy Misty Taylor(misty.taylor@fgc.edu), (Danny Kail (danny@kailpartners.com) and Arlenne Gil (agil@dlrgroup.com) as well.	DLR Group	1
6		Can you clarify the lab casework is in our scope of work and not purchased by the Owner.	12/16/2020	Foresight	Per General Notes on drawings (A2.1), Owner will procure the Lab Casework and Equipment indicated as Owner Furnished, Contractor Installed. Contractor should request Casework and Equipment shops from the owner for coordination with other subs. Updated in Addendum 02: Lab Casework/Casework will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	CRB	1
7		Do you have specifications on the lab casework?	12/16/2020	Foresight	See Response to note 6.	CRB	1
8		A1.1 & A1.2 have Note #3 for "Automatic vertically retractable acoustical wall." Location not shown on drawings, can you please clarify?	12/17/2020	Foresight	There is no Automatic vertically retractable wall. This note should have been deleted.	DLR Group	1
9		Please provide specs for 064000 – Wood veneer casework, 123200 – Plam casework as well as all the Lab equipment such as Fume Hoods, peg boards, google cabinets, flammable & acid storage cabinets, etc.	12/17/2020		064116 Plastic Laminate Clad Architectural Cabinets spec section has been provided in Addendum 01. Addendum 02: Lab Casework, Fume Hoods, Peg Boards, Goggle Cabinets, Flamable& ACid Storage Cabinets will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	DLR Group	1
10		For controls, are KMC, JIC, or Automated approved equals?	12/17/2020	Foresight	TLC has confirmed with FGC – No, KMC, JIC and JCl are not approved alternate building automation vendors for this project. Please provide BAS controls per specifications.	TLC Engineering	1
11	107113	Are the aluminum canopies above the south and west entrances to be the C.R. Laurence sunshades per spec section 107113? If not, where are these sunshades located and are there any pre approved manufacturers for these aluminum canopies?	12/22/2020	Scherer Construction	Spec Section 107113 Exterior Sunshades has been removed. We no longer have Sunshades on the project.	DLR Group	2
12		Is there a basis of design for the Door 108A Fire Shutter?	12/22/2020	Scherer Construction	Spec Section 083324 Overhead Coiling Fire Doors have been added. In addition, details have been added to sheet A9.3.	DLR Group	2
13	A2.3	A2.3 lists the Cold Storage as CFCI. However, the remarks state by Nycom. If the Cold Storage is to be CFCI. Can you please provide a specification for pricing?	12/22/2020	Scherer Construction	CDS-01 COLD ROOM should read OFCI. Cold Room to be Owner Furnished and Non-mechanically installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical and Plumbing Connections.	CRB	2
14		Is there a Survey available? If so, can you please forward it to us?	12/22/2020	Scherer Construction	A CAD file of the survey has been provided in Addendum 02	NFPS	2
15		The Bid Submittal Checklist was not included in the specifications. Can you please forward it to us?	12/22/2020	Scherer Construction	004393 Bid Submittal Checklist added along with Attachment 10.	DLR Group	2
16	A1.1, A1.2	A1.1 & A1.2 legend notes are not populated on the plans. Can you please clarify where these items occur?	12/22/2020	Scherer Construction	In Addendum 01, notes on A1.1 and A1.2 have been adjusted.	DLR Group	1
17		Civil - some existing contour lines do not have elevation labels. Please provide elevations.	12/22/2020	Scherer Construction	See provided survey. NFPS (Civil) does not modify, nor add to a certified survey.	NFPS	2
18		The parking lot that the new sidewalk ties in to on the South side of the building does not have any elevation information. Please provide elevation information.	12/22/2020	Scherer Construction	See detail 7 on sheet C8.	NFPS	2
19		Please provide elevation information on the sidewalk where it ties in to the existing parking lot.	12/22/2020	Scherer Construction		NFPS	2
20		A2000 pvc is not readily available in our area. Is SDR35 PVC or HDPE acceptable as an alternate?	12/22/2020	Scherer Construction		NFPS	2
21		There are six locations where 6" storm pipe is stubbed out on the North and South side of the building. Are these for internal roof drains or downspouts? If downspouts please provide a connection detail.	12/22/2020	Scherer Construction		TLC Engineering	2
22		The Chilled Water line layout does not match between drawings C6.0 and M1.1. If M1.1 is correct layout, please provide a distance to existing tie-in.	12/22/2020	Scherer Construction	TLC Response: Reference note 5/M1.1 requires the contractor to filed verify the existing CHW Mains location and final pipe routing. (Design drawings are design intent, not shop drawings.) TLC also notes that the pre-engineered underground piping is to be a pre-engineered (delegated design) piping system, coordinated with all utilities and existing conditions, refer to Reference note 15/M1.1.	TLC Engineering	2

Question and Answer Log

No.	Spec/Sheet	Question/Clarification	Date	Ву	Response	Ву	ADD
23		Is there a specified product/manufacturer for exterior Factory Finished Metal Panels MP-01 and	10/00/0000	0.1. 0. 1. 1.	Spec Section 074213, 2.2.B and 2.2.C specifies MP-01 and MP-02.	DLR Group	2
		MP-02?	12/22/2020	Scherer Construction	Pavers approved to be Belgrade "Holland Stone", 4x8x2 3/8" (60mm). These		
					are in lieu of the 4x8x4 (100mm) size. Refer to Section 321410-Pavers-		
24	Landscape/ Hardscape				Addendum 2 - 01-05-2021. Specified brick link:	J. Randolph	2
	Turuscupe	Please provide a manufacturer for brick paver, supplier is unaware of a 4x8x4 paver with zero	10/00/0000	0-1			Į.
		bevel. Please confirm that concrete sand setting bed (per ICPI guidelines) is acceptable substitute to	12/22/2020	Scherer Construction	http://www.belgard.com/products/pavers/holland-stone		
25		crush concrete setting bed. Manufacturers adhere to ICPI guidelines and a crush concrete will			Spec Section 321410 Pavers, 2.1 Bedding and Joint Sands provides direction	J. Randolph	2
		void warranties.	12/22/2020	Scherer Construction	for sand setting bed.	·	
26	095100 /A12.0	The Acoustical Ceilings specifications, Section 95100, page 3, paragraph 2.1, line A1, calls out the manufacturers of the ceiling tile and says to "See material list on sheet A12.0", but the Finish			Tegular Edge throughout. Square Edge in Restroom. Finish Legend on A12.0	DLR Group	2
20	095100/A12.0	Legend, on sheet A12.0, calls out the size and the Type of ceiling tiles to be used, but it does not			has been updated.	DER Group	2
		clarify as to whether or not the ceiling panels are a square edge or a reveal edge. Please clarify.	12/22/2020	Scherer Construction			
	230900	The specification for the HVAC controls lists Siemens or equal. Please confirm if KMC, JIC, or			TLC has confirmed with FGC - No, KMC, JIC and JCI are not approved alternate		
27		Automated are approved equals.	12/24/2020	Scorpio	building automation vendors for this project. Please provide BAS controls per specifications. (Duplicate of Pre-Bid RFI #10)	TLC Engineering	1
28	A9.1	The door schedule on A9.1 shows a coiling fire door but there is no specification, manufacturer, or model #. Please provide what coiling fire door is required.	12/24/2020	Scorpio	See Response to item 12.	DLR Group	2
29	102800	Please confirm if any of the toilet accessories are OFCI.	12/24/2020	Scorpio	All toilet accessories are CPCI. Owner will not be providing any of these items. Basis of Design is the desired standard for the Owner.	DLR Group/FGC	2
	A2.3	Please provide the manufacturer and model for the walk-in cooler.			CDS-01 COLD ROOM should read OFCI. Cold Room to be Owner Furnished and		
30			12/24/2020	Scorpio	Non-mechanically installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical and Plumbing Connections.	CRB/Nycom	2
31		Is there an existing access control system on campus that this building will tie into?	12/24/2020	Scorpio	Yes. Connection will be via fiber that is already indicated.	TLC Engineering	2
		Please provide a specification for the casework that is CFCI.					
					Lab Casework/Casework will be Owner Furnished and non-mechaincally		
32			12/24/2020	Scorpio	installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections. A sample cutsheet of Pre-wired and Pre-piped has been provided in Addendum 02.	CRB/Nycom	2
33	A1.1, A1.2	Note #3 on the dimensioned floor plans call for an Automatic Vertically Retractable Acoustical Wall, though it does not seem to be located on the plans. Please clarify the location of this wall. 03	12/24/2020	Scorpio	In Addendum 01, notes on A1.1 and A1.2 have been adjusted.	DLR Group	1
34	A12.0	There are solid surface panels listed in the finish legend but not shown in the finish schedule. Are they required anywhere?	12/24/2020	Scorpio	Solid surface in shown in Casework Elevations and Interior Elevations on A11.1 and A12.1. It is also required on window sills. Typ. Window Sill details have been updated on A10.2.	DLR Group	2
35	087113	There is not a manufacturer called out for the auto closures. Please advise on the school standard or desired basis of design.	12/24/2020	Scorpio	Section 2.1 of Spec Section 087113 calls for manufacturers/models.	DLR Group	2
36	081100	It is apparent the finish for the aluminum doors (clear anodized) is different than the finish for the frames (dark bronze). Please confirm the desired finish selection.	12/24/2020	Scorpio	Clear Anodize should be the selection for all aluminum frames.	DLR Group	2
37	088000	Oldcastle is not listed as an approved supplier. Please advise if Oldcastle may qualify as an approved substitute manufacturer to Kawneer.	12/24/2020	Scorpio	The question is unclear as in Spec Section 088000 - Glazing, 2.1.2 OldCastle BuildingEnvelope is listed as an approved manufacturer.	DLR Group	2
	075216	Are Firestone or GAF acceptable manufacturers for the roof system?			Please follow Spec Section 012500 Substitution Procedures, if these	Ì	
38			12/24/2020	Scorpio	manufacturers meet the performance criteria outlined in the specifications and meet Florida Product Approval they will be considered.	DLR Group	2
39	C6.0, L1.0, A0.1, E1.0	How many bollards are there at the east sidewalk? The civil utility plan and landscape plan show 6, the architectural site plan shows 2, the electrical site plan shows 4.	12/24/2020	Scorpio	A0.1 is correct. This will be updated and coordinated for Addendum 02.	DLR Group/NFPS/TLC Engineering	2
40	CP1.1, CP1.2	The life safety plans call for all structure in the 1st floor Lobby and 2nd floor Collaboration to have fireproofing/intumescent paint. Please confirm the specific locations of intumescent paint and cementitious fireproofing.	12/24/2020	Scorpio	CP1.1 and CP1.2 clearly denote the area that would require fireproofing and/or intumesecent paint on the exposed finished columns in this area. We have updated notes on A1.1 and A1.2 to reinforce which columns receive intumesecent paint.	DLR Group	2
41	A12.0	On "Finish Sheet" A12.0 it shows Collaboration Rm. 200 as receiving "WC-1" on east wall. On "Finish Floor Plan Sheet" A13.2 it shows "WC-2" on the west wall but does not show on any "WC-1." Please advise if in fact any "WC-1" is required in this area and the location.	12/24/2020	Scorpio	See updated Room Finish Schedule. Finish plans supercedes the Room Finish Schedule.	DLR Group	2

No.	Spec/Sheet	Question/Clarification	Date	Ву	Response	Ву	ADD
42	C6.0	What are the sizes of the existing chilled water pipes?	12/24/2020	Scorpio	TLC Response: Reference note 5/M1.1 requires the contractor to field verify the existing CHW Mains location and final pipe routing. (Design drawings are design intent, not shop drawings.) TLC also notes that the pre-engineered underground piping is to be a pre-engineered (delegated design) piping system, coordinated with all utilities and existing conditions, refer to Reference note 15/M1.1. Per a 1989 Utility study provided by FGC, TLC inderstans the existing CHW underground line is 8". See 1989 Utility study.		2
43	C6.0, M1.1	Neither the Utility Plan C6.0 nor the Mechanical First Floor Plan M1.1 show the location of the existing chilled water lines to tie into. Please provide locations.	12/24/2020	Scorpio	TLC Response: Reference note 5/M1.1 requires the contractor to field verify the existing CHW Mains location and final pipe routing. (Design drawings are design intent, not shop drawings.) TLC also notes that the pre-engineered dunderground piping is to be a pre-engineered (delegated design) piping system, coordinated with all utilities and existing conditions, refer to Reference note 15/M1.1. Per a 1989 Utility study provided by FGC, TLC understands the existing CHW underground line is 8". See 1989 Utility study.		2
44	002113	The project documents provide a date for substantial completion but not a start date. When is the Notice to Proceed anticipated to be provided?	12/24/2020	Scorpio	Reference response to item no. 1.	DLR Group	1
45	012300	Please confirm the location of the alternate aluminum canopy listed in the Alternates spec section.	12/24/2020	Scorpio	Section 012300 Alternates is reissued with Addendum 02	DLR Group	2
46	075216	Walkway pads are listed in the roofing specification but locations are not shown on the roof plan. If required, please indicate where they are to be installed.	12/24/2020	Scorpio		DLR Group	2
47	062023	The Interior Finish Carpentry specification calls for "Standing and Running Trim," Hardwood Plywood and Face Veneers," and "Wood Inserts at Steel Columns." I could not locate these on the plans. Please confirm locations.	12/24/2020	Scorpio	Spec Section 062023 Interior Finish Carpentry has been removed. No scope remains in this spec section.	DLR Group	2
48	A2.3	The equipment list on sheet A2.3 lists CDS-01 COLD ROOM as CFCI. Please provide a product specification or an amount to include as an allowance.	12/24/2020	Scorpio	CDS-01 COLD ROOM should read OFCI. Cold Room to be Owner Furnished and Non-mechanically installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical and Plumbing Connections.	CRB/Nycom	2
49	A2.1	Note #1 on A2.1 says to refer to lab casework shop drawings for additional pricing. Please provide these shop drawings.	12/24/2020	Scorpio	Lab Casework/Casework will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	CRB/Nycom	2
50	A11.7	Multiple notes state the lab casework is OFCI. There are also notes stating that a casework schedule is located on A11.7. Sheet A11.7 shows casework details but no schedule. Please provide a casework schedule detailing what exactly is OFCI and what is CFCI.	12/24/2020	Scorpio	Lab Casework/Casework will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	CRB/Nycom	2
51	F1.2	Please confirm if a fire protection system is required at the large overhang at the east elevation.	12/24/2020	Scorpio	Yes, as it is required by NFPA 13, for complete FP coverage for the building, as required by FP general note #1/FP0.0.	TLC Engineering	2
52	31/A10.5	Detail 31/A10.5 shows "continuous hardcoat" installed. Please clarify what this is.	12/24/2020	Scorpio	Detail 31/A10.5 has been updated to show acoustical sealant.	DLR Group	2

No.	Spec/Sheet	Question/Clarification	Date	Ву	Response	Ву	ADD
53	31/A3.1	Detail 31/A3.3 is calling for GYB and maple veneer plywood at the ceiling. Does the maple veneer cover the entirety of the GYB or only sections of it? There are lines drawn across the detail that could be edges of the plywood.	12/24/2020	Scorpio	The ceiling in this area is GWB, painted. This detail has been updated for Addendum 02.	DLR Group	2
54	M1.1/232113	Sheet M1.1, reference note #15 reads to be in conflict with 232113 Hydronic Piping, 2.3 Prefabiracted Underground Piping. What piping materials is to be used for the underground cilled water piping?	12/28/2020	Foresight	Base proposal for undergroung chilled water piping, shall be pre-engineered pre insulated HDPE/HDPE Fusion welded CHW system per Reference note #15/M1.1. Contractor may provide a alternate deduct to utalize welded schedule 40 steel carrier pipe with HDPE outer jacket pre-engineered piping systems, in lieu of HDPE/HDPE.	TLC Engineering	2
55		The Underground CHWS&R piping call for expansion loops, and thrust blocks. This usually only applies to underground heating hot water pipe systems. Can the underground chilled water piping mains be installed without the expanson loops in a straight line point to point?	12/28/2020	Foresight	TLC Response: Reference note 15/M1.1 indicates that the underground CHW Piping is a pre-engineered underground CHW piping system that is to be a pre-engineered (delegated design) piping system, coordinated with all utilities and existing conditions, refer to Reference note 15/M1.1 Reference note #16/M1.1 indicates that expansion loops, thrust blocks, and pipe anchors are to be in accordance with pre-engineered piping manufactures installation guidlines and pre-engineered design drawings by them. Provide is required by the pre-engineered design by the manufacture.	TLC Engineering	2
56	064116	064116 Plastic Laminate Clad Architectural Cabinets spec section was provided in Addendum 01 and this led to whether the AWI QCP certification is truly required.	12/23/2020	Foresight	AWI certification will be removed from Spec Section 064116.	DLR Group	2
57		Please confirm that the building permit and plan reviews are by the contractors.	12/29/2020	СРРІ	Per Spec Section 003143, 1.1.C Permit Fees to be paid by Contractor. DOE and AHJ have already reviewed the plans and comments have been addressed in the December 4, 2020 Bid Documents.	DLR Group	2
58	004393	Spec Section 004393 Bid Submittal Checklist is missing from the specifications. Please provide this spec section so it is clear what documents are required to be submitted with the bid.	12/29/2020	CPPI	The Bid Submittal Checklist has been provided in Addendum 02 along with Attachment 10.	DLR Group	2
59		Are either Johns Manville or Firestone acceptable substitute products for the roofing material? If so, please specify which products should be used.	12/30/2020	Foresight	We have provided three manufacturers with ample coverage of roofing sub- contractors for this project. The client has expressed a preference, which was the Basis of Design, but reviewed and approved Soprema and Tremco.	DLR Group	2
60	062023	Please provide information on wood inserts for steel columns, as referenced by spec section 062023, part 1.1.A.4 and A1.3 legend #3 alludes to this possibly, nut no other info has been found.	12/30/2020	Foresight	Spec Section 062023 Interior Finish Carpentry has been removed. No scope remains in this spec section. Legend #3 on A1.3 and A1.4 refers to exposed steel columns, not wood inserts.	DLR Group	2
61	A3.3	Please provide a cross section/more information on the plywood called for in detail 31 on page A3.3	12/30/2020	Foresight	Plywood has been removed, see updated detail 31/A3.3.	DLR Group	2
62		Many lab casework/casework subcontractors have declined to bid on installation only of the Kewaunee products. There is not a good way to services or warranty an item provided by owner in this case. Please provide a list of contractors approved by FGC to install these OFCI products.		Foresight	Lab Casework/Casework will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	CRB/Nycom	2
63	081000	Is Allegion an approved equal to the specified Assa Abloy door hardware? Attached is a formal substitution request.	12/31/2020	Scherer Construction		DLR Group/FGC	3
64		Please confirm if GAF products can be used in lieu of Siplast for the SBS Modified Bitumen Roofing System.	12/31/2020	Scherer Construction	We have provided three manufacturers with ample coverage of roofing sub- contractors for this project. The client has expressed a preference, which was the Basis of Design, but reviewed and approved Soprema and Tremco.	DLR Group	2
65	A11.7	There are requests for alternates within the plans (A11.7, M5.1, & M7.3) These alternates are not noted in section 012300. Do you want the General Contractor to provide the alternates listed within the plans?	12/31/2020	Scherer Construction	Alternates on A11.7 are Lab Casework/Casework furnished by the Owner. Alternates referenced on M5.1 have been added to the Schedule of Alternates in spect section 012300. Could not locate any alternates called out on M7.3.	CRB/TLC	2
66	051200	There is conflicting language regarding the AISC Certification. Note 1 under "Notes to GC & Owner" per Sheet S1.2 highly recommends a selection of an AISC Certified fabricator. However, <u>Spec Section 051200-2.1 Acceptable Fabricators</u> states that AISC Certification or independent certification in accordance with AISC is <u>required</u> for fabrication. Please clarify if there is an AISC Certification / independent certification requirement for fabrication and/or erection.	12/31/2020	Scherer Construction	BBM Reply: There is no conflict. The option to use a Non-AISC certified fabricator is given, although we recommend that an AISC certified fabrication be used.	ввм	2
67		Please clarify that all of the laboratory casework is sole sourced by Kewaunee and is to be contractor furnished and contractor installed. The equipment list per A2.1 only specifies equipment, there is no information on who's providing casework.	12/31/2020	Scherer Construction	Lab Casework/Casework will be Owner Furnished and non-mechaincally installed by Owner. General Contractor is responsible for all Final Mechanical, Electrical, and Plumbing Connections.	CRB/Nycom	2
68		Please provide material for the men's and women's restroom countertops that contain double sinks per detail	12/31/2020	Scherer Construction	Refer to updated restroom elevation on A2.4 and updated detail in A11.1.	DLR Group	2
69	T6.1	On page T6.1, detail #2 shows a 24 strand multimode fiber between MDF158 and IDF261 on 1st and 2nd floors, but singlemode fiber is being installed to the building. Please confirm this detail should show Singlemode and we are not to install multimode fiber.	12/31/2020	Scherer Construction		TLC Engineering	3

Question and Answer Log

No.	Spec/Sheet	Question/Clarification	Date	Ву	Response	Ву	ADD
70	T6.1	On page T6.1, Detail #2 doesn't show how many strands of fiber are to be installed between Building #15 and MDF 158 or Building #7 and MDF 158. Please clarify.	12/31/2020	Scherer Construction		TLC Engineering	3
71	T6.1	On Page T6.1, Detail #1 calls for the fiber to be blown back to the manhole and fusion spliced. This fiber is meant to be blown in and out of the tube. The fiber should be blown out all the way to building #7 and reinstalled after the slab is done, doing away with the need to be spliced.	12/31/2020	Scherer Construction		TLC Engineering	3
72	T1.0	T1.0 detail from existing telecomm manhole to building calls for (6EA) airblown fiber 1 1/2" microducts. The specified product comes in a tube that has 2,4, 7 or 19 tubes inside of it. Please confirm (7EA) is acceptable.	12/31/2020	Scherer Construction		TLC Engineering	3
73	092400	Please confirm desired finish for cement plaster. Spec section 092400 Page 3, Section F.1a states to refer to painting specs for coating scope and product info. However, spec section 09900 contains no information for it. Please clarify.	12/31/2020	Scherer Construction	Finish and Coatings have been updated in this spec section to reflect the Integrally Colored and Finish system within Parex DPR product.	DLR Group	2
74		Are any alternates or substitutions to Parex USA, Inc. for EIFS being considered at this time?	12/31/2020	Scherer Construction	Other Continous Insulation Stucco system providers will be acceptable. Contractor shall verify the components of meet the intent of the details and specified performance.	DLR Group	2
75		Spec Section "06-2023 Interior Finish Carpentry" calls for Painted standing and running trim and hardwood plywood and face veneers, although it is not indicated on the drawngings, please clarify.	12/31/2020	Scherer Construction	Spec Section 062023 Interior Finish Carpentry has been removed. No scope remains in this spec section.	DLR Group	2
76		Please confirm if there are any alternative manufacturers for the modular metal wall and ceiling system.	12/31/2020	Scherer Construction	Longboard 4* V-groove, tongue and groove system. Finish to be selected from available finishes during submittals: https://www.longboardproducts.com/available-finishes. Contractor must verify all Florida Product Approval is updated and accurate.	DLR Group	2
77		Please clarify where the staging/layout area will be located.	12/31/2020	Scherer Construction	The parking lot directly south of the site will be closed by the college for the duration of construction and will be used for staging and access to the site.	FGC	2
78		Spec Section 014000 Quality Requirements are not included, can this be provided?	1/5/2021	Foresight	This section has been provided in Addendum 02.	DLR Group	2
79		On page A4.1, RF-2 lists coverboard with a question mark. Please confirm that ½" coverboard will be necessary and sufficient.	1/5/2021	Foresight	1.2" coverboard is required and RF-2 has been updated in Addendum 02.	DLR Group	2
80		The roofing specs call for walkway pads, which are not shown on the roofing plan. Please confirm that this is an extraneous spec.	1/5/2021	Foresight	A4.1 has been updated with walkway pads and provided in Addendum 02.	DLR Group	2
81		The roofing specs call for gutters and downspouts, but none are depicted on the plans. Please confirm that this is an extraneous spec.	1/5/2021	Foresight	Per Keynote 01 on A4.1, there is a downpout at the back stair canopy. Downspout is also called out in Exterior Elevations 31/A5.1 and 45/A5.1.		
82		Per page M1.1 note 15 does not match spec section 232113-4. Are we to go by plans or specs?	1/5/2021	Foresight		TLC Engineering	3
83		Commisioning Specification - Code Commisioning Agent	1/5/2021	N/A		TLC Engineering	3



Pre-wired and Pre-piped

Specifications:

Pre-wired — All Supreme Air Fume Hoods may be Pre-wired at the factory. Pre-wired hoods are wired using flexible metallic conduit to a single junction box located at the top of the hood for a single point connection at the job site. UL listing is available on standard pre-wired configurations. Contact Kewaunee's Engineering Department for nonstandard electrical requirements.

A "U" option must be selected for fume hoods to be UL 61010A-1 listed.

Pre-piped — In addition all Venturi Fume Hoods may Pre-piped at the factory when pre-piped fittings are selected. Piping is routed to the rear of the hood, in the side of the hood that the fittings are mounted. (If fittings are mounted in both ends, there are two connection points.)

Piping may be routed either to the top or bottom of the hood as specified.

Standard 3/8" Piping Materials

Water — Hard Drawn Type L Copper

Gas — Black Steel

Vacuum — Hard Drawn Type L Copper

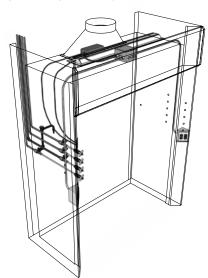
Air — Hard Drawn Type L Copper

DI Water— PVC

Other — Hard Drawn Type L Copper (Copper connections made with lead free solder, black steel connections are threaded)

Typical Walk-In Hood

(Piped to top of hood)

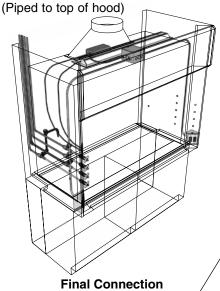


Typical Fume Hood with Plumbing & Wiring Connections

(Piped to bottom of hood)

Wiring and Junction Box **Piping to Service Fittings** by Kewaunee by Kewaunee when Pre-wiring specified when Pre-piping specified **24VDC Power Supply** and wiring to light controller by Kewaunee **Electrical Boxes** and Devices furnished and installed by Kewaunee **Service Fittings and Valves** furnished and installed by

Typical Bench Hood



supplied and connected by others

Supply Lines with shut-off valves

supplied and connected by others

Kewaunee or as specified (typical for both sides of hood)

DOCUMENT 002600 - PROCUREMENT SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted *prior* to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award. See Section 012500 "Substitution Procedures" for conditions under which Substitution requests will be considered following Contract award.

1.2 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products, materials and all performance criteria outlined in specifications. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by Architect; otherwise requests will be returned without action:
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.
 - 3. The request is fully documented and properly submitted.

1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to Architect. Procurement Substitution Request must be made in writing by prime contract Bidder only in compliance with the following requirements:
 - 1. Requests for substitution of materials and equipment will be considered if received no later than 10 business days prior to date of bid opening.
 - 2. Submittal Format: Electronically Submit PDF copies of each written Procurement Substitution Request, using CSI Substitution Request Form 1.5C.
 - a. Provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
 - b. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the Procurement Substitution Request.

B. Architect's Action:

- 1. Architect may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. Architect will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.
- C. Architect's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

END OF DOCUMENT 002600

DOCUMENT 004393 - BID SUBMITTAL CHECKLIST

1.1	BID INFORMATION
A.	Bidder:
B.	Prime Contract:
C.	Florida Gateway College STEM Facility
D.	Lake City, Florida.
E.	Florida Gateway College.
F.	Owner Project Number: 21-1-01
G.	DLR Group.
Н.	Architect Project No. 36-17116-00.

1.2 BIDDER'S CHECKLIST

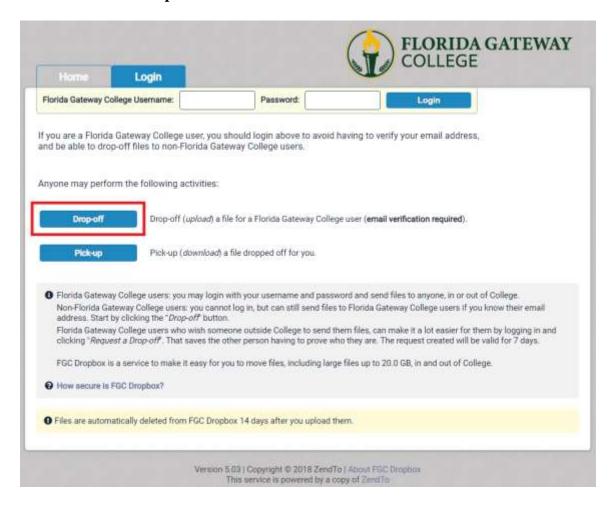
- A. In an effort to assist the Bidder in properly completing all documentation required, the following checklist is provided for the Bidder's convenience. The Bidder is solely responsible for verifying compliance with bid submittal requirements.
- B. Bid Proposals with all items related thereto, shall be electronically submitted to the FGC Dropbox. Instructions on submitting Bid Proposals to the FGC Dropbox are listed in Attachment 10.
 - 1. Used the Bid Form provided in the Project Manual.
 - 2. Prepare the Bid Form as required by the Instructions to Bidders.
 - 3. Indicate on the Bid Form the Addenda received.
 - 4. Attached to the Bid Form: Bid Supplement Form Allowances.
 - 5. Attached to the Bid Form: Bid Supplement Form Unit Prices.
 - 6. Attached to the Bid Form: Bid Supplement Form Alternates.
 - 7. Attached to the Bid Form: Proposed Schedule of Values Form.
 - 8. Attached to the Bid Form: Florida Trench Safety Act Sworn Statement.
 - 9. Attached to the Bid Form: Drug-Free Workplace Program Statement.
 - 10. Attached to the Bid Form: Bid Bond OR a certified check for the amount required.
 - 11. Verified that the Bidder can provide executed Performance Bond and Labor and Material Bond.
 - 12. Verified that the Bidder can provide Certificates of Insurance in the amounts indicated.

END OF DOCUMENT 004393

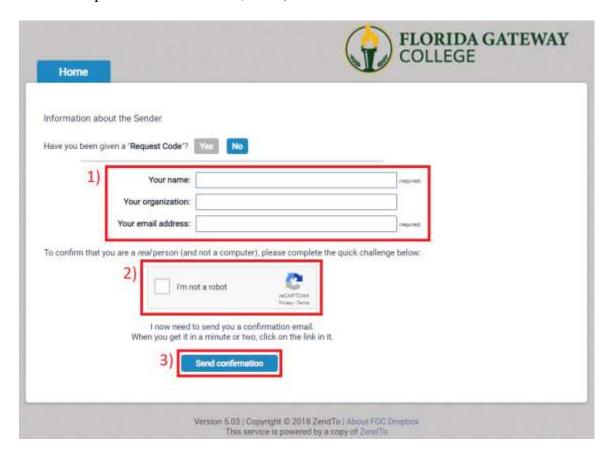
ATTACHMENT NO. 10

Submitting Bid Proposals via FGC Dropbox

- 1. In a web browser, navigate to https://dropbox.fgc.edu/.
- 2. Click the **Drop-off** button.



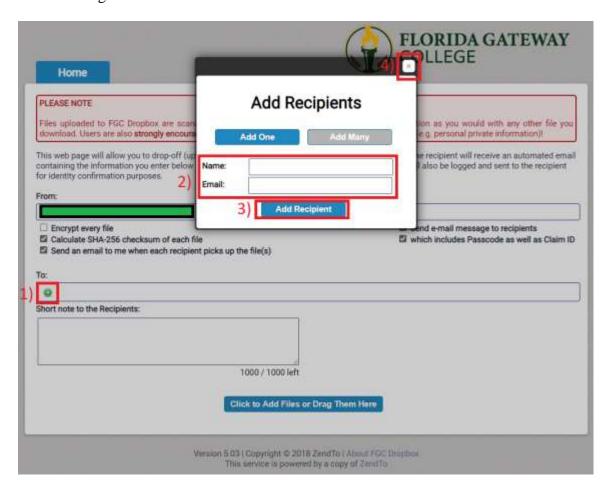
3. On the page that follows, 1) enter your name, organization, and email address; 2) complete the reCAPTCHA; and 3) click the **Send confirmation** button.



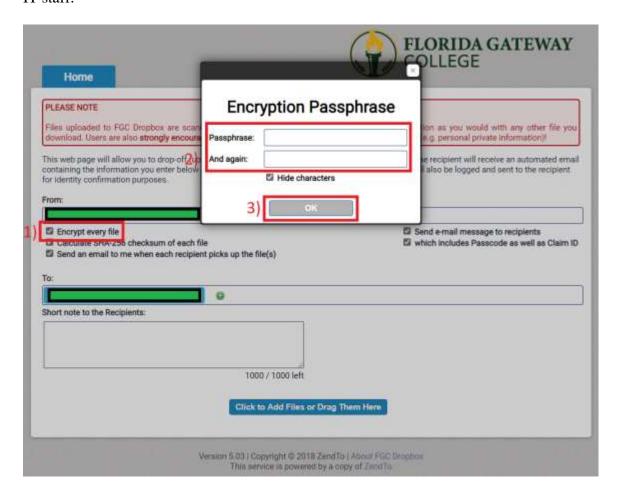
4. You will receive an email like the one below at the address you specified in the previous step. Navigate to the link provided in the email.



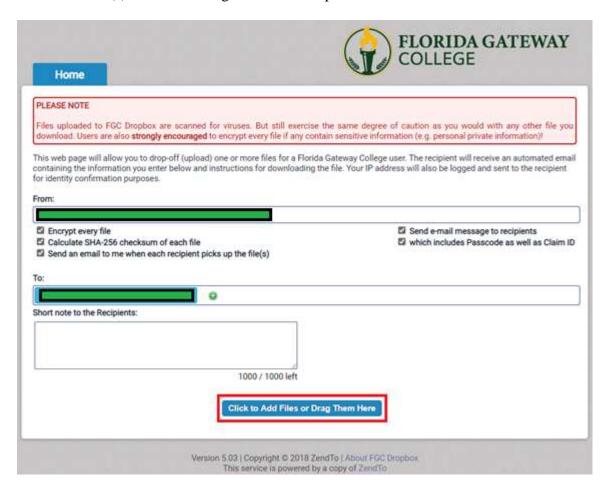
5. On the linked page, 1) click the add button (green and white plus sign); 2) enter the recipient's information. Name: Misty Taylor Email: misty.taylor@fgc.edu; and 3) click the Add Recipient button; and 4) click the close button on the Add Recipients modal dialog.



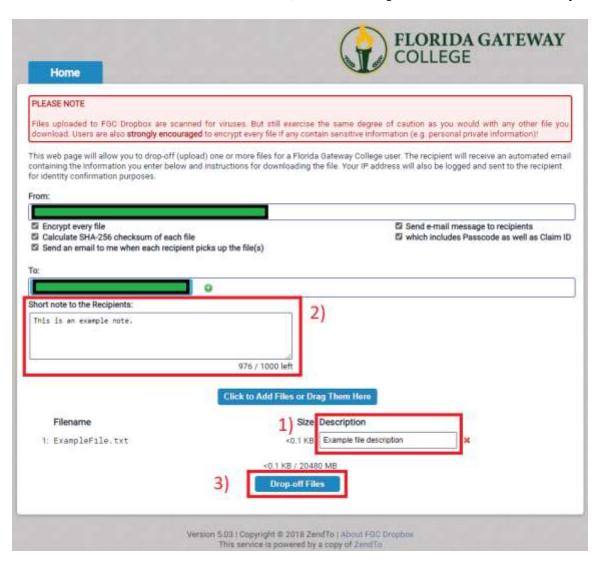
6. **IMPORTANT:** To provide assurance that the submitted files cannot be opened except by College personnel at the appropriate time, 1) check the **Encrypt every file** checkbox; 2) carefully enter a secure passphrase; and 3) click the **OK** button. You *MUST* be able to provide the passphrase to College personnel at the appropriate time (when your files are being reviewed). Without the passphrase, the files *cannot* be retrieved, even by College IT staff.



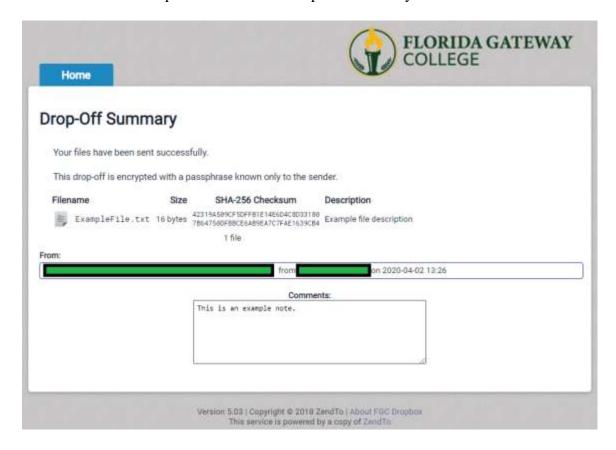
7. Upload the desired file(s) to be submitted. Either drag-and-drop the file(s) into the browser window or click the **Click to Add Files or Drag Them Here** button and select the file(s) from the dialog window that opens.



8. After uploading your files, 1) Enter a brief description of each item. 2) Type your organization's name and ITB 21-1-01 NEW STEM FACILITY, BID OPENING, JANUARY 15, 2021. When done, 3) click the **Drop-off Files** button to submit your files.



9. You will then be presented with the Drop-Off Summary.



SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

ALTERNATES 012300 - 1

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 01 – Variable Discharge Nozzles

- 1. Base Bid: CV LEFs with the VFD, without the variable Discharge Nozzles as referenced on M5.1.
- 2. Alternate: Variable Discharge Nozzles for each LEF Fan and its associated controls as referenced on M5.1

B. Alternate No. 02 – Boiler #2

- 1. Base Bid: Shall be one boiler system with coordinated isolation valves and blind flanges, and local disconnects for the second boiler as referenced on M5.1.
- 2. Alternate: Boiler #2 and its associated controls, piping, drains, electrical from the local disconnects, VFD, insulation, pump trim, HK pads, supports, start-up and T&B for complete second back-up boiler as referenced on M5.1.

C. Alternate No. 03 – HHWP-2

- 1. Base Bid: Shall be one HHW Pump system with coordinated isolation valves and blind flanges, and local disconnects for the second HHW pump as referenced on M5.1.
- Alternate: HHWP #2 and its associated controls, piping, drains, electrical from the local disconnects, VFD, insulation, pump trim, HK pads, supports, start-up and T&B for complete second back-up HHWP pump as referenced on M5.1.

D. Alternate No. 04 – CHWP-2

- 1. Base Bid: Shall be one CHW Pump system with coordinated isolation valves and blind flanges, and local disconnects for the second CHW pump as referenced on M5.1.
- 2. Alternate: CHWP #2 and its associated controls, piping, drains, electrical from the local disconnects, VFD, insulation, pump trim, HK pads, supports, start-up and T&B for complete second back-up CHWP pump as referenced on M5.1.

A. Alternate No. 01 Canopy over exterior doors at the Active Classrooms

- 1. Base Bid: No Canopy of exterior doors at the Active Classrooms, all other canopies over exterior doors into utility spaces.
- 2. Alternate: Canopy of exterior doors at the Active Classrooms as noted in the drawings.

END OF SECTION 012300

ALTERNATES 012300 - 2

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. RFIs.
 - 4. Digital project management procedures.
 - 5. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

C. Related Requirements:

- 1. Section 011200 "Multiple Contract Summary" for a description of the division of work among separate contracts and responsibility for coordination activities not in this Section.
- 2. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
- 3. Section 017300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
- 4. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

- A. BIM: Building Information Modeling.
- B. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and scheduled activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.

1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely indicated on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to coordination drawings in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
 - c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - f. Indicate required installation sequences.
 - g. Indicate dimensions shown on Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternative sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 - 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 - 2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within plenums to accommodate layout of light fixtures and other components indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
 - 3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
 - 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
 - 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.

- 6. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
- 7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inches in diameter and larger.
 - b. Light fixture, exit light, emergency battery pack, smoke detector, and other firealarm locations.
 - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor-control center locations.
 - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
- 8. Fire-Protection System: Show the following:
 - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
- 9. Review: Architect will review coordination drawings to confirm that in general the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make suitable modifications and resubmit.
- 10. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 013300 "Submittal Procedures."
- C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
 - 1. BIM File Incorporation: Develop and incorporate coordination drawing files into BIM established for Project.
 - a. Perform three-dimensional component conflict analysis as part of preparation of coordination drawings. Resolve component conflicts prior to submittal. Indicate where conflict resolution requires modification of design requirements by Architect.
 - 2. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
 - b. Digital Data Software Program: Drawings are available in Revit 2018 format for architectural, structural, MEP and Technology. Site Civil and Landscape provided in AutoCAD

c. Contractor shall execute a data licensing agreement in the form of AIA Document C106.

1.7 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Software-generated form with substantially the same content as indicated above, acceptable to Architect.
 - 1. Attachments shall be electronic files in PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
 - 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.

- b. Requests for approval of substitutions.
- c. Requests for approval of Contractor's means and methods.
- d. Requests for coordination information already indicated in the Contract Documents.
- e. Requests for adjustments in the Contract Time or the Contract Sum.
- f. Requests for interpretation of Architect's actions on submittals.
- g. Incomplete RFIs or inaccurately prepared RFIs.
- 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
- 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Owner in writing within 10 days receipt of the response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly and include the following information:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

1.8 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. Use of Architect's Digital Data Files: Digital data files of Architect's BIM model will be provided by Architect for Contractor's use during construction.
 - 1. Digital data files may be used by Contractor in preparing coordination drawings, Shop Drawings, and Project record Drawings.
 - 2. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Contract Drawings.
 - 3. Digital Drawing Software Program: Contract Drawings are available in Revit 2018.

- 4. Contractor shall execute a data licensing agreement in the form of AIA Document C106 Digital Data Licensing Agreement.
 - a. Subcontractors, and other parties granted access by Contractor to Architect's digital data files shall execute a data licensing agreement in the form of AIA Document C106.
- B. Web-Based Project Software: Use Architect's web-based Project software site for purposes of hosting and managing Project communication and documentation until Final Completion.
 - 1. Web-based Project software site includes, at a minimum, the following features:
 - a. Compilation of Project data, including Contractor, subcontractors, Architect, architect's consultants, Owner, and other entities involved in Project. Include names of individuals and contact information.
 - b. Access control for each entity for each workflow process, to determine entity's digital rights to create, modify, view, and print documents.
 - c. Document workflow planning, allowing customization of workflow between project entities.
 - d. Creation, logging, tracking, and notification for Project communications required in other Specification Sections, including, but not limited to, RFIs, submittals, Minor Changes in the Work, Construction Change Directives, and Change Orders.
 - e. Track status of each Project communication in real time, and log time and date when responses are provided.
 - f. Procedures for handling PDFs or similar file formats, allowing markups by each entity. Provide security features to lock markups against changes once submitted.
 - g. Processing and tracking of payment applications.
 - h. Processing and tracking of contract modifications.
 - i. Creating and distributing meeting minutes.
 - j. Document management for Drawings, Specifications, and coordination drawings, including revision control.
 - k. Management of construction progress photographs.
 - 1. Mobile device compatibility, including smartphones and tablets.
- C. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - 3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

1.9 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times a minimum of 10 working days prior to meeting.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within five days of the meeting.
- B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
 - 1. Attendees: Authorized representatives of Owner Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Responsibilities and personnel assignments.
 - b. Tentative construction schedule.
 - c. Critical work sequencing and long lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Use of web-based Project software.
 - g. Procedures for processing field decisions and Change Orders.
 - h. Procedures for RFIs.
 - i. Procedures for testing and inspecting.
 - j. Procedures for processing Applications for Payment.
 - k. Distribution of the Contract Documents.
 - 1. Submittal procedures.
 - m. Preparation of Record Documents.
 - n. Use of the premises
 - o. Work restrictions.
 - p. Working hours.
 - q. Owner's occupancy requirements.
 - r. Responsibility for temporary facilities and controls.
 - s. Procedures for moisture and mold control.
 - t. Procedures for disruptions and shutdowns.
 - u. Construction waste management and recycling.
 - v. Parking availability.
 - w. Office, work, and storage areas.
 - x. Equipment deliveries and priorities.
 - y. First aid.
 - z. Security.
 - aa. Progress cleaning.

- 3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at biweekly intervals.
 - 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.
 - 5) Status of sustainable design documentation.
 - 6) Deliveries.
 - 7) Off-site fabrication.
 - 8) Access.
 - 9) Site use.
 - 10) Temporary facilities and controls.
 - 11) Progress cleaning.
 - 12) Ouality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) Status of RFIs.
 - 16) Status of Proposal Requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.

- 4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- D. Coordination Meetings: Conduct Project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
 - 1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site use.
 - 9) Temporary facilities and controls.
 - 10) Work hours.
 - 11) Hazards and risks.
 - 12) Progress cleaning.
 - 13) Quality and work standards.
 - 14) Status of RFIs.
 - 15) Proposal Requests.
 - 16) Change Orders.
 - 17) Pending changes.

36-17116-00 5 JANUARY 2021 ADDENDUM 02

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

36-17116-00 5 JANUARY 2021 ADDENDUM 02

This page intentionally left blank.

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and quality-control requirements for individual work results are specified in their respective Specification Sections. Requirements in individual Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, Commissioning Authority, Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.
 - 4. Specific test and inspection requirements are not specified in this Section.

C. Related Requirements:

1. Section 012100 "Allowances" for testing and inspection allowances.

1.3 DEFINITIONS

- A. Experienced: When used with an entity or individual, "experienced" unless otherwise further described means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality-Control Tests: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

- C. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- D. Mockups: Full-size physical assemblies that are constructed on-site either as freestanding temporary built elements or as part of permanent construction. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 1. Exterior Mockups: Mockups of the exterior envelope constructed on-site as freestanding temporary built elements or as part of permanent construction, consisting of multiple products, assemblies, and subassemblies and as noted in the construction drawings. Elements include, but not limited to the following:
 - a. Window Head/Jamb/Sill conditions in stucco and metal panel.
- E. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- F. Product Tests: Tests and inspections that are performed by a nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, by a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- G. Source Quality-Control Tests: Tests and inspections that are performed at the source; for example, plant, mill, factory, or shop.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- J. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect or Construction Manager.

1.4 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

1.5 CONFLICTING REQUIREMENTS

- A. Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements are specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for direction before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.6 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups.
 - 1. Include plans, sections, and elevations, indicating materials and size of mockup construction.
 - 2. Indicate manufacturer and model number of individual components.
 - 3. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.
- B. Delegated-Design Services Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.

1.7 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.

- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:
 - 1. Main wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.
- D. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.
- F. Reports: Prepare and submit certified written reports and documents as specified.
- G. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.8 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's Construction Schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
 - 1. Project quality-control manager may also serve as Project superintendent.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.

- D. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
 - 1. Contractor-performed tests and inspections including Subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections. Distinguish source quality-control tests and inspections from field quality-control tests and inspections.
 - 2. Special inspections required by authorities having jurisdiction and indicated on the Statement of Special Inspections.
 - 3. Owner-performed tests and inspections indicated in the Contract Documents, including tests and inspections indicated to be performed by Commissioning Authority.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.9 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, telephone number, and email address of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspection.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.

- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, telephone number, and email address of technical representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, telephone number, and email address of factory-authorized service representative making report.
 - 2. Statement that equipment complies with requirements.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 4. Statement whether conditions, products, and installation will affect warranty.
 - 5. Other required items indicated in individual Specification Sections.

1.10 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspection indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f. When testing is complete, remove test specimens and test assemblies, and mockups do not reuse products on Project.

- 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect and Commissioning Authority, through Construction Manager, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups of size indicated.
 - 2. Build mockups in location indicated or, if not indicated, as directed by Architect or Construction Manager.
 - 3. Notify Architect and Construction Manager seven days in advance of dates and times when mockups will be constructed.
 - 4. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed to perform same tasks during the construction at Project.
 - 5. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 6. Obtain Architect's and Construction Manager's approval of mockups before starting corresponding work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 - 7. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 8. Demolish and remove mockups when directed unless otherwise indicated.

1.11 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspection they are engaged to perform.
 - 2. Payment for these services will be made from testing and inspection allowances, as authorized by Change Orders.
 - 3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
 - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 2. Engage a qualified testing agency to perform quality-control services.

- a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
- 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspection will be performed.
- 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
- 5. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
- 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Testing Agency Responsibilities: Cooperate with Architect, Commissioning Authority, Construction Manager, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect, Commissioning Authority, Construction Manager, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the locations from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform duties of Contractor.
- E. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."
- F. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- G. Associated Contractor Services: Cooperate with agencies and representatives performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.

- 2. Incidental labor and facilities necessary to facilitate tests and inspections.
- 3. Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.
- 4. Facilities for storage and field curing of test samples.
- 5. Delivery of samples to testing agencies.
- 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
- 7. Security and protection for samples and for testing and inspection equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents as a component of Contractor's quality-control plan. Coordinate and submit concurrently with Contractor's Construction Schedule. Update as the Work progresses.
 - 1. Distribution: Distribute schedule to Owner, Architect, Commissioning Authority, Construction Manager, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.
 - 1. Submit log at Project closeout as part of Project Record Documents.

END OF SECTION 014000

This page intentionally left blank.

SECTION 083324 – OVERHEAD COILING FIRE DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes overhead coiling fire doors

1.2 SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory.
 - 1. Include operation and maintenance data for overhead coiling doors to include in maintenance manuals.
 - a. Include spare parts list, together with part numbers and cut sheets for repairs.

B. Shop Drawings

- 1. Show elevations of each door type, shape and thickness of materials, finishes, details of guides and fittings, rough opening dimensions, location of hardware, anchorage and fastening methods, counterbalancing mechanism, and door operator details.
 - a. Include locations of replaceable fusible links on wiring diagrams for power, signal and controls.
- 2. Rated capacities, operating characteristics, electrical characteristics, and furnished accessories
- 3. Diagrams for power, signal, and control wiring
- 4. Show locations of controls, locking devices, detectors, or replaceable fusible links, and other accessories.
- 5. Provide schedule of doors using same reference numbers for details and openings as those on Contract Documents.
- C. Samples: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
- D. Draft copy of Maintenance Agreement
- E. Sample warranty
- F. Spare Parts: Provide Owner with one set of critical parts for each type of door to make emergency repairs.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years' experience in the fabrication and installation of security closures.
- B. Installer Qualifications: An entity that employs installers and supervisors who are certified or otherwise approved by manufacturer for both installation and maintenance of units required for this Project.
- C. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
- D. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at as close to neutral pressure as possible according to NFPA 252 or UL 10B.
- E. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.
- F. Design doors to a standard maximum of an overall maximum of 30,000 operating cycles for the life of the door.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver doors wrapped in a protective covering with the brands and names clearly identified.
- B. Store products in manufacturer's unopened packaging in a dry, warm, ventilated weathertight location until ready for installation.
- C. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

1.5 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's limits.

1.6 WARRANTY

- A. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years.
- B. Warranty: Manufacturer's limited door warranty for 2 years for all parts and components, including helical spring and counterbalance mechanism

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design: Cornell Ironworks, Fire Rated Counter Door with Integral Frame and Sill.
- B. Products of the following manufacturers may also be considered, providing their products equal or exceed the quality specified, and they can provide products of the type, size, function, and arrangement required.
 - 1. Kinnear Division of Marsco Corp.
 - 2. The Cookson Company
 - 3. North American Rolling Door Inc.
 - 4. Atlas Door

2.2 MATERIALS AND CONSTRUCTION

- A. Type: "Fire Door ", Chain or Crank operation.
 - 1. Model: ERD11
 - 2. Rating: 1 hour fire and smoke
- B. Door curtain shall be constructed of interconnected strip steel slats conforming to ASTM A526. The gauge of steel shall be 22 gage, 304 series stainless steel.
 - 1. Smoke Seals: Equip each fire-rated door with replaceable smoke-seal perimeter gaskets or brushes for smoke and draft control as required for door listing and labeling by a qualified testing agency.
- C. Finish: Stainless Steel: type 304 #4 finish
- D. Countertop: Stainless steel: 14 gauge; type 304 #4 finish.
- E. The guide shall consist of 3 stainless steel angles bolted together with 3/8-inch fasteners to form a channel for the curtain to travel. The wall angle portion shall be continuous and fastened to the surrounding structure with minimum 1/2-inch fasteners, on 36-inch centers. Finish: Same as indicated in the curtain.
- F. The brackets shall be constructed of steel not less than 1/4 inch thick and shall be bolted to the wall angle with minimum 1/2-inch fasteners. Finish: Same as indicated in the curtain.
- G. All gears shall be cast iron with teeth cast from machine cut patterns. The pinion gear shall not be less than a 3" pitch diameter. The gear ratio shall be designed for a maximum effort of not more than 30 pounds.
- H. Counterbalance Assembly: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft

and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.

- 1. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than 0.03 in./ft. of span under full load.
- 2. Counterbalance Spring: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.
 - a. Fire-Rated Doors: Equip with auxiliary counterbalance spring and prevent tension release from main counterbalance spring when automatic closing device operates.
- 3. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.
- 4. Brackets: Fabricate from minimum 3/16 inch steel plate with permanently lubricated ball or roller bearings at rotating support points to support counterbalance shaft assembly and form end closures
 - a. Finish: Match door
- I. Hood: 16-gauge stainless steel with reinforced top and bottom edges
 - 1. Finish:
 - a. Stainless Steel: type 304 #4 finish.

2.3 OPERATIONS

- A. Manual Push-up Operation: Conventional spring tension release operating system.
 - 1. Provide bottom bar lift handles and a pull-down with hook.
 - 2. Activate automatic closure by activation of a failsafe release by notification from central alarm system.
 - 3. Maintain automatic closure speed at average of 6"-24" per second.
 - 4. Reset of spring tension, mechanical dropouts or release devices to be completed by only an approved or trained door systems technician.
 - 5. Notify electrical contractor to supply and install the appropriate disconnect switch, all conduit and wiring per the door system wiring instructions.
 - 6. Drop test and reset door system twice by all means of activation and comply filly with NFPA 80, Section 5.

2.4 LOCKING MECHANISMS

A. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
 - 1. Verify conditions are in accordance with approved shop drawings
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the results to meet by Performance Requirements.

3.3 INSTALLATION

- A. Install assemblies to provide a rigid, permanent attachment to the building according to manufacturer's instructions and final Shop Drawings, free of springing, forcing, racking, and distortion.
 - 1. Fire-rated doors: Install in accord with NFPA 80
 - 2. Fasten door guide assemblies to adjacent structure with hot-dip galvanized (in accord with ASTM A153) machine bolts and nuts, or expansion or chemical adhesive anchor bolts to meet Performance Requirements
- B. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- C. Coordinate installation of electrical service with Division 26. Complete wiring from disconnect to unit components.
- D. Coordinate installation of sealants and backing materials at frame perimeter as specified in Division 07 Section, Joint Protection.
- E. Install an additional hood around gears where exposed to view in their final configuration.
- F. Fire-Rated Doors: Install according to NFPA 80.
- G. Smoke-Control Doors: Install according to NFPA 80 and NFPA 105.

3.4 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.

- 1. Perform installation and startup checks according to manufacturer's written instructions.
- 2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.
- 3. Test door closing when activated by detector or alarm-connected fire-release system. Reset door-closing mechanism after successful test.

3.5 ADJUSTING

- A. Adjust hardware and operating assemblies for smooth, free, effortless, and noiseless operation.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide weather-tight fit around entire perimeter.

3.6 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 months' full maintenance by skilled employees of coiling-door Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for door operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
 - 1. Perform maintenance, including emergency callback service, during normal working hours.

3.7 CLEANING

- A. Following completion of installation, including related work by others, lubricate, test, and adjust doors for ease of operation, free from warp, twist, or distortion.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

3.8 PROTECTION

A. Protect installed products until completion of project.

3.9 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate and maintain overhead coiling doors.
 - 1. Demonstrate that doors operate in accordance with the manufacturer's requirements and final Shop Drawings
 - 2. Verify operating controls, manual controls, bypass and safety devices are operating

FLORIDA GATEWAY COLLEGE NEW STEM FACILITY LAKE CITY, FLORIDA 36-17116-00 5 JANUARY 2021 ADDENDUM 02

END OF SECTION 083324

SECTION 092400 - CEMENT PLASTERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Exterior vertical plasterwork (stucco).
 - 2. Exterior horizontal and nonvertical plasterwork (stucco).

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site. | < Insert location >.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations and installation of control and expansion joints, including plans, elevations, sections, details of components, and attachments to other work.
- C. Samples: For each type of factory-prepared finish coat and for each color and texture specified.

1.5 OUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Build mockups for each substrate and finish texture indicated for cement plastering, including accessories.
 - a. Size: 100 sq. ft. in surface area.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store materials inside under cover and keep them dry and protected against damage from weather, moisture, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.

1.7 FIELD CONDITIONS

- A. Comply with ASTM C926 requirements.
- B. Exterior Plasterwork:
 - 1. Apply and cure plaster to prevent plaster drying out during curing period. Use procedures required by climatic conditions, including moist curing, providing coverings, and providing barriers to deflect sunlight and wind.
 - 2. Apply plaster when ambient temperature is greater than 40 deg F.
 - 3. Protect plaster coats from freezing for not less than 48 hours after set of plaster coat has occurred.
- C. Factory-Prepared Finishes: Comply with manufacturer's written recommendations for environmental conditions for applying finishes.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer, Basis of Design: Parex USA, Inc., 4125 E. La Palma Ave., Suite 250, Anaheim, CA 92807 Contact: Architectural Sales (866.516.0061) or Technical Support (800.226.2424).
- B. Components: Obtain components manufactured by Parex USA of Parex Armourwall 300 WaterMaster CI Stucco System from authorized distributors. No substitutions or additions of other materials are permitted without prior written permission from Parex USA for this project.

2.2 MATERIALS

- A. Water-Resistive & Air Barrier over Sheathing:
 - 1. Parex USA WeatherSeal Spray & Roll-On water-resistive barrier coating. Two coats may be required on plywood and OSB.
 - 2. Parex USA WeatherSeal Trowel-On water-resistive barrier coating: 100% acrylic, non-cementitious, trowelable water-resistive and air barrier.
- B. Stucco Base Coat (3/8 in 1/2 in per coat):
 - 1. Parex Fiber 47 Armourwall Scratch and Brown Base Concentrate: Proprietary mixture of portland cement and proprietary ingredients mixed with clean, cool, potable water, and ASTM C897 or ASTM C144 sand added in the field.

C. Leveling and Reinforcing Coat:

- 1. Parex 121 Base Coat: 100% acrylic polymer base, requiring the addition of portland cement.
- 2. Parex USA Reinforcing Meshes:
 - a. Parex USA Stucco Mesh: Weight 4.5 oz/yd2 (153 g/m2) reinforcing mesh.

D. Expanded Polystyrene Features over Stucco:

- 1. Adhesive and Base Coat
 - a. Parex 121 Dry Base Coat & Adhesive: Copolymer based, factory blend of cement and proprietary ingredients requiring addition of water.
 - b. Parex 121 Base Coat & Adhesive: 100% acrylic polymer base, requiring the addition of portland cement.

2. Insulation Board:

- a. In compliance with manufacturer's requirements for Parex CI systems.
- b. Produced and labeled under a third party quality program as required by applicable building code; and produced by a manufacturer approved by ParexUSA.

3. Reinforcing Mesh:

- a. Parex USA 355 Standard Mesh: Weight 4.5 oz/yd2 (153 g/m2) reinforcing mesh.
- b. Parex USA 356 Short Detail Mesh: Reinforcing mesh used for backwrapping and details.

E. Primer:

1. Parex USA Primer: 100% acrylic based coating to prepare surfaces for acrylic or elastomeric finishes.

F. Finish and Coatings:

- 1. Parex DPR: 100% acrylic polymer based finish, enhanced DPR acrylic finish. Finish type, texture and color as selected by Project Designer. To be painted with existing for final color coat.
 - a. <u>Integrally Colored: Gray White.Refer to Painting Specifications for Coating Scope and Product Information</u>
 - b. Finish: Sand smooth.
- G. Water: Clean, cool, potable water.

H.2.2 RELATED MATERIALS AND ACCESSORIES

LA. General: Stucco system materials and related materials shall conform to the requirements of ICC-ES Evaluation Report No. 2564 and shall conform to this specification.

J.B. Substrate Materials:

- 1. Gypsum Sheathing: Minimum 1/2 in (13 mm) thick, core-treated, weather-resistant, exterior gypsum sheathing complying with ASTM C79 or ASTM C1177.
- 2. Cement Board Sheathing, Minimum 1/2 in thick, conforming to ASTM C1186.
- 3. Fiberboard: Minimum 1/2 in (13 mm) thick fiberboard complying with ANSI/AHA A194.1 as a regular density sheathing.
- 4. Plywood: Minimum 5/16 in (8 mm) thick exterior grade or Exposure I plywood for studs spaced 16 in (406 mm) o.c. and 3/8 in (9 mm) thick exterior type plywood minimum for studs spaced 24 in (610 mm) o.c. Plywood shall comply be exterior grade or Exposure 1 and comply with DOC PS-1.
- 5. Oriented Strand Board (OSB): 7/16 -1/2 in Wall-16 or Wall-24, approved by the APA, TECO, or PSI/PTL. Stamped as Exposure 1 or Exterior Sheathing with a PS2 or PRP-108 rating. For OSB limitations on See Parex USA Technical Bulletin; EIFS and Stucco; Acceptable Substrates and Areas of Use.
- 6. Concrete Masonry Construction: Non-painted (uncoated). Shall be in conformance with the building code.
- 7. Other Approved by stucco system manufacturer in writing prior to the project.

K.C. Drainage behind continuous Insulation:

1. Polyisocyanurate Foam plastic adhesively installed with Parex USA Adhesive installed in vertical ribbons in accordance with Commercial Drainage CI Application Guide

L.D. Continuous Insulation:

- 1. Polyisocyanurate Foam plastic complying with ASTM C1289 as Type II board with a nominal density of 2 pcf (32 kg/m³).
- M.E. Lath and Accessories: Conform to ASTM C847, ASTM C933, ASTM C1032, ASTM C1063 and Appendix.
 - 1. Accessories: Manufacturer's standard steel products with minimum G60 galvanizing unless otherwise indicated as rigid polyvinyl chloride (PVC plastic) or zinc alloy.
 - 2. Lath Locks: Wind-lock "Lath-lock" steel washer. 1 1/4" diameter, 24 gauge, galvanized steel mechanical fastening washer, having a countersunk central through-hole, and four (4) down-turned legs that prevent rotation during installation and keep the mesh from slipping out from under the plate, or equal.
- N.F. Metal Plaster Bases: Minimum 17 gauge self-furred stucco netting, minimum 2.5 lb/yd2 (1.4 kg/m2) in accordance with applicable codes and standards.
- Q.G. Weep Screeds: Foundation weep screed with minimum 3-1/2 inch vertical attachment flange.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect adjacent work from soiling, spattering, moisture deterioration, and other harmful effects caused by plastering.
- B. Prepare smooth, solid substrates for plaster according to ASTM C926.
- C. Concrete Masonry Units: Remove projecting joint mortar so it is even with the plane of the wall. Remove surface contaminants such as efflorescence, existing paint or any other bond inhibiting material by sandblasting, water blasting, wire brushing, chipping or other appropriate means.

3.3 APPLICATION

A. General: Stucco system and its related materials shall conform to the requirements of ASTM C926 and shall conform to this specification. Follow Parex USA's current Stucco Application Guide.

B. Water Resistive Barrier:

- 1. Treat all sheathing joints with WeatherSeal water-resistive barrier with Parex USA Sheathing Joint Tape.
- 2. Flash all rough openings with reinforced WeatherSeal.
- 3. Apply WeatherSeal water-resistive barrier to the surface of the appropriate substrate (2 coats may be required on plywood and OSB).
- 4. Allow to dry.

C. Drainage:

1. Install insulation board with Parex USA Adhesive installed in vertical ribbons in accordance with Commercial Drainage EIFS Application Guide.

D. Continuous Insulation:

1. Insulation Boards should be fastened to allow temporary placement until the lath is installed.

- 2. The lath is applied tightly over the insulation board and fastened through the insulation board to studs. Care must be taken to avoid overdriving fasteners.
 - a. Welded and woven wire stucco bases: Install bugle head screws with 1 1/4" diameter galvanized washers (Wind-Lock, Lath Lock or equal).
 - b. Expanded metal lath: Install
 - 1) Modified truss head, minimum 7/16" head diameter corrosion resistant screws; screw type, diameter and length as appropriate for the wall construction.

OR

2) Bugle head screws corrosion resistant screws with 1 1/4" diameter galvanized washers; screws type, diameter, and length as appropriate for the wall construction.

E. Stucco Base:

1. Scratch Coat:

- a. Apply scratch coat to a minimum thickness of 3/8 in (9.5 mm), using sufficient trowel pressure to key stucco into lath or to create bond to substrates as applicable.
- b. Prior to initial set, scratch horizontally to provide key for bond of brown coat.
- c. Moist cure scratch coat with clean potable water for at least 48 hours in accordance with ASTM C926 and the building codes following initial application (unless brown coat is applied as soon as the scratch coat has achieved sufficient rigidity to support the brown coat).

2. Brown Coat:

- a. Apply brown coat to a minimum thickness of 3/8 in (9.5 mm), using sufficient trowel pressure to key stucco into scratch coat.
- b. Rod surface to true plane and float to densify.
- c. Trowel to smooth and uniform surface to receive acrylic polymer finish coat.
- 3. Moist cure brown coat with clean potable water for at least 48 hours, in accordance with ASTM C926 and the building codes
- 4. Trowel to smooth and uniform surface to receive acrylic or elastomeric polymer finish coat.

F. Leveling and Reinforcing Coat:

- 1. After Moist Curing, allow stucco base coat to air dry a minimum of 24 hours before applying the leveling and reinforcing coat.
- 2. Using a stainless steel trowel, apply the stucco leveling coat over the stucco base coat at a thickness of 1/16 to 3/32 in (1.6 2.4 mm).

- 3. Fully embed reinforcing mesh, either Stucco Mesh, 355 Standard Mesh or 358.10 Intermediate Mesh, into wet stucco level coat, including diagonal strips at corners of openings and trowel smooth. If Stucco Mesh or 355 Standard Mesh is used, seams are overlapped 2-1/2 in (63 mm); if 358.10 Intermediate Mesh is used, seams are butted and covered by strips of 356 Detail Mesh.
- 4. The acrylic primers and finishes can be applied as soon as the stucco leveling coat has dried, typically within 24 hours.

G. Expanded Polystyrene Featured over Stucco Base Coat:

- 1. Install back-wrap mesh at EPS terminations.
- 2. Apply adhesive to backs of insulation boards with a notched trowel. Allow to dry a minimum of 12 hours.
- 3. Apply base coat material to the entire foam shape and pull the backwrap mesh around the foam shapes and fully embed it into the base coat.
- 4. Immediately embed the reinforcing mesh in the wet base coat.

H. Primer and Finish:

- 1. Remove surface contaminants such as dust or dirt without damaging the substrate.
- 2. Ambient and surface temperature must be 40°F (4°C) or higher during application and drying time. Supplemental heat and protection from precipitation must be provided as needed.
- 3. Use only on surfaces that are sound, clean, dry, unpainted, and free from any residue that might affect the ability of the finish to bond to the surface.
- 4. Parex Armourwall 300 WaterMaster CI Krak-Shield Stucco System.
 - a. Before the application of the finish, the base coat must have cured a minimum of 24 hours or longer as required by conditions. Examine the cured base coat for any irregularities.
 - b. Correct these irregularities to produce a flat surface.
- 5. Apply primer as directed in manufacturer's product data sheet and application guide.
- 6. Apply exterior wall finish in number of coats thickness recommended by manufacturer to achieve texture indicated, using sufficient trowel pressure or spray velocity to bond finish to base coat.
- 7. Protect finish coats from inclement weather until completely dry.

I. Curing:

- 1. Keep stucco base coat moist for at least 48 hours (longer in dry weather) by lightly fogging walls. Start light fogging after initial set of 1–2 hours.
- 2. Air dry acrylic based and elastomeric finish coats only, do not wet cure.

3.4 CLEANING AND PROTECTION

A. Remove temporary protection and enclosure of other work after plastering is complete. Promptly remove plaster from door frames, windows, and other surfaces not indicated to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged during plastering.

END OF SECTION 092400



NEW STEM FACILITY

149 SE COLLEGE PL,

■ DLR Group

© 2020, DLR Group inc., a Florida corporation, ALL RIGHTS RESERVED

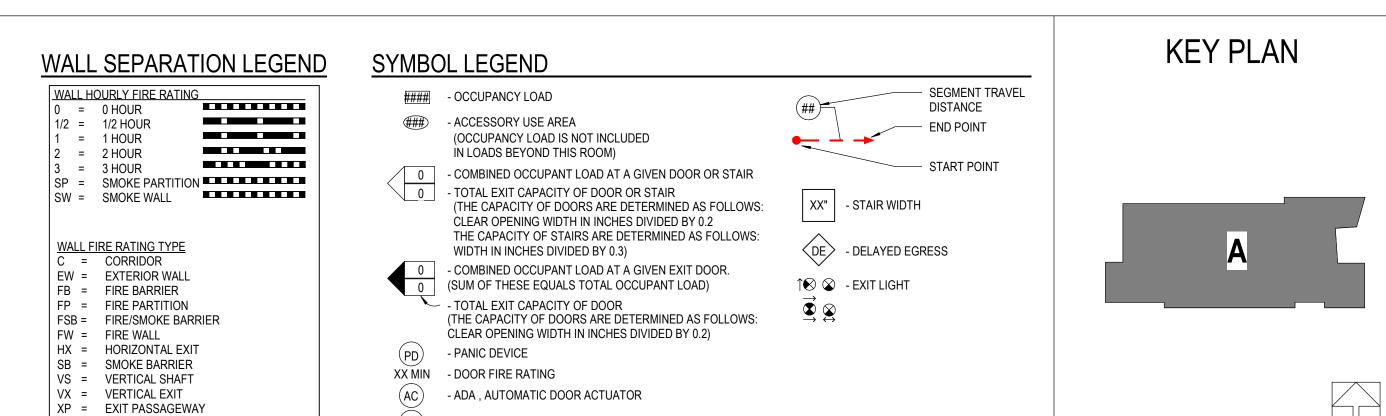
Architecture Engineering Planning Interiors

LAKE CITY, FL 32025

FLORIDA GATEWAY COLLEGE

DOCUMENTS

36-17116-00 12/11/2020 Revisions ADD02 1/05/2021



AL

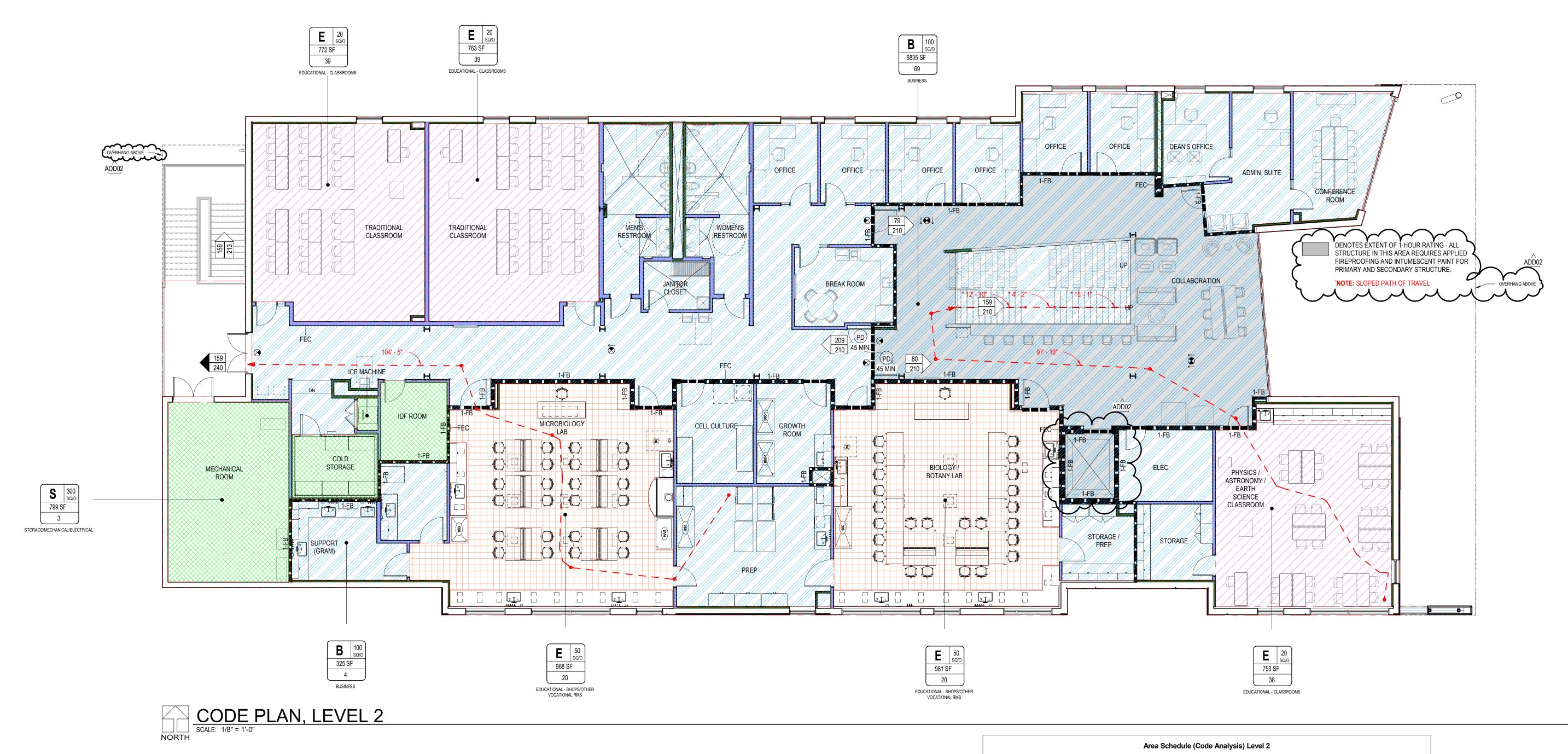
- ALARM

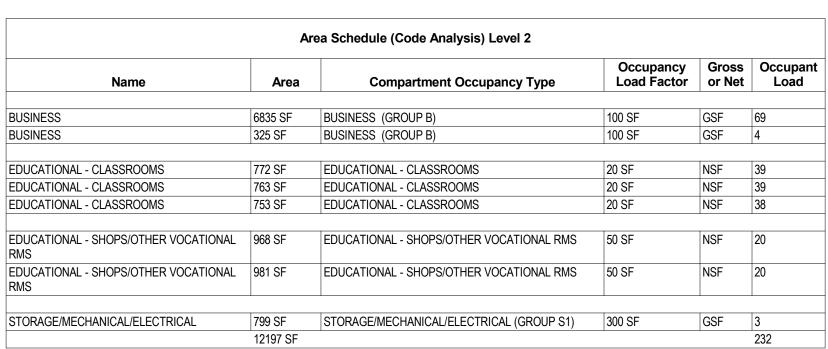
BIM 360://36-17116-00_Florida Gateway College - STEM Building/36-17116-00_

CP1.1

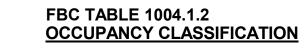
CODE PLAN,

FIRST LEVEL





LEVEL	ROOM OF ORIGIN	TRAVEL DISTANCE
LEVEL 01	STORAGE / CHEM-PREP 108	109' - 4"
LEVEL 02	PREP	104' - 5"
LEVEL 02	PHYSICS / ASTRONOMY / EARTH SCIENCE CLASSROOM (THROUGH MAIN STAIR)**	129' - 11"



BUSINESS (GROUP B) EDUCATIONAL - CLASSROOMS

EDUCATIONAL - SHOPS/OTHER VOCATIONAL RMS STORAGE/MECHANICAL/ELECTRICAL GROUP S1)

> NEW STEM FACILITY

149 SE COLLEGE PL, LAKE CITY, FL 32025

■ DLR Group

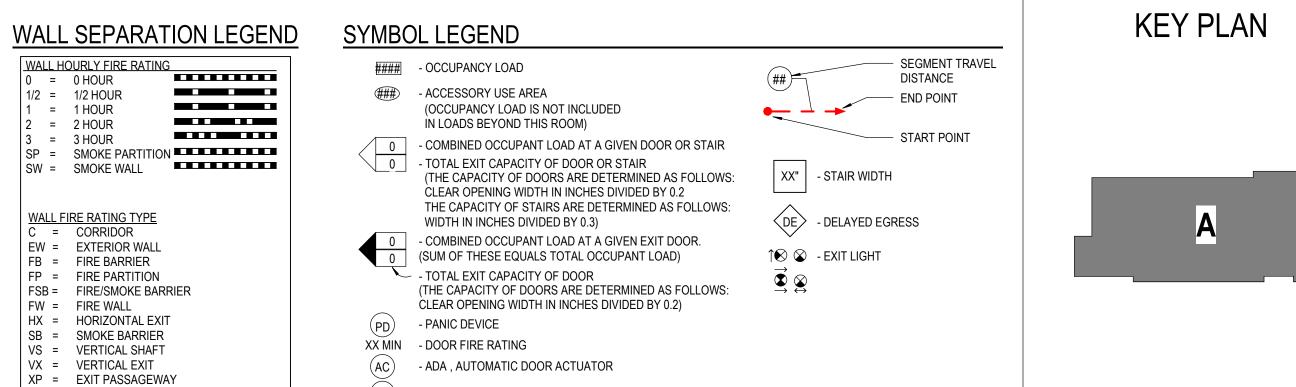
© 2020, DLR Group inc., a Florida corporation, ALL RIGHTS RESERVED

Architecture Engineering Planning Interiors

FLORIDA GATEWAY COLLEGE

DOCUMENTS

36-17116-00 12/11/2020 Revisions ADD02 1/05/2021



- ALARM

CODE PLAN, SECOND

LEVEL

CP1.2