University of South Carolina Aiken

Interior Renovations for Arts, Humanities and Social Sciences Building

471 University Pkwy, Aiken, South Carolina

State Project Number: H29-I357

May 21, 2020

ADDENDUM NO. 2

This addendum forms a part of the Contract documents and modifies the original Bidding Documents and any previous Addenda as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

MODIFICATIONS TO PREVIOUS ADDENDA:

N/A

MODIFICATIONS TO PROJECT MANUAL:

- 1. Reference SE-330: **DELETE** SE-330, dated 03/31/2020. **ADD** SE-330, dated 03/31/2020, Revised 05/21/2020. *Please note that Section 9. a) Contract Time has been revised.*
- 2. Reference Section 011000 Summary: **DELETE** Section 011000, dated 03/31/2020. **ADD** Section 011000, dated 03/31/2020, Revised 05/21/2020. See attached. *Please note that section 1.7 Schedule and 1.10 Work Restrictions have been revised.*
- 3. Reference Section 01500 Temporary Facilities: **DELETE** Section 015000, dated 03/21/2020. **ADD** Section 015000, dated 03/31/2020, Revised 05/21/2020. See attached. *Please note that section 2.2 Temporary Facilities has been revised.*

MODIFICATIONS TO DRAWINGS:

ARCHITECTURAL DRAWINGS:

- 1. Reference Sheet AD101. **DELETE** Sheet AD101, dated 03/31/2020. **ADD** Sheet AD101, dated 03/31/2020, Revised 05/21/2020. See attached.
- 2. Reference Sheet AD102. **DELETE** Sheet AD102, dated 03/31/2020. **ADD** Sheet AD102, dated 03/31/2020. Revised 05/21/2020. See attached.
- 3. Reference Sheet AD103. **DELETE** Sheet AD103, dated 03/31/2020, Revised 05/14/2020. **ADD** Sheet AD103, dated 03/31/2020, Revised 05/21/2020. See attached.
- 4. Reference Sheet A101. **DELETE** Sheet A101, dated 03/31/2020. **ADD** Sheet A101, dated 03/31/2020, Revised 05/21/2020. See attached.
- 5. Reference Sheet A401. **DELETE** Sheet A401, dated 03/31/2020, Revised 05/14/2020. **ADD** Sheet A401, dated 03/31/2020, Revised 05/21/2020. See attached.
- Reference Sheet A700. **DELETE** Sheet A700, dated 03/31/2020, Revised 05/14/2020. **ADD** Sheet A700, dated 03/31/2020, Revised 05/21/2020. See attached.
- 7. Reference Sheet A701. **DELETE** Sheet A701, dated 03/31/2020. **ADD** Sheet A701, dated 03/31/2020. Revised 05/21/2020. See attached.
- 8. Reference Sheet A702. **DELETE** Sheet A702, dated 03/31/2020. **ADD** Sheet A701, dated 03/31/2020, Revised 05/21/2020. See attached.

ELECTRICAL DRAWINGS:

None

MECHANICAL DRAWINGS:

None

PLUMBING DRAWINGS:

None

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REQUESTED PRODUCT APPROVALS:

1. Approved Manufacturer Addition: The lighting manufacturers H.E. Williams, WAC, and Oxygen Lighting have been added as approved equals to the Light Fixture schedule on Sheet E002. See attached lighting schedule from The Schneider Company, dated 05/15/2020.

QUESTIONS FROM CONTRACTORS:

- 1. Question: What is the real schedule for award, contract processing, submittal review, construction commencement, and substantial completion?
 - a. Answer: USC will announce the date the award will be posted at the bid opening. We do not have a definitive date to release at this time related to processing time. The date of commencement will be established in a notice to proceed issued by USC. See Specification section 013300 Submittal Procedures for submittal review processing time. See Specification section 011000 Summary, Revised 05/21/2020 and SE-330, Revised 05/21/2020, attached to this addendum for substantial completion date.
- 2. Question: See section 01100 1.7 Schedule. Will these dates be adjusted?
 - a. Answer: Yes, please see Specification section 011000 Summary, Revised 05/21/2020 and SE-330, Revised 05/21/2020, attached to this addendum. See above modification to the Project Manual.
- 3. Question: For Alternate 1, you show ceramic tile only on the wet walls. For these walls, do you want the tile to go to the floor or stop and add base tile?
 - a. Answer: See sheet A401, dated 03/31/2020, Revised 05/21/2020 attached to this addendum. Base tile should occur on all walls of the Men's and Women's restrooms as part of Alternate 1. Where it occurs, wall tile should begin above the base tile.
- 4. Question: Will USCA be holding classes over the summer or will we have full access to the jobsite over the summer semesters? What are the expectations regarding Covid-19 if building is occupied with students during construction?
 - a. Answer: USC Aiken will not be holding in-person classes during May or June. They will decide on summer II (July) classes in the coming weeks. If there are classes, there will only be approximately 2 classes which will have limited to no impact on construction progress. Regular in-person instruction will begin August 20, 2020. See Spec section 011000 Summary, Revised 05/21/2020, attached to this addendum for further instruction regarding construction after classes begin.
- 5. Question: For the builder's risk, what is the value we are risking? Are we to cover the entire building?
 - a. Answer: As stated in document A201, Property Insurance: Contractor shall provide Builder's Risk Policy to cover interest of all parties.
- 6. Question: When walking through the site, I noticed there are floor stops on the floor and wall. Will we be responsible for replacing those after flooring/painting? If so, do you want them all to be floor or wall stops?
 - a. Answer: Contractor should protect existing wall stops during construction and tape them off for painting. Contractor should remove floor stops prior to demolition and reinstall after installation of new flooring.
- 7. Question: Can you provide the asbestos report for this building?

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- a. Answer: Asbestos report will be provided to successful bidder. There is no asbestos in this scope of work.
- 8. Question: The specs say we may need to provide temporary facilities. Is this required for this job?
 - a. Answer: Temporary Facilities shall be provided as needed by the contractor. Contractor may use a classroom in the building as a construction office as approved by owner in writing. Contractor must provide portable toilets for construction personnel use. Please see Specification section 015000 Temporary Facilities, dated 03/31/2020, Revised 05/21/2020 for further details.
- 9. Question: What is the basis of design for the ceiling tile?
 - a. Answer: See finish specifications on sheet A700, dated 03/31/2020, Revised 05/21/2020 attached to this addendum.
- 10. Question: After walking through the site, I noticed corner guards on the corners. Will we be responsible for providing new corner guards? If so, what type some are plastic and a few were metal with covers.
 - a. Answer: Yes, contractor to provide new corner guards. See Sheets A700, A701, and A702, dated 03/31/2020, Revised 05/21/2020, attached to this addendum.
- 11. Question: The 1st floor of the building shows floor joints that have separated and contracted. This will possibly continue. What is the recommended solution?
 - a. Answer: See note DP20 on sheet AD101, dated 03/31/2020, Revised 05/21/2020, attached to this addendum, for further instruction to repair unlevel subfloor on the first floor. See note FP2 on sheet A701, dated 03/31/2020, Revised 05/21/2020, attached to this addendum, for further instruction to provide movement joints where signs of building movement have occurred. Exact locations to be finalized in the field. See revised finish specifications on Sheet A700, dated 03/31/2020, Revised 05/21/2020, attached to this addendum.
- 12. Question: On A701 (4) New LVT to Exist Vinyl, you call out a rubber transition strip, what is the basis of design/color for this strip?
 - a. Answer: See revised detail on sheet A701, dated 03/31/2020, Revised 05/21/2020 attached to this addendum.
- 13. Question: On the bid form, it shows N/A under subcontractors so we do not need to list them?
 - a. Answer: No, subcontractors do not need to be listed.
- 14. Question: Per Article 9.1.1 of the AIA document A701, there is a 2% withholding requirement for payments to non-residents. Does this include payments to non-resident subcontractors?
 - a. Answer: The Contractor is responsible for their subcontractors, and therefore the Contractor should do their due diligence and ensure that they are withholding correctly and in accordance with any requirements. For information about other withholding requirements (e.g., employee withholding), contact the Withholding Section at the South Carolina

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Department of Revenue at 803-898-5383 or visit the Department's website at https://dor.sc.gov.

- 15. Question: Since this is work for the state of SC, are local, county, or city building permits required?
 - a. Answer: This project is under USC's certification granted by OSE. OSE is the authority having jurisdiction for state projects. No city building permit is required. Bidders mut have appropriate LLR contractor's license and contractor's permits allowing them to work within city limits.
- 16. Question: Will contractor be responsible for removing, storing, and re-installing the numerous wall mounted appurtenances and accessories?
 - a. Answer: No, USCA maintenance will coordinate with the contractor to remove wall décor and bulletin boards, and USCA will reinstall after contractor is finished.
- 17. Question: Item #9 on the Bid Form states 110 calendar days for substantial completion but section 011000, 1.7, C states substantial completion by August 8, 2020. Please Clarify.
 - a. Answer: Please see Specification section 011000 Summary, Revised 05/21/2020, attached to this addendum. See above modification to the Project Manual.
- 18. Question: Ref. Addendum 1; The added Technical Specifications Table of Contents, Revised 5/14/2020 lists a section 102113.17 (phenolic-core toilet compartments) however I did not find that section included in the addendum. Please provide.
 - a. Answer: Section 102113.17 was included in the Project Manual dated 03/31/2020 but was not listed in the Technical Specifications Table of Contents. Addendum 1 added this section to the Technical Specifications Table of Contents but did not modify the specification section itself.

END OF ADDENDUM NO. 2

SE-330 LUMP SUM BID FORM

Revised 05/21/2020

Bidders shall submit bids on only Bid Form SE-330.

RID	SUBMITTED BY:
ыυ	(Bidder's Name)
BID	SUBMITTED TO: University of South Carolina Aiken
	(Owner's Name)
FOF	R: PROJECT NAME: <u>USCA Arts, Humanities, and Social Sciences Building Interior Renovations</u>
	PROJECT NUMBER: H29-I357
OFF	
<u>OFF</u>	
§ 1.	In response to the Invitation for Construction Services and in compliance with the Instructions to Bidders for the above- named Project, the undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with the Owner on the terms included in the Bidding Documents, and to perform all Work as specified or indicated in the Bidding Documents, for the prices and within the time frames indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
§ 2.	Pursuant to SC Code § 11-35-3030(1), Bidder has submitted Bid Security as follows in the amount and form required by the Bidding Documents:
	☐ Bid Bond with Power of Attorney ☐ Electronic Bid Bond ☐ Cashier's Check
	(Bidder check one)
§ 3.	Bidder acknowledges the receipt of the following Addenda to the Bidding Documents and has incorporated the effects of said Addenda into this Bid: (Bidder, check all that apply. Note, there may be more boxes than actual addenda. Do not check boxes that do not apply)
	ADDENDA: #1 #2 #3 #4 #5
§ 4.	Bidder accepts all terms and conditions of the Invitation for Bids, including, without limitation, those dealing with the disposition of Bid Security. Bidder agrees that this Bid, including all Bid Alternates, if any, may not be revoked or withdrawn after the opening of bids, and shall remain open for acceptance for a period of 60 Days following the Bid Date, or for such longer period of time that Bidder may agree to in writing upon request of the Owner.
§ 5.	Bidder herewith offers to provide all labor, materials, equipment, tools of trades and labor, accessories, appliances warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessary to complete the following items of construction work:
§ 6.1	BASE BID WORK (as indicated in the Bidding Documents and generally described as follows): Interior Renovation of corridors on first and second floors, Men's and Women's toilets on second floor and two sets of stairs
	\$, which sum is hereafter called the Base Bid. (Bidder to insert Base Bid Amount on line above)

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SE-330 LUMP SUM BID FORM

Revised 05/21/2020

Bidders shall submit bids on only Bid Form SE-330.

§ 6.2 BID ALTERNATES as indicated in the Bidding Documents and generally described as follows:	
ALTERNATE # 1 (Brief Description): Second floor Men's and Women's Toilets	
☐ ADD TO or ☐ DEDUCT FROM BASE BID: \$	
(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)	
ALTERNATE # 2 (Brief Description):	
ADD TO or DEDUCT FROM BASE BID: \$	
(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)	
ALTERNATE # 3 (Brief Description):	
☐ ADD TO or ☐ DEDUCT FROM BASE BID: \$	
(Bidder to mark appropriate box to clearly indicate the price adjustment offered for each Alternate)	

§ 6.3 UNIT PRICES:

BIDDER offers for the Agency's consideration and use, the following UNIT PRICES. The UNIT PRICES offered by BIDDER indicate the amount to be added to or deducted from the CONTRACT SUM for each item-unit combination. UNIT PRICES include all costs to the Agency, including those for materials, labor, equipment, tools of trades and labor, fees, taxes, insurance, bonding, overhead, profit, etc. The Agency reserves the right to include or not to include any of the following UNIT PRICES in the Contract and to negotiate the UNIT PRICES with BIDDER prior to including in the Contract.

No.	ITEM	UNIT OF MEASURE	ADD	DEDUCT
<u>1.</u>	N/A		\$	\$
2.			\$	\$
3.			\$	\$
4.			\$	\$
<u>5.</u>			\$	\$
6.			\$	\$

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§ 7. LISTING OF PROPOSED SUBCONTRACTORS PURSUANT TO SECTION 3020(b)(i), CHAPTER 35, TITLE 11 OF THE SOUTH CAROLINA CODE OF LAWS, AS AMENDED

(See Instructions on the following page BF-2A)

Bidder shall use the below-listed Subcontractors in the performance of the Subcontractor Classification work listed:

(A) SUBCONTRACTOR LICENSE CLASSIFICATION or SUBCLASSIFICATION NAME	(B) LICENSE CLASSIFICATION or SUBCLASSIFICATION ABBREVIATION	(C) SUBCONTRACTOR and/or PRIME CONTRACTOR (Required - must be completed by Bidder)	(D) SUBCONTRACTOR'S and/or PRIME CONTRACTOR'S SC LICENSE NUMBER
(Completed by Owner)	(Completed by Owner)	(Requirea - must be completed by Blader)	(Requested, but not Required)
	BA	ASE BID	
N/A			
	ALTI	ERNATE #1	
N/A			
	ALTI	ERNATE #2	
N/A			
	ALTI	ERNATE #3	
N/A			
			•

If a Bid Alternate is accepted, Subcontractors listed for the Bid Alternate shall be used for the work of both the Alternate and the Base Bid work.

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INSTRUCTIONS FOR SUBCONTRACTOR LISTING

- 1. Section 7 of the Bid Form sets forth an Owner-developed list of subcontractor license classifications or subclassifications for which Bidder is required to identify the entity (subcontractor(s) and/or himself) Bidder will use to perform this work.
 - a. Columns A & B: The Owner fills out these columns to identify the subcontractor license classification/subclassification and related license abbreviation for which the Bidder must list either a subcontractor or himself as the entity that will perform this work. In Column A, the subcontractor license classification/subclassification is identified by name and in Column B, the related contractor license abbreviation (per Title 40 of the SC Code of Laws) is listed. Abbreviations of licenses can be found at: https://llr.sc.gov/clb/PDFFiles/CLBClassificationAbbreviations.pdf. If the owner has not identified a subcontractor license classification/subclassification, the Bidder does not list a subcontractor.
 - b. Columns C and D: In these columns, the Bidder identifies the subcontractors it will use for the work of each license listed by the Owner in Columns A & B. Bidder must identify only the subcontractor(s) who will perform the work and no others. Bidders must make sure that their identification of each subcontractor is clear and unambiguous. A listing that could be any number of different entities may be cause for rejection of the bid as non-responsive. For example, a listing of M&M without additional information may be problematic if there are multiple different licensed contractors in South Carolina whose names start with M&M.
- 2. **Subcontractor Defined:** For purposes of subcontractor listing, a subcontractor is an entity who will perform work or render service to the prime contractor to or about the construction site pursuant to a contract with the prime contractor. Bidder should not identify sub-subcontractors in the spaces provided on the bid form but only those entities with which Bidder will contract directly. Likewise, do not identify material suppliers, manufacturers, and fabricators that will not perform physical work at the site of the project but will only supply materials or equipment to the Bidder or proposed subcontractor(s).
- 3. Subcontractor Qualifications: Bidder must only list subcontractors who possess a South Carolina contractor's license that includes the license classification and/or subclassification identified by the Owner in Columns A & B. The subcontractor license must also be within the appropriate license group for the work. If Bidder lists a subcontractor who is not qualified to perform the work, the Bidder will be rejected as non-responsible.
- 4. Use of Own forces: If, under the terms of the Bidding Documents and SC Contractor Licensing laws, Bidder is qualified to perform the work of a listed subcontractor classification or subclassification and Bidder does not intend to subcontract such work but to use Bidder's own employees to perform such work, the Bidder must insert itself in the space provided.
- 5. Use of Multiple Subcontractors:
 - a. If Bidder intends to use multiple subcontractors to perform the work of a single license classification/subclassification, Bidder must insert the name of each subcontractor Bidder will use, preferably separating the name of each by the word "and". If Bidder intends to use both his own employees to perform a part of the work of a single license classification/subclassification and to use one or more subcontractors to perform the remaining work, Bidder must insert itself and each subcontractor, preferably separating them with the word "and". Bidder must use each entity listed for the work of a single license classification/subclassification in the performance of that work.
 - b. Optional Listing Prohibited: Bidder may not list multiple subcontractors for a license classification/subclassification in a form that provides the Bidder the option, after bid opening or award, to choose one or more but not all the listed subcontractors to perform the work for which they are listed. A listing, which on its face requires subsequent explanation to determine whether it is an optional listing, is non-responsive. If Bidder intends to use multiple entities to perform the work for a single listing, Bidder must clearly set forth on the bid form such intent. Bidder may accomplish this by simply inserting the word "and" between the names of each entity listed. Agency will reject as non-responsive a listing that contains the names of multiple subcontractors separated by a blank space, the word "or", a virgule (that is a /), or any separator that the Agency may reasonably interpret as an optional listing.
- **6.** If Bidder is awarded the contract, Bidder must, except with the approval of the Agency for good cause shown, use the listed entities to perform the work for which they are listed.
- 7. If Bidder is awarded the contract, Bidder will not be allowed to substitute another entity as subcontractor in place of a subcontractor listed in Section 7 of the Bid except for one or more of the reasons allowed by the SC Code of Laws.
- **8.** Bidder's failure to identify an entity (subcontractor or himself) to perform the work of a subcontractor listed in Columns A & B will render the Bid non-responsive.

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§ 8. LIST OF MANUFACTURERS, MATERIAL SUPPLIERS, AND SUBCONTRACTORS OTHER THAN SUBCONTRACTORS LISTED IN SECTION 7 ABOVE (FOR INFORMATION ONLY):

Pursuant to instructions in the Invitation for Construction Services, if any, Bidder will provide to Owner upon the Owner's request and within 24 hours of such request, a listing of manufacturers, material suppliers, and subcontractors, other than

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	pro	se listed in Section 7 above, that Bidder intends to use on the project. Bidder acknowledges and agrees that this list is vided for purposes of determining responsibility and not pursuant to the subcontractor listing requirements of SC Code 1-35-3020(b)(i).				
§ 9.	TIME OF CONTRACT PERFORMANCE AND LIQUIDATED DAMAGES					
	a)	CONTRACT TIME				
		Bidder agrees that the Date of Commencement of the Work shall be established in a Notice to Proceed to be issued				
		by the Owner. Bidder agrees to substantially complete the Work within 130 Calendar Days				
		from the Date of Commencement, subject to adjustments as provided in the Contract Documents.				
	b)	LIQUIDATED DAMAGES				
		Bidder further agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the amount				
		of \$ 150.00 for each Calendar Day the actual construction time required to achieve Substantial				
		Completion exceeds the specified or adjusted time for Substantial Completion as provided in the Contract Documents.				
		This amount is intended by the parties as the predetermined measure of compensation for actual damages, not as a penalty for nonperformance.				
§ 10.	A(GREEMENTS				
	a)	Bidder agrees that this bid is subject to the requirements of the laws of the State of South Carolina.				
	b)	Bidder agrees that at any time prior to the issuance of the Notice to Proceed for this Project, this Project may be canceled for the convenience of, and without cost to, the State.				
	c)	Bidder agrees that neither the State of South Carolina nor any of its agencies, employees or agents shall be responsible				
		for any bid preparation costs, or any costs or charges of any type, should all bids be rejected or the Project canceled for any reason prior to the issuance of the Notice to Proceed.				
§ 11.	EL	ECTRONIC BID BOND				
	Ву	signing below, the Principal is affirming that the identified electronic bid bond has been executed and that the Principal				
	and	Surety are firmly bound unto the State of South Carolina under the terms and conditions of the AIA Document A310,				
	Bio	Bond, included in the Bidding Documents.				
	EL	ECTRONIC BID BOND NUMBER:				
	SIC	GNATURE AND TITLE:				

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CONTRACTOR'S CLASSIFICATIONS AND SUBCLASSIFICATIONS WITH LIMITATION
SC Contractor's License Number(s):
Classification(s) & Limits:
Subclassification(s) & Limits:
By signing this Bid, the person signing reaffirms all representation and certification made by both the person signing and the Bidder, including without limitation, those appearing in Article 2 of the SCOSE Version of the AIA Document A701, Instructions to Bidders, is expressly incorporated by reference.
BIDDER'S LEGAL NAME:
ADDRESS:
TELEPHONE:
EMAIL:
SIGNATURE: DATE:
PRINT NAME:
TITLE:

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SECTION 011000 – SUMMARY REVISED 05/21/2020

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:

- 1. Project information.
- 2. Work covered by Contract Documents.
- 3. Phased construction.
- 4. Work performed by Owner.
- 5. Multiple Work Packages.
- 6. Work under Owner's separate contracts.
- 7. Future work not part of this Project.
- 8. Owner's product purchase contracts.
- 9. Owner-furnished/Contractor-installed (OFCI) products.
- 10. Owner-furnished/Owner-installed (OFOI) products.
- 11. Contractor-furnished/Owner-installed (CFOI) products.
- 12. Contractor's use of site and premises.
- 13. Coordination with occupants.
- 14. Work restrictions.
- 15. Specification and Drawing conventions.
- 16. Miscellaneous provisions.

B. Related Requirements:

- 1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
- 2. Section 017300 "Execution" for coordination of Owner-installed products.

1.3 DEFINITIONS

A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.4 PROJECT INFORMATION

- A. Project Identification: University of South Carolina Aiken, Arts, Humanities and Social Sciences Building, Aiken, South Carolina
- B. Owner: University of South Carolina Aiken
 - University of South Carolina Aiken Owner's Representative: Brian Enter
- C. Architect: Studio 2LR
 - Architect's Representative: Wes Lyles, Studio 2LR, 2428 Main Street, Columbia, SC 29201
- D. Architect's Consultants: Architect has retained the following design professionals, who have prepared designated portions of the Contract Documents:
 - 1. Mechanical and Plumbing Engineering: Swygert & Associates
 - 2. Electrical Engineering: GWA Engineering
- E. Project Coordinator for Multiple Contracts: Owner shall serve as Project coordinator.

1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
 - Interior Renovation of corridors on first and second floors, three sets of gang toilets and two sets of stairs. Work includes selective demolition, metal studs, gypsum board, ceilings, millwork, doors and frames, painting, ceramic tile, LVT, lighting, electrical, plumbing, and mechanical work and other Work indicated in the Contract Documents.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.6 WORK UNDER OWNER'S SEPARATE CONTRACTS

A. Work with Separate Contractors: Cooperate fully with Owner's separate contractors, so work on those contracts may be carried out smoothly, without interfering with or delaying Work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under Owner's separate contracts.

1.7 SCHEDULE

A. Contract Award: It is anticipated that the contract will be awarded as soon as legally allowed after bid. Contractor should submit for approval all materials and order

materials during the month of June – payment will be processed for stored materials per State of South Carolina guidelines.

- B. Commencement of Work: Owner will issue a commencement date in a notice to proceed.
- C. Substantial Completion and Final Completion:
 - 1. Substantial Completion: 130 calendar days after notice to proceed.
 - 2. Final Completion: 7 calendar days after substantial completion.

1.8 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limits on Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits on Use of Site: Confine construction operations to defined area of renovations.
 - 2. Laydown and storage area will be located with owner.
 - 3. Parking will be made available for contractor.
 - 4. Contractor will be responsible for own porta-jon toilets.
 - 5. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.9 COORDINATION WITH OCCUPANTS

A. Full Owner Occupancy: Owner will occupy Project site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

- Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
- 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.10 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Beginning on the date of the notice to proceed and extending through August 19, 2020 limit work to between 7 a.m. to 7 p.m., Monday through Friday, unless otherwise indicated or agreed to in writing with the Owner. Beginning August 20, 2020, work must be limited to between 7 p.m. and 7 a.m, Monday through Friday. By 7 a.m. Each morning, the site must be clean and orderly, with all hazards cleared and areas of work taped/barricaded off. Safety of the students, faculty, and staff is paramount and all hazards must be secured prior to 7 am daily after night work. Night/evening classes may occur after August 20, 2020 and will be coordinated with the scheduled evening/night work. Contractor must halt all work that may disturb classes during classes. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.
 - 1. Weekend Hours: as agreed to in writing by Owner.
 - 2. Early Morning Hours: as agreed to in writing by Owner.
 - 3. Hours for Utility Shutdowns: as agreed to in writing by Owner.
 - 4. Hours for Core Drilling and other loud construction activities: as agreed to in writing by Owner.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
 - 1. All activities involving excessive noise or smells shall occur after 11:00 pm and before 8:00 am or on weekends as approved in writing by Owner. No activities involving excessive noise or smells is allowed during the work day or during evening/night classes.

- 2. All drilling into the floor above or saw cutting/core drilling of the floor shall be done after 11:00 pm and before 8:00 am or on weekends as approved in writing by Owner.
- 3. Notify Owner not less than two days in advance of proposed disruptive operations.
- 4. Obtain Owner's written permission before proceeding with disruptive operations during nights or weekends.
- 5. Contractor will coordinate with Owner for any scheduled University of South Carolina classes or other scheduled activities in the building that will prohibit loud or dusty construction operations during the standard work day.
- 6. Cutting of concrete corridor wall for new entrance to occur over a weekend.
- 7. All plumbing work above the occupied first floor area must be done between 11pm and 8am or on weekends. Contractor is responsible for restoring finishes and cleaning in that area following work each day.
- E. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances within the existing building or on Owner's property is not permitted.
- F. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- G. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.11 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
 - 3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
 - 4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS - Revised 05/21/2020

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 requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:

- 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.
- 2. Section 321313 "Concrete Paving" for construction and maintenance of cement concrete pavement for temporary roads and paved areas.

1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Sewer Service: Owner will pay sewer-service use charges for sewer usage by all entities for construction operations.
- C. Water Service: Owner will pay water-service use charges for water used by all entities for construction operations.
- D. Electric Power Service: Owner will pay electric-power-service use charges for electricity used by all entities for construction operations.
- E. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- F. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges.

Provide connections and extensions of services as required for construction operations.

1.4 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- D. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
 - 1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
 - 2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
 - 3. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
- E. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
 - 1. Locations of dust-control partitions at each phase of work.
 - 2. HVAC system isolation schematic drawing.
 - 3. Location of proposed air-filtration system discharge.
 - 4. Waste handling procedures.
 - 5. Other dust-control measures.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch, 0.148-inch thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8 inch OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch OD top rails
- B. Portable Chain-Link Fencing: Minimum 2-inch, 0.148-inch thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch OD top and bottom rails. Provide concrete bases for supporting posts.
- C. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.
- D. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.
- E. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading. A classroom may be used in lieu of a freestanding field office with Owner's written approval.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:

- 1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
- 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot- (1.2-m-) square tack and marker boards.
- 3. Drinking water and private toilet.
- 4. Coffee machine and supplies.
- 5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F (20 to 22 deg C).
- 6. Lighting fixtures capable of maintaining average illumination of 20 fc (215 lx) at desk height.
- C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
 - 1. Store combustible materials apart from building.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 017700 "Closeout Procedures".
- C. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
 - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- D. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- E. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. Delete "Toilets" Subparagraph below if facilities are unavailable or if their use is not permitted even if available. Indicate location of Owner's existing toilets in Section 011000 "Summary" or show on Drawings.
 - 2. Toilets: Use of Owner's existing toilet facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- F. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed

construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

- G. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
 - 1. Prior to commencing work, isolate the HVAC system in area where work is to be performed according to coordination drawings.
 - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
 - b. Maintain negative air pressure within work area using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
 - 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
 - 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.
- H. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
 - 1. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.
- I. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Install electric power service overhead unless otherwise indicated.
 - 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- J. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
 - 2. Install lighting for Project identification sign.

- K. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install [one] <Insert number> telephone line(s) for each field office.
 - 1. Provide additional telephone lines for the following:
 - a. Provide a dedicated telephone line for each facsimile machine in each field office
 - 2. At each telephone, post a list of important telephone numbers.
 - a. Police and fire departments.
 - b. Ambulance service.
 - c. Contractor's home office.
 - d. Contractor's emergency after-hours telephone number.
 - e. Architect's office.
 - f. Engineers' offices.
 - g. Owner's office.
 - h. Principal subcontractors' field and home offices.
 - 3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.
- L. Electronic Communication Service: Provide a desktop computer in the primary field office adequate for use by Architect and Owner to access Project electronic documents and maintain electronic communications. Equip computer with not less than the following:
 - 1. Processor: Intel Pentium D or Intel CoreDuo, 3.0> GHz processing speed.
 - 2. Memory: 4 gigabyte.
 - 3. Disk Storage: 300 gigabyte hard-disk drive and combination DVD-RW/CD-RW drive.
 - 4. Display: 22-inch (560-mm) LCD monitor with 256-Mb dedicated video RAM.
 - 5. Full-size keyboard and mouse.
 - 6. Network Connectivity: 10/100BaseT Ethernet.
 - 7. Operating System: Microsoft Windows XP Professional or Microsoft Windows Vista Business.
 - 8. Productivity Software:
 - a. Microsoft Office Professional, XP or higher, including Word, Excel, and Outlook.
 - b. Adobe Reader 7.0 or higher.
 - c. WinZip 7.0 or higher.
 - 9. Printer: "All-in-one" unit equipped with printer server, combining color printing, photocopying, scanning, and faxing, or separate units for each of these three functions.
 - Internet Service: Broadband modem, router and ISP, equipped with hardware firewall, providing minimum 384 Kbps upload and 1 Mbps download speeds at each computer.

- 11. Internet Security: Integrated software, providing software firewall, virus, spyware, phishing, and spam protection in a combined application.
- 12. Backup: External hard drive, minimum 40 gigabyte, with automated backup software providing daily backups.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits indicated on Drawings.
 - 1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.
- C. Temporary Use of Permanent Roads and Paved Areas: Locate temporary roads and paved areas in same location as permanent roads and paved areas. Construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.
 - 1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
 - 2. Prepare subgrade and install subbase and base for temporary roads and paved areas according to Section 312000 "Earth Moving."
 - 3. Recondition base after temporary use, including removing contaminated material, regrading, proofrolling, compacting, and testing.
 - 4. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion. Repair hot-mix asphalt base-course pavement before installation of final course according to Section 321216 "Asphalt Paving."
- D. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- E. Parking: Provide temporary parking areas for construction personnel.

- F. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.
- G. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
 - 1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 - 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 - 3. Maintain and touchup signs so they are legible at all times.
- H. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- I. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent and requirements specified in Section 311000 "Site Clearing."
- D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of 2003

EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

- 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
- 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
- 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- E. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- G. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- H. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations and as indicated on Drawings.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
- Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
- J. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- K. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- L. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

- 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- M. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
 - 1. Protect porous materials from water damage.
 - 2. Protect stored and installed material from flowing or standing water.
 - 3. Keep porous and organic materials from coming into prolonged contact with concrete.
 - 4. Remove standing water from decks.
 - 5. Keep deck openings covered or dammed.
- C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
 - 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
 - 2. Keep interior spaces reasonably clean and protected from water damage.
 - 3. Periodically collect and remove waste containing cellulose or other organic matter.
 - 4. Discard or replace water-damaged material.
 - 5. Do not install material that is wet.
 - 6. Discard, replace, or clean stored or installed material that begins to grow mold.
 - 7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

- D. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
 - 1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
 - 2. Use permanent HVAC system to control humidity.
 - 3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.
 - a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective.
 - b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
 - c. Remove materials that can not be completely restored to their manufactured moisture level within 48 hours.

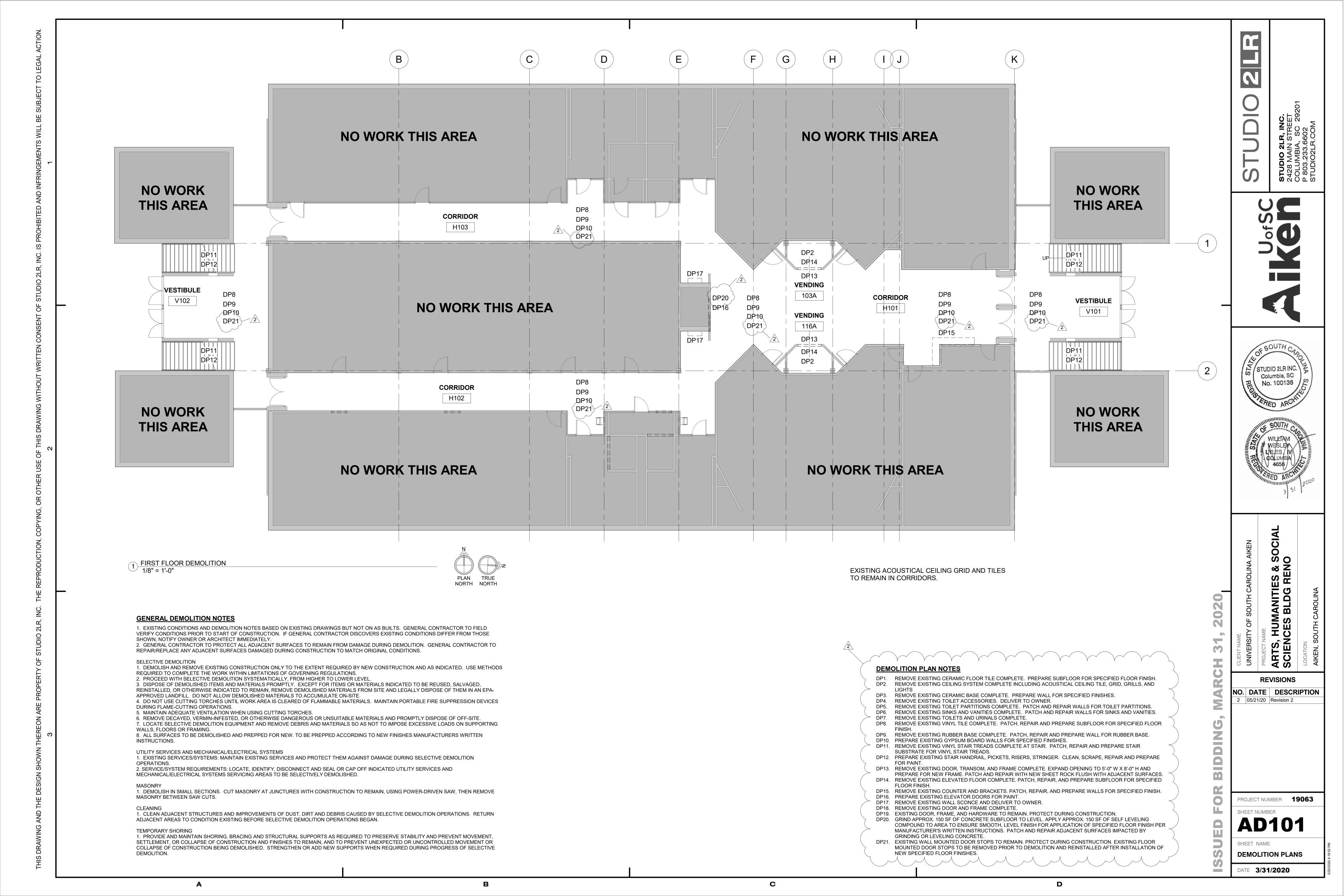
3.6 OPERATION, TERMINATION, AND REMOVAL

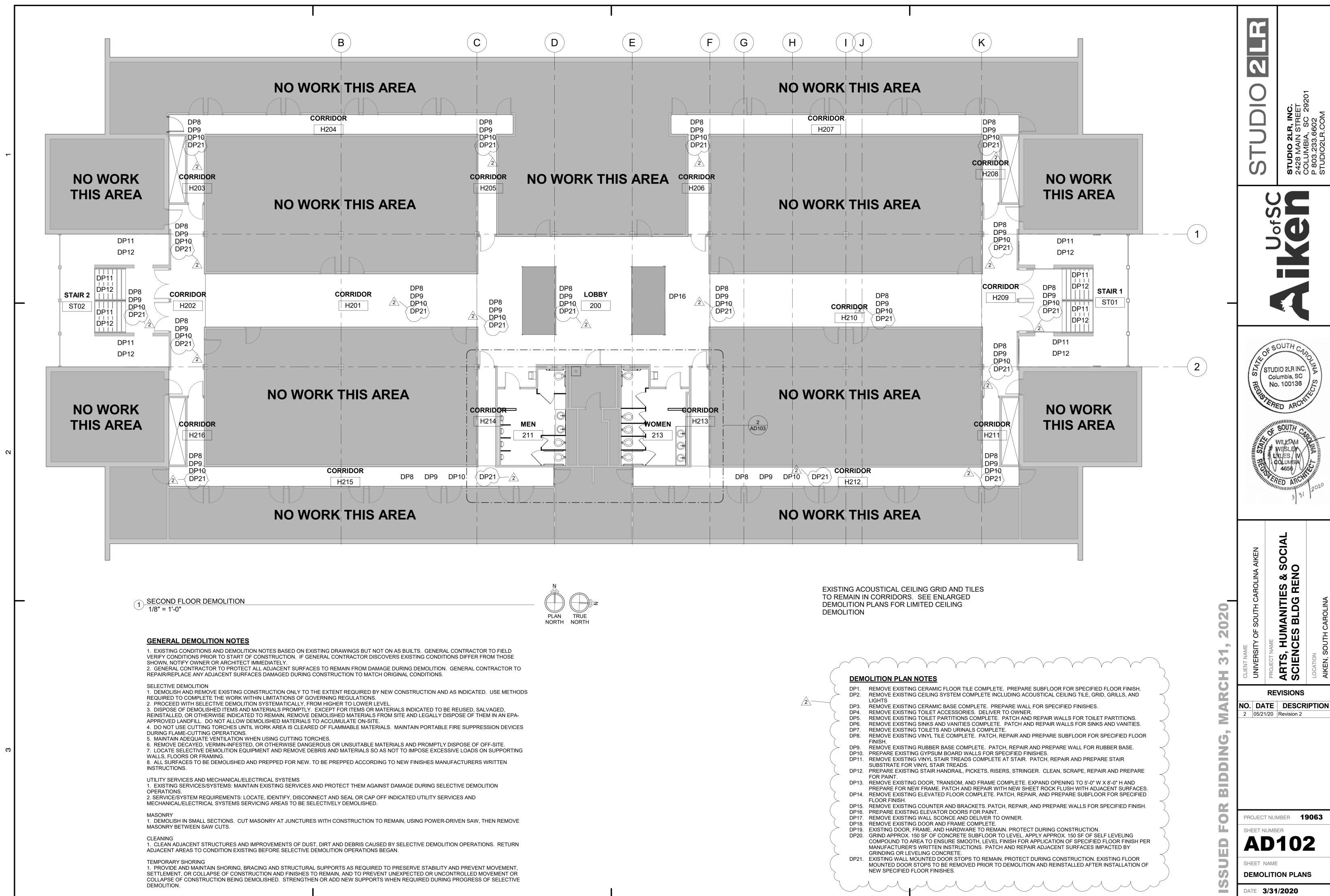
- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Operate Project-identification-sign lighting daily from dusk until 12:00 midnight.
- D. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- E. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape

development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000





C

GENERAL DEMOLITION NOTES

1. EXISTING CONDITIONS AND DEMOLITION NOTES BASED ON EXISTING DRAWINGS BUT NOT ON AS BUILTS. GENERAL CONTRACTOR TO FIELD VERIFY CONDITIONS PRIOR TO START OF CONSTRUCTION. IF GENERAL CONTRACTOR DISCOVERS EXISTING CONDITIONS DIFFER FROM THOSE SHOWN, NOTIFY OWNER OR ARCHITECT IMMEDIATELY. 2. GENERAL CONTRACTOR TO PROTECT ALL ADJACENT SURFACES TO REMAIN FROM DAMAGE DURING DEMOLITION. GENERAL CONTRACTOR TO REPAIR/REPLACE ANY ADJACENT SURFACES DAMAGED DURING CONSTRUCTION TO MATCH ORIGINAL CONDITIONS.

SELECTIVE DEMOLITION

1. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING

2. PROCEED WITH SELECTIVE DEMOLITION SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL

3. DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN, REMOVE DEMOLISHED MATERIALS FROM SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL. DO NOT ALLOW DEMOLISHED MATERIALS TO

4. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. MAINTAIN PORTABLE FIRE SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.

5. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES. 6. REMOVE DECAYED, VERMIN-INFESTED, OR OTHERWISE DANGEROUS OR UNSUITABLE MATERIALS AND PROMPTLY DISPOSE OF OFF-SITE.

7. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS OR FRAMING.

8. ALL SURFACES TO BE DEMOLISHED AND PREPPED FOR NEW. TO BE PREPPED ACCORDING TO NEW FINISHES MANUFACTURERS WRITTEN INSTRUCTIONS.

UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS 1. EXISTING SERVICES/SYSTEMS: MAINTAIN EXISTING SERVICES AND PROTECT THEM AGAINST DAMAGE DURING

2. SERVICE/SYSTEM REQUIREMENTS: LOCATE, IDENTIFY, DISCONNECT AND SEAL OR CAP OFF INDICATED UTILITY

SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS SERVICING AREAS TO BE SELECTIVELY DEMOLISHED.

1. DEMOLISH IN SMALL SECTIONS. CUT MASONRY AT JUNCTURES WITH CONSTRUCTION TO REMAIN, USING POWER-DRIVEN SAW, THEN REMOVE MASONRY BETWEEN SAW CUTS.

1. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE SELECTIVE DEMOLITION

TEMPORARY SHORING

1. PROVIDE AND MAINTAIN SHORING, BRACING AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF SELECTIVE DEMOLITION.

DEMOLITION PLAN NOTES

- DP1. REMOVE EXISTING CERAMIC FLOOR TILE COMPLETE. PREPARE SUBFLOOR FOR SPECIFIED FLOOR FINISH. DP2. REMOVE EXISTING CEILING SYSTEM COMPLETE INCLUDING ACOUSTICAL CEILING TILE, GRID, GRILLS, AND
- DP3. REMOVE EXISTING CERAMIC BASE COMPLETE. PREPARE WALL FOR SPECIFIED FINISHES. REMOVE EXISTING TOILET ACCESSORIES. DELIVER TO OWNER.
- DP5. REMOVE EXISTING TOILET PARTITIONS COMPLETE. PATCH AND REPAIR WALLS FOR TOILET PARTITIONS. DP6. REMOVE EXISTING SINKS AND VANITIES COMPLETE. PATCH AND REPAIR WALLS FOR SINKS AND VANITIES.
- DP7. REMOVE EXISTING TOILETS AND URINALS COMPLETE. DP8. REMOVE EXISTING VINYL TILE COMPLETE. PATCH, REPAIR AND PREPARE SUBFLOOR FOR SPECIFIED FLOOR
- DP9. REMOVE EXISTING RUBBER BASE COMPLETE. PATCH, REPAIR AND PREPARE WALL FOR RUBBER BASE.
- DP10. PREPARE EXISTING GYPSUM BOARD WALLS FOR SPECIFIED FINISHES. DP11. REMOVE EXISTING VINYL STAIR TREADS COMPLETE AT STAIR. PATCH, REPAIR AND PREPARE STAIR
- SUBSTRATE FOR VINYL STAIR TREADS. DP12. PREPARE EXISTING STAIR HANDRAIL, PICKETS, RISERS, STRINGER. CLEAN, SCRAPE, REPAIR AND PREPARE
- DP13. REMOVE EXISTING DOOR, TRANSOM, AND FRAME COMPLETE. EXPAND OPENING TO 5'-0" W X 8'-0" H AND
- PREPARE FOR NEW FRAME. PATCH AND REPAIR WITH NEW SHEET ROCK FLUSH WITH ADJACENT SURFACES. DP14. REMOVE EXISTING ELEVATED FLOOR COMPLETE. PATCH, REPAIR, AND PREPARE SUBFLOOR FOR SPECIFIED
- DP15. REMOVE EXISTING COUNTER AND BRACKETS. PATCH, REPAIR, AND PREPARE WALLS FOR SPECIFIED FINISH. DP16. PREPARE EXISTING ELEVATOR DOORS FOR PAINT.
- ∕DP17. ŘEMOVE EXISTING WALL∕SCONCE AND DELIVER TO OWNER. ✓
- DP18. REMOVE EXISTING DOOR AND FRAME COMPLETE.
- DP19. EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN. PROTECT DURING CONSTRUCTION DP20, GRIND APPROX. 150 SE OF CONCRETE SUBFLOOR TO LEVEL. APPLY APPROX. 150 SF OF SELF LEVELING COMPOUND TO ARÉA TO ENSURE SMOOTH, LEVEL FINISH FOR APPLICATION OF SPECIFIED FLOOR FINISH PER MANUFACTURER'S WRITTEN INSTRUCTIONS. PATCH AND REPAIR ADJACENT SURFACES IMPACTED BY GRINDING OR LEVELING CONCRETE.
- DP21. EXISTING WALL MOUNTED DOOR STOPS TO REMAIN. PROTECT DURING CONSTRUCTION. EXISTING FLOOR MOUNTED DOOR STOPS TO BE REMOVED PRIOR TO DEMOLITION AND REINSTALLED AFTER INSTALLATION OF NEW SPECIFIED FLOOR FINISHES.

STUDIO 2LR INC. Columbia, SC No. 100136



CIAL

REVISIONS

NO. DATE DESCRIPTION

05/14/20 Revision 1 2 05/21/20 Revision 2

PROJECT NUMBER 19063

ENLARGED DEMOLITION PLANS

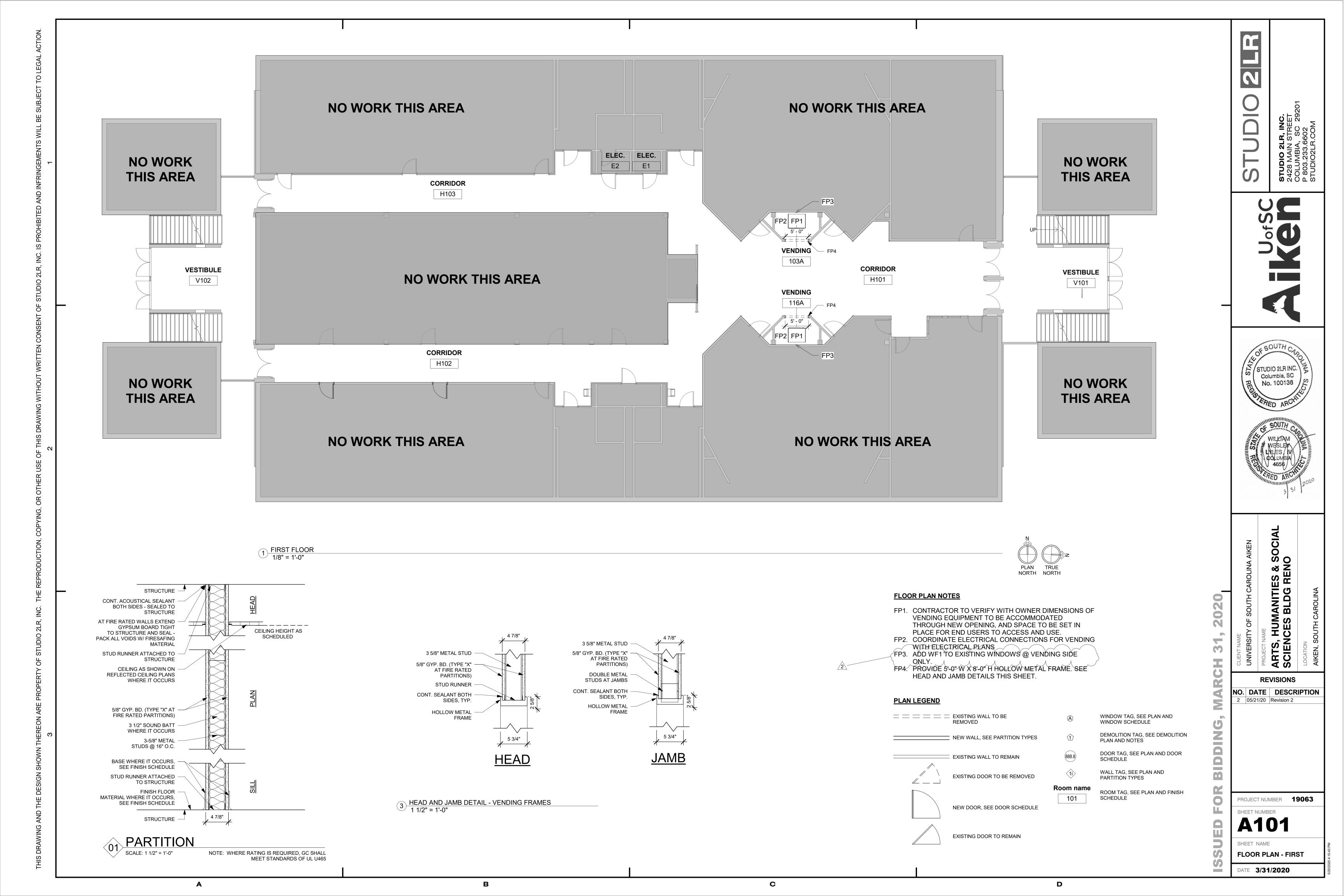
ADD ALTERNATE #1

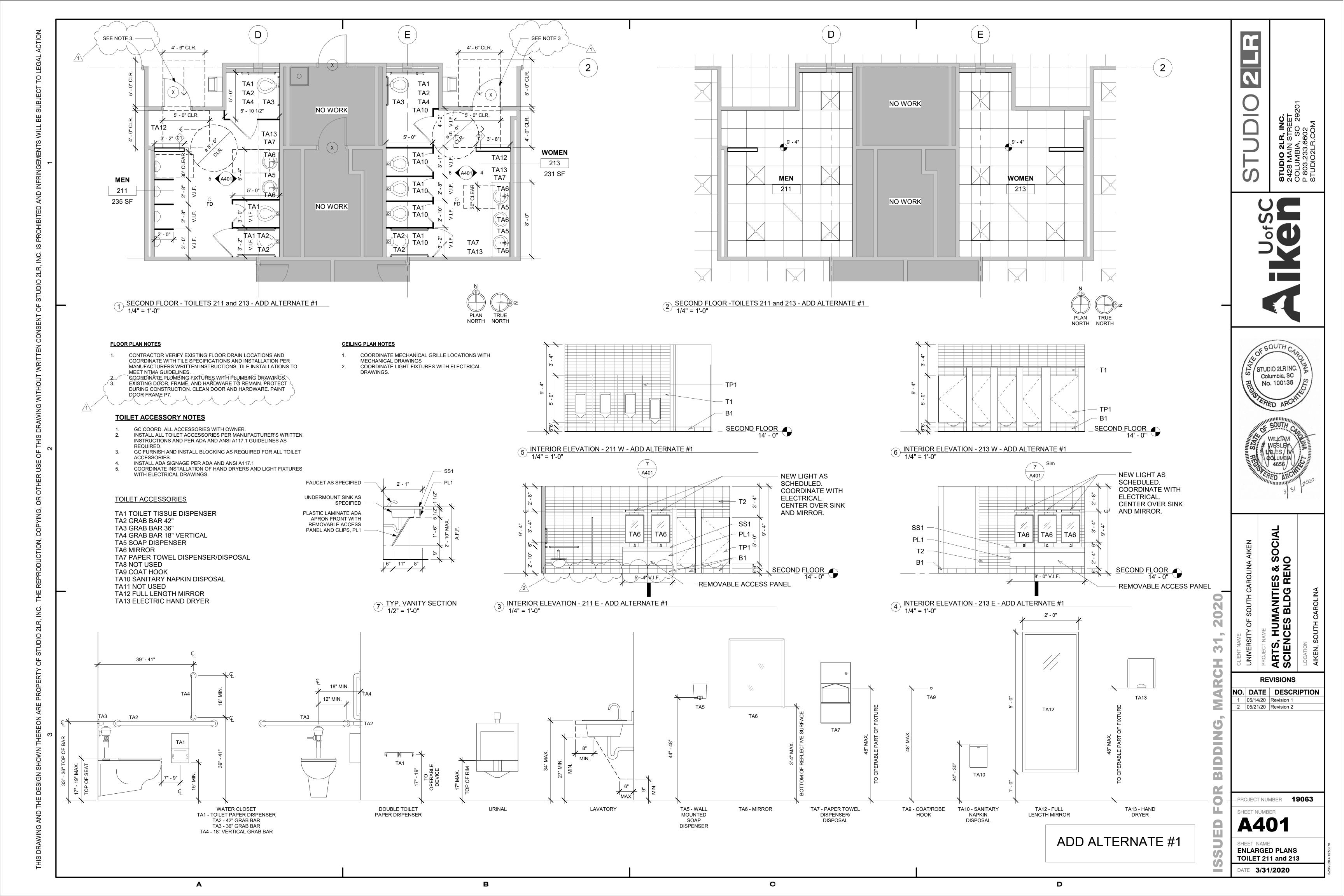
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DATE 3/31/2020







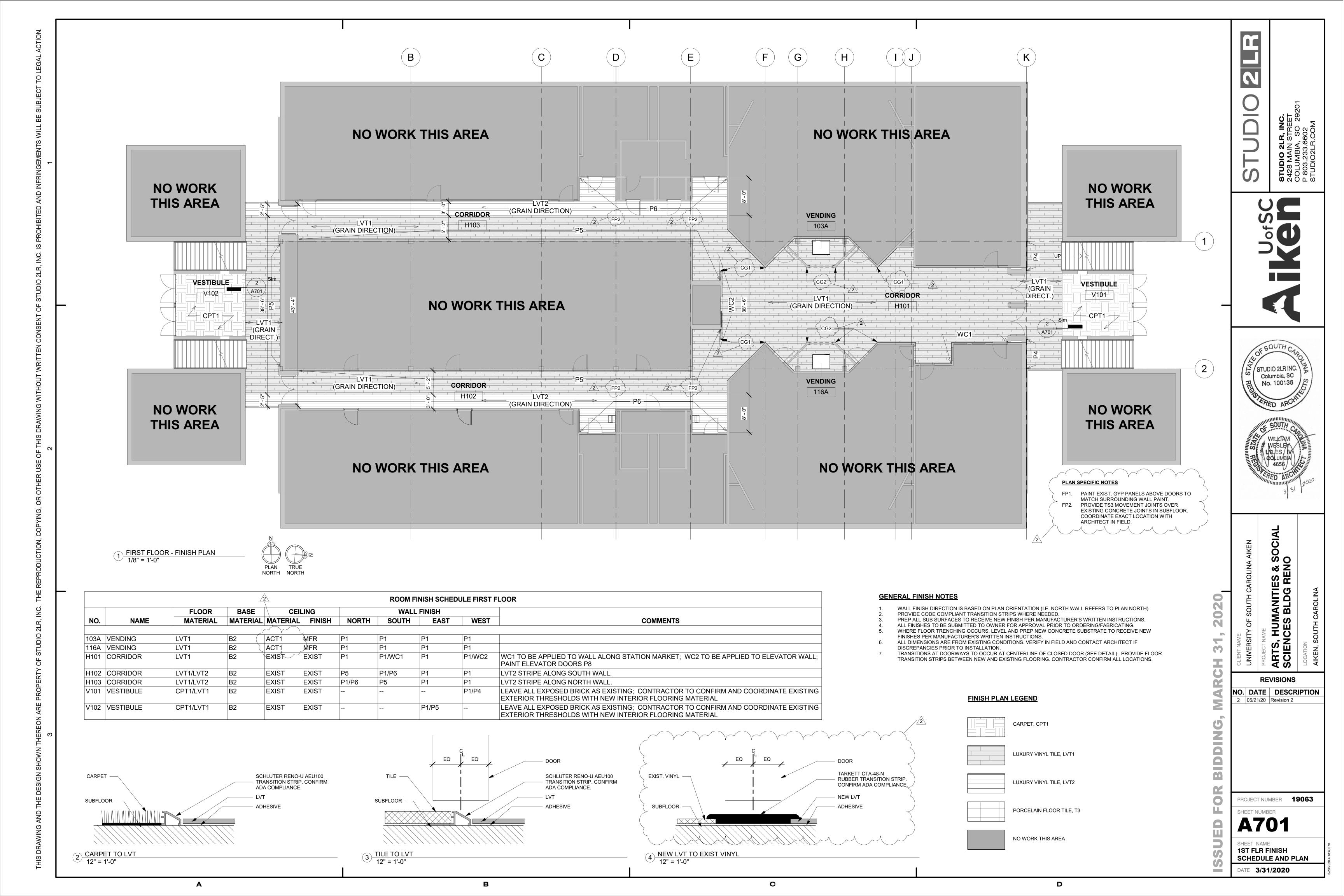
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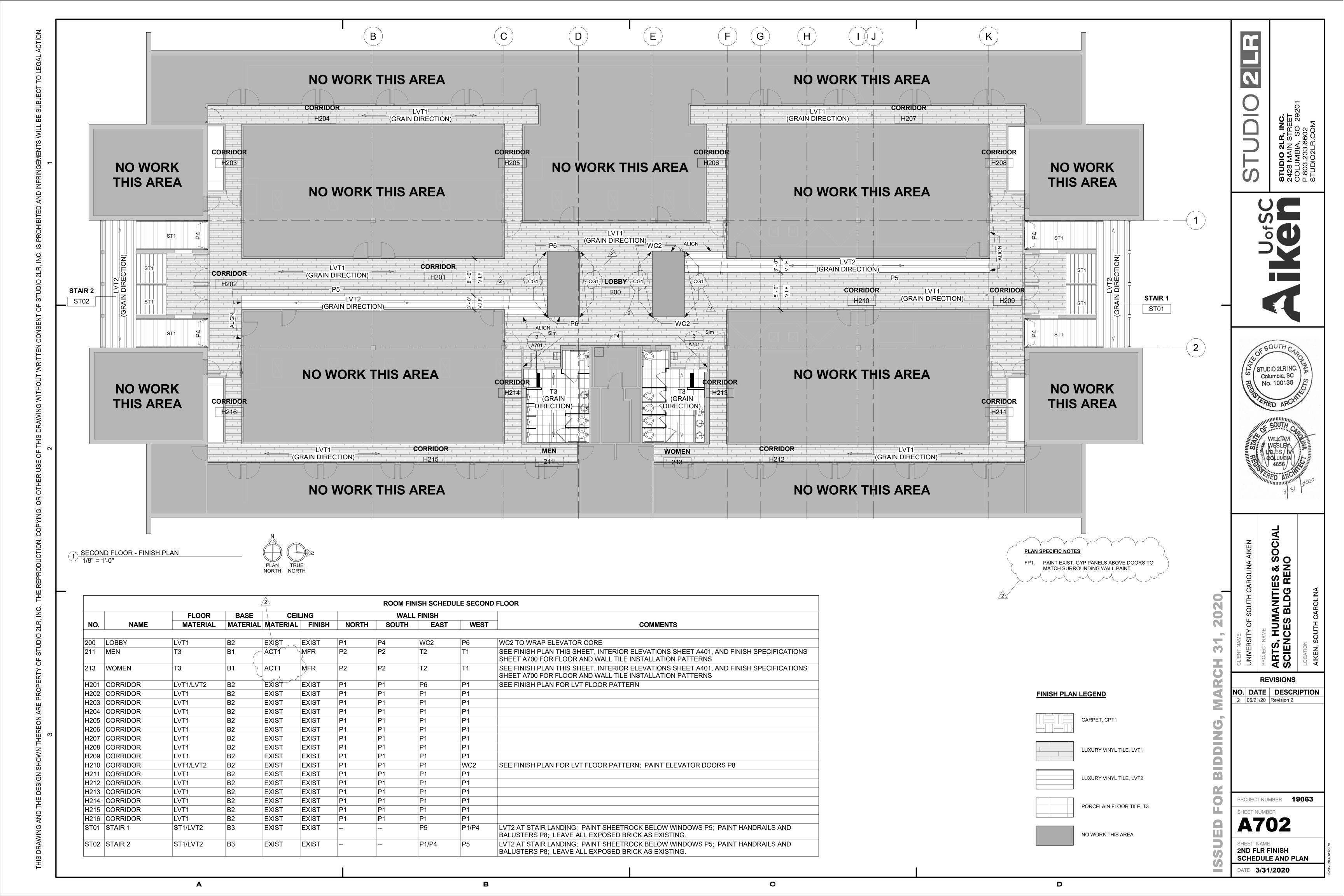
REVISIONS NO. DATE DESCRIPTION 05/14/20 Revision 1 2 05/21/20 Revision 2

M

PROJECT NUMBER 19063

FINISH SPECIFICATIONS DATE **3/31/2020**







Date: May 15, 2020

The Schneider Company 39A Pelham Davis Circle Greenville SC 29615 Phone: (864) 675-9250 Fax: (864) 675-9640

Job Name USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG TSC20-44083 471 UNIVERSITY PKWY, AIKEN SC

Bid Date May 28, 2020

Submittal Date May 15, 2020

Architect: STUDIO 2LR ARCHITECTURE 2428 MAIN STREE Columbia SC 29201

Engineer: GWA, INC 168 LAURELHURST AVENUE COLUMBIA SC 29210 Date: May 15, 2020

THE

SCHNEIDER

Transmittal

The Schneider Company 39A Pelham Davis Circle Greenville SC 29615 Phone: (864) 675-9250 From: ANITA SMITH

Project	USCA	ARTS	HUMANITIES	SOCIAL

SCIENCES BLDG

Quote# TSC20-44083

Location 471 UNIVERSITY PKWY, AIKEN SC

To

GWA, INC 168 LAURELHURST AVENUE

COLUMBIA SC 29210 Contact: DICKSON OBRIEN

oontaot.	BIOINGON OBINIEN		
ATTACHED WE AR ☐ Drawings ☐ Prints ☐ Plans	□ Sp □ Inf	COPY OF THE FOLLOW cecifications formation ubmittals	/ING ITEM: Other:
THESE ARE TRANS ☑ Prior Approval ☐ Approval ☐ Approval as Sub ☐ Approval as Not	☐ Re ☐ Co omitted ☐ Yo	esubmittal for Approval orrections our Use eview and Comment	Record Bids due on: Other:
Type	MFG	Part	
А	H.E. WILLIAMS	LT-22-L39/835-AF-(4)EQ CLIF DIM1-UNV	PS-(L33)-
B - OPT 1	WAC	WS-77624-27-STD FINISH	
B - OPT 2	OXYGEN LIGHTING	3-537-27-STD FINISH	
B - OPT 3	OXYGEN LIGHTING	3-524-27-STD FINISH	
С	H.E. WILLIAMS	75S-4-L50/835-(2)VBY-2/PWU	J-DIM-UNV

FF00009 Page 1/1



DICKSON OBRIEN GWA, INC 168 LAURELHURST AVENUE COLUMBIA SC 29210

RE: USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG 471 UNIVERSITY PKWY, AIKEN SC

Dear DICKSON

MFG Type **Part** Α H.E. WILLIAMS LT-22-L39/835-AF-(4)EQ CLIPS-(L33)-DIM1-UNV B - OPT 1 WAC WS-77624-27-STD FINISH B - OPT 2 3-537-27-STD FINISH OXYGEN LIGHTING OXYGEN LIGHTING 3-324-27-3TD FINISH С H.E. WILLIAMS 75S-4-L50/835-(2)VBY-2/PWU-DIM-UNV BE

> - (AW) 5.18.20

FIXTURE TYPE "B-OPT1" AND FIXTURE TYPE "B-OPT 2" APPROVED FOR BIDDING.

FF00010



Job Name:

USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG Architect: STUDIO 2LR ARCHITECTURE (Columbia)

3-7/8

LT-AR Air Return [2]

Catalog Number: LT-22-L39/835-AF-(4)EQ CLIPS-(L33)-DIM1-UNV Notes:

CATALOG #:

PROJECT:

CRI

9 90 ts

Type:

TSC20-44083







ORDERING EXAMPLE: LT - 24 - L52/835 - AF - OPTIONS - DIM - UNV

23-13/16

2x2 | 2x4 Shown

Low-profile depth for shallow plenum

- applications
- Diffuse lens provides smooth illumination for visual comfort
 Air return capability reduces number
- of unsightly ceiling vents for a cleaner appearance
- Surface mount kit preserves continuity
- Maximize energy savings with efficacies as high as 140 lm/W
- Made Right Here® in the USA

SPECIFICATIONS

FEATURES

- HOUSING/REFLECTOR Precision die-formed 22-gauge C.R.S. SHIELDING Frosted acrylic.
- FINISH Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL High quality mid-power LED boards. L80 >60,000 hours.
- MOUNTING NEMA Type "G". Surface mount and drywall kit accessories available, ordered separately.
- LISTINGS
 - cCSAus certified as luminaire suitable for dry or damp locations.
- DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
- City of Chicago Environmental Air approved when specified with CP option.
 WARRANTY 5-year limited warranty, see
- hew.com/warranty.



ORDERING INFO SERIES WIDTH LENGTH

1 1'[3] L28 2,800lm 4,700lm L63 6,300lm 2x2

L27 2,700lm L39 3,900lm L49 4,900lm 2x4 L40 4,000lm L52 5.200lm L64 6,400lm

L82 8,200lm

LUMENS [1]

SHIELDING CCT 27 2700K 30 3000K 35 3500K

AF Frosted acrylic 40 4000K 50 5000K

OPTIONS [6] Remote mount 7-watt emergency battery [8] 10-watt emergency battery [9] EM/7WRM EM/10W 12-watt emergency battery [19]
Earthquake clips [11] FM/12W EQCLIPS Integral occupancy sensor ar sor and power pack: Additional lower lumen packages available. [12] Example: 5,800 lumens = LT-24-L64/840-(L58) Chicago Plenum (CCEA) LT-14-SMK-W Surface mount kit, 1'x4', white LT-22-SMK-W Surface mount kit, 2'x2', white LT-24-SMK-W Surface mount kit, 2'x4', white DFK-1248W Drywall kit, 12" x 48", white

Drywall kit, 24" x 24", white Drywall kit, 24" x 48", white

DIM Dimming driver DRV VRF/DSR

Non-dimming driver Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver

120 120V 277 277V UNV 120-277V

VOLTAGE

DIM 1%

DRIVER [7]

QUICKSHIP 99

DFK-2424W DFK-2448W

LT-14-I 47/835-AF-QS-DIM-UNV LT-14-L47/840-AF-QS-DIM-UNV

LT-22-L39/835-AF-QS-DIM-UNV LT-22-L39/840-AF-QS-DIM-UNV LT-24-L40/835-AF-QS-DIM-UNV LT-24-L40/840-AF-QS-DIM-UNV LT-24-L64/835-AF-QS-DIM-UNV LT-24-L64/840-AF-QS-DIM-UNV

NOTES

- Lumens based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see options

 Air return through side slots. Not available with surface mount or CP option.

 4' length only

 2' width only

 Extended land times may apply. Consult factors for availability.

- 2 witch this Extended lead times may apply. Consult factory for availability. See page 3 for FLEXIBLE WHIP OPTIONS. See page 3 for SURFACE MOUNT KIT DETAILS. See Technical Info for Drywall Kit and Power Entry details.
- See page 2 for ADDITIONAL CONTROL OPTIONS. 120-277V only 120-277V only
- 120-277V only
- 14 per fixture; LT is compatible with Williams earthquake clips only.
 12 Specify in increments of 100 nominal lumens. Option must be
- specified with next higher lumen package.

 Not available with EM batteries

H.E. Williams, Inc. Carthage, Missouri www.hew.com 417-358-4065 Designed and Manufactured in the USA Information contained herein is subject to change without notice.

HEW.70491.JL REV.02/04/20

Recessed Page 1 of 3



Catalog Number:

LT-22-L39/835-AF-(4)EQ CLIPS-(L33)-DIM1-UNV Notes:

Type:



FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)
	L28	2814	21.4	131.6
1x4	L47	4677	33.7	138.7
3	L63	6261	48.5	129.1
	L27	2722	21.3	127.8
2x2	L39	3934	33.1	118.7
	L49	4869	38.1	127.7
	L40	3972	32.0	124.1
2x4	L52	5202	37.2	140.0
7	L64	6396	48.5	131.9
	L82	8214	64.3	127.7

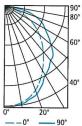
MULTIPLIER TABLE

	COLOR TEMPERATURE		
	CCT	CONVERSION FACTOR	
	2700K	0.97	
≂	3000K	0.99	
80 CRI	3500K	1.00	
∞	4000K	1.03	
	5000K	1.06	
	2700K	0.80	
₹	3000K	0.82	
90 CRI	3500K	0.83	
6	4000K	0.86	
100	5000K	0.89	

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
 Wattage shown is based on 120V input.
 Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
 Use multiplier table to calculate additional options.

PHOTOMETRY

LT-24-L52/835-AF-DIM-UNV Total Luminare Output: 5202 lumens; 37 Watts I Efficacy: 141 lm/W I 82 CRI; 3043 K CCT



	VERTICAL	HORIZONTAL ANGLE			ZONAL
	ANGLE	0°	45°	90°	LUMENS
CANDLEPOWER DISTRIBUTION	0	1851	1851	1851	
5	5	1843	1844	1846	175
뭂	15	1745	1761	1779	499
泛	25	1544	1589	1636	730
2	35	1276	1359	1440	848
8	45	1055	1193	1315	902
Œ,	55	741	902	1044	802
ᅙ	65	480	667	817	647
ઇ	75	241	429	544	438
	85	70	174	159	161
	90	0	0	0	

₩	ZONE	LUMENS	% FIXTURE
UMEN SUMMARY	0 - 30	1404	27
S	0 - 40	2252	43
H	0 - 60	3955	76
3	0 - 90	5202	100
	0 - 180	5202	100

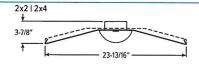
ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (Must specify 120V or 277V only)
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

CROSS SECTIONS







Information contained herein is subject to change without notice.

H.E. Williams, Inc.

Carthage, Missouri

www.hew.com

417-358-4065

Designed and Manufactured in the USA HEW.70491.JL REV.02/04/20

Recessed Page 2 of 3



Job Name:
USCA ARTS HUMANITIES SOCIAL SCIENCES
BLDG Architect: STUDIO 2LR ARCHITECTURE (Columbia)

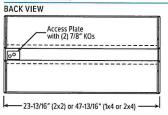
Catalog Number: LT-22-L39/835-AF-(4)EQ CLIPS-(L33)-DIM1-UNV Notes:

Type:

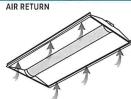
TSC20-44083



FIXTURE DETAILS







Total Air Return Space: 12-1/2" sq. (2x2) and 25-1/2" sq. (1x4 and 2x4)

SURFACE MOUNT KIT DETAILS

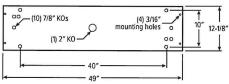


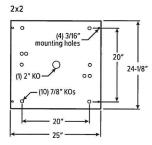


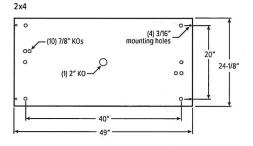


BACK VIEWS









FLEXIBLE WHIP OPTIONS

All Williams recessed troffers are available with a flexible metallic wiring harness, factory-attached and hard-wired to the luminaire. See ordering information table.

Straight connectors are a snap-in type. Consult factory for wiring harness utilizing connectors secured by lock nuts, optional flex size, lengths, and other wire sizes or circuitry. Three-wire flex utilizes black, white, and green wire. Four-wire flex utilizes black, white, red, and green wire. Adding an emergency option requires an additional wire.

Williams fixtures are UL listed to provide factory-installation of several manufacturers' modular wiring devices. Consult factory for availability and ordering information.

DESIGNATION	DESCRIPTION	DRIVER
F338	6' of 3/8" flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348	6' of 3/8" flex, (4) No. 18 AWG wires with (2) straight connectors	SD40
F334	6' of 3/8" flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344	6' of 3/8" flex, (4) No. 14 AWG wires with (2) straight connectors	SD40
F358	6' of 3/8" flex, (5) #18 AWG wires with (2) straight connectors	DIM, DALI

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Designed and Manufactured in the USA HEW.70491.JL REV.02/04/20

Recessed Page 3 of 3 Submitted by The Schneider Company THE

COMPAN

USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG Architect: STUDIO 2LR ARCHITECTURE (Columbia)

Catalog Number:

Delivered Lumens

1330

1440 1510

WS-77624-27-STD FINISH

Notes:

Type:

B-OPT 1

dweLED

Brink

Bathroom Sconce

WS-77624	24"
----------	-----

C	olor Temp	& CRI
	2700K	90
	3000K	90
	3500K	90

Vatt	LED Lumens
0.5W	1595
0.5W	1720
0.5W	1785

Finish

Fixture Type: Catalog Number:

Project:

Location:

Brushed Aluminum BK Brushed Black BR Brushed Brass

Example: WS-77624-27-AL

DESCRIPTION

A beautiful bar of pure LED light radiates through the co-extruded acrylic diffuser for brighter illumination, and an adjustable back plate adds versatility to this design's many attributes. It's a clean modern sconce

FEATURES

- · Conversion plate for 4" J box included
- · Adjustable backplate
- \cdot Driver installed within the Junction Box, driver dimension: 2.76" x 1.26" x 1.18"
- 5 year warranty

SPECIFICATIONS

Color Temp:

3500K, 3000K, 2700K 120-277 VAC, 50/60Hz

Input: CRI:

90

Dimming:

ELV: 100 - 5%

Rated Life:

85000 Hours Can be mounted on wall in all orientations

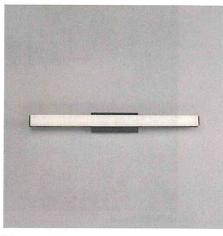
Mounting: Standards:

ETL, cETL, Energy Star 2.0

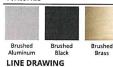
Damp Location Listed

Construction:

Aluminum hardware with co-extruded acrylic



FINISHES





WS-77624

Submitted by The Schneider Company



Job Name:

Architect: STUDIO 2LR ARCHITECTURE (Columbia)

Catalog Number: 3-537-27-STD FINISH

Notes:

Type:

B - OPT 2

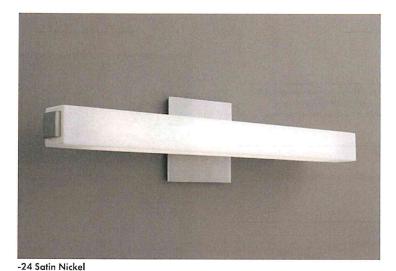
TSC20-44083

ADELPHI Vanity

3-537-xx



FIXTURE TYPE	LOCATION
PROJECT	DATE





-22 Oiled Bronze



-40 Aged Brass

DIMENSIONS W:

H:

Ext:

M.C:

24.25"

4.75"

3.50"

LIGHT SOURCE 1 x 11.7W LED, 3000K, CRI 90

LUMINAIRE POWER 14.1 W at 120V

RATED LIFE 60000 hr RL

OPTIONAL COLOR

2700K, 3500K, 4000K **TEMPERATURES**

LUMEN OUTPUT Delivered: 1258 lm (LM-79)

INPUT VOLTAGE 120V to 277V AC, 50/60Hz

DRIVER OUTPUT 350mA, 14.7W max power

DIMMING

TRIAC and ELV dimming at 120V AC; 0-10V dimming, 100% to 1% current output

CONSTRUCTION Plated Steel and Acrylic **DIFFUSER** - Matte White Acrylic

FINISHES Oiled Bronze (-22), Satin Nickel (-24), Aged Brass (-40)

MOUNTING 4" Octagonal J-Box

UL Dry/Damp listed, ADA Compliant, CEC Title 24 Compliant, Conforms to UL STD 1598, Certified CAN/CSA STD C22.2 No 250.0. **STANDARDS**

Order example for standard fixture:

3-537-24 (x- Voltage - xxx-Sequence # - xx-Finish)

3: 120V to 277V

Order example for optional color temperatures: 3-537-2724

27: 2700K, 35: 3500K, 40: 4000K







2.37" From top of fixture



201 Railhead Road, Fort Worth, TX 76106 - Tel. (877) 607-0202 - www.oxygenlighting.com

Submitted by The Schneider Company

COMPAN

Job Name:

USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG Architect: STUDIO 2LR ARCHITECTURE (Columbia)

Catalog Number: 3-524-27-STD FINISH

Notes:

Type:

B - **OPT** 3

APOLLO Vanity

3-524-xx

FIXTURE TYPE

LOCATION

DATE

PROJECT



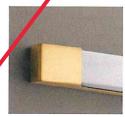
-22 Oiled Bronze



-14 Polished Chrome



-24 Satin Nickel



-40 Aged Brass



Alternative position

LIGHT SOURCE

2 x 10.1W LED, 3000K, CRI 90

LUMINAIRE POWER 26.1 W at 120V

RATED LIFE

60000 hr RL

OPTIONAL COLOR TEMPERATURES

2700K, 3500K, 4000K

LUMEN OUTPUT

Delivered: 1727 m (LM-79)

INPUT VOLTAGE

120V to 277 AC, 50/60Hz

DRIVER OUTPUT

700mA, 9.4W max

DIMMING

and ELV dimming at 120V AC; V dimming, 100% to 10% current output

CONSTRUCTION

lated Steel and Acrylic

DIFFUSER

- Matte White Acrylic

FINISHES

Polished Chron

NOT APPROVED EQUAL

Satin Nickel (-

MOUNING

4"x4" J-Box* with a single device mud ring *Deep J-Box (Required to house driver)

ANDARDS

ETL Dry/Damp listed, ADA compliant, CEC Title 24 Compliant, Conforms to UL STD 1598, Certified CAN/CSA, STD C22.2 No 250.0.

Order example for standard fixture:

3-524-24 (x- Voltage - xxx-Sequence # - xx-Finish)

3: 120V to 277V

Order example for optional color temperatures: 3-524-2724

27: 2700K, 35: 3500K, 40: 4000K



DIMENSIONS W:

H:

Ext:

27.75"

2.75"

2.50"

1.38" From top of fixture





201 Railhead Road, Fort Worth, TX 76106 - Tel. (877) 607-0202 - www.oxygenlighting.com



Job Name:

USCA ARTS HUMANITIES SOCIAL SCIENCES BLDG Architect: STUDIO 2LR ARCHITECTURE (Columbia)

Catalog Number: 75S-4-L50/835-(2)VBY-2/PWU-DIM-

UNV Notes: Type:

TSC20-44083

5 LED Narrow Strip







FEATURES

- Small fixture profile allows inconspicuous placement in coves or confined spaces
- Round and square lensed fixtures provide a clean look for architectural
- Row applications produce continuous light with minimal interruption between fixtures
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare Variety of mounting accessories for surface and suspended applications
- Special reflectors are available to provide
- precise light distribution (75 only)
 Maximize energy savings with efficacies as high as 171 lm/W
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING 22-gauge die-formed C.R.S.
- FINISH 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL High quality mid-power LED board. Rated for 50,000 hours at 70% lumen maintenance (L70). 25°C maximum ambient operating temperature
- MOUNTING Surface (ceiling or wall) or suspended (hanging hardware required) LISTINGS -
- cETLus conforms to UL STD 1598, Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations
- DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at
- WARRANTY 5-year limited warranty, see



ORDERING EXAMPLE: 75 - 4 - L85/835 - OPTIONS - DIM - UNV

ORDERING INFO

LENGTH [1] SERIES LUMENS [2] L15 1,500Im 75R 755 L20 2,000lm L30 3,000lm L40 4,000lm [4] 3' L40 4.000lm L30 3,000lm 6,500lm L85 8,500lm [5] L60 6,000lm 1100 10 000lm L130 13,000lm L170 17,000lm [6]

CCT **27** 2700K 30 3000K 40 4000K 50 5000K

OPTIONS [3] EM/7WRM

EM/10WLP EM/10WRM

C2__ WG-75 315 VBY

1-1/2" ceiling spacer (2) Y-hangers (2) Y-hangers and (2) 2' chains Row aligner [12] RA-75 45AMB (2) 45° adjustable mounting brackets [13] (L__)

Additional lower lumen packages available.^[14] Example: 7,000 nominal lumens = 75-4-L85/835-(L70)-DIM-UNV

Remote mount 7-watt emergency battery [8]

Two-circuit quick-connect wiring harness. [11]

Low-profile 10-watt emergency battery [9] Remote mount 10-watt emergency battery [10]

11-gauge white powder coat wireguard

MOUNTING (EXAMPLE: AC/D48) [15]

Prefix Type D 1" grid & hardpan 24 24" N 9/16" grid 48 48" S Slot grid 96 96"

CONTROL [16]

Dimming driver Non-dimming driver DIM

VDO/DSR Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver

VRF/DSR Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver VOLTAGE

120 120V 277 277V UNV 120-277 347 347V [17]

QUICKSHIP 🔑

75S-4-L50/835-QS-DIM-UNV 75S-4-L50/840-QS-DIM-UNV

75S-8-L100/835-QS-DIM-UNV 75S-8-L100/840-QS-DIM-UNV

NOTES

- For actual length, see page 4 for FIXTURE DETAILS Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. See page 5 for FINISH OPTIONS. See page 4 for MOUNTING DETAILS. See page 5 for SPECIAL REFLECTORS. Available with 75 only.

- MOUNTING DETAILS. See page 5 for SPECIAL REFLECTORS.
 Available with 75 only.
 Available with 75 only.
 Extended lead times may apply. Consult factory for availability.
 120-277V only
- up 2' and 3' only; must specify 120V or 277V
 2' and 3' only; must specify 120V or 277V
 See page 4 for QUICK CONNECT OPTIONS.
- Required when row mounting with aircraft cables
 Cord recommended, ordered separately. See page 4 for MOUNTING DETAILS. Field-adjustable up and down in 7-1/2°
- increments.

 Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.

 Required with suspended mount fixtures. Units specified with aircraft cable require cord. See page 4 for MOUNTING DETAILS. Requires RA-75 row aligner. See page 4 for MOUNTING ACCESSORIES DETAILS.
- See page 3 for ADDITIONAL CONTROL OPTIONS.
 Not available with EM drivers



H.E. Williams, Inc.
Carthage, Missouri www.hew.com 417-358-4065 Information contained herein is subject to change without notice.

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Catalog Number:

75S-4-L50/835-(2)VBY-2/PWU-DIM-UNV Notes:

Type:

TSC20-44083

FIXTURE PERFORMANCE DATA

			75 (NO I	LENS)	75R &	755
	LED PACKAGE	WATTAGE	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)
	L15	10.8	1592	147.4	1496	138.6
7,	L20	14.5	2102	145.0	1976	136.3
7	L30	21.3	3092	145.2	2906	136.5
	L40	25.2	3832	152.1	_	_
'n	L40	26.9	3929	146.1	3693	137.3
	L30	19.6	3011	153.6	2830	144.4
4,	L50	31.2	5360	171.8	5038	161.5
4	L65	42.3	6313	149.2	5934	140.3
	L85	59.6	8384	140.7		-
	L60	35.5	5814	163.8	5465	153.9
òó	L100	63.5	10038	158.1	9436	148.6
ω.	L130	85.5	13069	152.9	12285	143.7
	L170	119.2	17268	144.9	_	_

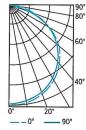
MULTIPLIER TABLE

	COL	OR TEMPERATURE
	CCT	CONVERSION FACTOR
	2700K	0.97
₹	3000K	0.99
80 CRI	3500K	1.00
œ	4000K	1.03
100	5000K	1.06
	2700K	0.80
≂	3000K	0.82
90 CRI	3500K	0.83
6	4000K	0.86
	5000K	0.89

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature. Wattage shown is average for 120V through 277V input. Results based on 3500K, 80 CRI, actual lumens may vary +/5%.
- Use multiplier table to calculate additional options.

PHOTOMETRY

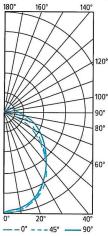
75-4-L85/835-DIM Total Luminaire Output: 8384 lumens; 59.6 Watts | Efficacy: 140.7 lm/W | 80 CRI; 3500K CCT



	VERTICAL ANGLE	HORIZONTAL ANGLE			TONAL LUMENO
	VERTICAL ANGLE	0°	45°	90°	ZONAL LUMENS
8	0	2846	2846	2846	
DISTRIBUTION	5	2867	2838	2827	270
2	15	2788	2751	2743	778
SS	25	2618	2579	2565	1192
	35	2374	2326	2298	1458
8	45	2030	1972	1956	1526
CANDLEPOWER	55	1606	1553	1533	1391
S	65	1104	1051	1030	1052
S	75	571	534	522	572
	85	102	114	99	142
W.	90	9	14	9	

IRY	ZONE	LUMENS	% FIXTURE
LUMEN SUMMARY	0 - 30	2240	27
3	0 - 40	3699	44
盃	0 - 60	6615	79
3	0 - 90	8381	100
	0 - 180	8383	100

75R-4-L65/835 Total Luminaire Output: 5934 lumens; 42.3 Watts | Efficacy: 140.3 lm/W | 80 CRI; 3500K CCT

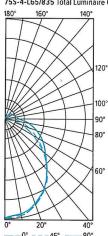


	VERTICAL ANGLE	НС	RIZONTAL AN	GLE	70141 1114516
4	VERTICAL ANGLE	0°	45°	90°	ZONAL LUMENS
	0	1901	1901	1901	
	5	1921	1894	1871	180
	15	1834	1830	1817	515
	25	1653	1690	1703	776
	35	1403	1496	1547	926
ᅙ	45	1085	1226	1336	939
CANDLEPOWER DISTRIBUTION	55	735	950	1090	832
쀭	65	455	690	818	653
질	75	196	462	568	449
2	85	46	294	367	277
8	90	6	228	298	
A.	95	1	182	241	165
ᅙ	105	0	110	161	99
5	115	0	69	109	61
	125	0	39	74	34
	135	0	21	46	17
3	145	0	9	25	7
	155	0	5	12	2
	165	0	0	3	0
13	175	0	0	0	0
	180	0	0	0	

	ZONE	LUMENS	% FIXTURE
≿	0 - 30	1471	25
LUMEN SUMMARY	0 - 40	2398	40
8	0 - 60	4168	70
NS	0 - 90	5547	94
빏	90 - 120	325	6
리	90 - 150	384	7
100	90 - 180	386	7
	0 - 180	5934	100

75 LED Narrow Strip

75S-4-L65/835 Total Luminaire Output: 5934 lumens; 42.3 Watts | Efficacy: 140.3 lm/ W | 80 CRI; 3500K CCT



	ERTICAL ANGLE	HO	RIZONTAL AN	GLE	TONAL LUMENIC
V	ERTICAL ANGLE	0°	45°	90°	ZONAL LUMENS
	0	2002	2002	2002	
	5	2019	1993	1965	189
3	15	1930	1913	1890	538
	25	1723	1731	1702	794
25	35	1443	1473	1440	913
5	45	1111	1138	1160	886
CANDLEPOWER DISTRIBUTION	55	771	850	946	770
₩.	65	453	615	749	605
SI	75	198	397	546	412
*	85	34	237	360	243
<u> </u>	90	0	180	286	
Ĭ.	95	0	169	252	164
<u> </u>	105	0	147	213	135
3	115	0	125	188	109
8	125	0	102	159	81
	135	0	71	121	52
	145	0	43	82	28
	155	0	26	46	12
	165	0	13	23	3
10	175	0	0	0	0
	180	0	0	0	

	ZONE	LUMENS	% FIXTURE
≿	0 - 30	1520	26
MA	0 - 40	2434	41
3	0 - 60	4090	69
NS	0 - 90	5350	90
LUMEN SUMMARY	90 - 120	408	7
3	90 - 150	569	10
	90 - 180	584	10
08	0 - 180	5934	100

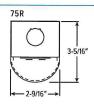
ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (Must specify 120V or 277V only)
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VDO/DSR	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VDO/DBI/LDE1	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VDO/DBI/LDE5	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

CROSS SECTIONS







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417-358-4065

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Submitted by The Schneider Company



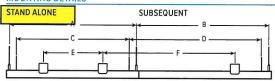
Catalog Number:

75S-4-L50/835-(2)VBY-2/PWU-DIM-UNV Notes:

Type:

TSC20-44083

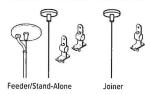
MOUNTING DETAILS



MOUNTING LENGTH

	AIRCRAFT CABLE		VBY HANGER		315 SPACER	
	A	В	С	D	E	F
2'	21-1/2"	22-1/2"	19"	22-1/2"	10"	22-1/2"
3'	32-1/2"	33-9/16"	30-1/16"	33-9/16"	21"	33-9/16'
4'	43-5/8"	44-5/8"	41-1/4"	44-5/8"	32"	44-5/8"
8'	88-3/16"	89-1/4"	85"	89-1/4"	77"	89-1/4"

STANDARD HARDWARE FOR SUSPENDED PRODUCT (Grid and Hardpan)



Notes:

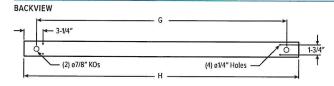
- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- Electrical supply is brought into the feeder fixture, either as part of a row or as a stand-alone unit. Joiner fixtures complete the row.
- The feeder kits are standard with a 5" canopy to cover the junction box and a 2" canopy at the non-feed point. No J-box is required at non-feed points.

CORD FOR SUSPENDED PRODUCT

Units specified with aircraft cable require cord. Please specify cord type using ordering information below.

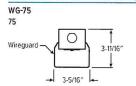
EXAMPLE: S2438/W				
CORD TYPE	LENGTH	# OF COND.	WIRE SIZE	COLOR
s	24 24" 48 48" 96 96"	3 4 5	8	/W White /B Black

FIXTURE DETAILS



	7/8" KOs (G)	ACTUAL FIXTURE LENGTH (H)
2'	18-3/8"	22-1/2"
3'	29-1/2"	33-9/16"
4'	40-1/2"	44-5/8"
8'	85-1/8"	89-1/4"

MOUNTING ACCESSORIES DETAILS













45AMB





QUICK CONNECT OPTIONS

Note: Quick connect wiring required for row mounting. Not available in 2' and 3' fixtures.

DESIGNATION	NUMBER OF WIRES (EXCLUDING GROUND)	WIRE COLORS	WIRE COLOR/POWER SUPPLY FACTORY CONNECTIONS	TYPICAL USE
C2B	3	White, Black, Red	White, Black	Alternating Circuits
C2BR	3	White, Black, Red	White, Black, Red	ON/OFF Switching (DRV) or Line Voltage dimming (DIM LINE) when equipped w/EM Power Supply (EM/10W)
C2R	3	White, Black, Red	White, Red	Alternating Circuits
C2BW/RY	5	White, Black, Red, Gray, Green	White, Black/Red, Gray	0-10V 4-wire Low Voltage Dimming (DIM)

Submitted by The Schneider Company Catalog Number: Type: T H E JOB Name:
USCA ARTS HUMANITIES SOCIAL SCIENCES
BLDG
Architect: STUDIO 2LR ARCHITECTURE
(Columbia) 75S-4-L50/835-(2)VBY-2/PWU-DIM-UNV Notes: TSC20-44083

5 LED Narrow Strip

SPECIAL REFLECTORS





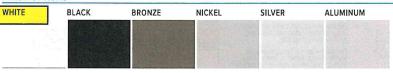




Reflectors are ordered separately, only available with 75, cannot be used with wireguard accessories.

Example: R1172-4-75LED REFL

FINISH OPTIONS



For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.