

**DESCRIPTION OF INTERIM CAPITAL PROJECT FOR CONSIDERATION**

October 5, 2017

**MEDICAL UNIVERSITY OF SOUTH CAROLINA**

**PROJECT NAME:** Basic Science Building 7<sup>th</sup> Floor Biorepository & Histology Lab Renovations

**REQUESTED ACTION:** Establish Construction Budget (Phase II)

**REQUESTED ACTION AMOUNT:** \$1,477,500

**PREVIOUS CHE ACTIONS:** June 1, 2017 (Phase I)

<b><u>Project Budget</u></b>	<b><u>Previous</u></b>	<b><u>Change</u></b>	<b><u>Revised</u></b>
Professional Service Fees	\$22,500	\$77,500	\$100,000
Renovations – Building Interior	\$0	\$1,250,000	\$1,250,000
Labor Costs	\$0	\$50,000	\$50,000
Contingency	\$0	\$100,000	\$100,000
<b><i>Total</i></b>	<b><i>\$22,500</i></b>	<b><i>\$1,477,500</i></b>	<b><i>\$1,500,000</i></b>

<b><u>Source of Funds</u></b>	<b><u>Previous</u></b>	<b><u>Change</u></b>	<b><u>Revised</u></b>
College of Medicine Clinical Revenue*	\$22,500	\$1,477,500	\$1,500,000
<b><i>Total</i></b>	<b><i>\$22,500</i></b>	<b><i>\$1,477,500</i></b>	<b><i>\$1,500,000</i></b>

\*REVENUE IS TRANSFERRED ON A REIMBURSEMENT BASIS FOR YEARLY EXPENSES AND COMMITMENTS

**DESCRIPTION:**

MUSC requests to proceed with Phase II for full design and construction of space on the 7<sup>th</sup> Floor of the Basic Science Building. This project will renovate approximately 4,000 sq. ft. of vacant, partially demolished lab space to enable the co-location of several existing labs to realize research efficiencies. Currently the Histology and Immunohistochemistry Lab, Hollings Center Biorepository and Tissue Analysis Lab, Brain Bank Lab, and the Electron Microscopy and Histology Labs are located on the 2<sup>nd</sup> and 3<sup>rd</sup> floors of the Walton Research Building. The vacated lab space in the Walton Research Building will be reconfigured into faculty offices and student study areas for the College of Medicine as part of an established permanent improvement project.

The proposed budget has not increased since presented for Phase I. All of the funds have been committed and are available for the project. Schematic design comments have been received from the Office of State Engineer, with no issues noted.

**E&G MAINTENANCE NEEDS:**

N/A – Renovation of lab space

**ADDITIONAL ANNUAL OPERATING COSTS/SAVINGS:**

No change in current expenses as this building is already built into the University’s maintenance plan.

**FOR DEPARTMENT USE ONLY**

CHE \_\_\_\_\_  
 JBRC \_\_\_\_\_  
 SFAA \_\_\_\_\_  
 JBRC Staff \_\_\_\_\_  
 ADMIN Staff \_\_\_\_\_  
 A-1 Form Mailed \_\_\_\_\_  
 SPIRS Date \_\_\_\_\_  
 Summary \_\_\_\_\_

(For Department Use Only)

SUMMARY NUMBER

FORM NUMBER

**PERMANENT IMPROVEMENT PROJECT REQUEST**

1. AGENCY Code H51 Name Medical University of South Carolina  
 Contact Person Philip S. Mauney Phone 843-792-2490

2. PROJECT Project # 9836 Name Basic Science Building 7th Floor Biorepository & Histology Lab Renovations  
 Facility # 500 Facility Name Basic Science Building

County Code	10 - Charleston
New/Revised Budget	\$1,500,000.00

Project Type	3 - Repair/Renovate Existing Facilities/Systems
Facility Type	2 - Program/Academic

3. CPIP PROJECT APPROVAL FOR CURRENT FISCAL YEAR  
 CPIP priority number \_\_\_\_\_ of \_\_\_\_\_ for FY \_\_\_\_\_.

4. PROJECT ACTION PROPOSED (Indicate all requested actions by checking the appropriate boxes.)

Establish Project	<input type="checkbox"/>	Decrease Budget	<input type="checkbox"/>	Close Project	<input type="checkbox"/>
Establish Project - CPIP	<input type="checkbox"/>	Change Source of Funds	<input type="checkbox"/>	Change Project Name	<input type="checkbox"/>
Increase Budget	<input checked="" type="checkbox"/>	Revise Scope	<input type="checkbox"/>	Cancel Project	<input type="checkbox"/>

5. PROJECT DESCRIPTION AND JUSTIFICATION  
 (Explain and justify the project or revision, including what it is, why it is needed, and any alternatives considered.  
 Attach supporting documentation/maps to fully convey the need for the request.)

This project will renovate approximately 4000 square foot of vacant, partially demolished lab space on the 7th floor of the Basic Science Building to enable the co-location of the following existing labs: Histology & Immunohistochemistry Lab, Hollings Cancer Center Biorepository and Tissue Analysis Lab, Brain Bank Lab, and the Electron Microscopy and Histology Labs. The goal is to realize research efficiencies by co-locating the labs and to provide enhanced quality of operations within and between each laboratory. The newly renovated labs will represent MUSC's progressive development in tissue and biorepository research and facilitate future development of the program.

This request is for approval to proceed with phase 2 full design and construction.

6. OPERATING COSTS IMPLICATIONS  
 Attach Form A-49 if any additional operating costs or savings will result from this request. This includes costs to be absorbed with current funding.

7. ESTIMATED PROJECT SCHEDULE AND EXPENDITURES  
 Estimated Start Date: June 2017 Estimated Completion Date: December 2018  
 Estimated Expenditures: Thru Current FY: \$750,000.00 After Current FY: \$750,000.00

8. ESTIMATES OF NEW/REVISED PROJECT COSTS

<b>PROJECT #</b>	9836
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- |  |                                       |                        |              |                   |
|--|---------------------------------------|------------------------|--------------|-------------------|
| 1. _____                                   | Land Purchase ---->                   | Land:                  | _____        | Acres             |
| 2. _____                                   | Building Purchase ---->               | Floor Space:           | _____        | Gross Square Feet |
| 3. <u>100,000.00</u>                       | Professional Services Fees            |                        |              |                   |
| 4. _____                                   | Equipment and/or Materials ---->      | Information Technology | _____        |                   |
| 5. _____                                   | Site Development                      |                        |              |                   |
| 6. _____                                   | New Construction ---->                | Floor Space:           | _____        | Gross Square Feet |
| 7. <u>1,250,000.00</u>                     | Renovations - Building Interior ----> | Floor Space:           | <u>4,000</u> | Gross Square Feet |
| 8. _____                                   | Renovations - Utilities               |                        |              |                   |
| 9. _____                                   | Roofing - _____                       | Roof Age               |              |                   |
| 10. _____                                  | Renovations - Building Exterior       |                        |              |                   |
| 11. _____                                  | Other Permanent Improvements          |                        |              |                   |
| 12. _____                                  | Landscaping                           |                        |              |                   |
| 13. _____                                  | Builders Risk Insurance               |                        |              |                   |
| 14. _____                                  | Other Capital Outlay                  |                        |              |                   |
| 15. <u>50,000.00</u>                       | Labor Costs                           |                        |              |                   |
| 16. _____                                  | Bond Issue Costs                      |                        |              |                   |
| 17. _____                                  | Other: _____                          |                        |              |                   |
| 18. <u>100,000.00</u>                      | Contingency                           |                        |              |                   |
| <u>\$1,500,000.00</u> TOTAL PROJECT BUDGET |                                       |                        |              |                   |

<b>ENVIRONMENTAL HAZARDS</b>	
Identify all types of significant environmental hazards (including asbestos, PCB's, etc.,) present in the project and the financial impact they will have on the project. Type: _____	
<u>Cost Breakdown</u>	
Design Services	\$ _____
Monitoring	\$ _____
Abate/Remed	\$ _____
Total Costs	\$ _____ 0.00

9. PROPOSED SOURCE OF FUNDING

Source	Previously Approved Amount	Increase/Decrease	Original/Revised Budget	Transfer to/from Proj. #	Rev Object Code	Treasurer's ID Number	Rev Sub Fund	Exp Sub Fund
(0) CIB, Group			0.00 0.00		8115		3043	3043
(1) Dept. CIB, Group			0.00 0.00		8115		3143	3143
(2) Institution Bonds			0.00 0.00					3235
(3) Revenue Bonds			0.00 0.00					3393
(4) Excess Debt Service			0.00 0.00					3497
(5) Capital Reserve Fund			0.00 0.00		8895		3603	3603
(6) Appropriated State			0.00 0.00		8895	68800100	1001	3600
(7) Federal			0.00 0.00			78800100		5787
(8) Athletic			0.00 0.00			88800100		3807
(9) Other (Specify) COM Clinical Revenue	22,500.00	1,477,500.00	1,500,000.00 0.00 0.00		7201	98800100	3035	3907
<b>TOTAL BUDGET</b>	<b>\$22,500.00</b>	<b>\$1,477,500.00</b>	<b>\$1,500,000.00</b>	#4 on FY18 Capital Budget				

10. SUBMITTED BY:

  
 \_\_\_\_\_  
 Signature of Authorized Official and Title

August 28, 2017

\_\_\_\_\_  
 Date

11. APPROVED BY:

(For Department Use Only) \_\_\_\_\_  
 Authorized Signature and Title

\_\_\_\_\_  
 Date

**ADDITIONAL ANNUAL OPERATING COSTS / SAVINGS  
RESULTING FROM PERMANENT IMPROVEMENT PROJECT**

1. AGENCY Code H51 Name Medical University of South Carolina

2. PROJECT Project # 9836 Name Basic Science Building 7th Floor Biorepository & Histology Lab Renovations

3. ADDITIONAL ANNUAL OPERATING COSTS SAVINGS. (Check whether reporting costs or savings.)

COSTS                       SAVINGS                       NO CHANGE

4.

TOTAL ADDITIONAL OPERATING COSTS SAVINGS				
Projected Financing Sources				
(1)	(2)	(3)	(4)	(5)
Fiscal Year	General Funds	Federal	Other	Total
1)	\$	\$	\$	\$ 0.00
2)	\$	\$	\$	\$ 0.00
3)	\$	\$	\$	\$ 0.00

5. If "Other" sources are reported in Column 4 above, itemize and specify what the other sources are (revenues, fees, etc.).

6. Will the additional costs be absorbed into your existing budget?  YES                       NO  
If no, how will additional funds be provided?

7. Itemize below the cost factors that contribute to the total costs or savings reported above in Column 5 for the first fiscal year.

	<u>COST FACTORS</u>	<u>AMOUNT</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
	TOTAL	\$0.00

8. If personal services costs or savings are reported in 7 above, please indicate the number of additional positions required or positions saved. \_\_\_\_\_

9. Submitted By: *Jose Fdunoy*                      8.28 2017  
Signature of Authorized Official and Title                      Date

**PERMANENT IMPROVEMENT PROJECT INFORMATION FORMAT  
FOR PHASE II CONSTRUCTION BUDGET**

**H51 – 9836 – BSB 7<sup>th</sup> Floor Biorepository & Histology Lab Renovation**

1. What is the total projected cost of the project and what is it based on? Please attach a summary of the costs prepared during the A&E pre-design phase to support the total cost.  
**\$1,500,000**
2. What is/are the source(s) of funds for the construction? If any private or federal funds are included, please attach a letter guaranteeing the availability of the funds.  
**Clinical Income**
3. What is your agency/institution's definition of each fund source to be used for construction? (If any type of fee makes up a portion of the source, what is the fee called, what is the fee amount, and when it was put in place. If there is a statutory authority authorizing the use of the funds for capital projects, please cite the code section.)  
**MUSC Physicians Department Generated-Clinical Revenue funds are transferred to the College of Medicine (COM) from the MUSCP Practice Plan on a reimbursement basis for yearly expenses and commitments.**
4. What is the current uncommitted balance of funds for each source listed in 3 above?  
**\$5,200,000**
5. If institution or revenue bonds are included as a source, when were the bonds issued? If not issued yet, when is the bond resolution expected to be brought for B&C Board approval?  
**Not Applicable**
6. If a student fee is used to fund debt service, what is the current amount of the fee annually or by semester? Please specify which.  
**Not Applicable**
7. Will the use of any funds for construction require an increase in any student fee or tuition? If so, please explain in detail.  
**NO**
8. Will the project be LEED certified for energy savings and conservation and if so, at what level will it be certified? For projects requiring or using LEED certification, please attach the required cost-benefit analysis and a checklist of items to be used to achieve LEED points or a description of the energy measures to achieve LEED.  
**NO**
9. What energy savings/conservation measures will be implemented within the project if the project will not be LEED certified? For projects that do not require/use LEED, please provide a paragraph on energy savings measures to be implemented as part of the project. If there are no energy savings measures included, please state that and explain why.  
**Energy efficient lighting and HVAC controls will be incorporated into the design.**
10. What is the projected date (month and year) for execution of the construction contract?  
**April 2018**
11. What is the projected date (month and year) for completion of construction?  
**November 2018**
12. What program(s) are to be included in the constructed or renovated space?  
**Histology & Immunohistochemistry Lab, Biorepository and Tissue Analysis Lab, Brain Bank Lab, and the Electron Microscopy and Histology Labs.**
13. What is the total square footage of the building to be renovated or constructed?  
**335,643 sf**
14. If a portion of the building is to be renovated, what is the square footage of the portion that will be included in the renovation?  
**4,000 sf**
15. What is the current age of the building or building systems to be renovated?  
**47 years old**
16. If any new space is being added to the facility, please provide demand/usage data to support the need.  
**No new space is being added**

17. What are the estimated numbers of students, faculty, staff and/or clients that are expected to use the space affected by the project or the entire building? (Answer for as many as are applicable.)  
**10 – 15 faculty and staff**
18. If the construction cost increased significantly from the internal estimate (30% or more), what factors caused the cost to increase?  
**Not applicable**
19. If the contingency is more than 10%, please explain why.  
**Not applicable**
20. If funds are being transferred from another project, what is the current status of the project from which funds are being transferred?  
**Not applicable**
21. Has the project been included in a previous year's CPIP? If so, what was the last year the project was included and for which year, 1-5?  
**At the time of the last CPIP submittal funding was not available for this project. Therefore it was not included**
22. What are the economic impacts of the project, including job creation and retention? If there are none, please explain.  
**The proposed area is for the Co-location of existing lab spaces: Histology and Immunohistochemistry Laboratory, Hollings Cancer Center Biorepository and Tissue Analysis Laboratory, the Brain Bank Laboratory, and the Electron Microscopy and Histology Laboratory. The goal for MUSC is to realize the efficiencies in co-locating the labs together and provide an enhanced quality of operations within and between each laboratory. The newly renovated laboratories will represent MUSC's progressive development in tissue and biorepository research and facilitate in future development of the program.**
23. How will your agency/institution address and fund maintenance of this facility construction/renovation?  
**The maintenance support structure is already in place for this existing area.**
24. If your agency/institution has a deferred maintenance account, what is the name of the account and what is its current uncommitted balance?  
**Yes, the name of the account is "Investment Fund-Deferred Maintenance." All funds in the account were committed to deferred maintenance projects during the FY18 capital budget process.**
25. If how maintenance will be addressed and funded for this facility construction/renovation has not been determined yet, what steps are in place to begin to address how your agency/institution will fund maintenance to this and other agency/institution facilities?  
**Not Applicable**



### Project Summary

**Client:** McMillan, Pazden, Smith  
121 Calhoun Street  
Charleston, SC 29401  
Contact: Andrew Pardue

**Date:** August 2, 2017

**Project:** BSB 7th Floor Bio / Histo Lab  
173 Ashley Avenue  
Charleston, SC 29425  
Project No. :

**Owner:** Medical University of South Carolina  
97 Jonathon Lucas Street  
Charleston, SC 29425  
Contact: Phil Mauney

Drawing Set

SD Phase Set

Description	Site		Building		Total	
	Cost	%	Cost	%	Cost	%
Lab Renovation	\$0		\$1,039,769		\$1,039,769	
<b>Total Estimated Base Bid</b>	<b>\$0</b>	<b>0.0%</b>	<b>\$1,039,769</b>	<b>87.0%</b>	<b>\$1,039,769</b>	

Design Contingency ( 10% of STCC)	\$0	0.0%	\$103,977	8.7%	\$103,977	
Construction Contingency ( 5% of STCC)	\$0	0.0%	\$51,988	4.3%	\$51,988	
<b>TOTAL Cost of Construction</b>	<b>\$0</b>	<b>0.0%</b>	<b>\$1,195,735</b>	<b>100.0%</b>	<b>\$1,195,735</b>	<b>100.0%</b>

<b>Construction Duration</b>					120 days	
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## Building Summary

**Client:** McMillan, Pazden, Smith  
 121 Calhoun Street  
 Charleston, SC 29401  
 Contact: Andrew Pardue

**Project:** BSB 7th Floor Bio / Histo Lab  
 173 Ashley Avenue  
 Charleston, SC 29425  
 Project No. :

<u>Project Info</u>		<u>Building Area</u>	
Type of Work:	Renovations	7th Floor	3,767 GSF
Duration of Project:	120 Days		
Project Budget:	Unknown		
Drawing Set:	SD Phase	<b>Total Area</b>	<b>3,767 GSF</b>

<i>Work Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Pr</i>	<i>Total</i>	<i>Cost/SF</i>	<i>Percent</i>
<b>DEMOLITION</b>				<b>\$21,315.20</b>	\$5.66	2.05%
<b>CONCRETE</b>				<b>\$19,007.47</b>	\$5.05	1.83%
<b>MASONRY</b>				<b>\$1,036.36</b>	\$0.28	0.10%
<b>STEEL &amp; IRON</b>				<b>\$10,519.05</b>	\$2.79	1.01%
<b>WOOD &amp; PLASTICS</b>				<b>\$25,916.63</b>	\$6.88	2.49%
<b>THERMAL &amp; MOISTURE PROTECTION</b>				<b>\$6,468.16</b>	\$1.72	0.62%
<b>DOORS &amp; WINDOWS</b>				<b>\$27,414.56</b>	\$7.28	2.64%
<b>FINISHES</b>				<b>\$78,543.90</b>	\$20.85	7.55%
<b>SPECIALTIES</b>				<b>\$4,586.70</b>	\$1.22	0.44%
<b>EQUIPMENT</b>				<b>\$1,122.83</b>	\$0.30	0.11%
<b>FURNISHINGS</b>				<b>\$155,100.00</b>	\$41.17	14.92%
<b>SPECIAL CONSTRUCTION</b>				<b>\$0.00</b>	\$0.00	0.00%
<b>CONVEYING SYSTEMS</b>				<b>\$0.00</b>	\$0.00	0.00%
<b>FIRE PROTECTION</b>				<b>\$0.00</b>	\$0.00	0.00%
<b>PLUMBING</b>				<b>\$205,790.00</b>	\$54.63	19.79%
<b>MECHANICAL SYSTEMS - HVAC</b>				<b>\$226,024.00</b>	\$60.00	21.74%
<b>ELECTRICAL</b>				<b>\$107,135.00</b>	\$28.44	10.30%
<b>COMMUNICATIONS</b>				<b>\$0.00</b>	\$0.00	0.00%
<b>SAFETY AND SECURITY</b>				<b>\$6,810.00</b>	\$1.81	0.65%
<b>GENERAL CONDITIONS</b>				<b>\$49,248.00</b>	\$13.07	4.74%
<b>JOB CLEAN-UP</b>				<b>\$8,323.51</b>	\$2.21	0.80%
<b>INSURANCE, LICENSE, &amp; PERMITS</b>				<b>\$10,997.12</b>	\$2.92	1.06%
<b>BONDING</b>				<b>\$9,431.93</b>	\$2.50	0.91%
<b>CONTRACTOR OVERHEAD</b>				<b>\$25,773.67</b>	\$6.84	2.48%
<b>CONTRACTOR PROFIT</b>				<b>\$39,205.40</b>	\$10.41	3.77%
<b>TOTAL BASE BID</b>				<b>\$1,039,769.50</b>	\$276.02	100.00%
<b>TOTAL COST OF CONSTRUCTION</b>				<b>\$1,039,769.50</b>		



Section	Work Description	Quantity	Unit	Line Totals	Division Totals	Unit Price	Total	Cost/SF	Percent
<b>Div. 1</b>	<b>GENERAL REQUIREMENTS</b>	<b>1</b>			<b>49,248</b>	<b>\$49,248.00</b>	<b>\$49,248</b>	<b>\$13.07</b>	<b>4.74%</b>
	Supervision (Duration 120 Days)	18	wk	33,264		\$1,848.00	\$33,264	\$8.83	3.20%
	Field Personnel	1	lot	3,510		\$3,510.00	\$3,510	\$0.93	0.34%
	Temporary Utilities	1	lot	3,000		\$3,000.00	\$3,000	\$0.80	0.29%
	Office Supplies	1	lot	3,720		\$3,720.00	\$3,720	\$0.99	0.36%
	Field Engineering	1	lot	500		\$500.00	\$500	\$0.13	0.05%
	Rental Equipment	1	lot	654		\$654.00	\$654	\$0.17	0.06%
	Equipment Maintenance	1	lot	600		\$600.00	\$600	\$0.16	0.06%
	Project Scheduling	1	lot	2,500		\$2,500.00	\$2,500	\$0.66	0.24%
	Proeject Safety	1	lot	1,500		\$1,500.00	\$1,500	\$0.40	0.14%
<b>Div. 2</b>	<b>EXISTING CONDITIONS</b>	<b>1.00</b>			<b>29,639</b>	<b>\$29,638.71</b>	<b>\$29,639</b>	<b>\$7.87</b>	<b>2.85%</b>
	Clean-up	1.00				\$0.00	\$0	\$0.00	0.00%
	Daily	100	mhr	2,079		\$20.79	\$2,079	\$0.55	0.20%
	Final	3,767	sf	1,757		\$0.47	\$1,757	\$0.47	0.17%
	Dumpsters	12	ea	4,488		\$373.96	\$4,488	\$1.19	0.43%
022223	Selective Demolition	1		0		\$0.00	\$0	\$0.00	0.00%
	Protection / EC - Tacky Mats	12	ea	1,046		\$87.20	\$1,046	\$0.28	0.10%
	Non-Structural Demolition	3,767	sf	13,244		\$3.52	\$13,244	\$3.52	1.27%
	MEP Items	1	ls	5,600		\$5,600.00	\$5,600	\$1.49	0.54%
	Cutting, Coring, Patching	1	ls	1,425		\$1,425.00	\$1,425	\$0.38	0.14%
<b>Div. 3</b>	<b>CONCRETE</b>	<b>1</b>			<b>19,007</b>	<b>\$19,007.47</b>	<b>\$19,007</b>	<b>\$5.05</b>	<b>1.83%</b>
033000	Cast In Place - Floor Patch @ Penetrations	1	cy	965		\$965.33	\$965	\$0.26	0.09%
035400	Cast In Place - Floor Patch @ Beams	42	sf	6,402		\$152.43	\$6,402	\$1.70	0.62%
035400	Cast Underlayment	1	sf	11,640		\$11,640.00	\$11,640	\$3.09	1.12%
<b>Div. 4</b>	<b>MASONRY</b>	<b>1</b>			<b>1,036</b>	<b>\$1,036.36</b>	<b>\$1,036</b>	<b>\$0.28</b>	<b>0.10%</b>
042200	Concrete Masonry Units	1				\$0.00	\$0	\$0.00	0.00%
	CMU Infills, Regular	59	ea	691		\$11.70	\$691	\$0.18	0.07%
	Mortar Mix - Type S	12	bag	217		\$18.08	\$217	\$0.06	0.02%
	Sand	1	cy	129		\$128.89	\$129	\$0.03	0.01%
<b>Div. 5</b>	<b>IRON &amp; STEEL</b>	<b>1</b>			<b>10,519</b>	<b>\$10,519.05</b>	<b>\$10,519</b>	<b>\$2.79</b>	<b>1.01%</b>
051200	Structural Steel - Erection - TSS Beam	1	ls	1,635		\$1,635.00	\$1,635	\$0.43	#DIV/0!
051200	Structural Steel - Erection - Studs	1	ls	3,270		\$3,270.00	\$3,270	\$0.87	#DIV/0!
051200	Structural Steel - Erection, Welding	1	ls	4,142		\$4,142.00	\$4,142	\$1.10	#DIV/0!
	Anchor Bolts	34	ea	1,255		\$36.91	\$1,255	\$0.33	#DIV/0!
055000	Misc Metals	1	ls	217		\$217.27	\$217	\$0.06	0.02%

Section	Work Description	Quantity	Unit	Line Totals	Division Totals	Unit Price	Total	Cost/SF	Percent
<b>Div. 6</b>	<b>WOOD &amp; PLASTICS</b>	<b>1</b>			<b>25,917</b>	<b>\$25,916.63</b>	<b>\$25,917</b>	<b>\$6.88</b>	<b>2.49%</b>
061000	Rough Carpentry	1		0		\$0.00	\$0	\$0.00	0.00%
	Misc. Blocking	320	lf	943		\$2.95	\$943	\$0.25	0.09%
	Rough Hardware	1	ls	164		\$163.50	\$164	\$0.04	0.02%
064000	Architectural Woodwork - Casework	1	ls	24,810		\$24,810.00	\$24,810	\$6.59	2.39%
<b>Div. 7</b>	<b>MOISTURE &amp; THERMAL</b>	<b>1</b>			<b>6,468</b>	<b>\$6,468.16</b>	<b>\$6,468</b>	<b>\$1.72</b>	<b>0.62%</b>
072100	Building Insulation - Batt	1	ls	2,180		\$0.00	\$2,180	\$0.58	0.21%
078400	Penetration Firestopping	1	ls	2,269		\$2,268.54	\$2,269	\$0.60	0.22%
079200	Joint Sealants	1	ls	2,020		\$2,019.62	\$2,020	\$0.54	0.19%
<b>Div. 8</b>	<b>DOORS &amp; WINDOWS</b>	<b>1</b>			<b>27,415</b>	<b>\$27,414.56</b>	<b>\$27,415</b>	<b>\$7.28</b>	<b>2.64%</b>
081213	Hollow Metal Frames	1	ls			\$0.00	\$0	\$0.00	0.00%
	Frame Type A	7	ea	2,366		\$338.05	\$2,366	\$0.63	0.23%
	Frame Type B	4	ea	1,810		\$452.50	\$1,810	\$0.48	0.17%
081416	Wood Doors - Flush	1	ls			\$0.00	\$0	\$0.00	0.00%
	Door Type A	11	ea	5,095		\$463.17	\$5,095	\$1.35	0.49%
	Door Type B	4	ea	1,853		\$463.17	\$1,853	\$0.49	0.18%
	Door Type C	4	ea	1,962		\$490.42	\$1,962	\$0.52	0.19%
083653	Overhead Doors/Shutters	1	ls	0		\$0.00	\$0	\$0.00	0.00%
	Window Type - C	1	ea	4,546		\$4,546.20	\$4,546	\$1.21	0.44%
085653	Pass Windows	1	ls	0		\$0.00	\$0	\$0.00	0.00%
	Window Type - C	1	ea	2,464		\$2,464.30	\$2,464	\$0.65	0.24%
087100	Finish Hardware	1	ls	5,232		\$5,232.00	\$5,232	\$1.39	0.50%
	Set No.	12	ea	1,716		\$143.00	\$1,716	\$0.46	0.17%
088000	Glass & Glazing	1	ls	0		\$0.00	\$0	\$0.00	0.00%
	Glass - Door lites	4	ea	371		\$0.00	\$371	\$0.10	0.04%
<b>Div. 9</b>	<b>FINISHES</b>	<b>1</b>			<b>78,544</b>	<b>\$78,543.90</b>	<b>\$78,544</b>	<b>\$20.85</b>	<b>7.55%</b>
092216	Non-Load Bearing Metal Framing	1,844	lf	9,589		\$5.20	\$9,589	\$2.55	0.92%
092900	Gypsum Board Assemblies	3,702	sf	11,476		\$3.10	\$11,476	\$3.05	1.10%
095100	Acoustical Panel Ceilings	3,955	sf	15,029		\$3.80	\$15,029	\$3.99	1.45%
096500	Resilient Tile Flooring	3,820	sf	32,279		\$8.45	\$32,279	\$8.57	3.10%
099000	Interior Painting	3,767	sf	10,171		\$2.70	\$10,171	\$2.70	0.98%
<b>Div. 10</b>	<b>SPECIALTIES</b>	<b>1</b>			<b>4,587</b>	<b>\$4,586.70</b>	<b>\$4,587</b>	<b>\$1.22</b>	<b>0.44%</b>
101101	Visual Display Boards	1	ls	1,287		\$1,286.65	\$1,287	\$0.34	0.12%
102600	Wall & Door Protection - Lump Sum	1	ls	0		\$0.00	\$0	\$0.00	0.00%
	Corner Guard - CG1	23	ea	2,619		\$113.85	\$2,619	\$0.70	0.25%
104413	Fire Extinguisher Cabinets	2	ea	293		\$146.67	\$293	\$0.08	0.03%
104416	Fire Extinguisher	2	ea	388		\$194.08	\$388	\$0.10	0.04%

Section	Work Description	Quantity	Unit	Line Totals	Division Totals	Unit Price	Total	Cost/SF	Percent
<b>Div. 11</b>	<b>EQUIPMENT</b>	<b>1</b>			<b>1,123</b>	<b>\$1,122.83</b>	<b>\$1,123</b>	<b>\$0.30</b>	<b>0.11%</b>
115100	Laboratory Fume Hood	2	ea	1,123		\$561.41	\$1,123	\$0.30	0.11%
<b>Div. 12</b>	<b>FURNISHINGS</b>	<b>1</b>			<b>155,100</b>	<b>\$155,100.00</b>	<b>\$155,100</b>	<b>\$41.17</b>	<b>14.92%</b>
123553	Laboratory Casework	1	ls	155,100		\$155,100.00	\$155,100	\$41.17	14.92%
<b>Div. 13</b>	<b>SPECIAL CONSTRUCTION</b>	<b>1</b>			<b>NIC</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0.00</b>	<b>0.00%</b>
<b>Div. 14</b>	<b>CONVEYING SYSTEMS</b>	<b>1</b>			<b>NIC</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0.00</b>	<b>0.00%</b>
<b>Div. 21</b>	<b>FIRE SPRINKLER</b>	<b>1</b>			<b>0</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0.00</b>	<b>0.00%</b>
210500	Fire Sprinkler System	1	ls	0		\$0.00	\$0	\$0.00	0.00%
<b>Div. 22</b>	<b>PLUMBING</b>	<b>1</b>			<b>205,790</b>	<b>\$205,790.00</b>	<b>\$205,790</b>	<b>\$54.63</b>	<b>19.79%</b>
220500	Plumbing	1	ls	205,790		\$205,790.00	\$205,790	\$54.63	19.79%
	Plumbing - DI Water	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Plumbing - Acid Waste	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Plumbing - Domestic	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Plumbing - Med Gas Piping	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Plumbing - Sanitary	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
<b>Div. 23</b>	<b>MECHANICAL SYSTEMS</b>	<b>1</b>			<b>226,024</b>	<b>\$226,024.00</b>	<b>\$226,024</b>	<b>\$60.00</b>	<b>21.74%</b>
230500	HVAC	1	ls	226,024		\$226,024.00	\$226,024	\$60.00	21.74%
	HVAC - Duct	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - Piping	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - Grilles, New	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - Insulating	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - Equipment	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - T&B	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%
	HVAC - Contols	1	ls	inc. Above		\$0.00	\$0	\$0.00	0.00%

Section	Work Description	Quantity	Unit	Line Totals	Division Totals	Unit Price	Total	Cost/SF	Percent
<b>Div. 26</b>	<b>ELECTRICAL SYSTEMS</b>	<b>1</b>			<b>107,135</b>	<b>\$107,135.00</b>	<b>\$107,135</b>	<b>\$28.44</b>	<b>10.30%</b>
260500	Electrical	1	Is	107,135		\$107,135.00	\$107,135	\$28.44	10.30%
	Electrical - Power	1	Is	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Electrical - Light	1	Is	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Electrical - Raceways, EMT	1	Is	inc. Above		\$0.00	\$0	\$0.00	0.00%
	Electrical - Gear	1	Is	inc. Above		\$0.00	\$0	\$0.00	0.00%
<b>Div. 27</b>	<b>COMMUNICATIONS</b>	<b>1</b>			<b>0</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0.00</b>	<b>0.00%</b>
270500	Data/Communications, Cable	1	Is	0	BY Owner	\$0.00	\$0	\$0.00	0.00%
<b>Div. 28</b>	<b>SAFETY &amp; SECURITY</b>	<b>1</b>			<b>6,810</b>	<b>\$6,810.00</b>	<b>\$6,810</b>	<b>\$1.81</b>	<b>0.65%</b>
283100	Fire Alarm	1	Is	6,810		\$6,810.00	\$6,810	\$1.81	0.65%
	<b>Direct Cost Sub-Totals</b>	<b>1</b>		<b>954,361</b>	<b>954,361</b>	<b>\$954,361.38</b>	<b>\$954,361</b>	<b>\$253.35</b>	<b>91.79%</b>
	Office Overhead				25,774		\$25,774	\$6.84	2.48%
	<b>Sub-total</b>				<b>980,135</b>		<b>\$980,135</b>	<b>\$260.19</b>	<b>94.26%</b>
	Profit				39,205		\$39,205	\$10.41	3.77%
	<b>Sub-total</b>				<b>1,019,340</b>		<b>\$1,019,340</b>	<b>\$270.60</b>	<b>98.04%</b>
	Builder's Risk Insurance				8,155		\$8,155	\$2.16	0.78%
	Permit/Plan Checking Fee				N/A		\$0	\$0.00	0.00%
	Business License Upgrade				2,842		\$2,842	\$0.75	0.27%
	<b>Sub-total</b>				<b>1,030,338</b>		<b>\$1,030,338</b>	<b>\$273.52</b>	<b>99.09%</b>
	Payment/Performance Bonds				9,432		\$9,432	\$2.50	0.91%
	<b>GRAND TOTAL</b>	<b>1</b>			<b>1,039,769</b>	<b>\$1,039,769.50</b>	<b>\$1,039,769</b>	<b>\$276.02</b>	<b>100.00%</b>
				Cost Per Square Fo		\$276.02			
	<b>TOTAL COSTS</b>					<b>\$1,039,769.50</b>			



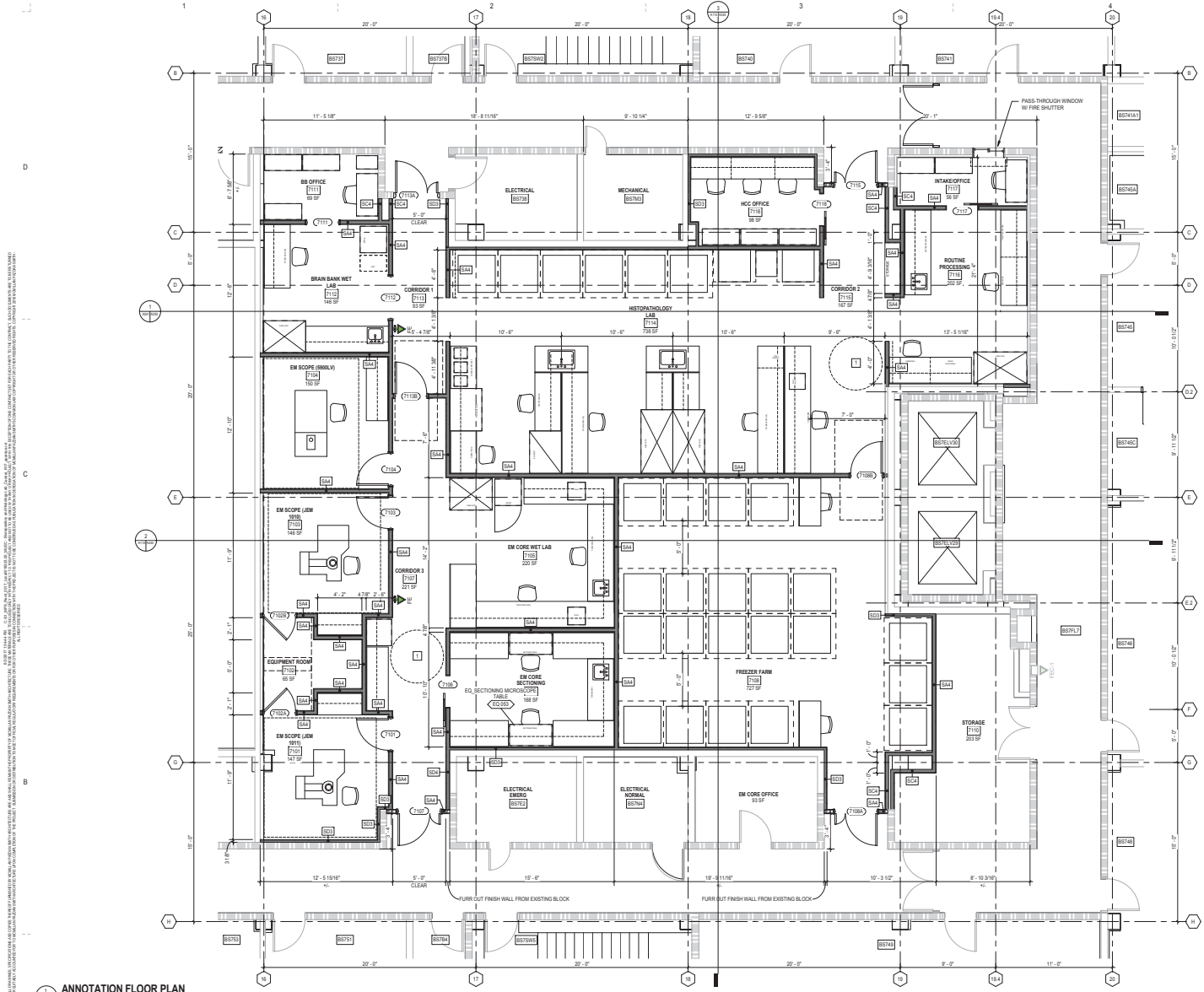
# Design & Construction Schedule

	2017 3RD QUARTER			4TH QUARTER			2018 1ST QUARTER			2ND QUARTER			3RD QUARTER				
	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
SCHEMATIC DESIGN 4 weeks	[Bar spanning July, August, and September 2017]																
DESIGN & DEVELOPMENT 7 weeks					[Bar spanning November, December 2017, and January 2018]												
CONSTRUCTION DOCUMENTS 7 weeks							[Bar spanning January, February, and March 2018]										
BIDDING & AWARD 4 weeks									[Bar spanning March and April 2018]								
CONTRACT NEGOTIATION 2 weeks									[Bar spanning April and May 2018]								
MOBILIZATION & CONSTRUCTION 24 weeks											[Bar spanning May 2018 through November 2018]						

08/04/2017 - 05/26/2017  
MUSC REVIEW & OSE REVIEW

12/18/2017 - 01/05/2018  
MUSC REVIEW OF DD DOCS.

03/05/2018 - 03/17/2018  
MUSC REVIEW OF CD DOCS.



**FLOOR PLAN LEGEND**

- EXISTING CONSTRUCTION - NOT IN SCOPE OF RENOVATION
- NOTE:  
WORK MAY BE REQUIRED OUTSIDE OF INDICATED AREA OF RENOVATION FOR INFRASTRUCTURE CONNECTIONS TO THE MAIN BUILDING SYSTEMS. SUB-SET ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO: ELECTRICAL, PLUMBING, MECHANICAL, TELECOMMUNICATION, FIRE PROTECTION & STRUCTURAL.
- SCOPE OF RENOVATION

**WALL RATING LEGEND**

- WALL TO REMAIN
- WALL TO BE DEMOLISHED
- NEW WALL
- FIRE BARRIER - 2 HOUR (2 HR. RATED WALL)
- FIRE BARRIER - 1 HOUR (1 HR. RATED WALL)

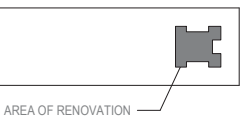
**PROGRAM AREAS**

Number	Name	Area
1750	EM CORE OFFICE	83 SF
1751	EM SCOPE (EM 501)	147 SF
1752	EQUIPMENT ROOM	86 SF
1753	EM SCOPE (EM 502)	146 SF
1754	EM SCOPE (EM 503)	150 SF
1755	EM CORE W/L LAB	222 SF
1756	CORRIDOR	221 SF
1758	EM CORE (REWORKING)	108 SF
1759	EM Core	1211 SF
1760	FREEZER FARM	727 SF
1761	EM CORE (REWORKING)	108 SF
1762	EM CORE (REWORKING)	108 SF
1763	EM CORE (REWORKING)	108 SF
1764	EM CORE (REWORKING)	108 SF
1765	EM CORE (REWORKING)	108 SF
1766	EM CORE (REWORKING)	108 SF
1767	EM CORE (REWORKING)	108 SF
1768	EM CORE (REWORKING)	108 SF
1769	EM CORE (REWORKING)	108 SF
1770	EM CORE (REWORKING)	108 SF
1771	EM CORE (REWORKING)	108 SF
1772	EM CORE (REWORKING)	108 SF
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1780	EM CORE (REWORKING)	108 SF
1781	EM CORE (REWORKING)	108 SF
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1788	EM CORE (REWORKING)	108 SF
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1790	EM CORE (REWORKING)	108 SF
1791	EM CORE (REWORKING)	108 SF
1792	EM CORE (REWORKING)	108 SF
1793	EM CORE (REWORKING)	108 SF
1794	EM CORE (REWORKING)	108 SF
1795	EM CORE (REWORKING)	108 SF
1796	EM CORE (REWORKING)	108 SF
1797	EM CORE (REWORKING)	108 SF
1798	EM CORE (REWORKING)	108 SF
1799	EM CORE (REWORKING)	108 SF
1800	EM CORE (REWORKING)	108 SF

**FLOOR PLAN KEY NOTES**

- EMERGENCY SHOWER & EYEWASH STATION

**KEY PLAN**



**ANNOTATION FLOOR PLAN**  
3/4" = 1'-0"

**GENERAL PLAN NOTES**

1. ALL CONTRACTORS AND SUB-CRONTACTORS ARE TO REVIEW ARCHITECT'S DRAWINGS AS WELL AS ENGINEER'S DRAWINGS AND COORDINATE EACH WITH THEIR RESPECTIVE FIELD. REVIEW ANY QUESTIONS OR CONFLICTS TO ARCHITECT BEFORE BEGINNING CONSTRUCTION.
2. COMPLETE SETS OF BIDDING DOCUMENTS SHALL BE USED IN PREPARING BIDS. NOTIFY THE OWNER FOR THE ARCHITECT'S ADDRESS ANY RESPONSIBILITY FOR ERRORS OR MISREPRESENTATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF BIDDING DOCUMENTS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE BIDDING DOCUMENTS THAT THEY HAVE USED. COMPLETE BIDDING DOCUMENTS. THE GENERAL CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ERRORS OR MISREPRESENTATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF BIDDING DOCUMENTS BY HIM OR ANY OF HIS SUB-CONTRACTORS.
3. WHEN INDIVIDUAL DRAWINGS DO NOT AGREE WITH EACH OTHER OR DRAWINGS AND SPECIFICATIONS DO NOT AGREE WITH EACH OTHER, THE ARCHITECT SHALL DETERMINE WHICH IS CORRECT AND TO BE FURNISHED. SUPPLIED AND/OR INSTALLED UNDER THIS CONTRACT. CONTRACTOR SHALL INCLUDE IN HIS BID THE MOST RESTRICTIVE OR COSTLY ALTERNATIVE.
4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY POSSIBLE CONFLICTS PRIOR TO INITIATING ANY WORK IN QUESTION.
5. GENERAL CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UNDERGROUND UTILITIES AND PIPING AND PROTECT BEFORE BEGINNING WORK. GENERAL CONTRACTOR SHALL EMPLOY A LOCATION SERVICE AT HIS EXPENSE, AND WILL BE RESPONSIBLE FOR ANY REPAIRS NECESSARY AS A RESULT OF ACTIONS CAUSED BY CONSTRUCTION OPERATIONS.
6. ALL DOORS SHALL BE INSTALLED WITH MINIMUM CLEARANCES.
7. TYP. ALL EXTERIOR WALLS, FULL VIDS WITH BATT INSUL. WHERE CMU IS FRAMED AROUND BEAMS AND BAR JOISTS AT ROOF DECK.
8. ALL ALL INTERIOR PARTITIONS (I.E. PLUMBING, MECHANICAL, ELECTRICAL) IN WETTED WALLS WITH UL RATED COMPACTED MINERAL WOOL AND COAT WITH UL RATED FIRE STOP COATING.
9. ALL WORK SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE, THE INTERNATIONAL PLUMBING CODE, THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS HAVING JURISDICTION.
10. ALL CONSTRUCTION SHALL BE HANDICAPPED ACCESSIBLE AND COMPLY WITH BARRIER FREE DESIGN AND OTHER APPLICABLE STANDARDS.
11. DIMENSIONS SHOWN FOR EXTERIOR DOORS AND WINDOWS ARE TO MASONRY OPENINGS UNLESS OTHERWISE NOTED. ALL OTHER DIMENSIONS ARE TO FACE OF STUD UNLESS OTHERWISE NOTED.
12. ALL DIMENSIONS SHOULD BE FIELD VERIFIED BEFORE ANY WORK IS PERFORMED. CONTRACTOR SHALL VERIFY CONDITIONS OF ALL EXISTING WALLS, STRUCTURE, MATERIALS, FINISHES OR SUBSTRATES TO VERIFY COMPATIBILITY WITH PROPOSED NEW CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY POSSIBLE CONFLICTS PRIOR TO INITIATING ANY WORK IN QUESTION.
13. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH THE WORK.
14. IN THE EVENT OF ANY CONFLICTS OR DISCREPANCIES FOUND IN THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL BE REQUIRED TO REQUEST FROM AND RECEIVE CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
15. ALL WOOD IN CONTACT WITH MORTAR, CONCRETE, OR MASONRY TO BE PRESURE TREATED.
16. THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND ALL REVISIONS/REQUIREMENTS STATED THEREIN. THE CONTRACTOR WILL WORK WITH ANY INSPECTORS, TESTING AGENCIES AND/OR OTHER CONSULTANTS Hired BY THE OWNER OR THE ARCHITECT TO HELP MEET THESE REQUIREMENTS.
17. PROVIDE FIRE EXTINGUISHERS IN ACCORDANCE WITH NFPA 10. INSTALL WALL MOUNTED FIRE EXTINGUISHERS (PUL) @ 4" x 4" TO TOP OF CABINET. GENERAL CONTRACTOR TO COORDINATE LOCATION WITH LOCAL FIRE DEPARTMENT.
18. HORIZONTALLY BRACE (STIFFEN) ALL METAL STUD SYSTEMS AS RECOMMENDED AND BRACE TOPS OF ALL PARTITIONS TO STRUCTURE ABOVE AT 4'-0" O.C. UNO.
19. WHERE THE ARCHITECTURAL FLOOR PLANS INDICATE A 2-HOUR OR 1-HOUR SMOKE WALL ANNOTATION AND THE MECHANICAL & ELECTRICAL DRAWINGS DO NOT INDICATE A FIRE-SMOKE DAMPER, A 2-HOUR OR 1-HOUR FIRE-SMOKE COMBINATION DAMPER RESPECTIVELY SHALL BE PROVIDED. ACCESS DOORS, DUCT DETECTORS AND CONTROL WIRING SHALL ALSO BE PROVIDED. WHERE THE ARCHITECTURAL FLOOR PLANS INDICATE A 1-HOUR OR 1-HOUR SMOKE WALL ANNOTATION AND THE MECHANICAL & ELECTRICAL DRAWINGS DO NOT INDICATE A FIRE-SMOKE DAMPER, A 1-HOUR PRE-AND 1-HOUR FIRE-SMOKE COMBINATION DAMPER RESPECTIVELY SHALL BE PROVIDED. ACCESS DOORS, DUCT DETECTORS AND CONTROL WIRING SHALL ALSO BE INCLUDED.

mcmillan | pazdan | smith  
ARCHITECTURE

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803.733.1111

STATE OF SOUTH CAROLINA  
SOUTH CAROLINA ARCHITECTS BOARD  
REGISTERED ARCHITECT

STATE OF SOUTH CAROLINA  
SOUTH CAROLINA ARCHITECTS BOARD  
REGISTERED ARCHITECT

MEDICAL UNIVERSITY OF SOUTH CAROLINA

Basic Science Building 7th Floor Biorepository & Histology Lab Renovations

CHARLESTON, SC

SHEET ISSUE:

NO. 04-2017 DATE DESCRIPTION BY

A 08.04.2017 SD PACKAGE MFS

SD PACKAGE 08.04.2017

PRINCIPAL IN CHARGE: Apponor

DRAWN BY: Chabur

AUTHOR: Author

SHEET TITLE:

**FLOOR PLAN**

SHEET NO. 0963.00

PROJ. NO. A110

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