UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208
BARRINGER HOUSE RENOVATIONS

STATE PROJECT #FP00000285
GMK PROJECT # 16070.03/H27-D339-ID
AUGUST 2, 2019
ISSUED FOR
CONSTRUCTION DOCUMENTS

Prepared by:

GMK ASSOCIATES, INC.

Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, South Carolina 29201
tel. 803-256-0000
fax 803-255-7243

STATE OF SOUTH CAROLINA
GMK ASSOCIATES ARCHITECTURAL DIVISION, INC.
Columbia, SC
No. B74015
REGISTERED ARCHITECTS

STATE OF SOUTH CAROLINA
THOMAS MARSHALL WIGLAND
COLUMBIA, SC
5308
REGISTERED ARCHITECT

08/01/2019

number	item	date

DRAWING INDEX

ARCHITECTURAL

A0.0 SYMBOLS AND LEGENDS
A0.1 LIFE SAFETY PLAN - FIRST AND SECOND FLOORS
A1.1 FIRST & SECOND FLOOR DEMOLITION PLANS
A2.1 FIRST & SECOND FLOOR RENOVATION PLANS, ENLARGED PLANS & INTERIOR ELEVATIONS
A4.0 MILLWORK DETAILS, BUILDING SECTIONS & DETAILS, WALL CONSTRUCTION TYPES
A7.1 FIRST AND SECOND FLOORS REFLECTED CEILING PLAN
A8.0 DOOR SCHEDULE, DOOR AND FRAME TYPES, FINISH SCHEDULE & LEGEND

PLUMBING

P0.0 PLUMBING DETAILS, NOTES, LEGEND, ABBREVIATIONS & SCHEDULES
P1.0 PARTIAL BASEMENT & BELOW SLAB PLUMBING PLANS
P1.1 PARTIAL FIRST FLOOR PLUMBING PLANS
P1.2 PARTIAL SECOND FLOOR PLUMBING PLANS

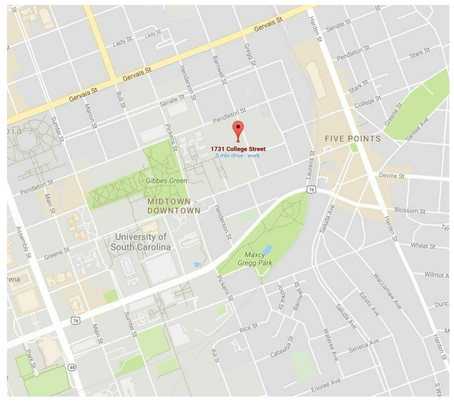
MECHANICAL

M1.0 HVAC DEMOLITION BASEMENT PLAN
M1.1 HVAC DEMOLITION FIRST FLOOR PLAN
M1.2 HVAC DEMOLITION SECOND FLOOR PLAN
M2.0 HVAC RENOVATION BASEMENT PLAN
M2.1 HVAC RENOVATION FIRST FLOOR PLAN
M2.2 HVAC RENOVATION SECOND FLOOR PLAN
M6.1 HVAC DETAILS
M7.1 HVAC NOTES & SCHEDULES

ELECTRICAL

E0.0 ELECTRICAL SYMBOLS, SCHEDULES & DETAILS
E0.1 ELECTRICAL PANEL SCHEDULES & RISER DIAGRAMS
E1.1 ELECTRICAL DEMOLITION FIRST AND SECOND FLOOR PLANS
E2.1 ELECTRICAL LIGHTING FIRST AND SECOND FLOOR PLAN
E3.1 ELECTRICAL POWER AND MECHANICAL WIRING FIRST AND SECOND FLOOR PLANS
E4.1 ELECTRICAL FIRE ALARM FIRST AND SECOND FLOOR PLANS

VICINITY PLAN



SERIES NUMBERING	SERIES DRAWING INFORMATION
A00	SYMBOLS
A0.1	LIFE SAFETY FLOOR PLANS
A1.0	DEMOLITION FLOOR PLANS AND/OR DEMOLITION ELEVATIONS AND
A2.0	DETAILS
A3.0	FLOOR PLANS, ROOF PLANS, AND ENLARGED FLOOR PLANS
A4.0	EXTERIOR ELEVATIONS
	BUILDING SECTIONS, EXTERIOR WALL SECTIONS, EXTERIOR PLAN
A5.0	DETAILS, EXTERIOR WINDOWS AND DETAILS
	VERTICAL CIRCULATION, PLANS, SECTIONS, DETAILS
A6.0	(STAIRS, ELEVATORS, ESCALATORS)
A7.0	INTERIOR ELEVATIONS
	REFLECTED CEILING PLANS AND ENLARGED REFLECTED CEILING PLANS
A8.0	AND DETAILS
	DOOR SCHEDULE, DOOR AND FRAME TYPES, PARTITION TYPES,
A9.0	INTERIOR DETAILS
A10.0	MILLWORK SECTIONS AND DETAILS
A11.0	FINISH PLANS AND FINISH SCHEDULE
A12.0	EQUIPMENT FLOOR PLANS
	FURNITURE PLAN DRAWING SERIES

THE ARCHITECTURAL CONSTRUCTION DOCUMENT REFERENCE SYSTEM ABOVE REPRESENTS TYPICAL ARCHITECTURAL DOCUMENT SET LAYOUT. ENTIRE DRAWING SERIES MAY BE OMITTED WHEN NOT APPLICABLE TO THE PROJECT. DRAWING SERIES INFORMATION MAY ALSO BE COMBINED WITH OTHER SERIES INFORMATION WHERE SPACE PERMITS (I.E. A6.0 MAY INCLUDE BOTH INTERIOR ELEVATIONS AND MILLWORK DETAILS).

1 GENERAL NOTES

1. NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF EXISTING CONDITIONS THAT ARE CONTRARY TO THOSE REPRESENTED WITHIN THE DRAWINGS.

2. NEW WORK SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.

3. ALL NEW VERTICAL AND HORIZONTAL DUCTS, PIPES, CONDUITS, ETC. (WHETHER SHOWN OR NOT) IN FINISHED ROOMS OR AREAS THROUGH OUT BUILDING, NOT CONCEALED, SHALL BE FURRED IN, AND FINISHED TO MATCH ROOM FINISH.

4. ALL NEW PARTITIONS, UNLESS OTHERWISE SHOWN OR DETAILED, SHALL BE METAL STUDS OF THICKNESS TO ADEQUATELY COVER PIPING, CONDUITS, ETC.

5. PROVIDE AN EDGE STRIP, AS DETAILED, UNDER ALL DOORS WHERE NEW OR EXISTING FINISHES AND ADJACENT FLOOR ARE AT DIFFERENT LEVELS AND WHERE ADJACENT FLOOR FINISHEES ARE OF DIFFERENT MATERIALS. SEE DETAIL 6/A0.0.

6. EXISTING DOORS, WHICH SWING INTO ROOMS WHERE NEW FLOOR FINISH IS ABOVE ADJACENT FLOORS, SHALL BE CUT OFF AT BOTTOM TO CLEAR NEW FINISHED FLOOR. DOOR BOTTOM SHALL BE SEALED AND FINISHED TO MATCH EXISTING FINISH.

7. OFFSET ALL DOORS 6" FROM ADJACENT WALLS UNLESS OTHERWISE NOTED.

8. NEW TILE FINISHES APPLIED TO EXISTING WALLS AND PARTITIONS SHALL BE APPLIED DIRECTLY TO PLASTER OR GYP. BD. WALLS BY THE THIN SET METHOD. NEW PARTITIONS AND CLOSURES OF OPENINGS IN ROOMS HAVING TILE BASE AND/OR TILE WAINSCOT SHALL BE FINISHED WITH TILE TO MATCH EXISTING, WHEN TILE CANNOT BE MATCHED, FURNISH ARCHITECT WITH SAMPLES OF EXISTING TILE TO PERMIT SELECTION OF SUBSTITUTE TILE.

9. PROVIDE ACCESS PANELS, 24" X 24", OR OF SIZES REQUIRED, WHERE PLUMBING AND HEATING VALVES, WATER SWITCHES, OXYGEN PRESSURE SWITCHES, VENTILATION SPLITTER DAMPERS, ETC. ARE SHOWN ON PLUMBING, HEATING, AND VENTILATION DRAWINGS. SUCH ACCESS PANELS TO BE INSTALLED IN THE FOLLOWING:
   (A) SUSPENDED PLASTER OR GYPSUM WALLBOARD CEILINGS
   (B) METAL STUD OR MASONRY PARTITIONS

10. WHEREVER EXISTING EQUIPMENT, PIPING, DUCTS, ETC. ARE REQUIRED TO BE REMOVED, SUCH REMOVAL SHALL INCLUDE ALL ANCHORS, HANGERS, FOUNDATIONS ETC. AFTER REMOVAL, FLOORS, WALLS AND CEILINGS SHALL BE FINISHED TO MATCH ADJOINING SURFACES OR AS INDICATED ON ROOM FINISH SCHEDULE.

11. WALL ASSEMBLIES SHALL BE MAINTAINED AT ALL RECESSED FIRE EXTINGUISHER CABINETS AND ALL RECESSED EQUIPMENT.

12. WHERE PAINT IS CALLED FOR ON WALLS IN RENOVATED ROOMS IN THE EXISTING BUILDING, ALL WALLS ARE TO BE PAINTED.

13. WHERE NO PAINT IN INDICATED IN AREAS WHERE PATCHING IS REQUIRED, NEW WORK IS TO BE PAINTED TO MATCH EXISTING ADJOINING SURFACES.

14. WHERE THE ROOM FINISH SCHEDULE CALLS FOR A NEW CEILING, THE EXISTING CEILING AND SUSPENSION SYSTEM IS TO BE COMPLETELY REMOVED.

15. PROVIDE FIRE EXTINGUISHING CABINETS OF THE TYPE SPECIFIED. REFER TO FLOOR PLANS (A2.0) FOR LOCATIONS.

16. WHERE THE ROOM FINISH SCHEDULE FOR EXISTING CONSTRUCTION CALLS FOR A NEW MATERIAL, THE ENTIRE ROOM IS TO RECEIVE THE NEW MATERIAL, WHERE THE ROOM FINISH SCHEDULE CALLS FOR BOTH PATCHING AND A NEW MATERIAL, THE NEW MATERIAL IS LIMITED TO AREAS OF NEW CONSTRUCTION WITHIN THAT ROOM ONLY.

17. SUPPLY BLOCKING AT ALL WALL HUNG EQUIPMENT (I.E. GRAB BARS, CASEWORK, MEDICAL EQUIPMENT, ETC.)

18. WHERE A NEW DOOR, VIEW WINDOW OR OPENING IS CUT THROUGH AN EXISTING MASONRY WALL, PROVIDE A LOOSE LINTEL AS REQUIRED ON THE LOOSE LINTEL SCHEDULE INDICATED ON THE STRUCTURAL DRAWINGS.

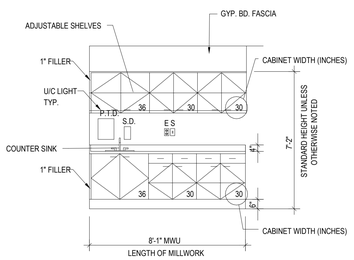
19. ALL DIMENSIONS SHOWN IN RENOVATED AREAS ARE TO BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH WORK.

20. IN ALL ROOMS BELOW AREAS WHICH RECEIVE UNDER FLOOR SERVICES, REMOVE A PORTION OF EXISTING CEILING AS REQUIRED. PATCH FINISHES TO MATCH EXISTING OR AS INDICATED ON ROOM FINISH SCHEDULE.

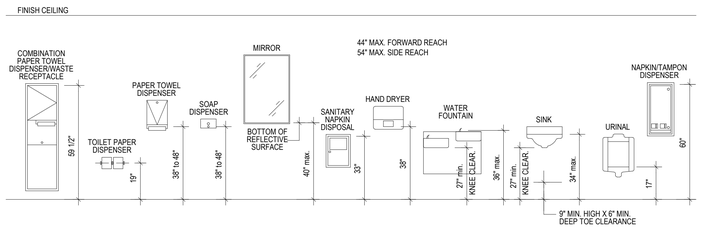
21. WHERE THE ROOM FINISH SCHEDULE CALLS FOR A ROOM TO BE PAINTED AND THAT ROOM CONTAINS WALL PAPER AND/OR VINYL CHAIR RAILS, THESE SHALL BE COMPLETELY REMOVED FROM WALLS AND ANY HOLES OR BUMPS SHALL BE FILLED OR SANDED SMOOTH BEFORE APPLYING NEW COAT OF PAINT.

22. ALL SHAFT PARTITIONS EXTEND FROM FLOOR SLAB TO UNDERSIDE OF SLAB ABOVE. EXPOSED BEAMS WITHIN SHAFTS ARE TO BE FIREPROOFED WITH 2-HOUR GYP. BD. ENCLOSURE.

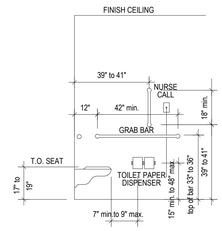
23. THE FIRE RATINGS OF ALL FIRED RATED WALLS SHALL BE STENCILED ABOVE CEILINGS, EACH SIDE OF WALL, BOTH SIDES OF CORRIDORS AND AS REQ'D BY IBC.



2 INTERIOR ELEVATION CONVENTIONS
N.T.S.



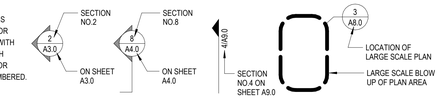
3 BARRIER-FREE FIXTURE MOUNTING HEIGHTS
3/8" = 1'-0"



NOTE: GRAB BARS TO BE ON BOTH SIDE WALLS OF TOILET PART. OF 36" WIDE., TOILET PART. GREATER THAN 36", GRAB BAR TO APPEAR ON BACK 36" MIN. WIDE AND SIDE AS INDICATED.

4 BARRIER-FREE WATER CLOSET MOUNTING HEIGHTS
3/8" = 1'-0"

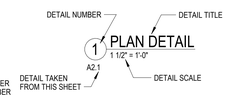
THE REFERENCE SYSTEM USES A NUMBER FOR EACH DETAIL OR ITEM ON A SHEET COMBINED WITH THE SHEET NUMBER ON WHICH IT IS LOCATED. EACH DETAIL OR ITEM ON A SHEET WILL BE NUMBERED.



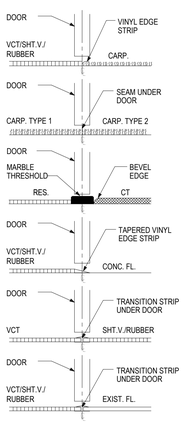
ALUMINUM ENTRANCE OR SLIDING DOOR SYMBOL — A-01 — ALUMINUM DOOR NUMBER

WINDOW SYMBOLS — W-1 — WINDOW NUMBER

LOUVER SYMBOLS — L-1 — LOUVER NUMBER

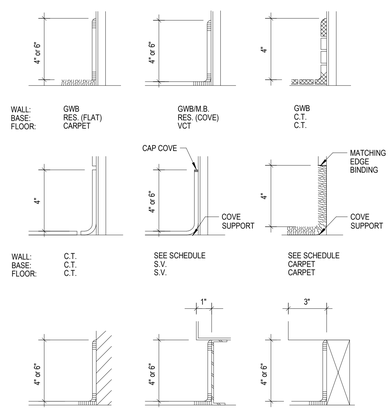


5 REFERENCE SYSTEM



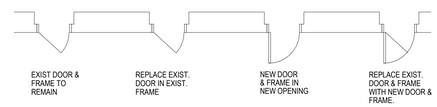
NOTE: CENTER SEAMS AND/OR VINYL EDGE STRIPS UNDER DOOR UNLESS OTHERWISE NOTED.

6 FLOOR DIVISION DETAILS
N.T.S.



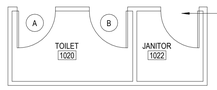
7 TYPICAL BASE DETAILS
N.T.S.

DOOR & FRAME PLAN SYMBOLS



DOOR NUMBERING LEGEND

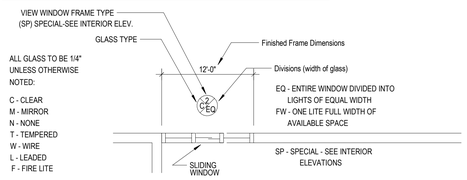
ROOMS WITH MULTIPLE DOORS HAVE "A", "B", ETC. DESIGNATIONS DOORS SHOWN AT THE RIGHT WOULD BE SCHEDULED AS "1020A" AND "1020B", RELATED TO THE ROOM WHERE (A) AND (B) ARE SHOWN.



ROOMS WITH ONLY ONE DOOR HAVE NO DOOR INDICATION. THE DOOR NUMBER IN THE SCHEDULE WILL BE THE SAME AS THE ROOM NUMBER.

IN LOCATIONS WHERE NECESSARY TO AVOID CONFUSION, FULL DOOR NUMBERING IS SHOWN ON PLAN.

VIEW WINDOW SYMBOLS (ON PLANS)



ALL GLASS TO BE 1/4" UNLESS OTHERWISE NOTED:

C - CLEAR
M - MIRROR
N - NONE
T - TEMPERED
W - WIRE
L - LEADED
F - FIRE LITE

EQ - ENTIRE WINDOW DIVIDED INTO LIGHTS OF EQUAL WIDTH
FW - ONE LITE FULL WIDTH OF AVAILABLE SPACE

SP - SPECIAL - SEE INTERIOR ELEVATIONS

8 INTERIOR OPENING SYMBOLS DOORS & VIEW WINDOWS
N.T.S.

DENOTES GENERAL PROJECT AREA. SOME WORK MAY OCCUR OUTSIDE PROJECT AREA AS IT IS INDICATED ON FLOOR PLAN.

EXISTING PARTITION TO REMAIN

EXISTING PARTITION TO BE REMOVED. REFER TO NOTE INDICATED FOR INSTRUCTIONS (ON DEMOLITION PLAN).

PARTITION:

LEAD LINED PARTITION. NOTE : NUMBER TO INDICATE THICKNESS AND HEIGHT ON SCHEDULE.

SMOKE TIGHT PARTITION (BUT NOT SMOKE RATED.)

1 HOUR FIRE RESISTIVE CONSTRUCTION

1 HOUR FIRE RESISTIVE CONSTRUCTION & SMOKE BARRIER

2 HOUR FIRE RESISTIVE CONSTRUCTION

2 HOUR FIRE RESISTIVE CONSTRUCTION & SMOKE BARRIER

4 HOUR FIRE RESISTIVE CONSTRUCTION

HOUR RATING

FIRE RATING

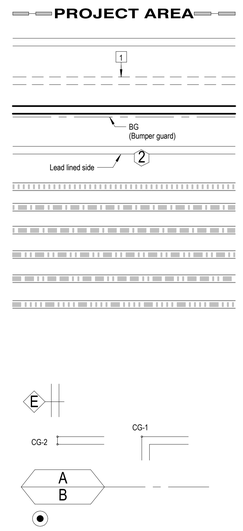
FIRE / SMOKE RATING

PARTITION TYPE (SEE PARTITION SCHEDULE DWG. A8.1)

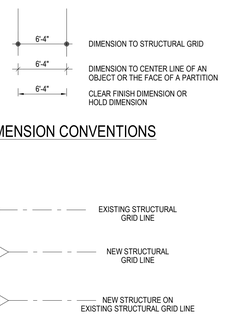
CORNER GUARD

MATCH LINE

FIRE EXTINGUISHER

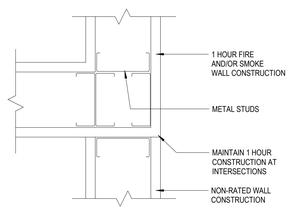


9 PARTITION SYMBOLS

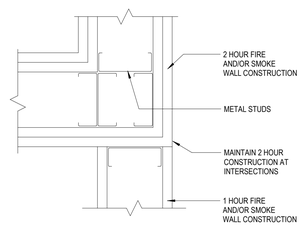


10 DIMENSION CONVENTIONS
N.T.S.

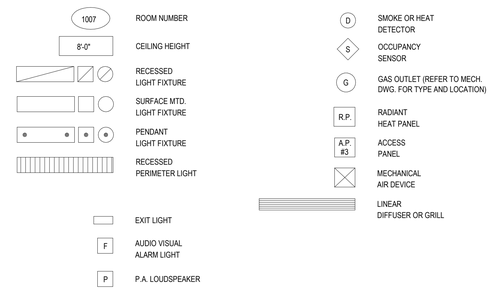
11 STRUCTURAL GRID CONVENTIONS
N.T.S.



12 DETAIL AT INTERSECTION OF A 1 HOUR AND A NON-RATED WALL
3"=1'-0"



13 DETAIL AT INTERSECTION OF A 2 HOUR AND A 1HOUR/NON-RATED WALL
3"=1'-0"



14 REFLECTED CEILING PLAN SYMBOLS

GMK ASSOCIATES, INC.
Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

STATE OF SOUTH CAROLINA — GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015 — REGISTERED ARCHITECTS

STATE OF SOUTH CAROLINA — THOMAS MARSHALL WILANO COLUMBIA, SC 5908 — REGISTERED ARCHITECT

08/01/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

sheet title

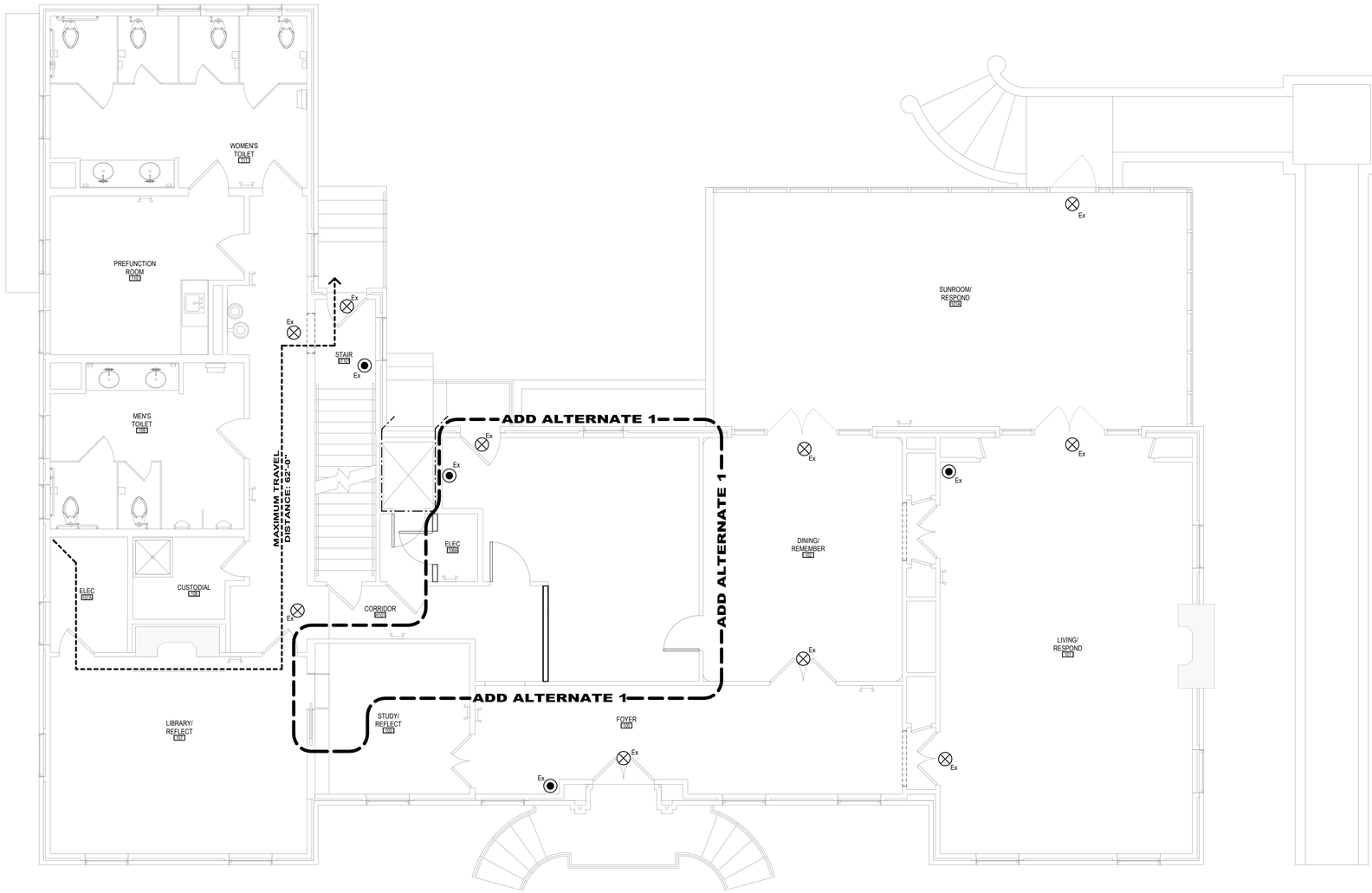
SYMBOLS AND LEGENDS

sheet number

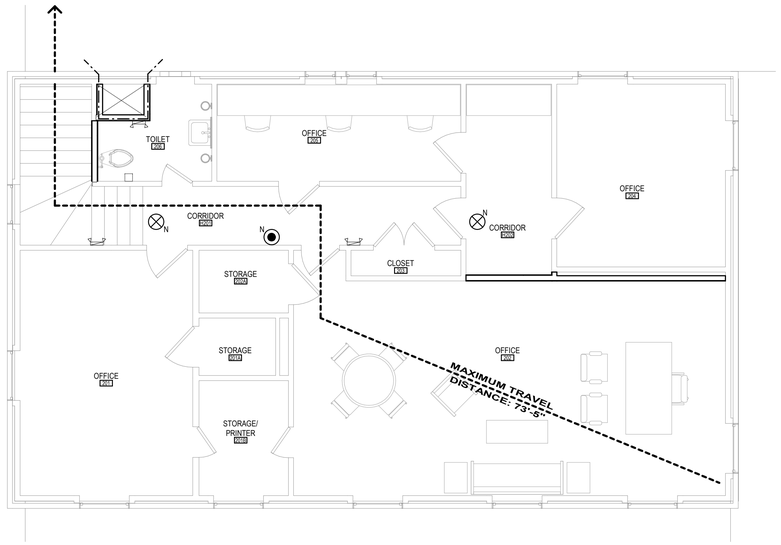
A0.0

drawn by MCD

checked by TMW



1 FIRST FLOOR LIFE SAFETY PLAN
A4.0 1/4" = 1'-0"



2 SECOND FLOOR LIFE SAFETY PLAN
A4.0 1/4" = 1'-0"

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:

1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.

2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.

B. Coordinate construction schedule and operations with Owner.

C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

10' 5' 1'

BUILDING CODE ANALYSIS
2015 INTERNATIONAL BUILDING CODE

BASIC BUILDING CODE INFORMATION

CONSTRUCTION CLASSIFICATION	TYPE: V (NON-SPRINKLED)
OCCUPANCY GROUP:	BUSINESS (B)
ALTERATION LEVEL PER IEBC:	LEVEL 2

BUILDING HEIGHT AND BUILDING AREA (PER IBC 504.3 & 506.2)

	AS ALLOWED BY IBC		AS DESIGNED	
	IN FEET	IN STORIES	IN FEET	IN STORIES
MAX. NO. OF STORIES	40'-0"	2	39'-0"	2
BLDG. AREA	9,000 SF PER STORY		3,950 SF (1ST FLOOR)	
			1,360 SF (2ND FLOOR)	

BUILDING GROSS AREA CALCULATION

SUMMARY OF ALL STORIES		
1 ST FLOOR (BUSINESS)	3,950 SF	
2 ND FLOOR (BUSINESS)	1,360 SF	
TOTAL AREA :	5,310 SF	(SUMMARY OF ALL STORIES)

BUILDING DESIGN OCCUPANT LOAD (PER IBC TABLE 1004.1.2)

1 ST FLOOR (BUSINESS OCCUPANCY)	3,950 SF	100 GROSS	39.5 - (39 PEOPLE)
2 ND FLOOR (BUSINESS OCCUPANCY)	1,360 SF	100 GROSS	13.6 - (13 PEOPLE)
TOTAL	5,310 SF		54 PEOPLE

MEANS OF EGRESS

CODE ITEM	REQUIRED	PROVIDED	NOTES
CORRIDOR WIDTH (PER IBC SECTION 1005.3.1)	44"	52"	54 (PEOPLE) X 0.2 = 10.8", OR 44" (WHICHEVER LARGER)
STAIR WIDTH (PER IBC SECTION 1005.3.2)	44"	54"	54 (PEOPLE) X 0.3 = 16.2", OR 44" (WHICHEVER LARGER)
MAXIMUM EXIT TRAVEL DISTANCE (PER IBC TABLE 1017.2)	200'	93'-7"	

FIRE RESISTANCE RATING OF BLDG ELEMENTS

BUILDING ELEMENT	RATING AS REQUIRED (IN HOURS)	RATING AS DESIGNED (IN HOURS)
STRUCTURAL FRAME (PER IBC TABLE 601)	0 HR	0 HR
BEARING WALLS EXTERIOR INTERIOR (PER IBC TABLE 601)	 N/A HR N/A HR	 N/A HR N/A HR
NONBEARING WALLS & PARTITIONS EXTERIOR INTERIOR (PER IBC TABLE 601 & 602)	 0 HR 0 HR	 0 HR 0 HR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS (PER IBC TABLE 601)	0 HR	0 HR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS (PER IBC TABLE 601)	0 HR	0 HR
SHAFT ENCLOSURES (PER IBC TABLE 713)	1 HR	1 HR

APPLICABLE CODES :

A. INTERNATIONAL BUILDING CODE	2015 EDITION
B. INTERNATIONAL EXISTING BUILDING CODE	2015 EDITION
C. INTERNATION MECHANICAL CODE	2015 EDITION
D. INTERNATIONAL FIRE CODE	2015 EDITION
E. INTERNATIONAL ENERGY CONSERVATION CODE	2009 EDITION
F. NATIONAL ELECTRIC CODE	2014 EDITION
G. INTERNATIONAL PLUMBING CODE	2015 EDITION
H. ICC/ANSI 117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES	2017 EDITION
I. ADA-TITLE III PUBLIC ACCOMODATIONS	2010 EDITION
J. LIFE SAFETY CODE (NFPA 101)	2012 EDITION
K. ANY OTHER CODE GOVERNED BY INDUSTRY STANDARDS	

WALL RATING LEGEND:

SMOKE TIGHT PARTITION (BUT NOT SMOKE RATED.)

1 HOUR FIRE RESISTIVE CONSTRUCTION

1 HOUR FIRE RESISTIVE CONSTRUCTION & SMOKE BARRIER

2 HOUR FIRE RESISTIVE CONSTRUCTION

2 HOUR FIRE RESISTIVE CONSTRUCTION & SMOKE BARRIER

NOTE: ALL WALL TYPES ABOVE TO BE LABELED ABOVE CEILINGS NO LESS THAN 15' O.C. IN LETTERING A MINIMUM OF 3" TALL.

CORRIDOR PARTITIONS, SMOKE STOP PARTITIONS, HORIZONTAL EXIT PARTITIONS, EXIT ENCLOSURES, AND FIRE RATED WALLS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING IN A MANNER ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. SUCH IDENTIFICATION SHALL BE ABOVE ANY DECORATIVE CEILING AND IN CONCEALED SPACES.

SUGGESTED WORDING:
"2-HOUR FIRE SMOKE BARRIER - PROTECT ALL OPENINGS."

MAXIMUM TRAVEL DISTANCE PATH

SEE SHEET A4.0 FOR PARTITION CONSTRUCTION & RATINGS

FIRE EXTINGUISHER LOCATION — Ex = EXISTING, N = NEW

EXIT SIGN LOCATION. SEE ELECTRICAL DWGS. — Ex = EXISTING, N = NEW

EMERGENCY EXIT LIGHT. SEE ELECTRICAL DWGS.

GMK ASSOCIATES, INC.

Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

STATE OF SOUTH CAROLINA — GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015 — REGISTERED ARCHITECTS

STATE OF SOUTH CAROLINA — THOMAS MARSHALL WEILAND — COLUMBIA, SC — 5008 — REGISTERED ARCHITECT

08/01/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

sheet title

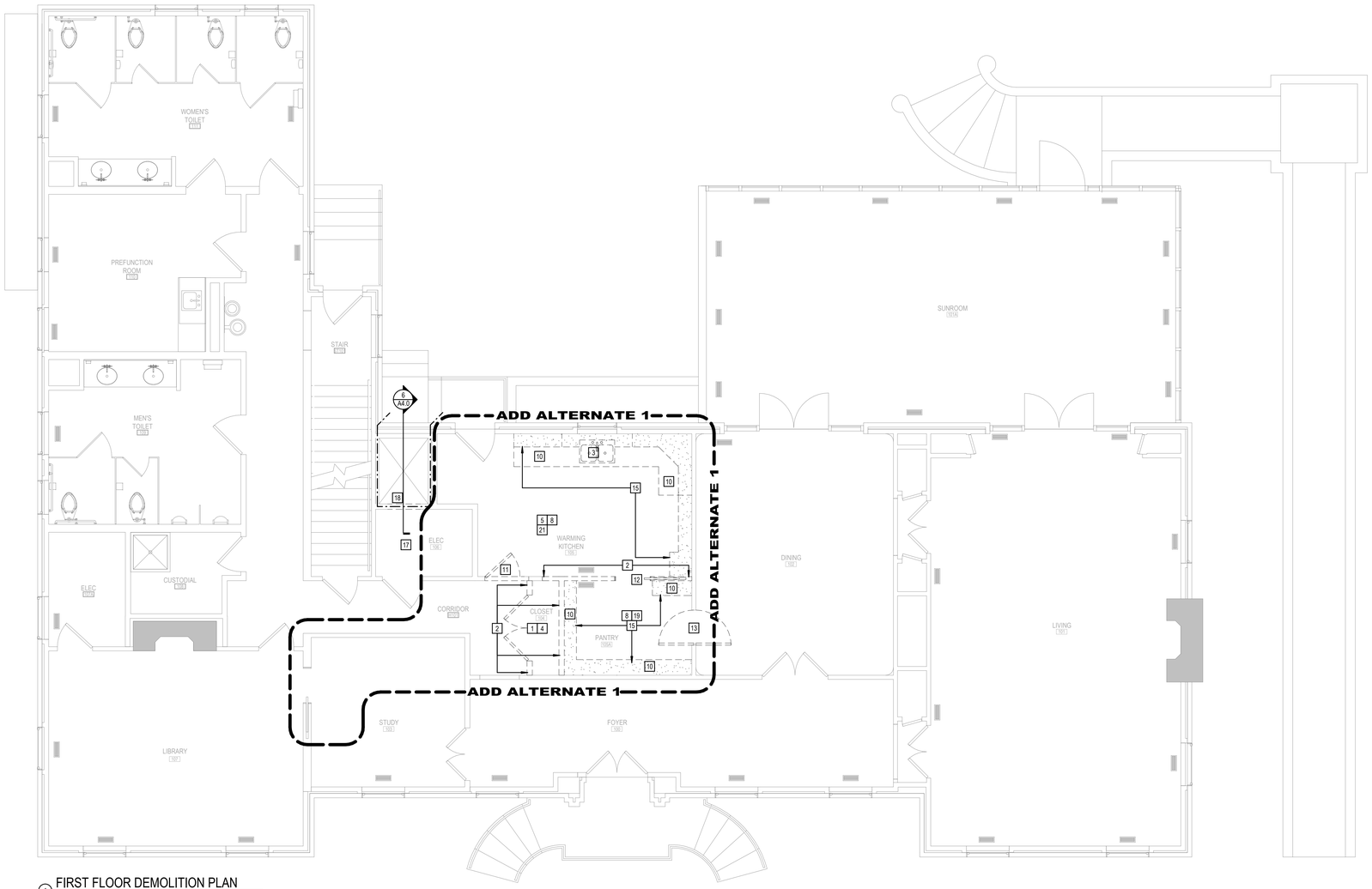
LIFE SAFETY PLAN - FIRST AND SECOND FLOORS

sheet number

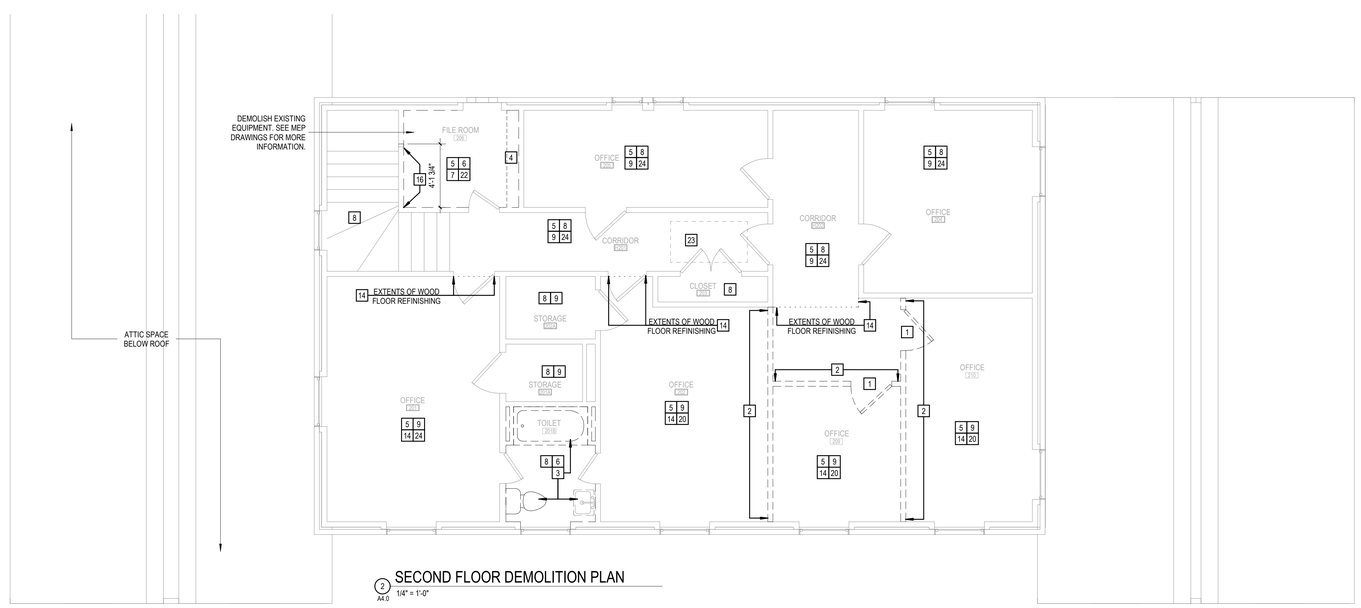
A0.1

drawn by MCD

checked by TMW



1 FIRST FLOOR DEMOLITION PLAN
A4.0 1/4" = 1'-0"



2 SECOND FLOOR DEMOLITION PLAN
A4.0 1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

1. LIFE-SAFETY EGRESS FROM EXISTING AREAS EITHER RENOVATED OR HAVING THE EGRESS AFFECTED BY THE RENOVATION SHALL BE MAINTAINED CLEAR OF OBSTRUCTION AND IMPEDEMENT TO EXITING AND SHALL BE SUPPLANTED TO PROVIDE REQUIRED LIFE-SAFETY COVERAGE AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION.

2. INTERIOR FINISHES, MATERIALS, FURNITURE, EQUIPMENT, ETC IN BUILDINGS TO REMAIN SHALL BE PROTECTED AS NECESSARY TO ELIMINATE POSSIBILITY OF MOISTURE, DUST, DEBRIS DAMAGE. COVER AND PROTECT AS NECESSARY.

3. ALL DEMOLITION SHALL BE PERFORMED WITH THE "DUE CARE AND DILIGENCE". ALL SUCH DISCOVERIES OF UTILITIES DURING THE DEMOLITION PROCESS WHICH ARE IN A DIFFERENT LOCATION FROM THAT INDICATED, CHANGE DIRECTION FROM FLOOR-TO-FLOOR, ETC., OR ARE UNIDENTIFIED, SHALL BE REPORTED TO THE ARCHITECT BEFORE REMOVAL OR DISTURBANCE.

4. ANY DAMAGE TO EXISTING CONDITIONS CAUSED BY DEMOLITION AND/OR NEW WORK SHALL BE REPAIRED AS DETAILED, OR WHERE NO DETAIL IS SHOWN, RESTORED BACK TO ITS ORIGINAL FINISHED CONDITION, BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.

5. DIMENSIONS SHOWN ON THE RENOVATION PLANS ARE SHOWN AS A REFERENCE FOR THE CONTRACTORS AND SHALL BE CONSIDERED +/-, IF EXACT DIMENSIONS ARE REQUIRED, FIELD MEASUREMENTS SHALL BE TAKEN BY EACH CONTRACTOR.

6. ALL HOLES MADE IN EXISTING WALLS OR FLOORS OR MADE BY THE REMOVAL OF ANY EQUIPMENT OR FIXTURES, SHALL BE PATCHED TO MATCH EXISTING, INSTALL NEW MATERIAL FLUSH WITH EXISTING ON BOTH SIDES.

7. EXISTING WALLS, FLOORS, CEILINGS, ETC. SHALL REMAIN UNDISTURBED UNLESS OTHERWISE NOTED.

8. NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF EXISTING CONDITIONS THAT ARE DIFFERENT THAN THOSE REPRESENTED BY THESE DOCUMENTS.

9. REFER TO PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR DEMOLITION OF SPECIFIC ITEMS AND EQUIPMENT RELATED TO RESPECTIVE TRADES AS NECESSARY.

10. ALL WORK SHALL CONFORM WITH ALL LOCAL AND FEDERAL (INCLUDING ADA) AGENCIES HAVING JURISDICTION.

KEYED DEMOLITION NOTES

1	DEMOLISH EXISTING DOOR AND FRAME COMPLETE. PROTECT & SALVAGE DOOR SLAB FOR RE-USE OR RETURN TO OWNER.
2	DEMOLISH EXISTING WALL AND STUDS COMPLETE. PROTECT AND SALVAGE CROWN & BASE FOR RE-USE IN PROJECT.
3	REMOVE PLUMBING FIXTURE COMPLETE. SEE PLUMBING DWGS FOR FULL SCOPE OF DEMOLITION.
4	REMOVE CASEWORK AND SHELVING.
5	REMOVE ANY FLAKING PAINT ON WALLS, CEILINGS, BASE & TRIM. PATCH, PREP & SAND ALL OF THE ABOVE TO BE SMOOTH. PREP TO RECEIVE PAINT AS SCHEDULED.
6	ALONG ENTIRE INTERIOR PERIMETER OF ROOM, DEMOLISH EXISTING SHEETROCK, PLASTER & ANY WALL COVERING TO EXISTING STUDS. CLEAN, PREP AND REPAIR/REPLACE ANY DAMAGE CAUSED BY MOISTURE, MOLD, AND/OR TERMITES.
7	DEMOLISH EXISTING CEILING TO JOISTS. JOISTS TO REMAIN. PREP TO RECEIVE NEW GYPSUM BOARD CEILING.
8	DEMOLISH EXISTING FLOOR FINISH. PREP FLOOR TO RECEIVE NEW FLOOR FINISH AS SCHEDULED.
9	REMOVE ANY CLASSROOM BOARDS, PROJECTORS, SCREENS, OR CONTROLS.
10	DEMOLISH EXISTING BASE CABINETS, COUNTERTOPS & WALL CABINETS COMPLETE. PATCH, PREP & SAND WALLS SMOOTH FOR PAINT AS SCHEDULED.
11	DEMOLISH EXISTING DOOR SLAB ONLY. PROTECT & MAINTAIN DOOR TRIM WHERE FEASIBLE WHILE MODIFYING DOOR OPENING TO BE LARGER AS SCHEDULED. PATCH FRAME AND TRIM WITH SALVAGED MATERIAL FROM PROJECT SCOPE.
12	DEMOLISH EXISTING DOOR AND FRAME COMPLETE. PROTECT & SALVAGE DOOR SLAB FOR RE-USE OR RETURN TO OWNER. PROTECT & SALVAGE DOOR FRAME & TRIM FOR RE-USE.
13	DEMOLISH & DISCARD EXISTING DOOR SLAB ONLY. PROTECT & MAINTAIN DOOR TRIM. REPLACE DOOR SLAB WITH SALVAGED DOOR FROM PROJECT SCOPE. PATCH & PREP EXISTING FRAME TO RECEIVED NEW DOOR HARDWARE AS SCHEDULED.
14	DEMOLISH EXISTING FLOOR FINISH TO EXISTING HARDWOODS. PROTECT HARDWOODS & PREP TO BE REFINISHED AS SCHEDULED.
15	DEMOLISH EXISTING SHEETROCK AND/OR PLASTER SOFFIT (EXTENT SHOWN BY HATCH) COMPLETE. PATCH, PREP & SAND SMOOTH DAMAGED CEILING & WALLS TO RECEIVE PAINT AS SCHEDULED.
16	DEMOLISH INTERIOR LAYER OF SHEETROCK AND/OR PLASTER AND STUDS ONLY AS NEEDED TO FURR OUT WALL BEHIND NEW WATER CLOSET. SEE PLUMBING DWGS.
17	MODIFY EXISTING ACT GRID AS NECESSARY FOR RENOVATION SCOPE. PROTECT & SALVAGE TILES AND GRID FOR RE-USE.
18	DEMOLISH WALL CONSTRUCTION AS NECESSARY FOR NEW DOOR OPENING AS SCHEDULED.
19	DEMOLISH FAUX BRICK WALL COVERING. PATCH & REPAIR WALL. SAND SMOOTH & PREP TO RECEIVE PAINT AS SCHEDULED.
20	DEMOLISH & DISCARD EXISTING WOOD BASE IN ENTIRE ROOM. PATCH WALL BEHIND BASE & EXTEND TO FLOOR WITH SHEETROCK WHERE REQUIRED. TAPE, MUD & SAND SMOOTH ANY JOINTS. PREP TO RECEIVE NEW PAINTED WOOD BASE & WALL PAINT AS SCHEDULED.
21	DEMOLISH & DISCARD EXISTING RUBBER BASE. PATCH & PREP WALL TO RECEIVE NEW PAINTED WOOD BASE AS SCHEDULED.
22	DEMOLISH EXISTING FLOOR FINISH DOWN TO SUBFLOOR. LEVEL FLOORING AND PREP TO RECEIVE HARD TILE FLOORING AS SCHEDULED.
23	DEMOLISH EXISTING WOODEN ATTIC PULL-DOWN STAIR. PROTECT DOOR & OPENING. PREP TO RECEIVE NEW LADDER.
24	WHERE WALL REGISTERS IN BASE ARE REMOVED, DEMOLISHED TALLER WOOD BASE SURROUND. PATCH WALL BEHIND BASE & EXTEND TO FLOOR WITH SHEETROCK WHERE REQUIRED. TAPE, MUD & SAND SMOOTH ANY JOINTS. PREP TO RECEIVE NEW PATCHED & PAINTED WOOD BASE & WALL PAINT AS SCHEDULED.

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

10' 5' 1'

GMK ASSOCIATES, INC.
Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # H27-D339-ID

GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
STATE OF SOUTH CAROLINA
GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015
REGISTERED ARCHITECTS
STATE OF SOUTH CAROLINA
THOMAS MARSHALL WILLARD
COLUMBIA, SC 5908
REGISTERED ARCHITECT
08/01/2019

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

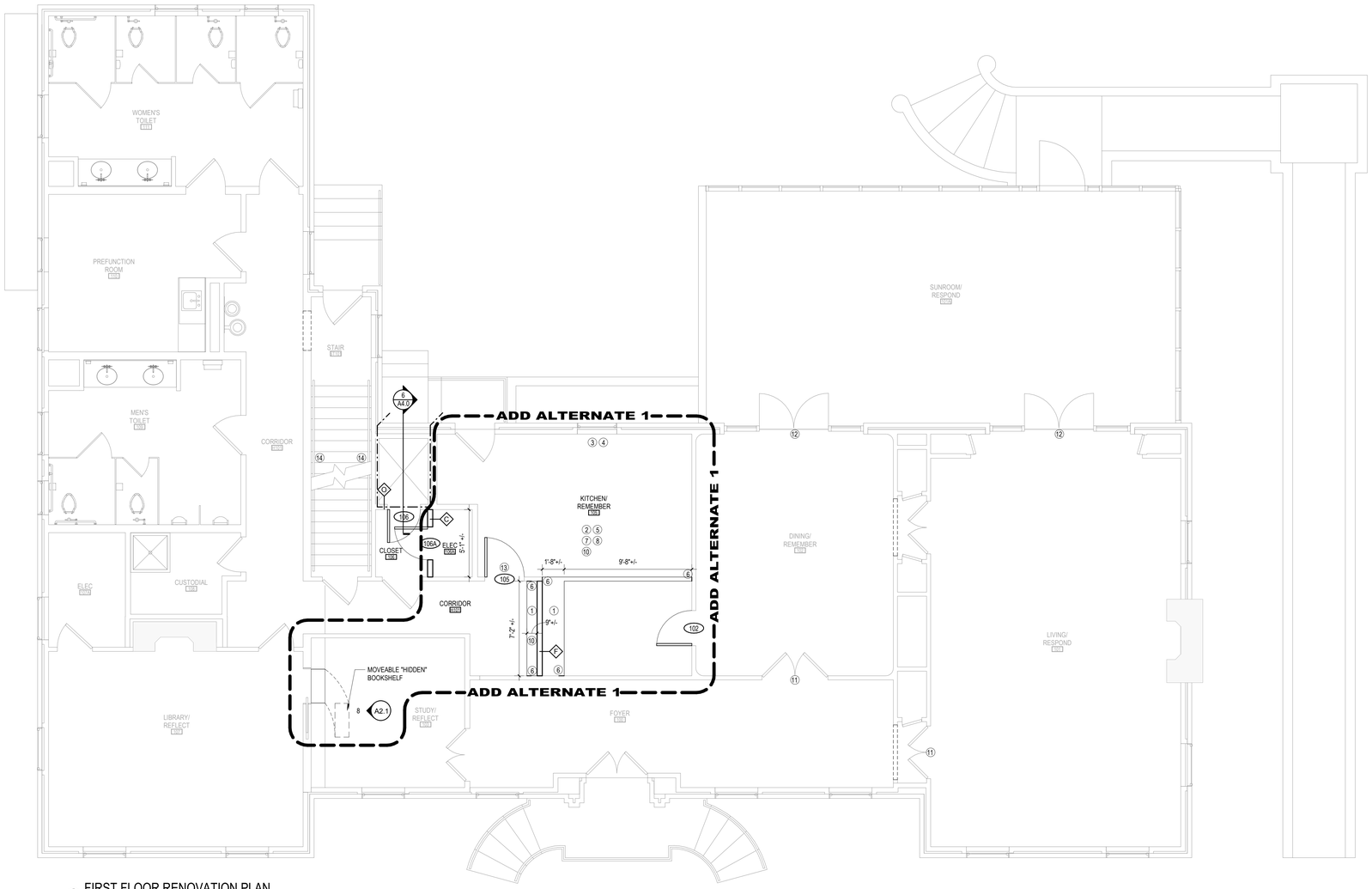
number	item	date

key plan

sheet title
FIRST & SECOND FLOOR DEMOLITION PLANS

sheet number
A1.1

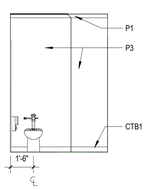
drawn by MCD
checked by TMW



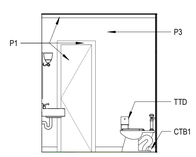
1 FIRST FLOOR RENOVATION PLAN
A4.0 1/4" = 1'-0"

ACCESSORIES LEGEND

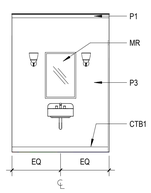
ABBREVIATION	ITEM	MANUFACTURER	COLOR/STYLE
MR	MIRROR	36" x 66"	BLACK FRAMED
PTD	PAPER TOWEL DISPENSER	BOBRICK	B-43949
SD	SOAP DISPENSER	GOJO	LTX-12, 1919-04
TTD	TOILET TISSUE DISPENSER	CASCADES	TANDEM 4259, BLACK
SND	SANITARY NAPKIN RECEPT.	BOBRICK	B270
GB18	18" GRAB BAR	BOBRICK	
GB42	42" GRAB BAR	BOBRICK	
GB36	36" GRAB BAR	BOBRICK	



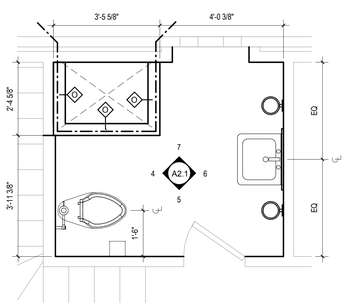
4 TOILET WEST
A2.1 1/4" = 1'-0"



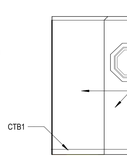
5 TOILET SOUTH
A2.1 1/4" = 1'-0"



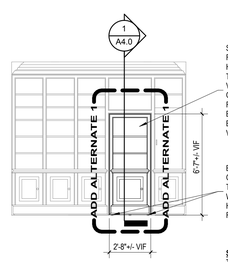
6 TOILET EAST
A2.1 1/4" = 1'-0"



3 ENLARGED PLAN - SECOND FLOOR TOILET
A2.1 1/2" = 1'-0"



7 TOILET NORTH
A2.1 1/4" = 1'-0"

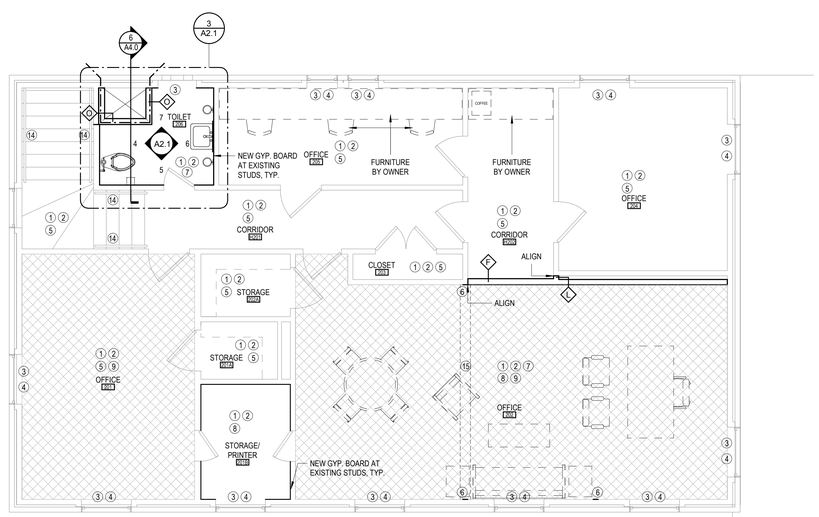


8 STUDY/REFLECT BOOKSHELF
A2.1 1/4" = 1'-0"

STAINED WOOD BOOKSHELF. FINISH COLOR, ALL PROFILES & ANY HARDWARE TO BE METICULOUSLY MATCHED TO ADJACENT EXISTING MILLWORK. VERIFY ALL SELECTIONS WITH ARCHITECT & OWNER BEFORE PROCEEDING WITH FABRICATION. GAP BETWEEN NEW BOOKSHELF & EXISTING CASEWORK SHOULD BE AS MINIMAL AS POSSIBLE. VERIFY ALL DIMENSIONS IN FIELD.

BOOKSHELF TO BE ON SMOOTH GLIDING CASTERS. TAKE CARE THAT HARDWARE SELECTION WILL NOT DAMAGE EXISTING HARDWOOD FLOORING WITH FREQUENT MOVEMENT.

SPECIFIC DESCRIPTION OF MILLWORK:
THIS BOOKSHELF IS A THEATRICAL PROP TO BE USED (ROLLED AWAY TO REVEAL A HIDDEN PASSAGE) IN PRESENTATIONS HELD AT THE FUTURE ANNE FRANK MUSEUM. ITS INTENT IS TO APPEAR "HIDDEN" AND BLEND IN SEAMLESSLY WITH THE EXISTING MILLWORK.



2 SECOND FLOOR RENOVATION PLAN
A4.0 1/4" = 1'-0"

GENERAL NOTES

1. NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF EXISTNG CONDITIONS THAT ARE CONTRARY TO THOSE REPRESENTED WITHIN THE DRAWINGS.

2. NEW WORK SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED AND DETAILED.

3. ALL NEW VERTICAL AND HORIZONTAL DUCTS, PIPES, CONDUITS, ETC. (WHETHER SHOWN OR NOT) IN FINISHED ROOMS OR AREAS THROUGH OUT BUILDING, NOT CONCEALED, SHALL BE FURRED IN, AND FINISHED TO MATCH ROOM FINISH.

4. ALL NEW PARTITIONS, UNLESS OTHERWISE SHOWN OR DETAILED, SHALL BE METAL STUDS OF THICKNESS TO ADEQUATELY COVER PIPING, CONDUITS, ETC.

5. PROVIDE AN EDGE STRIP , AS DETAILED, UNDER ALL DOORS WHERE NEW OR EXISITNG FINISHES AND ADJACENT FLOOR ARE AT DIFFERENT LEVELS AND WHERE ADJACENT FLOOR FINISHES ARE OF DIFFERENT MATERIALS. SEE DETAIL 6/A0.0.

6. EXISTING DOORS, WHICH SWING INTO ROOMS WHERE NEW FLOOR FINISH IS ABOVE ADJACENT FLOORS, SHALL BE CUT OFF AT BOTTOM TO CLEAR NEW FINISHED FLOOR. DOOR BOTTOM SHALL BE SEALED AND FINISHED TO MATCH EXISTING FINISH.

7. OFFSET ALL DOORS 6" FROM ADJACENT WALLS UNLESS OTHERWISE NOTED.

8. NEW TILE FINISHES APPLIED TO EXISTING WALLS AND PARTITIONS SHALL BE APPLIED DIRECTLY TO PLASTER OR GYP. BD. WALLS BY THE THIN SET METHOD. NEW PARTITIONS AND CLOSURES OF OPENINGS IN ROOMS HAVING TILE BASE AND/OR TILE WAINSCOT SHALL BE FINISHED WITH TILE TO MATCH EXISTING. WHEN TILE CANNOT BE MATCHED, FURNISH ARCHITECT WITH SAMPLES OF EXISTING TILE TO PERMIT SELECTION OF SUBSTITUTE TILE.

9. PROVIDE ACCESS PANELS, 24" X 24", OR OF SIZES REQUIRED, WHERE PLUMBING AND HEATING VALVES, WATER SWITCHES, OXYGEN PRESSURE SWITCHES, VENTILATION SPLITTER DAMPERS, ETC. ARE SHOW ON PLUMBING, HEATING, AND VENTILATION DRAWINGS, SUCH ACCESS PANELS TO BE INSTALLED IN THE FOLLOWING:
(A) SUSPENDED PLASTER OR GYPSUM WALLBOARD CEILINGS
(B) METAL STUD OR MASONRY PARTITIONS

10. WHEREVER EXISTING EQUIPMENT, PIPING, DUCTS, ETC. ARE REQUIRED TO BE REMOVED, SUCH REMOVAL SHALL INCLUDE ALL ANCHORS, HANGERS, FOUNDATIONS, ETC. AFTER REMOVAL, FLOORS, WALLS AND CEILINGS SHALL BE FINISHED TO MATCH ADJOINING SURFACES OR AS INDICATED ON ROOM FINISH SCHEDULE.

11. WALL ASSEMBLIES SHALL BE MAINTAINED AT ALL RECESSED FIRE EXTINGUISHER CABINETS AND ALL RECESSED EQUIPMENT.

12. WHERE PAINT IS CALLED FOR ON WALLS IN RENOVATED ROOMS IN THE EXISTING BUILDING, ALL WALLS ARE TO BE PAINTED.

13. WHERE NO PAINT IS INDICATED IN AREAS WHERE PATCHING IS REQUIRED, NEW WORK IS TO BE PAINTED TO MATCH EXISTING ADJOINING SURFACES.

14. WHERE THE ROOM FINISH SCHEDULE CALLS FOR A NEW CEILING, THE EXISTING CEILING AND SUSPENSION SYSTEM IS TO BE COMPLETELY REMOVED.

15. PROVIDE FIRE EXTINGUISHING CABINETS OF THE TYPE SPECIFIED. REFER TO FLOOR PLANS (A2.0) FOR LOCATIONS.

16. WHERE THE ROOM FINISH SCHEDULE FOR EXISTING CONSTRUCTION CALLS FOR A NEW MATERIAL, THE ENTIRE ROOM IS TO RECEIVE THE NEW MATERIAL. WHERE THE ROOM FINISH SCHEDULE CALLS FOR BOTH PATCHING AND A NEW MATERIAL, THE NEW MATERIAL IS LIMITED TO AREAS OF NEW CONSTRUCTION WITHIN THAT ROOM ONLY.

17. SUPPLY BLOCKING AT ALL WALL HUNG EQUIPMENT (I.E., GRAB BARS, CASEWORK, ETC.)

18. WHERE A NEW DOOR, VIEW WINDOW OR OPENING IS CUT THROUGH AN EXISTING MASONRY WALL, PROVIDE A LOOSE LINTEL AS REQUIRED ON THE LOOSE LINTEL SCHEDULE INDICATED ON THE STRUCTURAL DRAWINGS.

19. ALL DIMENSIONS SHOWN IN RENOVATED AREAS ARE TO BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH WORK.

20. IN ALL ROOMS BELOW AREAS WHICH RECEIVE UNDER FLOOR SERVICES, REMOVE A PORTION OF EXISTING CEILING AS REQUIRED. PATCH FINISHES TO MATCH EXISTING OR AS INDICATED ON ROOM FINISH SCHEDULE.

21. WHERE THE ROOM FINISH SCHEDULE CALLS FOR A ROOM TO BE PAINTED AND THAT ROOM CONTAINS WALL PAPER AND/OR VINYL, CHAIR RAILS, THESE SHALL BE COMPLETELY REMOVED FROM WALLS AND ANY HOLES OR BUMPS SHALL BE FILLED OR SANDED SMOOTH BEFORE APPLYING NEW COAT OF PAINT.

22. ALL SHAFT PARTITIONS EXTEND FROM FLOOR SLAB TO UNDERSIDE OF SLAB ABOVE. EXPOSED BEAMS WITHIN SHAFTS ARE TO BE FIREPROOFED WITH 2-HOUR GYP. BD. ENCLOSURE.

23. THE FIRE RATINGS OF ALL FIRE RATED WALLS SHALL BE STENCILED ABOVE CEILINGS, EACH SIDE OF WALL, BOTH SIDES OF CORRIDORS AND AS REQ'D BY IBC.

FLOOR AND WALL PREPARATION NOTES

1. PREPARE EXISTING FLOORS FOR INSTALLATION OF NEW FLOOR FINISHES AS SCHEDULED & PER MANUFACTURER'S RECOMMENDATIONS.

2. PREPARE EXISTING WALLS FOR INSTALLATION OF NEW WALL FINISHES PER MANUFACTURER'S RECOMMENDATIONS. WHERE A NEW WALL ABUTS AN EXISTING WALL FLUSH, FINISH FOR CONCEALED AND CONTINUOUS FLUSH APPEARANCE. FILL ALL VOIDS, CRACKS, PEELS, SPAWLS, FLAKES, ETC. WITH PLASTER AS NECESSARY. SEE FINISH SCHEDULE FOR FINISHES. PATCH, REPAIR, & SAND SMOOTH EXISTING WALLS TO REMAIN. PREPARE TO RECEIVE NEW FINISH AS SCHEDULED.

3. SCRAPE, CLEAN, AND PAINT EXISTING WINDOW FRAMES.

4. WINDOW BLINDS/COVERING. SEE SPECIFICATION.

5. PATCH, REPAIR, AND PAINT ANY EXISTING WOOD BASE, CHAIR RAIL, SHELVING AND CROWN MOULDING. PATCH/ADD NEW TRIM, OF ANY OF THE ABOVE. TO MATCH EXISTING TO CREATE UNIFORM FINISH AROUND ENTIRE ROOM. IF RECLAIMED TRIM PIECES FROM DEMOLITION SCOPE ARE NOT SUFFICIENT, MATCH EXISTING CUSTOM PROFILES. PAINT AS SCHEDULED.

6. PATCH, REPAIR & PREP WALL WHERE DEMOLITION OCCURED. MATCH EXISTING WALL CONSTRUCTION. PAINT AS SCHEDULED.

7. INSTALL CROWN MOULDING WITH RECLAIMED CROWN FROM DEMOLITION SCOPE. IF RECLAIMED PIECES FROM DEMOLITION SCOPE ARE NOT SUFFICIENT, INSTALL NEW & MATCH EXISTING CUSTOM PROFILES. PAINT AS SCHEDULED.

8. INSTALL NEW WOOD BASE WITH PROFILES TO MATCH EXISTING. PAINT AS SCHEDULED.

9. CLEAN EXISTING HARDWOODS OF ANY ADHESIVES BUT NOT SCRATCHING THE WOOD. SAND & BUFF ENTIRE FLOOR TO BE REFINISHED. PREP & REFINISH FLOOR TO ITS ORIGINAL CONDITION WITH NEW STAIN & FINISH AS SCHEDULED. PATCH ANY VOIDS IN FLOORING WITH MATCHING WOOD SPECIES & COLOR.

10. INSTALL NEW FLOOR FINISH AS SCHEDULED TO MATCH EXISTING CORRIDOR & FOYER FLOORING. ENSURE ANY TRANSITIONS ARE LEVEL, MATCHING IN FINISH, ADA COMPLIANT & ALLOW FOR COMPLETE & PROPER USE OF ALL DOORS.

11. SHAVE BOTTOM OF EXISTING DOOR, AS LITTLE AS POSSIBLE, TO ALLOW PROPER CLOSURE AND PASSING OVER EXISTING WOOD THRESHOLD.

12. INSTALL GASKETING AROUND DOORS TO CREATE A TIGHT SEAL AND SOUND BARRIER WHEN DOORS ARE CLOSED.

13. PATCH WIDENED DOOR FRAME WITH SALVAGED MATERIAL FROM DEMOLITION SCOPE. INSTALL NEW PANELED DOOR TO MATCH EXISTING PROFILES & PANELING. APPLY FINISHES AS SCHEDULE.

14. SAND & PREP EXISTING HANDRAILS TO RECEIVE NEW STAIN & FINISH AS SCHEDULED.

15. NEW HARDWOOD AT LOCATION OF REMOVED WALL, TOOTH IN FOR CONSISTANT JOINT LAYOUT. STAIN TO MATCH ADJACENT EXISTING FLOORING AS SCHEDULED.

PATCH AND REFINISH EXISTING HARDWOOD FLOORING.

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

10' 5' 1'

GMK ASSOCIATES, INC.
Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # H27-D339-ID

GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
STATE OF SOUTH CAROLINA
GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015
REGISTERED ARCHITECTS
STATE OF SOUTH CAROLINA
THOMAS MARSHALL WILLARD
COLUMBIA, SC 5908
REGISTERED ARCHITECT
08/01/2019

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

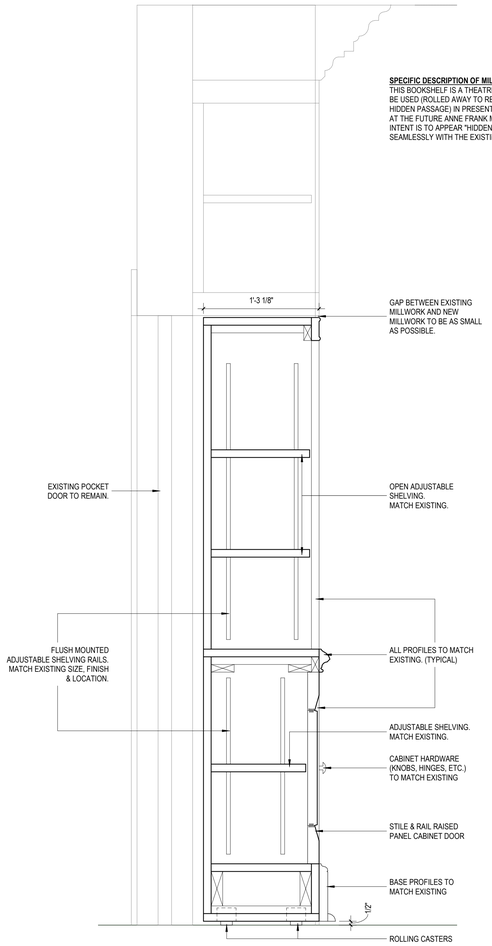
number	item	date

key plan

sheet title
FIRST & SECOND FLOOR RENOVATION PLANS, ENLARGED PLANS & INTERIOR ELEVATIONS

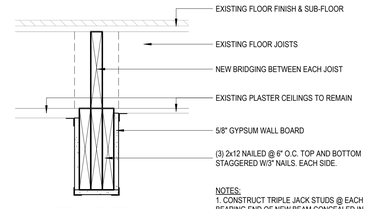
sheet number
A2.1

drawn by MCD
checked by TMW



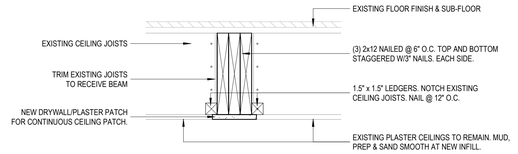
SPECIFIC DESCRIPTION OF MILLWORK:
THIS BOOKSHELF IS A THEATRICAL PROP TO BE USED (ROLLED AWAY TO REVEAL A HIDDEN PASSAGE) IN PRESENTATIONS HELD AT THE FUTURE ANNE FRANK MUSEUM. ITS INTENT IS TO APPEAR "HIDDEN" AND BLEND IN SEAMLESSLY WITH THE EXISTING MILLWORK.

1 A2.1 CASEWORK SECTION 1 1/2" = 1'-0"



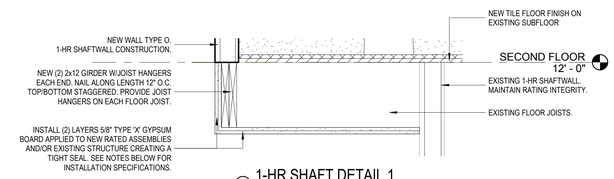
NOTES:
1. CONSTRUCT TRIPLE JACK STUDS @ EACH BEARING END OF NEW BEAM CONCEALED IN EXISTING WALLS.
2. TEMPORARILY SHORE EXISTING CEILING AS NECESSARY FOR NEW BEAM INSTALLATION.

2 A7.1 BEAM DETAIL 1 1 1/2" = 1'-0"

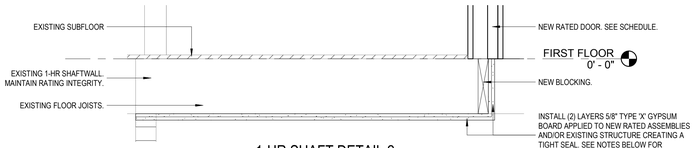


NOTES:
1. MODIFY ATTIC HVAC PLATFORM (PLYWOOD) AS NECESSARY TO ACCOMODATE NEW BEAM.
2. CONSTRUCT TRIPLE JACK STUDS @ EACH BEARING END OF NEW BEAM CONCEALED IN EXISTING WALLS.
3. TEMPORARILY SHORE EXISTING CEILING AS NECESSARY FOR NEW BEAM INSTALLATION.

3 A7.1 BEAM DETAIL 2 1 1/2" = 1'-0"

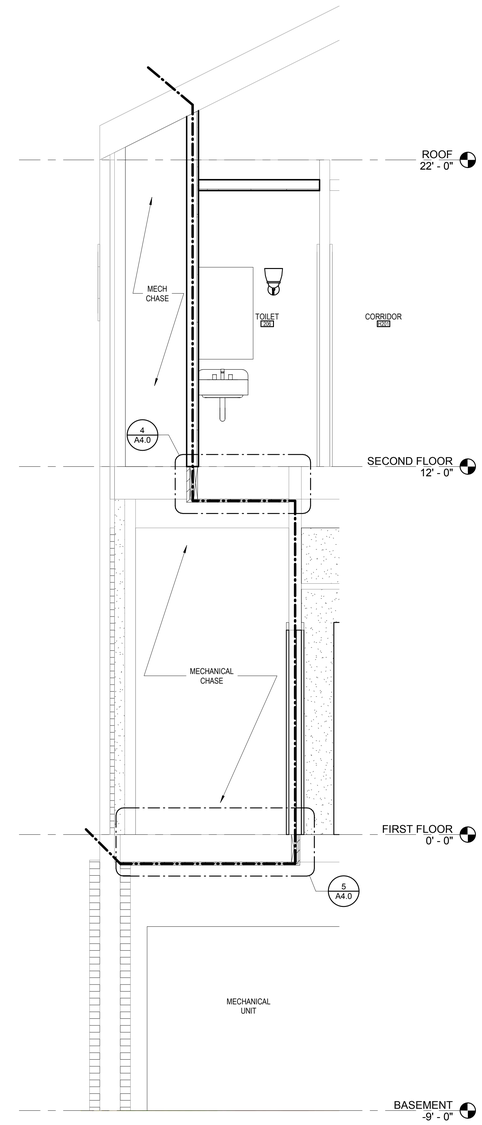


4 A4.0 1-HR SHAFT DETAIL 1 1" = 1'-0"

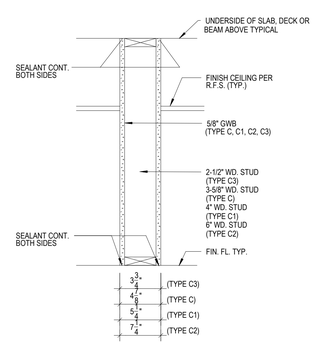


5 A4.0 1-HR SHAFT DETAIL 2 1" = 1'-0"

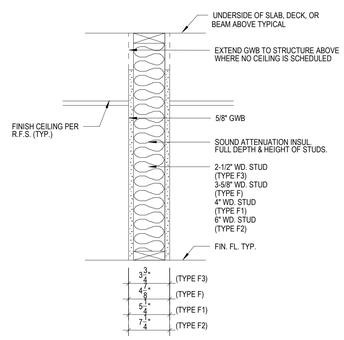
1-HR CONSTRUCTION SPECIFICATIONS:
1. VERIFY FRAMING MEMBERS ARE INSTALLED 16" O.C. IF NOT, INFILL TO MEET 16" O.C. SPACING REQUIREMENT.
2. GYPSUM BOARD SHALL BE INSTALLED WITH HORIZONTAL JOINTS STAGGERED 24" O.C. AND ALL JOINTS FINISHED.
3. GYPSUM BOARD SHALL BE INSTALLED WITH THE LONG DIMENSION PERPENDICULAR TO FRAMING MEMBERS AND SHALL HAVE ALL JOINTS FINISHED.
4. ALL DUCTS PENETRATING GYPSUM BOARD TO HAVE FIRE DAMPERS & ALL PENETRATIONS TO BE SEALED WITH FIRE CAULKING.



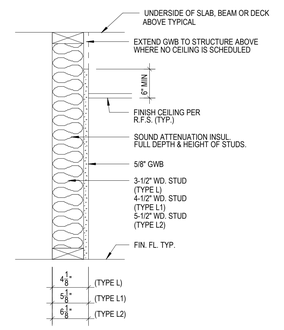
6 A1.1 MECHANICAL CHASE SECTION 1/2" = 1'-0"



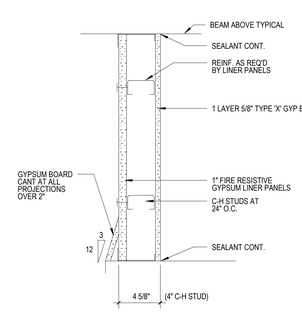
C NON-RATED TYPES: C, C1, C2, C3
NOTE: USE KILN DRIED PRESSURE TREATED WOOD FOR GROUND CONTACT IN BASEMENT LOCATIONS.



F NON-RATED TYPES: F, F1, F2, F3



L NON-RATED TYPES: L, L1, L2



NOTES:
1. DUCTS PENETRATING GYPSUM BOARD TO HAVE FIRE DAMPERS.
2. ALL OTHER PENETRATIONS TO BE SEALED WITH FIRE CAULKING.

O 1 HR. U.L. DES. U469 TYPE: O

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.
Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # H27-D339-ID

GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
STATE OF SOUTH CAROLINA GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015 REGISTERED ARCHITECTS
STATE OF SOUTH CAROLINA THOMAS MARSHALL WILLARD COLUMBIA, SC 5908 REGISTERED ARCHITECT
08/01/2019

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

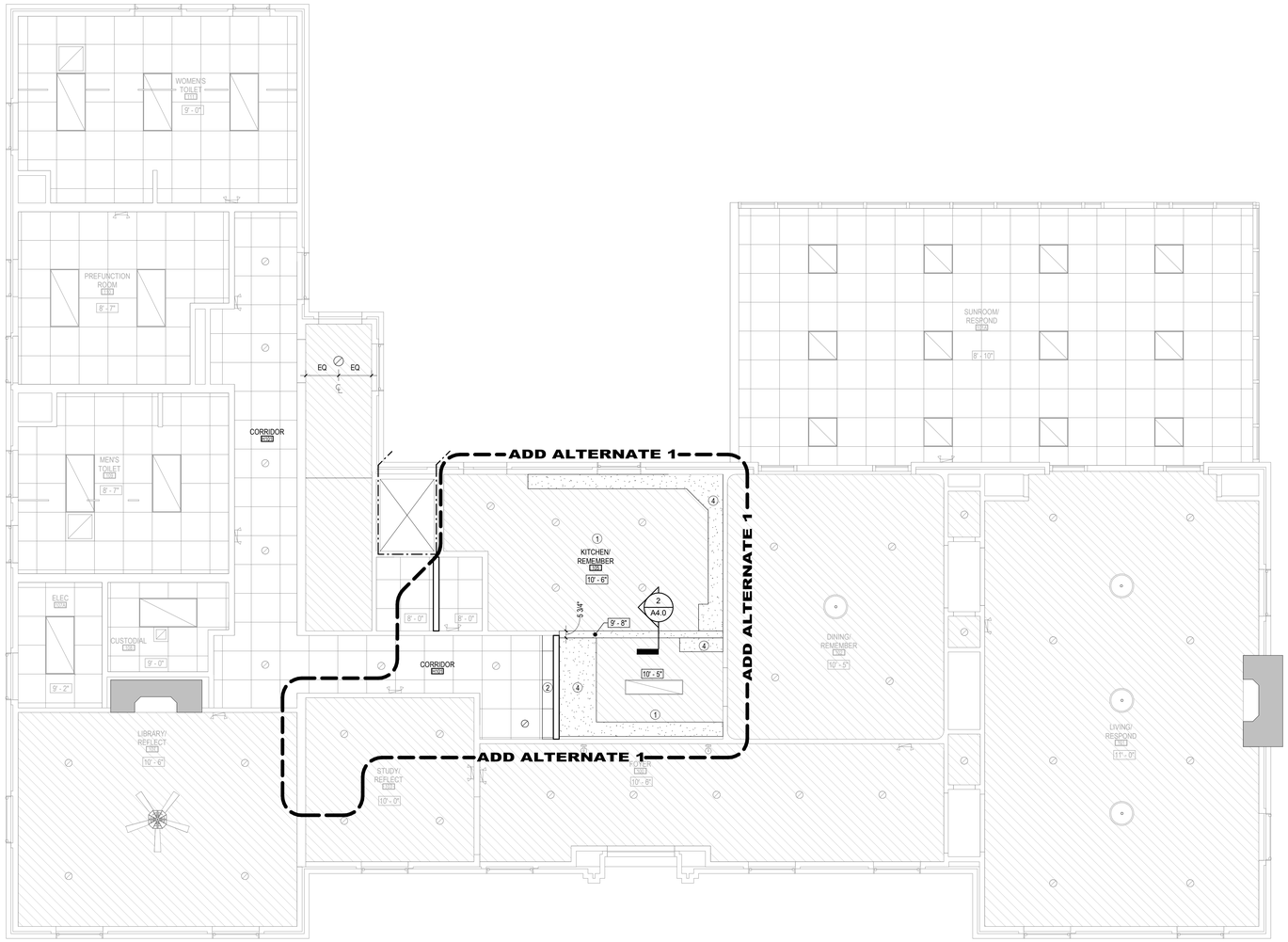
number	item	date

key plan

sheet title
MILLWORK DETAILS, BUILDING SECTIONS & DETAILS, WALL CONSTRUCTION TYPES

sheet number
A4.0

drawn by MCD
checked by TMW



1 FIRST FLOOR REFLECTED CEILING PLAN
A4.0 1/4" = 1'-0"

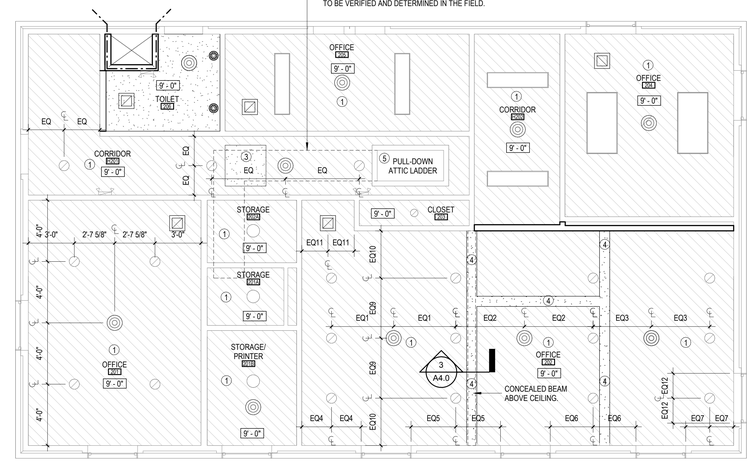
SYMBOL LEGEND

- 9'-0" CEILING HEIGHT AFF
- OTS OPEN TO STRUCTURE
- ACCOUSTIC TILE
- NEW GYPSUM BOARD CEILING OR NEW CEILING PATCH.
- EXISTING GYPSUM BOARD CEILING. PATCH, REPAIR, PREPARE & PAINT.
- SURFACE MOUNTED LIGHT FIXTURE
- RECESSED LIGHT FIXTURE
- LED STRIP LIGHT
- PENDANT LIGHT FIXTURE
- HVAC DIFFUSER/GRILLE
- HVAC DIFFUSER/GRILLE
- CEILING FAN

CEILING NOTES

1. CEILING TO BE MINIMALLY DAMAGED BY ELECTRICAL AND MECHANICAL WORK. PATCH, REPAIR AND PAINT CEILINGS TO REMAIN TO MATCH EXISTING.
2. EXTEND ACT GRID TO BE CONTINUOUS. MATCH EXISTING GRID & TILE AS SPECIFIED.
3. PATCH CEILING WHERE EXISTING HVAC DEVICES WERE DEMOLISHED. SAND TO BE SMOOTH, FLUSH AND CONTINUOUS TO EXISTING CEILING.
4. PATCH CEILING WHERE EXISTING BULKHEAD AND/OR WALL WAS DEMOLISHED. SAND TO BE SMOOTH, FLUSH AND CONTINUOUS TO EXISTING CEILING.
5. INSTALL NEW ALUMINUM PULL-DOWN ATTIC LADDER. MATCH EXISTING SIZE.

PROVIDE 2'-0" WIDE PLATFORM MADE FROM 3/4" PLYWOOD FROM ATTIC ACCESS TO ALL VAV BOXES. NAIL DOWN TO EXISTING FLOOR JOISTS. EXACT LOCATIONS TO BE VERIFIED AND DETERMINED IN THE FIELD.



3 SECOND FLOOR REFLECTED CEILING PLAN
A4.0 1/4" = 1'-0"

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:

1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.

2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.

B. Coordinate construction schedule and operations with Owner.

C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

10' 5' 1'

GMK ASSOCIATES, INC.

Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # H27-D339-ID

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

STATE OF SOUTH CAROLINA
GMK ASSOCIATES ARCHITECTURAL DIVISION, INC.
Columbia, SC
No. B74015
REGISTERED ARCHITECTS

STATE OF SOUTH CAROLINA
THOMAS MARSHALL WILLARD
COLUMBIA, SC
5908
REGISTERED ARCHITECT

08/01/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

sheet title

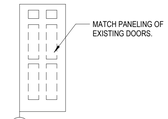
FIRST AND SECOND FLOORS REFLECTED CEILING PLAN

sheet number

A7.1

drawn by MCD

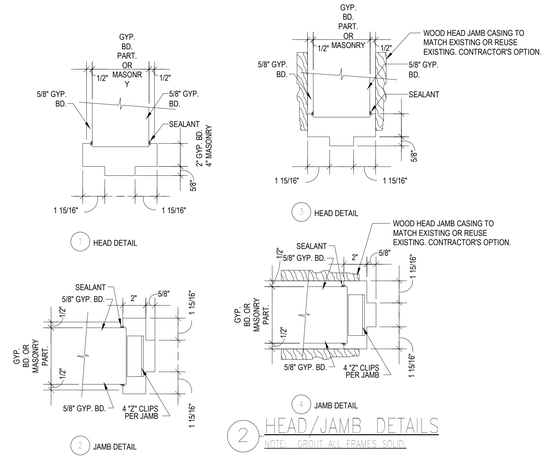
checked by TMW



A WD- PANELS
A1 MTL- NO LABEL
A2 WD- 3/4 HR. "C" LABEL
A3 MTL- 3/4 HR. "C" LABEL
A4 WD- 1-1/2 HR. "B"LABEL
A5 MTL- 1-1/2 HR. "B"LABEL
A6 WD- 3 HR. "A"LABEL
A7 MTL- 3 HR. "A"LABEL
A8 MTL- EXTERIOR INSULATED
A9 WD- 20 MIN. CERTIFIED CONSTRUCTION
A10 WD- 20 MIN. CERTIFIED CONSTRUCTION- 7'-10" HIGH
A11 MTL- 3 HR. "A" LABEL

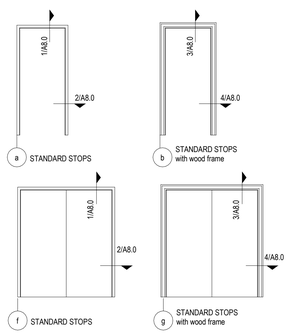
1 DOOR TYPES

NOTES:
1. ASTRAGAL REQUIRED AT DOUBLE EGRESS DOORS
2. ALL EXTERIOR DOORS TO BE HOT DIPPED GALVANIZED DOOR AND FRAME



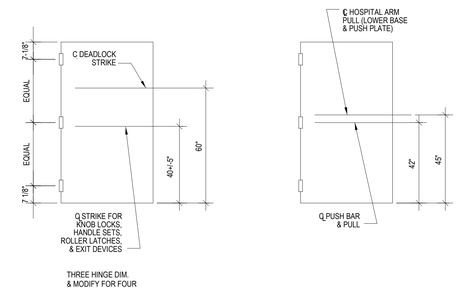
2 HEAD/JAMB DETAILS

NOTE: GROUT ALL FRAMES SOLID.



3 FRAME TYPES

NOTES: LABELED DOORS REQUIRE LABELED FRAMES
INSULATED GLASS AT EXTERIOR LOCATIONS



4 DOOR HARDWARE LOCATIONS

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	ROOM TRIM/ FLOOR BASE	WALLS FINISH	WALLS ACCENT	CEILING FINISH	REMARKS
BASEMENT							
001	STAGING	EXIST	EXIST	EXIST		EXIST	
002	JAN	EXIST	EXIST	EXIST		EXIST	
003	MECHANICAL/ELECTRICAL	EXIST	EXIST	EXIST		EXIST	
004	MECHANICAL	EXIST	EXIST	EXIST		EXIST	
H001	CORRIDOR	EXIST	EXIST	EXIST		EXIST	
FIRST FLOOR							
100	FOYER	EXIST	EXIST	EXIST		EXIST	
101	LIVING/ RESPOND	EXIST	EXIST - P4	EXIST		EXIST	
101A	SUNROOM/ RESPOND	EXIST	EXIST	EXIST		EXIST	
102	DINING/ REMEMBER	EXIST	EXIST - P4	P5	P4 AT WAINSCOT	EXIST	
103	STUDY/ REFLECT	EXIST	EXIST	EXIST		EXIST	
105	KITCHEN/ REMEMBER	WD2	WDB1* - P1	P1	P1 AT CROWN	P1	*USE SALVAGED BASE & CROWN FROM DEMOLITION SCOPE.
106	CLOSET	EXIST	RB1	P1		ACT1	
106A	ELEC	EXIST	RB1	P1		ACT1	
107	LIBRARY/ REFLECT	EXIST	EXIST	EXIST		EXIST	
107A	ELEC	EXIST	EXIST	EXIST		EXIST	
108	CUSTODIAL	EXIST	EXIST	EXIST		EXIST	
109	MEN'S TOILET	EXIST	EXIST	EXIST		EXIST	
110	PREFUNCTION ROOM	EXIST	EXIST	EXIST		EXIST	
111	WOMEN'S TOILET	EXIST	EXIST	EXIST		EXIST	
H101	CORRIDOR	EXIST	EXIST	P2		ACT1	
STR01	STAIR	CPT1	EXIST - P1	P2	STAIN AT HANDRAILS	P1	*HANDRAIL STAIN TO MATCH REFINISHED HARDWOODS. COLOR BY ARCHITECT/OWNER.
SECOND FLOOR							
201	OFFICE	CPT1	EXIST - P1	P2		P1	
201A	STORAGE	CPT1	EXIST - P1	P2		P1	
201B	STORAGE/ PRINTER	CPT1	RB1	P2		P1	
202	OFFICE	WD1	WDB1* - P1	P2	P1 AT CROWN	P1	*USE SALVAGED BASE & CROWN FROM DEMOLITION SCOPE.
202A	STORAGE	CPT1	EXIST - P1	P2		P1	
203	CLOSET	CPT1	EXIST - P1	P2		P1	
204	OFFICE	CPT1	EXIST - P1	P2		P1	
205	OFFICE	CPT1	EXIST - P1	P2		P1	
206	TOILET	CT1	CTB1	P3	P1 AT CROWN	P1	*USE SALVAGED CROWN FROM DEMOLITION SCOPE.
H201	CORRIDOR	CPT1	EXIST - P1	P1		P1	
H202	CORRIDOR	CPT1	EXIST - P1	P1		P1	

ADD ALTERNATE 1

ADD ALTERNATE 1

FINISH LEGEND

ABBREVIATION	MATERIAL	MANUFACTURER	COLOR/STYLE	SIZE	NOTES
CEILING					
ACT1	ACOUSTICAL CEILING TILE	ARMSTRONG	ULTIMA BEVELED TEGULAR	MATCH EXISTING	SUPRAFINE XL FIREGUARD 9/16" EXPOSED TEE
FLOORING					
CPT1	CARPET 1	MANNINGTON	MOSSO, BROOM 42332	BROADLOOM	
VCT1	VINYL COMPOSITION TILE 1	JOHNSONITE	AZROCK VCT, V-217 WEATHERED CB	12" x 12"	
WD1	WOOD FLOOR 1*		OAK	EXISTING	*REFINISHED EXISTING HARDWOODS, SEE NOTE 2 BELOW
WD2	WOOD FLOOR 2		OAK	MATCH EXISTING	SEE SPECS
CT1	CERAMIC FLOOR TILE	ROCA	CC MOSAICS, HEXAGON WHITE & BLACK MATTE	1" x 1"	
PAINT					
P1	TRIM PAINT	SHERWIN WILLIAMS	SW 7006 EXTRA WHITE (BRIGHT WHITE)		WALL: CASHMERE PEARL SHEEN, TRIM/BASE: SEMI-GLOSS
P2	FIELD PAINT	SHERWIN WILLIAMS	SW 6169 SEDATE GRAY		CASHMERE PEARL SHEEN
P3	FIELD PAINT	SHERWIN WILLIAMS	SW 7004 SNOWBOUND		CASHMERE PEARL SHEEN
P4	FIELD PAINT	SHERWIN WILLIAMS	SW 6105 DIVINE WHITE (OFF-WHITE)		SEMI-GLOSS
P5	FIELD PAINT	SHERWIN WILLIAMS	SW 6693 LILY (YELLOW)		CASHMERE PEARL SHEEN
FLOOR BASE					
RB1	RUBBER WALL BASE	JOHNSONITE	44 DARK BROWN	4"	
WDB1	WOOD WALL BASE*		SW 7006 EXTRA WHITE (BRIGHT WHITE)	MATCH EXISTING	*RECLAIMED BASE FROM DEMOLITION SCOPE, SEMI-GLOSS PAINT
CTB1	CERAMIC TILE BASE	ROCA	BLACK BRIGHT U759 A3401	3" x 6"	

NOTES:
1. ALL WALLS SHOULD BE LEVEL 4 FINISH.
2. STAIN COLOR BY ARCHITECT/OWNER. CLEAR SATIN POLYURETHANE FINISH COAT.

DOOR SCHEDULE

ROOM NAME	DOOR NUMBER	DOOR ELEV	DOOR SIZE	FRAME ELEV	HDWR SET	REMARKS
FIRST FLOOR						
DINING/ REMEMBER	102	EXIST	32" x 84"	EXIST	1	*USE RECLAIMED DOOR FROM ROOM 105 OR 105A
KITCHEN/ REMEMBER	105	EXIST	36" x 80"	MATCH EXIST	1	*PAINT CORRIDOR SIDE OF DOOR & FRAME P1. STAIN ROOM SIDE TO MATCH EXISTING.
CLOSET	106	A3	30" x 80"	a	2	*PAINT DOOR & FRAME P1
ELEC	106A	A1	30" x 80"	a	2	*PAINT DOOR & FRAME P1

ADD ALTERNATE 1

GENERAL DOOR NOTES:
1. ANY NEW DOORS/FRAMES OR MODIFIED DOORS/FRAMES SHALL HAVE TRIM PROFILES AND DOOR PANELING TO MATCH EXISTING.
2. DO NOT DISCARD OF ANY DEMOLISHED DOORS. PROTECT & SALVAGE FOR RE-USE OR RETURN TO OWNER.

HARDWARE SETS

SET NO. 1 -
PASSAGE SET
HINGES
MORTISE LATCHSET
SILENCERS
BUMPER

SET NO. 2 -
STORAGE SET
HINGES
MORTISE LOCKSET
SILENCERS
BUMPER

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.
Architects/Engineers/Planners
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYWRITED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATED, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT THE PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # H27-D339-ID

GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
STATE OF SOUTH CAROLINA GMK ASSOCIATES ARCHITECTURAL DIVISION, INC. Columbia, SC No. B74015 REGISTERED ARCHITECTS
STATE OF SOUTH CAROLINA THOMAS MARSHALL WILLIAMS COLUMBIA, SC 5908 REGISTERED ARCHITECT
08/01/2019

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

number	item	date

key plan

sheet title
DOOR SCHEDULE, DOOR AND FRAME TYPES, FINISH SCHEDULE & LEGEND

sheet number
A8.0

drawn by MAP
checked by TMW

PLUMBING FIXTURE SCHEDULE

WC-1: WATER CLOSET (FLOOR MOUNTED) 1. TYPE A. SLOAN WETS-2021, SIPHON JET, ELONGATED BOWL, VITREOUS CHINA, 1.1 GAL FLUSH VALVE. 2. SEAT A. CENTOCO 820STSS WHITE, EXTRA HEAVY DUTY, ELONGATED OPEN FRONT, STAINLESS STEEL POST, SELF-SUSTAINING CHECK HINGES. 3. CONNECTION A. 3" WASTE. 1" COLD WATER. 4. MOUNTING A. FLOOR 17" TO RIM. 5. FLUSH VALVE A. SLOAN ROYAL MODEL 111 WITH SCREW DRIVER STOPS. ROUGH IN FOR VALVE OPERATOR TO WIDE SIDE OF STALL.	
L-1: LAVATORY (WALL HUNG) 1. TYPE A. AMERICAN STANDARD DECORUM 9024, VITREOUS CHINA. 2. SIZE A. 18.25"x20" RECTANGULAR. 3. CONNECTION A. 1-1/4" WASTE, 1/2" CW, 1/2" HW. 4. MOUNTING A. WALL 34" AFF TO RIM. 5. FITTING A. DELTA 520-SSMPU-DST, SINGLE HANDLE WITH AERATOR, STAINLESS FINISH. 6. SUPPLIES A. MCGUIRE 165LK WITH LOOSE KEY STOPS. 7. DRAIN A. DELTA RP26533 METAL POP-UP ASSEMBLY DRAIN. 8. TRAP A. MCGUIRE 8872 1-1/4" P-TRAP WITH C.O. PLUG. 9. CARRIER A. WATTS WCA-4	

PLUMBING LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COLD WATER LINE – NEW (CW)		PIPE DOWN OR DROP (DN OR DROP)
---- CW ----	COLD WATER LINE – EXISTING (CW)		PIPE UP
	COLD WATER LINE – DEMO (CW)		PIPE BREAK OR CONTINUATION
	HOT WATER LINE – NEW (HW)		P-TRAP
---- HW ----	HOT WATER LINE – EXISTING (HW)		END CAP
	HOT WATER LINE – DEMO (HW)		UNION
	HOT WATER RECIRCULATING LINE – NEW (HWR)	CO	INLINE CLEANOUT
	SANITARY WASTE LINE – NEW (W)	SA-A	SHOCK ABSORBER & TYPE
---- SAN ----	SANITARY WASTE LINE – EXISTING (W)		BALL VALVE
SAN	SANITARY WASTE LINE – DEMO (W)		POINT OF CONNECTION – NEW TO EXISTING
	SANITARY VENT LINE – NEW (V)		AREA TO BE DEMOLISHED
	SANITARY VENT LINE – EXISTING (V)		
	SANITARY VENT LINE – DEMO (V)		

ABBREVIATIONS *

ABV	Above	NC	Normally Closed
AD	Access Door	NIC	Not in Contract
AFF	Above Finished Floor	NO	Normally Open
BFP	Backflow Preventer	NPT	National Pipe Thread
CA	Compressed Air	NTS	Not To Scale
CI	Cast Iron	OFST	Over Flow Storm Drain
COL	Column Line	OX	Oxygen
CONN	Connection	P-#	Pump – No.
CW	Cold Water	PRV	Pressure Reducing Valve
DI	De-ionized Water	PSI	Pounds Per Square Inch
DN	Down	RD	Roof Drain
ELEV	Elevation	SA	Shock Absorber
ET	Expansion Tank	SH-#	Shower
EWC-#	Electric Water Cooler	SK-#	Sink
FD	Floor Drain	SS	Stainless Steel
FL	Floor	ST	Storm Drain
FT	Feet	STD	Standard
GPH	Gallons Per Hour	TEMP	Temperature
GPM	Gallons Per Minute	TOS	Top of Steel
HW	Hot Water	TYP	Typical
HWR	Hot Water Return	U-#	Urinal
IE	Invert Elevation	VAC	Vacuum
L-#	Lavatory	VB	Vacuum Breaker
MA	Medical Air	V	Sanitary Vent
MAX	Maximum	VTR	Vent Thru Roof
MIN	Minimum	W	Sanitary Waste
MPT	Male Pipe Thread	WB-#	Wall Box
MSB-#	Mop Sink Basin	WC-#	Water Closet
N/A	Not Applicable		

* Not All Abbreviations Used

FIXTURE SIZE SCHEDULE

MARK	WASTE	VENT	CW	HW
WC	3"	2"	1"	---
LAV	1-1/4"	1-1/4"	1/2"	1/2"
U	2"	1-1/2"	3/4"	---
SK	1-1/2"	1-1/4"	1/2"	1/2"
MSB	3"	1-1/2"	3/4"	3/4"
EWC	1-1/4"	1-1/4"	1/2"	---

NOTE:
CONNECTION SIZE IS FOR SINGLE POINT CONNECTION. REFER TO PLANS FOR MULTIPLE OR HEADER TYPE CONNECTIONS. PLUMBING CONTRACTOR TO VERIFY WITH MANUFACTURER'S INSTRUCTIONS BEFORE FINAL CONNECTION.

PIPE IDENTIFICATION SCHEDULE

SERVICE TYPE	DECAL IDENTIFICATION	TAPE COLOR
COLD WATER SERVICE	COLD WATER SUPPLY	GREEN
HOT WATER	DOMESTIC HOT WATER	YELLOW
HOT WATER RETURN	HOT WATER RETURN	YELLOW

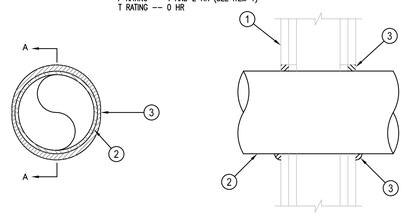
1. PIPE SIZES 1-1/4" TO 6", USE 2-1/4" LETTERING.
2. PIPE SIZES 1" OR LESS, USE 1-1/4" LETTERING.

WATER-HAMMER ARRESTER SCHEDULE

PDI UNITS	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

NOTES: FIXTURE UNITS BASED ON IPC, TABLE E103.3(2), LOAD VALUES ASSIGNED TO FIXTURES.

SYSTEM NO. W-L-1290
F RATING -- 1 AND 2 HR (SEE ITEM 1)
T RATING -- 0 HR

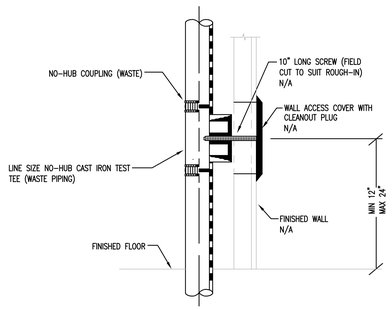


SECTION A-A

1. WALL ASSEMBLY -- THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES.
   A. STUDS -- REFER TO ARCH DETAILS FOR TYPE & CONSTRUCTION.
   B. GYPSUM BOARD*- -- REFER TO ARCH DETAILS FOR TYPE & CONSTRUCTION. MAX DIAM OF OPENING IS 5 IN. (THE HOURLY F & T RATINGS OF THE FIRESTOP SYSTEM ARE EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.)
2. THROUGH PENETRANT -- ONE METALLIC PIPE OR TUBING INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE, OR TUBING MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 DEGREES FROM PERPENDICULAR. PIPE OR TUBE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE ANNULAR SPACE BETWEEN THE PIPE OR TUBE & PERIPHERY OF THE OPENING SHALL BE MIN 0 IN (POINT CONTACT) TO MAX 1/2 IN. THE FOLLOWING TYPES & SIZES OF METALLIC PIPES MAY BE USED:
   A. IRON PIPE -- NOM 4 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   B. COPPER PIPE -- SHALL FOLLOW WL-1243 SYSTEM
3. FILL, VOID OR CAVITY MATERIAL*-SEALANT -- MIN 5/8 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE & WALL, A MIN ½ IN DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE/WALL INTERFACE.

*BEARING THE UL CLASSIFICATION MARK

1 FIRE STOPPING DETAIL – METALLIC PIPE
NTS



2 WALL CLEANOUT WITH ACCESS COVER DETAIL
NTS

PLUMBING GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL PLUMBING FIXTURES IN OR ATTACHED TO CASEWORK WITH THE ARCHITECT AND THE MILLWORK SHOP DRAWINGS. COORDINATE PRIOR TO INSTALLATION.
2. CONFIRM OR VERIFY EXACT LOCATION AND ACTUAL INVERT OF SANITARY LINES PRIOR TO INSTALLATION.
3. DUE TO THE LARGE QUANTITY OF PIPING, DUCTWORK, CONDUIT, ETC. OVERHEAD, COORDINATION WITH OTHER DISCIPLINES IS MANDATORY.
4. LOCATE SHUT-OFF VALVES ABOVE CEILINGS AND IN LOCATIONS ACCESSIBLE FOR SERVICE. LOCATION SHALL COMPLY WITH THE REQUIREMENTS OF ALL CODES REFERENCED HEREIN. PROVIDE CEILING MARKERS FOR LOCATION IDENTIFICATION.
5. ALL SANITARY DRAINAGE PIPING 3" AND LARGER SHALL SLOPE 1/8" PER FOOT UNLESS NOTED OTHERWISE. ALL SANITARY DRAINAGE PIPING 2-1/2" AND SMALLER SHALL SLOPE 1/4" PER FOOT UNLESS NOTED OTHERWISE.
6. REFERENCE PLUMBING FIXTURE CONNECTION SCHEDULE ON SHEET P7.1 FOR LINE SIZES NOT SHOWN TO FIXTURES/EQUIPMENT.
7. ALL CLEANOUTS AND FLOOR DRAINS SHALL BE INSTALLED PLUMB AND LEVEL WITH FINISHED FLOOR ELEVATION.
8. CONTRACTOR SHALL PROVIDE HANGERS AND SUPPORTS FOR SEISMIC RESTRAINT PER THE INTERNATIONAL BUILDING CODE. SEISMIC REPORT REQUIRED BY SEISMIC ENGINEER.
9. ALL DRAINAGE PIPING AND PRESSURE SYSTEM PIPING SHALL BE RUN AS HIGH AS POSSIBLE TO BOTTOM OF STRUCTURE, UNLESS NOTED OTHERWISE. COORDINATE PIPE ROUTING WITH ALL OTHER TRADES.
10. THE FOLLOWING PLUMBING SYSTEMS SHALL BE INSULATED: COLD WATER, HOT WATER, HOT WATER RECIRCULATION, P-TRAPS AND HORIZONTAL PIPING RECEIVING CONDENSATE ABOVE CEILINGS.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT ITEMS TO BE FURNISHED FIT THE SPACE AVAILABLE.
12. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT LOCATIONS OF FIXTURES AND EQUIPMENT. ALL OFFSETS AND FITTINGS FOR COMPLETE INSTALLATION MAY NOT BE DEFINED ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT DIMENSIONS AT THE BUILDING AND ANY NECESSARY CHANGES MADE IN ACCORDANCE WITH STRUCTURAL CONDITIONS, EQUIPMENT TO BE INSTALLED AND COORDINATION WITH OTHER SYSTEMS. IF CONFLICTS CANNOT BE RESOLVED THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER.
13. CONTRACTOR SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS INSOFAR AS THEY APPLY: NFPA 99, 2015 IBC, PLUMBING AND MECHANICAL CODES.
14. CONTRACTOR SHALL SECURE ALL PERMITS, INSPECTIONS, LICENSES AND TESTS REQUIRED FOR THIS WORK AND PAY ALL FEES IN CONNECTION THEREWITH.
15. ALL MATERIALS SHALL BEAR THE MANUFACTURER'S NAME, TRADE NAME AND BE U.L. LABELED IF REQUIRED BY CODE. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER. ALL EQUIPMENT OF A SIMILAR TYPE SHALL BE OF THE SAME MANUFACTURER.
16. CONTRACTOR SHALL LOCATE AND SIZE ALL OPENINGS REQUIRED FOR PLUMBING EQUIPMENT AND PIPING; AND PROVIDE THIS INFORMATION TO THE GENERAL CONTRACTOR IN TIME NOT TO DELAY BUILDING CONSTRUCTION.
17. CONTRACTOR SHALL PROVIDE AND LOCATE SLEEVES AND INSERTS REQUIRED BEFORE THE FLOOR AND WALLS ARE BUILT OR SHALL BE RESPONSIBLE FOR THE COST OF CUTTING AND PATCHING REQUIRED FOR PIPES WHERE SLEEVES AND INSERTS WERE NOT INSTALLED OR WHERE THEY WERE INCORRECTLY LOCATED.
18. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR OR OF THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL TO THE WORK OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR TO PERFORM THE CONSTRUCTION WORK IN ACCORDANCE WITH THE DRAWINGS.
19. ALL WALL HUNG FIXTURES AND FLOOR MOUNTED MOP SINKS SHALL BE SEALED BETWEEN WALL AND FIXTURES WITH WHITE SILICONE CAULKING.
20. ALL COUNTER MOUNTED FIXTURE RIMS SHALL BE SEALED WITH SILICONE CAULKING.
21. LOCATE FLOOR CLEANOUTS PAST LIMITS OF THE CASEWORK.
22. CONTRACTOR SHALL MAKE PROVISIONS FOR EXPANSION LOOPS WHERE NECESSARY WHETHER OR NOT SHOWN ON DRAWINGS.
23. OFFSET PLUMBING VENTS AND WATER PIPING AS NECESSARY TO AVOID CONFLICTS WITH DUCTWORK. SEE HVAC PLANS.
24. IT IS THE INTENT AND MEANING OF THE DRAWINGS TO PROVIDE COMPLETE AND OPERABLE PLUMBING AND DRAINAGE SYSTEMS.
25. ALL PLUMBING LINE SIZE REDUCTIONS SHALL BE MADE WITH REDUCERS AND/OR REDUCING FITTINGS.
26. NO DOUBLE WYE FITTINGS OR CONNECTIONS PERMITTED. MAKE ALL SANITARY CONNECTIONS WITH OFFSET FITTINGS.

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.
Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # FP00000285
GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA No. 21297 JEFFREY W. BERRY PROFESSIONAL ENGINEER
8/2/2019

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

number	item	date

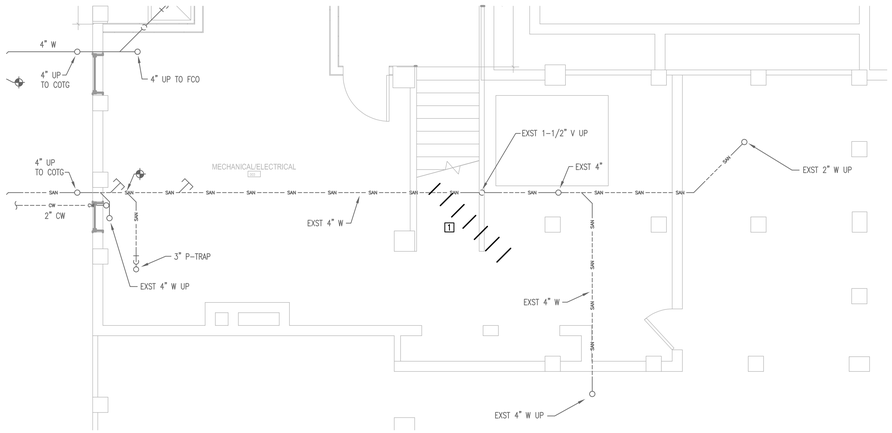
key plan

N

sheet title
PLUMBING DETAILS, NOTES, LEGEND, ABBREVIATIONS & SCHEDULES

sheet number
P0.0

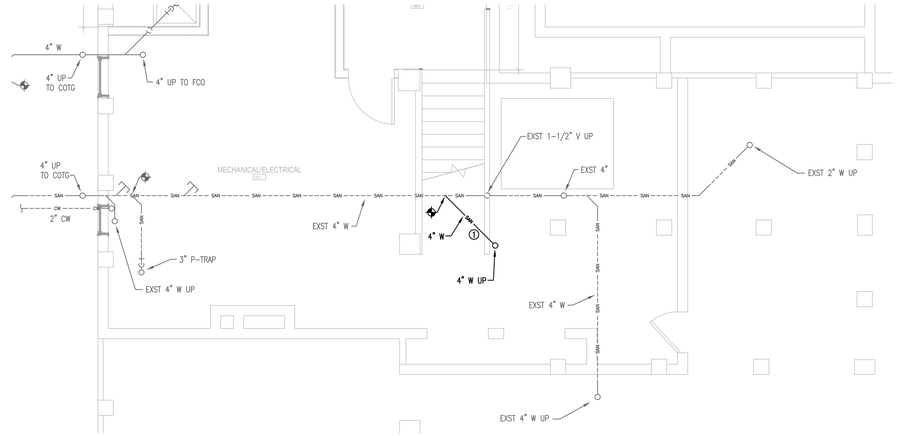
drawn by JJR
checked by JWB



1 PARTIAL BELOW SLAB PLAN – PLUMBING DEMOLITION
1/4"=1'-0"

DEMOLITION KEYNOTES:

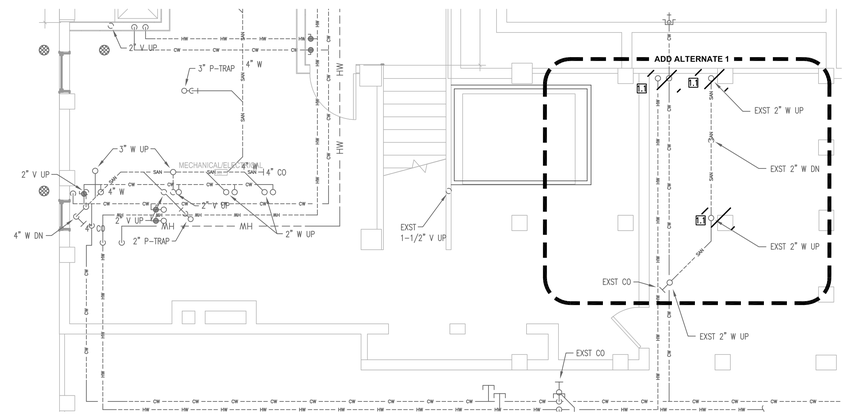
1 DEMOLISH EXISTING BASEMENT SLAB THIS AREA TO ACCESS EXISTING 4" WASTE PIPING BELOW SLAB.



2 PARTIAL BELOW SLAB PLAN – PLUMBING RENOVATION
1/4"=1'-0"

WASTE PIPING KEYNOTES:

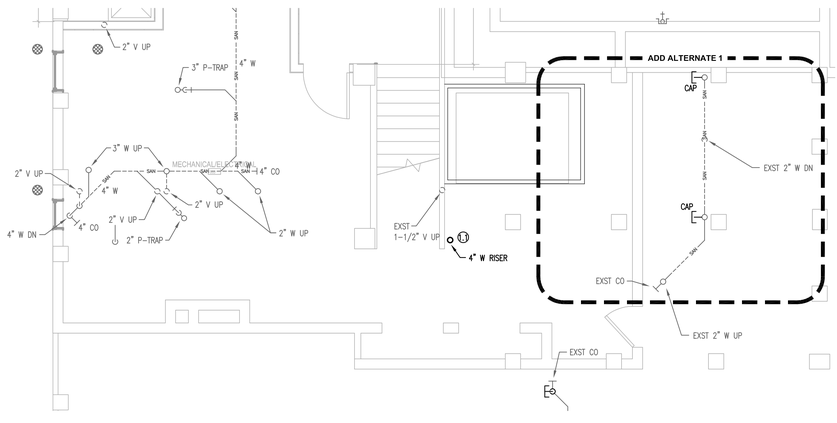
1 CONFIRM INVERT OF EXISTING WASTE PIPING PRIOR TO INSTALLATION OF NEW WASTE PIPING TO VERIFY MINIMUM DEPTH OF COVERAGE WILL BE MAINTAINED FOR ALL NEW BELOW SLAB AND UNDERGROUND WASTE PIPING.



3 PARTIAL BASEMENT PLAN – PLUMBING DEMOLITION
1/4"=1'-0"

ALTERNATE #1 – DEMOLITION KEYNOTES:

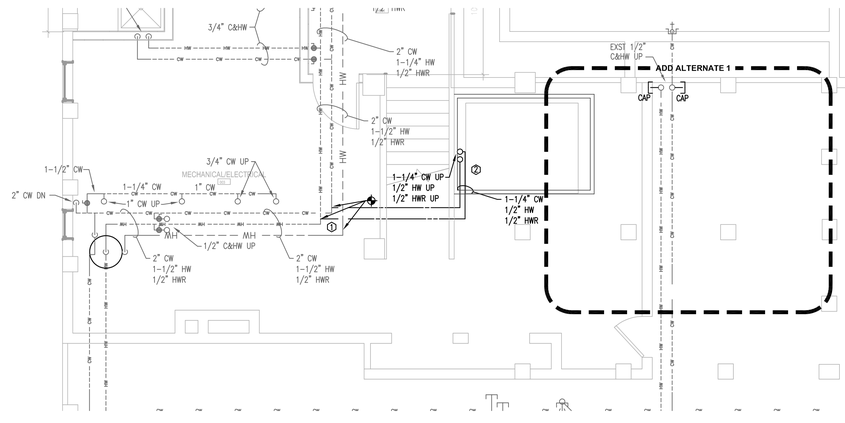
5.1 DEMOLISH EXISTING WASTE AND SUPPLY PIPING RISER TO DEMOLISHED KITCHEN FIXTURES. CAP EXISTING PIPING.



4 PARTIAL BASEMENT PLAN – WASTE & VENT PIPING
1/4"=1'-0"

WASTE PIPING KEYNOTES:

1.1 PROVIDE AND INSTALL 4" CLEANOUT IN VERTICAL 4" WASTE RISER.



5 PARTIAL BASEMENT PLAN – SUPPLY PIPING
1/4"=1'-0"

SUPPLY PIPING KEYNOTES:

1 CONNECT NEW COLD, HOT AND HOT WATER SUPPLY PIPING TO EXISTING PIPING IN THIS LOCATION. FIELD VERIFY SIZE AND LOCATION.

2 COORDINATE ROUTING OF SUPPLY PIPING IN THIS LOCATION WITH HVAC EQUIPMENT.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 JEFFREY W. BERNICKY

8/2/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

PARTIAL BASEMENT & BELOW SLAB PLUMBING PLANS

sheet number

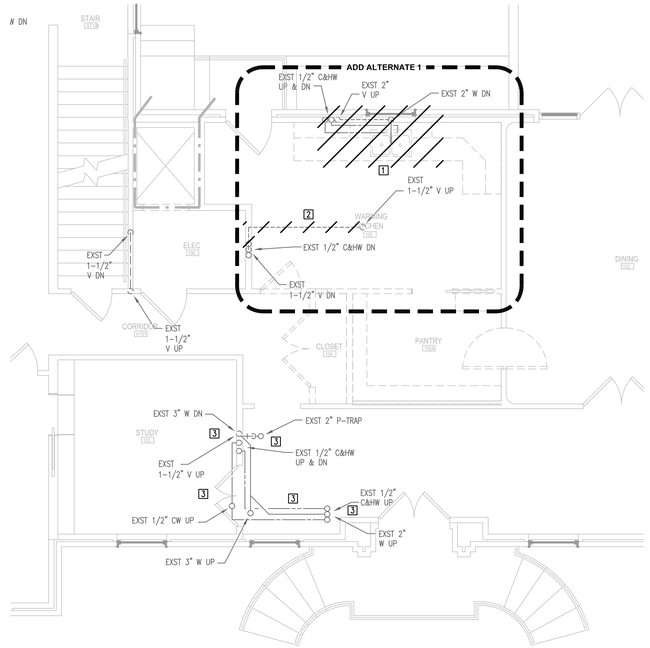
P1.0

drawn by JJR

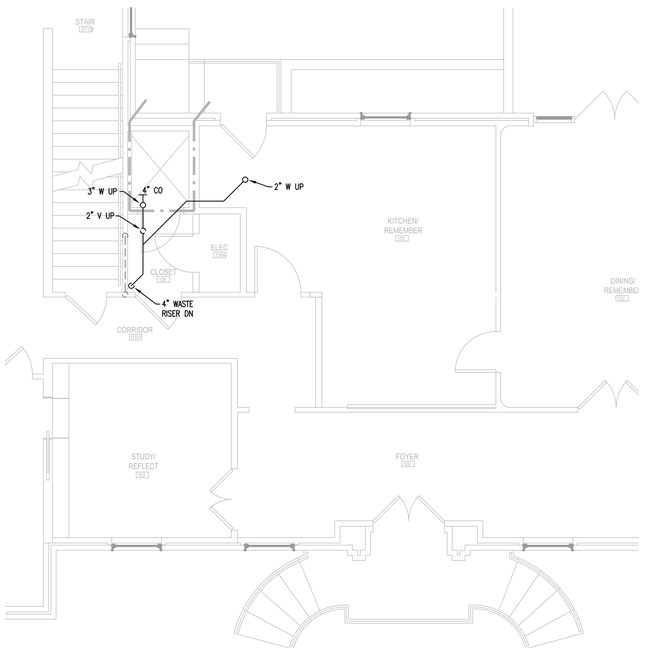
checked by JWB

ALTERNATE #1 – PLUMBING DEMOLITION KEYNOTES:

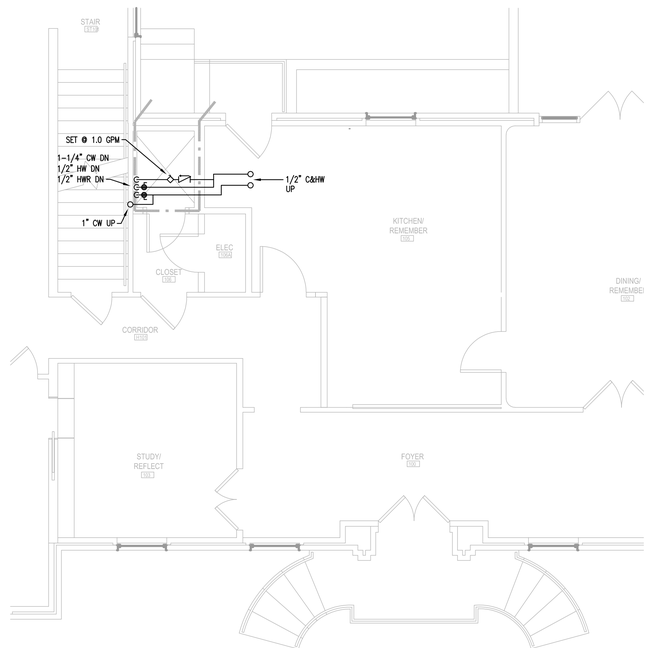
1. DEMOLISH AND REMOVE EXISTING FIXTURE DEMOLISH EXISTING WASTE AND SUPPLY PIPING BELOW FLOOR AND CAP IN BASEMENT. FIELD VERIFY SIZE AND LOCATION OF EXISTING.
2. DEMOLISH EXISTING VENT PIPING TO MAIN VENT PIPING AS SHOWN ON SHEET P1.2 AND CAP. FIELD VERIFY SIZE AND LOCATION OF EXISTING.
3. EXISTING PLUMBING SHALL REMAIN CAPPED BELOW FLOOR ON SECOND FLOOR. ACCESS TO PIPING SHALL BE FROM SECOND FLOOR ABOVE.



1 PARTIAL FIRST FLOOR PLAN – PLUMBING DEMOLITION
1/4"=1'-0"



2 PARTIAL FIRST FLOOR PLAN – WASTE & VENT PIPING
1/4"=1'-0"



3 PARTIAL FIRST FLOOR PLAN – SUPPLY PIPING
1/4"=1'-0"

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21297 JEFFREY W. BERNHARDT

8/2/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

PARTIAL FIRST FLOOR PLUMBING PLANS

sheet number

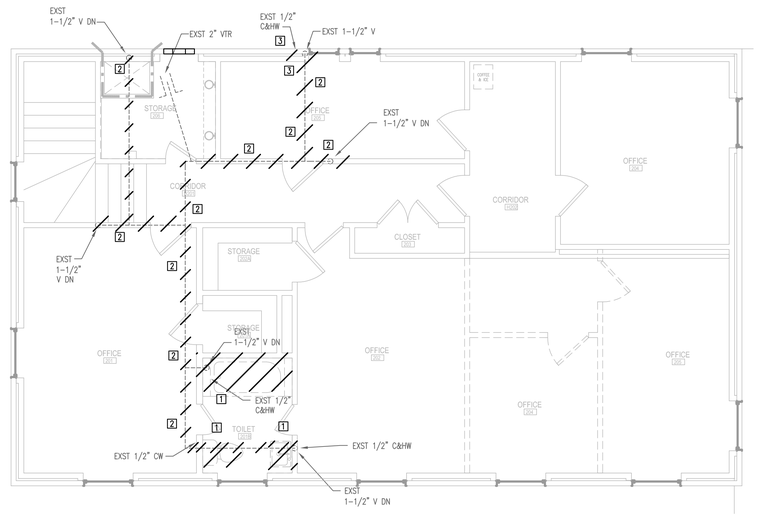
P1.1

drawn by JJR

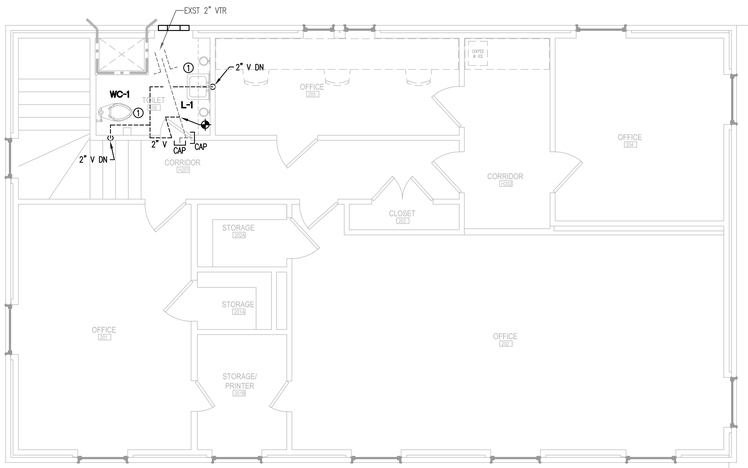
checked by JWB

PLUMBING DEMOLITION KEYNOTES:

1. DEMOLISH AND REMOVE EXISTING PLUMBING FIXTURE, TRIM AND ACCESSORIES. DEMOLISH EXISTING WASTE PIPING BELOW EXISTING FINISHED FLOOR LEVEL AND CAP. DEMOLISH EXISTING VENT PIPING TO MAIN VENT PIPING IN ATTIC AND CAP AS SHOWN. DEMOLISH EXISTING COLD & HOT WATER SUPPLY PIPING BELOW EXISTING FINISHED FLOOR LEVEL AND CAP. FIELD VERIFY SIZE AND LOCATION OF EXISTING.
2. DEMOLISH EXISTING VENT PIPING TO MAIN VENT PIPING AND CAP. FIELD VERIFY SIZE AND LOCATION OF EXISTING. DEMOLISH ONLY HORIZONTAL PIPING LOCATED IN ATTIC SPACE. WHERE HORIZONTAL VENT PIPING IS LOCATED IN CEILING SPACE PIPING SHALL BE CAPPED AT VERTICAL RISERS.
3. DEMOLISH EXISTING WASTE PIPING AND SUPPLY PIPING BELOW FLOOR. ALTERNATE #1 INCLUDES DEMOLITION OF PLUMBING PIPING THROUGH FIRST FLOOR AND CAPPED BASEMENT.



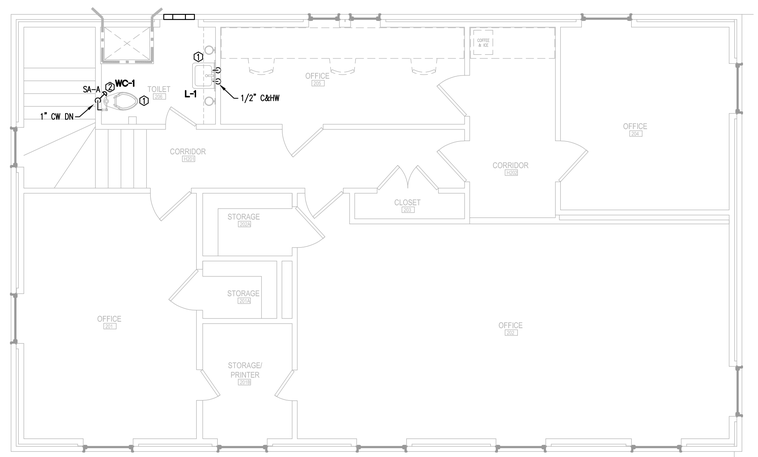
1 PARTIAL SECOND FLOOR PLAN – PLUMBING DEMOLITION
1/4"=1'-0"



2 PARTIAL SECOND FLOOR PLAN – WASTE & VENT PIPING
1/4"=1'-0"

WASTE PIPING KEYNOTES:

1. PROVIDE AND INSTALL NEW FIXTURE. CONNECT WASTE PIPING TO EXISTING WASTE RISER IN BASEMENT. CONNECT VENT PIPING TO EXISTING VTR IN ATTIC SPACE.



3 PARTIAL SECOND FLOOR PLAN – SUPPLY PIPING
1/4"=1'-0"

SUPPLY PIPING KEYNOTES:

1. PROVIDE AND INSTALL NEW PLUMBING FIXTURE. CONNECT TO NEW WATER PIPING AS SHOWN.
2. PROVIDE AND INSTALL NEW ACCESS PANEL FOR FIXTURE MAINTENANCE. COORDINATE LOCATION OF COLD WATER SUPPLY SHOCK ABSORBER WITH ACCESS PANEL.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. CO0287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 JEFFREY W. BERNACKI VIRGINIA

8/2/2019

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

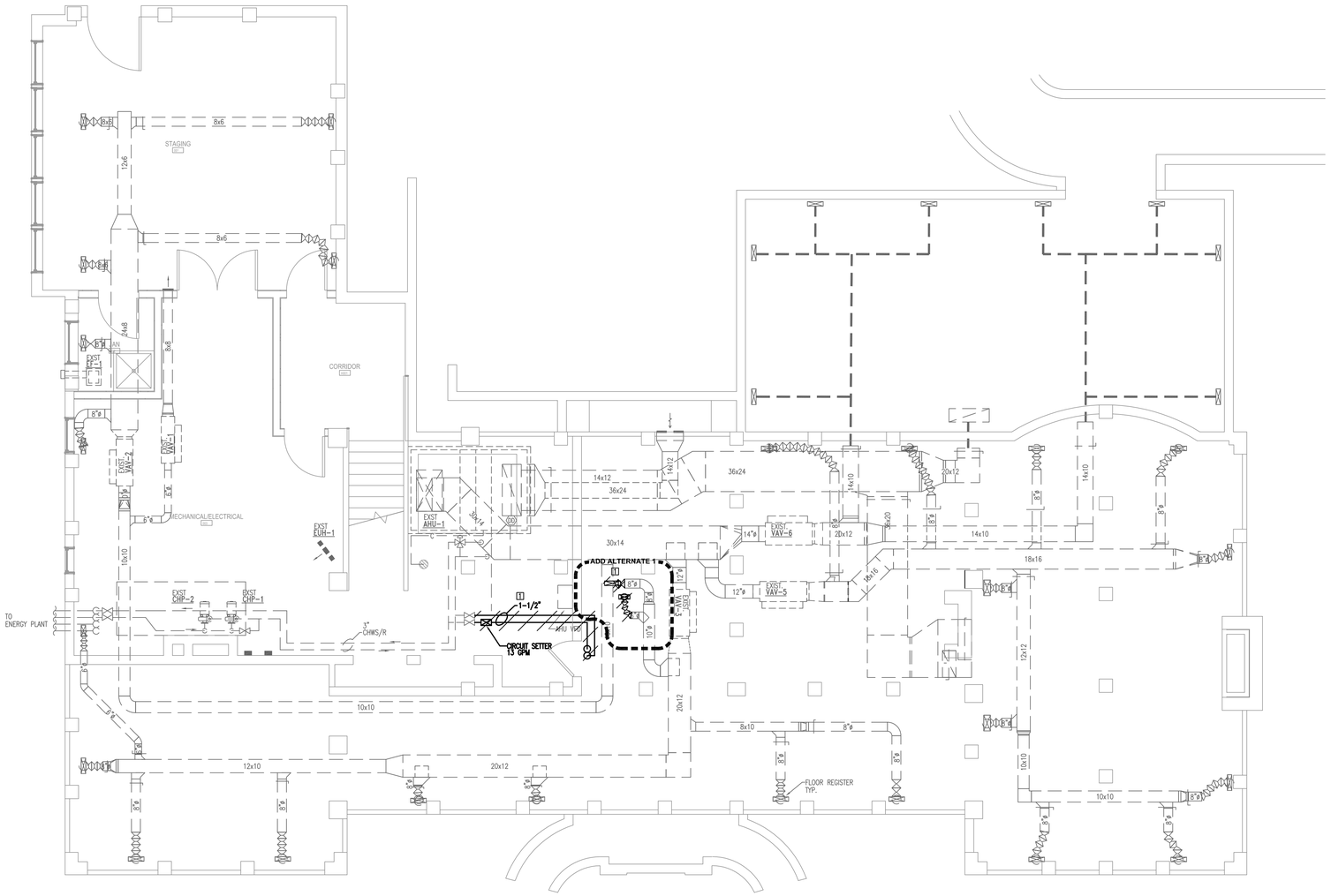
PARTIAL SECOND FLOOR PLUMBING PLANS

sheet number

P1.2

drawn by JJR

checked by JWB



1 BASEMENT FLOOR LEVEL – HVAC DEMOLITION

1/4"=1'-0"

DEMOLITION KEYNOTES:

1 REMOVE ALL EXISTING EQUIP, DUCTWORK AND PIPING. CONTRACTOR SHALL FIELD VERIFY EXTENT OF DEMOLITION PRIOR TO BIDDING.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21297 8/2/19 JEFFREY W. BERNACKI

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

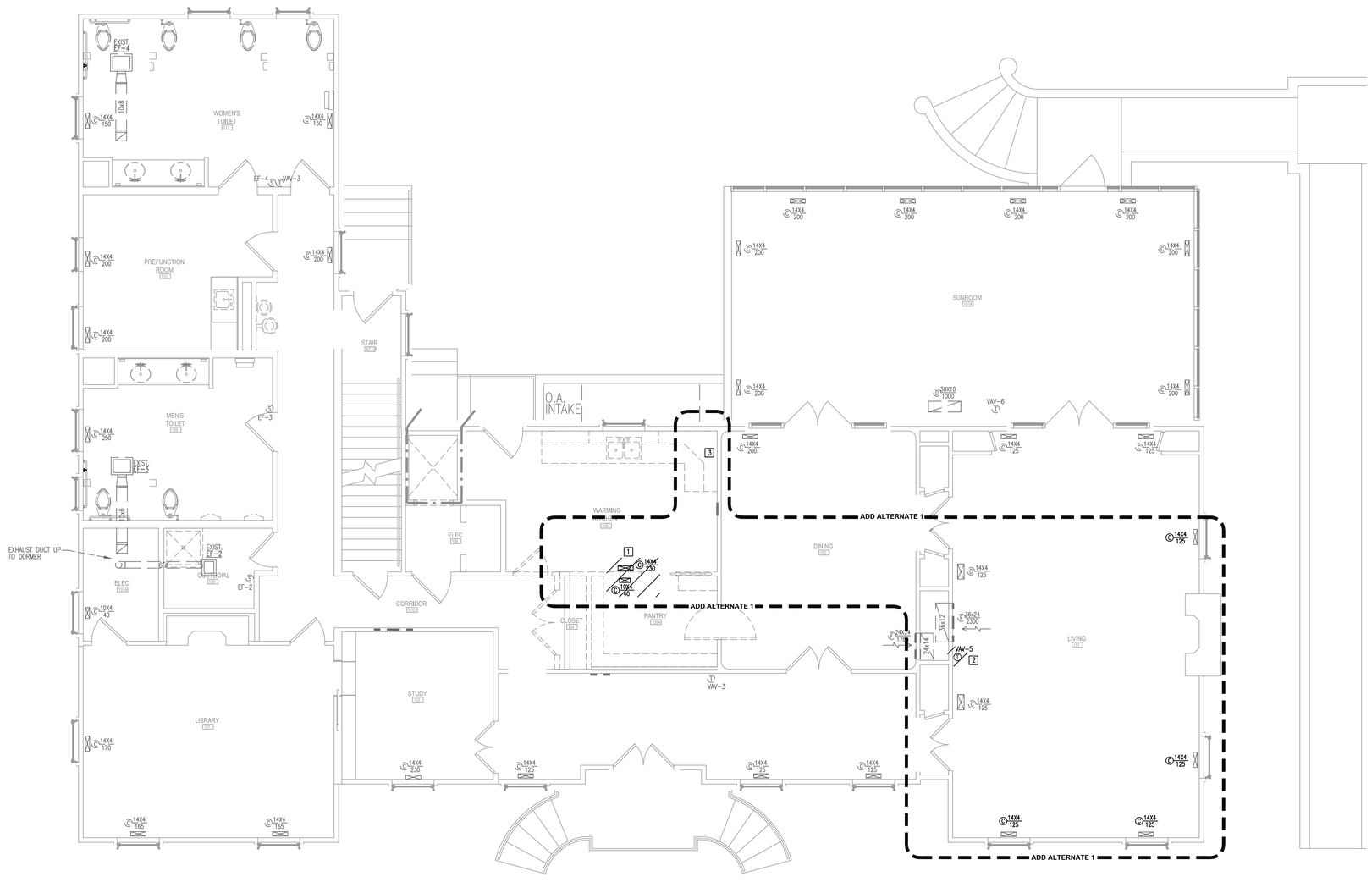
HVAC DEMOLITION BASEMENT PLAN

sheet number

M1.0

drawn by JWB

checked by JDR



1 FIRST FLOOR LEVEL – HVAC DEMOLITION

1/4"=1'-0"

DEMOLITION KEYNOTES:

1. RELOCATE EXISTING FLOOR GRILLE
2. RELOCATE AND RE-WIRE EXISTING TEMPERATURE SENSOR
3. RE-LOCATE AND RE-BALANCE EXISTING SUPPLY GRILLE
   REMOVE EXISTING ABANDONED DUCTWORK IN SOFFIT BEING DEMOLISHED.
   REMOVE ASSOCIATED WALL LOUVER. PATCH AND REPAIR EXTERIOR WALL MATCH

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION GMK, INC. No. C00287

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 8/2/19 JEFFREY W. BERNOTZ

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

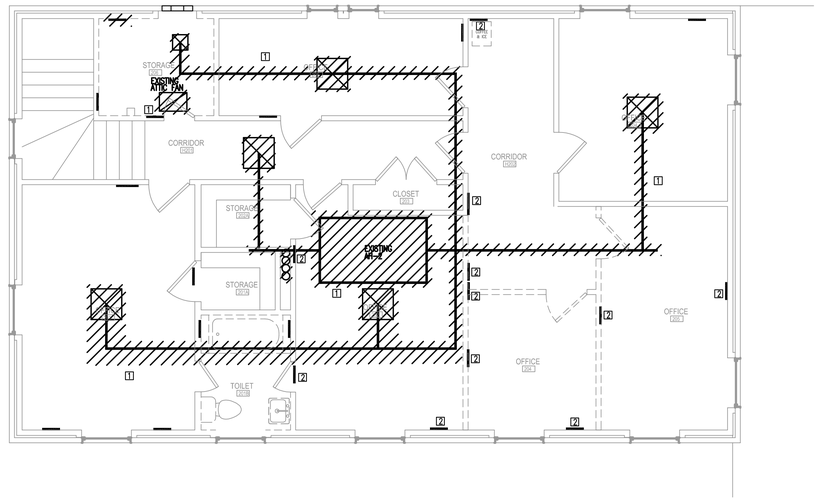
HVAC DEMOLITION FIRST FLOOR PLAN

sheet number

M1.1

drawn by JWB

checked by JDR



1 SECOND FLOOR PLAN – HVAC DEMOLITION
1/4"=1'-0"

DEMOLITION KEYNOTES:
1 REMOVE ALL EXISTING EQUIP, DUCTWORK AND PIPING. CONTRACTOR SHALL FIELD VERIFY EXTENT OF DEMOLITION PRIOR TO BIDDING.
2 REMOVE EXISTING GRILLE CONTRACTOR SHALL CAP DUCT AND REPAIR WALL.

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # FP00000285
GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 8/2/19 JEFFREY W. BERNATITZ

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

number	item	date

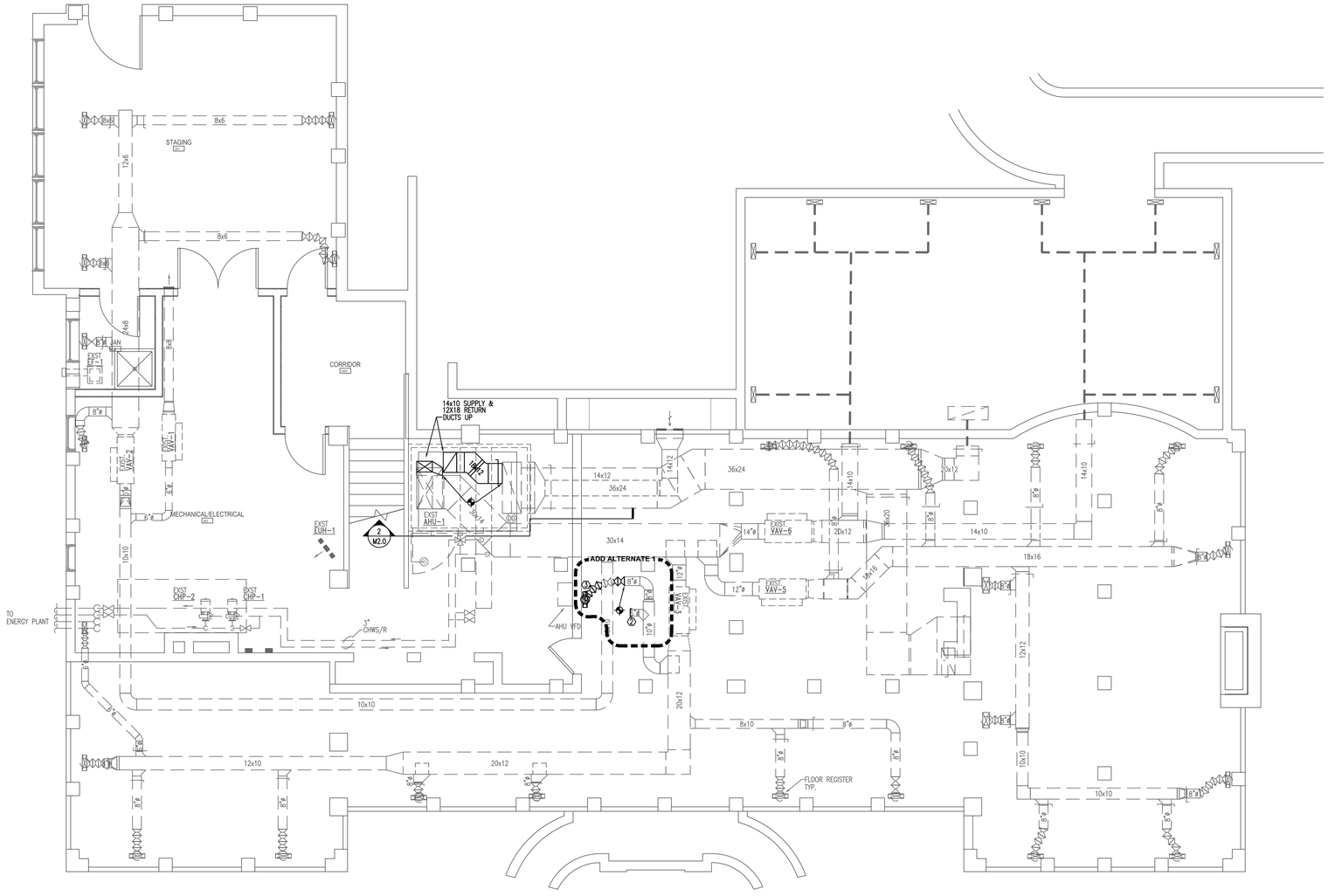
key plan

N

sheet title
HVAC DEMOLITION SECOND FLOOR PLAN

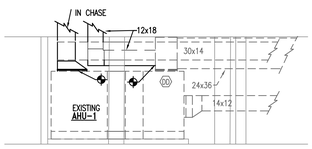
sheet number
M1.2

drawn by XXX
checked by XXX



1 BASEMENT FLOOR LEVEL – HVAC RENOVATION
1/4"=1'-0"

RENOVATION KEYNOTES:
1. RE-SET VAV BOX TO 1700 CFM MAX AND 700 CFM MIN.
2. CAP DUCT
3. RE-LOCATE FLOOR GRILLE TO THIS APPROX. LOCATION. SEE M2.1



2 AHU-1 SECTION VIEW
1/4"=1'-0"

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # FP00000285
GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 8/2/19 JEFFREY W. BERNACKI

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

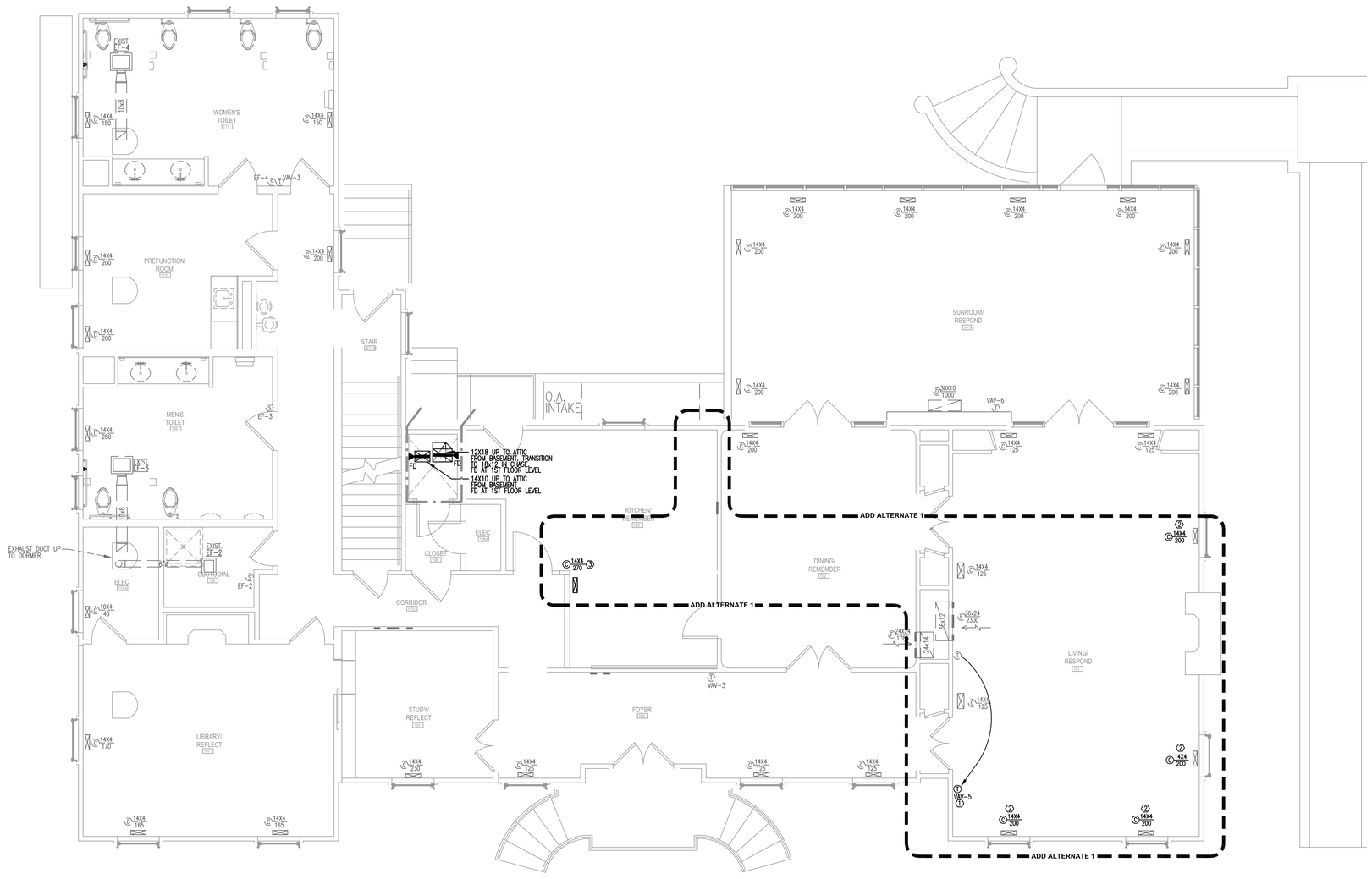
number	item	date

key plan

sheet title
HVAC RENOVATION BASEMENT PLAN

sheet number
M2.0

drawn by JWB
checked by JDR



1 FIRST FLOOR LEVEL – HVAC RENOVATION
1/4"=1'-0"

RENOVATION KEYNOTES:
1. RELOCATE EXISTING TEMPERATURE SENSOR TO THIS LOCATION
2. RE-BALANCE EXISTING SUPPLY GRILLE TO 200 CFM

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.
Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner
UNIVERSITY OF SOUTH CAROLINA
USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # FP00000285
GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature
SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 8/2/19 JEFFREY W. DERRICK

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

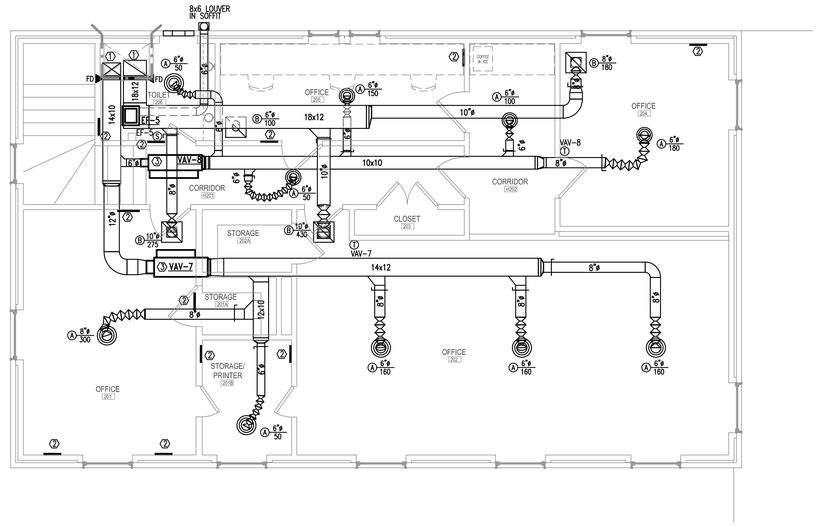
number	item	date

key plan

sheet title
HVAC RENOVATION FIRST FLOOR PLAN

sheet number
M2.1

drawn by JWB
checked by JDR



1 SECOND FLOOR LEVEL – HVAC RENOVATION
1/4"=1'-0"

RENOVATION KEYNOTES:

1. NEW DUCT UP FROM BELOW. INSTALL FIRE DAMPER WHERE DUCTS LEAVE CHASE IN ATTIC.
2. EXISTING GRILLE TO BE ABANDONED IN PLACE. CONTRACTOR SHALL CAP DUCT AS NEAR AS POSSIBLE TO GRILLE. IF DUCT IS CAPPED DIRECTLY BEHIND GRILLE FACE. SHEET METAL CAP MUST BE PAINTED BLACK SO AS NOT TO BE VISIBLE.
3. VAV BOXES SHALL BE OWNER FURNISHED AND CONTRACTOR INSTALLED

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK
ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA
GMK, INC.
No. C00287
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 21297
8/2/19
JEFFREY W. BERNHARDT

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

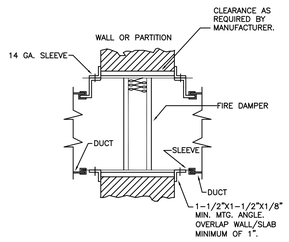
HVAC RENOVATION SECOND FLOOR PLAN

sheet number

M2.2

drawn by JWB

checked by JDR



NOTES:

1. PROVIDE TYPE "C" DYNAMIC FIRE DAMPERS IN ALL 1 HR. THRU 4 HR. WALLS, SLABS, AND PARTITIONS SHOWN ON ARCH. AND MECH. DRAWINGS.

2. PROVIDE DUCT ACCESS DOOR. ACCESS DOOR SHALL BE LARGE ENOUGH TO PERMIT INSPECTION AND MAINTENANCE OF THE DAMPER AND ITS OPERATING PARTS. ACCESS DOOR SHALL BE LABELED "FIRE DAMPER". THE LETTERS SHALL NOT BE LESS THAN 0.5 INCHES IN HEIGHT.

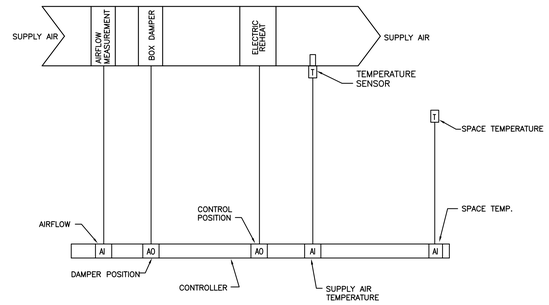
3. PROVIDE ALL CEILING, FLOOR, AND WALL ACCESS DOORS NECESSARY FOR ACCESS TO FIRE DAMPER.

4. FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ONLY FIRE DAMPERS LABELED FOR USE IN DYNAMIC SYSTEMS SHALL BE INSTALLED IN HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS DESIGNED TO OPERATE WITH FANS ON DURING A FIRE.

5. BLANKET INSULATION SHALL BE INSTALLED OVER ANGELS AND SEALED TO WALL.

6. DAMPER BLADES SHALL BE LOCATED OUT OF THE AIR STREAM.

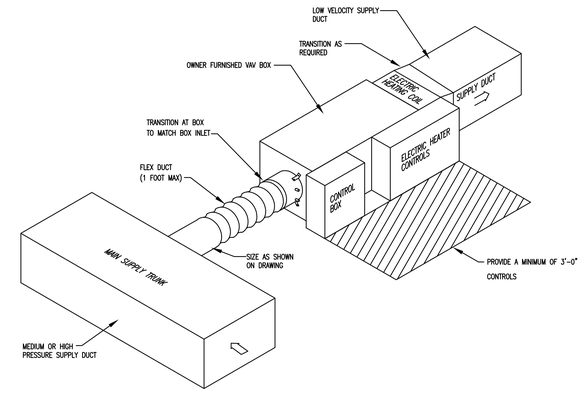
7 VERTICAL FIRE DAMPER DETAIL
NTS



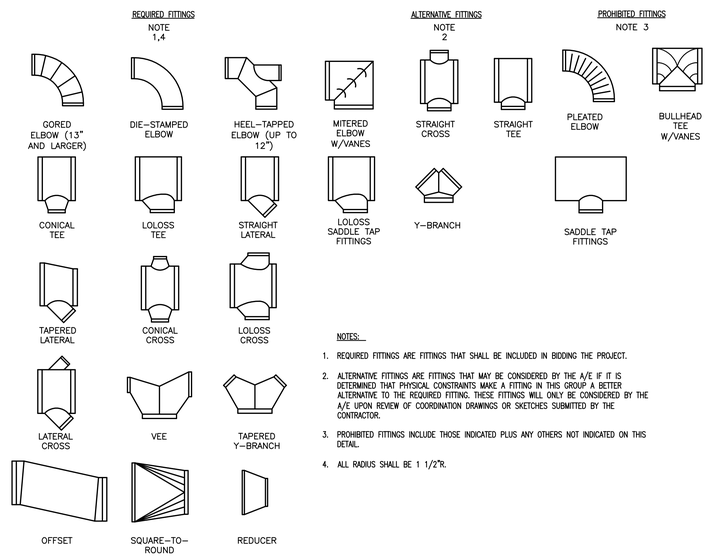
NOTES:

1. TYPICAL FOR ALL VAV AND CAV BOXES

4 TERMINAL BOX CONTROL DIAGRAM
NTS



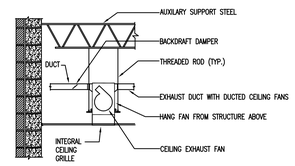
1 SHUT OFF TYPE VAV OR CAV DETAIL
NTS



NOTES:

1. REQUIRED FITTINGS ARE FITTINGS THAT SHALL BE INCLUDED IN BIDDING THE PROJECT.
2. ALTERNATIVE FITTINGS ARE FITTINGS THAT MAY BE CONSIDERED BY THE A/E IF IT IS DETERMINED THAT PHYSICAL CONSTRAINTS MAKE A FITTING IN THIS GROUP A BETTER ALTERNATIVE TO THE REQUIRED FITTING. THESE FITTINGS WILL ONLY BE CONSIDERED BY THE A/E UPON REVIEW OF COORDINATION DRAWINGS OR SKETCHES SUBMITTED BY THE CONTRACTOR.
3. PROHIBITED FITTINGS INCLUDE THOSE INDICATED PLUS ANY OTHERS NOT INDICATED ON THIS DETAIL.
4. ALL RADIUS SHALL BE 1 1/2"R.

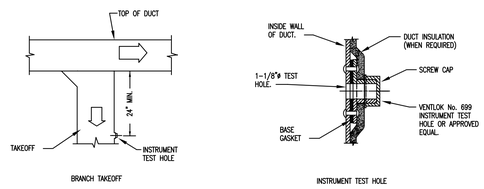
5 ROUND DUCT FITTINGS
NTS



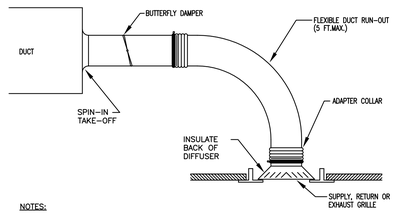
NOTES:

1. FAN AND PARTS REQUIRING MAINTENANCE. SHALL SWING DOWN AND BE FULLY SERVICABLE.
2. DUCT CEILING EXHAUST FAN SIMILAR.

2 CEILING/CABINET EXHAUST FAN DETAIL
NTS



6 TYPICAL LOW PRESSURE DUCT DETAILS
NTS



NOTES:

1. PROVIDE MIN OF 3 DUCT DIAMETERS BETWEEN TAPS OR AFTER ELBOWS.

3 FLEXIBLE DUCT CONNECTION TO GRILLE
NTS

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21297 8/2/19 JOHN W. BERNHARDT

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

HVAC DETAILS

sheet number

M6.1

drawn by JWB

checked by JDR

HVAC LEGEND

- SUPPLY DIFFUSER
- RETURN / EXHAUST
- FIRE DAMPER IN FIRE-RATED WALL (FD)
- THERMOSTAT (T)
- CONNECT TO EXISTING
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- FLEXIBLE DUCT
- CHANGE IN DUCT ELEVATION
- DUCT TURNING DOWN
- DUCT TURNING UP
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- DIFFUSER, GRILLE, LOUVER OR REGISTER TYPE — (A) 6"x6" / 100 — NECK SIZE / PEAK LOAD CFM

MECHANICAL DEMOLITION NOTES

1. DRAWINGS SHOW GENERAL INTENT OF DEMOLITION. QUANTITIES, LOCATIONS, SIZES AND EQUIPMENT ARE SHOWN TO INDICATE TYPE OF SYSTEM INSTALLED AND DOES NOT NECESSARILY REPRESENT EXACT CONDITIONS. CONTRACTOR SHALL FIELD VERIFY BEFORE BIDDING.
2. DEMOLITION OF EQUIPMENT, SYSTEMS, AND COMPONENTS SHALL INCLUDE ALL SUPPORTS, PADS, HANGERS, INSULATION, CONTROLS, STARTERS, ACCESSORIES, AND APPURTENANCES NOT REQUIRED FOR THE INSTALLATION OF THE NEW SYSTEM.
3. WHEN PARTIAL DEMOLITION OF A SYSTEM IS INDICATED, THE PART OF THE SYSTEM SHOWN TO REMOVED SHALL BE REMOVED TO THE ACTIVE MAIN OR BRANCH IF NOT REQUIRED FOR THE INSTALLATION OF THE NEW SYSTEM. THE ACTIVE MAIN OR BRANCH SHALL BE REPAIRED TO MATCH NEW INSTALLATION AS MUCH AS PRACTICAL. IF SYSTEM IS INSULATED, INSULATION SHALL BE PATCHED AND FINISHED REPAIR (IE: VAPOR BARRIER, COATING, ETC.)
4. PATCHING OF BUILDING STRUCTURES AND FINISHES SHALL PERTAIN TO ALL WALLS, FLOORS, SLABS, ROOFS, STRUCTURES, AND FINISHES. PATCHES SHALL MATCH EXISTING STRUCTURE, FIRE RATING AND FINISH.
5. ALL OPENINGS CREATED BY THE ABANDONMENT OR REMOVAL OF EXISTING SYSTEMS SHALL BE PATCHED.
6. ALL WALLS, ROOFS, SLABS, STRUCTURES, AND FINISHES WHOSE FINISH IS IRREGULAR DUE TO THE REMOVAL OF SYSTEMS, SUPPORTS, PADS, ACCESSORIES, AND APPURTENANCES SHALL BE PATCHED.
7. ALL FINISHES SHALL MATCH EXISTING FINISH. WHEN FINISH OBVIOUSLY DOES NOT MATCH EXISTING FINISH SUCH AS SHADE OF PAINT, AGE OF FINISH, ETC. THE FINISH SHALL BE APPLIED TO THE PATCH AND THE SURFACE IN ALL DIRECTIONS UNTIL A SURFACE CHANGE OF A MINIMUM OF 45 DEGREES.
8. REMOVAL OF SYSTEMS SHALL INCLUDE COMPLETE SYSTEM WHENEVER PRACTICAL. IF NOT, SYSTEM (IE: PIPE, CONDUIT, ETC.) SHALL BE REMOVED TO 1 INCH BELOW SURFACE.

MECHANICAL GENERAL NOTES

1. DO NOT SCALE DRAWINGS; SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
2. LOCATE ALL THERMOSTATS, HUMIDISTATS AND SWITCHES 4'-0" ABOVE FINISH FLOOR; ALIGN WITH LIGHT SWITCHES.
3. DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
4. CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED.
5. RUNOUTS SHALL PITCH DOWN IN DIRECTION OF FLOW A MINIMUM OF 1" IN 30 FEET.
6. AIR DISTRIBUTION SYSTEMS WITH MORE THAN ONE BRANCH, OR MULTIPLE OUTLETS ON A BRANCH, SHALL HAVE VOLUME DAMPERS TO BALANCE AIR FLOWS. SPIN-IN FITTINGS ARE PERMITTED FOR CONNECTING FLEX DUCT TO BRANCH OR TRUNK DUCTS WHERE FLEX DUCTS ARE INDICATED. IF FLEX DUCT CANNOT BE CONNECTED WITH A SPIN-IN, A HARD DUCTED TAKEOFF MUST BE PROVIDED.
7. 45 DEGREE TAKEOFFS SHALL BE USED ON ALL HARD DUCTED SUPPLY BRANCHES.
8. PROVIDE ALL TRANSITIONS REQUIRED FOR INSTALLATION OF DUCT, DUCT HEATERS, AIR VOLUME CONTROLLERS, FAN COIL UNITS, EXHAUST FANS, SUPPLY FANS, AND ALL OTHER EQUIPMENT AND APPURTENANCES.
9. BLANK-OFF ALL UNUSED PORTIONS OF LOUVERS (WHICH HAVE MECHANICAL DUCT CONNECTIONS) WITH 20 GAGE GALVANIZED SHEET METAL.
10. ALL DUCT IS GALVANIZED SHEET METAL EXCEPT AS NOTED.
11. DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
12. INTAKES FOR AIR HANDLING EQUIPMENT SHALL BE A MINIMUM OF TEN FEET AWAY FROM ANY EXHAUST OR VENT.
13. AIR DISTRIBUTION UNITS SHALL HAVE TRIM REQUIRED FOR FINISHED SERVICE.
14. COORDINATE ORIENTATION OF SUPPLY AND RETURN PIPING BEFORE FABRICATION.
15. PROVIDE DIELECTRIC FITTINGS AT ALL LOCATIONS WHERE DISSIMILAR METALS ARE JOINED IN PIPING AND DUCT SYSTEMS.
16. ALL SUPPLY AND RETURN DUCTS SHALL HAVE TURNING VANES.

VARIABLE AIR VOLUME TERMINAL SCHEDULE (OWNER FURNISHED)

TAG NO.	MAXIMUM BOX CFM	MINIMUM BOX CFM	MIN. INLET S.P. (W.C.)	REHEAT COIL			INLET SIZE (INCHES)	ELECTRICAL (VOLTS/PHASE)	MANUFACTURER	MODEL NO.	NOTE
				LAT	KW	STAGES					
EXIST. VAV-5	1700	550	---	---	---	---	---	---	TRANE	VCEF12	2
VAV-7	830	400	1"	90°	5	2	10"	208/3	TRANE	VCEF10	1,4,5
VAV-8	530	300	1"	86°	3	1	6"	208/3	TRANE	VCEF06	1,4,5

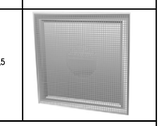
1. ELECTRIC ACTUATOR
2. RE-BALANCE EXIST. BOX CFM'S
3. SOUND ATTENUATOR
4. SINGLE POINT POWER CONNECTION WITH DISCONNECT
5. ACCESS PANEL

EXHAUST FAN SCHEDULE

TAG	TYPE	CAPACITY CFM	E.S.P. (IN. WG.)	MOTOR		ELECTRICAL (VOLTS/PHASE)	MANUFACTURER	MODEL NO.	NOTES
				WATTS	RPM				
EF-5	CEILING	50	.375	128	636	115/1	GREENHECK	SP-150	2,3,8,9,10

1. MOTORIZED BACKDRAFT DAMPER
2. GRAVITY BACKDRAFT DAMPER
3. DISCONNECT SWITCH
4. BIRDSCREEN
5. ALUMINUM ROOF CURB
6. MOTORSIDE FAN GUARD
7. FILTER
8. RHEOSTAT
9. WALL SWITCH
10. ALTERNATE 3

AIR DISTRIBUTION SCHEDULE

TAG	DESCRIPTION	NECK	MODULE SIZE	MOUNT	CONSTR.	MFGR	MODEL	NOTES	
A	ROUND ADJUSTABLE	AS SHOWN	---	SURFACE	ALUMINUM	HART AND COOLEY	SERIES 20	2,3,4	
B	PERFORATED CEILING RETURN/EXHAUST	AS SHOWN	12x12	SURFACE	ALUMINUM	PRICE	SERIES APDDR	3,5	

1. FURNISH WITH OPPOSED BLADE DAMPER
2. 4-WAY DEFLECTION UNLESS NOTED OTHERWISE
3. BAKED ENAMEL OFF-WHITE FINISH
4. FINISH SELECTED BY ARCHITECT

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA — GMK, INC. No. C00287 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 21297 — 8/2/19 — JEFFREY W. BERNARD

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

HVAC NOTES & SCHEDULES

sheet number

M7.1

drawn by JWB
checked by JDR

GENERAL NOTES ALL DRAWINGS:

1. DO NOT SCALE DRAWINGS. LOCATE OUTLETS, EQUIPMENT AND OTHER ELECTRICAL DEVICES AS INDICATED AND COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
2. MINIMUM SIZE CONDUCTOR FOR POWER SHALL BE #12 AWG. PROVIDE DEDICATED NEUTRAL FOR EACH MULTI-WIRE BRANCH CIRCUIT IN COMPLIANCE WITH NEC.
3. ALL FUSES SHALL BE DUAL-ELEMENT TYPE, "FUSETRON" BY BUSSMAN, "ECON" BY ECONOMY, OR FERRAZ SHAWMUT.
4. BRANCH CIRCUIT SIZES ARE #12 AWG, 1/2"C. UNLESS OTHERWISE NOTED IN PANELBOARD SCHEDULES OR ON DRAWINGS.
5. ALL BRANCH CIRCUIT LOADS SHALL BE BALANCED ACROSS PANELBOARD BUSSES TO OBTAIN MINIMUM NEUTRAL CURRENT.
6. ALL FLEXIBLE CONDUIT SHALL CONTAIN A GREEN WIRE BONDED TO RIGID RACEWAY, BOX OR FIXTURE AT EACH END OF FLEX. SIZE GROUND PER NEC TABLE 250-122.
7. PROVIDE PULL STRING IN ALL EMPTY RACEWAYS.
8. COORDINATE WITH OTHER TRADES TO CONCEAL ELECTRICAL WORK AND PROVIDE OUTLETS IN CORRECT LOCATIONS.
9. DO NOT FLUSH MOUNT JUNCTION BOXES BACK TO BACK, STAGGER TO REDUCE SOUND TRANSMISSION BETWEEN ROOMS.
10. CONCEAL OUTLETS FOR ALL EQUIPMENT IN FINISHED AREAS. OBTAIN ROUGHING DIAGRAMS FOR ALL EQUIPMENT AND INSTALL ELECTRICAL WORK ACCORDING TO DIAGRAMS.
11. MOUNT BRACKET TYPE LIGHTING FIXTURES AT HEIGHTS SHOWN OR SCHEDULED ON DRAWINGS OR AS DIRECTED ON JOB BY ARCHITECT UNLESS NOTED OTHERWISE.
12. SEAL ALL PENETRATIONS TO RATED WALLS AND CEILINGS WITH UL LISTED FIREPROOFING SYSTEM. THIS IS TO INCLUDE BUT IS IN NO WAY LIMITED TO CONDUCTOR, RACEWAY AND DEVICE PENETRATIONS. SUBMIT SYSTEM AND INSTALLATION DETAILS AS PART OF SHOP DRAWING SUBMITTAL.
13. WHERE NOT INDICATED OTHERWISE, EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED PER NEC TABLE 250-122.
14. ALL METAL CONDUITS 1" AND LARGER SHALL HAVE A GROUNDING BUSHING BONDING CONDUIT TO ENCLOSURE.
15. REMOVE DRYWALL DUST AND MUD FROM THE INTERIOR OF BOXES BEFORE INSTALLING DEVICES.
16. AT SUBSTANTIAL COMPLETION CLEAN ALL LIGHT FIXTURES AND CLEAN ALL DEVICES IN THE CONSTRUCTION AREAS. REPLACE DAMAGED DEVICES AND DEVICE PLATES AS NEEDED.
17. VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS AND ELECTRICAL REQUIREMENTS WITH MECHANICAL PLANS. IF MECHANICAL EQUIPMENT BEING PROVIDED DOES NOT MATCH DESIGN NOTIFY ENGINEER IMMEDIATELY.
18. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH POWER & TELECOMMUNICATIONS UTILITIES. ELECTRICAL CONTRACTOR TO PROVIDE ALL MATERIALS AND WORK FOR AS REQUIRED BY EACH UTILITY FOR A COMPLETE AND OPERABLE SYSTEM. PROVIDE RACEWAY(S) TO UTILITY CONNECTION POINT.
19. CONCEAL ALL CONDUIT AND RACEWAY. IF CONDITIONS REQUIRE CONDUIT OR RACEWAY TO BE RUN EXPOSED COORDINATE ROUTING WITH ARCHITECT AND PAINT AS REQUIRED BY ARCHITECT.
20. ELECTRICAL WORK SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, REQUIREMENTS AND ORDINANCES.
21. ALL BACKBOXES SHALL BE MINIMUM 4" SQUARE.
22. ALL EMT FITTINGS SHALL BE STEEL COMPRESSION TYPE WITH INSULATED THROAT.
23. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE BLOCKING AT ALL WALL MOUNTED DEVICES WHERE APPLICABLE.
24. PROVIDE PLASTIC ENGRAVED NAMETAGS FOR ALL ELECTRICAL GEAR. INDICATE EQUIPMENT NAME, EQUIPMENT SERVED (WHERE APPLICABLE), FEEDER SOURCE AND CIRCUIT, VOLTAGE. LETTERING SHALL BE 3/8" IN HEIGHT, WHITE ON BLACK BACKGROUND.
25. PROVIDE LABELS INDICATING CIRCUIT NUMBER AND SOURCE FOR ALL 120V AND GREATER DEVICES. LABELS SHALL BE THERMAL TRANSFER TYPE, 3/8" WITH 1/4" LETTERING. WHITE BACKGROUND FOR BLACK DEVICES, CLEAR BACKGROUND OTHERWISE.
26. PROVIDE ALL EQUIPMENT WITH 75°C OR 90°C TERMINATIONS. ALL WIRE SIZING INDICATED ON PLANS IS BASED ON 75°C TERMINATIONS. WHERE EQUIPMENT IS PROVIDED BY OTHERS AND IS NOT SPECIFICALLY LISTED AND MARKED WITH 75°C TERMINATIONS INCREASE CONDUCTOR SIZE BASED ON 2011 NEC TABLE 310.15(B)(16) 60°C COLUMN FOR CIRCUITS 100 AMPERES AND LESS IN SIZE.
29. THE DEMOLITION NOTES INCLUDED IN THESE DRAWINGS ARE INTENDED TO REPRESENT A GENERAL DIRECTIVE FOR DISCONNECTION AND REMOVAL OF EXISTING EQUIPMENT AND PREPARATION OF EXISTING ROOMS OR AREAS SCHEDULED FOR RENOVATION. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND THE OWNER PRIOR TO DISCONNECTION OR MODIFICATION OF ANY ELECTRICAL SYSTEM ELEMENT OR DEVICE.

ELECTRICAL SYMBOL SCHEDULE - GENERAL

GENERAL

LP1-2,4	BRANCH CIRCUIT RACEWAY. RUN CONCEALED IN CEILING OR WALLS. ARROWHEAD DENOTES HOMERUN TO PANEL. CROSSLINES DENOTE NUMBER OF PHASE AND NEUTRAL CONDUCTORS WHEN MORE THAN TWO ARE TO BE INSTALLED. TEXT DENOTES PANEL NAME AND CIRCUIT NUMBERS FOR HOMERUN. INSTALL GROUND WIRE IN ALL RACEWAYS. #12 AWG MINIMUM AND AS PER CODE.
LP1-2,4	BRANCH CIRCUIT RACEWAY. RUN IN OR UNDER SLAB OR FLOOR. ARROWHEAD DENOTES HOMERUN TO PANEL. CROSSLINES DENOTE NUMBER OF PHASE AND NEUTRAL CONDUCTORS WHEN MORE THAN TWO ARE TO BE INSTALLED. TEXT DENOTES PANEL NAME AND CIRCUIT NUMBERS FOR HOMERUN. INSTALL GROUND WIRE IN ALL RACEWAYS. #12 AWG MINIMUM AND AS PER CODE.
TCB*	PLYWOOD TELECOM BACKBOARD. SEE DETAIL.
PP1	ELECTRICAL DISTRIBUTION OR BRANCH CIRCUIT PANELBOARD. TEXT DENOTES NAME, REFER TO DRAWINGS FOR LOCATION. SEE POWER RISER DIAGRAM AND PANEL SCHEDULES. SURFACE OR FLUSH MOUNTED AS INDICATED ON PANEL SCHEDULE.
	FLUSH MOUNTED SINGLE CIRCUIT BREAKER PANEL.
	JUNCTION BOX, FLUSH WALL MOUNTED IN FINISHED WALLS, SURFACE MOUNTED WHERE INDICATED ON DRAWINGS. MINIMUM 4" SQUARE WITH APPROPRIATE REDUCING RING FOR DEVICE BEING INSTALLED. REFER TO TYPICAL MOUNTING HEIGHTS DETAIL WHERE MOUNTING HEIGHT IS NOT INDICATED ON DRAWINGS. SIZE PER NEC.
	JUNCTION BOX, CEILING MOUNTED. SIZE PER NEC.
*	DENOTES ELECTRICAL DEVICE IS SURFACE MOUNTED.

ELECTRICAL SYMBOL SCHEDULE - POWER

POWER

	120V, 20A DUPLEX RECEPTACLE, NEMA 5-20R. WALL MOUNTED, REFER TO TYPICAL MOUNTING HEIGHTS DETAIL. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
B	120V, 20A DUPLEX RECEPTACLE, NEMA 5-20R. WALL MOUNTED, "B" DENOTES RECEPTACLE IS MOUNTED HORIZONTALLY IN BASEBOARD.
	120V, 20A DUPLEX RECEPTACLE, NEMA 5-20R. WALL MOUNTED AT 42" AFF OR 6" ABOVE COUNTERTOP BACKSPLASH UNLESS OTHERWISE NOTED. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	120V, 20A QUADRAPLEX RECEPTACLE CONSISTING OF TWO DUPLEX RECEPTACLES IN COMMON BACKBOX, NEMA 5-20R. WALL MOUNTED, REFER TO TYPICAL MOUNTING HEIGHTS DETAIL. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	120V, 20A QUADRAPLEX RECEPTACLE CONSISTING OF TWO DUPLEX RECEPTACLES IN COMMON BACKBOX, NEMA 5-20R. WALL MOUNTED AT 42" AFF OR 6" ABOVE COUNTERTOP BACKSPLASH UNLESS OTHERWISE NOTED. REFER TO ADDITIONAL NOTATIONS BELOW WHERE INDICATED ON DRAWINGS.
	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT, CEILING MOUNTED.
30	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT, MOUNTED IN A FLUSH FLOOR BOX.
	ELECTRIC MOTOR OR EXHAUST FAN. PROVIDE LOCAL MEANS OF DISCONNECT PER NEC RATED TO SUIT LOAD WHERE NOT FACTORY EQUIPPED. CONNECT AS REQUIRED.
J	HEAVY DUTY DISCONNECT SWITCH, SEE SCHEDULE.

WIRING DEVICE TYPICAL NOTATIONS

GF	GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE.
GF	GROUND FAULT CIRCUIT INTERRUPTER TYPE WITH CAST WEATHERPROOF IN-USE TYPE COVER. ALL RECEPTACLES LOCATED OUTDOORS OR EXPOSED TO THE ELEMENTS SHALL BE WEATHER RESISTANT LISTED WITH "WR" LISTING ON FACE OF DEVICE BY FACTORY.
WC	INDICATES RECEPTACLE LOCATION FOR ELECTRIC WATER COOLER, RECEPTACLE TO BE GFCI TYPE. COORDINATE MOUNTING WITH VENDOR FOR INSTALLATION IN ACCESSIBLE LOCATION.

ELECTRICAL SYMBOL SCHEDULE - LIGHTING SYSTEMS AND ACCESSORIES

LIGHTING

A	CEILING MOUNTED LIGHT FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE AND MOUNTING. SEE RECESSED LAY-IN FIXTURE DETAIL FOR LAY-IN FIXTURES MOUNTED IN CEILING GRID. LETTER DENOTES FIXTURE TYPE.
A	LINEAR STRIP FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE AND MOUNTING. LETTER DENOTES FIXTURE TYPE.
A A	WALL MOUNTED INCANDESCENT, COMPACT FLUORESCENT, LED OR HID FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE. MOUNTING HEIGHTS AS INDICATED ON DRAWINGS OR IN LIGHT FIXTURE SCHEDULE OR AS DIRECTED BY OWNER. LETTER DENOTES FIXTURE TYPE. PROVIDE COLD WEATHER BALLASTS FOR ALL FIXTURES LOCATED OUTDOORS.
A	CEILING MOUNTED INCANDESCENT, COMPACT FLUORESCENT, LED OR HID FIXTURE. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE AND MOUNTING. PROVIDE MOUNTING HARDWARE APPROPRIATE FOR TYPE OF CEILING WHERE FIXTURE IS INSTALLED. SEE ARCHITECTURAL REFLECTED CEILING PLAN. LETTER DENOTES FIXTURE TYPE.
	LED EXIT SIGN, WALL OR CEILING MOUNTED, STEM DENOTES WALL MOUNTED. SINGLE FACE FOR WALL MOUNTED, FACES AS INDICATED BY DARKENED AREAS FOR CEILING MOUNTED. ARROWS DENOTE CHEVRONS INDICATING DIRECTION OF EXIT AS INDICATED ON DRAWINGS. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE.
	LED EXIT SIGN WITH HIGH OUTPUT BATTERY CAPABLE OF POWERING DUAL REMOTE EGRESS HEADS AT BUILDING EXTERIOR. EXIT SIGN DOES NOT INCLUDE INTEGRAL EGRESS LAMP HEADS FOR INTERIOR. WALL OR CEILING MOUNTED, STEM DENOTES WALL MOUNTED. REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE.
	EC SHALL PROVIDE AND INSTALL A CEILING FAN. CEILING FAN SHALL INCLUDE A LIGHT KIT AND BE SWITCHED WITH A 1500 WATT DIMMER SWITCH. PROVIDE A $150.00 ALLOWANCE AND COORDINATE FAN AND FIXTURE WITH OWNER.
$	120-277V, 20A SINGLE POLE LIGHT SWITCH. HEAVY DUTY TYPE. PROVIDE NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS.
$3	120-277V, 20A 3-WAY LIGHT SWITCH. HEAVY DUTY TYPE. PROVIDE NEUTRAL CONDUCTOR TO ALL SWITCH LOCATIONS.
$oc	120-277V OCCUPANCY SENSOR WALL SWITCH. PASSIVE INFRARED UNLESS OTHERWISE NOTED ON DRAWINGS. WATTSTOPPER PW-100 OR EQUIVALENT. "D" DENOTES DUAL TECHNOLOGY TYPE (WATTSTOPPER DW-100). "U" DENOTES ULTRASONIC TYPE (WATTSTOPPER UW-100).
N	DENOTES FIXTURE TO SERVE AS A NIGHT LIGHT. CONNECT LINE SIDE OF ANY SWITCHING, OCCUPANCY SENSOR, RELAYS, OR OTHER FORM OF MANUAL OR AUTOMATIC CONTROL. FOR HIGH BAY FIXTURES WITH MULTIPLE DRIVERS OR FLUORESCENT FIXTURES WITH DUAL BALLASTS, CONNECT TO POWER ONLY ONE INPUT CIRCUIT WHERE FIXTURES ARE CONFIGURED FOR DUAL-LEVEL CONTROL.

ELECTRICAL SYMBOL SCHEDULE - COMMUNICATIONS

COMMUNICATIONS

	COMBINATION DATA/TELEPHONE OUTLET LOCATION. REFER TO TYPICAL MOUNTING HEIGHTS DETAIL. PROVIDE 1"C WITH PULL STRING TO ABOVE ACCESSIBLE CEILING WHERE APPLICABLE OR TO TELECOM BACKBOARD IN OPEN STRUCTURE SPACES.
B	COMBINATION DATA/TELEPHONE OUTLET LOCATION. WALL MOUNTED, "B" DENOTES OUTLET IS MOUNTED HORIZONTALLY IN BASEBOARD.
	SAME AS ABOVE EXCEPT MOUNTED AT COUNTERTOP HEIGHT. MOUNT AT 48" AFF WHERE NOT LOCATED ABOVE A COUNTERTOP UNLESS OTHERWISE NOTED ON DRAWINGS.

ELECTRICAL SYMBOL SCHEDULE - FIRE ALARM

FIRE ALARM

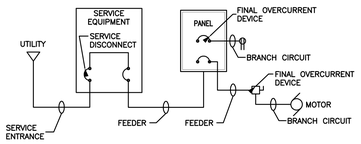
F	FIRE ALARM PULL STATION. PROVIDE WITH TAMPER RESISTANT ALARM COVER.
15	FIRE ALARM HORN/STROBE. WALL MOUNTED.
15	FIRE ALARM STROBE ONLY. WALL MOUNTED.
S	CEILING MOUNTED SMOKE DETECTOR. PHOTOELECTRIC TYPE.
H	CEILING MOUNTED HEAT DETECTOR. FIXED TEMPERATURE 135°F.
FAA	FIRE ALARM ANNUNCIATOR PANEL. SEE SPECIFICATIONS.
FACP	MAIN FIRE ALARM CONTROL PANEL. SEE SPECIFICATIONS.
DH	DUCT SMOKE DETECTOR WITH SAMPLING TUBE. INSTALLED ON RETURN OR RETURN AND SUPPLY AS REQUIRED, SEE DIV 23 DRAWINGS AND COORDINATE. "WP" DENOTES WEATHERPROOF HOUSING FOR OUTDOOR UNITS.

LIGHT FIXTURE SCHEDULE

	TYPE	DESCRIPTION	CATALOG NUMBER	LAMPS	WATTAGE	NOTES
	A1	1'x4' SURFACE MOUNT LED ARCHITECTURAL TROFFER WITH 2100 LUMEN OUTPUT AND FROSTED DIFFUSER.	HE WILLIAMS #ATS1-14-L30/835-D-DIM-UNV	LED BY MFR.	28W	
	A2	2'x4' SURFACE MOUNT LED ARCHITECTURAL TROFFER WITH 2100 LUMEN OUTPUT AND FROSTED DIFFUSER.	HE WILLIAMS #ATS1-24-L30/835-D-DIM-UNV	LED BY MFR.	31W	
	C	6" LED RECESSED DOWNLIGHT WITH 2000 LUMEN OUTPUT AND WHITE REFLECTOR AND FLANGE.	HE WILLIAMS #6DR-TL-L20/835-DIM-UNV-OW-OF-CS-R	LED BY MFR.	19.1W	
	CA	6" LED RECESSED ADJUSTABLE DOWNLIGHT WITH 1500 LUMEN OUTPUT AND WHITE REFLECTOR AND FLANGE.	HE WILLIAMS #6AR-L20/835-DIM-UNV-OW-OF-CS-R	LED BY MFR.	19.1W	CANLIGHTS SHALL BE ADJUSTED TO MATCH THE SLOPE OF THE CEILING INSTALLED ON.
	H	2' WALL MOUNTED LED LIGHT FIXTURE.	HE WILLIAMS #SLF-2-L26/835-HIA-DRV-UNV	LED BY MFR.	23W	
	K	BATH SCONE WITH ETCHED OPAL SHADE AND ANTIQUE NICKEL FINISH. WHITE HOUSING FINISH COLOR.	HOUSE OF ANTIQUE HARDWARE# RS-03HK-5740AN	LED BY MFR.	100W	
	S	4' LED STRIPLIGHT, SURFACE MOUNTED TO CEILING, 4000 LUMEN.	METALUX #4SLSTP4040DD-UNV	LED BY MFR.	43W	
		WALL MOUNTED EMERGENCY LIGHTING UNIT WITH DUAL LAMP HEADS AND INTEGRAL 90 MINUTE BATTERY BACKUP.	LITHONIA #ELM2 * * HOUSING FINISH AS DIRECTED BY ARCHITECT.	LED BY MFR.	7W	CONNECT LINE SIDE OF ANY SWITCHING, RELAY, OR OTHER CONTROL. MOUNT AT 7'-6" AFF.
EXIT		LED EDGELIT GREEN BRUSHED ALUMINUM EXIT LIGHT WITH DIRECTIONAL CHEVRONS AS INDICATED BY ARROWS WHERE APPLICABLE ON DRAWINGS. PROVIDE WITH 90 MINUTE MINIMUM BATTERY BACKUP.	ASTRALITE #LG-750-REM * GM-BA * # OF FACES DETERMINED BY LOCATION	LED BY MFR.	1W	CONNECT LINE SIDE OF ANY SWITCHING, RELAY, OR OTHER CONTROL. FACES AND DIRECTIONAL CHEVRONS AS INDICATED ON DRAWINGS.

1. OTHER MANUFACTURERS ACCEPTABLE WITH WHERE EQUIVALENT IN PERFORMANCE AND AESTHETICS. SUBMIT FOR APPROVAL WITH SHOP DRAWINGS.
2. WHERE FIXTURES ARE INDICATED ON DRAWINGS TO BE CONNECTED AS NIGHTLIGHTS, CONNECT FIXTURE INPUT (AND BATTERY WHERE APPLICABLE) LINE SIDE OF ANY SWITCHING OR CONTROLS.

RACEWAY MATERIAL SCHEDULE



RACEWAY MATERIALS:

SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE: EMT (INDOORS ONLY), IMC, GRS.

FEEDERS: EMT, IMC, GRS

BRANCH CIRCUITS CONCEALED ABOVE CEILING/IN WALLS: EMT, IMC, GRS, AC/MC CABLE*, NMC*

BRANCH CIRCUITS EXPOSED (INTERIOR): EMT, WIREMOLD

OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).

* WHERE PERMITTED BY CODE, WITH APPROVAL OF OWNER, AND CONCEALED IN WALLS OR ABOVE FINISHED CEILINGS ONLY WITH THE EXCEPTION OF LIGHT FIXTURE WHIPS.

ABBREVIATIONS

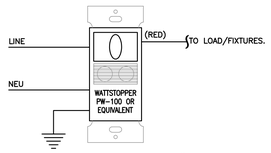
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AF	ARC FAULT CIRCUIT INTERRUPTER
BKR	BREAKER
C	CONDUIT
CATV	CABLE TELEVISION
CKT	CIRCUIT
EC	ELECTRICAL CONTRACTOR, DIVISION 16 (DIV 16)
EF	EXHAUST FAN
EMT	ELECTRICAL METALLIC TUBING
FCU	FAN COIL UNIT
GC	GENERAL CONTRACTOR, DIVISION 00 THROUGH 14
GF	GROUND FAULT CIRCUIT INTERRUPTER
GRS	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
IG	DEVICE SHALL HAVE ISOLATED GROUND – SEE SPECIFICATIONS
IMC	INTERMEDIATE METALLIC CONDUIT
JB or J-BOX	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATT
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR, DIVISION 15 (DIV 15)
MDP	MAIN DISTRIBUTION PANEL
MIN	MINIMUM
MFR	MANUFACTURER
NMC	NONMETALLIC-SHEATHED CABLE
V	VOLT
NEC	2014 NATIONAL ELECTRICAL CODE, (NFPA 70)
SWBD	SWITCHBOARD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WC	WATER COOLER
XFMR	TRANSFORMER

DISCONNECT SWITCH SCHEDULE

SWITCH	DESCRIPTION
S-1	30A/2P
S-2	60A/2P
S-3	100A/2P
S-4	200A/2P
S-5	400A/2P
S-6	30A/3P
S-7	60A/3P
S-8	100A/3P
S-9	200A/3P
S-10	400A/3P
S-11	30A/4WSN
S-12	60A/4WSN
S-13	100A/4WSN
S-14	200A/4WSN
S-15	400A/4WSN

SWITCH NOTES:

1. ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE.
2. 240V OR 600V TO SUIT CIRCUIT VOLTAGE.
3. ALL DISCONNECTS FUSIBLE UNLESS OTHERWISE NOTED, PROVIDE FUSES TO SUIT LOAD.
4. ENCLOSURES NEMA 3R OUTDOORS AND IN WET LOCATIONS, NEMA 1 ELSEWHERE UNLESS OTHERWISE NOTED.
5. ALL OUTDOOR DISCONNECTS SERVING GROUND MOUNTED HVAC UNITS SHALL NOT BE MOUNTED HIGHER THAN 36" ABOVE FINISHED GRADE.



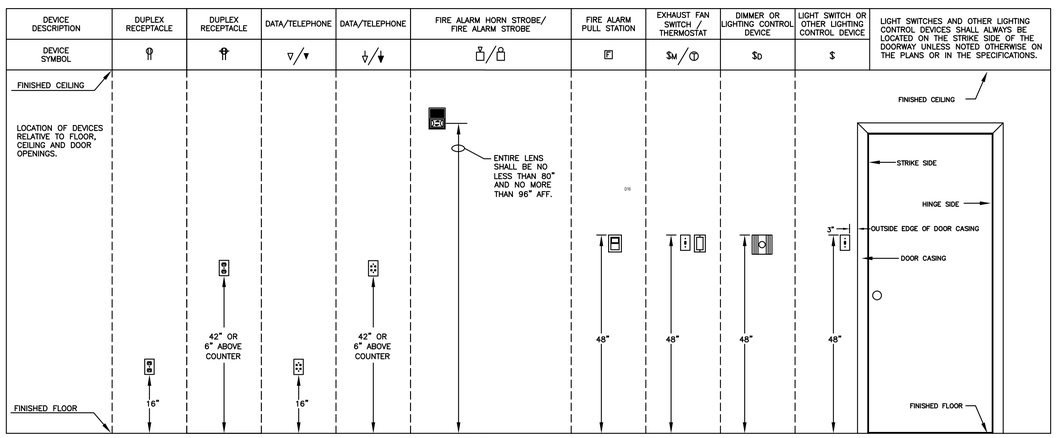
AUTOMATIC WALL SENSOR SWITCH $oc

TYPICAL SINGLE RELAY WIRING SCHEMATIC

NO SCALE

NOTE 1: SCHEMATIC IS REPRESENTATIVE OF WATTSTOPPER PW/DW-100 AND DSW-100. CONNECTION REQUIREMENTS AND COLOR CODING MAY DIFFER BETWEEN MANUFACTURERS. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS.

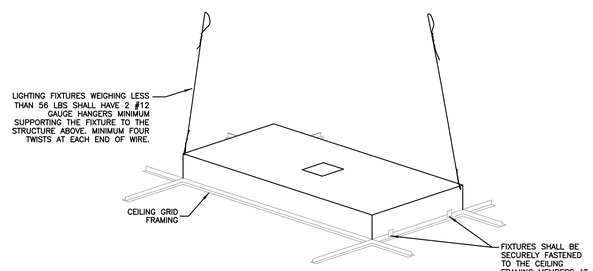
NOTE 2: WHERE APPLICABLE, CONNECT EXIT SIGNS, BATTERY PACKS FOR EGRESS LIGHTING, AND NIGHT LIGHTS LINE SIDE OF AUTOMATIC WALL SWITCH SENSORS.



****ALL MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED ON PLANS.****

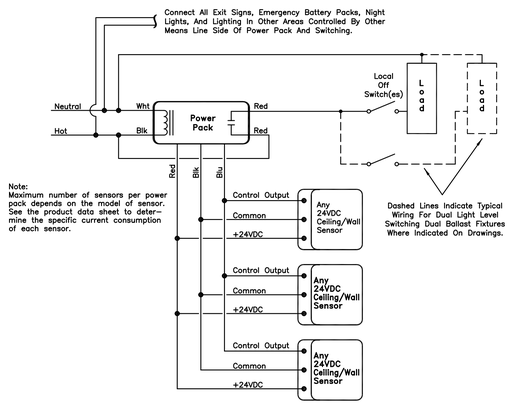
DEVICE MOUNTING HEIGHTS

NO SCALE



RECESSED LAY-IN FIXTURE DETAIL

NO SCALE



Note:
Maximum number of sensors per power pack depends on the model of sensor. See the product data sheet to determine the specific current consumption of each sensor.

CEILING MOUNT OCCUPANCY SENSOR

TYPICAL WIRING SCHEMATIC FOR LOW VOLTAGE SENSOR

NO SCALE

NOTE 1: SCHEMATIC IS REPRESENTATIVE OF WATTSTOPPER DT-300/305. CONNECTION REQUIREMENTS AND LOW VOLTAGE TOPOLOGY MAY DIFFER BETWEEN MANUFACTURERS. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS.

NOTE 2: WHERE APPLICABLE, CONNECT EXIT SIGNS, BATTERY PACKS FOR EGRESS LIGHTING, AND NIGHT LIGHTS LINE SIDE OF AUTOMATIC WALL SWITCH SENSORS.

NOTE 3: PROVIDE QUANTITY OF POWER PACKS AS REQUIRED TO SERVE LOADS AS INDICATED ON DRAWINGS. WHERE MULTIPLE BRANCH CIRCUITS SERVE THE SAME AREA, PROVIDE SEPARATE POWER PACKS FOR EACH BRANCH CIRCUIT AND PHASE.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 31520 8/2/19 RYAN MATTHEW INFINGER

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

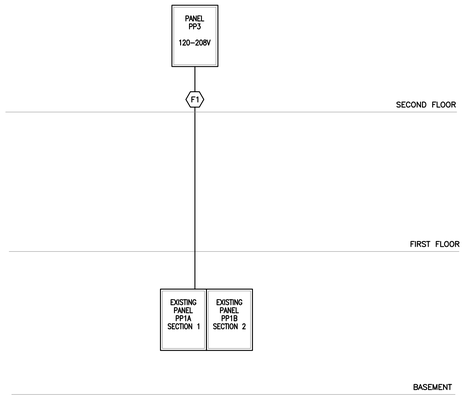
ELECTRICAL SYMBOLS, SCHEDULES & DETAILS

sheet number

E0.0

drawn by RMI

checked by RMI



POWER RISER DIAGRAM KEYNOTES:

F1 SEE PANEL SCHEDULE THIS SHEET FOR PANEL CONDUCTOR SIZING.

POWER RISER DIAGRAM

NO SCALE

NAME : PP1A (EXISTING) BUS AMPS : 400A SECTION 1
SYSTEM : NORMAL MAIN : 400A MAIN BREAKER SERVICE ENTRANCE RATED
TYPE : SQUARE D, NQOD VOLTAGE : 120–208V/3ø/4W/SN
INTERRUPTING RATING : 22K AIC MOUNTING : SURFACE

CKT.	CIRCUIT NAME	WIRE	COND	LOAD	BKR	POLES	PHASE	POLES	BKR	LOAD	COND	WIRE	CIRCUIT NAME	CKT.
1	AHU-1	1/0	1-1/2	7.1	135		A		100	7.2	1-1/2	3	PANEL PP2	2
3				7.1			B			7.6				4
5				7.1			C			6.2				6
7	WATER HEATER WH-1	4	1-1/4	3.0	70		A		100	4.7	1-1/2	3	PANEL PP3	8
9				6.0			B			4.2				10 *
11				3.0			C			5.1				12
13	VAV-6	10	1/2	2.7	30		A		25	2.0	1/2	10	VAV-5	14
15				2.7			B			2.0				16
17				2.7			C			2.0				18
19	EUH-1	12	1/2	1.7	20		A		15	1.3	1/2	12	VAV-2	20
21				1.7			B			1.3				22
23				1.7			C			1.3				24
25	SPACE	–	–	–	100		A		25	2.0	1/2	10	VAV-3	26
27				–			B			2.0				28
29				–			C			2.0				30
31	CHILLED WATER PUMP CHP-1	12	1/2	0.6	20		A		15	0.5	1/2	12	VAV-1	32
33				0.6			B			0.5				34
35				0.6			C			0.5				36
37	CHILLED WATER PUMP CHP-2	12	1/2	0.6	20		A		40	–	3/4**	8**	SURGE PROTECTION DEVICE	38
39				0.6			B			–				40
41				0.6			C			–				42

CONNECTED LOAD, THIS SECTION (KVA): A 35.4 B 37.5 C 33.2
CONNECTED LOAD, BOTH SECTIONS (KVA): A 39.1 B 41.4 C 37.0
TOTAL (KVA): 117.5
DEMAND (A): 326

* PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE. NEW CIRCUIT BREAKER TO MATCH EXISTING TYPE AND FAULT CURRENT RATINGS.
SECTION 1 OF A 2 SECTION PANELBOARD. PROVIDE FEED THRU LUGS AND FULL SIZE FEEDER EXTENSION TO SECTION 2.
"GF" DENOTES GROUND FAULT TYPE CIRCUIT BREAKER.

NAME : PP1B (EXISTING) BUS AMPS : SEE SECTION 1 SECTION 2
SYSTEM : SEE SECTION 1 MAIN : MLO
TYPE : SEE SECTION 1 VOLTAGE : SEE SECTION 1
INTERRUPTING RATING : SEE SECTION 1 MOUNTING : SEE SECTION 1

CKT.	CIRCUIT NAME	WIRE	COND	LOAD	BKR	POLES	PHASE	POLES	BKR	LOAD	COND	WIRE	CIRCUIT NAME	CKT.
1	LTNG: STAGING 001	12	1/2	0.3	20		A		20	0.8	1/2	12	RECEPTS: STAGING 001	2
3	LTNG: MECH/ELEC 003	12	1/2	0.3	20		B		20	0.8	1/2	12	RECEPTS: MECH/ELEC 003	4
5	LTNG: CORRIDOR 004	12	1/2	0.1	20		C		20	0.6	1/2	12	RECEPTS: MECH/ELEC 003	6
7	LTNG: CRAWL SPACE	12	1/2	0.3	20		A		20	0.6	1/2	12	RECEPTS: TELCOM BOARD	8
9	LTNG: LOBBY/OFFICE	12	1/2	0.4	20		B		20	0.6	1/2	12	RECEPTS: TELCOM BOARD	10
11	FAN*	12	1/2	1.0	20LK		C		20	0.6	1/2	12	RECEPTS: DATA RACK	12
13	OUTDOOR LOAD CENTER PP1C	4	1-1/4	0.8	60		A		20	0.8	1/2	12	RECEPTS: DATA RACK	14
15							B		20	0.4	1/2	12	EF-1	16
17	SPACE	–	–	–	20		C		20	0.5	1/2	12	RECIRC PUMP RP-1	18
19	SPACE	–	–	–	20		A		20	0.1	1/2	12	TIMECLOCK TC-1	20
21	SPACE	–	–	–	20		B		20	0.8	1/2	12	OUTDOOR LIGHTING	22
23	SPACE	–	–	–	20		C		20	0.8	1/2	12	OUTDOOR LIGHTING	24
25	SPACE	–	–	–	20		A		20	–	–	–	SPACE	26
27	SPACE	–	–	–	20		B		20	–	–	–	SPACE	28
29	SPACE	–	–	–	20		C		20	–	–	–	SPACE	30
31	SPACE	–	–	–	20		A		20	–	–	–	SPACE	32
33	SPACE	–	–	–	20		B		20	–	–	–	SPACE	34
35	SPACE	–	–	–	20		C		20	–	–	–	SPACE	36
37	SPACE	–	–	–	20		A		20	–	–	–	SPACE	38
39	SPACE	–	–	–	20		B		20	–	–	–	SPACE	40
41	SPACE	–	–	–	20		C		20	–	–	–	SPACE	42

CONNECTED LOAD, THIS SECTION (KVA): A 3.7 B 3.9 C 3.8

* VERIFY WITH OWNER PROVIDED EQUIPMENT REQUIREMENTS.
** OR AS REQUIRED BY EQUIPMENT BEING INSTALLED.

SECTION 2 OF A 2 SECTION PANELBOARD.

"GF" DENOTES GROUND FAULT TYPE CIRCUIT BREAKER.
"LK" DENOTES PROVIDE LOCKING PROVISIONS PER NFPA 72.

NAME : PP3 BUS AMPS : 100A
SYSTEM : NORMAL MAIN : MLO
TYPE : SQUARE D, NQOD VOLTAGE : 120–208V/3ø/4W/SN
INTERRUPTING RATING : 22K AIC MOUNTING : SURFACE

CKT.	CIRCUIT NAME	WIRE	COND	LOAD	BKR	POLES	PHASE	POLES	BKR	LOAD	COND	WIRE	CIRCUIT NAME	CKT.
1	VAV-7	12	1/2	1.7	20		A		15	1.0	1/2	12	VAV-8	2
3				1.7			B			1.0				4
5				1.7			C			1.0				6
7	EF-3	12	1/2	0.2	20		A		20	1.0	1/2	12	LTNG: 2ND FLOOR	8
9	SPARE	–	–	–	20		B		20	0.8	1/2	12	LTNG: ATTIC	10
11	RECEPTS: OFFICE 201/STORAGE	12	1/2	0.6	20		C		20	0.8	1/2	12	LTNG: 2ND FLOOR STAIRS	12
13	RECEPTS: OFFICE 203/STORAGE	12	1/2	0.6	20		A		20GF	0.8	1/2	12	RECEPTS: COFFEE	14
15	RECEPTS: OFFICE	12	1/2	0.4	20		B		20	0.8	1/2	12	RECEPTS: ICE	16
17	RECEPTS: CORIDOR 200/STORAGE	12	1/2	0.6	20		C		20	–	–	–	SPARE	18
19	RECEPTS: OFFICE 208/TOILET	12	1/2	0.4	20		A		20	–	–	–	SPARE	20
21	RECEPTS: CORRIDOR 204	12	1/2	0.4	20		B		20	–	–	–	SPARE	22
23	RECEPTS: OFFICE 205	12	1/2	0.8	20		C		20	–	–	–	SPARE	24
25	RECEPTS: OFFICE 206	12	1/2	0.4	20		A		20	–	–	–	SPARE	26
27	RECEPTS: OFFICE 207	12	1/2	0.8	20		B		20	–	–	–	SPARE	28
29	SPARE	–	–	–	20		C		20	–	–	–	SPARE	30

CONNECTED LOAD (KVA): A 4.7 B 4.2 C 5.1
TOTAL (KVA): 14
DEMAND (A): 38.9

* VERIFY WITH OWNER PROVIDED EQUIPMENT REQUIREMENTS.
** OR AS REQUIRED BY EQUIPMENT BEING INSTALLED.
"GF" DENOTES GROUND FAULT TYPE CIRCUIT BREAKER. "AF" DENOTES ARC FAULT TYPE CIRCUIT BREAKER.
"LK" DENOTES PROVIDE LOCKING PROVISIONS PER NFPA 72.

NAME : PP2 (EXISTING) BUS AMPS : 100A
SYSTEM : NORMAL MAIN : MLO
TYPE : SQUARE D, NQOD VOLTAGE : 120–208V/3ø/4W/SN
INTERRUPTING RATING : 22K AIC MOUNTING : SURFACE

CKT.	CIRCUIT NAME	WIRE	COND	LOAD	BKR	POLES	PHASE	POLES	BKR	LOAD	COND	WIRE	CIRCUIT NAME	CKT.
1	LTNG: WOMENS TOILET 115	12	1/2	0.4	20		A		20	1.0	1/2	12	RECEPTS: LIBRARY 109	2
3	LTNG: PREFUNCTION RM 113	12	1/2	0.1	20		B		20	0.8	1/2	12	RECEPTS: LIBRARY 109	4
5	LTNG: MEN'S TOILET 112	12	1/2	0.4	20		C		20	1.0	1/2	12	RECEPTS: CORRIDOR 105/MECH	6
7	LTNG: CORRIDOR 105	12	1/2	0.2	20		A		20	0.6	1/2	12	RECEPTS: MEN 114/PREFUNCT	8
9	LTNG: LIBRARY 109	12	1/2	0.5	20		B		20GF	–	–	–	RECEPTS: PREFUNCTION RETRACT	10
11	LTNG: STUDY 104	12	1/2	0.1	20		C		20	0.2	1/2	12	RECEPTS: FUNCTION COUNTER	12
13	LTNG: WARMING KITCHEN 106	12	1/2	0.5	20		A		20GF	1.0	1/2	12	RECEPTS: WATER COOLER	14
15	LTNG: FOYER 103	12	1/2	0.3	20		B		20	0.8	1/2	12	RECEPTS: WOMEN 117/STAIR	16
17	LTNG: DINING 102	12	1/2	0.4	20		C		20	0.6	1/2	12	RECEPTS: PREFUNCTION ROOM	18
19	LTNG: SUNROOM 101A	12	1/2	0.2	20		A		20	1.0	1/2	12	RECEPTS: FOYER 103	20
21	LTNG: LIVING 101	12	1/2	0.3	20		B		20	1.0	1/2	12	RECEPTS: STUDY 104	22
23	LTNG: LIVING 101	12	1/2	0.6	20		C		20	0.8	1/2	12	RECEPTS: WARMING KITCHEN 106	24
25	LTNG: STAIR 115	12	1/2	0.1	20		A		20	0.8	1/2	12	RECEPTS: DINING 102	26
27	SPARE	–	–	–	20		B		20	1.0	1/2	12	RECEPTS: WARMING OVEN	28
29	SPARE	–	–	–	20		C		20	0.8	1/2	12	RECEPTS: LIVING 101	30
31	SPARE	–	–	–	20		A		20	0.8	1/2	12	RECEPTS: LIVING 101	32
33	SPARE	–	–	–	20		B		20	0.6	1/2	12	RECEPTS: LIVING 101	34
35	SPARE	–	–	–	20		C		20	0.8	1/2	12	RECEPTS: SUNROOM 101A	36
37	SPARE	–	–	–	20		A		20	0.8	1/2	12	RECEPTS: SUNROOM 101A	38
39	SPARE	–	–	–	20		B		20	0.4	1/2	12	EXHAUST FANS EF-1,2,3	40
41	SPARE	–	–	–	20		C		20	0.5	1/2	12	POWERED DOOR	42

CONNECTED LOAD (KVA): A 7.2 B 7.6 C 6.2
TOTAL (KVA): 21
DEMAND (A): 58.3

* VERIFY WITH OWNER PROVIDED EQUIPMENT REQUIREMENTS.
** OR AS REQUIRED BY EQUIPMENT BEING INSTALLED.
"GF" DENOTES GROUND FAULT TYPE CIRCUIT BREAKER. "AF" DENOTES ARC FAULT TYPE CIRCUIT BREAKER.
"LK" DENOTES PROVIDE LOCKING PROVISIONS PER NFPA 72.

REQUIRED WORK SEQUENCE:
A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.
Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name
BARRINGER HOUSE RENOVATIONS

State project number
PROJECT # FP00000285
GMK project number
PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 31520 8/2/19 RYAN MATTHEW INFINGER

issued for
CONSTRUCTION DOCUMENTS

date
AUGUST 2, 2019

number	item	date

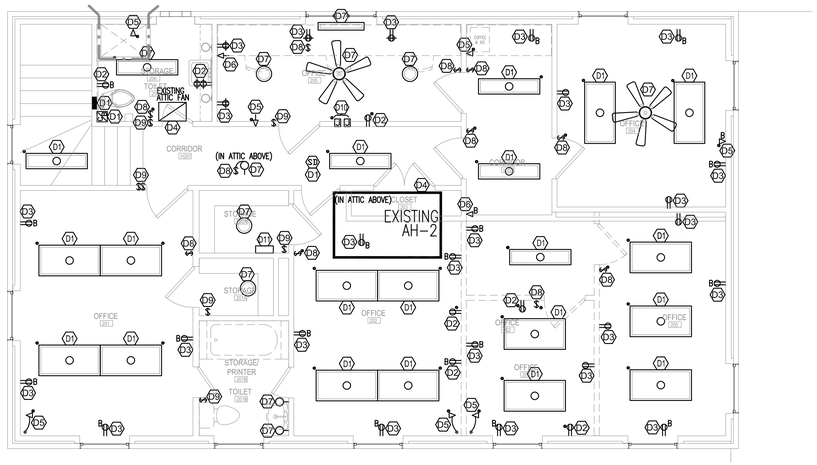
key plan

N

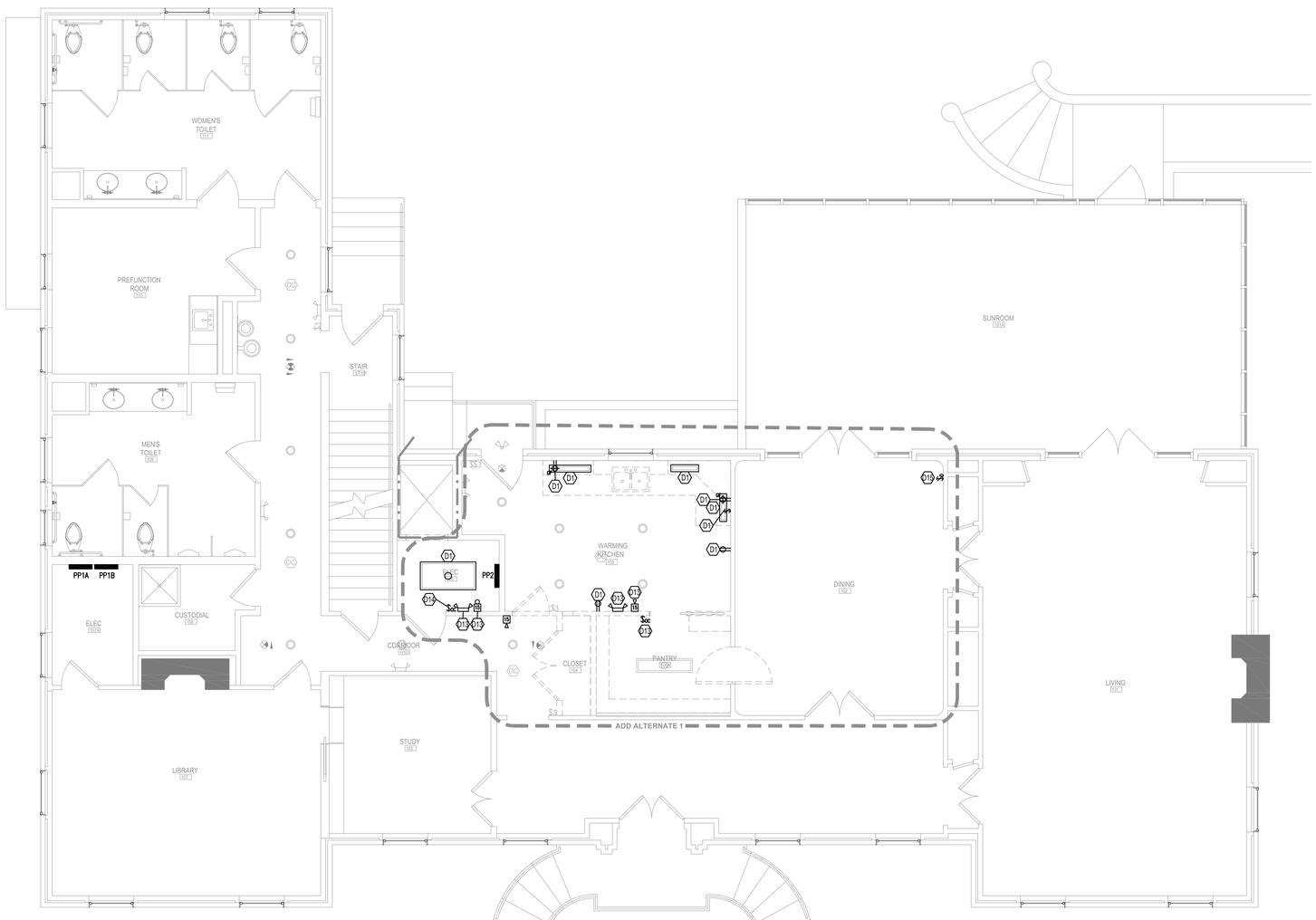
sheet title
ELECTRICAL PANEL SCHEDULES & RISER DIAGRAMS

sheet number
E0.1

drawn by RMI
checked by RMI



2 SECOND FLOOR – ELEC DEMOLITION
1/4"=1'-0"



1 FIRST FLOOR – ELEC DEMOLITION
1/4"=1'-0"

GENERAL DEMOLITION NOTES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTION AND REMOVAL OF ANY ELECTRICAL DEVICES OR SYSTEMS AS REQUIRED FOR BUILDING ALTERATION WORK. COORDINATE WITH ARCHITECTURAL DRAWINGS AND PROVIDE LABOR AND MATERIALS FOR ALL WORK REQUIRED TO DISCONNECT DEVICES, LIGHT FIXTURES, ETC AT WALLS AND CEILINGS SCHEDULED FOR DEMOLITION.

WHERE DEVICES OR FIXTURES ARE REMOVED OR OTHERWISE MODIFIED TO ACCOMMODATE NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONNECTIONS AND WIRING TO EXISTING BRANCH CIRCUITS AND DEVICES AND EXTENDING CIRCUITS AS REQUIRED TO MAINTAIN CONNECTIVITY TO EXISTING ADJACENT DEVICES AND FIXTURES TO REMAIN. NOTIFY OWNER PRIOR TO DISCONNECTION OR REMOVAL OF ANY ELECTRICAL SYSTEM DEVICE OR EQUIPMENT.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING STYLES AND FINISHES OF EXISTING DEVICES, COVER PLATES, AND FIXTURES. NEW DEVICES AND EXIT SIGNS SHALL BE FURNISHED TO CLOSELY MATCH AESTHETIC CHARACTERISTICS OF EXISTING FIXTURES AND DEVICES.

WHERE DEVICES OR EQUIPMENT ARE ABANDONED OR DEMOLISHED AS PART OF THE SCOPE OF WORK, THE OWNER HAS FIRST RIGHT OF REFUSAL TO ALL EQUIPMENT, WIRING, AND MATERIALS DEMOLISHED. THE CONTRACTOR SHALL PROVIDE FOR PROPER DISPOSAL OF ALL EQUIPMENT AND MATERIALS NOT ACCEPTED BY THE OWNER. CONTRACTOR SHALL PROVIDE FOR REASONABLE TRANSPORTATION TO STORAGE FACILITY AS DIRECTED BY THE OWNER FOR ALL EQUIPMENT AND MATERIALS FOR WHICH THE OWNER CHOOSES TO RETAIN POSSESSION OF AFTER REMOVAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PATCHING, PAINTING, ETC AS REQUIRED TO CLOSELY MATCH ADJACENT BUILDING FINISHES WHERE DEVICES OR EQUIPMENT ARE REMOVED.

WHERE DEVICES OR FIXTURES ARE DEMOLISHED OR OTHERWISE ABANDONED AS PART OF THIS WORK, THE CONTRACTOR SHALL REMOVE ALL WIRING, RACEWAY, AND PERIPHERAL MATERIALS AND SUPPORTS TO SOURCE PANEL OR TO NEAREST JUNCTION BOX WHERE CIRCUIT SERVES OTHER DEVICES OR FIXTURES IN ADJACENT AREAS WHICH ARE TO REMAIN. FIELD COORDINATE.

REMOVE ALL CEILING MOUNTED DEVICES FROM CEILINGS BEING DEMOLISHED OR REWORKED AND REINSTALL AT SAME LOCATION OR NEW LOCATION AS DESCRIBED ON RENOVATION DRAWINGS. WHERE ANY NEW CEILINGS ARE LOWERED AND ARE BELOW LEVEL OF EXISTING WALL MOUNTED DEVICES, CONTRACTOR SHALL RELOCATE EXISTING DEVICES BELOW NEW CEILING LEVEL AND EXTEND WIRING/RACEWAY AS REQUIRED.

CAREFULLY REVIEW ARCHITECTURAL, MECHANICAL, AND PLUMBING DEMOLITION PLANS. EXAMINE WORK TO BE DONE AND PROVIDE ALL ELECTRICAL WORK AS REQUIRED FOR DEMOLITION OF WALLS, CEILINGS, EQUIPMENT, OR SIMILAR AS DESCRIBED IN CONTRACT DOCUMENT SET. THIS INCLUDES RELOCATION, REROUTING, ETC OF ELECTRICAL CIRCUITS OR INFRASTRUCTURE WHERE REQUIRED FOR WORK UNDER OTHER TRADES WHETHER SPECIFICALLY INDICATED ON ELECTRICAL DRAWINGS OR NOT. CONTRACTOR IS REQUIRED TO VISIT THE SITE PRIOR TO PLACING BID AND INCLUDE IN BID ANY LABOR AND MATERIALS ASSOCIATED WITH RELOCATION OR MODIFICATION OF EXISTING ELECTRICAL SYSTEMS WHICH MAY BE AFFECTED BY WORK IN THE AREAS OF RENOVATION OR ADJACENT BUILDING AREAS.

GENERAL NOTES NOT KEYED TO PLAN:

G1 EXISTING LIGHTING DEVICES IN PROJECT AREA TO REMAIN SHOWN AS LIGHTWEIGHT.

DEMOLITION NOTES KEYED TO PLAN:

D1 DEMOLISH COMPLETE ALL EXISTING RECEPTACLES/LIGHT FIXTURES/LIGHT SWITCHES/STARTERS/DISCONNECTS/ PANELBOARDS/BACKBOXES/J-BOX'S/PULL BOXES/CONDUITS ETC. IN/ON WALLS AND CEILINGS COMPLETE IN ALL SPACES/ROOMS. DEMOLISH ALL WIRING AND RACEWAY NO LONGER IN USE. ALL REMOVED EQUIPMENT SHALL BE TRANSPORTED TO THE OWNER'S STORAGE FACILITY BY THE CONTRACTOR. CONTRACTOR RESPONSIBLE FOR DISPOSAL FOR ALL MATERIALS REFUSED BY OWNER. FIELD COORDINATE EXACT LOCATION OF ALL EXISTING DEVICES.

D2 RECEPTACLE SHALL BE REMOVED. REMOVE RECEPTACLE, FACE PLATE, BACKBOX, AND CONDUCTORS COMPLETE. PATCH AND REPAIR WALL TO CONDITION OF REMAINING WALL WHERE EXISTING ELECTRICAL DEVICE IS REMOVED.

D3 RECEPTACLE SHALL BE REMOVED. REMOVE RECEPTACLE, FACE PLATE, AND CONDUCTORS COMPLETE.

D4 DISCONNECT EXISTING FEEDER FROM EXISTING HVAC UNIT. EXISTING DISCONNECT SWITCH AND FEEDER SHALL BE REMOVED. CONDUIT, WIRE, AND BACKBOX SHALL BE REMOVED COMPLETE. REMOVE EXISTING DEHUMIDIFIER ADJACENT TO AHU UNIT COMPLETE.

D5 DATA OUTLET SHALL BE REMOVED. REMOVE OUTLET, FACE PLATE, AND BACKBOX COMPLETE. PATCH AND REPAIR WALL TO CONDITION OF REMAINING WALL WHERE EXISTING ELECTRICAL DEVICE IS REMOVED.

D6 DATA OUTLET SHALL BE REMOVED. REMOVE OUTLET AND FACE PLATE.

D7 DEMOLISH COMPLETE ALL EXISTING LIGHT FIXTURES IN SPACE. DEMOLISH ALL CONDUCTORS, SURFACE RACEWAY, AND BACKBOX TO SOURCE PANEL. PATCH AND REPAIR WALL TO CONDITION OF REMAINING WALL WHERE EXISTING FIXTURE IS REMOVED.

D8 LIGHT SWITCH SHALL BE REMOVED. REMOVE SWITCH, FACE PLATE, BACKBOX, AND CONDUCTORS COMPLETE. PATCH AND REPAIR WALL TO CONDITION OF REMAINING WALL EXISTING ELECTRICAL DEVICE IS REMOVED.

D9 LIGHT SWITCH SHALL BE REMOVED. REMOVE LIGHT SWITCH, FACE PLATE, AND CONDUCTORS COMPLETE.

D10 REMOVE BACKBOX AND FACE PLATE COMPLETE. PATCH AND REPAIR WALL TO CONDITION OF REMAINING WALL WHERE EXISTING ELECTRICAL DEVICE IS REMOVED.

D11 EXISTING TELECOMMUNICATIONS DEVICE AND ALL ASSOCIATED DATA WIRING SHALL REMAIN AS-IS AND BE PROTECTED DURING DEMOLITION.

D12 LIGHT FIXTURE SHALL BE REMOVED. REMOVE FIXTURE AND CONDUCTORS COMPLETE.

D13 EXISTING DEVICE TO BE REMOVED AND RELOCATED TO NEW LOCATION SHOWN ON RENOVATION PLAN.

D14 EXISTING SWITCH TO REMAIN. TIE INTO NEW LIGHT FIXTURES AS SHOWN ON RENOVATION PLAN.

D15 EXISTING SWITCH TO BE RELOCATED TO NEW LOCATION.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 31520 8/2/19 RYAN MATTHEW INFINGER

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

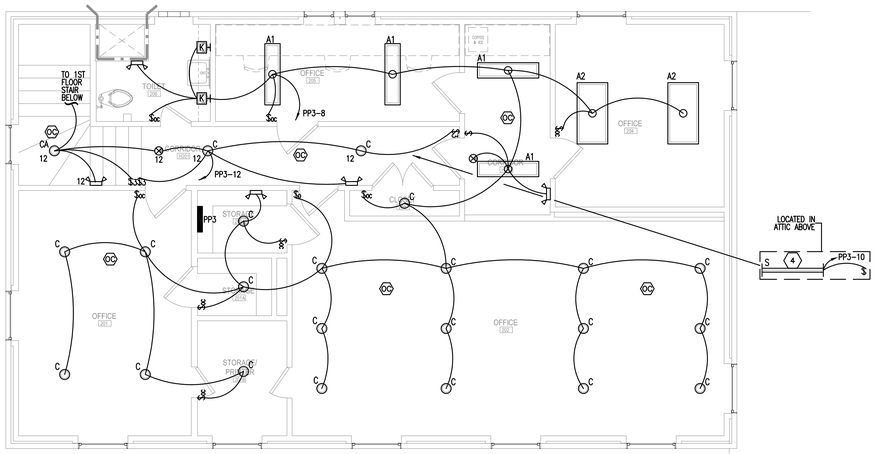
sheet title

ELECTRICAL DEMOLITION FIRST AND SECOND FLOOR PLANS

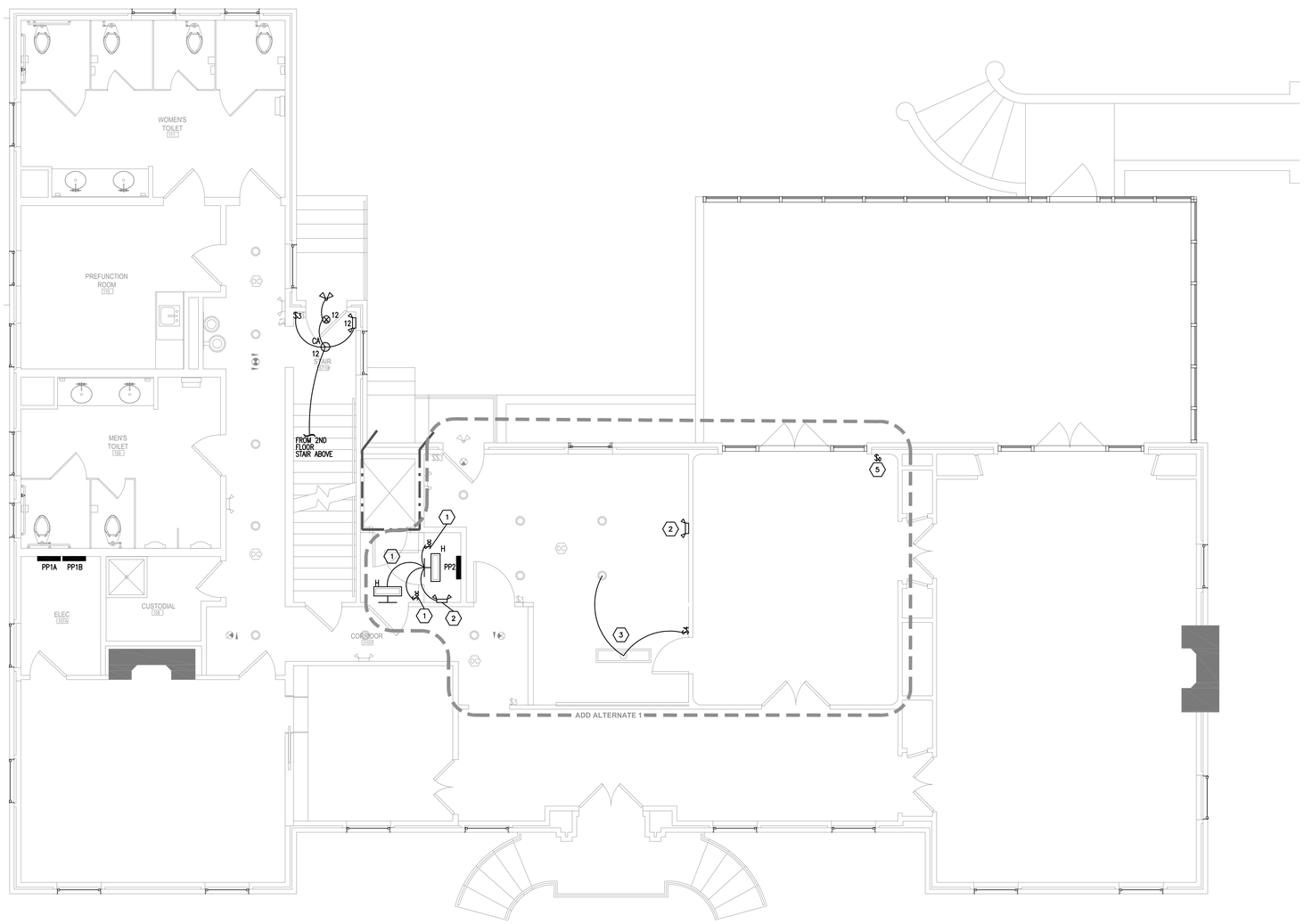
sheet number

E1.1

drawn by RMI
checked by RMI



2 SECOND FLOOR – ELEC LIGHTING
1/4"=1'-0"



1 FIRST FLOOR – ELEC LIGHTING
1/4"=1'-0"

GENERAL NOTES NOT KEYED TO PLAN:

EXISTING FIXTURES TO REMAIN AS IS ARE SHOWN LIGHTWEIGHT.

LIGHTING NOTES KEYED TO PLAN:

1. RELOCATE EXISTING OCCUPANCY SENSOR SWITCH REMOVED DURING DEMOLITION TO NEW LOCATION SHOWN. TIE INTO NEW LIGHTING FIXTURES AND SWITCH AS SHOWN. NEW LIGHTING FIXTURES SHALL BE TIED INTO EXISTING LIGHTING CIRCUIT PP2-13.

2. RELOCATE EXISTING EMERGENCY FIXTURE REMOVED DURING DEMOLITION TO NEW LOCATION SHOWN. TIE FIXTURE INTO EXISTING LIGHTING CIRCUIT PP2-13.

3. PROVIDE NEW 4 WAY LIGHT SWITCH AND TIE EXISTING SURFACE MOUNTED FIXTURE INTO KITCHEN LIGHTING CIRCUIT. ALL FIXTURES IN SPACE SHALL BE CONTROLLED BY THE NEW 4 WAY SWITCH AND EXISTING 3 WAY SWITCHES.

4. INSTALL (4) FIXTURES IN ATTIC. MOUNT FIXTURE DIRECTLY TO STRUCTURE IN ATTIC. COORDINATE WITH MC TO AVOID ALL MECHANICAL EQUIPMENT THAT MAY INTERFERE WITH PROPER LIGHTING OF SPACE. LOCATE ATTIC LIGHT SWITCH AT ENTRANCE OF ATTIC DOOR. COORDINATE.

5. RELOCATE EXISTING LIGHTING SWITCH TO NEW LOCATION SHOWN. EXTEND EXISTING WIRING AND CONDUIT AS REQUIRED.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA
GMK, INC.
No. C00287
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 31520
8/2/19
RYAN MATTHEW INFINGER

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

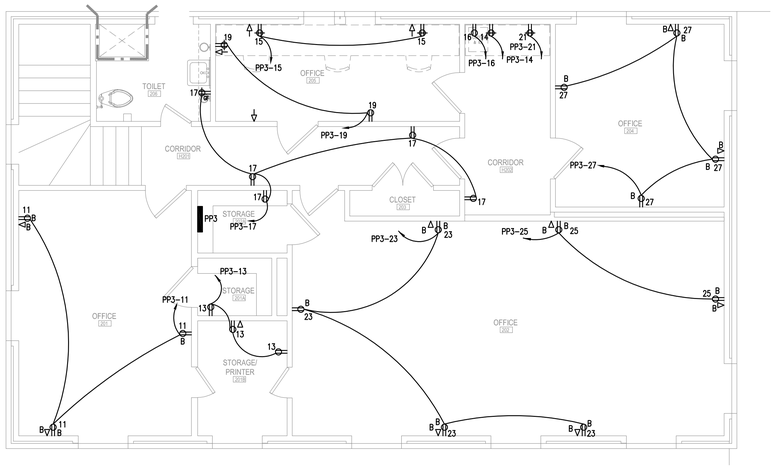
ELECTRICAL LIGHTING FIRST AND SECOND FLOOR PLAN

sheet number

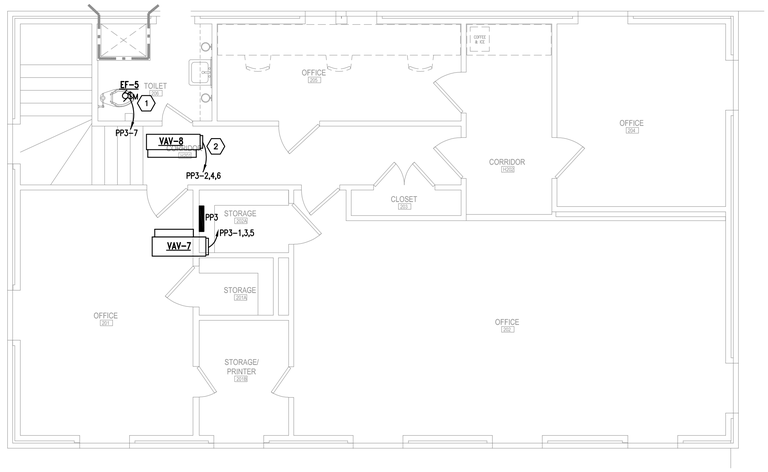
E2.1

drawn by RMI

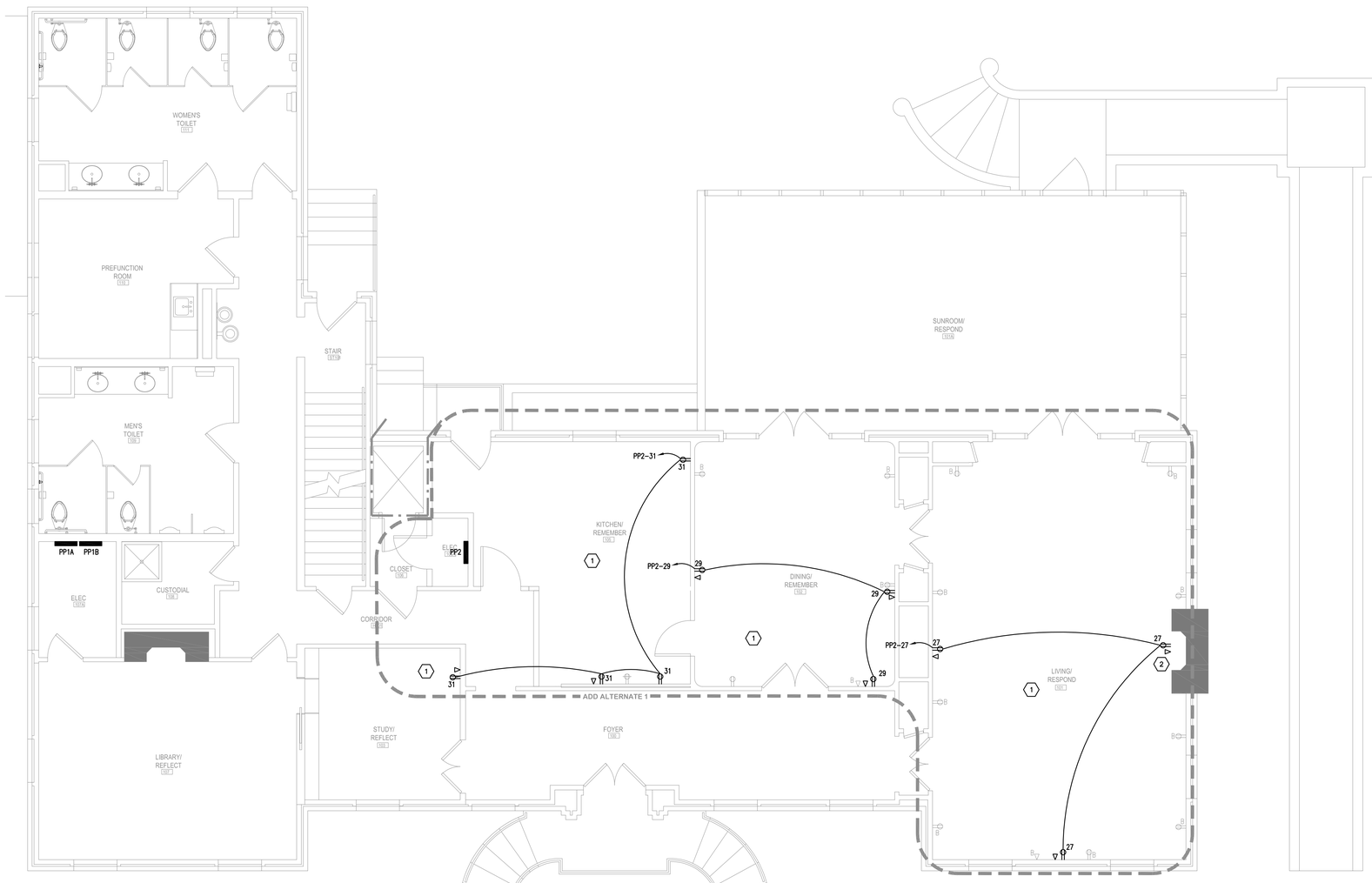
checked by RMI



2 SECOND FLOOR – POWER PLAN – RENOVATION
1/4"=1'-0"



3 SECOND FLOOR – MECHANICAL WIRING PLAN – RENOVATION
1/4"=1'-0"



1 FIRST FLOOR – POWER PLAN – RENOVATION
1/4"=1'-0"

MECHANICAL WIRING PLAN KEYNOTES:

1. CIRCUIT AND SWITCH WITH LIGHTING IN ROOM EXHAUST FAN IS SERVING.
2. CIRCUIT TO DISCONNECT SWITCH FURNISHED BY DIV 23. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS AND COORDINATE LOCATION OF DISCONNECT SWITCH WITH MECHANICAL CONTRACTOR. CONNECT AS REQUIRED.

POWER AND COMMUNICATION NOTES NOT KEYED TO PLAN:

EXISTING DEVICES TO REMAIN AS IS SHOWN LIGHTWEIGHT.

POWER AND COMMUNICATION NOTES KEYED TO PLAN:

1. ALL RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED 54" ABOVE FINISHED FLOOR TO THE BOTTOM OF THE BOX UNLESS NOTED OTHERWISE. COORDINATE EXACT LOCATION OF ALL RECEPTACLES WITH OWNER PRIOR TO ROUGH IN.
2. MOUNT RECEPTACLE AND DATA OUTLET 24" ABOVE MANTLE. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH IN.

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. COO287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 31520 8/2/19 RYAN MATTHEW INFINGER

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

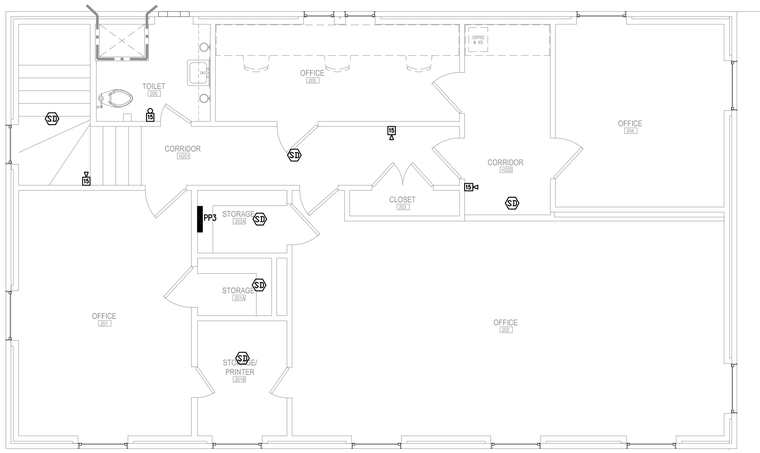
ELECTRICAL POWER AND MECHANICAL WIRING FIRST AND SECOND FLOOR PLANS

sheet number

E3.1

drawn by RMI

checked by RMI



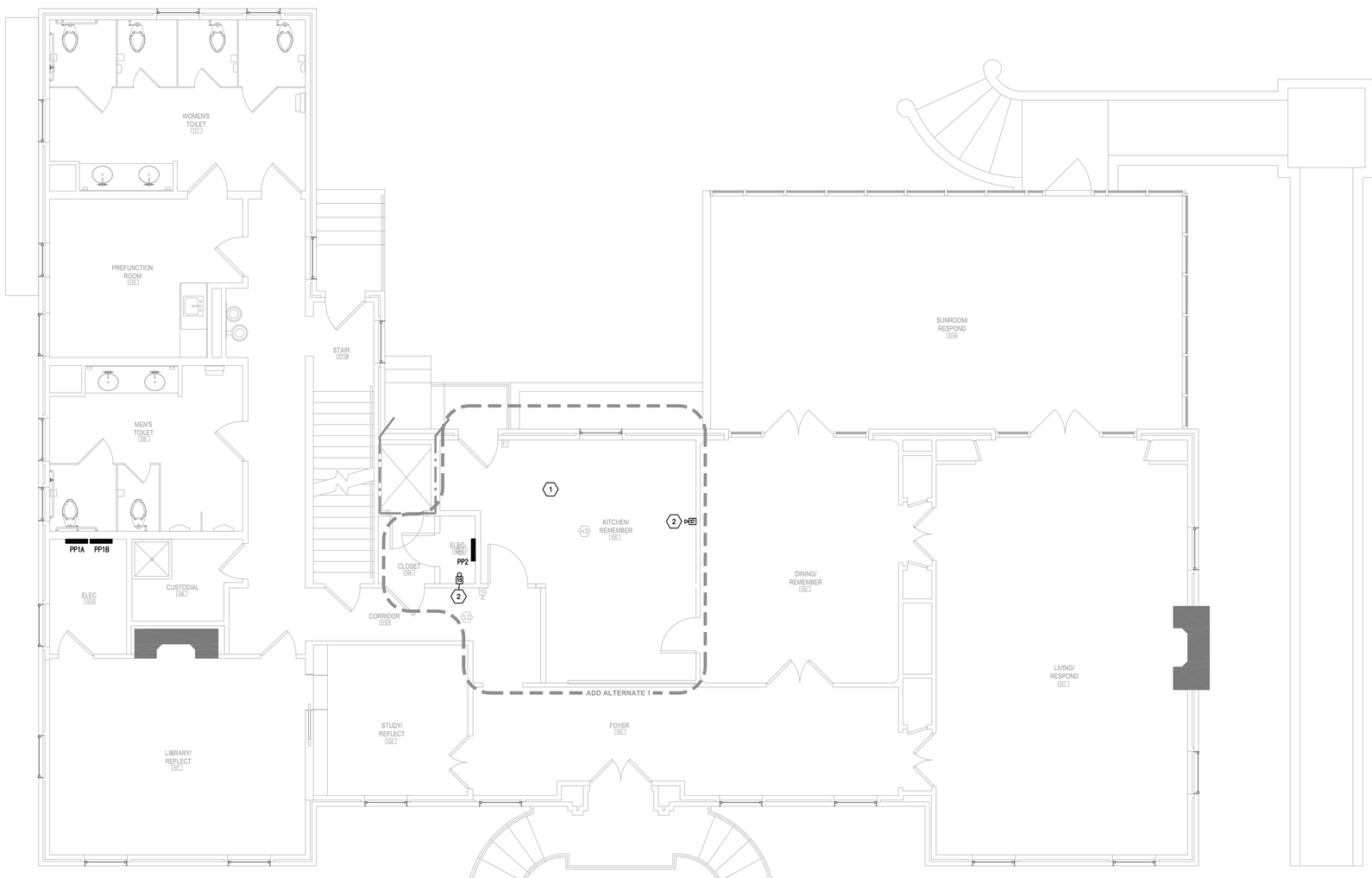
2 SECOND FLOOR – FIRE ALARM PLAN – RENOVATION
1/4"=1'-0"

FIRE ALARM NOTES KEYED TO PLAN:

1. EXISTING FIRE ALARM DEVICES IN RENOVATION AREA TO REMAIN ARE SHOWN LIGHTWEIGHT.
2. RELOCATE EXISTING DEVICE REMOVED DURING DEMOLITION TO NEW LOCATION SHOWN. EXTEND EXISTING CONDUIT AND WIRING TO NEW LOCATION.

FIRE ALARM SYSTEM PARTIAL RENOVATION AND EXTENSION GENERAL NOTES:

1. INCLUDE IN BID ALL LABOR, MATERIALS, PROGRAMMING, ETC AS REQUIRED FOR COMPLETE SYSTEM IN ACCORDANCE WITH THE INTENT OF THESE DRAWINGS.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL COMMUNICATIONS PATHWAYS AS REQUIRED FOR A COMPLETE SYSTEM. COORDINATE ALL PATHWAY LOCATIONS PRIOR TO ANY ROUGH-INS. IF CONDITIONS REQUIRE CONDUIT OR RACEWAY TO BE RUN EXPOSED COORDINATE ROUTING WITH ARCHITECT AND PAINT AS REQUIRED BY ARCHITECT.
3. ALL NEW DEVICES SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM AND NOTIFICATION APPLIANCES SHALL BE CAPABLE OF STROBE SYNCHRONIZATION WITH THE EXISTING DEVICES TO REMAIN IN ALL AREAS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO ENGINEER AND TO AHJ ALL REQUIRED CALCULATIONS AND DETAILS OF RENOVATED SYSTEM. THIS INCLUDES BUT IS IN NO WAY LIMITED TO, POINT TO POINT WIRING DIAGRAMS, REVISED VOLTAGE DROP CALCULATIONS, REVISED BATTERY CALCULATIONS, AND ALL ADDITIONAL DOCUMENTATION REQUIRED FOR APPROVAL BY THE AHJ FOR THE COMPLETE SYSTEM AFTER RENOVATION.
5. PROVIDE ADDITIONAL POWER SUPPLIES, NAC EXTENDER PANELS, OR SIMILAR AUXILIARY EQUIPMENT AS REQUIRED FOR ADDITION OF NEW DEVICES AND RELOCATION OF EXISTING DEVICES AT LOCATIONS REFERENCED ON DRAWINGS.
6. ONLY DEVICES AFFECTED IN AREAS OF RENOVATION ARE INDICATED ON DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND CIRCUITING OF ALL DEVICES IN ADJACENT AREAS TO MAINTAIN OPERATION OF SYSTEM DURING AND AFTER RENOVATION.
7. APPROVAL AND PERMIT SHALL BE OBTAINED BY THE AHJ PRIOR TO COMMENCING ANY WORK.
8. PROVIDE RECORD OF COMPLETION TO ENGINEER AND AHJ PER NFPA 72.
9. EXISTING FIRE ALARM SYSTEM MANUFACTURER: GAMEWELL FCI



1 FIRST FLOOR – FIRE ALARM PLAN – RENOVATION
1/4"=1'-0"

REQUIRED WORK SEQUENCE:

A. Construct Work in stages during construction period:
   1. Stage 1: [2nd Floor alterations]. Achieve full certificate of occupancy, including life safety system operational inspection and all other final completion requirements, by October 16, 2019.
   2. Stage 2: [1st Floor alterations (if alternate is accepted)]. Achieve full certificate of occupancy, including life safety system operational inspection and all final completion requirements, within 105 calendar days from the Date of Commencement.
B. Coordinate construction schedule and operations with Owner.
C. Work on the 1st floor that supports the Work on the 2nd floor functionally (such as ducts, shafts, vertical piping and infrastructure, etc.) is to be included in Stage 1 work.

GMK ASSOCIATES, INC.

Design/Planning/Construction
1201 Main Street, Suite 2100
Columbia, S.C. 29201
tel. 803-256-0000
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

UNIVERSITY OF SOUTH CAROLINA

USC CAMPUS PLANNING AND CONSTRUCTION
1300 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29208

project name

BARRINGER HOUSE RENOVATIONS

State project number

PROJECT # FP00000285

GMK project number

PROJECT # 16070.03/H27-D339-ID

seals/signature

SOUTH CAROLINA GMK, INC. No. C00287 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 31520 8/2/19 RYAN MATTHEW INFINGER

issued for

CONSTRUCTION DOCUMENTS

date

AUGUST 2, 2019

number	item	date

key plan

N

sheet title

ELECTRICAL FIRE ALARM FIRST AND SECOND FLOOR PLANS

sheet number

E4.1

drawn by RMI

checked by RMI