DENMARK HALL

Historic Structure Report

Denmark Hall, Photograph © UGA

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TABLE OF CONTENTS

I. DENMARK HALL: A CONCISE HISTORY

Situated to the far west side of the University of Georgia's (UGA) North Campus, Denmark Hall has gone through a variety of uses in its 115-year history. From dining hall to historic preservation headquarters, Denmark's interior has been purposed and re-purposed, while its exterior has remained almost true to design. Somehow, in all its years, this historic building has slipped by unnoticed by most faculty, staff, and students at UGA. As such, there is a multitude of concerning issues. It is time to finally bring Denmark into the 21st century.

Named for Brantley A. Denmark, the leader of the first alumni fundraising drive, the university built Denmark Hall in 1901 as the campus' first dining hall. The same grant that funded Candler Hall provided money for Denmark. Clarke County's commission lent the school convict labor to use in the structure's construction [1]. As a mess hall for students, Denmark was nicknamed the "beanery," an unflattering allusion to its food. Fortunately for the students, while the food was less than satisfactory, the amenities were quite tasteful. Sterling silver salt and pepper shakers, berry and bonbon spoons, porcelain egg cups, blue glass-and-silver salt cellars (1.1, 1.2) — all were hand-engraved with "D" or "Denmark Hall;" these were the kinds of tableware provided.

Fig. 1.1, 1.2: Rebecca McManus. *Porcelain egg cup* and *silver salt shakers*, both labeled with the dining hall's name. February 2016. Photographs.

Upperclassmen usually filled the student positions at Denmark, as they were considered more responsible and "able to exercise a stronger influence on the body of student who patronize the Dining Hall" [2]. A little farm situated itself behind the building, providing eggs and pork and other goods to the kitchen. At some point in the coming decades, the exterior porch would be filled in with windows.


Fig. 1.3, 1.4: Photographer unknown. *Interior of dining hall with students* and *interior of dining hall*. 1905-1915. Photographs.

Not much is known about the next fifty years, but the building continued to be a dining hall up through the 1950s. Professor Ingram took charge of Denmark in 1921, while the matron continued to be Mrs. Kinnebrew. The farm was removed with the addition of Brooks Hall in 1928. An addition to the building was suggested in 1936, but this was never completed. A 1939 postcard shows that at that point Denmark's exterior was covered in yellow stucco and white columns. Rumor has it that the building was used as an infirmary during World War II; however, there is no evidence of this, as 1945 floor plans show that it was still a dining hall. Come the early '50s, a luncheonette called "The Co-op" took up residence in Denmark's basement. In 1956 UGA's Landscape Architecture program moved in to occupy the entire building. (1.5)

Fig. 1.5: Photographer unknown. *North façade of Denmark Hall as the Landscape Architecture Building*.

1960s-70s. Photograph.

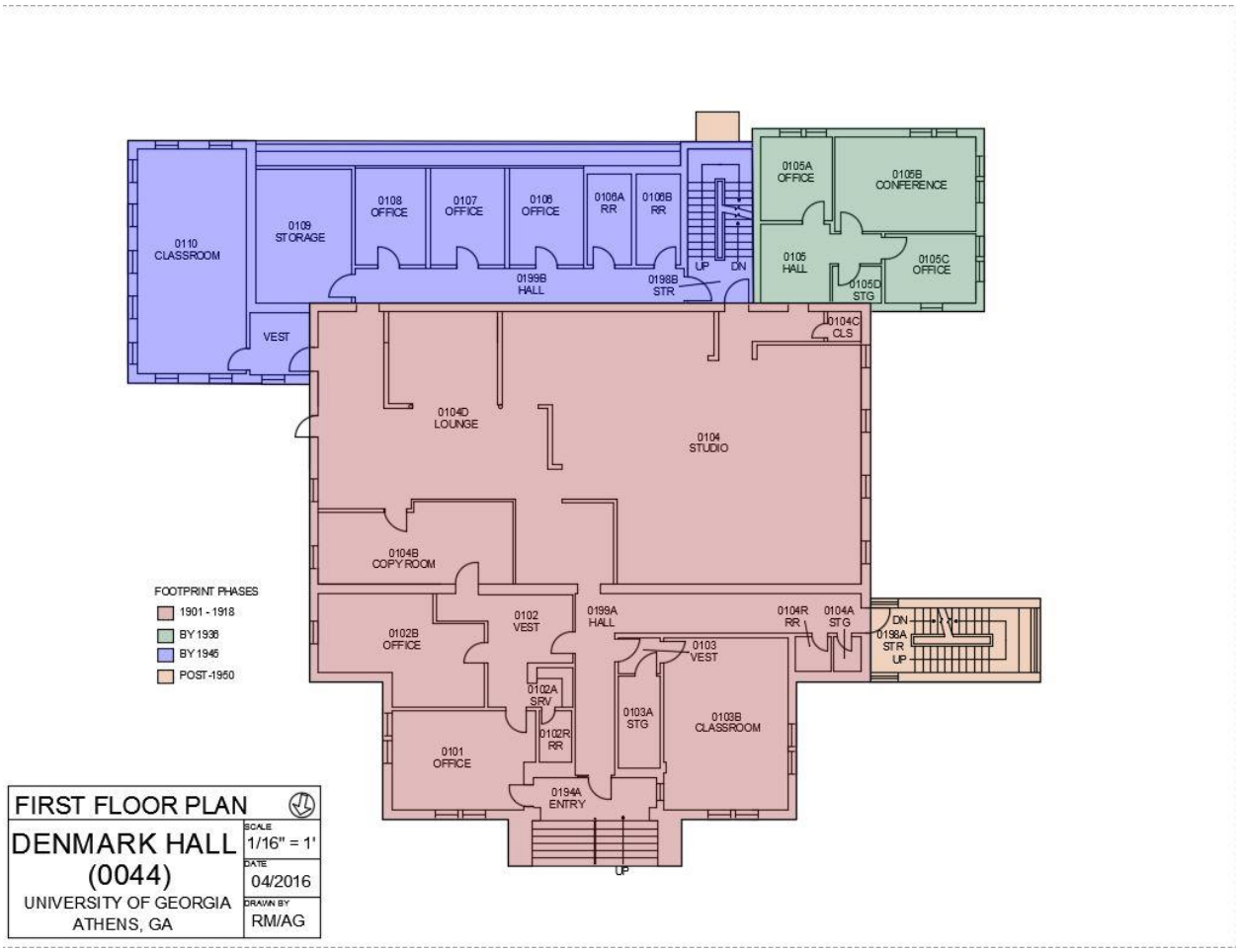
From that point on, very little change occurred. A sculpture by sculpture professor Jack Kehoe was placed in front of Denmark at his retirement in 1973. Sixteen years later the AC system was replaced by Tolson, Simpson and Associates; the same firm replaced the AC in the Physical Education buildings. When the Historic Preservation department was created in 1987, they moved into Denmark. By 1995 the building had reached its current form. A 1996 plan for renovation designed by Roberts-Collins never achieved fruition, and UGA's Physical Plant grounds department led the landscape renovations in 2000. The Landscape Architecture department moved out of Denmark Hall in 2012 with the completion of the rehabilitation of the Jackson Street Building, formerly the Lamar Dodd School of Art.

In the 115 years that Denmark Hall has existed, surprisingly little has changed. For those concerned with the integrity of the building, this is good news. For those actively using the building, this can be somewhat of an issue. With no renovations in the past 20 years, and with nothing substantial updated in close to 30 years, the current condition of the building is concerning. Very little effort has been put into maintaining Denmark, and its age has been showing for over a decade. For a building with such initial necessary use to the development of North Campus, this lack of interest is worrying.

[1] Convict labor
[2] Correspondence between Dean Snelling and W.V. Lanier in 1912

II. DEVELOPMENTAL HISTORY

The developmental history of Denmark Hall has been broken up into four different phases, as seen and labeled below. Phase 1 consists of the period between construction (1901) and 1918. Phase 2 consists of changes that have occurred by 1936, Phase 3 by 1945, and Phase 4 being post-1950.



PHASE 1: 1901 – 1918 (RED)

No floorplans for the 1901 structure survive, but a 1903 Sanborn map shows that the building's overall shape contains three rectangular blocks with a porch on the north façade. The dimensions of the brick foundation walls still extant in the building (the 2'3" foundation walls) show that the north and central blocks were the main building and that the southern block, labeled 'kitchen,' was likely a less permanent structure.

The 1908 Sanborn shows the same building footprint, with the addition of three outbuildings (shown in yellow), including a henhouse. The building and outbuildings remained unchanged at the time of the 1913 Sanborn. At the time of the 1918 Sanborn, the main building footprint stayed the same but the outbuildings were reconfigured.

PHASE 2: BY 1936 (GREEN)

A floorplan and elevations from 1936 show what may be the addition of a dining room to the southwest side of the main dining block. These drawings seem to match up with floorplans from a short time later.

PHASE 3: BY 1945 (PURPLE)

By 1945, the rear kitchen block was replaced or added to. This constitutes the building's south wing, which occupies much the same footprint as it does today. A set of undated plans seem to show an alternate proposal or intermediate construction of this same wing.

PHASE 4: POST-1950 (ORANGE)

There is no documentation of exactly when the west stair tower was built, but it is likely during the 1960's or 1970's renovation of the building. This renovation resulted in the layout and finishes seen today.

The HVAC system was replaced in 1989 and has not been upgraded since. There is not data on when the plumbing and electrical systems have been upgraded. There is still evidence of the now-defunct knob-and-tube wiring. All visible plumbing has been upgraded from lead.

III. EXISTING CONDITIONS & CONDITIONS ASSESSMENT

The conditions of the rooms on each floor were graded on a three-point sale of Poor, Fair, and Good. It should be noted that while many of the following rooms were concluded to be in "Good" condition, this is strictly from a structurally-sound standpoint and not from an aesthetic or historically appropriate standpoint. The existing conditions section will begin with an exterior assessment of each elevation of Denmark Hall, and conclude with interior assessments from the basement level up.

1. NORTH FAÇADE

Denmark Hall is a Neoclassical Revival building constructed during the early years of the style's popularity (1901). Nowhere on the building is this better reflected than the north elevation, or, the primary façade from which the building can be entered. The first floor displays a continuous belt course that runs around the entirety of the historic footprint of the building, approximately four feet from ground level, and the entrance is flanked by squared, engaged columns with Doric capitals. These columns are also subject to the building's belt course. The front doors to Denmark, once flanked by an additional two columns in the Doric style (removed), were replaced mid-century by a single door with a sidelight and transom light. The double windows on both sides of Denmark Hall's entrance are double-hung sash windows, all of which are painted shut. There are two lights in each sash, making a total of four panes per window. Each set of double windows has a decorative column, made of turned wood, between them: this column does not comply with any particular architectural order, looking like a mix

between Etruscan columns and Doric columns.

Where the engaged columns flanking the entrance meet the edge of the building's roof there is a decorative cornice and dentils. The first floor once supported an open porch with a row of five columns (supporting the second story roof) and surrounded by a low balustrade. This balustrade has since been removed, and the open porch closed with a contemporary window wall that does not comply with the historic character of the building. Above the window wall is a decorative architrave, frieze, and cornice. The right side of the north elevation "porch" has a single door that opens out onto the roof.

While the decorative cornice on the edge of the former porch is in sore need of repair (the almost-nonexistent gutter system retrofitted into it has no actual downspouts), the former porch itself is suffering an immense deal of damage. The majority of this damage is from issues both related to water and extraneous equipment (wiring, plumbing, pipes, air conditioning systems, et cetera) that still clings to the building's walls. Much of this satisfies no purpose and is non-functional. The louvered windows cannot easily be opened without a special crank, and there is no weather-strip on the door that leads into the interior of the building.

The roof here itself is extremely problematic and this is largely due to its change from an open porch to covered asphalt. In its time, the porch would have been angled toward the north façade, to better facilitate the drainage of water. Currently the asphalt roof has no slope and therefore water pools on its surface. This has led to extreme cases of water penetration along the running board at the base of

the window wall, and in various pockets spotting the roof. The asphalt itself is long past its due date for replacement, cracked in many places and bubbling up from the roof. Close to the window wall and on the left edge of the former porch it is evident that mosses and lichens have been growing on the asphalt. The gutters are full of organic detritus and two vents peeking out from the middle of the roof have not been appropriately waterproofed. Most of running board along the window wall has been "repaired" with bathroom caulking, which is neither appropriate nor beneficial in the long run. Its removal would damage original historic elements of Denmark Hall. On the right side of the former porch is a nun-functioning air conditioning unit.



The center of the porch has recently – within the last month – sustained a halfhearted attempt at redirecting water on the rooftop and mitigating the sorry state of the gutters attached to the historic cornice. This PVC pipe, installed haphazardly to the gutter and the exterior wall, leads water two feet from the window wall to pool on the asphalt sheathing of the first story roof, where it then sits.

2. EAST FAÇADE

The east façade of Denmark Hall features the same belt course, stone-laying pattern, and decorative cornice (on the second-story roof edge). There are thirteen bays total on the first floor, and five bays on the second floor. The northeast corner of the first floor has another set of double windows, not unlike those flanking the engaged columns on either side of Denmark Hall's entrance. This double window has the same decorative column-shaped separator. Each bay is a double-hung sash window and each sash is fitted with two lights, giving each window four lights. All bays have been painted shut in the last fifty years and cannot be opened. The northeast corner of the building also suffers some of the worst water penetration and wood rot, but this could be due to a number of the following reasons:

- the trees on this side of the building are much larger and extend over the first story, depositing organic material on the former porch
- the connecting overhang between Denmark Hall and Caldwell keeps the eastern façade perpetually in the shade so that rainwater cannot evaporate and sinks into the ground around the foundations
- the grade of the landscaping has been raised multiple times over the course of Denmark Hall's history, and is now at least two feet higher than it was originally

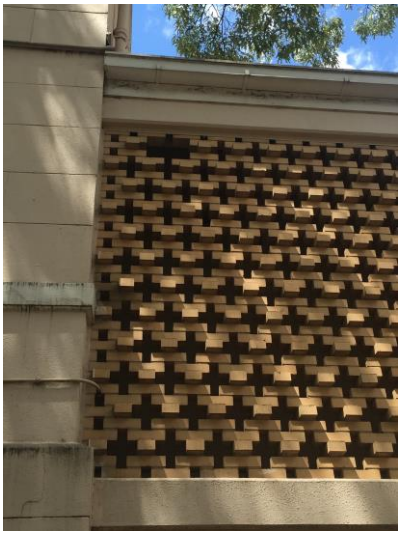
The eastern façade also has the cornerstone of the building, and the changing grade is most evident here: a protective barrier of concrete has been built around the cornerstone, as it sits a foot below grade. This side of the building also has an abundance of needless and nonfunctioning equipment, including multiple wires and pipes.



3. SOUTH FAÇADE

The south façade of Denmark Hall is the widest and spans a number of different levels. It also has the newest additions to the building, contributing a large amount of square footage by 1945 that includes offices, storage space, and classroom areas. The southwest corner of Denmark Hall has two characteristic double-windows on the first floor, added to contribute to the original design of the building. The remainder of the first floor features an enormous window wall that spans the length of three offices for professors. This window wall is shielded by a screen wall constructed of brick on stone piers that attach to the basement level. This screen wall is not structural in any regard, and the mortar has been compromised to the extent that several bricks have fallen from place.


The second story of the south side of Denmark Hall has three windows, all of which are double-hung sash windows (with the characteristic two lights per sash, making four lights total per window). All but one window are painted shut. These windows look out onto the newest addition's roof, which has little slope. Fortunately, the south side of the building receives the most sunlight during the day, and therefore has few issues with water penetration or moisture damage. Less promising are the multitude of tension cracks in different areas spanning the entire exterior wall, and the parts of the roof that are placed directly under the trees surrounding Denmark. Many of the gutter placements do not make sense, and water drains directly onto the roof, where it pools. The tension cracks are primarily located under the small, single-light windows dotting the exterior wall of the basement computer lab, which can be accessed through the south side of the building.



Another problem with the south side of Denmark Hall is an excess of equipment (pipes, wires, air conditioning units) that is non-functional and serve no purpose to the building. They add to the load that the building must support, and have been largely painted over to "camouflage" them. This attempt has been ineffective, at best.

4. WEST FAÇADE

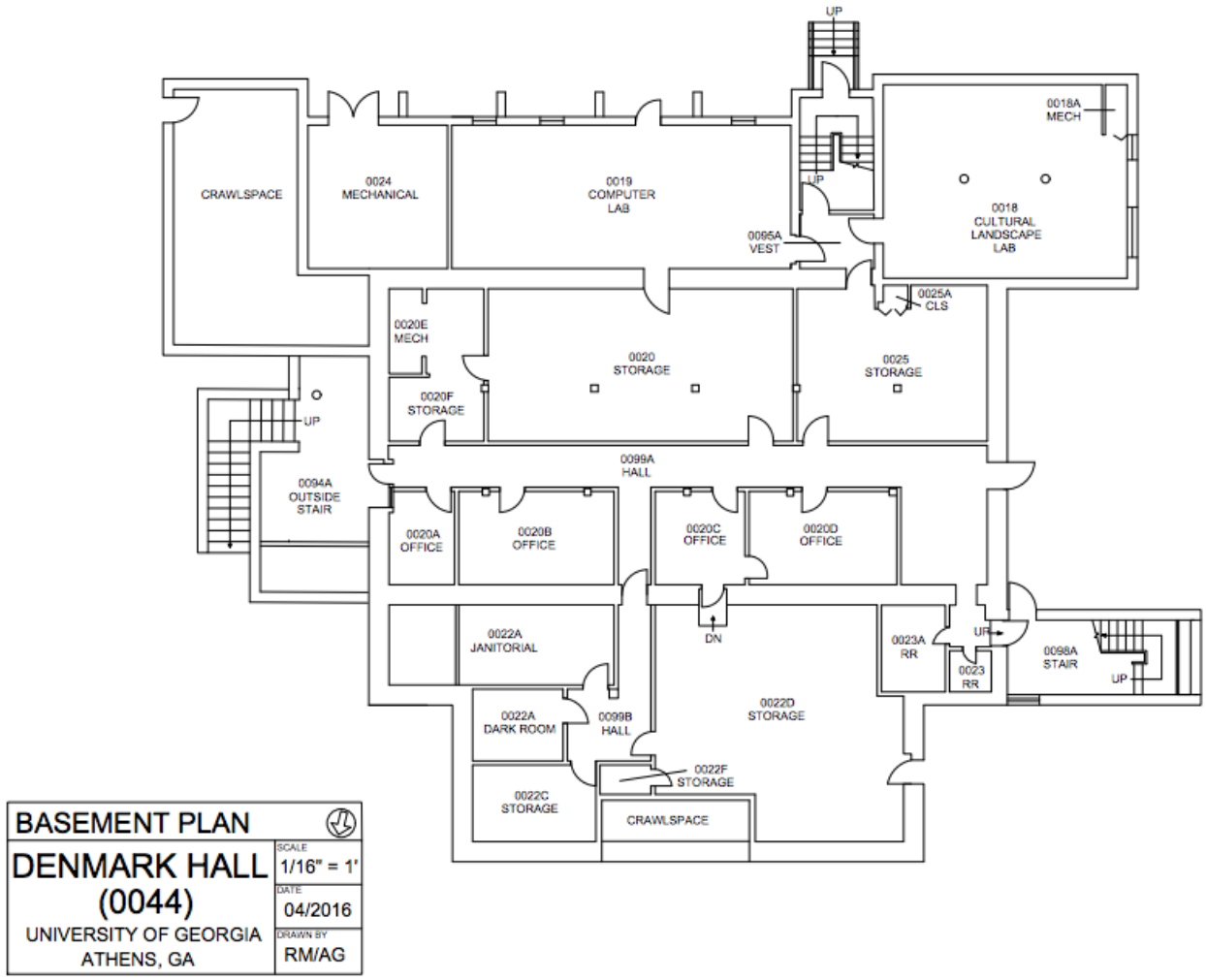
The west façade of Denmark Hall consists of the by-1935 addition, the original building, and post-1950 exterior stairwell. This side of the building has seven bays on the first floor, two of which are double-windows, and all of which feature the characteristic two-over-two lights in a double-hung sash. A door from the basement level opens out onto the drive adjacent to Denmark Hall, as well as a door from the southeast corner of the exterior stairwell.


This side of the building does not suffer any serious moisture damage except in the southwest corner, which is where the Cultural Landscapes Lab is located. Reports have stated that the CLL flooring has withstood intensive and persistent water penetration, which has caused minor flooding and forced many of the interior floor tiles to peel away. The small windows looking into the Cultural Landscapes Lab, built into the by-1935 addition, have been mostly blocked up (partly with a vent) due to a threat of burglary. The decorative keystone lintel over the windows is precisely that: decorative, and etched into

the stone rather than being structural.

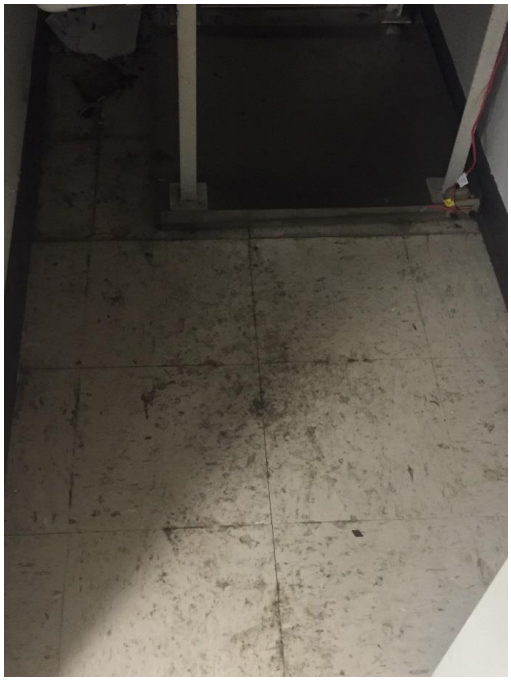
Denmark Hall's west side features four bays on the second floor, all of which have the characteristic two-over-two lights in a double-hung sash. Three of the four open into offices for professors. As with the rest of the original part of Denmark Hall, this side of the building features a decorative cornice that meets the contemporary standing-seam roof. Similar to other sides of Denmark Hall, the west side has an excess of superfluous equipment (pipes, wires, air conditioning units) that is non-functional and serves no purpose to the building.

5. BASEMENT LEVEL



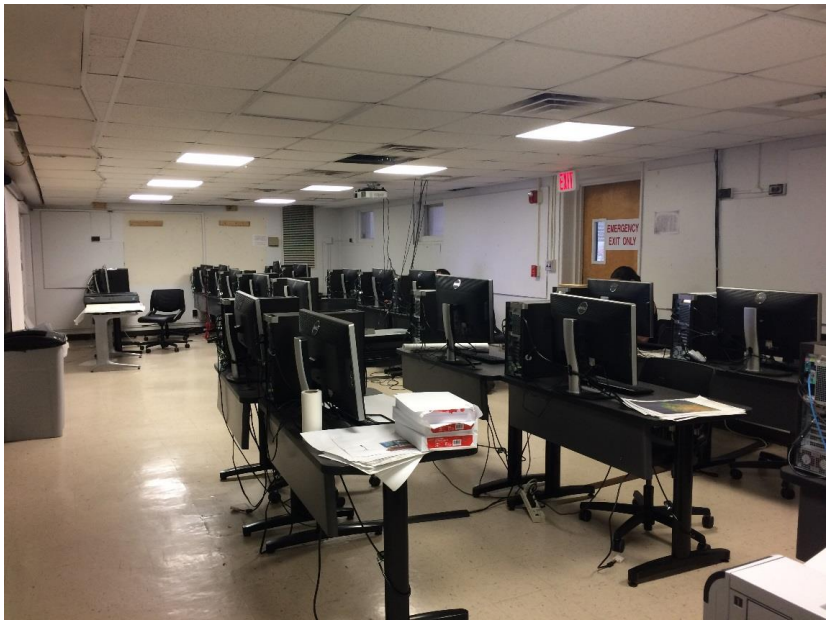
0018
Room 0018 currently houses the Cultural Landscape Lab, which aims to assist in cultural landscape management. It is a large room with tile flooring, drywall, and a drop ceiling. This room is subject to damp and flooding, and as such the tile flooring adhesive is coming loose and seeping between the individual tiles. It is in poor condition.

0018A
Room 0018A is an extension of the Cultural Landscape Lab and its features are the same. The mechanical room has sustained some of the worst water damage. It is in poor condition.



0019

Room 0019 is Denmark Hall's computer lab. A large rectangular room with a gradual slope in grade, it has vinyl tile flooring, drywall covered in pin board, and a drop ceiling. The height of the room to the drop ceiling is approximately 7'2". The pin board has many areas covered in mold, primarily in the corners. Other elements are in fair condition.



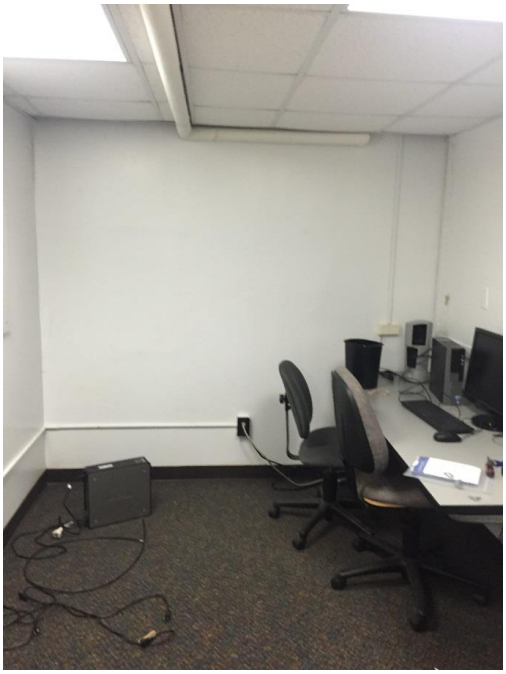
0020

Room 0020 is immediately adjacent to the computer lab and currently an open storage room, holding extra drafting tables, regular desks, and an assortment of other furniture. Also rectangular, it has vinyl tile flooring, drywall, and a drop ceiling. The ceiling height here is 7'0".

Behind the drop ceiling is some acoustic tiling. This acoustic tile is particularly damaged and crumbling. The original ceiling, as well as the rest of the flooring and walls, seems to be in good condition.



0020A
0020 is a small office space. It has carpeting, drywall, and a drop ceiling. It is in fair condition, and smells of mold.



0020B
0020B is a larger rectangular office space currently being used as storage for large wooden crates. It has carpeting, drywall, and a drop ceiling. It is in fair condition, and smells of mold.

0020C

0020C is a small office, also currently being used as storage. It has carpeting, drywall, and a drop ceiling. It is in fair condition, and smells of mold.

0020D

0020D is an office being used as a Building Materials Conservation library. Larger and rectangular like 0020B, it has carpeting, drywall, and a drop ceiling. It is in fair condition, and smells of mold.

0020F
0020F is a storage room that houses a tiny mechanical closet. It has vinyl tile flooring, drywall, and a drop ceiling. It is in fair condition.

0020E
0020E is a mechanical room. Small, it has vinyl tile flooring, drywall, and a drop ceiling. The ceiling height is 7’0”. It is in fair condition.

0022A
0022A is an unfinished custodial closet. The floor is concrete, the walls are brick and concrete, and the ceiling is open to the underside of the original flooring from the first floor. The concrete flooring has calcium built up in some areas, likely a by-product of the small washing machine that custodial staff uses, but the walls and the ceiling are otherwise in good condition.

0022B

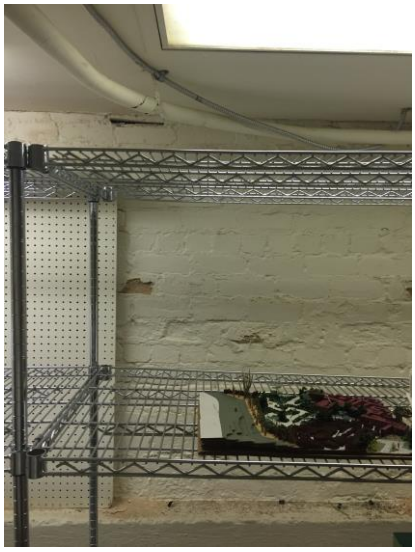
0022B is former dark room, now storage room. There is a contemporary antechamber to the interior room, made of wood and drywall, which was intended to keep light out while developing film. The room has vinyl tile flooring, concrete block interior walls and brick exterior walls, and acoustic tile ceiling.

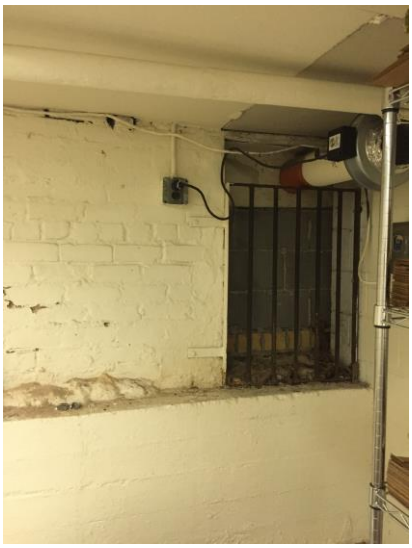
The brick exterior walls have severe deterioration and efflorescence. The interior concrete block walls and acoustic tiles are in fair condition.

0022C

0022C is yet another storage room with barely anything in it. It has wall-to-wall shelving. The floor is concrete, the walls are painted concrete block and brick, and a drywall ceiling. Said ceiling is 7’0” at height.

The walls have severe deterioration, efflorescence and spalling in the concrete block sub-foundation. The ceiling has mild damp, but in fair condition.

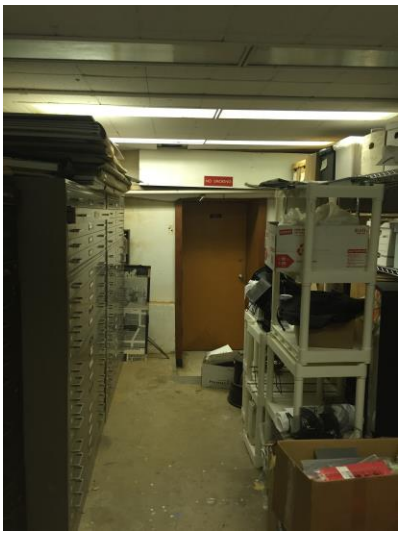




0022D

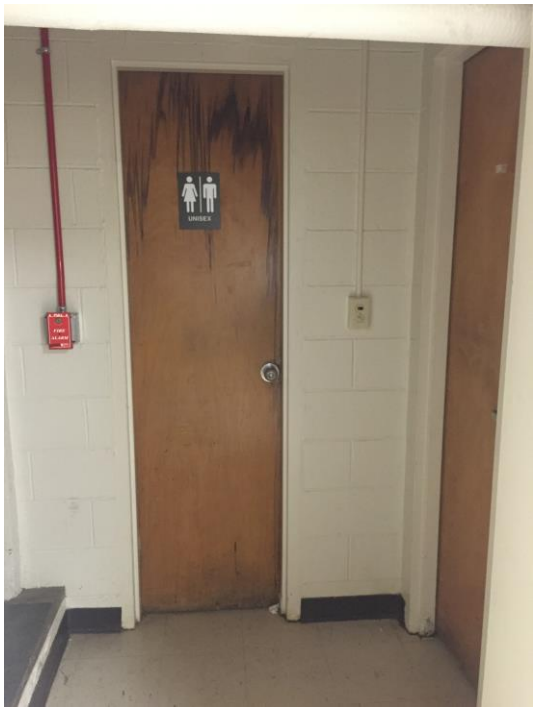
0022D is a former model-making shop, now utilized as excess storage for the Landscape Architecture program. With an irregular shape, it is one of the largest rooms in Denmark Hall. Its walls are brick and concrete block, with concrete flooring, and an acoustic tile ceiling.

The brick in the north wall is immensely deteriorated; almost dust, while the northeast corner of the ceiling is saturated with water penetration. The flooring is fair and the acoustic tiles have been tremendously damaged by moisture. It is possible there is a leak somewhere in the ceiling. Much of the equipment in this room is non-functional, and the bricks on the north wall are spalling. Salt crystals have formed on the mortar.



0022F
0022F is a storage unit, with concrete flooring, concrete block walls, and a plaster ceiling. It is in good condition.

0023M
0023M was the men's restroom, now unisex. It is very small, with the door hitting the toilet as it opens. It has vinyl tile flooring, plaster and concrete walls, and a concrete ceiling. It is in poor condition, as the bricks and concrete on the west wall of the restroom sustain spalling and efflorescence.



0023W
0023W was originally the women's restroom, now unisex. It is larger than the former-men's, has vinyl tile flooring, plaster wall and brick walls, and a concrete ceiling. The floor has some water damage and the walls have sustained efflorescence: salt crystals have formed on the concrete.

0024
0024 is mechanical and inaccessible to the researchers.

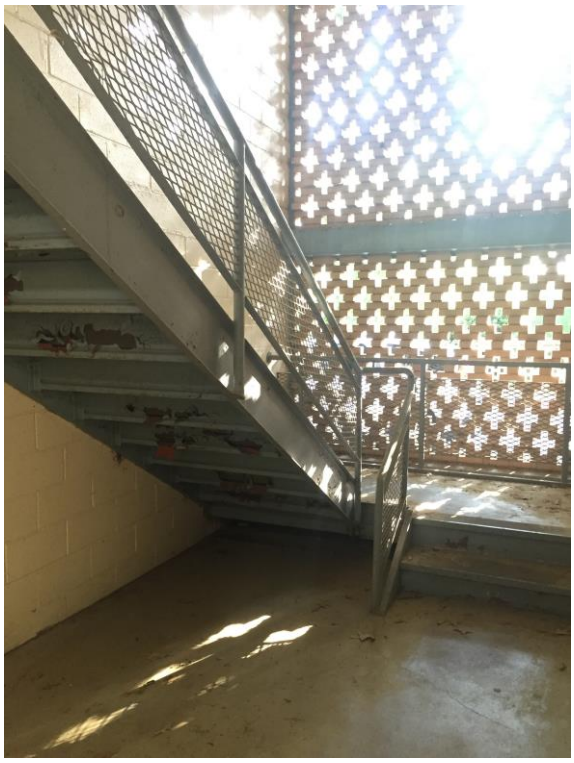
0025
0025 is the Cultural Landscape Lab storage room. It has vinyl tile flooring, drywall, and a drop ceiling. It is in good condition.

0025A
0025A is the Cultural Landscape Lab mechanical room and inaccessible to the researchers.

0094A
0094A is an outside stair. It has concrete flooring, concrete walls, and an inaccessible ceiling. The flooring, walls, and ceiling are in poor condition.

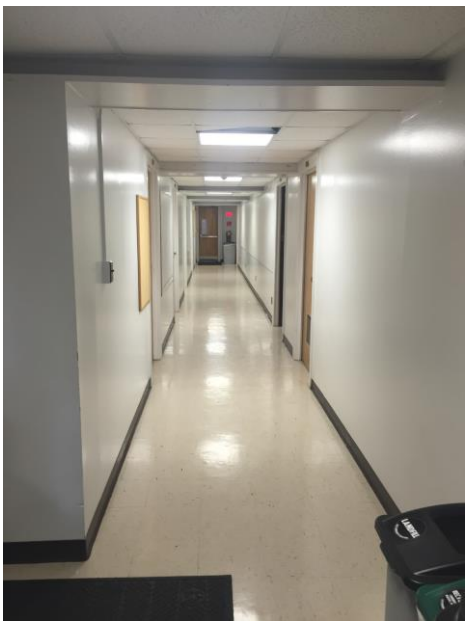
0095A
0095A is a vestibule from the south stairway. It has vinyl flooring, concrete walls, and a concrete ceiling. It is in fair condition.

0098B
0098B is another stairway. It has concrete flooring, concrete and brick walls, and a concrete ceiling. The paint is peeling and has exposed the metal beneath it. It is in poor condition.



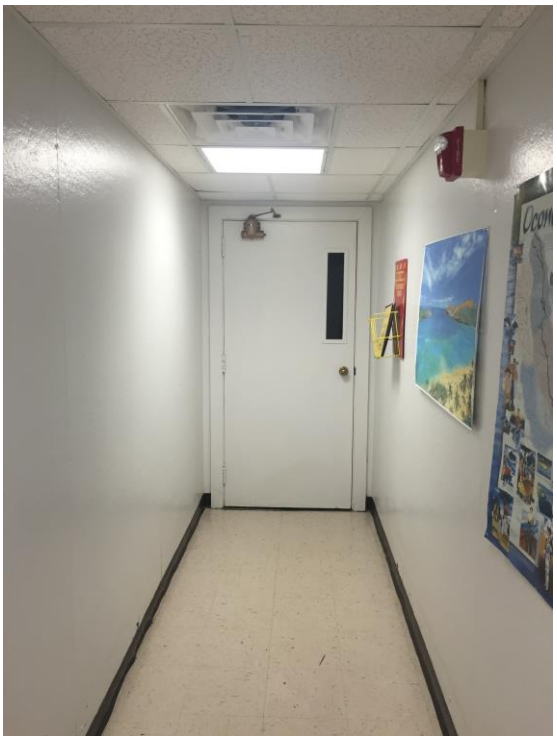
0098A
0098A is a stair on the west side of the building. It has a decorative brick screen wall, concrete flooring, concrete and brick walls, and a concrete ceiling. The stair itself needs repainting. The flooring, walls, and ceiling are in fair condition.

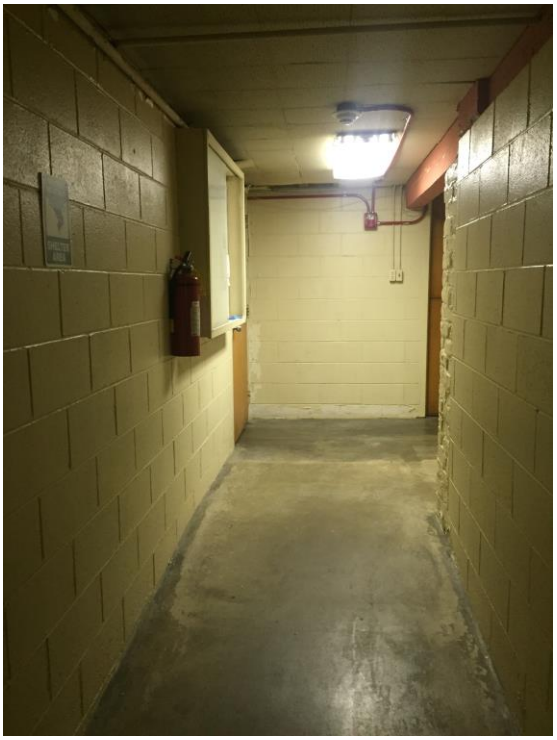
0099A
0099A is a hallway running the length of the basement, east to west. It is situated between 0020 and the 0020A-D offices, and it opens to the 0094A stair and a western entrance. The hall has vinyl tile flooring, drywall, and a drop ceiling. It is in good condition.



0099B

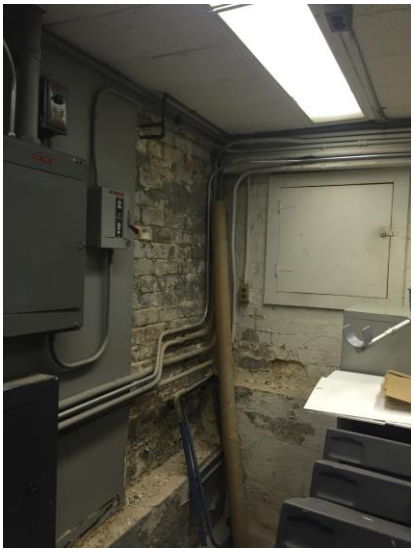
0099B is a hallway originating from the 0099A hall, between 0020B and 0020C, and dead-ending into the north wall of Denmark. A door severs the passage between the two halls. The hall leads to the 0019 and 0022A, C, F, and D storage units. It has concrete flooring with a slight incline, concrete block walls, and an acoustic tile ceiling. There is an original exposed beam in fair condition, as well as some water stains. The floor, walls, and ceiling otherwise are in fair condition.



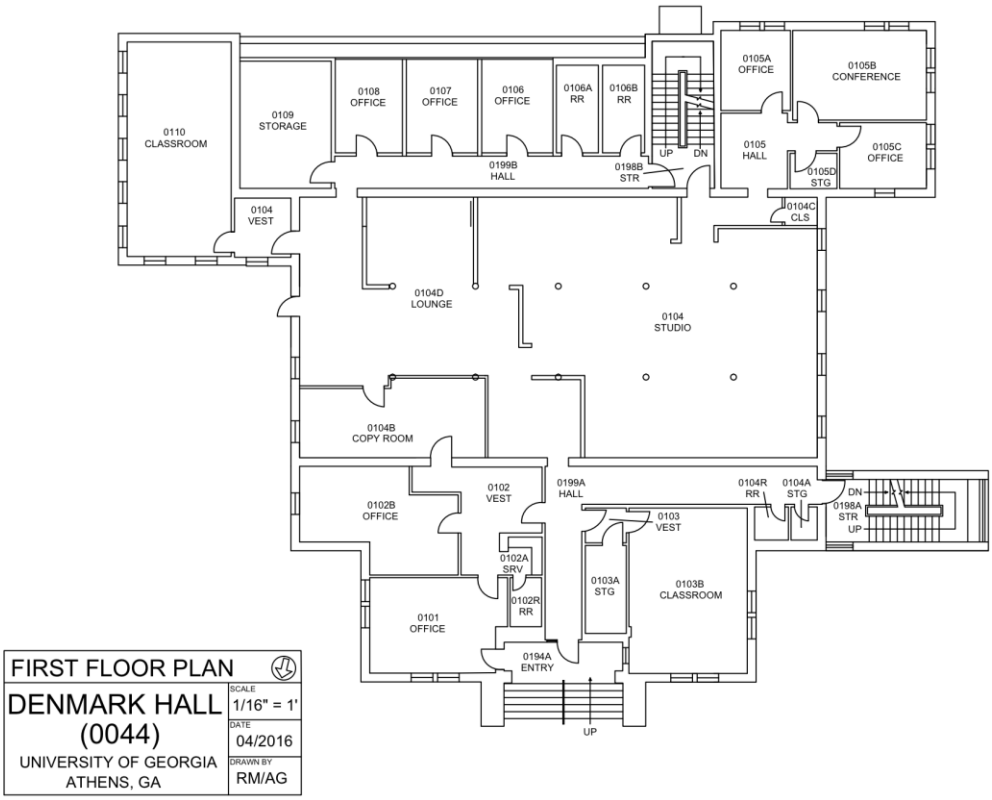


Unexcavated
There is an unexcavated crawlspace in room 0022D, just under the north wall of Denmark Hall. It is full of debris, possibly from the model shop years. The walls are brick with a soft and white lime mortar. The ceiling is concrete.

This is a major source of strain and one of the predominant issues in Denmark Hall. The walls glitter with efflorescence and the brick decay is catastrophic, particularly on the north wall. There is a 2' long tension crack on the south wall running at a 45-degree angle. The concrete ceiling has suffered iron oxide jacking: the concrete itself has deteriorated and the rebar is exposed. This is a serious structural issue, as this failure of a support system is immediately underneath Denmark Hall's entrance steps.



6. FIRST FLOOR

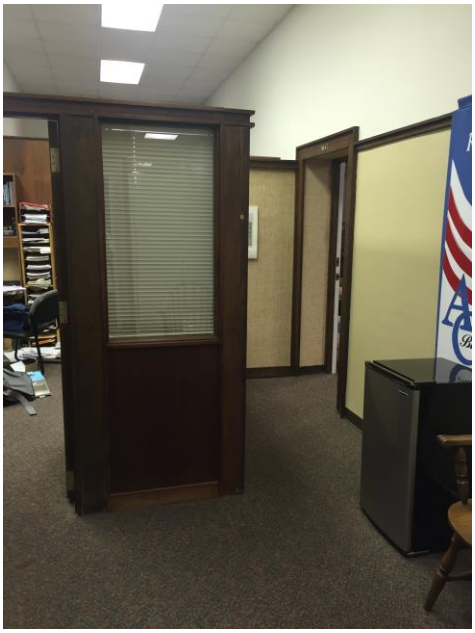


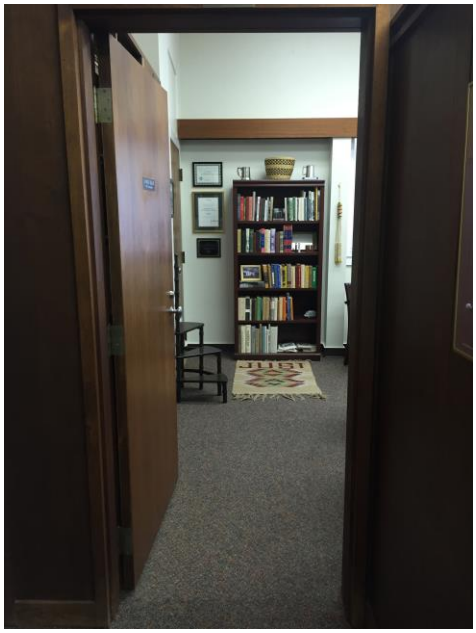
0101

0101 is the graduate coordinator's office. A large room, it has an exterior entrance. It has carpeting, drywall, and a drop ceiling. It is in fair condition, but some of the original features have been covered up with extraneous material for no apparent reason (see window, at left).

0102

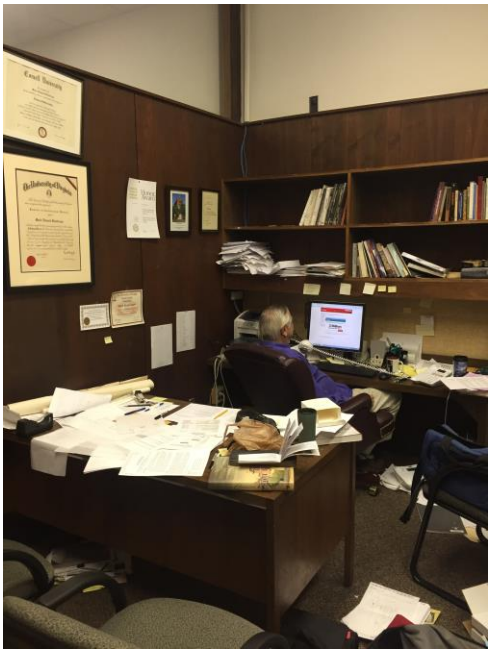
0102 is the vestibule leading to a set of offices. It has carpeting, drywall, and a drop ceiling. It is in fair condition.





0102A
0102A is a service area, mostly consisting of shelving. It has carpeting, drywall, and a drop ceiling
It is in good condition.

0102B
0102B is a large office space with partition walls. It has carpeting, drywall, and a drop ceiling. It is in good condition.



0102R
0102R is a small private restroom. It has vinyl tile flooring, concrete block walls, and a drop ceiling. It is in fair condition.

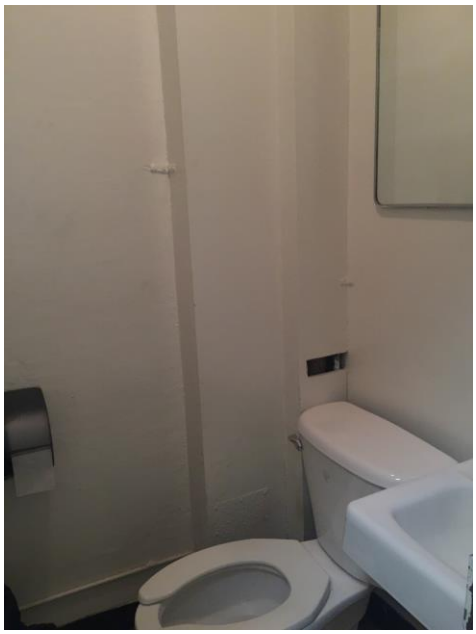
0103
0103 is a vestibule leading to a classroom and which contains a storage room. It has carpeting, drywall, and a drop ceiling. It is in good condition.

0103A
0103A is the storage room in the vestibule. It is inaccessible to researchers.

0103B
0103B is the first and largest of two classrooms in Denmark. It has carpeting, pin board and drywall, and a drop ceiling. It is in good condition.

0104
0104 is the large studio space on the first floor. It has vinyl tile flooring, pin board and drywall, partition walls, and a drop ceiling. It is in good condition, but its partition walls make for awkward distribution of natural light, and break up the space necessary for students to properly organize their worktables.

0104R
0104R is a small bathroom adjacent to the west entrance to Denmark. It has vinyl tile flooring, drywall, and a drop ceiling. It is in fair condition, as the paint is peeling from the walls and the plumbing lines are exposed.

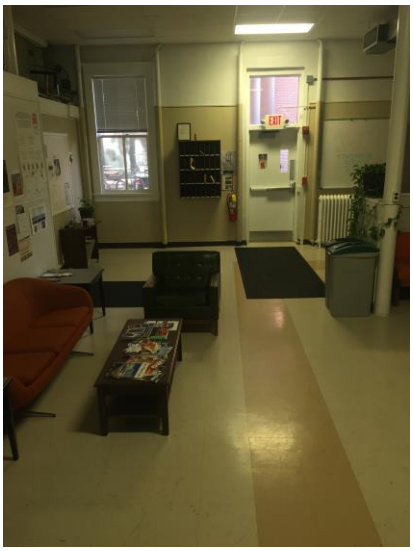


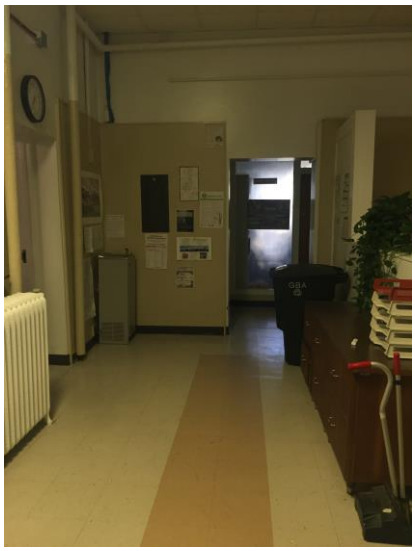
0104A
0104A is a small storage room next to 0104R. It is inaccessible to researchers.

0104B
0104B is a copy room connected to the 0101-0102 office complex. It has carpeting, drywall, and a drop ceiling. It is in fair condition.

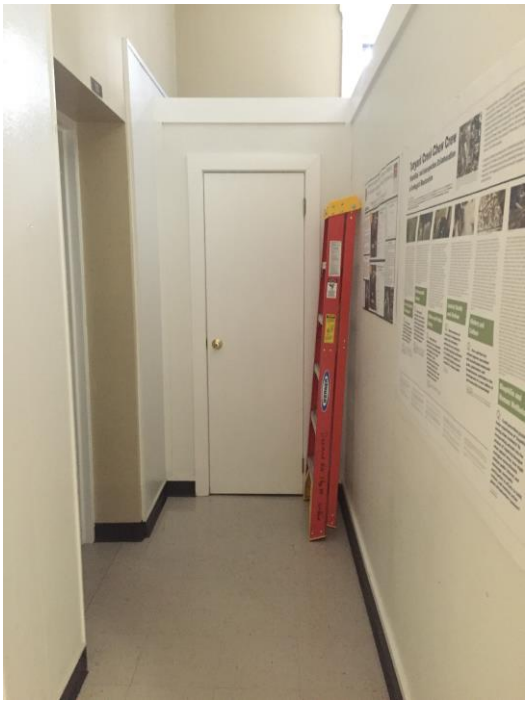
0104C
0104C is a storage closet. It is inaccessible to researchers.

104D
0104D is the large lounge area housing a small kitchenette, tables, and couches. It is separated from the studio by partition walls. It has vinyl tile flooring, drywall, and a drop ceiling. It is in poor condition.



0105
0105 is a hall leading to the back office complex. It has carpeting, drywall, and a drop ceiling. It is in fair condition.




0105A
0105A is office space. It is inaccessible.

0105B
0105B is the only conference room in Denmark Hall, that is ironically not being used as conference space. Or for anything. Smaller than 0103B, it has carpeting, drywall, and a drop ceiling. It is in good condition.

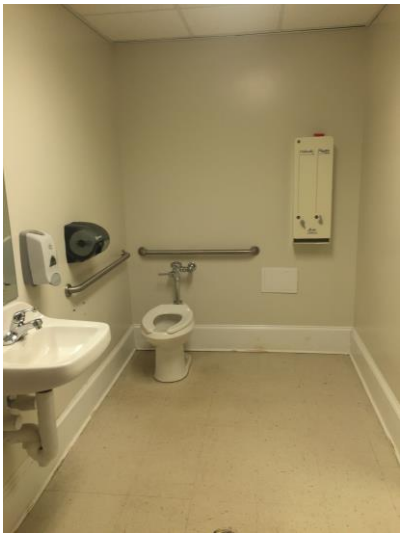
0105C
0105C is an office space. It is inaccessible.

0105D
0105D is a storage closet. It is inaccessible.

0106
0106 is one of three offices in the back half of Denmark. It has carpeting, drywall on every wall but the south wall (which is a window wall), and a drop ceiling. It is in good condition.

0106A
0106A is one of five unisex restroom, and one of the only two handicap accessible restrooms in Denmark Hall. It has vinyl tile flooring, drywall, and a drop ceiling. It is in good condition.

0106B
0106B mirrors 106A— it is one of five unisex restrooms. It has vinyl tile flooring, drywall, and a drop ceiling. It is good condition.



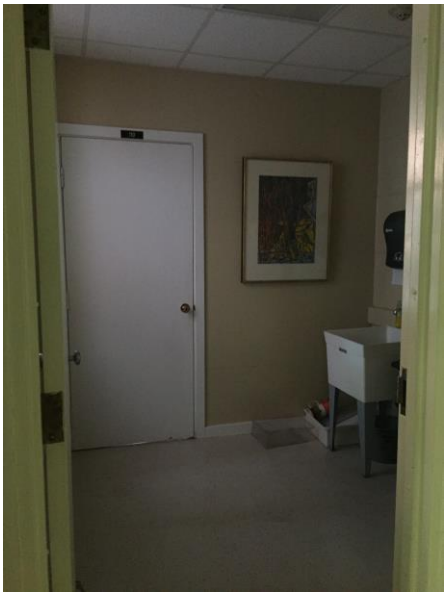
0107
0107 is one of three offices in the back half of Denmark. It has carpeting, drywall on every wall but the south wall (which is a window wall), and a drop ceiling. It is in fair condition.

0108
0108 is one of three offices in the back half of Denmark. It has carpeting, drywall on every wall but the south wall (which is a window wall), and a drop ceiling. It is in fair condition.

0109
0109 is a storage room. It is inaccessible.

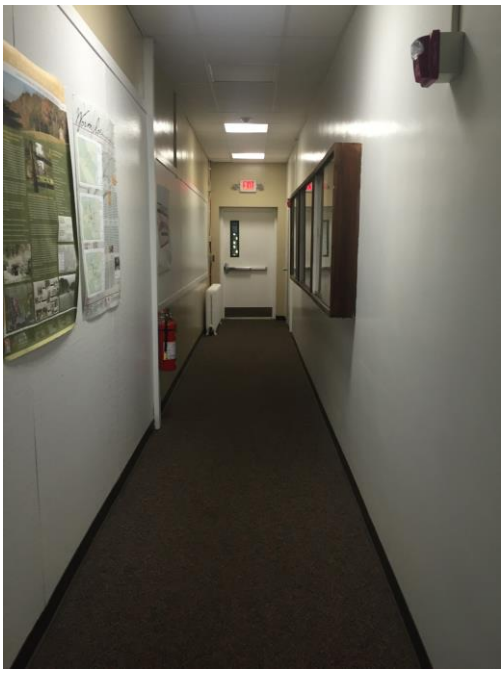
0110
0110 is one of two classrooms one the first floor of Denmark. It has vinyl tile flooring, drywall and concrete walls, and a drop ceiling. The windows are painted shut. It is in fair condition.

0110A – Vestibule
0110A is a vestibule leading to 0110 and containing a wash station. It has vinyl tile flooring, drywall and concrete walls, and a drop ceiling. It is in fair condition, but reeks of mildew.



0194A
0194A is the north entrance to Denmark. It is made of concrete and is suspended over the structurally compromised unexcavated space in the basement level. It is in fair condition cosmetically.

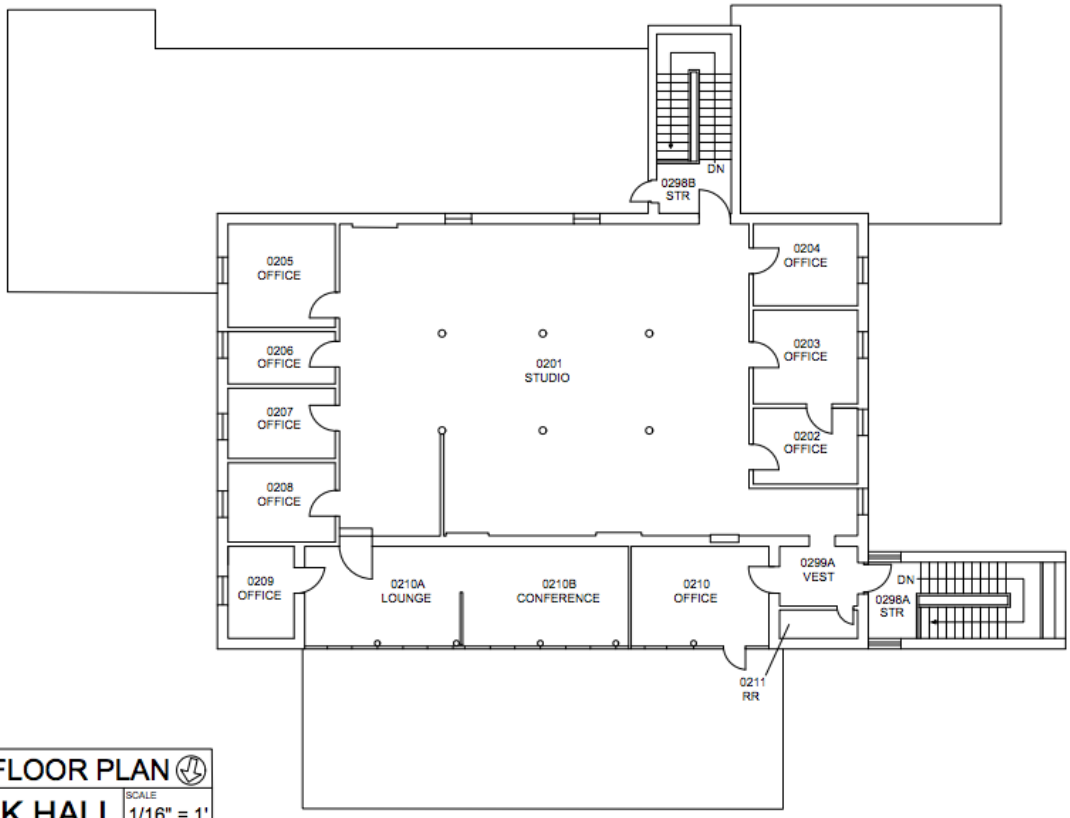
0199A
0199A is a hall extending east to west in the front half of Denmark. It has carpet flooring, drywall, and a drop ceiling. It is in fair condition.



0199B

0199B is another hall extending east to west in the back half of Denmark. Three offices and two restrooms open to the hall. It has vinyl tile flooring, drywall and concrete walls, and a drop ceiling. It is in fair condition.

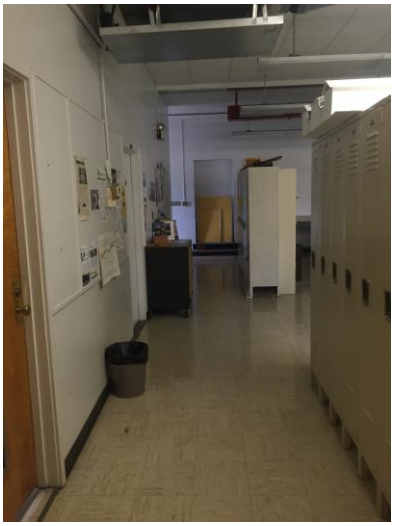
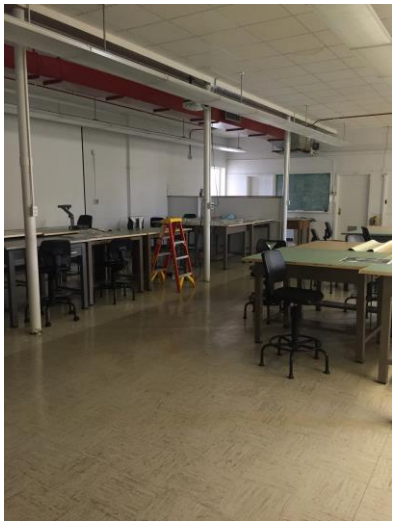
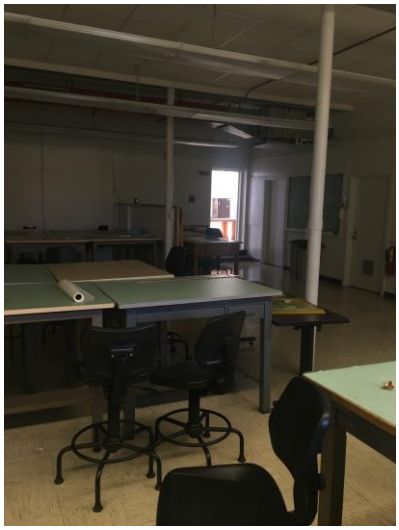
7. SECOND FLOOR



SECOND FLOOR PLAN	
DENMARK HALL (0044)	SCALE 1/16" = 1'
	DATE 04/2016
UNIVERSITY OF GEORGIA ATHENS, GA	DRAWN BY RM/AG

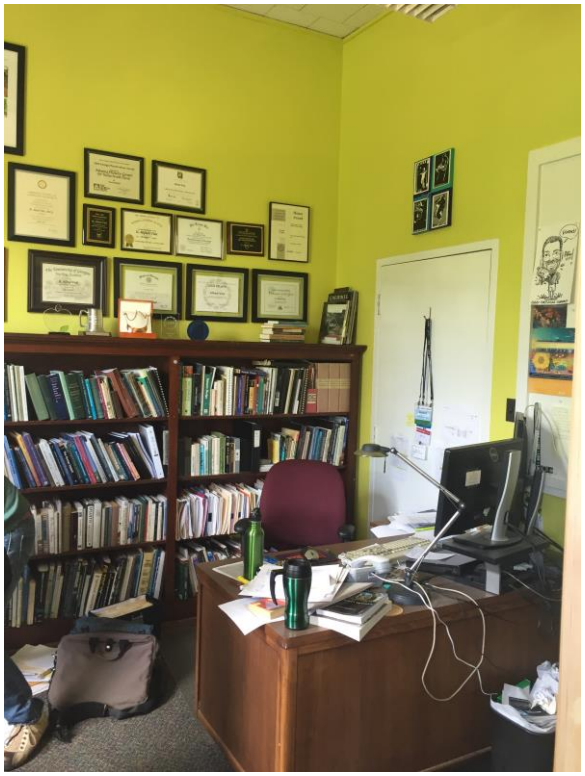
0201
0201 is a large studio room, which takes up most of the second floor. It has vinyl tile flooring, concrete block walls, and a drop ceiling.

There is some water damage to the acoustic tile ceiling (above the drop ceiling) - in turn leaking to the drop ceiling. The leak is coming from an unknown source in the inaccessible attic. This is causing the acoustic tile to fall from the original ceiling, which will eventually lead to the collapse of the drop ceiling. The rest of the elements are in fair condition.

0210
0210 is the first of eight office spaces on the second floor. It has carpeting, concrete on the south and west walls, drywall on the east wall, a window wall on the north wall, and acoustic tile ceiling. It is in good condition.

0202
0202 is the second of eight office spaces on the second floor. The current occupant created an opening between its south wall and **0203**'s north wall, forming a passageway and making a larger office. It has carpeting, drywall, and acoustic tile ceiling. It is in good condition.



0203
0203 is the third of eight office spaces on the second floor. It was recently combined into one office space with **0202** by the current occupant (see above). It has carpeting, drywall, and a drop ceiling. It is in good condition.

0204
0204 is the fourth of eight office spaces on the second floor. It has carpeting, drywall, and a drop ceiling. It is in good condition.

0205
0205 is the fifth of eight office spaces on the second floor. It has carpeting, drywall, and a drop ceiling. It is in fair condition.

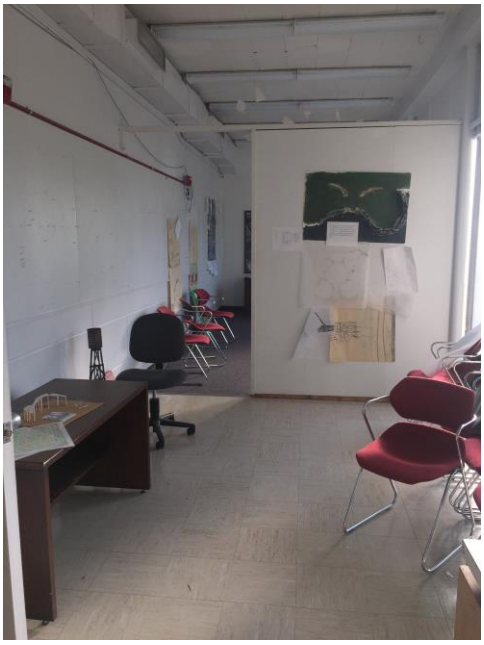
0206
0206 is the sixth of eight office spaces on the second floor. It has carpeting, drywall, and a drop ceiling. It is in fair condition.

0207
0207 is the seventh of eight office spaces on the second floor. It has carpeting, drywall, and a drop ceiling. It is in fair condition.

0208
0208 is the eighth of eight office spaces on the second floor. It has carpeting, drywall, and a drop ceiling.

0209
0209 is an exterior storage room. Its only exit is to the 210A lounge area, rather than to the studio like the remaining offices. It has carpeting, concrete and drywall, and a drop ceiling. It is in fair condition.

0210A
0210A is a lounge area taking up a third of the old, converted covered porch, and it leads to the conference room. It has vinyl tile flooring, concrete, pin board, and window walls, and acoustic tile ceiling. It is in fair condition.



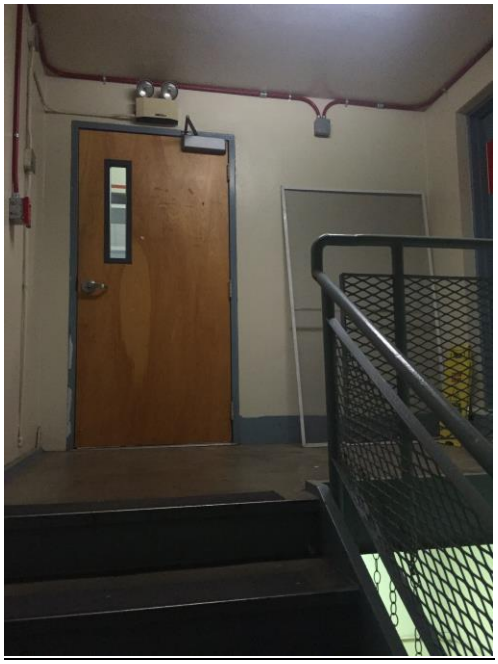
0210B
0210B is a conference room that takes up the middle third of the old, converted covered porch. It has carpeting, concrete, pin board, and window walls, and acoustic tile ceiling. It is in fair condition.

0211
0211 is the only restroom on the third floor. It has vinyl tile flooring, concrete block walls, and a concrete ceiling. It is in poor condition.

0299
0299 is a vestibule leading from the west stairway to room 0210 and the studio. It has concrete flooring, concrete block and brick walls, and concrete ceiling. It is in fair condition.

0298A
0298A is the west stairway, continuing from the basement. Like the previous floors, it has concrete flooring, concrete block and brick screen walls, and concrete ceiling. The staircase is in dire need of repainting, as the current paint is peeling off.

0298B
0298B is the south stairway, continuing from the basement. Like the previous floors, it has concrete flooring, concrete block and brick walls, and concrete ceiling. It is in fair condition.



IV. RECOMMENDATIONS & PROPOSAL FOR FUTURE USE

These recommendations will contain a prioritized assessment of the structural, health and safety, and programmatic needs of Denmark Hall based on its continued use as an academic building for the College of Environment and Design's Master of Historic Preservation program.

1. BUILDING ENVELOPE

The cause of many of the conditions concerns in all parts of Denmark Hall can be linked to an insufficient or failing building envelope, which is the umbrella term for the systems and structures that separate the interior from the exterior of the building. The building envelope (or weather envelope) includes the wall, floor, and roof systems as well as the windows, doors, and other water/weather control systems of a building. The reestablishment of a functional building envelope should be the first priority of future work to avoid the potential degradation of all other repairs.

The ***roof*** of the building is in overall good condition. The hipped roof that covers the main portion of the building is clad in metal standing seam that shows no signs of significant damage or issues. The tar roofing on the remainder of the building is in only fair condition. Over the entryway block – on top of which used to be an open porch – the asphalt roof is bubbling and cracking. Towards the north side of this block, the subfloor has significant give and should be evaluated for rot when the roofing material is removed.[1]

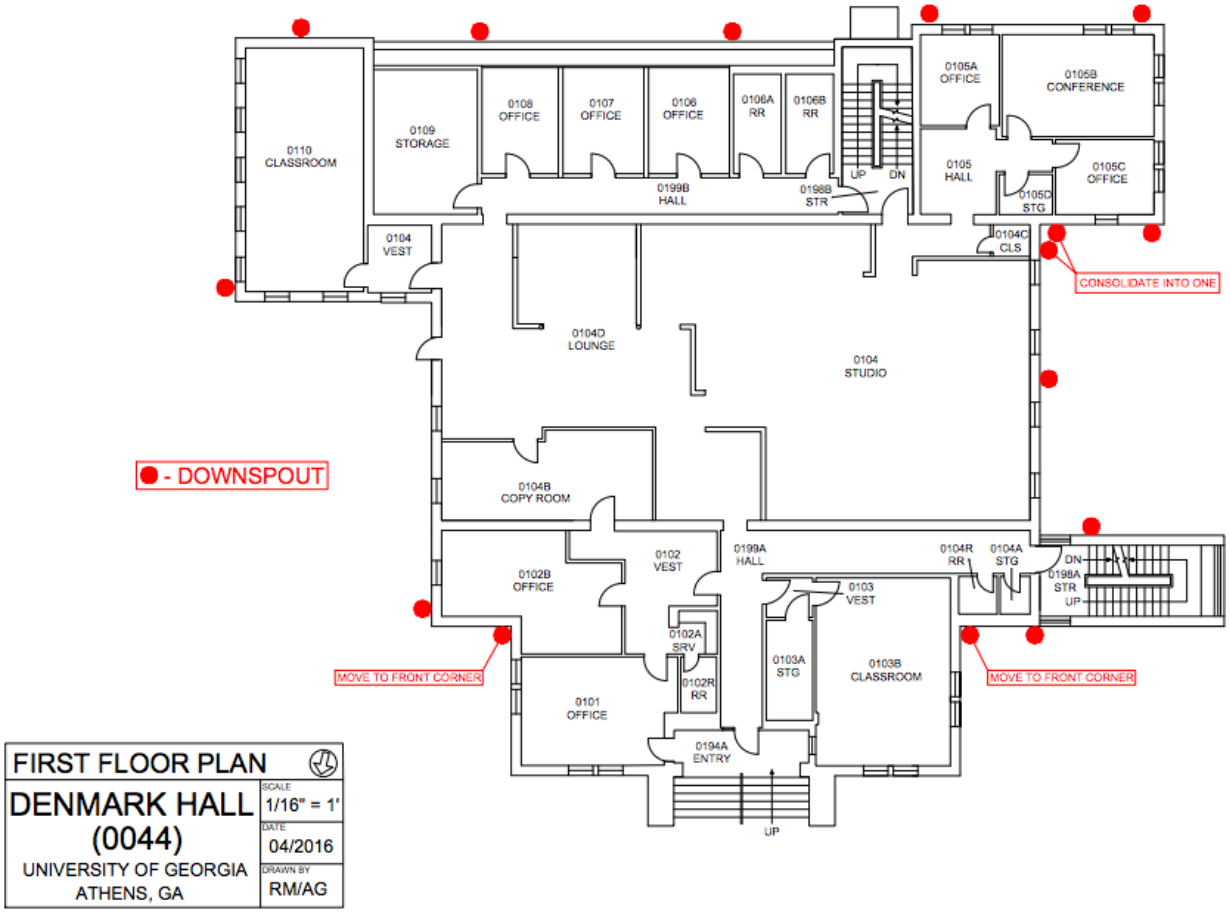
The addition blocks on the south side of the building are also asphalt. These are in marginally better condition than the northern asphalt roof but should still be replaced. During investigation there was significant tree debris standing and holding moisture on many portions of these roofing sections. The roof above the western stairwell was inaccessible for conditions assessment, but satellite imagery does not show significant mechanical damage or debris build-up.

> **RECOMMENDATIONS: Replace the asphalt roofing in kind or, to assure better debris and water drainage, create a minimum slope of 2:12 and install a metal standing seam roof similar to that which covers the main building block. At minimum, the vents and HVAC units on the roof should be reflashed to avoid moisture intrusion.**

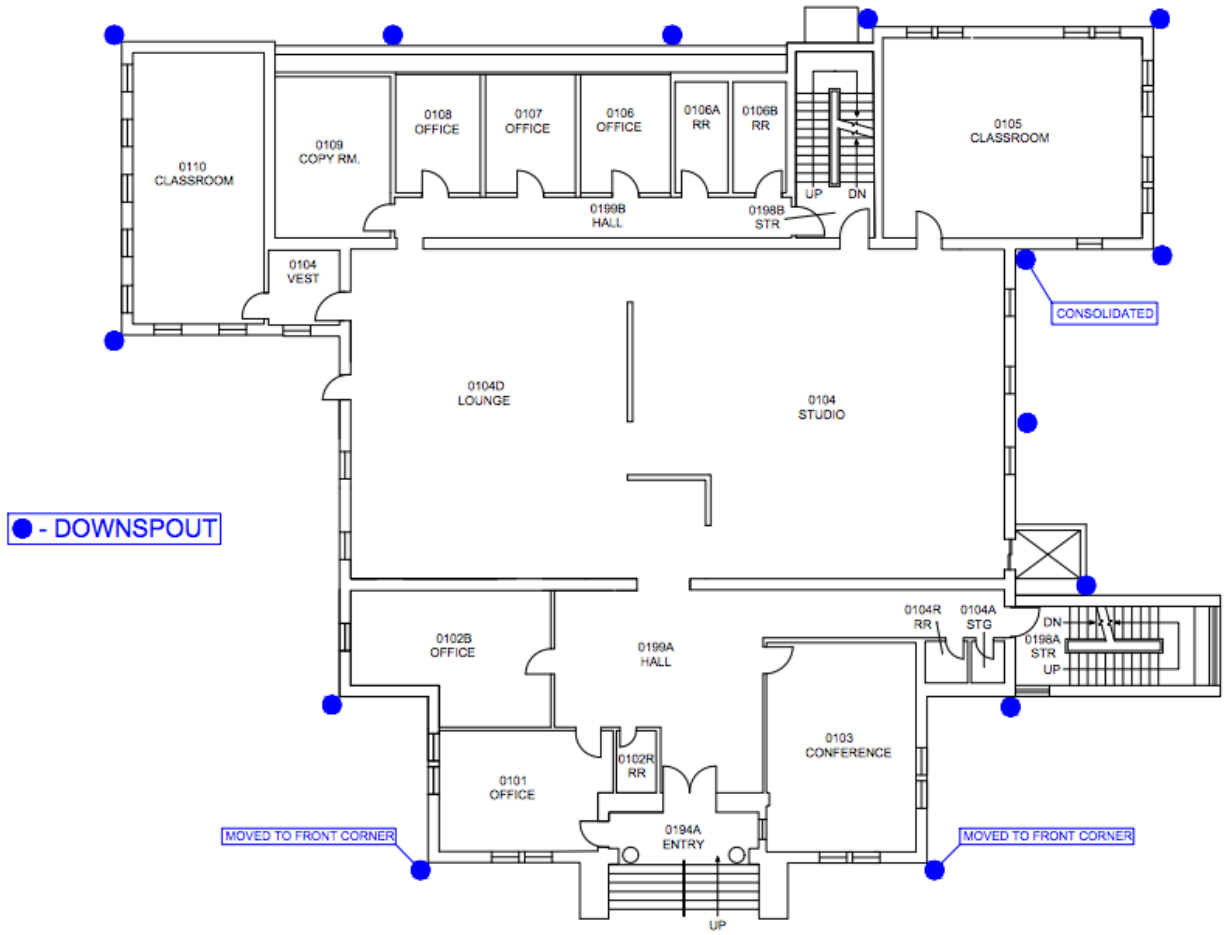
The ***water drainage systems*** (including the gutters, downspouts, and ground drainage systems) of Denmark Hall are in poor condition. There is no indication that the downspouts or the ground drainage systems are compromised, but the horizontal gutter system suffers from both deferred maintenance and material degradation. The overhanging trees have dropped considerable debris into the gutters that is not being regularly removed. This accumulation of debris encourages frequent overflows of water which saturates the fascia boards to which the gutters are attached and splashes onto the face of the building. Dark water marks show where water is flowing over the exterior walls, despite an adequate overhang and the gutter system. The same vegetation that is the source of the debris in the gutters shades the building and encourages the growth of moss and mold. In particular, the northeastern corner of the building is very cool and damp. During our investigation on a hot, sunny week with no rain, there was standing water in this corner.

The vertical drainage members are not located in logical places and often drain water onto the flat roof surface, where it pools.

RECOMMENDATIONS: A thorough cleaning of the gutters is the first step to mitigating these problems. The overhanging branches should be trimmed back to avoid continued debris accumulation. Gutter cleaning should be made an ongoing maintenance priority. The fascia boards only require spot replacement, but overflows should be monitored for continued impact on the cornice and lower roof members. Downspouts should be moved to logical locations on the corners of the roofs. If the gutter capacity or function continues to be insufficient after cleaning and regular maintenance, a new system should be installed.



[Current Gutter System]



[Proposed Gutter System]

The ***above grade wall systems*** are in overall good condition. There is no evidence of structural problems or materials degradation. The textured walls have collected insect activity including webs and nests and requires nothing but a thorough cleaning.

> **RECOMMENDATIONS: A gentle wash of the exterior of the building is all that is required to return function and aesthetic satisfaction to the above ground wall systems.**

The ***below grade wall systems*** are in overall poor condition. Due to the slope of the surrounding terrain, the only subterranean wall systems are on the north side of the building and the rear block of the east side of the building. It is unclear what sort of moisture barrier may or may not be present between the masonry foundation and the surrounding soil, but if any is present it has failed.

Along the north side of the building, where there is the most significant water problem, the subterranean foundation is approximately 2' 3" thick and constructed of brick. When the basement was dug out, this foundation was underpinned with approximately two feet of concrete masonry units (CMU's). The brick has been covered with electronic equipment in Room 0022D and its condition is difficult to assess. In the crawlspace and Room 0022C, the brick's condition is clear. The brick is severely efflorescing and fuzzy-looking salt crystals are found on nearly every brick. This efflorescence has dissolved the hard crust on the bricks and the soft, interior of the bricks has turned to dust. In the course of trying to assess the degree of damage, a slight touch removed nearly a brick's worth of dust from the crawlspace wall. In addition, there is a significant tension crack in the south wall of the crawlspace.

Similar efflorescence has flaked the paint on the north foundation wall in room 002C. It is apparent from the texture of the paint that the wall has been repainted after the brick's degradation had become serious. Holes in the bricks and mortar are evident.

In Room 0019, the floor has been dug out by a number of feet and the foundation wall underpinned with CMU's. The subterranean brick foundation is not in such dire condition here but still shows signs of mechanical damage (perhaps due to construction) and water intrusion.

There is no evidence on any of these walls that repointing has been attempted, but certain patches of what appears to be a high-Portland mortar may have been smeared onto bricks in a consolidation attempt.

> **RECOMMENDATIONS: The degraded subterranean foundation walls are beyond chemical or physical consolidation and should be removed and rebuilt. A continuous CMU foundation with a proper moisture barrier is recommended. This is by far the most physically-intensive recommendation for Denmark Hall but is crucial for the building's long-term structural integrity and safety.**

The ***doors and windows*** are in good condition. Most of the doors and windows in the building are sufficient to keep the weather out but need work to assure maximum efficiency and safety. Water has repeatedly infiltrated the windows in the Cultural Landscape Lab (0018), where moisture continues to be a major issue. Water marks on the interior and exterior of the building suggest that water has previously infiltrated through the window framing. Despite this, there is no major rot or mold present around any windows or doors.

Many windows on the first floor have been repeatedly painted shut and should be operable for safety and comfort.

RECOMMENDATIONS: Windows should be cleaned and returned to an operable state. At this point we are not recommending replacing the windows due to the cost and difficulty of replacing them with historic sensitivity. As other work is being done, each window should be checked for leaks and re-caulked as necessary. Further aesthetic recommendations for windows and doors can be found below.

The ***floor systems*** of Denmark Hall are in fair condition. The first and second floor structures are sufficient for the live load of an academic building and do not show significant mechanical, water, or insect damage. The only potential area of concern is the floor system above the crawlspace, which supports the concrete front porch. The general water intrusion in that area has caused the concrete to spall and reveal the rebar, which is rusted and brittle. Further examination of the interior floor systems will be possible during other work.

The basement floor system is prone to moisture problems and settling. Repeated attempts at controlling moisture intrusion have proven largely unsuccessful.

RECOMMENDATIONS: The basement floor system should be dug up (and potentially dug out to increase ceiling height) and replaced with increased water resistance, including moisture barriers under the slab and proper slope and drainage both inside and out. The concrete porch floor should be removed and replaced in kind when the foundation walls are addressed.

2. ACCESSIBILITY

Currently, only the first floor of Denmark Hall could be considered ADA compliant. This is the only floor that has the appropriate combination of accessible entrances, interior arrangement, door widths, and accessible bathrooms. The program uses all levels of the building, however, and should assure accessibility on all three floors.

RECOMMENDATIONS: An elevator tower could be placed conveniently to the south of the west stair tower (0198A). This location provides accessibility to all levels without interrupting the use of interior spaces and without necessitating serious structural work within the interior of the historic building. This location is also preferable due to the fact that the stairwell hides it from view and it does not impact the historic façade any further than the existing stair tower does.

The restrooms on the basement level and second floor are not accessible, currently. The addition of the elevator could be sufficient to allow access to the accessible restrooms on the first floor, but if budget allows the existing restrooms should be retrofitted to allow for accessibility on all floors.

3. ASBESTOS AND MOLD REMEDIATION

Due to its age and continuing moisture problems, Denmark Hall requires moderate levels of mold remediation. In the basement, both old mold stains and active black and green mold can be seen in many of the offices. The interior areas of the basement are humid and musty and require better

ventilation and mold remediation. Mold is not so severe a problem on the top two floors but mold and water stains can be found throughout the building.

The vinyl tile floor was installed in the 1970's has become brittle and is cracking. These tiles contain asbestos and pose an immediate health risk to the building's occupants. Our aesthetic recommendations include complete removal of all existing vinyl flooring and for a building-wide asbestos remediation. The acoustic ceiling tiles attached to the original ceiling structure (currently hidden above the drop ceiling) may also contain asbestos or other hazardous materials and should be removed when the flooring is removed.[2]

> **RECOMMENDATIONS: Complete professional remediation of mold and asbestos should be a priority throughout the building. Care should be taken to assess all possible origins of hazardous materials and mold during renovation.**

4. CLIMATE CONTROL SYSTEMS

The current HVAC system in Denmark Hall was installed in 1989 and is insufficient to properly control the interior climate of the building.

> **RECOMMENDATION: The climate control systems should be replaced in their entirety and designed in accordance with new interior floorplan designs. If budget allows, window air conditioning units, found in many of the building's offices and classrooms, should be replaced with a more convenient and efficient centralized system.**

5. LANDSCAPING CONSIDERATIONS

No intensive landscape research was completed during the course of this HSR, but historic photographs show the evolution of the landscape features in front of Denmark Hall. In general, the grade was an average of three feet lower than it currently is today. Since much of the existing landscape will be removed in order to work on the foundation along the north side of the building, further landscape research could guide the new planting plans.

> **RECOMMENDATIONS: More intensive historic landscape research could guide future planting plans. Moreover, the existing landscape is helping to hold moisture near the foundation walls; new plantings should be spaced from the foundation wall by a minimum of two feet and should be augmented by a French drain system or similar.**

PROGRAMMATIC AND AESTHETIC RECOMMENDATIONS

Denmark Hall contains sufficient square footage to meet the needs of the growing Historic Preservation program, even including the addition of the PhD program and the dedication of spaces to Landscape Architecture and Sustainable Design uses. The rearrangement of interior, non-structural partition walls can allow for a low-cost and simple redesign of the building's interior spaces. Below is an example of work that can be done on all three levels that involves minimal changes to load-bearing structures and significant functional and aesthetic improvements. Proposed changes are discussed by level, room by room (rooms where no specific changes are recommended do not appear).

A possible alternative to these recommendations is the 1996 renovation proposal which includes a different configuration of many of the same programmatic changes that we recommend herein. The complete set of architectural drawings is available through the University Architect's Office.

OVERALL RECOMMENDATIONS

1. STAIRWELLS
All stairwells are dirty and suffer from peeling paint. They should all be thoroughly cleaned, have insect and bird activity cleared from the screen walls, and be repainted.

2. FLOORS
There is significant evidence that the original tongue-and-groove pine floorboards are intact under the vinyl flooring. The vinyl should be removed due to asbestos risk and the original floorboards exposed. Unless they have suffered significant damage that is not visible from below, these floorboards should be patched, repaired, and refinished in all areas where they may be found.

Where wood floors were not original, other flooring materials may be considered that complement the updated aesthetic of the building.

3. CEILINGS
The drop ceilings should be removed throughout the building and the acoustic tile beneath it should be removed, as well. This will raise ceiling heights by at least a foot. Originally, the ceilings of all levels were white horsehair plaster; if the newly revealed ceilings cannot be replastered due to budgetary or functional concerns, drywall should be used.

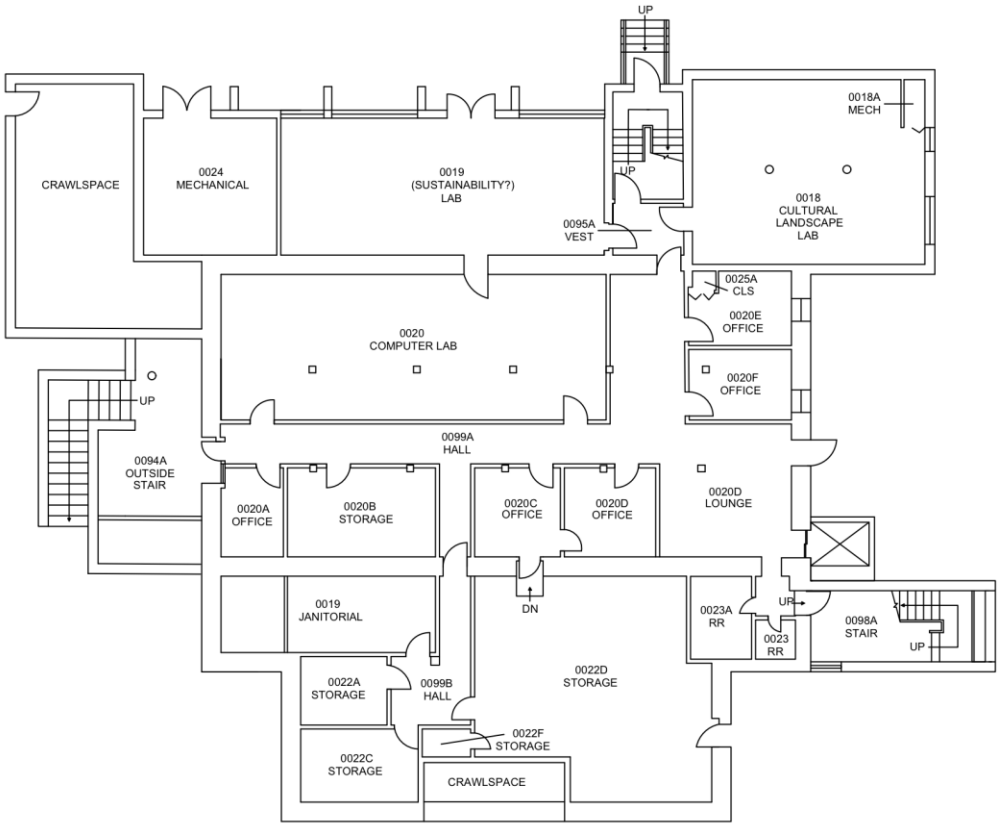
4. WALLS
Much of the original plaster walls survive but are in poor condition or hidden behind pegboard. The pegboard should be replaced in the studio spaces and removed elsewhere. The walls should be replastered and repainted. Drywall should be used in the later additions, where plaster was not used historically.

5. EXTERIOR CLEANUP

The exterior of the building should be removed of all extraneous plumbing and electrical lines to neaten the appearance of the building and reduce the number of places that insect and animal detritus can accumulate.

Moreover, the covered walkway between Denmark and Caldwell Halls should be removed. This roofed area does not protect the patio from the elements and merely encourages dark, damp, and organic growth on the west side of Denmark Hall. Its removal would significantly brighten that side of the building and the second floor offices inside.

BASEMENT RECOMMENDATIONS



1. LAB (0019)
The current computer lab originally served as part of the kitchen space. This rear space may originally have had garage doors and served as the location where trucks would pull up to deliver food for the dining hall. A YEAR drawing suggested inserting a glass storefront system along the south wall of this room to echo the rhythm and spatial arrangement of the original garage doors. We recommend that this suggestion be implemented to allow for better light in this room.

Since the addition of the glass would pose a security risk for the computer lab, we are recommending that the computer lab be moved to a new, larger, cooler space (see below). Room 0019 could be then used as a flex space for Sustainability and/or Building Materials Conservation labs or for more classroom space.

2. COMPUTER LAB (0020)
Room 0020 would serve as the new computer lab. By combining current Rooms 0020, 0020E, and 0020F, a larger and cooler computer room could be created with three entrances. The necessary electrical capacity and wiring should already be present or easily moved. The existing mechanical should be moved to the mechanical room (0024) when the mechanical systems are upgraded throughout the building.

3. EXISTING OFFICES (0020A, 0020B, 0020C, 0020D)
Most of the problems with these offices are with physical conditions. The finishes should be upgraded when the mold problem is addressed.

Room 0020B should be repurposed for the Sustainability and/or BMC labs' storage. This room should not be subdivided into two offices because it will be unable to take advantage of borrowed light (which 0020C and 0020D are in a better position to do). The west wall of Room 0020D should be moved to the east to accommodate a larger lounge/waiting room in the hall. This new gathering area will serve the newly-inhabited offices of the basement level.

The offices in current Rooms 0020C and 0020D do not have access to natural light. This problem could be ameliorated by the use of transoms or glass walls for borrowed light.

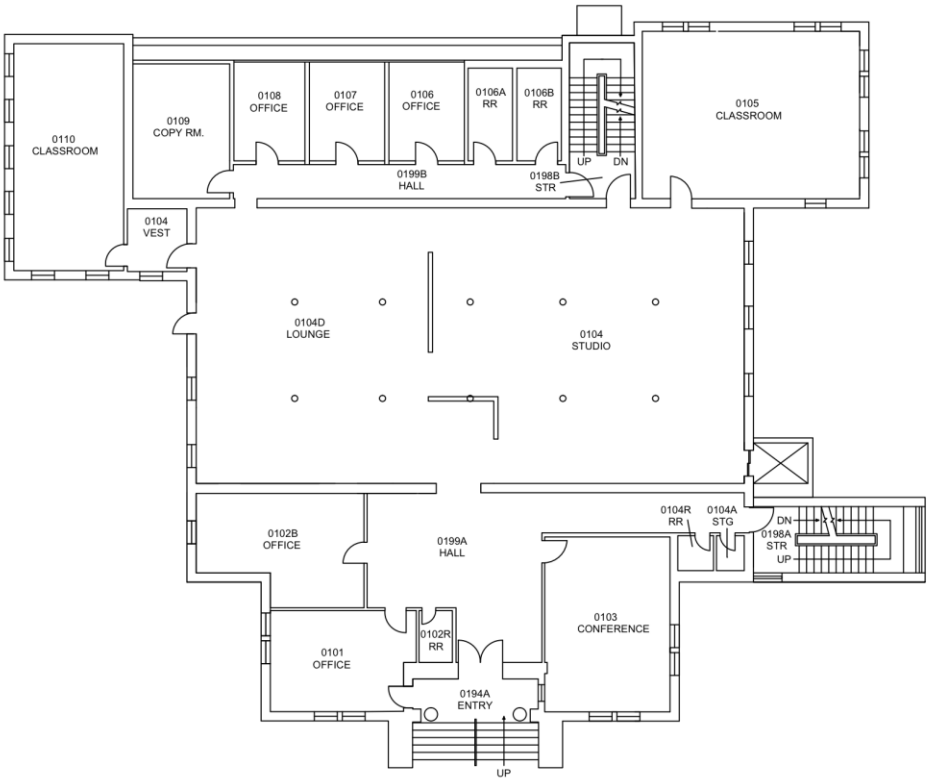
4. DARK ROOM (0022A)
The dark room is no longer used and should be cleaned out and used for storage.

5. NEW OFFICES AND HALL (CURRENT ROOM 0025)
Room 0025 is currently being used for storage. To allow for more logical access to the rest of the basement level, Room 0025 should be subdivided into a hallway from the south staircase and two offices. The northernmost office would already have one window; a window should be added to the southernmost new office.

6. HALL (0099A)
The basement hallway will be augmented by a new section from Room 0025 and the addition of a common area (see above). There is currently HVAC equipment in the hallway that should be moved when the mechanical systems are upgraded throughout the building. The ghost of a previous window can be seen from the outside. This window should be reinstalled to allow for natural light in the hallway.

The new elevator tower will open into this hallway.

FIRST FLOOR RECOMMENDATIONS



1. ENTRY PORCH (0194A)
The historic entrance has been changed significantly since the building's construction. Photographic evidence shows that two white, wood, Doric columns originally flanked the entrance. It is unclear why these were removed and we recommend that they be replaced to return historic character to the entrance. The same photographs show that there were French doors roughly centered on the porch that led into the entrance hall (0199A). We also recommend that these be replaced. Finally, the transom above the exterior door to Room 0101 has been filled in and should be returned to a window.

2. ENTRY HALL (0199A)
We propose that the entry hall be enlarged to create a comfortable and functional entrance for the building. The current Rooms 0102, 0102A, 0103, and 0103A are not being used and could be removed to create an open circulation space that is brighter and more welcoming than the current enclosed, narrow hall. This will also allow for the opening between the hall and main block of the building to be widened from three to six feet to allow for better circulation. There is still room for a clearly-demarcated waiting area outside of the two offices in the front of the building (0101 and 0102B).

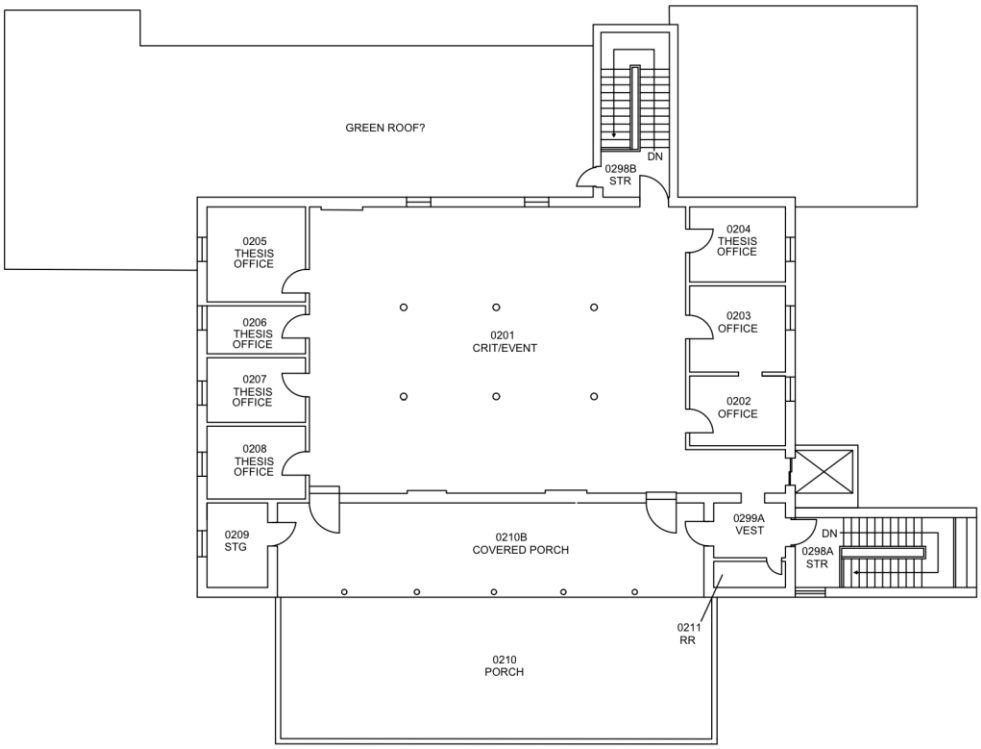
3. OFFICE (102B)
This room currently serves as a faculty office. A new partition wall should be installed to the ceiling for better sound control (necessitated by the entry hall expansion).

4. STUDIO BLOCK (104, 104B, 104C, and 104D)
The existing partition walls in this block should be replaced with a new, simplified system with better flow. The arrangement of the lockers should be consolidated and relocated, perhaps to the west side of the vertical partition wall. There is room for 24 to 32 studio desks in the studio space and for a new kitchen wall and seating area in the lounge space. The copy room (104B) is unnecessarily large and encourages the accumulation of clutter. Shrinking or relocation of this space will allow for a more open entry into this block.

The new elevator tower opens into the northwest corner of this block.

5. 0105 BLOCK (0105, 0105A, 0105B, 0105D, and 0105D)
Most of this block is currently unused, except for one faculty office in 0105A. The interior walls of this block should be removed and a door inserted into the opening in the block's north wall. This room would serve as a much-needed large classroom. There is sufficient office space in the building to relocate the faculty person's office elsewhere in the building.

SECOND FLOOR RECOMMENDATIONS



1. CRITIQUE/EVENT SPACE (0201)
Room 0201 was originally a studio space but has not been used as such with any frequency since the Landscape Architecture program relocated to the Jackson Street Building. The partition wall in the northeast corner of this room should be removed and the desks and lockers relocated. This room would now serve as a space for the design course's critiques, an event space (which could flow out onto the renovated porch), and a general flex space.

The elevator tower will open into the northwest corner of this space.

2. OFFICES (0202, 0203, 0204, 0205, 0206, 0207, and 0208)
The offices require updated finishes but do not require any other work. The main recommendation for these offices is that they be occupied by program faculty. Those that are not occupied should be available to PhD and Masters students as quiet thesis and work space.

3. PORCH (0210)
The porch should be returned to its historic appearance (see photograph below). This would greatly help to restore the historic façade and be a pleasant leisure and event space for the building.

Renovations include removing Rooms 0210, 0210A, and 0210B to open this block to the outside, hiding the structural columns inside wooden Doric columns, reinstalling a balustrade along the perimeter of the porch, and regrading and paving the porch to assure proper drainage. Since this area was originally a porch, the structure below should be sufficient to support a new one. There is sufficient office space elsewhere to relocate the faculty member currently in 0210.