PROBLEMS OF REPAIR

hroughout the nineteenth century and the first half of the twentieth century, modifications and additions were made to Pavilion V. The building as it now exists is approximately twice the size of the pavilion that Thomas Jefferson envisioned. Previously, little attention was given to conservation or preservation of the building; expedient alterations characterize much of the work that has been undertaken. Yet in many ways the additive nature of the work has allowed much of the original building fabric to survive. The quality of the original construction has served the building well; it has endured 170 years with relatively few problems.

EXTERIOR

ROOF

The roof structure above the original building envelope was altered in 1837, when a hipped roof was constructed, encapsulating Thomas Jefferson's ridge-and-furrow roof design. Jefferson's intent had been to create the appearance of a flat roof, as viewed from the ground. Similar roof configurations were designed for Pavilion VIII and for the ranges of student rooms linking the hotels and pavilions. Jefferson also had ridge-and-furrow roofs on Monticello and Poplar Forest. In each instance Jefferson's design proved inadequate. By the mid-nineteenth century the flat roofs on the university buildings had been replaced with more traditional gabled and hipped roofs.

When the hipped roof was installed on Pavilion V, the ends of the saw-toothed joists supporting the ridge-and-furrow roof system were cut off to accommodate the angle of the roof slopes. This alteration had little effect on the structure below because the saw-toothed joists were supported by the second-floor ceiling joists, which run in a perpendicular direction. The ends of the saw-toothed joists were left in the attic and later used as supports for knob-and-tube electrical wiring.

Pieces of the original wood gutter system were incorporated in the construction of knee-wall framing that supports the rafters of the replacement roof.

Physical evidence suggests that built-in rainwater diverters were incorporated in the design of the hipped roof; these have since been bridged with framing and sheathing. A replacement slate roof was installed in the 1980s, and painted flat-lock terne-coated steel roofing, incorporating a surface-mounted rainwater diverter, has been installed along the eaves of the roof to roughly match previous conditions. The existing downspout configuration is awkward and inefficient; downspouts collect water at the northeast and southeast corners of the pavilion and carry it west, along the entablature, to the rear elevation of the dormitory rooms located to the north of Pavilion V and to the colonnade roof located south of Pavilion V. The paint on the downspouts of the original building is peeling.

The sheet-metal hood attached to the chimney stack of the original building is visually obtrusive; it is awkward in design, and the metal has rusted. The chimney of the rear addition appears to have been repointed with a gray portland cement mortar; the workmanship is of poor quality, and the mortar color does not match the earlier material.

The roofing on the rear addition, connecting hyphen, and west porch consist of painted, standing-seam terne-coated steel. The metal appears to be in relatively good condition; however, some of the construction details are unsophisticated and are inappropriate from the standpoint of both historical accuracy and good modern building practice. Near the center of the west entablature on the original building, the ridge of the gabled roof above the connecting hyphen abuts the upper molding of the architrave; counterflashing obscures nearly all of the architrave along the width of the hyphen roof. The flashing is nailed to the early wood moldings and caulked. Fasteners for supplemental gutter supports along the north and south elevations of the hyphen penetrate the metal roof surface; this detail may contribute to problems with water infiltration. The painted finish on the hung gutters and downspouts of the hyphen and rear addition is peeling. The paint on the cornice of the rear addition is alligatored and water stained. The west porch roof and gutters frequently become covered with leaves from nearby trees, and the galvanized ogee gutter surrounding the porch roof is rusting.

The painted finish on the flat-lock terne roofing at the roof terraces flanking the second floor of the hyphen is peeling, and the metal is rusting. Algae is growing on the metal roofing of the north terrace. Water staining and mildew are visi-

ble on the cornice molding behind the second floor gutter of the north terrace. The painted woodwork of the balustrades along the terraces is peeling. Much of the wood substrate is exposed, and ferrous staining is visible where the woodwork is nailed together. Elastomeric roofing membrane has been glued to the caps of the balustrade posts as an expedient repair.

PORTICO AND ENTABLATURE

East Elevation

- 1. The Ionic capitals are dirty and require cleaning.
- 2. There are hairline cracks in the mortar parging on the columns.
- 3. The mortar joints at either end of the east porch are eroded.
- 4. The beaded-board ceiling above the east porch does not conceal the wood nailing blocks set in the brickwork of the east elevation. The exposure of the wood blocks, especially at the northeast and southeast corners of the building, may be contributing to their deterioration.
- 5. Television coaxial cable and twin-lead antenna wire are routed across the brick masonry at the porch level.
- 6. Exposed, non-grounded electrical receptacles have been recessed in the brick masonry to the north and south of the balcony's central entry.
- 7. There are holes in the mortar joints flanking the second-floor window blinds; these were apparently used for a previous generation of shutter holdbacks.
- 8. The paint on the wood treads of the steps leading to the porch entry is alligatored and mildewed.
- 9. The paint on the wrought-iron support rods at the eastern edge of the porch is alligatored, and the iron is rusting.
- 10. The wide mortar joints beneath the second floor window sills are cracked.
- 11. The paint on the underside of the stairway leading from the south end of the porch to the roof of the colonnade is alligatored and peeling.
- 12. Insects have nested around the base of the prismatic light fixture beneath the porch.

North Elevation

1. The painted finish on the entablature of the original building is alligatored. The paint adjacent to the downspout penetrations in the cornice is peeling.

West Elevation

1. The paint on the entablature of the original building is alligatored and peeling. At the southwest corner of the entablature a large area of wood substrate is exposed.

South Elevation

- 1. The paint on the cornice of the original building is peeling in the vicinity of the southeast downspout. It appears that wood deterioration has occurred as a result of water infiltration.
- 2. Television coaxial cable is routed along the entablature and walls of the original building, the hyphen, and the rear addition.

MASONRY WALLS

East Elevation

- 1. At the juncture of the pavilion and the dormitory rooms to the north, the brick wall beneath the porch appears to have been discolored by paint chalking from the woodwork above. The brick at this juncture is not interlocked, and mortar is missing from the vertical mortar joint at the first floor level.
- 2. The brick on the east facade is more exposed at the southern end of the building due to a break in the continuous roofing of the colonnade. An iron oxide wash on the mortar joints in this area has been eroded, and much of the mortar has been leached from the joints. Along the south edge of the facade the brickwork beneath the porch appears to have been discolored by chalking paint above.
- 3. The brickwork above the southeast window of the living room has been disrupted. Mortar is missing, and the brick has been fractured.
- 4. On the east elevation of the rear addition, to the north of the connecting hyphen, the mortar joints at the basement and first-floor levels are open and require pointing. At the first-floor level some broken brick is visible. Beneath the porch of the hyphen, efflorescence covers the masonry. At the second-floor level a poorly executed pointing repair was made at the vertical joint between the hyphen and rear addition; mortar has been troweled over the face of the brickwork.
- 5. On the east elevation of the rear addition to the south of the connecting hyphen, the mortar is eroded and pointing is required. At the second-floor level where the balustrade of the hyphen roof terrace is attached to the rear addition, bricks are broken and missing.



South elevation with improper pointing

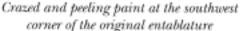


Improper pointing and open mortar joints at the east end of the north elevation

North Elevation

- I. To the west of the student dormitory rooms, pointing repairs have been made between the first-floor and basement windows and between the first- and secondfloor window. These repairs have been made with a white cement mortar that has been struck; they do not resemble the early mortar joints that have an applied oxide stain. The iron oxide stain is generally eroded. Other inappropriate pointing campaigns have been carried out; the joints at the basement level of the original building, for instance, are flat and wide, unlike the early joints above.
- Electrical conduit, coaxial television cable, and telephone wiring have been surface mounted to the face of the brick wall.
- 3. Paint, algae, and efflorescence are visible on the north elevation of the original building beneath the level of the basement window sills. The algae extend to the head height of the basement windows.







Broken brick at the west end of the south roof terrace

- At the second-floor roof terrace of the hyphen, algae are growing on the first four courses of brick above the counterflashing.
- Improper pointing repairs have been made with a dark gray cement mortar along the outside edge of the west door architrave at the porch entry. Above the entry and above the window to the east, pointing repairs have been made with white cement mortar.
- 6. At the second-floor level of the connecting hyphen, pointing repairs have been made around the window frame with cement mortar. Poor workmanship is displayed in the repairs. Additional pointing repairs have been made along the entire length of the hyphen, between the second floor cornice and the upper architrave of the doorway. It appears that a soft mortar was used; however, the grayish white color and granular texture of the repairs are inappropriate. These repairs were made in an area concealed by a previous cornice. A mortar joint immediately above the door architrave lacks pointing.
- Beneath the first-floor windows of the rear addition pointing repairs have been made with a grayish-white cement mortar. The joints have been struck, and they differ greatly in appearance from those above.

8. Near the northwest corner of the pavilion a Canadian hemlock (approximately 18" in diameter) is growing within three feet of the building: the visible shoulder of a tree root is one foot from the sill of the northwest basement window. The root system of the tree is likely to have an adverse impact on the building.

West Elevation

- 1. At the northwest corner of the original building poorly executed mortar repairs have been made between the basement and first-floor windows. The new white mortar and struck joints contrast sharply with the early buff-colored mortar. The white mortar has been used for a wash above the brick enframement of the basement window and at the line of the watertable. Between the first- and second-floor windows, colored (red) mortar repairs have been made. The early mortar in this area remains in deteriorated condition and requires pointing. There are holes in the mortar joints flanking the middle rails of the open blinds; apparently they were used for a previous generation of shutter holdbacks.
- 2. Paint, algae, and efflorescence are visible at the northwest corner of the original building beneath the level of the basement window sills.
- 3. Near the southwest corner of the original building, the vertical mortar joint between the second floor of the connecting hyphen and the original building has been expediently repaired with a hard-setting caulk. The repair was poorly executed.
- 4. The mortar at the second floor, southwest corner of the original building is deteriorated. The brick at the location of the original shutter holdback, now missing, for the southwest window is broken.
- 5. Improper pointing repairs have been made across the west elevation of the rear addition with white mortar and struck joints. Efflorescence is visible at the northwest corner, and brick spalling has occurred beneath the porch. To the south of the basement entry damaged brick has been improperly repaired with mortar.

South Elevation

1. On the south elevation of the original building, a stark contrast in mortar color occurs at the sill line of the first-floor windows. Pointing repairs beneath these windows have been made with a white cement mortar that does not match the earlier material in color or finish. Where early mortar remains, the oxide stain applied to the joints is eroded.



Areaway at the northwest corner of the pavilion with surface-mounted wiring, improper pointing, and open joints in the paving



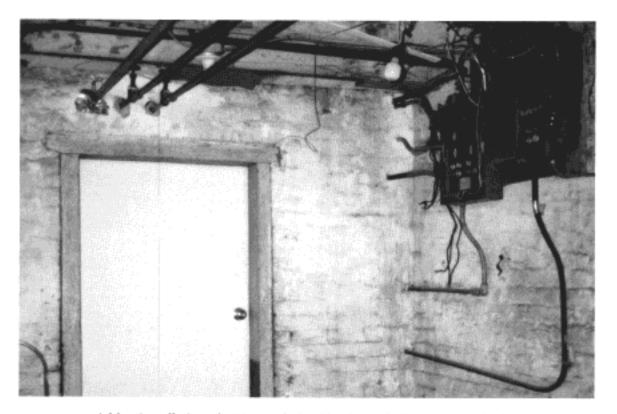
Deteriorated mortar and inadequate drainage conditions in the areaway at the northwest corner of the original building

- Within the passage between Pavilion V and the dormitory rooms to the south, efflorescence is visible on the south wall of the pavilion up to 30" above grade level.
- The mortar washes above the projecting brick enframements of the basement windows in the original building are cracked, and portions of the mortar have lost adhesion.
- The brickwork does not meet the west architrave of the southeast basement window in the original building; repairs attempted with mortar have been unsuccessful.
- 5. The brick course at grade level between the two southeastern basement windows of the original building has been disrupted by the installation of steel grating and diamond-plate decking. Although the mortar joints in this area have been repointed, the repairs have failed.

- 6. In the basement window well along the south elevation of the pavilion, the brick has been painted white. The paint has eroded. Steel pipe rail surrounding the window well has been let into the brick wall. The brick has been poorly cut out and repaired with mortar. The mortar has failed, and the brickwork is open to the weather.
- 7. The brick piers supporting the arched openings at the base of the hyphen's south elevation are spalling.
- 8. To the west of the hyphen the brick garden wall has efflorescence, open mortar joints, and cement mortar repairs of poor workmanship.
- 9. Pointing repairs have been made on the south elevation of the rear addition with a white cement mortar that does not match the earlier mortar. The new mortar was used to repair a large extent of the wall surface beneath the first-floor level. 10. At the rectangular-framed, elliptical window on the south elevation of the rear addition, the joint between the window frame and the masonry wall is open. Poorly executed mortar repairs have been attempted in this area.

PORCHES

- 1. A porch with an arcaded screen extends along the north face of the connecting hyphen. The woodwork of the deck, stairway, columns, arcade, and balustrade is eroded. The paint is alligatored and peeling in large areas, exposing the wood substrate. Advanced mildew and algae extend over the balustrade, decking, and stair components. Joints in much of the woodwork are open. The outer edge of the porch decking is rotted. Surface-mounted wiring for a doorbell switch is routed along the west architrave of the porch entry. The door knocker has been removed, and gouges in the intermediate stile of the door are visible where the knocker had been attached.
- 2. A columned porch extends across the west elevation of the rear addition and rests on brick piers. The painted finish on the porch woodwork is dirty, eroded, and alligatored; mildew is visible over much of the painted surface. The painted finish on the wood stair and handrail has failed, exposing the wood substrate. Algae are growing on the surface of the woodwork along the north end of the porch. At the northwest corner of the porch the mitered joint of the fascia skirting the porch deck is open. The decking is moderately eroded, and the paint is peeling. The brick piers at the perimeter of the porch have been repointed with a cement mor-



Ad hoc installation of wiring and plumbing beneath the connecting hyphen

tar. The mortar color is sympathetic to the color of the original mortar; however, the wide, flat, struck joints are inappropriate. Efflorescence is visible on the northwest pier. Inappropriate modern light fixtures have been mounted on the ceiling of the porch and on the west elevation of the rear addition. The electric wall sconce is serviced by surface-mounted conduit.

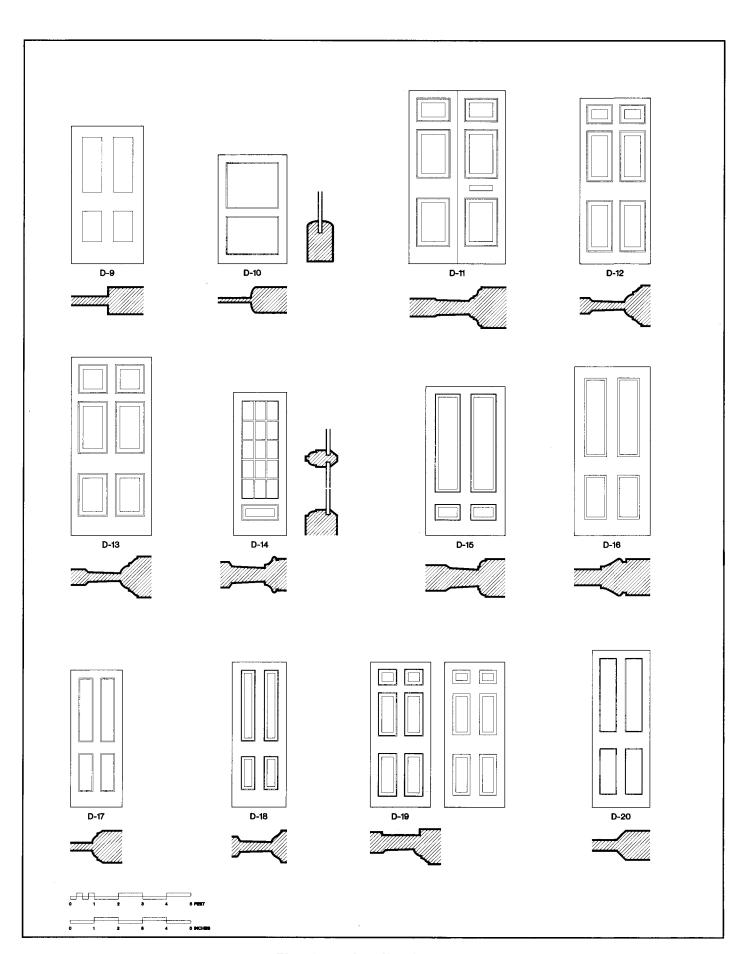
AREAWAYS

- 1. A downspout from the roof above the student dormitory rooms and two downspouts at the northwest corner of the original building conduct water into the brick-paved areaway along the north and west elevations of the pavilion. Drainage in this area is not sufficient; much of the water filters into the ground at the base of the building. Many of the brick pavers in the areaway are broken, and the joints are open.
- The wood lattice in the archways beneath the south elevation of the connecting hyphen is broken and in disrepair. In the brick areaway beneath the hyphen plas-

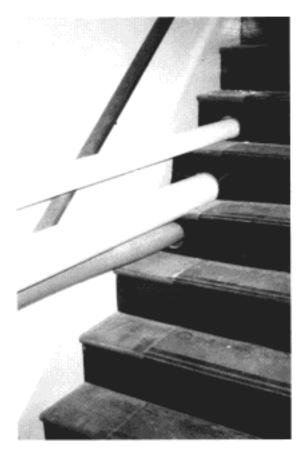
ter and lath are missing from the ceiling. Portions of the brickwork have been painted, and the paint has eroded to varying degrees. Mortar has been leached from joints in the brickwork at grade level. Heating pipes, plumbing lines, and electrical conduit have been suspended from or attached to the ceiling. A downspout in the southeast corner of the areaway has rusted through; the downspout extends from the plastered ceiling into a brick retaining wall.

WINDOWS

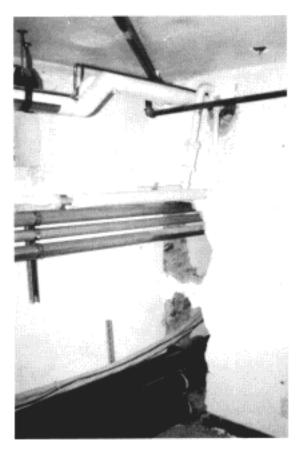
- 1. On the east elevation of the building, the painted finish on the blinds and windows is dirty, and mildew appears to be growing on the blinds. Wire-mesh reinforcing and plastic sheeting extend across the basement window wells to the north of the entry. These materials appear to have been introduced with the installation of a concrete slab and brick paving beneath the colonnade. The protective horizontal wood bar in the basement window immediately north of the entry has been broken out of the window reveal.
- 2. On the north elevation of the building, the paint on the window sash, architraves, and sills is alligatored and peeling. Mildew is visible on the basement windows of the rear addition, and the sills of these windows are at or below grade level.
- 3. On the west elevation of the original building to the north of the hyphen, the paint on the window sash, architraves, and sills is alligatored; in isolated areas the paint is peeling.
- 4. On the west elevation of the rear addition, the paint on the basement-window openings is dirty and alligatored. The paint on the second-floor windows has failed, and the wood substrate of the sill at the northwest window is exposed. The northwest basement window has been converted to an entry; the replacement of the window with a door is an awkward and inappropriate modification. The joint between the brickwork and the wood enframement at this entry has been filled with mortar; the mortar has failed, and the joint remains open.
- 5. On the south elevation of the original building, the paint on the basement window architraves is alligatored and peeling, and the paint on the window sills is heavily eroded. The glazing compound in these windows is cracked and deteriorated. The glazing compound in the first- and second-floor windows is deteriorated, and the wood substrate of the muntins is exposed.
- 6. On the south elevation of the connecting hyphen, the woodwork surrounding the arched windows is deteriorated. The paint has failed, and the wood substrate is



Elevation and profiles of door types



Mid-twentieth century West Lawn heating main and electrical service



Intervention in original building fabric for the installation of utilities

exposed. Ferrous staining from nails is apparent. The woodwork has split, and joints have opened. The glazing compound in the windows is deteriorated and cracked.

- 7. The painted window blinds across the first- and second-floor levels of the south elevation have a chalky appearance, and the paint is visibly eroded. At the first floor southeast window, the lower west shutter pintle is hanging loosely from its mounting screws.
- On the south elevation of the rear addition, the paint on the window architraves and sills has failed. The central basement window has an opening for a clothesdryer vent.

DOORS

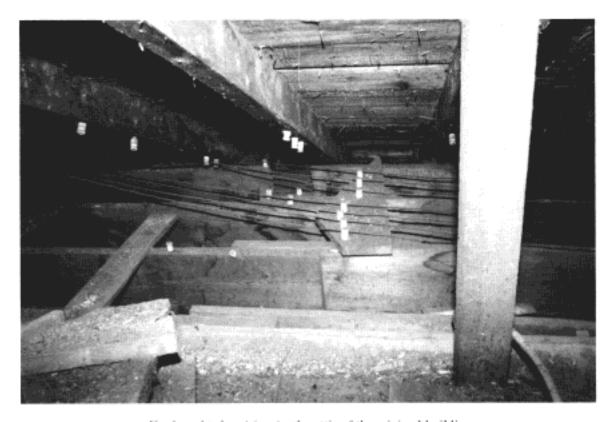
- 1. The paint on the risers of the stone steps at the east entry is alligatored. The nosing of the upper tread is chipped at the northeast corner, and the stone plinth beneath the south door architrave is cracked. White cement has been used to repair a cavity in the stonework of the steps. The east entry door has been removed and temporarily replaced with a hinged plywood panel.
- 2. On the north elevation of the connecting hyphen, the paint on the first-floor door architrave and on the second-floor entry doors is alligatored. The joints at the base of the second-floor doors are open.
- 3. The paint at the southwest, second-floor entry to the original building is heavily eroded and uneven. The paint is alligatored and peeling. The outward-swinging screen door binds on the metal roofing of the terrace.
- 4. The paint on the west porch entries is dirty, alligatored, and mildewed. There is a bird's nest within the reveal of the transom above the northwest entry.
- 5. The painted finish on the stairs to the first-floor entry at the southwest corner of the hyphen has failed, and the wood substrate of the treads and landing is exposed. The painted finish of the door and surrounding architrave is alligatored and peeling. Joints in the woodwork are open, and splits have occurred in the stile-and-rail construction of the door. The metal screen in the outer door has been ripped. An inappropriate modern light fixture has been mounted on the wall adjacent to the door opening. The fixture is missing its bulb and globe.

INTERIOR

The interior spaces of the building remain in relatively good condition despite the absence of a comprehensive maintenance program. As needs have changed, modifications have been made to the interior; generally, the modifications have corresponded with changes in occupancy.

The introduction of building systems, such as central heating, plumbing, and electricity, has been accomplished on an ad hoc basis. The insensitive installation of these systems has been an aesthetic imposition and a physical intrusion on the building.

The most radical alterations have occurred in utilitarian spaces, such as those found in the basement. Preservationists are beginning to recognize such areas for their intrinsic historic value, and preservation philosophy now embraces efforts to restore the original character of service-related spaces.



Knob-and-tube wiring in the attic of the original building

While individual problems are listed by room, there are several problems that reoccur throughout the building:

- There are exposed electrical junction boxes on the walls and ceilings, where light fixtures have been removed. In other locations sheet-metal escutcheons cover electrical junction boxes where fixtures were once installed.
- Holes have been drilled in the floor for piping at either end of cast-iron radiators. In many instances the paint on the radiators has peeled, and radiator enclosures have been screwed to plaster wall surfaces and architectural moldings.
- Period locksets have been removed from doors on the first and second floors of the original building and replaced with modern mortised locksets.

BASEMENT

ROOM BOL FRONT STAIR HALL

- The West Lawn heating main and two electrical conduits are routed along the east wall of the stair hall. These lines extend through holes sawn in the risers of the stairway and through openings made in the north wall of the stair hall.
- At the foot of the stairway electrical conduit, domestic water piping, pneumatic HVAC control tubing, and heating/cooling pipes span the north and south walls of the stair hall above the doorways. Openings have been cut in the walls for these lines.
- The telephone service line is routed across the west wall of the stair hall and through openings in the north and south walls.
- A twentieth-century light fixture has been recessed in the ceiling.
- At the foot of the stairway a steel bracket and plastic identification tag for a fire extinguisher have been screwed to the south wall.
- Vinyl treads have been tacked to the wood stair treads, and a vinyl mat has been tacked down to the stair landing at the top of the stairway.
- There is paint peeling from the plastered surfaces. The plaster on the north wall is uneven in the vicinity of the conduit and piping. The wood paneling on the south wall has been broken and splintered; it is filled with putty.
- The original flooring at the base of the stair has been replaced or covered with concrete.
- There are holes and indentations in the plaster walls at the head of the stairway.

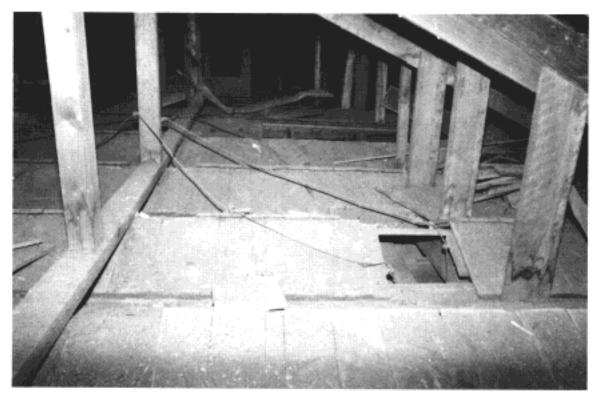
ROOM B01A CLOSET

- I. The west lawn heating main is routed along the south and east walls of the closet, A large electrical junction box is located in the southeast corner of the closet. Conduit extends across the closet from the junction box to holes in the north and east walls.
- Pneumatic HVAC control tubing and heating/cooling pipes are routed through the closet.
- A domestic water line, radiator piping, and surface-mounted electrical conduit traverse the closet with holes cut through the north, south, and west walls and through the ceiling.
- The original flooring has been replaced or covered with concrete. At the south end of the closet a large concrete repair has been broken.

- Along the base of the south, east, and west walls, water has filtered up to the level of the exterior grade. The finishes have peeled, and much of the plaster is friable.
- The plaster wall finish on the south and east walls near the southeast corner has a series of cracks above the level of the exterior grade.
- The plastered undercarriage of the stairway is cracked, especially along the juncture of the stair and east wall. The plaster near the floor level is friable as a result of water damage.
- The plaster ceiling at the south end of the closet is uneven and cracked.
- Wood blocking has been attached to the splayed reveals of the south window and steel bars have been installed across the opening. One light in the lower sash is cracked. The intersection of the east stile and bottom rail of the lower sash is heavily eroded, as if gnawed.

ROOM B02 HALL

- Surface-mounted electrical conduit extends across the ceiling and wall surfaces of the hall from a panel box on the south wall. An electrical disconnect for the hot-water heater is surface mounted to the south wall.
- Domestic plumbing pipes are suspended from the ceiling; they extend the length of the hall, passing through openings in the north, south, and west walls. At the southwest corner of the hall waste lines extend beneath the finished ceiling.
- Two large electrical conduits and the west lawn heating main span the east end of the hall.
 These lines are routed through holes in the north and south walls.
- The telephone service line is mounted to the east wall and routed through holes in the north and south walls. A surface-mounted telephone junction box is attached to the east wall.
- Pneumatic HVAC control tubing and two insulated heating/cooling pipes are suspended from the ceiling at the east end of the hall. These lines are routed through holes in the north and south walls.
- The original flooring has been replaced or covered with concrete.
- 7. There are some cracks in the plastered wall and ceiling surfaces, and the painted finish is peeling throughout the hall. Marginal plaster repairs have been made in the southwest corner of the ceiling where several plumbing pipes protrude. Mois-



Accumulated debris and fine, silt-like dust cover the encapsulated ridge-and-furrow roof

ture-induced plaster deterioration has occurred in the northwest corner of the ceiling, where the plaster is friable.

- The painted finish at the base of the west door and its surrounding architrave is peeling.
- A steel bracket and plastic identification tag for a fire extinguisher have been screwed to the east architrave of the southwest door.

ROOM B03 STORAGE

1. Heating pipes and electrical conduit are suspended from the ceiling or screwed directly to the ceiling. Heating pipes and electrical conduit extend across the east wall, passing through the north and south walls of the room. A large electrical pull box has been mounted to the north wall near the northeast corner. A single, large opening has been made near the center of the west wall, immediately beneath the ceiling, for the building's perimeter heating main. A bole has been made in the east wall, at the southeast corner, for a domestic water line.

- 2. One light in the upper sash of the window and one light in the lower sash are cracked. The sweep lock on the meeting rail has been moved due to deterioration of the rail at the previous location. The molding along the west reveal of the window has separated from the plaster wall surface.
- The paint is peeling from the window sash and frames along the east wall.
- There is significant water damage to the plaster at the juncture of the ceiling and north wall. The damage occurs in close proximity to the juncture of the pavilion and the rear wall of the student dormitories to the north.
- Plaster cracks and areas of peeling paint are visible on the ceiling and on each of the walls of the room. Water droplet stains on the ceiling surface above much of the uninsulated heating pipe indicate that condensation has been a problem.
- The original flooring has been replaced or covered with concrete.
 - 7. The door to the room has been removed; the

hinge locations are splintered and have evidence of previous repairs.

ROOM B04 WORKROOM

- 1. A cast-iron radiator is suspended from the ceiling in the northeast corner of the room, and exposed heating pipes extend across the northern end of the room, just below the ceiling. There are large openings in the east and west walls, near the center of the room, for the building's perimeter heating main. The masonry above the opening in the west wall is unsupported. There are smaller openings in the ceiling, along the north wall, for individual heating pipes to the radiators above. Water droplet stains on the ceiling surface above the radiator indicate that condensation has been a problem.
- 2. Surface-mounted electrical conduit is routed along the ceiling and walls, and a pendant-mounted fluorescent fixture is suspended from the ceiling. Obsolete telephone wiring is strung across the west well
- 3. Two of the lights in the upper sash of the northwest window (north wall) have compound cracks. One of the lights in the upper sash of the northwest window (west wall) has a single crack. Marginal repairs have been made to keep the sweep locks on the windows operational. Either the locks have been relocated or rudimentary dutchman repairs have been made to the meeting rails of the sash.
- 4. There are hairline plaster cracks and areas of peeling paint over much of the ceiling and wall surfaces. A prominent crack in the plaster generally follows the juncture of the ceiling and walls to the north and west. The crack descends at the northeast corner of the room to approximately the level of the exterior grade.
- 5. The original flooring has been replaced or covered with concrete.
- 6. A closet has been removed from the southeast corner of the room. Pock marks in the plaster wall and ceiling surfaces and in the concrete floor remain where framing was previously attached.

ROOM B05 DEN (ORIGINAL KITCHEN)

- 1. The original flooring has been replaced or covered with concrete.
 - 2. A cast-iron radiator is located against

the south wall and exposed heating pipes are suspended beneath the ceiling adjacent to the south and west walls. The heating main for the west lawn, as well as the perimeter main for the pavilion, enters the building through the south wall, at the southeast corner of the room. Two new heating/cooling pipes and pneumatic HVAC control tubing also enter the room at this location.

- 3. Surface-mounted electrical conduit and receptacles are attached to the walls.
- 4. Domestic plumbing pipes are suspended from the ceiling adjacent to the west wall. These lines enter through the north wall of the room and service Toilet Room B05A.
- 5. Two twentieth-century light fixtures have been recessed in the ceiling.
- 6. At the southwest window the window-stop moldings have been removed.
- 7. A single light in the lower sash of each of the south windows is cracked. The bottom rail of the lower sash in the southeast window is splintered. The sweep locks on the south windows are incomplete, and the sweep lock on the west window has been moved due to deterioration of the meeting rail.
- 8. Paint is peeling on each wall, to varying degrees. This is generally occurring above the level of the exterior grade. It appears that water infiltration has caused the paint failure at either end of the south wall.
- 9. The stub of a large (3-1/2'') diameter conduit protrudes through the baseboard of the east wall at the southeast corner of the room. The conduit is mortared in place and cut off in Closet B01A. The conduit has no apparent use.

ROOM B05A TOILET ROOM

- 1. Heating pipes are suspended beneath the ceiling along the south and west walls.
- 2. A twentieth-century light fixture has been recessed in the ceiling.
- *3.* The painted finish on the ceiling and on the south and west walls is peeling. Significant horizontal cracks have developed in the plaster wall surface beneath the window.
- 4. Along the south wall the plywood platform for the water closet at the south end of the room is rotted.
- 5. A single light in the lower window sash is cracked.

ROOM B06 LAUNDRY

- Near the center of the room, the textured plaster ceiling exhibits evidence of plumbing leaks.
 The painted finish in this area has peeled, and the plaster is friable. Additional water damage is visible along the south edge of the ceiling. There are cracks in the ceiling plaster on the underside of the stair carriage to the southwest.
- Domestic water pipes and electrical conduit extend across the ceiling. The base of a surfacemounted light fixture remains attached to the ceiling.
- An exposed cast-iron waste line extends vertically through the southwest corner of the laundry. Electrical conduit and surface-mounted electrical receptacles are attached to the north and south walls.
- A cast-iron radiator is suspended from the ceiling in the northeast corner of the room. The perimeter heating main for the building is suspended from the ceiling along the north wall.
- A hole has been cut in the north wall for a clothes-dryer vent.
- Water damaged plaster is visible at the eastern end of the room on the north and south walls and on the east wall north of the door. This appears to be the result of rising damp.
- A single light in the upper window sash is cracked.

ROOM B07 REAR STAIR HALL

- The plaster surfaces in the northeast corner of the hall are friable; there appears to have been significant water infiltration. The plaster ceiling has areas of peeling paint.
- Surface-mounted electrical conduit has been attached to the ceiling and to the east and west walls.
- 3. Domestic water pipes are suspended beneath the ceiling; they are connected to the water heater located in the northeast corner of the hall. The pipes extend through the masonry walls. An electrical disconnect and surface-mounted conduit for the hot water heater have been attached to the east wall.
- 4. The perimeter heating main for the building penetrates the east and west walls at the northern end of the hall and the east wall to the south of the door. The pipe to the south is routed through a riser in the basement stair. The northern section of pipe is suspended from the ceiling.

- Inappropriate fiberboard finishes have been nailed to the framing at the south end of the hall and along the enclosure wall of the stairway.
- The brick floor is worn and uneven. The brick is laid in a relatively soft mortar; however, there has been some repointing with cement mortar. At the north and south ends of the hall the mortar is significantly eroded.
- During a previous renovation, cementitious repairs were made to the masonry walls in the hall. Between the doors to rooms B08 and B09 the cement has been coursed to resemble brick; this repair was poorly executed.
- A cast-iron radiator is located against the north wall. The piping extending from the west end of the radiator is routed through the west wall.
- At the northeast corner of the hall a cast-iron waste line and clean-out have been partially buried in the east wall.
- The window on the north wall has splintered jambs and replacement hardware.
- 11. A solid-core wood replacement door with steel butt hinges and a brass-plated mortised passage set has been installed in the east door opening. The wood sill is cracked and appears to be rotted from contact with the damp brick paving. The inner face of the door frame has been augmented to accommodate the thick new door. The base of the north jamb has a poorly executed dutchman repair.

ROOM B07A BATHROOM

- The plastered ceiling surface is uneven and cracked.
- The building's perimeter heating main penetrates the west wall and is routed through the fiberboard nailed to the underside of the stair carriage in the northeast corner of the room. The masonry opening in the west wall remains unsupported.
- The heating main, two radiator pipes, a domestic water pipe, and a plumbing vent extend across the bathroom, from east to west, beneath the ceiling.
- The original flooring has been replaced or covered with concrete.
- Various holes have been made in the masonry of the west wall.
- A heavy build-up of paint exists on the masonry wall surfaces. Delamination of the paint has occurred on the west wall.
 - Inappropriate fiberboard finishes have been

nailed to the north wall and to the underside of the stair carriage. Beneath the stairway, it appears that joint compound has been applied around the opening cut for the heating main; the workmanship is of a poor quality.

8. Poorly constructed modern shelving has been installed beneath the stairway.

ROOM B08 STORAGE

- 1. The floor is of uneven brick laid in mortar. To the southwest the brick is broken, and the mortar is eroded. In the northeast corner the brick is broken in localized areas and has collapsed; a perimeter drain may exist beneath the floor. The sill at the southeast door is missing.
- 2. The window on the west wall has been converted to a half-height door. Freestanding wood steps have been constructed within the room to provide access to the opening. The inner screen door and outer paneled door have modern, brass-plated mortised hardware and steel butt hinges. The screen door binds on the uneven ceiling.
- 3. The ceiling has been completely covered with beaded board. The ceiling boards are irregularly laid in places. Access holes have been cut in the ceiling and covered with sheet metal. The building's perimeter heating main is suspended from the ceiling along the north and west walls; the pipe penetrates the south and east walls. The openings that have been cut in the masonry walls remain unsupported. Branch lines for the heating system penetrate the west wall at the southwest corner and the ceiling at the northwest corner. A cast-iron radiator is located on the floor in the northwest corner, and a branch line from the radiator extends across the north wall and passes through the east wall at its base
- 4. Surface-mounted electrical conduit has been attached to the ceiling and to the north, south, and east walls.
- 5. The mantel above the fireplace in the southwest corner is missing.
- 6. The northwest window sill is eroded but sound; the northeast sill and window apron have been replaced with modern materials.
- 7. A telephone jack has been surface-mounted to the west architrave of the northeast window. Telephone station wire has been routed over finished surfaces on the north and east walls.
- 8. The latch hardware on the southeast door is inoperable and incomplete. Two of the recessed

panels within the door are split vertically.

9. Television coaxial cable is routed through the south wall and is stapled to the ceiling.

ROOM B09 STORAGE

- 1. The original flooring has been replaced or covered with concrete. A single crack extends through the center of the concrete floor from east to west.
- 2. The ceiling has an uneven plaster finish. The paint is peeling in the southeast quadrant, and there is evidence of plaster repairs above the suspended heating lines.
- 3. Surface-mounted electrical conduit is attached to the ceiling and walls. At the southeast corner, domestic water supply and waste lines for a washing machine protrude from the east wall.
- 4. Domestic water lines are suspended from the ceiling along the north and east walls of the room.
- 5. The perimeter heating main for the building is suspended from the ceiling along the south and west walls; the pipe passes through the north and east walls. The openings that have been cut in the masonry walls remain unsupported. Paint is peeling from the wall areas surrounding the openings. In the southeast corner, noticeable plaster deterioration has occurred. Branch lines of the heating system pass through the south wall at the southwest corner, the east wall at the southeast corner, and the ceiling in the southeast corner.
- 6. A plywood closet with sliding doors is located in the southwest corner of the room. The closet detracts from the spatial layout of the room, and it is incompatible with its historic interior.
- 7. A single light in the southwest window sash is cracked. One light in the southeast window sash has been replaced with a clothes dryer vent and a second light is cracked. One light in the lower sash of the west window is cracked.
- 8. In the northwest corner, overlapping sheetmetal plates have been nailed to the face of the chimney mass just below the ceiling. The purpose of these plates is not apparent.

FIRST FLOOR

ROOM 101 ENTRANCE HALL

1. Two of the lights in the fanlight above the east door have cracks.



Deteriorated mortar at the base of the original chimney

ROOM 101A HALL

- I. Differential movement has occurred between the east wall of the hall and the flanking walls to the north and south. The plaster has separated at the juncture of these wall surfaces, probably as a result of interaction between the original walls and the east wall, which was a later insertion.
- Hairline plaster cracks and peeling paint are visible on the north and south walls. At the eastern end of the hall, the paint on the ceiling is peeling.
- A surface-mounted telephone junction block is screwed to the baseboard on the south wall.
- A plaster crack extends between the west architrave of the southwest door and the cornice molding above.
- The blind-splice joints in the cornice molding have become visible with the movement of the moldings.
- Near the center of the south wall the chair rail has separated from the plaster wall surface.

ROOM 101B TOILET ROOM

- 1. The original exterior door architrave, jamb, and transom on the west wall have been uncovered; they remain in relatively good condition despite being encased by alterations. The transom above the door has one broken light. Nail holes are visible over most of the moldings. The original chair-rail and baseboard moldings have survived on the west wall; however, only the baseboard remains on the north and south walls.
- Holes have been drilled in the floorboard adjacent to the north wall for supply and waste pipes associated with the lavatory and with the plumbing on the second floor. At the south end of the space the flooring has been cut out for the water closet supply and waste pipes.
- Above the level of the dropped ceiling in Toilet Room 101B the original cornice has been removed from the west wall. The cornice moldings on the north and south walls remain; however, the plas-

ter and much of the split lath of the original ceiling is missing. The mitered corner of the cornice molding on the north wall has been cut off to create a chase for a plumbing vent and exhaust duct.

4. Early plaster remains on the north, south, and west walls; however, it has been pock-marked with nail holes. Holes have been cut in the plaster on the north wall for electrical wiring.

ROOM 102 LIVING ROOM

- 1. In the southeast and northwest corners of the room holes have been drilled in the floor and in the wood cornice moldings for exposed heating pipes.
- 2. One light in the upper sash of the northeast window has a compound crack. Two lights in the upper sash of the north window on the west wall are cracked.
- 3. A crack in the wall plaster extends between the architrave of the southeast door and the cornice molding above. Relatively minor plaster cracks are visible above the northeast window architrave and the southwest door architrave.
- 4. The outer molding of the architrave at the southeast window has been cut to accommodate a radiator enclosure.
- 5. The architectural moldings have separated from the plaster wall surface at the western end of the north wall.
- 6. The raised paneling beneath the windows on the north and west walls has separated along the horizontal seams in the paneling. The paint on these panels is peeling.
- 7. The raised paneling in the southwest door is split diagonally. The interior faces of both doors have been damaged where the hinged stiles of the doors have bound on the plinth blocks beneath the architraves.
- 8. The wood mantel has separated from the plaster wall surface of the chimney breast.

ROOM 103 DINING ROOM

- 1. To the north of the radiator on the west wall a hole has been drilled in the flooring, and a second hole has been chiseled through the brick wall to run a $\frac{1}{4}$ " diameter water line from the basement to the refrigerator icemaker located in Kitchen 106.
- 2. Radiator enclosures were screwed to the window architrave moldings and to the raised paneling beneath the south window. The panel has separated along its horizontal seam, and the paint on the pan-

eling is alligatored and peeling as a result of high temperature levels attained by the radiator.

- 3. Two lights in the lower sash of the south window are cracked.
- 4. The two original window openings on the west wall have been altered. The northwest opening has been closed and shelving has been constructed within the window reveal. The southwest opening has been converted to a doorway. The door is mounted on modern spring hinges. The shelving, the swinging door, and the infill paneling are of an inappropriate character for an historic interior.
- 5. Steel fire extinguisher brackets and plastic identification tags have been screwed to the chair rail in the northeast and northwest corners of the room
- 6. Plaster cracks extend between the original window architraves on the west wall and the cornice molding above. On the south wall, to the west of the window, there are minor plaster cracks extending between the chair rail and baseboard.
- 7. On the north wall, above the chair rail, the mantle and fireplace surround have separated from the plaster wall surface.
- 8. Above the fireplace, holes have been drilled in the plaster wall surface for anchors and picture hangers.
- 9. A modern coat hook has been screwed to the south face of the northwest door, and the lower hinge of the door is completely detached from the door jamb.

ROOM 104 FRONT STAIR HALL

- 1. Hairline plaster cracks extend between the architrave of the southeast window and the window above.
- 2. The fluted wood pilasters flanking the arched opening on the north wall have separated along blind vertical joints.
- 3. One light in the upper sash of the northeast window is cracked.
- 4. Along the south wall there is a noticeable separation between the baseboard cap molding and the plaster wall surface.

ROOM 105 VESTIBULE

1. Near the midpoint of the south wall a vertical chase was constructed to house domestic plumbing pipes, a waste pipe, and rigid electrical conduit.

- 2. Water leaks from the second floor bathrooms have damaged the ceiling plaster; the plaster is friable.
- 3. The paint on the north wall is peeling in isolated areas. Much of the finish on the walls of the vestibule is uneven; it appears that remnants of wall-paper remain beneath the painted finish.
- 4. An electric doorbell mechanism (clapper and bell) is attached to the north wall above the west architrave of the door. Wiring for the bell is stapled to the outer molding of the door architrave and is routed through holes drilled in the architrave moldings.
- 5. Screw holes remain in the architrave and west stile of the north door, where a horizontal surface bolt has been removed. Filler has been used to obscure holes in the intermediate door stile where a door knocker was once installed, and the painted finish on the door is peeling.
- 6. A telephone wiring block is mounted to the baseboard on the north wall. Telephone station wire is stapled to the perimeter baseboard and to the architrave of the south door.
- 7. There is a vertical split in one of the upper recessed panels of the south door.

ROOM 105A STAIR

- 1. Paint is peeling from the plaster ceiling and wall surfaces of the stair hall.
- 2. Exposed heating pipes pass through the beaded-board wainscot on the west wall. Water has leaked from this piping and caused substantial plaster damage in the southeast corner of the stair hall.
- 3. Near the southwest corner, a portion of the chair rail is missing.
- 4. The beaded wainscot on the east wall has buckled near the midpoint of the stairway, and the painted finish on the wainscot has peeled. This damage appears to be the result of water infiltration.
- 5. Sheet flooring has been applied to the landing, obscuring the wood floor beneath. A rubber foot mat has adhered to the sheet flooring at the east side of the landing.
 - 6. The lockset on the north door is loose.

ROOM 106 KITCHEN

- 1. The plaster ceiling is uneven; peeling paint and plaster cracks are visible. There is evidence of water damage surrounding an electrical junction box in the ceiling; the plaster is friable.
 - 2. The brick wall to the north was once an exte-

- rior wall surface. Brick and mortar repairs were made with a grey mortar to which a pink coating was applied. Neither the mortar nor the coating matches existing materials. The mortar is moderately hard and may contain portland cement.
- 3. Near the center of the north wall, above counter height, a duplex receptacle has been recessed into the masonry.

ROOM 106A BREAKFAST ROOM

- 1. The painted ceiling finish is peeling at the west end of the room. Severe plaster deterioration has occurred above the central window in the south wall; water infiltration has caused the plaster to become friable.
- 2. A surface-mounted duplex receptacle has been attached to the south wall at the east end of the radiator. Conduit from the receptacle has been routed through a hole drilled in the floor.
- 3. Telephone station wire protrudes from a hole in the south wall that is located between the two western windows.
- 4. The original window opening on the east wall has been reconfigured as a doorway, and infill panels have been constructed above the door. Modern hardware has been installed for a swinging door. The swinging door and the infill paneling are of an inappropriate character for an historic interior.
- 5. One light in the upper sash of the west window on the south wall is cracked, and one light is broken. Three lights in the lower sash are cracked.
- 6. One light in the upper sash of the central window on the south wall is cracked. Two lights in the lower sash are cracked.
- 7. Two lights in the upper sash of the east window on the south wall are cracked; one has compound fractures. Three lights in the lower sash are cracked.
- 8. One light in the fanlight above the west door is cracked.
- 9. The paint on the architraves of the south windows is cracked and delaminating, especially at the juncture of the architraves and walls. The paint on the sill of the west window has delaminated. The sill is eroded and water damaged; the wood has opened along the grain.
- 10. The muntins on the south window sash have varying degrees of paint delamination. At the west window, the muntins in the lower half of the upper sash are heavily deteriorated. Paint delamination is advanced, and water damage is visible.

ROOM 107 REAR STAIR HALL

- 1. There are minor plaster cracks on the underside of the stairway at the southwest corner of the hall.
- 2. The finishes within the hall are dirty. The paint on the wood trim is peeling, and the paint on the door architraves along the west wall is alligatored. The paint on the recessed panels of the south door is alligatored as well. The stained finish on the stair treads is worn, and the nosings are eroded. The paint on the stair risers is peeling.
- 3. There are plaster cracks above the door architraves on the west wall. In the southwest corner there is a significant plaster crack that extends from the baseboard to the height of the upper architrave of the south door.

ROOM 107A STAIR LANDING

- 1. A bare-bulb light fixture and surface-mounted conduit have been attached to the ceiling.
- 2. The paint on the ceiling and wall surfaces is peeling. All finishes are dirty.
- 3. The stained finish on the wood flooring is worn. A carpet mat is nailed to the floor adjacent to the northwest door.
- 4. The paint on the blind door to the west is alligatored and gouged.
- 5. The northeast door binds on the floor. A surface bolt has been attached to the north face of the door; the bolt is mounted to a block of wood that is nailed to the face of the door.
- 6. Modern shelving has been attached to the south wall of the stair landing with little regard for the space or for the earlier materials.

ROOM 108 KITCHEN

- 1. The architrave moldings at the base of the north window have been cut off, and the interior sill has been cut back flush with the plaster-wall surface to accommodate the kitchen casework.
- 2. Three lights in the upper window sash and one light in the lower sash are cracked. The paint on the sash and sill is alligatored, and much of the paint on the sill is eroded. The sweep lock for the upper sash was mounted to a wood block that has pulled loose.
- 3. In localized areas, the plaster finish on the ceiling is uneven, and the paint is peeling. A circline fluorescent fixture is mounted to the ceiling.

- 4. The finishes in the kitchen are extremely dirty.
- 5. The kitchen door is binding on the west jamb; the wood is abraded.

ROOM 109 DINING ROOM

- 1. The window stop moldings have been removed from the north window, and the sash cord is missing. The sash are nailed in place. The sweep lock has been relocated due to the deteriorated condition of the meeting rail.
 - 2. There are cracks in the plaster ceiling.
- 3. There is a significant crack in the plaster on the north wall that extends vertically from the baseboard to the head of the window and runs along the east architrave of the window; the crack continues in a horizontal line from the upper window architrave to the east wall.
- 4. The finishes in the dining room are extremely dirty. Paint is peeling in localized areas on each wall. The painted finish on the north and west walls has alligatored in large flake-like segments, 2" to 3" across.
- 5. There is a significant crack in the plaster on the east wall, adjacent to the northeast corner. The crack extends vertically from the baseboard to just below the ceiling and then extends in a horizontal line toward the door opening. The painted finish is peeling along the horizontal leg of the crack.
- 6. There are holes in the plaster on each wall where masonry anchors have been removed. The holes on the north and east walls and on the southwest chimney mass are pronounced.
- 7. Vertical plaster cracks are visible at either side of the chimney mass. It appears that there has been differential settlement between the chimney stack and walls.
- 8. The paint on the south door is alligatored and peeling.
- 9. Modern surface bolts have been attached to both leaves of the west door. The beaded molding along the leading edge of the south door leaf is splintered in the area adjacent to the strike.

ROOM 110 PARLOR

- 1. The ceiling plaster in the southwest corner of the room appears to be water damaged; the plaster is friable.
- 2. The finishes in the parlor are extremely dirty. Paint is peeling in large areas on each wall. In the

southwest corner and on the west wall, north of the door opening, the painted finish has alligatored in large flake-like segments, 2" to 3" across.

- 3. The paint on the window architraves and sash and the paint on the north and northeast door architraves is alligatored and delaminating. A similar condition exists at the wood fireplace surround. The trim in this room has been gouged.
- 4. The paint on the plaster fascia around the firebox is peeling.
- 5. The mortised lockset at the west door is not in proper operating condition; the set screw on the knob is not seated.
- 6. One light in the upper sash of the southeast window and two lights in the lower sash are cracked. Half of the sweep lock is missing at the southeast window. The painted finish on the window sills is eroded and peeling, and water staining on the sills and sash is apparent.

SECOND FLOOR

ROOM 201 FRONT STAIR HALL

- 1. Two lights in the lower sash of the northeast window are cracked, and one light in the upper sash is chipped.
- 2. There are hairline plaster cracks extending between the upper architrave of the northeast window and the cornice.
- 3. The painted finish on the stair handrail is alligatored.

ROOM 202 HALL

- 1. Four plywood closets with sliding doors have been placed against the north and south walls of the hallway. The closets detract from the spatial layout of the hall and are incompatible with the historic interior. Ledger strips have been fastened to the plaster wall surface above each closet to retain the closets against the walls.
- 2. A pipe chase covered with plasterboard is located in the northwest corner of the hallway. Extending from floor to ceiling, the chase contains a plumbing vent and exhaust duct for Toilet Room 1018
- 3. The original window opening on the west wall was converted to a doorway for Bathroom 206B. There are hairline plaster cracks above the door architrave, and previous plaster repair is evident to the

south of the opening.

- 4. There are hairline plaster cracks on the north and south walls immediately west of the chimney mass and on the west face of the chimney mass above the masonry vault spanning the hallway. There is some peeling paint in this area as well. The problems appear to be the result of differential settlement between the chimney and building and of minor moisture infiltration at chimney flashings.
- 5. A plaster crack extends from the attic access hatch west of the chimney to the north wall of the hall.
- 6. It appears that the original cornice molding has been removed from the hall. Only a simple $1^{-3}/4''$ \pm perimeter molding remains to either side of the chimney mass.
- 7. A steel bracket for a fire extinguisher has been screwed to the north architrave of the arched opening at the east end of the chimney mass.
- 8. The south baseboard and cap molding have separated from the plaster wall surface within the vault spanning the hallway.
- 9. Some gaps and splits in the flooring can be seen to the east of the chimney mass. Two holes $(\frac{5}{8}"$ \pm diameter) have been drilled in the floor at the southeast corner of the chimney mass. These holes appear to have been used for early electrical wiring.
- 10. Inappropriate, modern surface bolts have been mounted to the interior face of the doors at the east end of the hall.

ROOM 203 STUDY

- 1. One light in the lower sash of the southeast window is cracked. One light in the upper and one in the lower sash of the northeast window are cracked. One light in the lower sash of the north window is cracked.
- 2. The lower sash of the north window has been raised approximately 8" and held in place with a blind panel. This alteration was made to accommodate the introduction of a gabled roof on the range of student rooms to the north of Pavilion V; the modification was poorly designed.
- 3. It appears that the original baseboard moldings on the east and west walls were cut off for the installation of shelving along the north wall. Immediately west of the north window, a surface-mounted duplex receptacle is attached to the plaster wall surface at the back of the shelving. Surface-mounted conduit extends vertically from the receptacle to the head height of the window; the conduit continues

horizontally to the west wall.

- 4. The paint is peeling from the plaster wall surface behind the shelving on the north wall. This deterioration appears to be confined to the wall surface east of the window.
 - 5. Peeling paint is visible on the east wall.
- 6. Hairline plaster cracks extend upward from the door architrave on the south wall.
- 7. In the southwest corner of the room the mantel and fireplace surround have separated from the plaster wall surface. An awkward condition exists at the juncture of the fireplace surround and floor: to the northwest, sheet metal has been placed between the architrave moldings of the fireplace surround and the floor; to the southeast, the wood flooring is splintered or chiseled beneath the architrave moldings.
- 8. The baseboard and cap molding at the north end of the west wall have separated from the wall surface
- 9. The cornice moldings above the intermediate fascia on the south wall have separated.
- 10. Coaxial television cable enters the room at the juncture of the floor and frame of the southeast window. Telephone station wire enters the study through a hole drilled in the frame of the north window. The wire is stapled to the east reveal and architrave of the window.
- 11. Upper and lower door hinges are screwed to the jamb with one screw each. Some impact damage has occurred to the door and surrounding moldings where the west stile of the door has come in contact with the plinth block beneath the west door architrave.

ROOM 204 BEDROOM

- 1. Three lights in the upper sash of the northeast window are cracked. Two lights in the upper sash of the west window on the north wall are cracked. Two lights in the upper sash of the north window on the west wall are cracked, and one light in the lower sash is cracked.
- 2. A surface-mounted duplex receptacle has been attached to the north wall, immediately east of the west window. Surface-mounted conduit extends vertically from the outlet to the height of the window head; the conduit continues horizontally to the east wall.
- 3. There are hairline plaster cracks and minor areas of peeling paint on each of the walls.
 - 4. In the southeast corner of the room the fire-

place surround has separated from the plaster wall surface

- 5. Two vertically aligned holes have been drilled through the intermediate stile and rail of the door, approximately 5'6'' above the finished floor.
- 6. The hinged stile of the door has been scraped to prevent binding at the jamb. The careless scraping has removed all finishes.
 - 7. The plaster ceiling has hairline cracks.

ROOM 205 MASTER BEDROOM

- 1. One light in the upper sash of the south window is cracked.
- 2. Peeling paint and hairline plaster cracks are visible on the ceiling and on the north, south and west walls
- 3. In the northeast corner of the room, a vertical plaster crack on the east wall extends between the chair rail and cornice. Previous plaster repairs are visible along the crack. At this same location, disrupted finishes on the baseboard, chair rail, and wall surface may indicate the previous installation of framing for a closet between the east wall and the projecting chimney mass to the west.
- 4. The fascia above the architrave of the fireplace surround has a long horizontal split.
- 5. The definition of many decorative elements in the ornamental frieze has been obscured by the build up of paint coatings. Several decorative elements, including guttae and medallions, are missing from the cornice. Several bucrania are chipped.
- 6. The east door has a vertical split through one of the raised panels beneath the lock rail.

ROOM 206 VESTIBULE, ROOM 206A BATHROOM, ROOM 206B BATHROOM

Prior to the survey of this area significant removals were undertaken. The bathroom fixtures were removed, and partition walls between these spaces were demolished. Plaster rubble obscured the flooring at the time of this survey.

- 1. Modern light fixtures remain attached to the ceiling in this area, and electrical conduit and cable hang down from the ceiling where partitions once existed.
- 2. The sill of the northeast window has been split, probably with the removal of casework from the northeast corner. The paint on the window sill is peeling as a result of water infiltration.

- 3. The muntins in the north doors are water stained. At the bottom of the doors the stiles and rails are water damaged. The west door has obvious rot.
- 4. The paint on the plaster wall surfaces in the northwest corner is peeling.
- 5. Ceramic tile and plaster have been removed from the south wall. The removal of the tile and its cement base caused the soft, circa 1850 brick construction of the wall to spall; the face of the brick remains attached to the cement.

ROOM 207 STORAGE

- 1. An inappropriate, modern light fixture is mounted on the ceiling. Minor plaster cracks are visible on the ceiling surface.
- 2. The paint on each of the plastered walls is peeling. Severe water damage has occurred on the south wall beneath the window sill; the paint is peeling, and the plaster is friable.
- 3. The window sill has been covered with an adhesive vinyl film; paint erosion is visible where the vinyl has delaminated. The paint on the window sash and architraves is peeling. The bottom rail of the lower window sash has significant water damage; the joints between the rail and stiles have opened. The window stop moldings are missing, and the lower sash is held in place with nails.
- 4. Television coaxial cable is routed through a hole drilled in the west end of the window apron.
- 5. Holes remain in the north wall where anchors were inserted for shelving.
- 6. Modern clothes hooks have been screwed to the south face of the door. The lower hook is broken off.

ROOM 208 BATHROOM

- Minor plaster cracks are visible on the ceiling surface.
- 2. Modern plywood casework is attached to the north wall in the northeast corner of the bathroom.
- *3.* One light in the upper window sash is cracked, and one light is broken.

ROOM 209 STAIR HALL

- 1. The plaster ceiling has severe water damage at the juncture with the east wall. The paint is peeling, and the plaster is friable.
- 2. The finishes in the stair hall are dirty. The stained finish on the stair treads is worn, and the

- nosings have been eroded by foot traffic. The paint on the risers and on much of the baseboards is delaminating.
- 3. The window in the south wall has five cracked lights. The paint on the sash, jambs, and architraves is alligatored. The paint on the muntins is peeling, and the muntins are water damaged. Water infiltration at the perimeter of the window opening, especially to the east, has caused the paint on the casework beneath the window to peel.
- 4. Telephone station wire has been stapled to the baseboards and stair header at the south end of the hall. A surface-mounted telephone jack has been attached to the baseboard on the east wall, south of the door opening.
- 5. The door architraves and baseboards are scuffed and nicked. The baseboard between the door openings on the west wall has been pried loose.
- 6. The paint on the west door reveals is alligatored. The paint on the overhead reveal of the east door is peeling.

ROOM 210 BATHROOM, ROOM 209A CLOSET

Prior to the survey of this area significant removals were undertaken.

- 1. One light in the lower window sash is cracked, and one light is broken.
- 2. The painted finish on the window architraves, jambs, and sash is alligatored.
- 3. At the juncture of the ceiling and north wall of the bathroom the paint is peeling, and the plaster is friable.
- 4. In the northeast corner of the bathroom the paint on the north wall is peeling.
- 5. The painted finish on the west face of the bathroom door is alligatored.
- 6. The plaster finishes on the ceiling and on the east and west wall surfaces have been disrupted by the removal of the framed partition at the south end of the room.
- 7. The painted finishes on the east and west walls of the former closet (Room 209A) are peeling.

ROOM 211 BEDROOM

1. Severe water damage is apparent at the juncture of the ceiling and the north wall and at the juncture of the ceiling and the west wall. In these locations the painted finish has peeled, and the plas-

ter is friable. Additional water damage is visible in the southwest quadrant of the ceiling.

- 2. Plaster cracks and peeling paint are visible on each of the walls. The cracks have occurred around the window and door openings and at the juncture of the south wall and the chimney mass.
- 3. Two lights in the lower sash of the west window are cracked, and half of the sweep lock is missing. One light in the lower sash of the north window is cracked. The painted finish on the window architraves and sash is alligatored. The paint on the west window sill is alligatored and peeling as a result of water damage.
- 4. A plywood closet with sliding doors is located in the northeast corner of the room. The closet detracts from the spatial layout of the room, and it is incompatible with the historic interior.
- 5. The painted finish on the southeast door is alligatored and peeling; one of the recessed panels in the door is split. The paint on the south architrave of the northeast door is alligatored.
 - 6. The finishes in the bedroom are dirty.

ROOM 212 BEDROOM

- 1. There is significant water damage to the plaster ceiling above the bedroom door; the plaster in this location is friable. The ceiling above the west window is water stained, and small areas of friable plaster are visible.
- 2. Plaster cracks and peeling paint are visible on each of the walls. The cracks have occurred around the window and door openings and at the juncture of the north wall and the chimney mass.
- 3. South of the doorway, a vertical plaster crack extends up the east wall; the crack continues horizontally beneath the ceiling to the south wall.
 - 4. The finishes in the bedroom are dirty.
- 5. Paint is peeling from the plaster fascia surrounding the firebox and from the moldings of the fireplace surround.
- 6. Two lights in the upper sash of the west window are cracked; one light in the lower sash is cracked. One light in the upper sash of the southwest window is cracked; three lights in the lower sash are cracked.

- 7. The painted finish on the window jambs, architraves, and sash is alligatored. The sill of the west window has been covered with an adhesive vinyl film. The paint on the window sills along the south wall is peeling. At the southwest window, water damage is visible on the bottom rail of the lower sash. Half of the sweep lock at the southeast window is missing. The sweep lock on the upper sash of the west window has been mounted on a supplementary block of wood; as an expedient repair.
- 8. The painted finish on the door is alligatored, and the paint is peeling in localized areas.
- 9. A surface-mounted telephone jack has been attached to the baseboard on the east wall. Station wire is stapled to the baseboard and is routed through a hole drilled in the south door architrave.

ATTIC

- 1. Thomas Jefferson's ridge-and-furrow roof system, encapsulated beneath the mid-nineteenth century hipped roof, is covered with fine, silt-like black dust.
- 2. Holes have been cut in the ridge-and-furrow roofing system. Since the early roofing serves as the floor surface in the attic, these openings are safety hazards
- 3. The mortar used in the construction of the chimney has deteriorated in some locations; there has been a loss of adhesion between the mortar and brick.
- 4. The chimney has been stained by the infiltration of water at the perimeter flashing. There is a build-up of debris around the base of the chimney and on the stepped masonry shelf of the original stack.
- 5. Knob-and-tube wiring is strung across the ridge-and-furrow roof. While this wiring is an important artifact dating to the electrification of the building, its continued use is an electrical shock and fire hazard.
- 6. The installation of large new mechanical units in the attic resulted in the removal of the original roof access hatch, which became the attic access opening. The original opening was enlarged and the associated tin-plate flashing was removed.

UTILITY SYSTEMS

ELECTRICAL SYSTEM

Portions of the existing electrical system date to the late nineteenth or early twentieth century. Knob-and-tube wiring remains in place, especially in the attic of the original building. The continued use of this wiring is an electrical shock and fire hazard.

As the demand for electrical service has grown, new circuits have been added in an ad hoc manner, with little sensitivity for the historic quality of the building. Surface-mounted conduit and panel boxes are visible throughout the original building and subsequent additions. Holes have been drilled in flooring, intrusive chases have been constructed, and, most recently, original building materials have been channeled to receive new wiring and conduit.

All existing light fixtures are inappropriate to the historic quality of the building.

HVAC SYSTEM

A circulating hot-water system is used to heat the building. The water is supplied by a remote heating plant and distributed to cast-iron radiators throughout the building. Generally, the water distribution pipes have not been concealed. The pipes are routed through holes drilled in the flooring, and risers extend from floor to ceiling through inhabited spaces. The heating pipes are especially obtrusive in the basement, where a perimeter heating main is suspended from the ceiling; secondary piping supplies water to radiators in the basement and to the rooms above. In some areas the uninsulated heating pipes have dried out adjacent building materials, and they have caused condensation to form on cooler surfaces in close proximity to the pipes. Exposed pneumatic control lines for the heating system are also visually intrusive.

PLUMBING SYSTEM

The plumbing consists primarily of galvanized-steel supply pipe and cast-iron huband-spigot soil pipe. This system, probably installed in the first half of the twentieth century, has been augmented with copper supply tubing. Much of the piping is exposed. The plumbing system appears to be near the end of its useful life; visible

corrosion and damage associated with plumbing leaks are apparent throughout the building.

Plumbing fixtures appear to have been replaced as required. The dates of manufacture span most of the twentieth century. Hot water heaters have been obtrusively installed in basement hallways.

FIRE DETECTION/SUPPRESSION SYSTEMS

Rudimentary fire detection is provided by independent, battery-operated smoke detectors. Fire extinguishers constitute the only system for fire suppression. The existing fire extinguishers have been installed with little sensitivity for the historic building fabric; brackets and labels have been mounted directly to architectural moldings.

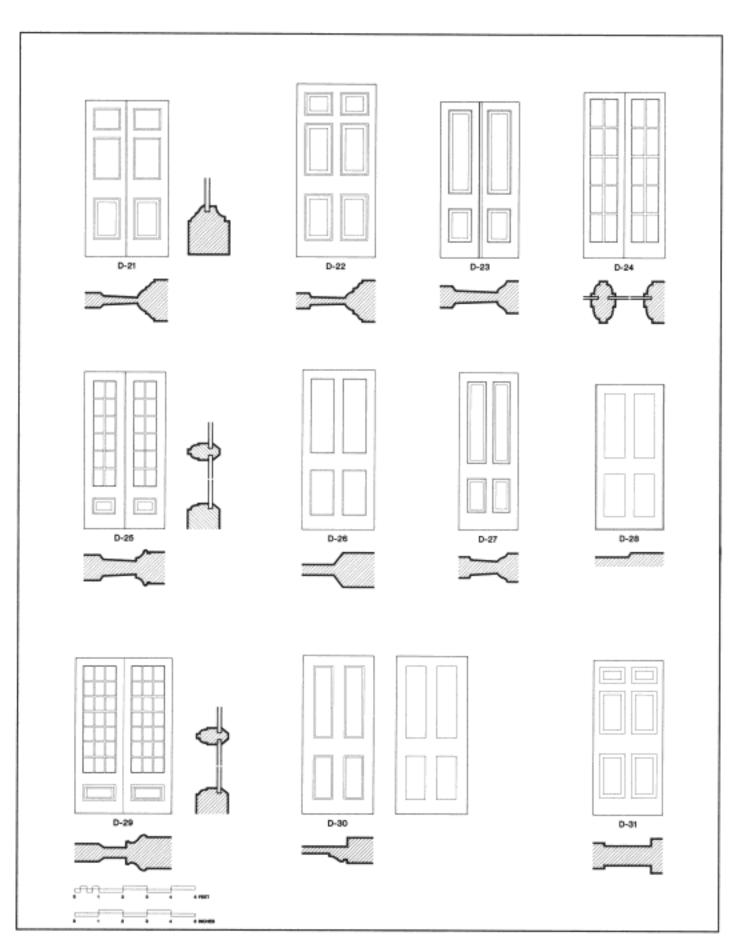
RECOMMENDATIONS FOR REPAIR AND RESTORATION

This historic structure report serves as both an archival and physical survey of the construction, history and current condition of Pavilion V, as well as a framework for conducting the current restoration effort and for guiding future work. The report provides directions, which if followed, will help to ensure that the integrity of the structure is not compromised and its remaining historic building fabric is preserved intact, while necessary modifications are made to accommodate modern functional requirements, such as bathrooms and kitchens.

Previous modifications that have compromised the historic character of the building and caused physical damage should be reversed. New work must be based on the physical and documentary evidence summarized in this report. It needs to be realized that restoration efforts should not be founded on romantic interpretations of past conditions, nor on expedient, pseudo-historic design considerations. It is the artifact, or building, that is of lasting value, and it is the integrity of the building that must be preserved. While the conflicting agendas of preservation and modern residential accommodation temper the response of architects, engineers and tradesmen, it must be recognized that occupants will come and go along with systems that provide for their comfort. The building must be preserved as a testament to the architectural and construction genius of Thomas Jefferson.

APPROACH TO RESTORATION

The restoration of Jefferson's buildings at the university should be approached from a curatorial perspective. Each building should be regarded as a rare object of art or as a valuable piece of furniture, and it should be entrusted only to the care of architects and craftsmen trained in the conservation of historic building fabric.



Elevation and profiles of door types

RECOMMENDATIONS

Accurate restoration work is not easy and often requires extraordinary dedication to excellence. Trained architects and craftsmen develop a sensitivity to historic materials and the way they were utilized. Restoration specialists understand that inappropriate, expedient solutions often cause irreparable damage.

The renovation and installation of building systems often causes substantial damage to historic buildings. New electrical, plumbing and mechanical systems often require large amounts of space and destruction of original building fabric. Building systems can be camouflaged once they have been installed; however, it is the underlying damage inflicted by their installation that threatens the building's integrity. To minimize the physical and aesthetic effect on the building, limitations should be placed on modern amenities. Occupants of such significant historic buildings should not expect the same levels of comfort and convenience found in new structures.

Utility systems for significant historic buildings should be designed only by engineers who specialize in the integration of building systems in historic structures, and the work should be coordinated with restoration architects to insure that the least intrusive methods of installation are pursued. Building systems must be skillfully designed to provide adequate levels of comfort while conforming to strict building conservation requirements.

Concern for preservation should be extended to all original building fabric and to the cumulative history of the structure. Windows, doors, hardware, floor-boards, traditional plaster construction, and decorative finishes should be conserved and maintained. Where elements are missing they should be replaced with exact, dated replicas. Original material, including that which is considered seemingly insignificant, should never be replaced for cosmetic reasons, nor for the convenience of construction. Period nails and screws are as invaluable to Jefferson's buildings as are the architectural moldings.

In situ repair and stabilization is the preferred method of conservation for original wood and plaster elements. These materials should never be replaced in toto, and care must be taken to preserve such historic building material throughout the restoration process.

EXTERIOR

ROOF

The original ridge-and-furrow roof now in the attic is of major historic significance. It is the best preserved of Jefferson's ridge-and-furrow roofs, which were unique to Monticello, Poplar Forest, and the University of Virginia. It is especially significant because not only have the rooflets survived intact, but the roof hatch and flashings remain unaltered. The proposed renovation work, particularly the installation of new mechanical systems, should be done in a manner that does not damage or compromise the significant features of the original Jefferson-designed roof.

Although the slate roof on the original building was replaced in the 1980s, it appears that no effort was made to restore the built-in rainwater diverters of the 1837 hipped roof. The existing downspout locations may or may not correspond with those for the mid-nineteenth century roof. When future roof work is undertaken, the roof on the original building should be investigated to determine if the downspouts can be relocated, in accordance with the remaining physical evidence, to provide more positive drainage.

Additional work on the roofs of the original pavilion, the connecting hyphen, the rear addition and the west porch includes the following:

- Remove leaves and debris from the roofs and gutters.
- Re-design sheet metal flashing at the juncture of the original building and the roof of the connecting hyphen.
- Paint sheet metal roofing, downspouts and hung gutters.
- Replace galvanized ogee gutter at perimeter of west porch with a historically appropriate hung gutter.
- Restore balustrades on roof terraces of connecting hyphen, eliminating expedient repairs that utilized elastomeric roofing membrane.

MASONRY WALLS

The exterior brick walls should be carefully cleaned and repaired. Existing portland cement mortar repairs and improperly matched white and colored mortars should be removed and new lime-rich mortar installed. The masonry work should include the following:

RECOMMENDATIONS

- Clean exterior brick walls using a mildly acidic masonry cleaner.
- 2. Remove all deteriorated mortar and replace with lime-rich mortar matching the original in color, texture, density and tooling. If possible, all portland cement mortar should be removed as well; however, further investigation should be undertaken to determine if the cement mortar can be removed without causing significant damage to the adjacent brick. After pointing, settlement cracks should be monitored to determine whether movement has been arrested.
- Dry brush efflorescence from brickwork and use mild chemical cleaning agents to remove biological growth and other types of staining. No chemicals should be used that will damage the masonry.
- 4. Replace broken and badly spalled bricks.
- Correct exterior drainage to help prevent rising damp.
- Remove surface-mounted electrical conduit, coaxial television cable and telephone wiring from exterior wall surfaces.
- Remove the Canadian hemlock tree located three feet from the northwest corner of the rear addition.

AREAWAYS

 Correct drainage problems in the areaways to the north, west and south of the original building. Replace broken brick pavers.

WINDOWS

- I. Remove all loose, crazed and peeling paint using hand-scraping techniques.
- Remove wire mesh and plastic sheeting from basement window wells on east elevation. Replace broken wood bar in reveal of basement window.
- 3. Remove mildew growth on windows and blinds with a diluted bleach solution.
- 4. Repair deteriorated wood using epoxy consolidants and fillers.
- 5. Where compound cracks occur within a window pane, and excess air penetration has developed, replace glass with compatible restoration glass. The restoration glass should have the year of replacement etched in a corner.
- Replace deteriorated glazing putty and repaint sash.
- Rehang all sash to ensure proper operation and to reduce excessive air penetration.

INTERIOR

The interior spaces, especially those in the original building (1819-1823), should be preserved in their historic forms and restored where necessary. Original paint colors and interior finishes should be replicated; wallpaper should be installed where there is sufficient evidence to confirm its initial use.

Pavilion V should continue to be used as a residence; however, modifications should be made to convert the two existing residences to a single residence. With the establishment of a single residence, service facilities can be located in the connecting hyphen and rear addition. This will allow a more conservative preservation approach to be taken in the original Jeffersonian spaces. The large size of the building may also facilitate its use for informal teaching space. Within the original building, residential functions should be accommodated much as they have been, with the more formal spaces on the first floor, family bedrooms and sitting rooms on the second floor, and informal living and storage spaces in the basement.

All spaces that require plumbing — bathrooms and kitchens — should be located in the hyphen or rear addition. In this way the original building can be spared the mutilation caused by the installation of piping and the damage resulting from plumbing leaks.

Basement

- 1. Install brick flooring to match original flooring.
- 2. Restore fireplaces to original form.
- 3. Remove existing heating pipes and exposed plumbing.
- 4. Remove surface-mounted electrical conduit.
- 5. Replace deteriorated and moisture-damaged wall and ceiling plaster.
- 6. Remove inappropriate modern casework and finishes.
- 7. Repair deteriorated and modified woodwork.
- 8. Renovate bathroom and laundry facilities.
- 9. Repair all period hardware and replace modern hardware with appropriate reproductions.

First Floor

- 1. Remove modern partitions constructed at the east and west ends of the central hall in the original building and restore the original west entry door.
- 2. Re-design the closures for the original window openings in the west wall of the

RECOMMENDATIONS

dining room (Room 103).

- 3. Replace deteriorated and moisture-damaged plaster.
- 4. Rake out settlement cracks and replaster.
- 5. Repair deteriorated and modified woodwork, including cornices.
- 6. Repair damaged floorboards.
- 7. Restore fireplaces to original form.
- 8. Renovate kitchen and bathroom facilities.
- 9. Remove unused electrical junction boxes and repair plaster ceiling and wall surfaces.
- 10. Repair all period hardware and replace modern hardware with appropriate reproductions.

Second Floor

- 1. Replace deteriorated and moisture-damaged plaster.
- 2. Rake out settlement cracks and replaster.
- 3. Repair deteriorated and modified woodwork, including cornices.
- 4. Repair damaged floorboards.
- 5. Chemically remove heavy paint build-up from elaborate plaster frieze in master bedroom (Room 205).
- 6. Remove unused electrical junction boxes and repair plaster ceiling and wall surfaces.
- 7. Remove inappropriate modern casework.
- 8. Renovate bathroom facilities.
- 9. Repair all period hardware and replace modern hardware with appropriate reproductions.

Attic

- 1. Clean and vacuum Jefferson's ridge-and-furrow roof, encapsulated beneath the existing hipped roof.
- 2. Catalog artifacts found within attic space above the original building.
- 3. Verify that existing knob-and-tube wiring is inactive. This wiring should be maintained *in situ* as an artifact of the building's electrification.
- 4. Prepare large format photographic negatives of ridge-and-furrow roof.
- 5. If the fireplaces within the original building are to remain in use, selective pointing repairs are required at the chimney.
- 6. As a safety precaution, the holes in the ridge-and-furrow roofing should be bridged or closed in a reversible manner.

UTILITY SYSTEMS

Electrical System

- 1. Replace entire electrical system.
- 2. Remove existing light fixtures and install fixtures appropriate to the historical quality of the building.

HVAC System

- 1. Remove existing heating system, including pipes and radiators.
- 2. Investigate installation of a new forced-air HVAC system to provide heating and air conditioning. Equipment for the new system should be located in mechanical spaces beneath the student dormitory rooms and within the connecting hyphen and rear addition of the pavilion.
- 3. The new heating and cooling system should utilize the university's central hot and chilled water plants.

Plumbing System

1. Replace entire plumbing system as part of the renovations for bathroom and kitchen facilities.

Fire Detection and Suppression Systems

- 1. Install a fire detection system throughout the building that utilizes heat and ionization detectors and communicates with a central reporting facility.
- 2. Investigate the installation of a limited fire suppression system utilizing sprinklers. Such a system should be considered for attic and mechanical spaces. It is not recommended that the first and second floors of the original building be sprinklered because of the damage that would be caused by the installation of such a system.
- 3. Fire extinguishers should be discreetly located throughout the building. The installation of these appliances should not cause damage to building materials.

ILLUSTRATION ACKNOWLEDGMENTS

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