FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor’s Number       USGS Quad       Area(s)       Form Number
UMASS No. 74              Williamsburg     N/A

Town: Amherst
Place: University of Massachusetts

Address: 149 Clark Hill Road

Historic Name: Apiary Laboratory

Uses: Present: Medical Entomology and Bee Research
      Original: Laboratory

Date of Construction: 1911

Source: University of Massachusetts Facilities Dept.

Style/Form: Vernacular

Architect/Builder:

Exterior Material:
  Foundation: Brick
  Wall/Trim: Brick and Stucco
  Roof: Asphalt Shingles

Outbuildings/Secondary Structures: Garage and Shed
(dates of construction unknown)

Major Alterations (with dates): Addition of one dormer to the east and west elevations, post-1918.

Condition: Fair. Has some boarded windows

Moved: no | X | yes | | Date __________

Acreage: Total Campus Acreage: 1,348 Acres

Setting: Located at the northeast corner of Clark Hill Road and Butterfield Terrace, the Apiary Laboratory is set into a landscaped hillside, with an open grassed area on its west side along Butterfield Terrace.

Follow Massachusetts Historical Commission Survey Manual instructions for completing this form.
Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:
Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Apiary Laboratory is a 1½-story brick and stucco vernacular building with a gambrel roof that has flared ends. The building is three bays wide and three bays deep, with a rectangular footprint, a brick foundation and an asphalt shingle roof. The building is set into a hillside, with its main entry on its (east) uphill side. The rear (west) downhill side has a fully exposed basement with brick walls. The first story and gable peak walls are coated with stucco.

The east elevation has a central doorway that has paired 8/8 wood sash windows on either side. The door is a modern replacement with a narrow strip window insert. The east slope of the gambrel roof has a central dormer that is sided with asphalt shingles and contains a 6/6 sash window.

The north elevation has two small windows in the brick foundation, which is fully above ground at its western end. The first story has a central pair of 8/8 sash windows, which have a single 8/8 window at either side. The gable peak contains a central pair of 8/8 windows.

The west elevation is 2½ stories because of the slope of the land. The basement story has a central door, made of painted plywood, with a window opening on either side. Based on what remains of these basement windows, they appear to have originally been 6/6 sash. The window to the north of the door retains its 3/2 upper sash, but the lower sash has been replaced by a painted panel that has an exhaust fan in its center. The window to the south of the door has been covered with unpainted plywood. The first story contains three evenly spaced sets of paired 8/8 windows. The west slope of the gambrel roof has an off-center dormer that is sided with asphalt shingles and contains a 6/6 sash window.

Historic photographs of the Apiary Laboratory on file at Special Collections and Archives, W.E.B Du Bois Library, University of Massachusetts Amherst show that the building did not have any dormers in 1918. Based on these photographs, the gambrel roof appears to have been covered in wood shingles at that time. Other than the addition of these dormers and installation of an asphalt shingle roof, the exterior of the Apiary Laboratory is remarkably unchanged from its 1918 appearance.
Landscape – Visual/Design Assessment
Apiary Laboratory is located on the south side of Clark Hill Road near the intersection with Infirmary Way. The site features extreme slopes surrounding the building and westward views into the campus. Along the south side, the site is heavily wooded. Vegetation on the site consists of deciduous trees over mown and un-mown lawn, evergreen trees, an evergreen hedgerow, and perennial planting at the foundation of the building. Access to the building is provided by a bituminous concrete drive with a bituminous concrete curb and an irregular granite stepping stone path. The site also features stone boulders, a stone retaining wall, and a woodshed.

2005 orthophotograph of the Apiary Laboratory (center) and surrounding landscape, north is up (MassGIS).
HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Overview

The University of Massachusetts, Amherst was chartered as the Massachusetts Agricultural College in 1863 but did not accept its first class until 1867. As one of two land grant universities in Massachusetts, the university’s original mission was agricultural education. Its mission, however, evolved within the first 20 years in response to the changing needs of the United States. While agriculture remains, even today, a mainstay of the University’s mission, the University now also supports engineering, science, education, and liberal arts colleges and departments.

A full historical narrative of the University of Massachusetts from its founding to 1958 is contained in the survey report. This narrative was prepared in 2009 by Carol S. Weed, Senior Archaeologist with Vanasse Hangen Brustlin, Inc.

Shown below are selected highlights from the text of the full historical narrative, along with additional information pertinent to the specific building that is described in this Massachusetts Historical Commission Building Form. This section contains: (1) highlights of the historic periods in the development of the University of Massachusetts, leading up to and including the period when the building was constructed, (2) information about the university in the decade when the building was constructed, (3) information about the circumstances that led to the construction of the building, along with information about its architect, if known, and (4) an analysis of the historic landscape of the building.

1863-1867: Administration and Initial Campus Layout

As the educational mission evolved in the years after 1863, so did the university’s approach to its facilities and its landscape. There was no accepted plan for the layout of the college, despite the preparation of various plan proposals in the 1860s, including separate proposals from the country’s preeminent landscape planners, Calvert Vaux and Frederick Law Olmsted, who had formerly worked together on the winning design for New York City’s Central Park. Neither Vaux’s plan, nor Olmsted’s plan to create a campus around a central green, were accepted by the University Trustees.

In 1912, a professional landscaping publication reported that Warren H. Manning, formerly affiliated with the Olmsted firm, had spent over four years preparing a comprehensive plan for the University Trustees. The Trustees had considered it imperative for the college to plan harmonious development that would conserve the beauty of campus grounds while meeting the needs of a growing student population whose expanding range of activities was unprecedented.

Manning’s plan designated three distinct sections of the campus, the Upland, Midland and Lowland Sections. Each section was intended to be the locus of specific functions, with clusters of purpose-built structures to serve those functions. For example, one section would be designated for faculty, women’s and horticultural facilities. A second section would contain administration, research, science and student life (dormitory, dining hall, and sports) facilities. The third section would be dedicated to poultry, farming and sewage disposal facilities.

Although Manning’s Upland, Midland, and Lowland sections are not fully realized, it is apparent that discipline specific groupings were developed. Building clusters, especially those related to agriculture, administration, and the hard and earth sciences (physics, chemistry, and geology) continued to expand through the present day.
By World War I and continuing through the 1920s, University records frequently refer to the inadequacy of the physical plant; the lack of class room space; the lack of properly ventilated and lighted spaces; and the danger of having to cancel classes because of a lack of appropriate facilities. Expansion of the campus through acquisition of additional land was considered essential if the University were to construct new and better facilities to address these deficiencies and excel as an institution of higher education.

### Apiary Laboratory

By the early 20th century, the portion of campus east of North Pleasant Street and north of present-day Clark Hill Road was the locus of the College’s market gardens, orchards and vineyards. Market gardens also extended south of Clark Hill Road along the east side of North Pleasant Street. All of these agricultural enterprises were dependent on pollination by bees. In 1911, the Apiary Laboratory was constructed opposite the southernmost market garden tract, within a suitable proximity of the various gardens and orchards. Unsurprisingly, an historic photograph of 1918 shows that the lawn area immediately surrounding the Apiary Laboratory contained beehives. The Apiary Laboratory, like numerous other late 19th and early 20th century laboratory buildings on campus, was designed with an outward appearance that is more redolent of residential architecture than the popular conception of what a scientific laboratory might resemble. The quasi-residential exterior design of the Apiary Laboratory and other laboratory buildings on campus may be attributed to the fact that these structures typically included residential quarters for graduate students who served as caretakers for the buildings. The upper story of the Apiary Laboratory was originally fitted out with a small apartment and features of this residential set up are still evident on the interior of this building although the top floor is closed due to building code issues. The Apiary Laboratory is part of the Department of Plant, Soil, and Insect Sciences facilities and the building is currently used for research on medical entomology, including studies on pesticide effects on bees.

### Landscape Analysis

Historic photographs show that the landscape surrounding the Apiary Laboratory was once more open in character, with less dense vegetation. Deciduous trees are shown over un-mown lawn and the landscape appears more vernacular. The landscape to the south of the Apiary Laboratory, now dense forest, was once open field associated with the building. Access to the building was provided by an unpaved drive in the present location of Clark Hill Road, leading to the west side of the building. The site surrounding the building retains its characteristic extreme slopes.

### BIBLIOGRAPHY and/or REFERENCES

Joseph S. Larson, Personal communication to VHB 25 March 2009 and 16 April 2009 concerning the Apiary Laboratory’s continuing use as a research facility and the status of the building’s top floor apartment

Richard Nathhorst, Personal communication to VHB 3 March 2009 regarding the historic context of the Apiary Laboratory and its dual function as laboratory and residential space
Apiary Laboratory, view northeast, September 2008
Apiary Laboratory, view southeast, September 2008
Apiary Laboratory, with beehives in foreground, 1918
Courtesy Special Collections and Archives, W.E.B. Du Bois Library, University of Massachusetts Amherst
Apiary Laboratory, 1918
Courtesy Special Collections and Archives, W.E.B. Du Bois Library, University of Massachusetts Amherst
First established in 1863 under the provisions of the Federal Morrill Land-Grant Colleges Act, the University of Massachusetts Amherst retains a significant collection of buildings dating from its first period of operation as the Massachusetts Agricultural College (1863-1931). These include, but are not limited to: substantial brick and masonry classroom, laboratory, research and administrative buildings dating to the late nineteenth and early twentieth centuries, barns and stables related to its function as an agricultural college, pre-existing wood frame buildings (including two 18th century buildings [117, 118]) incorporated into campus functions, the power plant [107], the Chancellor’s House [124], and the Old Chapel [126] and Memorial Hall [112], historic centerpieces of the campus. The historic buildings from the “Mass Aggie” period for the most part are concentrated in three areas: (1) an arc that extends west to east between the Mullins Center and the Northeast Residential Area, including the Grinnell barn complex [109, 110, 111], Blaisdell [108], the power plant [107], Flint [104], Stockbridge [105], Draper [103], Goessmann [106], and West [114] and East [113] Experiment Stations; (2) a smaller grouping that includes, Wilder [115], the University Club buildings [117, 118], Clark [116] and Fernald [119]; (3) and the group of South College [128], Old Chapel [126] and Memorial Hall [112] at the center of the campus. Other individual buildings [including 120, 124, 125] also survive outside these areas. Although the campus has expanded significantly in and around the Massachusetts Agricultural College core, both individual buildings and groups of buildings that still convey their relationship to each other as part of the Agricultural College are campus plan, are eligible for listing on the National Register of Historic Places under criteria A and C at the state level.

The University of Massachusetts Amherst also retains a significant collection of buildings dating from 1931-1958, which is a period characterized by the expansion of the school’s mission and physical plant that began in the 1930s with its name change to Massachusetts State College. At this time, the Trustees made a concerted effort to modernize and increase campus facilities, through the post-World War II mid-20th century period when there was unprecedented growth in the size of the university student population and a concurrent growth in specialized academic research and degree work.
Significant buildings that were constructed to meet the University’s needs between 1931 and 1958, as well as significant buildings predating 1931 which have no prior Form B on file with the Massachusetts Historical Commission, include (listed in order of construction date): [UMass 58]; Hatch Laboratory, built 1891 [UMass 118]; Clark Hall Greenhouse, built 1907 [UMass 84]; French Hall Greenhouse, built 1908 [UMass 105]; French Hall, built 1909 [UMass 104]; Waiting Station Shelter, built 1911 [UMass 63]; Apiary Laboratory, built 1911 [UMass 74]; Hicks Physical Education Building, built 1931 [UMass 121]; Hicks Physical Education Cage, built 1932 [UMass 122]; Thatcher House, built 1935 [UMass 30]; Research Administration Building, built 1939 [UMass 579]; Lewis House, built 1940 [UMass 28]; Butterfield House, built 1940 [UMass 5]; Greenough House, built 1946 [UMass 24]; Chadbourne House, built 1947 [UMass 6]; Mills House (New Africa House), built 1948 [UMass 29]; Skinner Hall, built 1948 [UMass 128]; Gunness Laboratory, built 1949 [UMass 91]; Brooks House, built 1949 [UMass 4]; Hamlin House, built 1949 [UMass 25]; Knowlton House, built 1949 [UMass 26]; Marston Hall, built 1950 [UMass 92]; Paige Laboratory, built 1947 [UMass 6]; Hasbrouck Laboratory, built 1950 [UMass 124]; Baker House, built 1952 [UMass 3]; Crabtree House, built 1953 [UMass 12]; Leach House, built 1953 [UMass 27]; Worcester Dining Hall, built 1953 [UMass 85]; Arnold House, built 1954 [UMass 2]; Durfee Range, built 1955 [UMass 96]; Van Meter House, built 1957 [UMass 32]; Machmer Hall, built 1957 [UMass 111]; Student Union, built 1957 [UMass 131]; Wheeler House, built 1958 [UMass 33]; and Johnson House, built 1959 [UMass 36].

The recommended University of Massachusetts Amherst historic district meets Criterion A for its association with the ongoing mission of this state university to meet the educational requirements of a rapidly changing world. From the inception of the University in 1863 as the Massachusetts Agricultural College, through the current day, the Trustees have sought to provide educational programming and facilities that would enable students to advance the practice of agriculture and a steadily increasing host of other fields, meet the needs of a rapidly-industrializing world, and succeed in leading a post-industrial information and technology-based economy.

The historic district also meets Criterion C for its stock of buildings and landscape features whose forms and functions reflect the evolving and expanding mission of the University in the 95 years between its 1863 founding and 1959 (1959 being the 50 year cut-off for National Register consideration). A number of architects, landscape architects and planners of local, regional and/or national prominence were involved in the design of the individual buildings and the overall plan of the current University of Massachusetts Amherst campus. The aggregate efforts of these design professionals produced a distinctive public university campus landscape, primarily of the mid-19th to mid-20th century, which is unique in Massachusetts.

Despite the loss of certain buildings and landscape features up to the present time in 2009 and incremental physical changes seen in new window, door and roofing replacements, as well as siding replacements in a small number of buildings, the district retains integrity of location, setting, design, feeling, association, workmanship, and materials.