

UNIVERSITY OF PENNSYLVANIA, SMITH WALK
Bounded by Walnut Street, 33rd Street,
34th Street, and Spruce Street
Philadelphia
Philadelphia County
Pennsylvania

HABS No. PA-6179

HABS
PA
51-PHILA
5666-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

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HISTORIC AMERICAN BUILDINGS SURVEY

UNIVERSITY OF PENNSYLVANIA, SMITH WALK

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Location: Bounded by Walnut Street, 33rd Street, 34th Street, and Spruce Street.
Philadelphia, Philadelphia County, Pennsylvania
USGS Philadelphia Quad, UTM Coordinates: 18:483400-4422170
18:483580-4422170

Present Owner: University of Pennsylvania

Present Use: Campus Walkway

Significance: The landscaped walk that is now called Smith Walk preceded the campus plan of 1913 that set the goal of using buildings to frame space. With Hamilton Walk on the south side of the University of Pennsylvania campus, it established the precedent for the modern character of the campus as a series of super-blocks enclosing space from the urban streetscape. Laid out by architects Cope and Stewardson as a part of their Towne Building project in 1903, the walk continued the palette of materials of that building's limestone trim and bluestone steps into the adjacent walkway. While all of the original landscape elements including the trees and the walkway materials have been replaced, the character of the original landscape survives. Later additions including the Smith statue (1926) and the War Memorial flagpole (1952) have given the walk additional presence and focus. Smith Walk with its adjacent buildings, including the National Historic Landmark Furness Building, forms a part of the National Register University of Pennsylvania Campus district.

Part I. Historical Information:

A. Smith Walk Development:

1. Early history:

— Though Locust Street was laid out on city maps and eventually was opened east of 33rd Street, there was no path or walkway through what would have been the 3300 block before the mid 1890s.¹ The block itself remained undeveloped until the 1870s when it was sold by the City of Philadelphia, which had held it as a part of the Almshouse property. Houses were built along Walnut Street in the 1870s but the remainder of the block was held by the city which turned over portions for civic activities in the early 1890s. The first of these institutions was the Foulke and Long Institute which acquired the property on the north side of Smith Walk in 1890. In 1891, the Lea Institute of Hygiene was given the property on the south side of the unopened Locust Street.

2. University of Pennsylvania development:

In 1888, the University built its new library on the west side of 34th Street, effectively blocking the passage of Locust Street. Because both the Foulke and Long Institute and the Lea Institute of Hygiene faced 34th Street and because the University had no resources east of 34th Street, there was no call for anything more than a pathway. The need for a more finished walk emerged in 1896 when the University received the property at the east side of the block for the site of its Dental School (since renamed Hayden Hall). Two years after the opening of the Dental School, the *Penn Dental Journal* reported that a new stone walk had been laid out to 33rd Street.² Seven years later, the University constructed the new Towne Building for the School of Engineering, further increasing foot traffic across the block.

With the construction of the new Towne School of Engineering across from the Dental School, the walkway was given character and form. Early photographs dating from the dedication of the Towne Building in 1904, show only a narrow concrete walkway with a narrow cross walk on axis with the central doorway of the Dental Hall and the west entrance of the Towne Building. By 1906, the simple cross walk had been replaced with an oval plaza with semicircular

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planting beds flanking the main walkway.³ Smith Walk was constructed and embellished as part of the University program to upgrade its landscape which reached fruition in the first decade of the twentieth century. With this project, the major buildings along the walkway were completed as they presently exist.

George Nitzsche described the early twentieth century campus as a "... pleasing site for the many handsome buildings. Well-kept walks wind about the grounds which are diversified by terraces, shrubbery and many different species of trees.all combine to form one of the 'sights of the city'...."⁴ In 1913, a report by Paul P. Cret, Warren P. Laird, and the Olmsted Brothers, entitled "Future Development of Buildings and Grounds and the Conservation of Surrounding Territory" called for a shift from the facing buildings toward street toward a more enclosed campus. The report suggested a central campus "...planned exclusively for pedestrians; and having ample space for planting of grass plats...."⁵ Central to the report was the call to create open spaces "... enclosed by buildings and not employed to surround them." It is worth noting that the 1913 report referred to the present Smith Walk as "the private way between Engineering and the Dental Hall." It apparently had no other name.⁶

The placement of the statue of Provost Smith at the end of the walk and the enlargement of the sports complex gave the walk additional significance. The walk was widened with side panels of macadam before the mid-1930s. In 1938, in recognition of its increased importance, and in gratitude for the continuing support by Smith's widow, of Edgar Fahs Smith Memorial Collection of the History of Chemistry, the University trustees announced that "henceforth the walk from 33rd to 34th street will be known as Edgar Fahs Smith Walk" in honor of the former provost.⁷

3. The Role of Smith Walk in the Modern Campus:

Smith Walk acquired a larger role in the 1948 Master Plan of the University. In contrast to the north-facing "mall" of the Cret plan, the new plan called for the creation of a central spine along the Locust Street-Smith Walk axis, the closing of 34th Street to create a cross axis, and the demolition of the Furness Building. Because of a 70 foot change of elevation from west to east, it was proposed to link the new walkway with a series of monumental steps and plazas that would be bisected at 36th Street by a University Tower.⁸ The Smith statue was to be

moved to the west to a position in a plaza in the midst of the present steps in front of the Furness Building and a flagpole and war memorial were to close off the Smith Walk axis at the east end. Of the major elements of the 1948 plan, only the flagpole and war memorial were executed, leaving Smith Walk and the southern half of the main campus essentially as it had been since the installation of the Smith Statue.⁹

4. Ownership:

The site was owned by the City of Philadelphia as a part of its almshouse property; it was acquired by the University of Pennsylvania in the transaction of 1895 that provided the site of the dental school and has remained University property to the present.

B. Significant Individuals Associated with Smith Walk:

1. Edgar Fahs Smith (1856-1928)

Assistant Professor of Chemistry from 1876 until 1881, Professor of Chemistry from 1888 - 1928 and University Vice-Provost from 1899 to 1911 and Provost from 1911 - 1920. After graduating from Pennsylvania College in 1874, Smith took a doctorate at Goettingen University in 1876. Smith arrived at Penn the following autumn and with the exception of seven years (1881-1888) at Muhlenberg College, was associated with Penn for the next half century. Smith directed the Laboratory of Chemistry during the years that the Harrison laboratory was being constructed and the graduate program in chemistry was organized. During the provostship of Charles Harrison, he served as Vice Provost, before being elevated to the Provost's chair on Charles Harrison's retirement. The first laboratory in the United States using electro-analysis was established at Penn under his direction and his own work in this field was of considerable importance; his own research on the nature of tungsten and the preparation of tungsten salts led to the development of tungsten filaments for lighting. After his retirement, Smith devoted much of his effort to gathering materials on the history of chemistry, the principal collection on the subject in the nation. It is now contained in the Edgar Fahs Smith Memorial Collection of the History of Chemistry in VanPelt Library.¹⁰

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2. R. Tait McKenzie (1867-1938)

Born in Ontario, McKenzie studied medicine at McGill University, receiving the M.D in 1892. During his study at McGill, McKenzie found his core interest in physical education as preventive medicine. His interest in physiology led him toward sculpture as a means of scientific description. After teaching at McGill University from 1894 to 1904, he took a summer to study sculpture in Paris and then accepted a position as Professor in the medical department at the University of Pennsylvania. There, he taught physical education and sculpture at the University of Pennsylvania beginning in 1904 while continuing his career as a sculptor. At the end of his career, he won the Olympic Art Award at the 1932 Los Angeles Olympics for a Shield of Athletes. The University of Pennsylvania houses the largest collection of his works, including additional monumental figures of "The Reverend George Whitefield" in the dormitory quadrangle and the "Young Benjamin Franklin" in front of Weightman Gym, as well as a remarkable collection at the Jones Gallery in the Gimbel Gym.¹¹

3. Cope and Stewardson, architects, Walter Cope (1860 - 1902) (John Stewardson, 1858 - 1896)

Architects of the campus during the Harrison provostship, they transformed American collegiate architecture away from the various Victorian and classical styles toward the English Gothic. In addition to Penn, and despite their early deaths, they were the principal designers of Bryn Mawr College, Haverford College, and Washington University in St. Louis as well as commercial, residential and institutional commissions.¹²

4. Paul P. Cret (1876 - 1945)

Cret was born in Lyons, France, studied architecture at the Ecole des Beaux-Arts, Atelier Pascal, and then was brought to the University of Pennsylvania by interested alumni in 1903. He quickly became a superb teacher who guided the design component of the School of Architecture. His students swept the Paris Prizes from 1911 - 1914 establishing the school's international reputation. Cret himself continued to win prizes as well, beginning with the Pan American Union in Washington D.C. in 1907. In the early 20th century Cret was assigned to planning duties as part of his work at Penn, leading to his role in the 1913

Master Plan.¹³ Cret's practice survived as the firm of Harbeson, Hough, Livingston, and Larson and continues to the present as H2L2.

Part II. Descriptive Information:

A. Original Design:

Photographs taken at the completion of the Towne Building show that the executed design resulted in a concrete walkway flanked by American elm saplings which were planted close to the walk. After 1906, the trees were interrupted at a small oval plaza that emphasized the cross-axis between the central portal of the Dental School (now Hayden Hall), and the west portal of the main facade of the new Towne Scientific Building. At the east end of the walk, a stone stair, flanked by stone curbs made the transition to the 33rd Street level.

B. Evolution and alteration:

1. The Cret era:

Though the walk between 33rd and 34th streets had been landscaped by 1906, it only acquired a terminating focus with the installation of the statue of Provost Edgar Fahs Smith in 1926.¹⁴ The statue was the work of University professor R. Tait McKenzie (1867-1938) and honored the recent University provost. It was located at the west end of the walk, adjacent to the former Lea Institute of Hygiene. That building was renamed in Smith's honor in 1969 as the Edgar Fahs Smith Chemistry Laboratory.¹⁵

Into the 1930s, what is now called Smith Walk remained essentially as originally built with its narrow walkway and cross axis between Hayden Hall and the Towne Building. A photograph dated 1936 shows that the walk had been widened with macadam borders - perhaps in consequence of the additional foot-traffic caused by the construction of the Palestra, Hutchinson Gym, and the enlargement of Franklin Field in the mid 1920s.¹⁶ The original oval between Towne and the Dental Hall (by that time serving the School of Fine Arts) had been replaced with a simple cross walk, presumably because of the widening of the walk to serve the enlarged sports complex to the east. This new destination

made the walk a major link in the campus circulation.

2. The Modern Campus:

The 1948 Master Plan recognized the new realities of the emerging campus. Penn had not acquired the lands to the north that were to be the basis of the central mall; instead it had been acquiring properties to the west. By 1948, the new Dietrich Hall of the Wharton School was designed and under construction on the 3600 block of Locust Street, establishing the Locust Street - Smith Walk corridor as the major campus spine. As a part of the new masterplan, the War Memorial Flagpole was erected to serve as the eastern terminus of Smith Walk which was to terminate an axis focused on a "Cathedral of Learning" type skyscraper at 36th and Locust Streets.¹⁷ While it is fortunate that other components of the plan were not executed, particularly the demolition of the Furness Building and Logan Hall on the main campus, the 1948 plan heralded Penn's present form and orientation.

By the 1970s, many of the original trees had died from Dutch Elm disease, necessitating replanting with the present locust trees.¹⁸ At the same time, the original concrete walks and macadam side panels were replaced with bluestone and macadam. As a part of this project, the larger planting bed was constructed around the statue of Provost Smith, the walkway was widened with a border and low pipe rail barriers were added to protect the ivy beds in front of the buildings. More recently, the diagonal handicapped ramp from 33rd Street has been added to the east of Hayden Hall. Thus, the present walk is the sum of a series of activities that span from 1906 into the 1970s.

C. Contemporary Appearance:

1. Physical organization:

Smith Walk, in its most limited sense, consists of a western plaza that forms the setting of a statue of Provost Smith, a tree shaded walkway leading past two important campus structures and interrupted by two cross walks, and a flight of stairs at the east end of the walk leading down to 33rd Street.

2. Description:

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The "Smith Plaza" fronts on the concrete walkway along 34th Street. In its center is the 72" high bronze statue of a seated figure of Provost Edgar Fahs Smith, enveloped in his academic robes, seated on a favorite chair from his office below which are books on chemistry by Smith. This statue was installed in 1926. The statue is by R. Tait McKenzie (1867-1938) who served on the University faculty and was one of the best known sculptors of his day with a national practice. The piece stands on a cylindrical limestone base designed by Horace Trumbauer that is inscribed with the subject's name and the dates of his provostship.¹⁹ Copper staining from deterioration of the statue streaks the limestone base, a portion of which is buried in the landscape fill. The first photograph taken at the installation shows a circular surrounding curb that appears to have been removed and replaced with a later cast stone curb. The statue is now surrounded by an enlarged polygonal planting bed framed granite cobbles and pressure-treated wood that dates from the last generation. The plaza beyond the planting bed consists of macadam paving dating from the 1970s. Only the statue and its base dates from before the 1975 upgrading of the plaza.

The walk spans 300' from 33rd to 34th Streets with a pathway of 12'. The framed visual corridor is roughly 70' with the cross walk between Hayden and Towne being 75'. The walk consists of bluestone flags as the walkway, with outer panels of macadam, framed by granite cobbles that form a curb. Plats of grass and ivy beds front the principal buildings. The walk is flanked by small caliper honey locusts planted within the last generation, at the time of the most recent upgrading of the walk. A low pipe rail from the 1970s updating protects the beds. This portion of the walk is interrupted by two cross axes, a secondary axis linking the rears of Morgan and Music Buildings and a side door of the Towne Building with the rear of Smith Hall. The more important axis of bluestone pavers links the main centered portal of Hayden Hall with the western front door of the Towne Building. This central plaza replaced the oval plaza with semicircular planting beds that had been constructed in 1906. Granite cobbles flank the paving and serves as the base for benches which frame the plaza. The most recent addition to the walk is a macadam diagonal handicapped access ramp that bypasses the stairs at the east end. All of the materials of this portion date from after 1975.

The stair at the east end of Smith Walk consists of a flight of cast stone steps

with a central landing, leading down to a small bluestone plaza at the lower level of 33rd Street. It is modified from the original stairs of 1906 which were bluestone, with flanking limestone curbs like the steps to the Towne Building. The bluestone steps were replaced and widened in the 1960s. Since then an iron hand rail has been added.

3. Ambience and character:

Smith Walk is more than just a walkway through the campus. Historically, it had additional importance as one of the few areas of the pre-modern campus that formed a "place" with its own identity. This was because most of the remainder of the campus was framed by streets and thus remained urban with intrusions of the noise and visual presence of automobiles, trolleys and other traffic. For this reason, Smith Walk and Hamilton Walk (behind the dormitory quadrangle between 36th and 38th Streets) meant "the campus" to most students in ways that more urban areas could not. These areas shared a second characteristic in that they were both designed by architects Cope and Stewardson to knit together groups of buildings which they had designed. In the case of Hamilton Walk, they included the dormitories, and the Zoology and John Morgan Medical Laboratory buildings; in the case of Smith Walk it included the Morgan Physics Lab (formerly the Foulke and Long Institute) and the Towne Scientific Building. The unity of the walks and their similarity is suggested in the *Landscape Development Plan* which describes those spaces under the title of "old Walkways."

The visual experience along the Old Walkways is evocative of a Gothic cathedral -- a flowing, linear space of arching columns and a high vault with major events and points of release at each end. ... The walls of the bordering buildings form a subdued yet intricate backdrop which defines the aisles of green. Although segments of these walks are subtly different from one another, as a whole they follow a set of basic rules. First of all, large trees are planted right at the edges of the walkway paving, which creates a sense of protection and visual expansiveness as one walks under the vault of the canopy In places where the walkway is not defined by buildings, the allee often becomes a series of groves on one side, counterpointed with a few specimen individuals on the other. (p. 68, 71).²⁰

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Smith Walk has the additional feature of being terminated at the east and west ends by sculptures providing small scale focal points against the larger scale of the buildings that frame them. The buildings that frame Smith Walk range from the red brick National Landmark Furness Building (built as the University library; Furness, Evans & Co. 1888-91) that terminates the vista at the west end, the similarly red Morgan and Music Buildings (begun as the Foulke-Long Institute, an orphanage later converted to a physics lab; Cope and Stewardson, 1890-91), the brick and brownstone Smith Hall (the Lea Institute of Hygiene and later a branch of the chemistry department; Collins and Autenrieth, 1891-92) and the brick and red terra cotta Hayden Hall (built as the Dental Hall; Edgar V. Seeler, 1895). The brick and limestone Towne Building (the engineering school; Cope and Stewardson, 1902-5) faces Hayden Hall and marks the shift toward the Academic Gothic of later Penn architecture. A small modern, ornamentless brick and cast stone structure for music was inserted in the 1970s behind Morgan Hall while oblique vistas frame views of the 1958 Chemistry addition to the south-east, the 1973 Chemistry Building to the south west, and the Gothic Irvine Auditorium on the south-west (Horace Trumbauer, 1926) and the modern Meyerson Hall (Martin, Stewart, Noble and Class, 1966) on the north-west. Their stylistic and functional variety attests to the continuous evolution of the University over the last century while also indicating the changing constituencies served by Smith Walk.

Because of changes indicated earlier, Smith Walk is in generally good condition - but has been significantly rebuilt since the mid 1970s. Its original concrete paving and oval central plaza have been replaced with bluestone pavers, flanked by granite cobbles. The original elm trees that were planted after the completion of the Towne Building were killed by Dutch elm disease and have been replaced with smaller honey locust trees. And the secondary cross axis toward Morgan and the side of the Towne Building has been altered in the 1990s. Because these materials are more transitory than the framed views and flanking buildings, it can be stated that the Smith Walk ensemble is generally intact with minor intrusions such as the modern music building addition.

notes:

1. See G.M. Hopkins, *Atlas of West Philadelphia*, (Philadelphia: 1872) pl.B.
2. *Penn Dental Journal*, 2 (Jan. 1899) p. 66-67.
3. A drawing in the Cope and Stewardson "Engineering Building files," drawer #225 (sheet 190) of the Architectural Archives of the University of Pennsylvania shows the stairs, landing and other details of the walks and the stair to 33rd Street. This established the detailing of the walk by the firm of Cope and Stewardson and proves their authorship of the design.
4. George F. Nitzsche, *University of Pennsylvania Illustrated*, Philadelphia, 1906, p.1-2.
5. p. 13-14.
6. "Report to the Board ... p. 16. Section D of the report covers the area that is now the Central Science Precinct. It called for the construction of the new graduate school buildings at the corner of 34th and Walnut with future growth either east along Walnut, or the preferred growth, south along 34th Street onto the sites of the present Morgan and Music buildings. This presumably accounts for the design of Bennett Hall with the potential for expansion in either direction.
7. *Pennsylvania Gazette*, October 1938, p. 7.
8. Sydney Martin, "Architectural Elements of the New Campus Plan," *General Magazine and Historical Chronicle*. 54:2 (Winter 1952) p. 70.
9. The All Wars Memorial to Penn Alumni was the work of Charles Rudy in association with architect Grant Simon. It was the gift of Walter Annenberg and was installed 15 December 1952. See *Sculpture of a City*, p. 305.
10. Cornell Dowlin, ed. *The University of Pennsylvania of Today*. (Philadelphia: University of Pennsylvania Press, 1940) p. 63-4; George H. Meeker, *Biographical Memoir of Edgar Fahs Smith*, Washington, D.C. National Academy of Science, 1936.
11. Jean McGill, *The Joy of Effort, a Biography of R. Tait McKenzie*. Ontario, 1980.
12. Ralph Adams Cram, "The Work of Messrs. Cope and Stewardson," -*The Architectural Record* 16;5 (November 1904) 403-438.

13. Theo B. White, *Paul Philippe Cret, Architect and Teacher* (Philadelphia: Art Alliance Press, 1973), and Elizabeth Greenwell, *Paul Philippe Cret: Rationalism and Imagery in American Architecture* (Ph.D. thesis, Brown University, 1980).

14. The statue was a gift of John C. Bell, Attorney General of Philadelphia and a University Trustee. See Fairmount Park Art Association, *Sculpture of a City: Philadelphia's Treasures in Bronze and Stone*, (New York: Walker Publishing Co., 1974), p. 303. and University of Pennsylvania, *General Alumni Catalogue of the University of Pennsylvania*, Philadelphia, 1917, p. 501.

15. Minutes of the Board of Trustees, University of Pennsylvania 14 November 1968 vol. A p. 33-34. On 8 August 1975 it was reported that the building was to be renamed Edgar Fahs Smith Hall, by agreement of the president, provost and John Hetherston of University Facilities Planning.

16. The photograph was taken by William Rittase and is in the folder entitled "Smith Walk" in the photo files of the University Archives.

17. Officially entitled the "All Wars Memorial to Penn Alumni," it was the 1951 work of sculptor Charles Rudy, with the base and surround designed by Grant Simon. Installed December 1952, the memorial was a gift of Walter Annenberg.

18. The change from elms to honey locusts is described in Peter Shephard, et al. *Landscape Development Plan for the University of Pennsylvania*, 1977, p. 48.

19. "Unveil Statue of Provost Edgar F. Smith," *Pennsylvania Gazette* 2 July 1926. Presumably Trumbauer was the architect because he was a favorite of John C. Bell, Attorney General of Philadelphia. Trumbauer designed Bell's house on 22nd and Locust Streets in 1905, and with Bell as executor of the William Irvine estate, designed Irvine Auditorium.

20. It is noted earlier that the loss of the elms and their replacement with Honey locusts along Smith Walk worked against this effect because the replacement trees do not form an overhead canopy of the same scale.

Part III. Sources of Information:

A. Architectural Drawings and Plans:

Original plans relating to the design of the Towne Building are in the Architectural Archives of the University of Pennsylvania. See Cope and Stewardson, "Engineering Building," drawer #225, sheet 190. More recent plans are included in the Sir Peter Shephard, et al. "Landscape Development Plan: University of Pennsylvania" cited below. Copies of that document are in the University of Pennsylvania Archives. Other drawings include various topographic drawings dating from 1960 to the present are filed in the print archives, Franklin Building.

B. Early Views.

University of Pennsylvania Archives, folders "Smith Walk," "Towne Building," "Dental Hall-Hayden Hall."

C. Bibliography

1. Primary Sources

Minutes of the Board of Trustees of the University of Pennsylvania, indexed and microfilmed, University of Pennsylvania Archives.

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Cohen, Madeleine. University of Pennsylvania Campus Historic District, National Register Nomination, 1977.

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2. Secondary sources:

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Philadelphia Real Estate Record and Builders' Guide. 5:29 (23 July 1890); 6:1 (7 January 1891); 18:20 (20 May, 1903).

Thomas, George E. and Ann Strong. *The Book of the School: 100 of the Graduate School of Fine Arts of the University*, Philadelphia: University of Pennsylvania, 1991.

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White, Theo B. *Paul Philippe Cret, Architect and Teacher* (Philadelphia: Art Alliance Press, 1973).

D. Other items to research:

1. Additional University of Pennsylvania Masterplans and related documentation including:

Paul P. Cret, University of Pennsylvania Plan. 1940.

Sydney E. Martin, and others, University of Pennsylvania Campus Plan, 1948.

1961 Master Plan

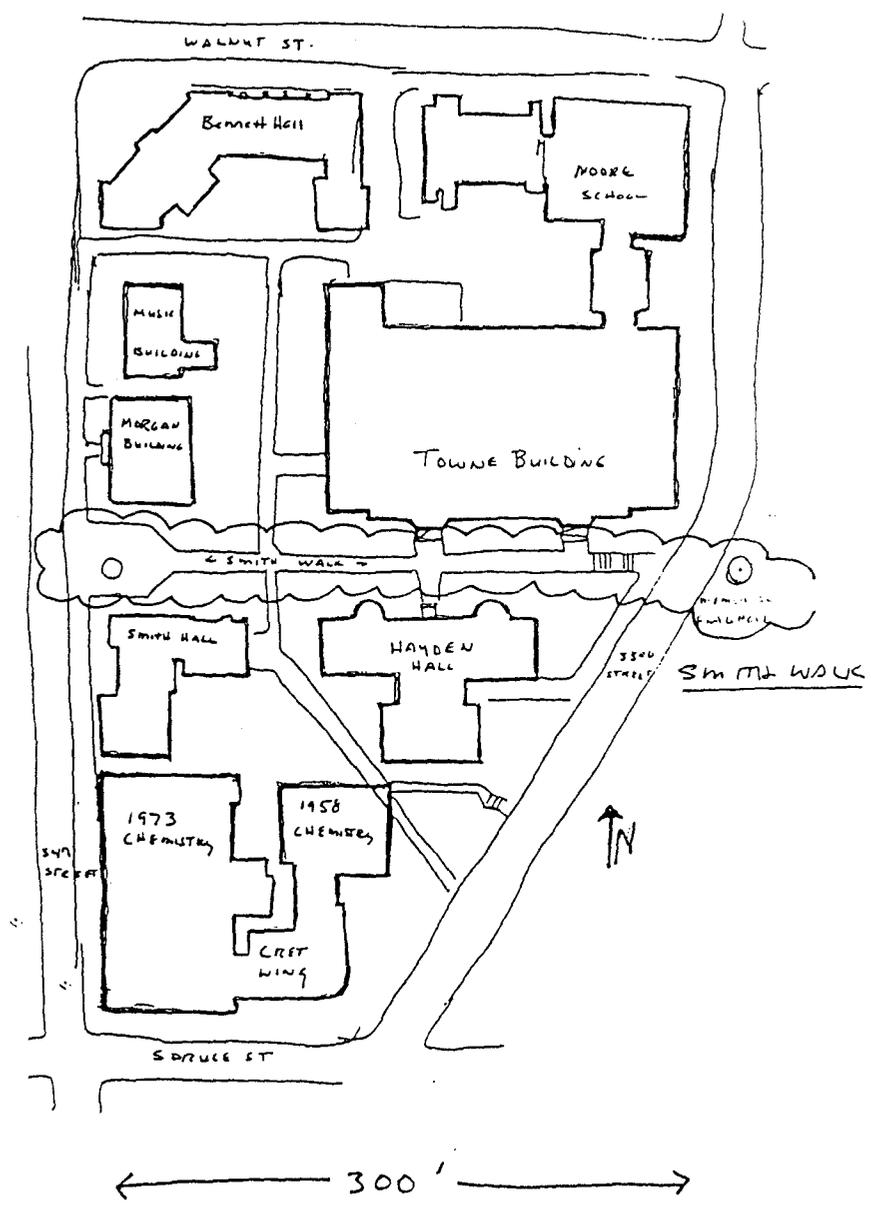
"A Brief History and Compilation of Trustee Actions concerned with the Planning and Development of the West Philadelphia Campus" U. of P. Department of Facilities Development.

Part. IV Project Information:

Background. The *Department of Defense Appropriations Act, 1991*, P.L. 101-511, 104 Stat. 1856, 1870 (5 November 1990) directed that no less than \$10 million of the funds appropriated for Defense Agencies Research, Development, Test and Evaluation be made available as a grant to set up an Institute for Advanced Science and Technology (IAST). On 30 January 1991, the office of Director, Defense Research and Engineering delegated responsibility for award of the grant to the Air Force Office of Scientific Research (AFOSR). Following a competitive evaluation of proposals, AFOSR selected a proposal from the University of Pennsylvania (Penn) as the proposal which best satisfied the selection criteria set by Congress in Section 243, *National Defense Authorization Act for Fiscal Year 1991*, P.L. 101-510, 104 Stat. 1485, 1518 (5 December 1990). AFOSR awarded Grant 91-0243 to Penn to support initial construction of the IAST project on 30 September 1991.

Recorded by: George E. Thomas
George E. Thomas Associates
March 1995

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SITE PLAN