



ALUMNAE - STUDENT ACTIVITY BUILDING FOR WILSON COLLEGE

A thesis report
submitted by :

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of M. Arch.

Approved by:

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15 September 1947

Mr. William W. Wurster, Dean,
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Dear Dean Wurster:

In partial fulfillment of the requirements for the
degree of Master of Architecture I submit my thesis,
"Alumnae - Student Activity Building for Wilson College".

Sincerely yours,

William M. Hunt

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Miss E. Jane Matter

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INTRODUCTION

On Building For A College

Precedent in building for American colleges covers a wide range, from the simple log, professor and student at opposite ends; to the southern college whose first - and for several years only - building was a million dollar football stadium. Between these extremes we find, as the books say, "two styles, Gothic and Georgian"; the more advanced books on the subject include a third style, the "neo-classic", but remarkably little else. By comparison with elementary and high schools little serious research has been done; few standards set up for performance or efficiency; little investigation made of real needs, or

ways to meet those needs. With a few notable exceptions no outstanding buildings have been added to college campuses in this country since the discovery of Gothic in the late nineteenth century.

The layman inclines to think of colleges as the reservoir of reason and the fountainhead of truth -- why, he might wonder, have they so singularly failed to express wisdom and truth in their physical plant? The answer is a complex of many factors, a few of which I shall list and discuss:

1) The Ape Factor: Americans for many years considered Europe the seat of Culture and Learning; so that in designing American colleges it became fashionable to ape the European universities. Although the seat might now appear on the other chair, European Culture having gone to what few dogs the starving Europeans have neglected to eat, habit retains the Ape Factor. An Ivy League university can still proudly hail its "best Gothic in America" knowing its loyal sons will accept the boast. They have been conditioned in intellectual gymnastics with time and geography by drinking "domestic Champagne" and listening to radios hidden in "genuine Chippendale cabinets".

2) The Prestige Factor: "A college" the old grad pontificates, "must look like a college". By this he means it should not be confusable with any group of buildings of

simple mundane use, such as housing people and giving them places for instruction, work and recreation. No, the college building must express CULTURE, a high-class but dull commodity purchasable over a four year period at so many dollars per term, and fittingly packaged in a style very dead, very cultured, and very expensive.

3) Absentee Management, or the Trustee Factor:

Inquisitive students soon learn that important decisions in colleges and universities are not made by the students and the staff, or even the president and officers of the institution. They are made, in the last analysis (or as frequently charged, the last lack of analysis) by a body of august personages known as trustees. On these public-spirited individuals all manner of faults, shortcomings, oversights and sins both of omission and commission are blamed. The trustees are generally well-intentioned and well-heeled citizens who are invited to accept the care and responsibility of guiding the college destiny, in return for a feeling of well-doing, and a certain cultural prestige.

Trustees are usually persons of considerable financial and administrative acumen, but are they adequate judges of the requirements of collegiate architecture? They won't live in the dormitories; they won't work in the laboratories and libraries; they won't study in the classrooms. In fact it is doubtful whether they will ever enter most of the buildings of whose design they are the final arbiters.

In short, the contact of college trustee with college building consists generally of his admiring its exterior. The trustee, therefor, is principally interested in the outer appearance of the building - it should look solid, expensive, impressive, full of years, culture and cloistered grace. Since what else it may be full of (or empty of) is of little concern to the trustee, the natural result is post-card architecture.

An exaggerated concern for consistency helps to perpetuate the growth of post-card architecture on the campus, many persons feeling it better to repeat old mistakes than to risk new ones. Such an attitude is a sad decline from the virile experimentation of earlier days; it also overlooks the proven ability of trees, grass, and shrubs to unify and make charming even the most hodge-podgy campuses.

Thus the usual approach to the design of college buildings has been to produce first as exterior pleasing to trustees and alumnae, and then by fair means or foul, by warping and twisting, somehow to stuff the building's primary function into the preconceived exterior. This process of course reverses the method essential to sound architectural design, which must proceed from use and organization to plan, thence to exterior expression.

It is my hope in the report which follows to indicate a sounder approach to the problem of building for a college. An approach which considers fully the background of the school; the specific uses to which the building is to be put; the money available (fortunately in this case - as so often today - an amount so small as to demand the utmost simplicity of conception and execution). An approach which assumes that the facts of need and use, fully understood and honestly expressed lead directly to the ground plan; that an honest plan honestly expressed in space will determine an exterior both functional and beautiful; an exterior of which trustees, alumni and students may be justly proud.

THE PROBLEM

The immediate purpose of this thesis is to offer a solution to the architectural problem facing Wilson College, Chambersburg, Pennsylvania. A womens college with enrollment of 453 students, Wilson College set out in the fall of 1938 to raise 250,000 dollars for a building to house various student and alumnae activities. The college has received to date some 275,000 dollars; the need for the building is more pressing than ever, but the original plans, as well as later revisions, are estimated well above the money at hand. The problem, then, is to determine whether, and how, the college can answer its needs with the money available.



BACKGROUND

Town and Region

Chambersburg, county seat of Franklin County, lying fifty-two miles southwest of Harrisburg, is the center of a rich farming area in the Cumberland Valley. Its appearance is typically American: ugly houses, beautiful trees, a business section barren by day, glowing with neon enthusiasm by night. Around it fertile fields and meadows and trim orchards roll to the mountains north and south. The roads leave town south to Hagerstown, east to Gettysburg, north to Pittsburgh, east to Harrisburg.



The roads were important to Chambersburg. From 1730, when Benjamin Chambers settled along the Conococheague Creek, until after the Civil War they brought in new settlers and funnelled others further west. Frontier fort, trading post, colonial cross-roads, site of a grist mill, a saw mill, a brewery, the settlement grew steadily. In 1764 it became officially a town; by 1775 the town was large enough to send a company to the aid of General Washington at Boston. Designation of the town in 1784 as county seat of the newly formed Franklin County gave impetus to its growth, as did the Philadelphia-Pittsburgh turnpike, and later the railroad (1837).

A front-line town during the Civil War, Chambersburg lived in fear of enemy raids. Its precarious position prevented the industrial expansion prompted in safer areas by military needs. Eventually the threat was realized: in 1864 the town was burned by rebel cavalry. Today, a granite marker in the town square reminds the citizens of their forebears' loss, 537 buildings destroyed, real estate loss to the value of \$713,294.34, personal property destroyed, \$915,138.24. The marker, tactfully, faces away from the Union soldier standing immortal in green bronze beside the town fountain.

From the Civil War to World War I the town grew and became industrialized. The Cumberland Railway (later

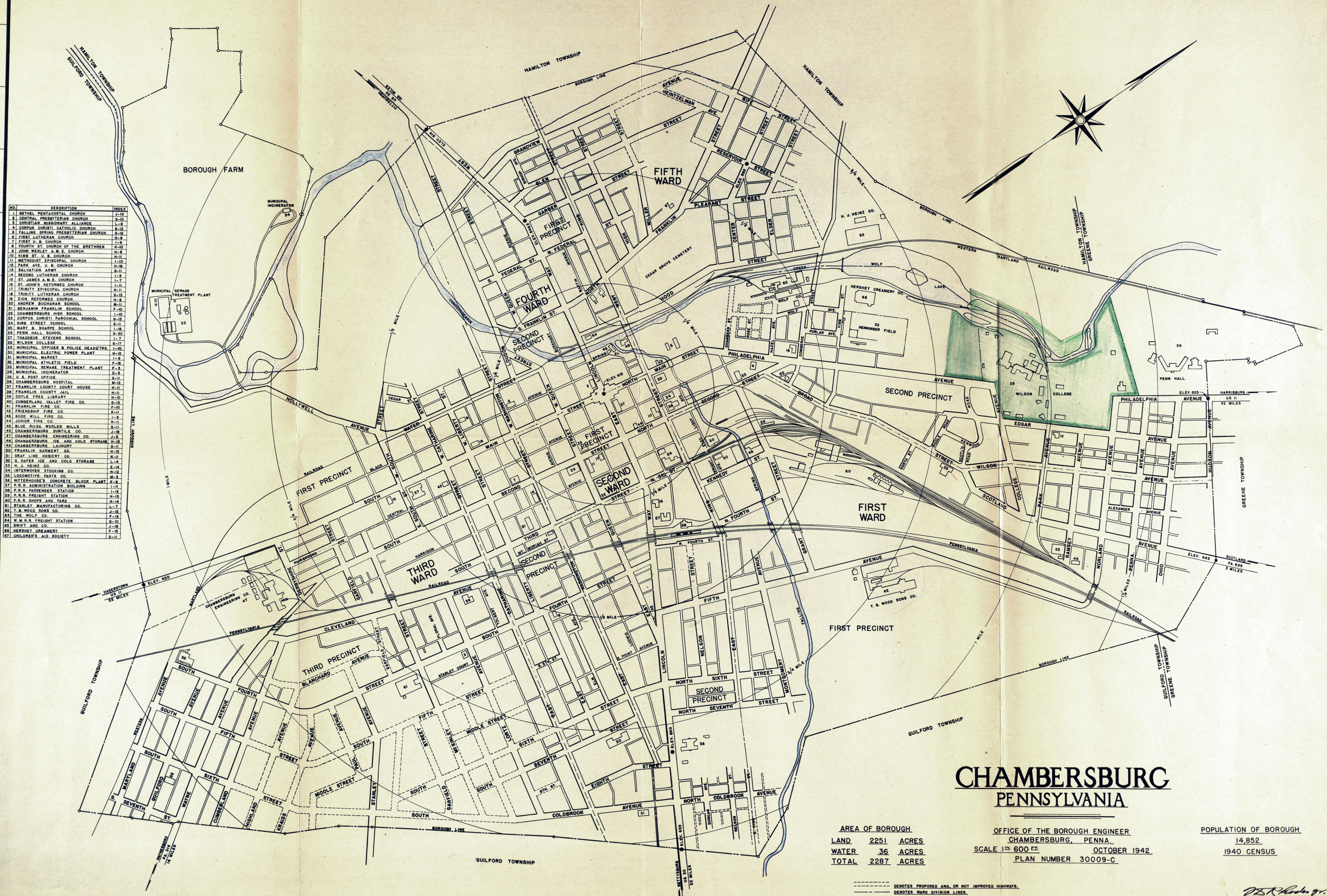
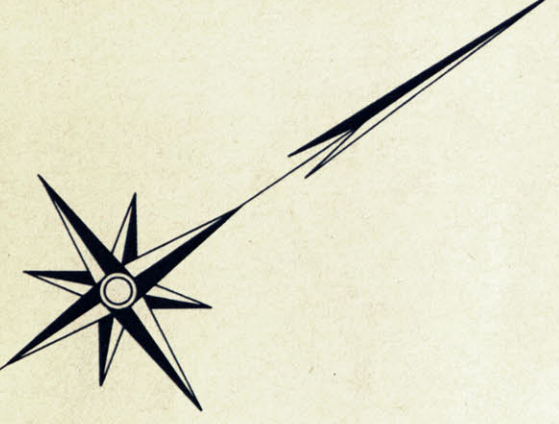
purchased by the Pennsylvania Railroad) was extended. A second railway, the Western Maryland, came through town. Iron foundaries gave way to engineering works; the tannery went out, a show company came in. New stores, new factories moved into town. The pace of industrialization was quickened by the first World War.

In all this development, Chambersburg followed closely the pattern of the region of which is a part. But in one important aspect it differed: starting in 1875, the town discovered the value of municipal ownership of public utilities. It started by building its own water works (after waging a successful court battle against the existing decrepit water company). This was followed in 1889 by borough ownership of a light plant, first for street lighting only, but soon to provide service to domestic and commercial consumers. Since then the town has come to own its own sewerage system, incinerator, municipal market, recreation center, playgrounds and public comfort station, as well as the usual police and fire equipment. The services provided/city today to its 14,852 citizens (1940 census) ^{by the} are exceptional for a town of such size, and at a very low tax rate (31 mills, of which 21 go to schools, 6 to state county and institutional purposes), made possible by profitable operation of the town-owned water and electricity services. The town calculates that for every dollar of taxes collected it provides 36 dollars worth of services - police

fire, health, relief, playground director, etc.- the extra 35 dollars being met out of utility profits. Low tax rates, together with low water and power and light rates have undoubtedly helped the town attract and keep the many diversified light industries which, together with agricultural marketing, furnish the economic base of the town.

Chambersburg has much to offer its citizens in material well-being; to the students of Wilson College it presents a living example of a prosperous, progressive small American city. The college, in turn, can contribute much to the life of the city. Because Chambersburg is small and relatively isolated from metropolitan areas, it has a natural tendency toward provincialism. Here the college can be of especial value, by providing lectures, concerts, plays which the townspeople wouldn't otherwise have the opportunity to attend. The college is well aware of its responsibilities in this direction, and meets them as well as limited facilities allow.





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CHAMBERSBURG PENNSYLVANIA

AREA OF BOROUGH
 LAND 2251 ACRES
 WATER 36 ACRES
 TOTAL 2287 ACRES

OFFICE OF THE BOROUGH ENGINEER
 CHAMBERSBURG, PENNA.
 SCALE 1" = 600 FT.
 OCTOBER 1942
 PLAN NUMBER 30009-C

POPULATION OF BOROUGH
 14,852
 1940 CENSUS

--- DENOTES PROPOSED AND OR NOT IMPROVED HIGHWAYS.
 --- DENOTES WARD DIVISION LINES.
 --- DENOTES PRECINCT DIVISION LINES.

D. B. ...
 BOROUGH ENGINEER



BACKGROUND

Origin and Growth of the College

Despite its isolation, despite the pressing need in early years of the settlement to wring a living from soil and mills, the community of Chambersburg early felt the need of cultural institutions. First such was the Falling Spring Presbyterian Church, founded in 1739, and the only church in town - the early settlers being predominantly Scotch-Irish Presbyterian - until 1780, when the entering wave of Pennsylvania Germans founded the First Lutheran Church. For forty-four years after 1739 Church and home were apparently considered an adequate agency for instruction. Then in 1793 a college preparatory academy for boys was founded. Public schools for both boys and

girls originated in 1834 and 1835. The addition to the town in 1840 of the Rosedale Seminary provided girls with a local source of higher education. But in the raid of 1864 Rosedale's building was burned; the Seminary failed to reopen.

Apparently the town felt its loss keenly, for when, in 1870, members of the Presbytery of Carlisle solicited subscriptions from various towns to found in the Cumberland valley a college for women, Chambersburg made the highest offer, 23,000 dollars. This sum being found inadequate, Miss Sarah Wilson, who had already pledged 10,000 dollars, added another 20,000 dollars, on the condition that the college bear her name, as a memorial to herself and her family. Thus was born Wilson College, incorporated by Act of the Legislature, March 24, 1869, opened October 12, 1870; its purpose being, in the words of its first catalogue, "To extend to young ladies the same high advantages for a thorough education - physical, intellectual, moral and religious - as are afforded now to young men in the best colleges in the land!"

In seventy-six years of life Wilson's original twenty-five acre campus has expanded to fifty-four. It occupies a quiet site on the eastern edge of town, along the tree-lined banks of the Conococheague Creek. West and south are large old houses and shaded lawns; to the east the campus of Penn Hall, a junior college for women; to the north, across the creek, are woods and then open farms.

The only discordant note is the Western Maryland railway, which ~~parallels~~ the creek to the north. A freight line only, its activity depends largely on the demand for coal. During the war years traffic was heavy, but it has slackened off since. The sound of passing trains is cut down by the screen of trees, so that it is not serious except when the engine blows its whistle, as sometimes happens. On such occasions lectures and sermons are simply suspended until the blast is over. The line itself is invisible from the campus, although a spur track, very seldom used, passes south of the main line and cuts through the east part of the college grounds.

Student enrollment had grown by 1946 to 477, including twenty day girls and 24 male students accepted to offset the postwar crowding of men's colleges. The trustees, in order to preserve the college's intimate character have limited enrollment to the present size; further expansion is not expected in the foreseeable future.

The college has expanded its curriculum as well as its campus. A living institution, its methods have been open to steady change and improvement. Just now, for instance, twenty-five students each year are enrolled in an experimental curriculum designed to broaden student outlook beyond fields of specialization, and to encourage more organized and comprehensive independent work. Wilson realizes, as do most colleges today, that its basic task is more than

academic training; that it should turn out people well fitted to live in our age and culture, rather than mere scholars and gentlewomen.

The college believes that extra-curricular activities are an important part of college life. Here the student finds herself a semi-autonomous member of a social group divorced from the shelter of family life; the college life must be a sympathetic and adequate preparation for later years of responsible adult life. Here, under conditions of understanding and encouragement, the girl learns to get on with others on an adult basis; to lead and follow in group activities; to study the town and region in which she lives and contribute to its welfare; to meet and charm young men; to express herself in dance and drama and writing; here she can hear music and lectures, and discuss with her friends the ideas and facts to which she is being introduced. Here by democratic means she takes part in the government of her own community.

All these activities require organization; this in turn requires a physical location. Offices, club rooms, meeting rooms are at present scattered through a variety of makeshift and inadequate accommodations.

Most students of the college come from Pennsylvania and nearby states, with a sprinkling from other regions and foreign countries. The resultant strongly regional character of the school has led to the formation of an

unusually active Alumnae Association, which was largely responsible for collecting the funds for the new building. Present quarters of the Association are cramped; to improve the association's lot, as well as to release their present offices for use by the college administration, it is proposed that the new building include space for this activity.

A third basic reason for the new building lies in the hope of the college that it can more closely serve the needs of the town. The largest hall presently available, the chapel, holds only 740 persons; this has meant in the past that townspeople have been unable to find seats at the better-attended lectures and concerts. It is hoped that seating capacity of around 1000 would encourage a closer relationship with the town.



INVESTIGATION AND ANALYSISThe Program

Wilson College's desire for a new building has grown from three areas of activity: student extra-curricular activities; activities of the Alumnae Association; the provision of lectures and concerts attractive to town residents as well as students. The program has been long and thoroughly studied by the college administration. I quote below an excerpt from a letter written me by Mr. A.J. Frey, formerly business manager of Wilson college:

"We have been studying this program off and on for the past ten years, and to date five schemes have been proposed by the college architect; each failed to come within the funds available at present... Briefly, we had hoped to erect a building that would enclose an auditorium seating approximately 1000, with a stage properly equipped for use by the

dramatic club; a series of offices or workshpps for the other student organizations and activities; a ballroom to accomodate the important formal dances of the college; a section of the building to be given over exclusively to the Alumnae Association in which there would be offices and workrooms for the association secretary and her staff; as many guest rooms as could be provided for; living accomodations for the secretary; a foyer which might be used for art exhibits, receptions etc.; a formal lounge; an informal lounge and game room. In connection with the theater there should be adequate space for the storage of stage props, space for storage, dressing rooms, make-up rooms, and of course toilet facilities. The building should also contain a couple of serving kitchens for the entertainment of guests at tea or light refreshments... "

Mr. Frey's letter covers the original program set up by the college. It falls into the following divisions:

- a. Budget
- b. Theater-Lecture Hall
- c. Ballroom
- d. Lounge
- e. Game room
- f. Gallery (foyer)
- g. Kitchens
- h. Offices for student organizations
- i. Offices for Alumnae Association
- j. Suite for Alumnae Secretary
- k. Guest rooms

To these have been added:

- l. Suite for hostess in charge of building
- m. Room and bath for maid (in charge of guest rooms)

Items b) through m) constitute the maximum program as now thought of by the college administration. The college realizes, however, that not all this can be built within the budget, and has determined to combine ballroom with the auditorium, and to abandon the guest rooms and maid's room.

INVESTIGATION AND ANALYSIS

Detailed Discussion of the Program

The section which follows is based on interviews with members of the faculty and administration of Wilson College (all of whom were very helpful), as well as my own analysis of the problems involved.

Budget The original 1938 estimate for the proposed building was 250,000 dollars; the fund-raising campaign was based on that figure. Since then 275,000 have been received. The college would, I gathered, go ahead with construction if they could build what they want for somewhere in the neighborhood of 300,000 dollars - preferably to include fees, landscaping costs etc. - They could not go much higher than that figure.

It being my intention in this thesis to stick close to reality, I based my studies, after preliminary exploration of size requirements, on the following tentative schedule of allowable sizes and estimated costs at today's prices:

<u>Item</u>	<u>sq. ft. Area</u>	<u>estimated \$/sq.ft.</u>	<u>estimated cost</u>
Auditorium-Ballroom	4500	25	\$112,500
Game room	1500	20	30,000
Stage	2700	15	40,500
Dressing and storage	1000	12	12,000
Lounge	1500	20	30,000
Services and lobby	1000	12	12,000
Gallery-Green room	1000	12	12,000
Student Offices	1500	12	18,000
Alumnae Association Offices	700	12	8,400
Living Quarters (Assoc. Sec'y & Hostess)	600	12	7,200
	<u>TOTALS</u>	<u>16,000</u>	<u>\$282,000</u>

Only a rough estimate for preliminary exploratory purposes, this table nonetheless served to bring home to me certain inescapable facts: the separate theater must be eliminated, as must all guest rooms and the maid's room, to obtain those elements considered basic. Since sizes are toward the minimum, and square foot costs low, while the total is close to the college's top figure, it is obvious that simple construction and materials are called for throughout. Further, to seat an audience of 1000, the 4500 square foot auditorium is inadequate - another room must be available for double use. This is assumed to be the game room.

Auditorium-Ballroom As theater auditorium this room should seat comfortably 500. A larger audience is definitely not expected; it is felt that to increase the size of the room much beyond that necessary for 500 would destroy the intimate relationship between actors and audience. This calls for a room not much over 4000 square feet in area. Since the floor must be flat for use as a ballroom, ideal sightlines can't be expected; the acoustics of the room, however, should be the best possible. At the same time it might be desirable to widen the seating area, so as to reduce the number of rows. Sightlines in this case, in fact, are less important than they would be in a commercial theater, since plays are ^{rehearsed} six or eight weeks, three or four nights a week, but are open to the public only one night. Thus the process, and with it stage, lighting etc., become more important than the end product, seating etc. The drama club wants the greatest possible flexibility of presentation, since they range from experimental work (its quality depending on the individual members from year to year) to strictly conventional presentations.

As Ballroom this area will house the school dances, and performances of the "Orchesis", an organization of students which presents several modern dance recitals each year. The gymnasium is now used for the school dances, but is so small (3200 square feet) that another room (1200 feet clear area) at some distance from the gym must be used as

for overflow, with music piped in. The gym is also disliked by the girls because it is dark and has the usual and unavoidable gymnasium smell. The students prefer to dance in the main dining room; this however involved moving so many tables and chairs as to be exorbitantly expensive. Judging by the two rooms now used, a floor area of about 4400 to 4500 square feet would be adequate for the dances.

Lecture-Concert Hall To use the auditorium for a capacity of 1000 would require at least 5500 to 6000 square feet of floor area. This is greater than needed for dances, and greater than the maximum limit for successful theater use. At the same time, it is apparent that functions drawing such a large audience would no doubt leave the game room empty (the lounge, on the other hand would no doubt be heavily used during intermissions and before and after these functions). Thus, since additional space for such use alone would be prohibitive in cost, it seemed advisable to assume the possibility of using the play room for extra seating at lectures and concerts.

Game room Principal use of the game room would be for ping-pong, bridge, pool, conversation, informal dancing. It should be accessible to a kitchen-snack bar, and might contain a juke box and coke machine. A fair amount of sound deadening might be desirable.

Joint problems; Auditorium, Ballroom and Game Room While the obvious way to get more building for less money is to make areas serve multiple purposes, this process always brings with it a train of special problems. In this case, the major questions are: 1) Windows, 2) Acoustics, and 3) Method of Division.

Windows are mandatory in the game room; it must have good natural lighting. In the Ballroom they are highly desirable; for lectures and concerts they are also desirable; yet for a theater auditorium they are only a nuisance. Obviously the eventual solution must be to some extent a compromise, but it should allow close to ideal conditions for each use.

Ideal acoustic conditions for speech (lecture or drama) differ from those for music, which benefits from more reverberation. Even within the single field of music we find a certain variation of desirable characteristics, to meet the requirements, say of a Bach fugue, precise, sharply defined; or of a Wagnerian prelude, shadowy, romantic. For an area then which must meet a variety of use, it would be well to provide, first, sufficient reflection of sound to build up areas in the rear so that a public address system would be unnecessary, and secondly, an amount of absorption variable from that needed for music to that required for whispered speech to be clearly audible. Care should of course be taken to avoid echo, flutter and distortion of the sound at any time.

The division between auditorium-ballroom and game room must be attractive in appearance, easily removed and replaced, and of such character as to fit into the scheme of acoustic design. It should be handled in such a way that each area will seem complete in itself; yet so that when joined together they become one space in esthetic value as well as in fact.

The Stage The college is anxious to provide the drama club with a really adequate stage, to replace the present very cramped stage in the gymnasium. They want wide and deep acting space, large wings, the best possible lighting facilities, trap doors in the stage, a complete flyloft and grid system. Especially they want stage and stage-audience relationship to be as flexible as possible. It should be possible to present Restoration drama with footlights and conventional scenery, or the students own experimental work with abstract scenery and elaborate lighting effects. There should be storage space for props and permanent conventionalized scenery (steps, boxes, etc.); dressing rooms for men and women (a small one for men); make-up room; toilets. If the stage is large a separate shop would not be required, since most scenery construction is done by the college carpenters and painters.

Although the drama club has apparently thought mainly in terms of fly-loft and grid, I believe that a wagon stage might better fit their needs. This method of scene shifting

is well adapted to use with either conventional or stylized scenery; it is fast and easy to operate; it involves no skilled and dangerous rigging work on a high-flown grid, no hauling and belaying of ropes or adjustment of counterweights. For a girls' college especially it seems well suited. It is recommended by many modern authorities as more efficient than the old flown system, which originated to a large extent because high city land values prevented the building of theaters with adequate stage floor area. The wagon stage (that is, one on which scenery is moved by being mounted on wheeled wagons four or five inches high, which act as stage floor when wheeled into place) has the further great advantage in this case of being considerably cheaper to build than stage tower and grid. Height of the stage house is reduced by almost half, and the grid mostly eliminated. Only enough rigging would be needed for a cyclorama, a few teasers, traveller, sectional fire-curtain, etc. At the same time, it would be possible to add higher stage house walls and grid in the future, if additional funds became available, and it were considered desirable.

The college does not expect to show movies in the building, several theatres existing in Chambersburg. Yet if convenient it might be well to provide a booth from which they should be projected if the future should produce a need for them. Such a booth could also be most useful as location for traveling spots and switchboard control panel,

whose operator should have a clear view of the stage. A light bridge clear across the auditorium should also be provided on which to mount fixed spots.

Lounge Of the total sum raised for the proposed Alumnae-Student Activity building, 31,287 dollars are to be used to provide a formal lounge as a memorial to Miss Hannah Patterson, a former trustee of the college. The lounge will have daily use as a place for reading, conversation and entertaining callers; it will also be used as lounge in connection with the auditorium during plays and dances. A third use will be for formal receptions given by President and Mrs. Havens at commencements and reunions. These are at present held in the garden of the president's home, weather permitting. When the weather doesn't permit, two adjoining rooms in the main building are pressed into service. Their joint area of 900 square feet is inadequate. The lounge will be used throughout the year for teas, receptions for speakers, and other small functions.

Services and Lobby To include a ticket office, coat room, toilets (which should provide a shower for the men, and bathing facilities for the women, in case parts of the building are used as a dormitory for younger alumnae at reunion weekends). There should also be sufficient space for entry, umbrella furling, etc.

Kitchen-Snack Bar This area would receive daily use as a snack bar, occasional use as serving kitchen; thus one might expect some separation of function. The snack bar would need a serving counter, small soda-fountain with

facilities for washing glassware, plate for light cooking, ice-cream cooler, etc. It would quite possibly be student-operated, although there seemed to be some division of opinion among the people I interviewed on this subject. The serving kitchen should include apparatus for making tea and coffee, a refrigerator, dish-washer or sink, work area, trays on which to carry in refreshments prepared in the main college kitchen, for functions taking place in the lounge. The area should be accessible from the lounge and game room.

Gallery This room might also serve as green room at the time of theater performances. As a gallery, it would be used for display of traveling exhibits, such as those provided by the Museum of Modern Art, and for rotating display of the collection of the college. It should be visible from main traffic lines to lounge and game room, so as to attract students to visit the displays.

Student Offices Included would be offices for: Student Government and Student Council, which require meeting space, and space for the storage of records; YWCA, which needs meeting space, storage for records, a small reference library of YWCA publications; the school paper, published weekly, desk space and record storage; the Press Board, which sends out news to home papers, needs desk space and files; Year Book; Literary magazine. These organizations are all

of relatively stable size and organization. Others, such as departmental clubs, vary from year to year. The first group might well be assigned permanent quarters tailored to their special needs, the latter assigned space each year in flexible office areas. A total of about ten offices is desired, with access to a larger meeting room (to hold 10 to 20 persons) for conferences. Such a room would be used by student organizations largely in the evening, thus could be shared with the Alumnae Association, whose board meetings are held in the afternoon. Student council and student government could share one large office; the year-book and literary magazine could also share space, as could some of the departmental and miscellaneous clubs. Emphasis in this section of the building should be on flexibility, to accommodate changes over the years. Provision should be made in all offices for storage of books, files, etc., and in most for provision of desk or table work space.

Alumnae Association Offices These should include: two small offices (120 to 150 square feet) for secretary and assistant to the secretary; a general office large enough for three typists and four filing cabinets; mailing and work room for address files (2' x 4'), stencil maker (2½' x 2'), addressing machine (2'4" x 3'), work space for laying out and sorting material to be mailed; storage room for supplies, equipment and dead files (c. 100 square feet); access to conference room for 15 to 18 people for committee meetings. The mailing room should be on the ground floor,

have its own service entrance for material delivered and picked up by truck.

Living Quarters Should allow separate entrance, and easy passage into main building; preferably not on ground floor.



INVESTIGATION AND ANALYSIS

Site, Codes, etc

Site The site chosen by the college for the proposed building seems the best location available. It is well provided with trees, on ground sloping gently west and north to the Conococheague. Sewer and water lines are easily accessible. Steam is available from the college power plant. The location is reasonably central, will be more so as the college plans to build eventually a new dormitory west of the Alumnae-Student Activity Building. Present policy of the college allows no on-campus parking; this seems a wise policy to continue, since normal parking requirements are minor, and the neighboring streets are wide with no commercial areas nearby.

Codes and Zoning The city of Chambersburg has no

building code, no zoning restrictions. Thus the only governmental controls to which the proposed building would be subject are those of the Commonwealth of Pennsylvania, as administered by the State Department of Labor and Industry.

The provisions of the Department Regulations are in general similar to those of the National Board of Fire Underwriters. In certain safety measures, however, the provisions are less stringent for college, than for commercial, theater buildings. For instance, no ventilating devices are required over the stage house. The proscenium fire curtain need be only of asbestos cloth, and may be of the trip type, or the sectional type. Thus minimum height of the stage ceiling is one half the proscenium height, plus 4'6" above proscenium opening.

Other important requirements include:

All materials to be "fire-resistive" ("The term FIRE-RESISTIVE CONSTRUCTION shall mean that all buildings or parts of buildings required to be of fire-resistive construction shall be constructed of such non-inflammable material as stone, concrete, brick, tile, expanded metal lath with plaster on steel studs when specifically permitted by the regulations, and such other materials as may be approved from time to time.")

Emergency lighting system required; 8" masonry wall, or equal, between theater and other uses; Folding seats to be clamped to floor when used; Exit width 5' minimum, 6' maximum; Aisles, wall, min. 3'6", center, min 4'0", rear and cross, min 5'0"; Number of exits to depend on capacity, figured as 6 square feet per person when using folding

chairs (a capacity of 1000 persons requires 6 exits); Fire doors in proscenium wall to be self-closing; Motion picture projection booths must meet the requirements for commercial theaters, except that toilet facilities for the projectionist are not required.

The principal effect of these regulations, as compared to those for commercial theaters, is to allow the use of a much lower stage house. Other provisions are similar to those for straight theaters.

CONCLUSION

It is not my intention to include in this report a detailed description of the solution which grew out of the needs and conditions discussed above, since that is the function of the drawings which accompany it. I would like, however, to sketch briefly the general reasoning which led to the solution.

First, the whole problem was attacked without any preconception. A college building, like any other building, should be a direct and beautiful statement of use, place and inter-relationship. First step in solution was the analysis outlined above; the second was the large organization of the elements in relation to site, view, other parts of the campus, anticipated future buildings, to give an easy and natural flow of traffic, a pleasant outlook and orientation. Beyond this point, the solution became a matter of successive approximations to an ideal - conditioned always by the need for economy.

This need for economy also dictated throughout the choice of simple materials and simple methods of construction; these, I believe, have the further virtue of reflecting the essential character of the region.

While I kept in mind throughout the process the tentative schedule of budget-limited sizes given above

(page 19), the table was subject to constant revision as refinement produced changes in required sizes, and as unit prices fluctuated with varying span, height, etc. of rooms. Since estimated unit costs are at best pretty much of a guess, I did not allow the estimate to limit altogether the final solution. I feel, however, that I have met the conditions set, and have done so within reasonable cost limits, the final estimate of the solution, using the method of page 19, coming to 315,500 dollars.

BIBLIOGRAPHY

I was able to find no books which dealt in any useful way with the general problem of this thesis - building for a college - or its specific application - an alumnae-student activity building. A great many books deal with the various problems involved in my building, such as the theater; in presenting this bibliography I make no attempt to catalogue the field, but mention only those books and articles which I found contributed directly to my solution.

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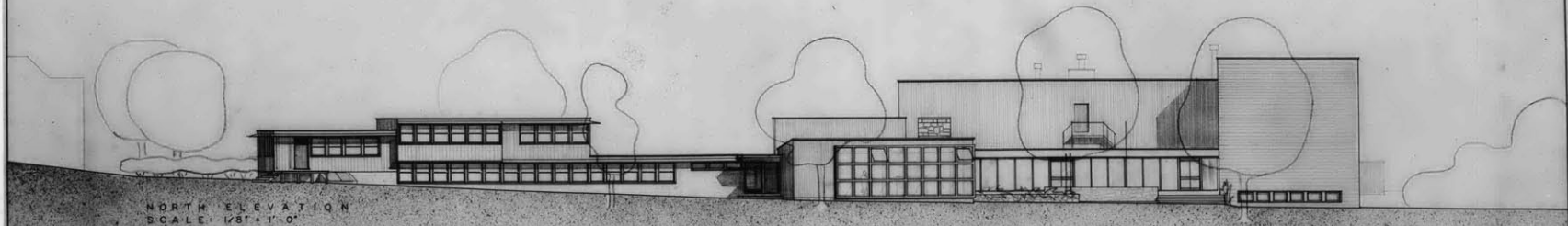
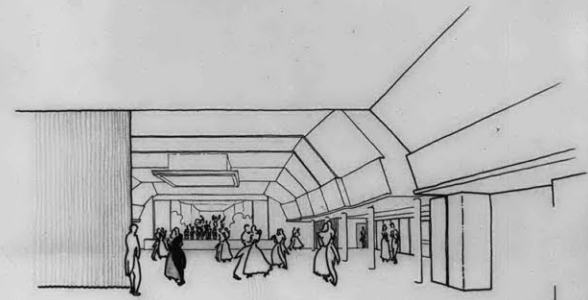
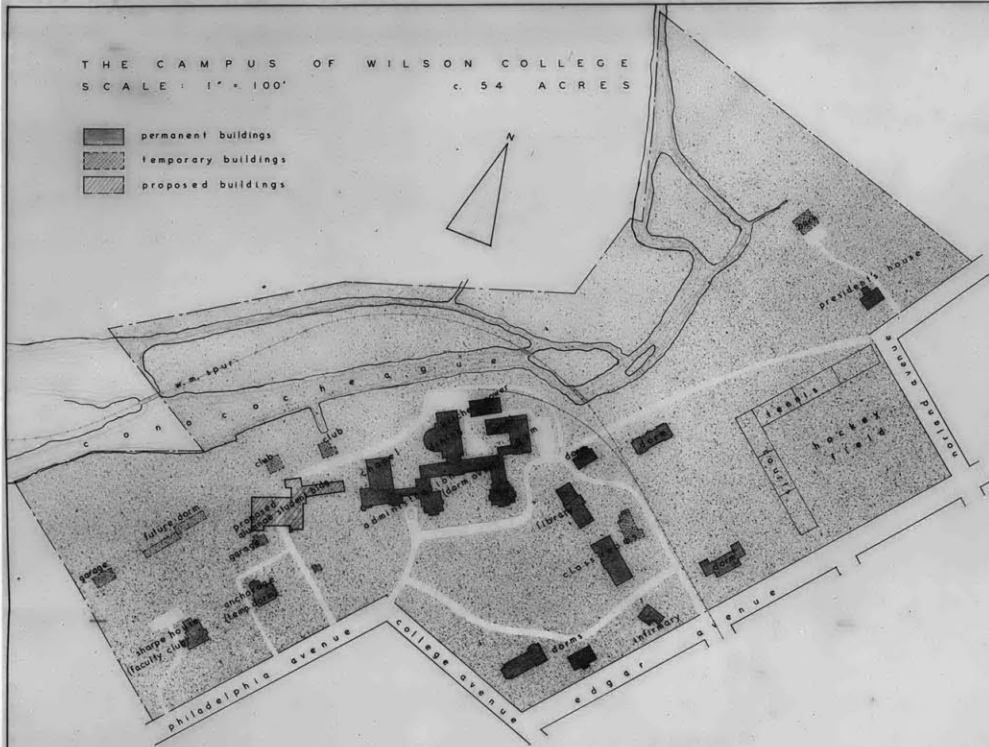
Department of Labor and Industry, Commonwealth of Pennsylvania, "Regulations for Protection from Fire and Panic", "Class I Buildings", Harrisburg, 1946 edition, 58 pp.

----- "Class II Buildings, Theatres and Motion Picture Theatres", Harrisburg, 1947 Edition. 47 pp/

----- "Construction, Installation and Maintenance of
Emergency Lighting Systems", Harrisburg, 1947 Edition,
29 pp.

THE CAMPUS OF WILSON COLLEGE
 SCALE: 1" = 100'
 c. 54 ACRES

-  permanent buildings
-  temporary buildings
-  proposed buildings

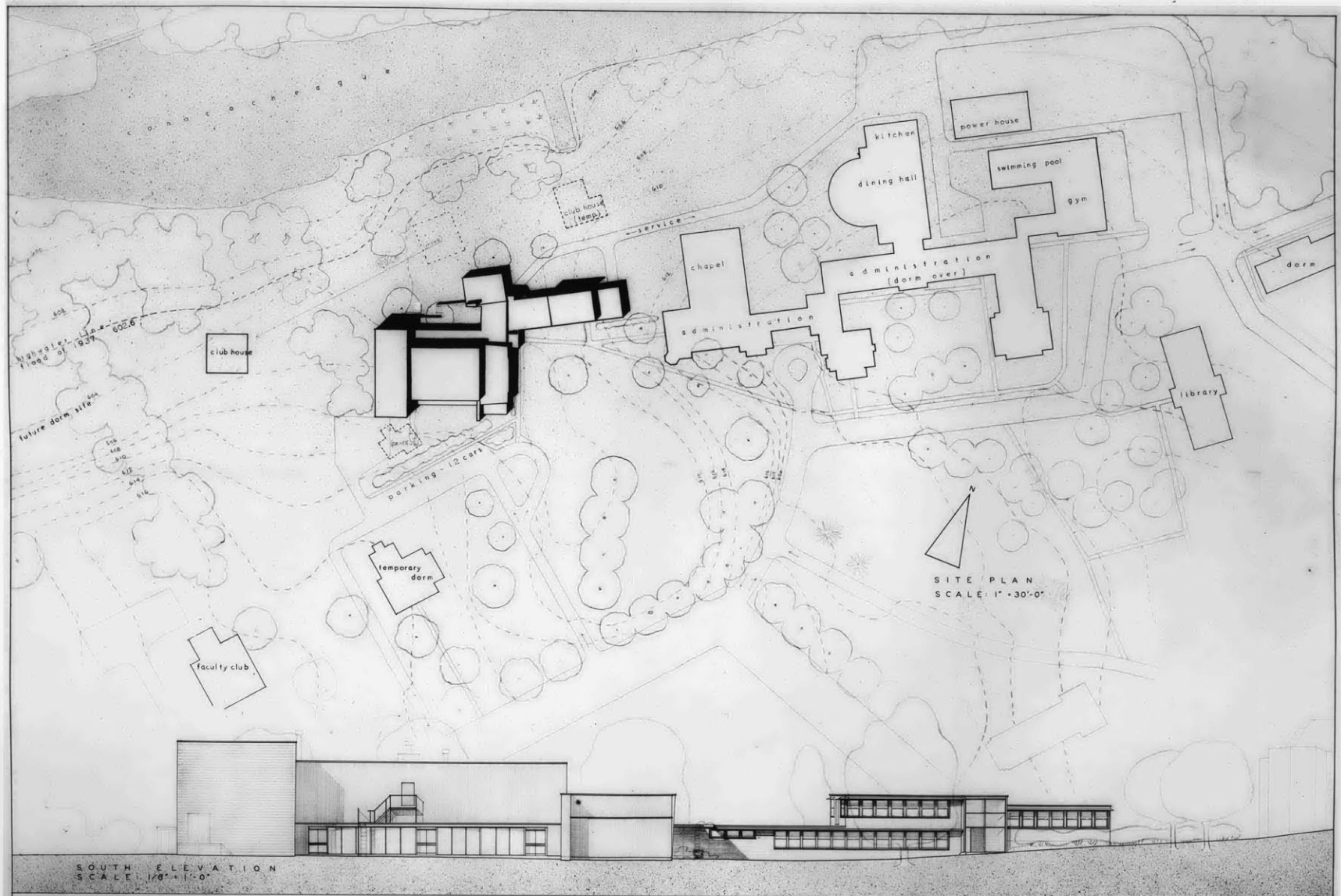


NORTH ELEVATION
 SCALE: 1/8" = 1'-0"

ALUMNAE STUDENT ACTIVITY BUILDING FOR WILSON COLLEGE

②

WILLIAM M. HUNT
 MARCH, THESIS
 M.I.T. SEPT. 1947



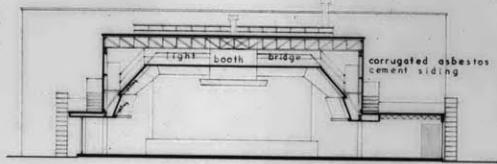
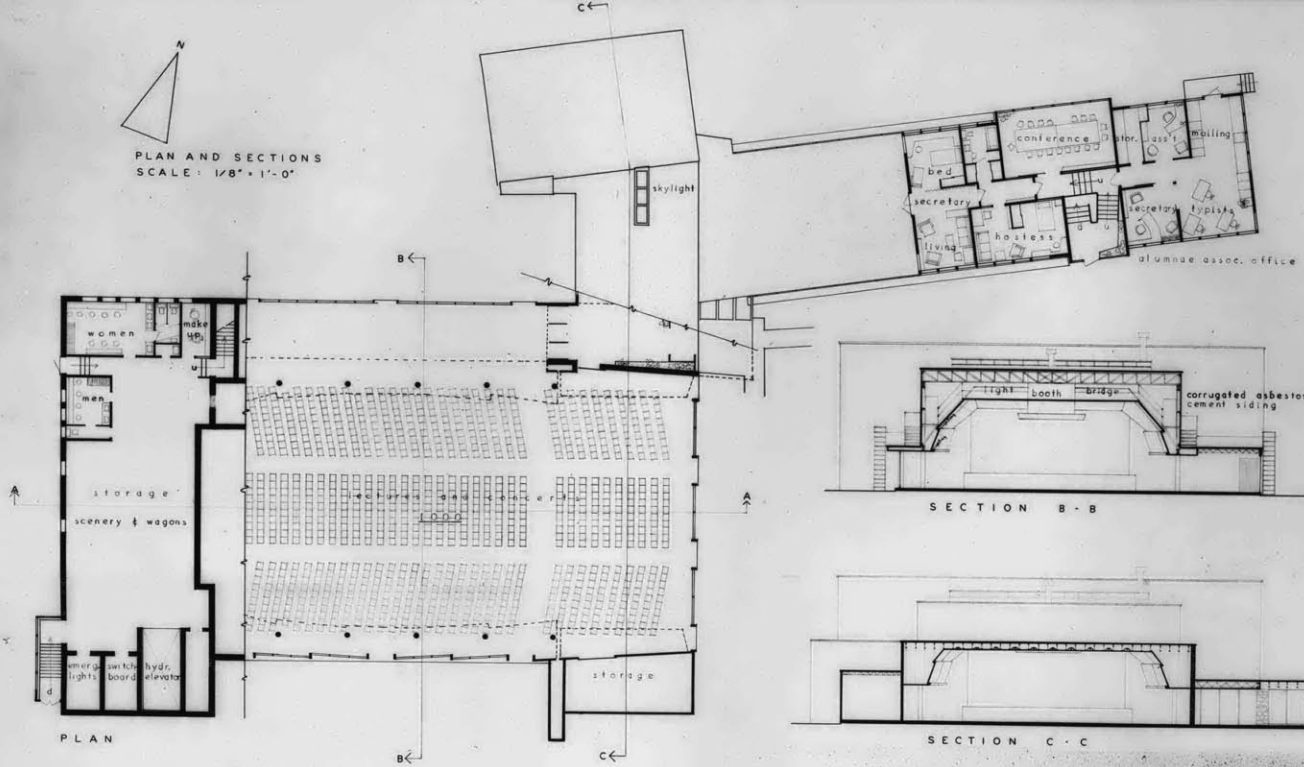
ALUMNAE STUDENT ACTIVITY BUILDING FOR WILSON COLLEGE

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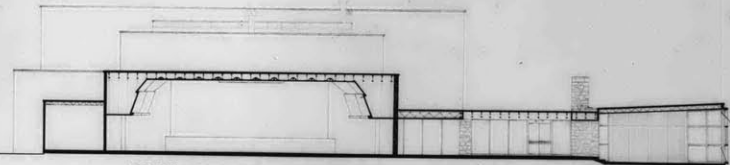
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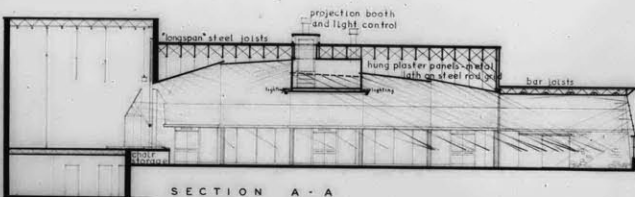
PLAN AND SECTIONS
SCALE: 1/8" = 1'-0"



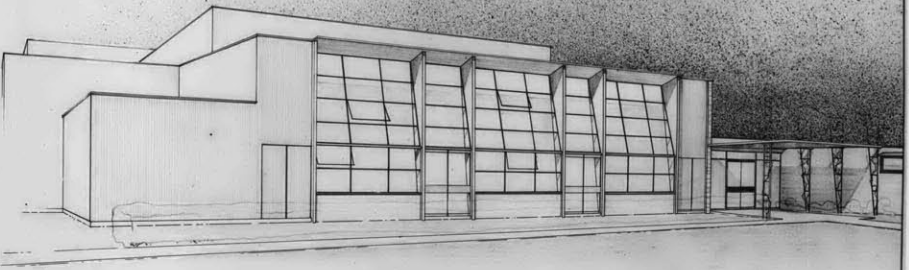
SECTION B - B



SECTION C - C



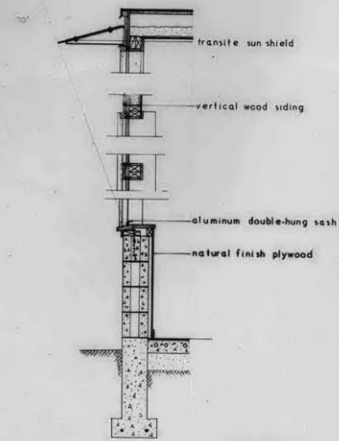
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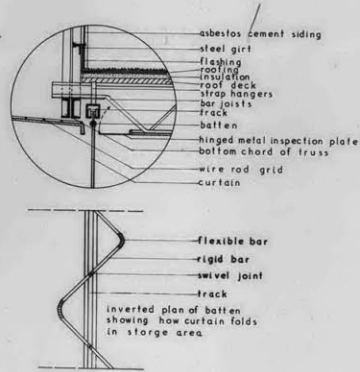
ALUMNAE STUDENT ACTIVITY BUILDING FOR WILSON COLLEGE

4

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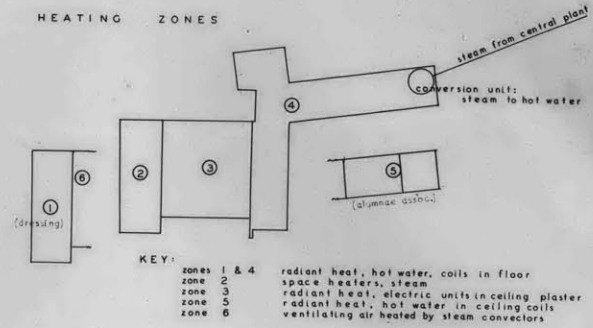


WALL SECTION: STUDENT OFFICE.
SCALE: 1/4" = 1'-0"



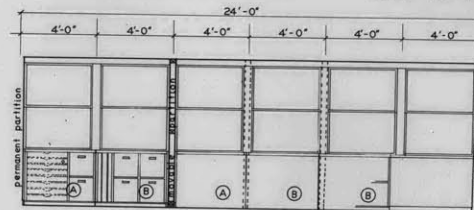
DETAIL OF CURTAIN HANGING
AUDITORIUM - GAME ROOM
SCALE: 1/4" = 1'-0"

HEATING ZONES



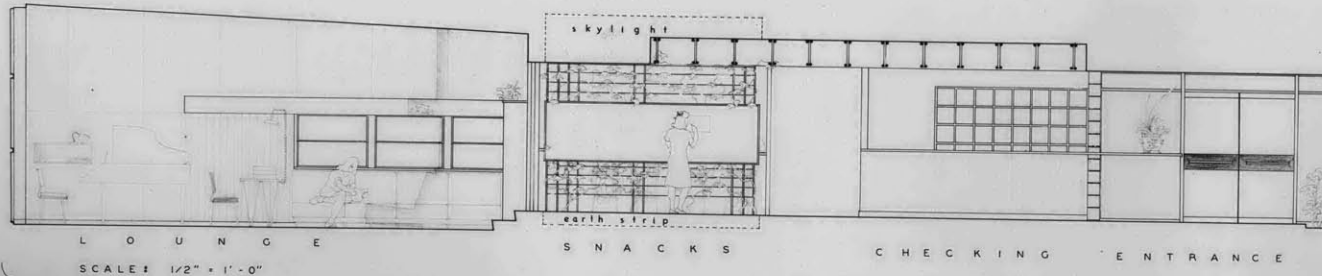
TYPICAL OFFICE UNIT

SCALE: 1/2" = 1'-0"



alternate positions of movable partitions
give flexibility; possible combinations:

one room	24' x 12'	or
two rooms	12' x 12' ea.	or
two rooms	6' x 12' & 18' x 12'	or
three rooms	8' x 12' ea.	



SCALE: 1/2" = 1'-0"

ALUMNAE STUDENT ACTIVITY BUILDING FOR WILSON COLLEGE

5

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