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AN AUDITORIUM-FINE ARTS COMPLEX

for

WESTMAR COLLEGE

LEMARS, IOWA

Part I
Undergraduate Thesis in Architectural Design

by

Bernard L. Fisher

Submitted to the School of Architecture as partial fulfillment of the requirements for the degree of Bachelor of Architecture

at

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PROPOSAL

My thesis project is an Auditorium-Fine Arts Complex for Westmar College located in Le Mars, Iowa. Having attended Westmar for three years prior to transferring to Montana State University in 1964, I am familiar with the needs of the college and their building program.

The project was suggested to me by Mr. William Cookson, who is Director of Westmar's Art Department.

Westmar is expanding its facilities and has built two dormitories and a science building in the past four years. An Auditorium-Fine Arts Complex is to be built within five years.

I fulfilled the requirements for an art major at Westmar which I feel gives me an understanding of the needs of that particular department.

The Auditorium-Fine Arts Complex, as I envision it, will house the following departments: (1) Music, (2) Art, and (3) Speech and Dramatic Arts.

Following is an outline of the area requirements for the building:

I. Art Department
   - A. Administrative offices
   - B. Ceramic Studio
   - C. Kiln room
   - D. Ceramic and sculpture-storage area
   - E. Sculpture studio
   - F. Crafts workshop
   - G. Print workshop
   - H. Design and art education studio
   - I. Painting and drawing studio and storage
   - J. Library

II. Music Department
   - A. Administrative offices
   - B. Practice rooms

C. Large classroom and recital room
D. Listening room
E. Band and orchestra room
F. Instrument storage
G. Instrument repair shop
H. Uniform storage
I. Recording room
J. Library

III. Speech and Dramatic Arts Department
A. Administrative offices
B. Small theater - 400 capacity
C. Dramatic-teaching laboratory
D. Dressing rooms
E. Workshop
F. Library
G. Greenroom

IV. Auditorium - 1500 capacity

HISTORY OF WESTMAR

LOCATION

Westmar College is located in Le Mars, Iowa. Its 38 acre campus appears refreshing and systematic to the student and all who visit its grounds.

"The college buildings, for the most part, are of red and yellow brick. Whether they be old or new, all the buildings are in good condition. The main buildings are arranged almost in a tandem on the south side of one of the main streets. In the center is Thoren Hall, the oldest building. On the east side of the chain of chain of halls is an amphitheater and the tennis courts, and on the south side, the former athletic field. The new athletic field, which serves both college and town, is four blocks from the campus. There are curving walkways, evergreen and deciduous trees, shrubery, and an iron eagle atop a stone sphere typifying the world, and adding dignity and appeal." (5:p.215,1965)

CHURCH AFFILIATION

Westmar College is affiliated with the Evangelical United Brethren Church. This church began in 1946 as the result of a merger between the Church of the United Brethren and the Evangelical Church. The doctrine of both churches is basically Methodist.

The church of the United Brethren began in 1800 by Phillip W. Otterbein. He began revivals in Pennsylvania, Maryland, and Virginia among the Germans.

The Evangelical Church was founded by Jacob Albright in 1903. He began preaching in Pennsylvania among the German people.

At first, the Church of the United Brethren and the Evangelical Church had a feeling of doubt for higher education, since the more established old churches who were affiliated with colleges had become more worldly and less spiritual. Also, the uneducated rural folks were more attracted to the early church, and they weren't interested in higher education.

Around 1840 the Church of the United Brethren and the Evangelical Church felt they needed to be more of an organization. They noticed churches affiliated with colleges had places to meet. Also, they felt they needed self-preservation and that a unit of higher education would help this.

In 1847, colleges affiliated with these two churches were beginning to be founded. First was Otterbein College located in Westerville, Ohio. Small towns were chosen as homes for these colleges as they wanted to avoid large cities.

At first, these church affiliated colleges were opposed to the trained ministry. In 1871, twenty-four years after the founding of their first college, Bonebrake Theological Seminary was founded in Dayton, Ohio. This seminary is now called United Theological Seminary.

In 1968, the Evangelical United Brethren Church merged with the Methodist Church. This newly united church is called United Methodist Church.

HIGHER EDUCATION IN LE MARS

Higher education began in Le Mars through the efforts of Professor Jacob Wernli who came to Le Mars from Chicago in 1875. On March 28, 1887, he opened Northwestern Normal School-Business College. It was located in a frame building used previously by the school district of Le Mars. There were only seven students for the first term but 190 students by the second year. Because of the increased enrollment, Northwestern Normal School-Business College was moved to a larger building. The Richards House, a large three-story veneered structure, became the school.

The citizens of Le Mars became interested in the college and formed a Normal School Association in 1892. They built a three-story brick building in the south end of town in 1893. This became the new home of Northwestern Normal School-Business College. The business-men hoped Le Mars might be chosen as a sight for a State Normal School, but this never occurred.

Meanwhile, the United Evangelical Church was realizing the need for a denominational college in the middle west, since they didn't have one located in that area.

Le Mars was a good location for a college as it was easily reached by outlying regions. It was located at the junction of the Illinois Central and the Chicago St. Paul and Minneapolis railroads. The Great Northern ran within two miles of the city. Le Mars was a rich farming country and the county seat of Plymouth County.

In 1899, the Illinois Conference of the United Evangelical Church began work on locating a college. In 1900, the Le Mars Normal School Association sent a proposal to the conference. The Illinois Conference then sent three members to meet with members of the Normal School Association at Le Mars on April 10, 1900.

As a result, on April 12, 1900 Western Union College of the United Evangelical Church was organized. The college acquired the name Western Union College because the conferences of the United Evangelical Church that united to form the school were in the more western part of the country. The seven-acre campus of Northwest Normal School-Business College along with their college building were turned over to Western Union College.

WESTERN UNION COLLEGE

Rev. Herman Thoren, Ph.D., of Naperville, Illinois was elected first president of Western Union College. On September 12, 1900, the college was expected to open, but during a thunderstorm on the night of August 24 the college building burned down. Immediate plans were made for a new structure, but meanwhile the college opened in temporary quarters. School opened one week later on September 19, 1900 in the Le Mars Hotel. This building was vacant and large enough to serve as a temporary college.

82 students attended Western Union College the first quarter in 1900. 101 students attended winter quarter in 1900. These students were from eight states and ten church denominations. Of the 101 students, 35 were women and 66 were men. 31 of the stud-

ents were from Le Mars.

The new college building was dedicated on September 18, 1901. This first building, later named Thoren Hall, was large and well equipped. It had city water, electric lights and was steam heated. The college had no dormitories; thus, students lived in private homes. Their board and room was $2.50 to $3.00 a week.

Western Union College offered the following degrees: (1) Bachelor of Arts, (2) Bachelor of Science, (3) Bachelor of Philosophy, and (4) Bachelor of Divinity. The college also offered a Normal Course for those desiring to become teachers. A Commercial Department was developed for business training. A Preparatory Course was also offered which prepared students for entrance as Freshmen in the other curriculums of the college. Debate, music, and art were also offered.

NAME CHANGE

It seemed important for Western Union College to change their name since their idenity was continually being confused with that of the telegraph company. In April of 1948, Western Union College changed its name to Westmar College. This was a synthetic creation of Professor Frank Jewett who got it from the words Western Union and Le Mars, since both were important in the development of Westmar College.

WESTMAR MERGED WITH YORK

York College began as the Gibbon Collegiate Institute founded in 1886 at Gibbon, Nebraska by the Church of the United Brethren. At that time they bought it from the Baptist people and conducted it as an academy. In 1890, for financial reasons, the college was moved to York, Nebraska. It then became known as York College.

The college had the following departments: (1) Academy, (2) Art, (3) College, (4) Commercial, (5) Normal, and (6) Music. The campus consisted of eight acres. In 1916, a business college was added.

There was a loss of student enrollment after 1949, when the college suffered a series of misfortunes such as the burning of their Administrative Building, Old Main; the death of two staunch friends of the college, Bishop V. O. Weidler in 1950 and Dr. Harlan Thomas in 1951; and difficulty arising with the deed to their property.

After the Evangelical United Brethren Church was organized in 1946 as a result of a merger between the Church of the United Brethren and the Evangelical Church, they had discussions as to the number of their colleges that could be properly operated west of the Mississippi River.

In 1954, York College merged with Westmar College. The united college was called Westmar and was located in Le Mars. The York colors, blue and white, became the colors of Westmar. Dr. D. O. Kime continued as president of Westmar. Dr. A. V. Howland, former president of York, became the vice president of

the new merged college, Westmar.

WESTMAR'S BUILDINGS

The overall impression one gets of Westmar's buildings is a conglomeration of designs which in no way relate to one another. This is the result of the following factors: (1) Buildings were constructed during different periods of history; (2) Buildings are not being used for the purpose for which they were originally built or designed; and (3) Buildings have encountered forceful remodelings to accommodate increased enrollment.

On February 23, 1965, President H. H. Kalas presented to the board a report that indicated the building needs at that time were: Library $130,000; Science Hall $600,000; Auditorium-Fine Arts Complex $470,000; and a dormitory $300,000. All these would cost a total of $1,500,000. (5:p.186,1965)

Art Center

This building is a three-story house with a full basement. It was formerly known as Overmiller House. It has been remodeled and houses equipment for art studios and a gallery.

Home Economics Building

This building was built in 1909 as a gymnasium. The gymnasium was remodeled in 1940 to house the library. Then upon completion of the Mock Memorial Library, it was remodeled to house the Home Economics Department on its main floor and the student union in its basement. In 1958 upon completion of Weidler Hall,

the new dining hall and Student Union Building, the basement of the old gym was converted to an Art Department.

Development - Psychology Building

In 1947, President Kime announced that the Federal Works Agency, upon recommendation of the United States Department of Education, had allocated 8,000 square feet of floor space for science laboratory facilities for Western Union College. Three buildings of the air base in Sioux City were moved to the campus by plans of William Buettler, college architect. The structure was L-shaped and housed the chemistry and physics labs on the first floor and the biology lab on the second floor. It was later brick veneered. It was finished in 1947 and was called Kime Science Hall.

Upon completion of the new Kime Science Hall, this building was remodeled and presently houses the Psychology Department and offices for campus development.

Dubs Memorial

Dubs Memorial was built in 1920 and was named in honor of Bishop Rudolph Dubs. It housed the college library, Commercial Department, President's Office, and Treasurer's Office. It presently contains classrooms and faculty offices.

Industrial Arts Building

The Industrial Arts Building was constructed in 1948. It is a one story brick structure and provides space for engineering

drawing shop, workshop, and faculty offices.

Kime Science Hall

Kime Science Hall was designed by Johnson-Jamerson and Associates and was completed in 1967. It is a modern brick structure and houses the science and mathematics departments. The building contains six general classrooms, 20 instructional laboratories, a 200 seat lecture hall, and 17 faculty offices. It was named in honor of David O. Kime, LL.D., president of Westmar College from 1932-1956.

Charles A. Mock Library

The library, a two-story brick structure, was built in 1951 to provide facilities for 500 students, 75,000 volumes, and administrative offices. It was named in honor of Rev. Charles A. Mock, Ph.D., Litt.D., president of Westmar College, 1911-1930.

Gymnasium

This building was completed in 1941. It contains a basketball court 50 feet by 90 feet, and a seating capacity for one thousand. It is used for physical education classes, intramural athletics, and social gatherings.

Thoren Hall

This is the oldest building on the campus having been built in 1901. It is named in honor of Rev. H. H. Thoren, Ph.D., former president of the college. The building houses an auditorium with a seating capacity of 325, studios and practice rooms for music

students, and classrooms.

Weidler Hall

This building was completed in 1958 and was named in honor of Bishop Victor O. Weidler, former Bishop of the Southwestern Episcopal area, and Dr. Deleth Eber Weidler, president of York College from 1938-1947. It is a two-story brick building containing the Student Union and dining hall.

Eastview Residence Hall for Men

A two-story brick building that was originally designed as faculty housing, containing ten apartments. It has been remodeled and now contains facilities for housing 74 men. It was built in 1946 with funds from the Federal Public Housing Authority.

Memorial Hall

This building was originally two separate dormitories. They were named Memorial Hall and Koehler Hall. Memorial Hall was built in 1947. Koehler Hall was built in 1949 and was the same as Memorial Hall except the floor plan was reversed. In 1963, a unit was built connecting Koehler and Memorial Halls. This serves as an entrance and reception room. The entire complex provides housing for 182 men.

Wernli Hall

Wernli Hall, a four-story brick building, was built in 1921. Until the completion of Weidler Hall, Wernli Hall housed the campus dining hall. It was completely remodeled in 1966. It pro-

vides rooms for 142 women. It is named in honor of Professor J. Wernli, founder of Northwestern Normal School-Business College.

Bonebrake Hall

Bonebrake Hall is a three-story brick building with housing facilities for 229 women. It was completed in 1964.

Westmar Apartments

These are two, two-story brick buildings for housing married students. They provide for eight,two-bedroom apartments and 16, one-bedroom apartments.

Present Construction

Construction began August, 1967 on a men's dormitory and dining hall. The dormitory will contain 154 units, and the dining hall will serve 600 students.

FINANCES

Finances were a moderate problem for Westmar during its development as it was a problem for most small colleges, especially during the depression.

Westmar College receives financial support from alumni, private donors, corporations, churches, and tuition. The Federal Government also loans considerable amounts for housing facilities.

ACCREDITATION

On March 25, 1953, Westmar College was accepted for accredi-

tation by the North Central Association of Colleges and Secondary Schools. It is a four year Bachelor's Degree granting institution.

DEGREES

Since 1932, the college's education department has grown, and today the majority of its students prepare for teaching.

Summer sessions have been continued yearly since 1933. The college also offers evening classes during the regular school year.

Westmar College presently offers the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Music, and Bachelor of Music Education.

ENROLLMENT

Of the 862 students enrolled in 1964, 430 were women and 432 were men. 50 percent of the total student enrollment were members of the Evangelical United Brethren Church. Westmar has an enrollment at present (1968) of 1,040, and there are presently 77 instructors.

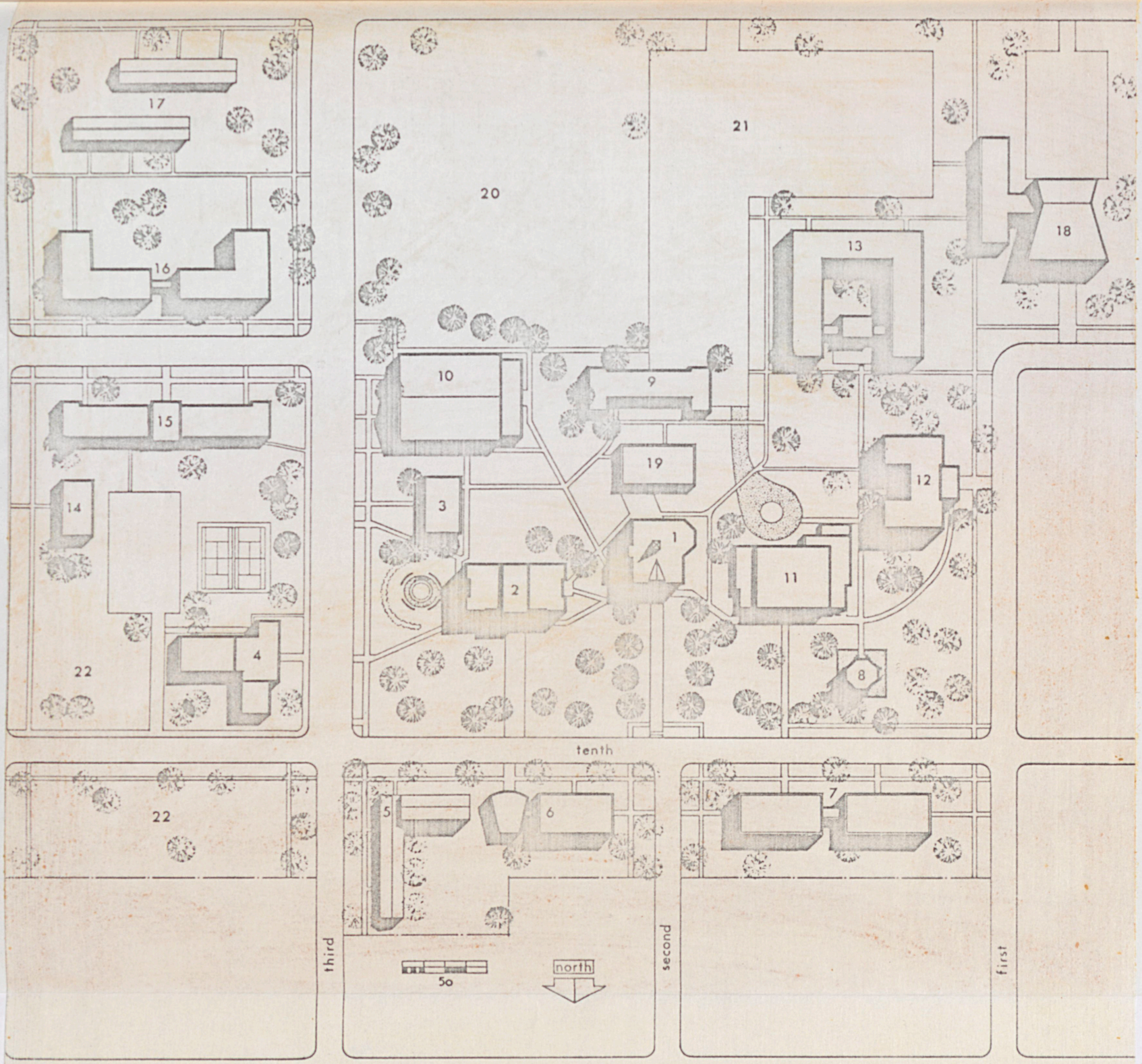
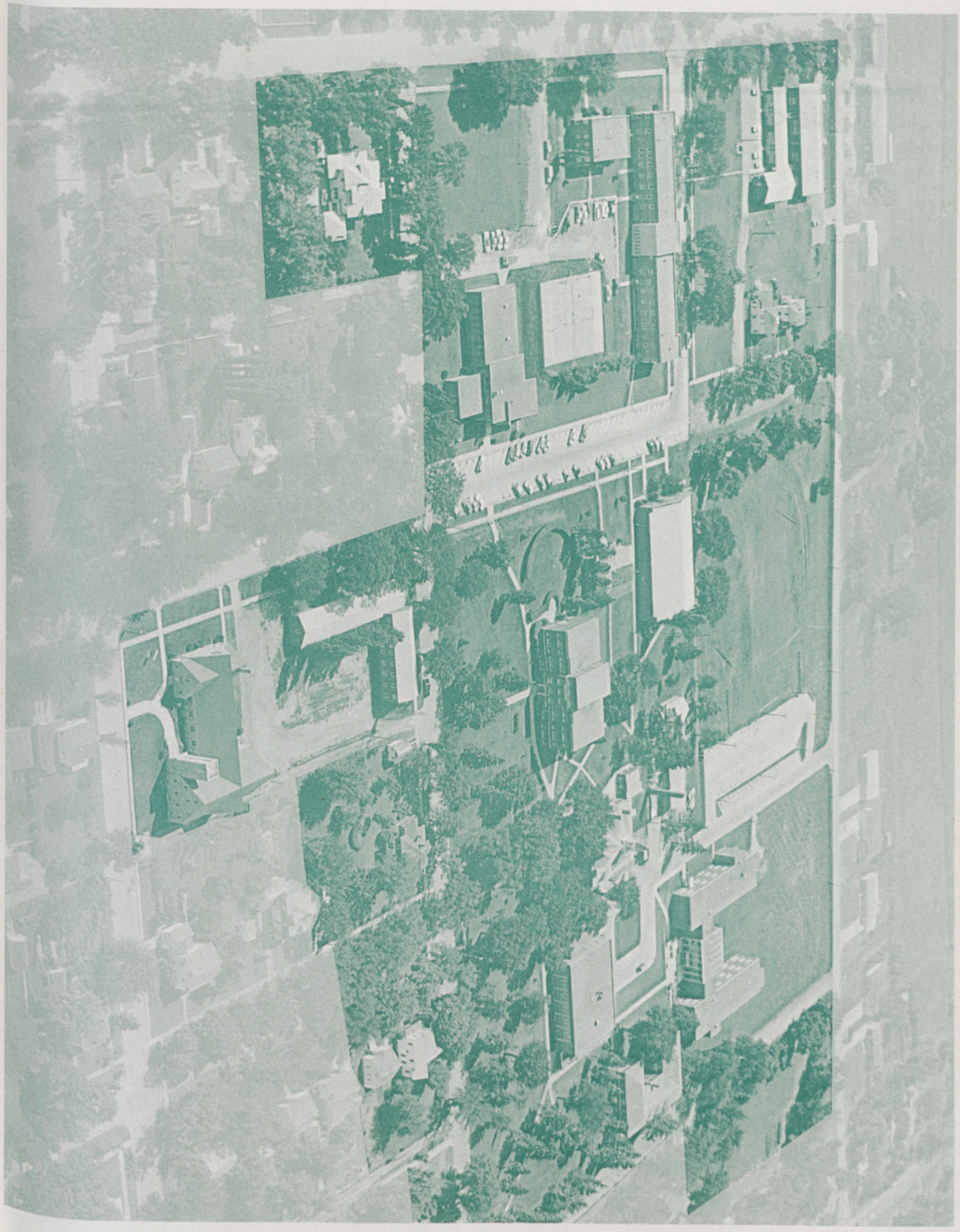


FIGURE 1.

PROJECTED CAMPUS PLAN FOR WESTMAR COLLEGE LE MARS IOW

KEY TO CAMPUS PLAN

1) THOREN HALL
2) DUBS MEMORIAL HALL
3) HOME ECONOMICS BUILDING
4) MOCK MEMORIAL LIBRARY
5) KIME SCIENCE HALL
6) PROPOSED NEW SCIENCE HALL
7) PROJECTED NEW CLASSROOM BUILDINGS
8) PROJECTED CAMPUS CHAPEL
9) INDUSTRIAL ARTS BUILDING
10) GYMNASIUM
11) WEIDLER HALL
12) WERNLI HALL
13) NEW WOMEN'S RESIDENCE
14) EASTVIEW DORMITORY
15) MEMORIAL HALL
16) PROJECTED MEN'S RESIDENCE HALLS
17) WESTMAR HOMES
18) PROJECTED AUDITORIUM–MUSIC–FINE ARTS BUILDING
19) CENTRAL CAMPUS UTILITY BUILDING
20) PHYSICAL EDUCATION AND INTRAMURAL FIELD
21) PROPOSED CENTRAL CAMPUS PARKING AREA
22) FUTURE EXPANSION



Westmar College

OFFICE OF DEVELOPMENT

LEMARS, IOWA

LOCAL CONDITIONS

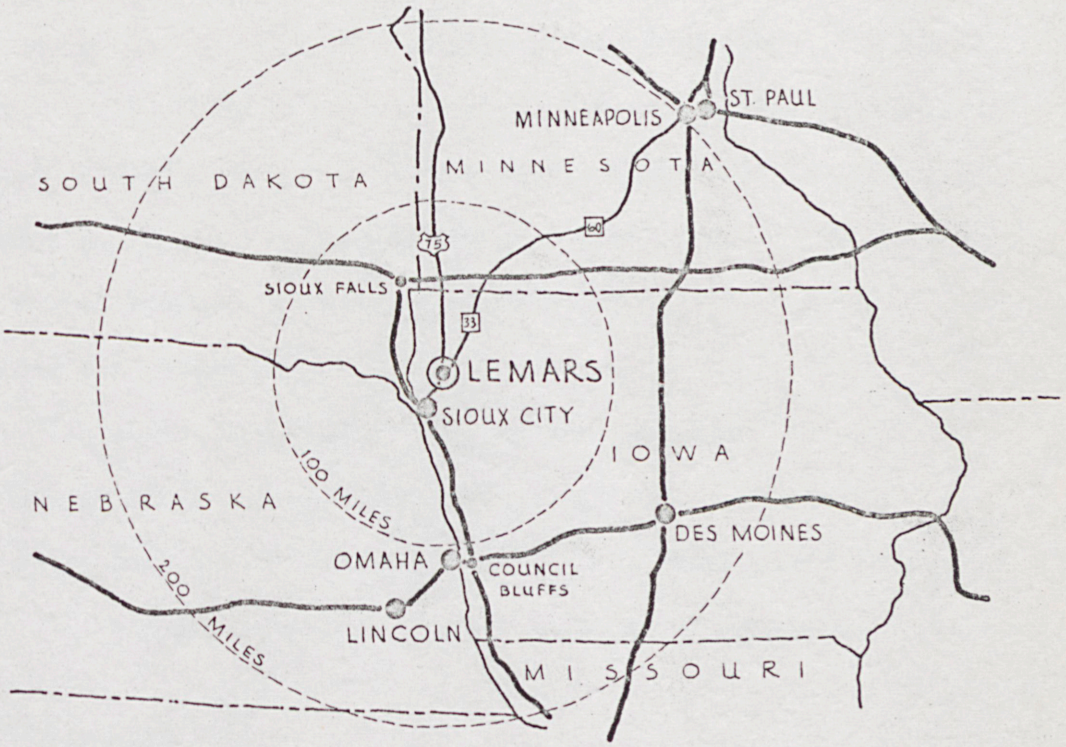


FIGURE 2. LOCATION OF LE MARS (1:p.5,1962)

LOCATION

Westmar College is located in Le Mars, Iowa, a small agricultural community with a population of 7, 847 in 1965. There is a total of 3,020 acres within the city limits of Le Mars.

Le Mars in northwestern Iowa, is the county seat of Plymouth County. It lies on the flat valley floor of the Floyd River and on the gentle rolling hills southeast of the valley. The flood plain of the Floyd River is about a half mile wide. It has a noticable effect on the form of the city, since it is low, flat, drains poorly, and is subject to periodic flooding. Almost half of the city's area is undeveloped and provides many pleasant wooded open areas within the city.

Le Mars' geographical location is 42 degrees 49 minutes latitude and 96 degrees 12 minutes longitude. The altitude of Le Mars is 1,224 feet above sea level. It is 25 miles from Sioux City, a metropolitan area with a population of 110,000.

HISTORY OF LE MARS

Settling Of Le Mars

The completion of the Iowa Falls and Sioux City Railroad, now a part of the Illinois Central System, gave rise to the city of Le Mars which was plotted on June 11, 1870. Its present area was incorporated in 1881. The name of Le Mars was derived from the first name initials of six ladies who accompanied railroad officials to the site soon after the railroad's completion.

Settlers

About half of the settlers came from the Eastern part of the United States where their families had settled generations earlier. They were inclined to come for business and professional reasons. The remainder of settlers came from Germany, Ireland, and England with a few from the Scandinavian countries and the Netherlands.

Agriculture

The early farmer had two problems, namely breaking the prairie sod and fighting off the Indians. The farmers were intermittently bothered with hard winters and tornados. In the 1870's and 1880's, grasshopper plagues struck the farmers. An economic depression and drought occurred in the late 1880s, and many hail storms took place in the 1890s.

In 1930, the effects of the depression were felt in the middle west. Legal foreclosures began, and the farm strike followed. Prices of farm produce were so low that it was economical to burn corn for fuel.

Between 1910 and 1930, there was a definite shift in crops from wheat to corn and hogs. Cattle and oats are also produced now. Presently, Plymouth County is experiencing a change from smaller to larger farms.

Plymouth County is one of America's wealthiest agricultural areas and ranks 57th in the nation and fourth in Iowa. Their most important agricultural product is livestock.

Industries

Most of the industries in Le Mars are related to agriculture. Some of the products produced include feeds, clothing, well drilling equipment, industrial abrasives and dairy products. A rendering plant and meat packing plant are also located in the town.

Churches

Le Mars is approximately 40 percent Catholic and 60 percent Protestant. There are presently over twenty different churches in the community.

Utilities

Three wells located in the north end of the city are the present sources of water supply. The water treatment plant provides chlorination only and has a capacity of 1,500,000 gallons per day.

The present sewage treatment plant located on the Floyd River is designed for a population of 8500 and has a capacity of 575,000 gallons a day.

Except during unusually heavy rains, the storm drainage system is generally adequate.

Architecture

The sod house and log cabin were the earliest style of architecture. By 1871, frame buildings were being constructed. Brick or frame buildings with considerable "gingerbread" (16:1968)

and "General Grant Gothic" (16:1968) appeared in the 1880s and 1890s.

Conventional, Colonial, and Modern Architecture are also visible in Le Mars. Brick or frame buildings are presently the most predominant.

Community Facilities

In 1871, Le Mars had fifty business establishments, a post office and a newspaper. It became a county seat in 1872.

In 1900 when Western Union College opened its doors, the population of Le Mars was 6,000. Located in Le Mars were four banks, Carnegie Library, good factories, sixteen churches and religious organizations, a post office constructed in 1869, three semi-weekly newspapers and one German newspaper. A $70,000 courthouse was under construction.

Various facilities presently located in Le Mars are: (1) Post Office constructed in 1915, (2) Carnegie Library containing 17,893 volumes in 1966, (3) Parkinson's Ancient Musical Instruments Museum, (4) Historical Museum, (5) KLEM Radio, (6) two newspapers, (7) Royal Theater, (8) Drive-In Theater, (9) Municipal Golf Course, (10) Municipal Swimming Pool, (11) four parks, (12) Floyd Valley Hospital, (13) Brentwood Rest and Convalescent Home, (14) Le Mars Clinic, (15) Plymouth County Home, (16) eight elementary schools, (17) two junior high schools, (18) two senior high schools, (19) Westmar College, (20) two banks, (21) five motels, (22) eleven restaurants and drive-ins, (23) City Hall,

(24) Plymouth County Courthouse, (25) National Guard Armory, (26) buildings of the Plymouth County Fair, (27) Vocational-Agricultural Building, and (28) numerous offices and business establishments.

CLIMATE

The climate of Le Mars is one of variation. The summers are generally hot and humid with occasional cool spells. The average summer temperature is 85 F. with an average humidity of 73 percent. The hottest temperature recorded was 111 F. on July 17, 1936.

Heavy thunderstorms, about forty per year, are common from early May to late September with an average monthly rainfall for this period of 3.21 inches. The heaviest rainfall ever recorded in 24 hours was 5.50 inches on September 11, 1900.

The winter climate in Le Mars is relatively severe with an average winter temperature of 24.8 F. The coldest temperature recorded was -37 F. on January 12, 1912. Heaviest snowfall ever recorded was 28.5 inches during the month of February in 1936.

The prevailing wind is from the northwest from November to April and from the south for the remainder of the months. High winds to 75 mph at 15 feet above the ground may be expected once in fifty years.

Tornados are an occasional occurrence in Le Mars. From May 30, 1899 to the present, fifteen tornados have occurred in Plymouth County, three of which occurred in Le Mars.

The last average killing frost in the Spring is May 7, and the first average killing frost in the Fall is October 3. The average annual growing season is 149 days. The seasonal average of percent of sunshine is as follows: Winter, 55 percent; Spring, 63 percent; Summer, 77 percent; Fall, 64 percent; and Annual, 65 percent. (6:p.3,1966)

The following were averaged over a period of 22 years.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An'l
Precipitation	0.83	0.92	1.68	2.32	3.44	4.73	3.53	3.24	3.37	1.54	1.03	0.85	27.48
Snowfall	6.9	6.9	7.9	1.8	.04	T	T	0	T	T	3.3	6.2	33.4
Mean Temp.	19.3	23.0	34.2	48.8	60.6	70.2	75.8	73.5	64.6	53.0	35.8	24.3	48.6
Mean Max.	29.2	33.2	44.4	60.8	72.9	82.0	88.5	85.9	77.5	66.1	46.2	33.6	60.0
Mean Min.	9.5	12.9	24.0	36.8	48.3	58.5	63.2	61.2	51.8	40.0	25.3	15.0	37.2
Highest Temp.	67	66	89	89	108	106	111	108	102	94	77	66	111
Lowest Temp.	-25	-28	-20	5	25	35	45	35	23	12	-14	-20	-28

TABLE 1. CLIMATE OF LE MARS, IOWA (12:1967)

Year	Population	Increase	Percent Increase
1910	4,157		
1920	4,683	526	12.7
1930	4,788	105	2.2
1940	5,353	565	11.8
1950	5,844	491	9.2
1960	6,767	923	15.8
1965	7,847	1,080	

TABLE 2. POPULATION OF LE MARS, IOWA (1:p.6,1962)

"A steady growth trend has not been the case for Plymouth County as a whole. The county has increased in population only 2.8 percent in the last 50 years, while in the same period the State of Iowa has increased 23.9 percent and Le Mars has increased 62.8 percent." (1:p.6,1962)

Year	Population	Increase (Decrease)	Percent Increase
1910	23,129		
1920	23,584	455	2.0
1930	24,159	575	2.4
1940	23,502	(659)	(2.7)
1950	23,252	(250)	(1.1)
1960	23,906	654	2.8
1965	24,100	194	

TABLE 3. POPULATION OF PLYMOUTH COUNTY (1:p.6,1962)

"The dramatic shift from dominating rural population to dominating urban population in the State of Iowa is illustrated by the table below." (1:p.6,1962)

Year	Iowa Total	Rural	Urban	Percent Urban
1930	2,470,939	1,491,647	979,292	39.6
1940	2,538,268	1,454,037	1,084,231	42.8
1950	2,621,073	1,370,135	1,250,938	47.7
1960	2,757,537	1,295,025	1,462,512	53.0

TABLE 4. RURAL AND URBAN POPULATION OF IOWA (1:p.6,1962)

The populace of Le Mars is 55 percent foreign born. The percentage of each race in Le Mars is as follows: White, 100 percent; Negro, 0 percent; and other 0 percent. (6:p.4,1966)

The male population 14 years of age and over in Plymouth County in 1966 was 9,346. Of these, 6,123 were employed. The female population 14 years of age and over in Plymouth County in 1966 was 8,900. Of these, 2118 were employed. In 1964, 2.3 percent of the labor force in Plymouth County was unemployed. (6:p.19,1966)

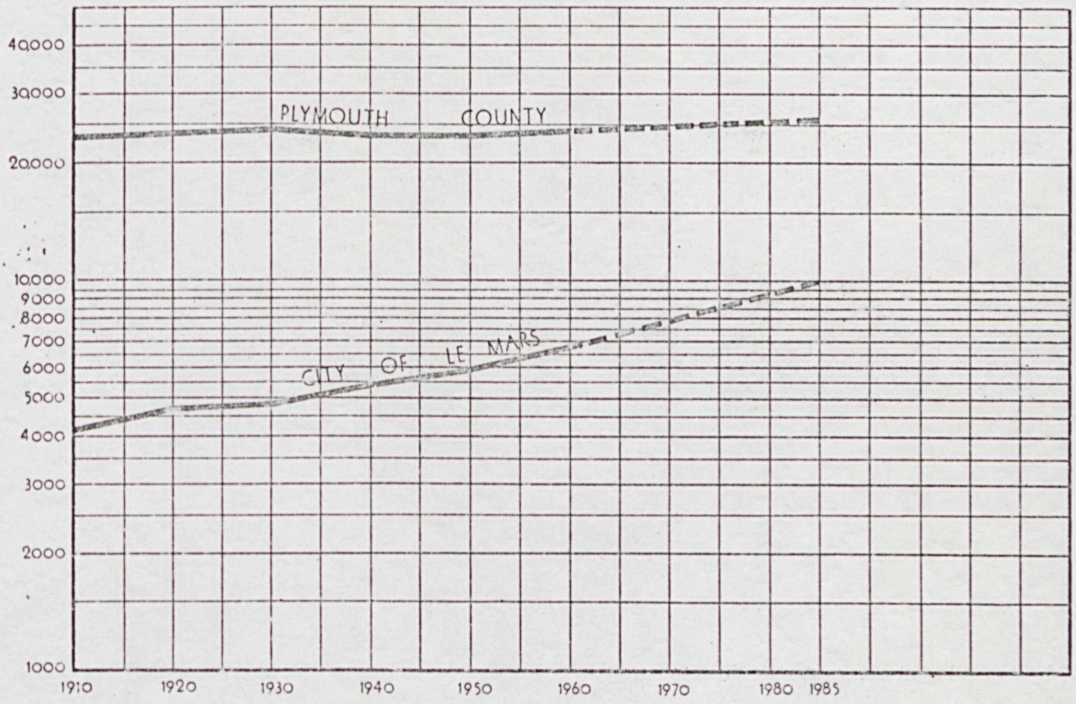
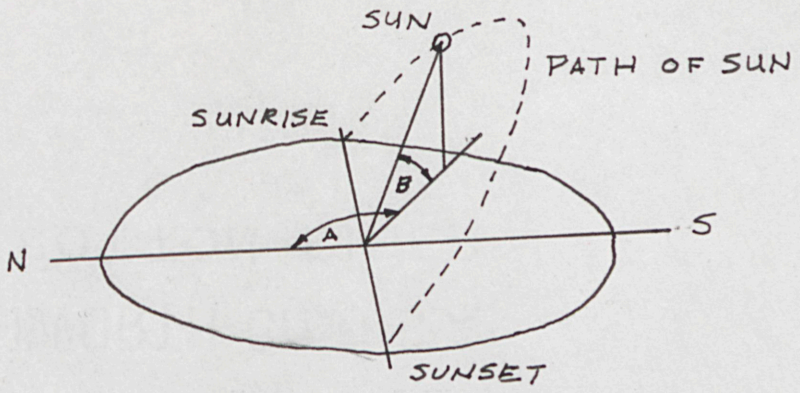


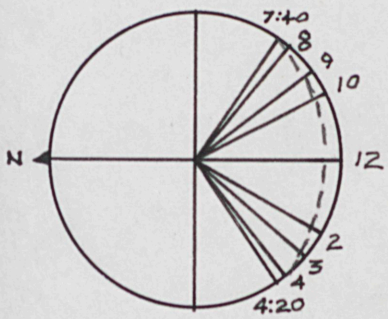
FIGURE 3. POPULATION OF LE MARS AND PLYMOUTH COUNTY (1:12,1966)

EXPLANATION

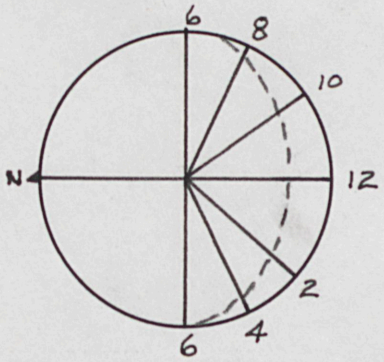


Angle A - Azimuth
Angle B - Altitude

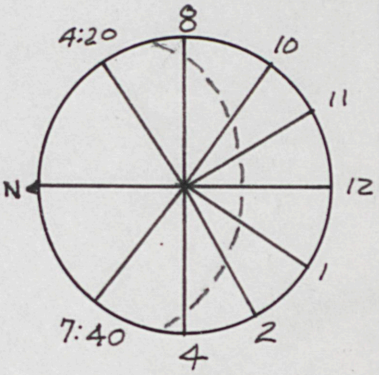
FIGURE 4. SOLAR ANGLES FOR LE MARS, IOWA



Winter
Dec.22



Spring - March 21
Fall - Sept. 23



Summer
June 22

A.M.	Azimuth	Altitude	A.M.	Azimuth	Altitude	A.M.	Azimuth	Altitude
7:40	122 -45	0 0	6:00	90 -0	0 -0	7:20	57 -15	0 -0
8:00	127 -15	4 -0	8:00	111 -15	21 -30	8:00	91 -0	37 -30
9:00	137 - 0	8 -0	10:00	139 -30	39 -45	10:00	117 -45	58 -45
10:00	150 - 15	18 -15	Noon	180 -0	47 -30	11:00	141 -45	67 -15
Noon	180 - 0	24 -0				Noon	180 -0	71 -0
P.M.			P.M.			P.M.		
2:00	150 -15	18 -15	2:00	139 -30	39 -45	1:00	141 -45	67 -15
3:00	137 -0	8 -0	4:00	111 -15	21 30	2:00	117 -45	58 -45
4:00	127 -15	4 -0	6:00	90 -0	0 -0	4:00	91 -0	37 -30
4:20	122 -45	0 0				7:40	57 -15	0 -0

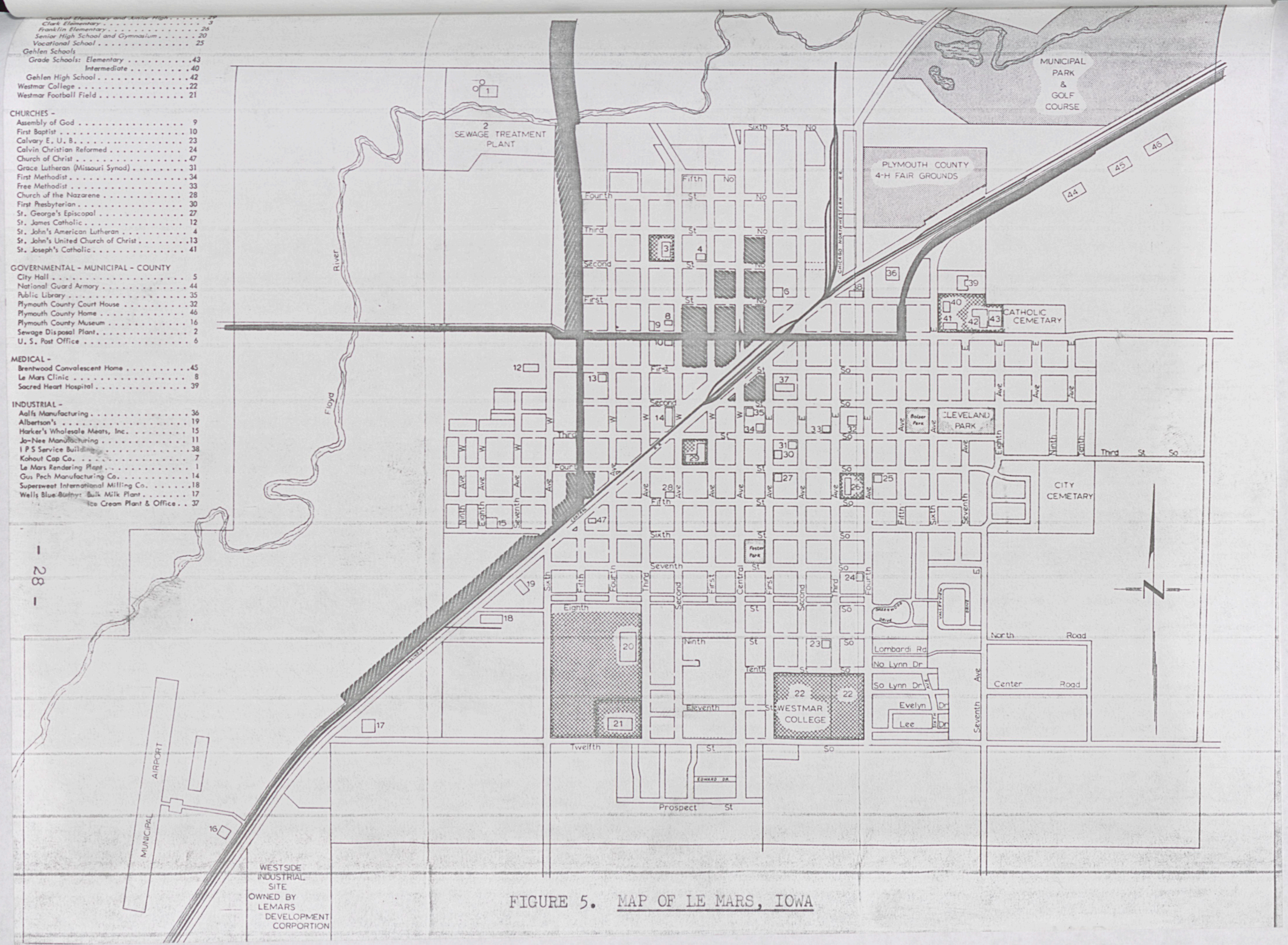


FIGURE 5. MAP OF LE MARS, IOWA

NEED

AUDITORIUM

At the present time, there is no auditorium within the city limits of Le Mars with adequate facilities or seating capacity for activities such as choral recitals, orchestra presentations, visiting lecturers, visiting musicians, etc.

The predicted maximum student enrollment at Westmar is 1,500 but will not exceed this number (21:1968). It would be desirable if Westmar had an auditorium to seat its entire student body for assemblies and chapel services. The high schools and city populace would have use of the auditorium whenever necessary for recitals, Le Mars Symphony Orchestra presentations, visiting lecturers, etc.

The intention of Westmar's administrators is to provide an auditorium of 1,500 seating capacity for Westmar College and the city of Le Mars.

ART DEPARTMENT

Westmar's present Art Department is housed in two separate buildings which are approximately two blocks apart.

Ceramics, crafts, design, art history, and art education are located in the basement of the Home Economics Building. Drawing, painting, and sculpture are located in the Art Center. The basement of this house has been converted to a sculpture studio. An art gallery and the department head's office are located on the main floor. The second floor is used primarily as

a drawing and painting studio, but a faculty office is located here also. The third floor is employed as an advanced drawing and painting studio for upper division students.

The existing buildings are inadequate facilities for an Art Department for the following reasons: (1) The department is not unified because of the activities performed in separate buildings. (2) No classroom area is completely private. Students passing through the department, either during classes or at leisure, interrupt class proceedings, since they must pass directly through the area where classes are in session. (3) The present facilities do not provide a distinct area for lectures or slide shows. (4) Storage is extremely inadequate, and in most cases, storage is not directly accessible to the classrooms or studios. (5) The classrooms and studios are poorly illuminated. (6) There is insufficient space for the 343 students who take art courses in one year.

MUSIC, SPEECH AND DRAMATIC ARTS

These departments are located in Thoren Hall which was constructed in 1901. Its floor and roof structures are of wood with masonry bearing walls. The building has a full basement and is three stories above ground.

Following is an outline of the activities performed on each floor of Thoren Hall.

I. Basement
   A. Music Department
      1. 2 studios

2. 1 instructor's workroom

B. Speech and Dramatic Arts
   1. 1 staff office

C. Other
   1. Rest-rooms

II. First Floor

A. Music Department
   1. 4 studios
   2. 1 file room
   3. 1 classroom (which is also used for choir rehearsal)
   4. 1 classroom (which is also used for band rehearsal)

III. Second Floor

A. Music Department
   1. 1 classroom (which is also used for choir rehearsal)

B. Speech Department
   1. 2 staff offices
   2. Greenroom

C. Auditorium
   1. Music recitals
   2. Organ studio
   3. Theatrical productions
   4. Speech classes

IV. Third Floor

A. Music Department
   1. 1 storage room
   2. 1 organ practice room
   3. 1 piano practice room

B. Speech Department
   1. 1 storage room
   2. 1 workshop

As is apparent in the preceeding list, the activities of the Speech and Dramatic Arts, and Music Departments are scattered throughout the building causing inconvenience and confusion for all who use the building. Classrooms are small and provide poor seating arrangements for the instruction of classes. The location of the recital and practice rooms restricts their use to a time when classes are not in session. None of the rooms, regardless of their use, are adequate, but the departments are forced

to use them to their best advantage.

The existing building is inadequate for the activities of the Music, Speech and Dramatic Arts Departments for the following reasons: (1) The acoustics of Thoren Hall are inadequate for a music department, since sound is transmitted easily throughout the building. (2) The present facilities do not provide a distinct area for the use of audio-visual aid equipment. (3) Storage is extremely inadequate, and in most cases there is not a space allotted for storage. (4) The classrooms, studios, and offices are poorly illuminated. (5) There is insufficient space for the 600 students that take music and speech courses in one year.

The auditorium or theater (it is presently used as both) is located on the second floor and has a seating capacity of 325 which is smaller than present requirements.

Since the theater (auditorium) is on second floor, it is inconvenient for individuals attending theatrical productions. Strangers to the campus find it very difficult to locate the theater (auditorium).

It is also extremely hazardous, since the building is a fire hazard and the time to evacuate a crowd of people under the present circumstances would be critical.

The illumination and acoustics of the theater (auditorium) are outdated and far below present-day standards. The stage and its facilities are too small and restrict dramatic productions.

The workshop and storage room for stage props are located on third floor; thus, the props are built on the third floor and

must be carried downstairs to the second floor where the stage and theater (auditorium) are located. There are no dressing rooms in which the participants of a dramatic production may change costumes. At present, classrooms suffice as dressing rooms. There is no storage room near the stage.

It is desirable and necessary for the Art, Music, Speech and Dramatic Arts Departments to be placed in one building that will be adequate for all their needs.

One building is desired so that the departments are easily accessible to one another for the following reasons: (1) They are all involved in theatrical productions. (2) They are all fine arts. (3) They all involve noise. (4) They all seek an audience. It is also necessary that they each have their own distinct area for needed privacy.



FIGURE 6. CERAMIC STUDIO

ART



FIGURE 7. AUDIO-VISUAL AIDS



FIGURE 8. ART GALLERY



FIGURE 9. SCULPTURE STUDIO



FIGURE 10. STAFF OFFICE

MUSIC



FIGURE 11. CLASSROOM



FIGURE 12. PRACTICE ROOM



FIGURE 13. CHOIR REHEARSAL

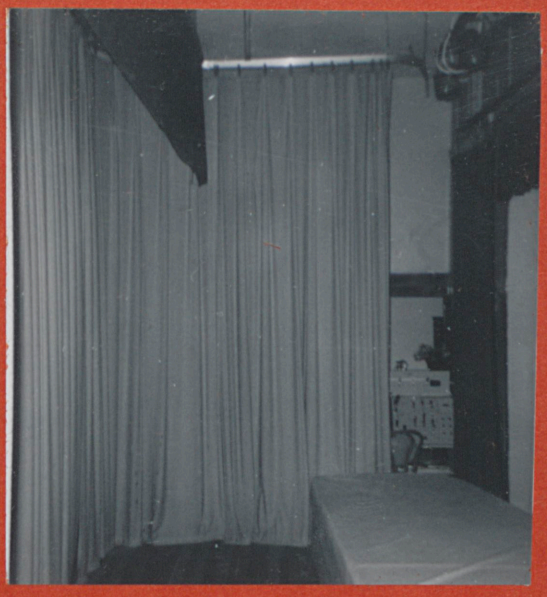


FIGURE 14. STAGE

SPEECH AND DRAMATIC ARTS



FIGURE 15. THEATER

PROGRAM

GENERAL

The program of the Auditorium-Fine Arts Complex for Westmar College is a result of research, interviews and personal correspondence with Westmar's personnel. Present and projected educational needs of the Speech and Dramatic Arts, Music, and Art Departments are the basis for this program.

Since this building is primarily for education purposes, its character must be conducive to learning. Two aspects which influence the design of the Auditorium-Fine Arts Building are: (1) flexible interior spaces which will permit adaptation to the needs of the department which are dictated by student enrollment. (2) An aesthetic character representative of the Fine Arts.

The predicted growth of the Art, Music, Speech and Dramatic Arts Departments is expected to be a maximum of two-thirds of their present facilities.

The function of the Auditorium-Fine Arts Complex is to provide adequate facilities for the Speech and Dramatic Arts, Music, and Art Departments. The various divisions of the building are as follows: (1) Art Department, (2) Music Department, (3) Speech and Dramatic Arts Department, (4) Areas common to all departments, and (5) Auditorium.

ART DEPARTMENT

During the academic year of 1967-1968, the Art Department had 16 declared majors, 17 declared minors and two faculty mem-

bers. The total number of students enrolled in art courses during this period was 343. Following is a list of courses taught during 1967-1968 and the number of students enrolled in each course.

Courses taught in Art Department 1967-1968	Description	No. of students
141, 142 Basic Design	Study of basic, formal elements and guiding principles of design. Studio work.	30
201, 202 Exploring Art	Introduction to principal of art. Aims at appreciation through acquaintanceship with great artists.	130
221, 222 Beginning Drawing	Introduction to the problems of suggesting three-dimensionality and functional structures.	45
231, 232 Beginning Painting	Introduction to variety of materials and methods of painting. Emphasis on pictorial conception and composition.	20
251, 252 Beginning Ceramics	Introduction to handbuilding and throwing pottery and the study of three-dimensional form elements.	19
261 Crafts	Instruction in creation of silver jewelry and enameling on metal.	9
262 Crafts	Applied design in areas of leather, batik, dyeing, rug hooking, simple weaving, and textile design.	9
331, 332 Advanced Ceramics	Second semester of ceramics. Throwing, glazing, firing, and chemistry of clay and glazes.	0
341, 342 Advanced Design	Compositional problems and techniques in relief printing, and experimental printing.	5

cont.

cont.

Courses taught in Art Department 1967-1968	Description	No. of students
351, 352 Advanced Drawing	Continuation of problems of three-dimensionality and space with emphasis on value conception.	6
361, 362 Sculpture	Study of three-dimensional form in clay, plaster, wood, metal, and other media.	3
365, 366 Intermediate Painting	Painting with oils, water-colors, casein, or gouache.	2
371, 372 Introduction to Art History	Introduction to major periods, personalities, and styles of art from prehistoric times to mid-19th century.	12
385 Arts and Crafts for Elementary Teachers	Study function of Art in an elementary school curriculum as guide and stimulus to child growth.	34
392 Secondary Art Educational Methods	Guided study of problems of secondary art instruction. Reading, theory, and experience in techniques.	4
421, 422 Individual Projects	Individual instruction for advanced work in ceramics, painting, drawing or sculpture.	10
452 Seminar In Contemporary Art	Study of origins, styles, and content of contemporary art with background for mid-19th century to present.	14

TABLE 5. CURRICULUM OF ART DEPARTMENT (1967-1968) (13:1968)

The activities performed in the Art Department are varied and require different spaces. Some of these spaces should be flexible to meet the area requirements of student enrollment. Painting and drawing areas are the most flexible since the equipment used for this type of instruction is not permanently attached

and can be easily moved.

Ceramics, crafts, sculpture and printmaking require permanent and specific equipment which is not easily moved. The use of such equipment requires that these areas be stationary. It is important to provide adequate area for these facilities, since they are not easily changeable. A large amount of storage must be provided within the Art Department for student work since their projects are numerous.

Dressing rooms will be provided within the Art Department so that students may change from school attire to studio attire for working with materials that are harmful to clothing.

It is important that all areas of the Art Department be well ventilated, since there are conditions which create intensive heat, dust, and toxic fumes from soldering and welding.

MUSIC DEPARTMENT

During the academic year of 1967-1968, the Music Department had 40 declared majors and six faculty members. The total number of students enrolled in music courses during this period was 327. Private music lessons included 25 instrumental, 145 piano and organ, and 120 voice. Following is a list of courses taught during 1967-1968 and the number of students enrolled in each course.

Courses taught in Music Department 1967-1968	Description	No. of students
121, 122 Music I	A correlated course in harmony, rhythmic, and melodic technique of music.	48

cont.

cont.

Courses taught in Music Department 1967-1968	Description	No. of students
171,172 Class Voice	Group instruction in vocal technique and solo literature.	16
201, 202 Music Literature	Survey of music and musical style of all periods with historical and cultural backgrounds.	118
223, 224 Music II	Continuation of first year harmony with original writing, modulation, etc.	26
300 Counterpoint	Analysis and writing of the contrapuntal techniques that are associated with 18th century counterpoint forms.	5
301 Analysis	Analysis of the simple structural elements, such as motive, phrase, and period.	4
311, 312 History of Music	Study of music history and music literature.	21
355,356 Hymnology	The study of hymns.	14
386 Music Methods	Involvment of the classroom teacher in the philosophy and implementation of the music curriculum.	32
395 Brass Techniques	Study of the problems encountered in teaching the brasses.	5
396 Instrumental Methods Woodwin Techniques	Study of the problems encountered in teaching the woodwine. A study of principles of instrumentation.	6
397 Percussion Techniques	Study of both membraphones and idiophones.	5
491 Foundations in School Music	Instructional and supervisory practices in the required school curriculums.	5

cont.

cont.

Courses taught in Music Department 1967-1968	Description	No. of students
492 Choral Conducting	Auditioning, rehearsal and conducting techniques of the choral director, studies in style and repertoire.	8
494 Instrumental Seminar	Baton techniques and interpretation as applied to band and orchestras.	4
496 Piano Pedagogy	Examination and evaluation of several basic series for the teaching of piano.	10

TABLE 6. COURCES TAUGHT IN MUSIC DEPARTMENT 1967-1968 (18:1968)

The activities performed in the Music Department are of a vocal or instrumental nature which will require special acoustical treatment of all room surfaces. It is important that sound not be transmitted from room to room within the Music Department or from the Music Department to other areas in the building, since this would be distracting and disrupting to other educational activities within the Auditorium-Fine Arts Complex.

A large amount of storage must be provided for instrument storage. This area should also include facilities for the repair of musical instruments.

The vocal and band rehearsal rooms will require special arrangements for choir and band formations.

SPEECH AND DRAMATIC ARTS DEPARTMENT

During the academic year of 1967-1968, the Speech and Dramatic Arts Department had 13 declared majors and three faculty members. The total number of students enrolled in speech and

dramatic art courses during this period was 304. Following is a list of courses taught during 1967-1968 and the number of students enrolled in each.

Courses taught in Speech and Dramatic Arts Dept.	Description	No. of students
101, 102 Fundamentals of Speech	Discussion, Voice and Articulation, and Public speaking.	304
211, 212 Voice and Articulation	Principles of respiration, phonation, resonation, articulation and speech development.	31
231, 232 Public Speaking	Application of the principles of public address. Parliamentary procedure.	18
243, 244 Forensic Activities	Participation in intercollegiate forensics. Prerequisite.	12
261, 262 Introduction to Theatre	Survey of modes, periods, styles of theatre. Con temporary production methods.	10
332 Oral Interpretation	Techniques study for oral interpretation of prose, poetry, and drama.	11
335 Persuasion	Motivation and social control applied to various forms of speech.	0
351 Dramatic Production	Play selection, casting, rehearsal, and technical direction.	16
353 Acting	Interpretation of the character and his relation to the play.	14
362 History of the Theater	Development of stage from primitive theatre to the present day.	8
372 Film Arts	History of the motion picture.	0

cont.

cont.

Courses taught in Speech and Dramatic Arts Dept.	Description	No. of students
382 Speech Correction	Therapy for speech and hearing disorders given by teacher in classroom situation.	29
391 Teaching Speech in Secondary School	Problems, content, methods, and materials for teaching speech and dramatic arts.	5
411 Foundation of Speech	Social, psychological, and physical bases of speech. Mass media and general semantics.	12
421, 422 Seminar in Speech	Readings, reports, and projects in area of student's special interest.	2

TABLE 7. COURSES TAUGHT IN SPEECH AND DRAMTIC ART DEPARTMENT (14:1968)

The activities of the Speech and Dramatic Arts Department are varied and require different types of spaces. These activities include dramatic presentations, speech instruction, and debate.

Many features of the theater and auditorium are similar and could be integrated to eliminate duplication. These features include stage, workshop, prop storage, dressing rooms, greenroom, public rest-rooms, lobby, and ticket booths. The total area required of these activities would be approximately one-half the total seating area of the theater.

The theater should be flexible, since facilities for theater-in-the-round presentations are desired. A fly-left in a small theater is not necessary, but off stage space is most desirable.

The differences between the auditorium and the theater are: (1) seating capacity, (2) type of productions presented in each, (3) facilities that each requires, and (4) acoustics.

AREAS COMMON TO ALL DEPARTMENTS

The areas common to the Speech and Dramatic Arts, Music, and Art Departments are: (1) Staff lounge, (2) Student lounge, (3) Library, (4) Conference Room, (5) Secretary-Receptionist, and (6) Lecture rooms.

I have chosen to make these areas common to all departments housed in the Auditorium-Fine Arts Complex in order to make maximum use of these facilities. Each department's enrollment does not warrant separate facilities.

AUDITORIUM

The auditorium will be used primarily by Westmar College for chapel services, assemblies, visiting lecturers, and musicians. It is anticipated that the city of Le Mars will use the facilities also since there is, at present, no building adequate for large community gatherings, or the Le Mars Symphony Orchestra. The seating capacity of the auditorium will be 1500.

ART DEPARTMENT

Space No.	Description	Area-sq.ft.	No.
A1	Chairman's Office	200	1
	Function - Private conferences with visitors, students and other instructors, general office work and counselling.		
	Capacity - One Chairman and three visitors.		
	Equipment- Desk and chair, bookshelves, filing cabinets, and chairs for visitors.		
A2	Staff Offices	200	3
	Function - Private conferences with visitors, students and other instructors. General office work and counselling.		
	Capacity - One instructor and two visitors.		
	Equipment- Desk and chair, bookshelves, filing cabinets, and chairs for visitors.		
A3	Ceramic Studio	600	1
	Function - The design and construction of handmade pottery.		
	Capacity - One instructor and 20 students.		
	Equipment- Two slop sinks, wedging tables, drying tables, six potter's wheels, (4 manual, 2 motorized), work tables, stools, chalk and tackboards.		
A4	Kiln Room	400	1
	Function - Drying and firing of ceramic ware.		
	Capacity - One instructor and four students.		

Space No.	Description	Area-sq.ft.	No.
	Equipment- Two heavy duty electric kilns, one large gas kiln, shelving for drying of ceramics, and storage cabinet for kiln furniture.		
A5	Glazing Room	200	1
	Function - Mixing and application of glazes to ceramic ware. Capacity - One instructor and five students. Equipment- Compressor for spraying glazes, storage for clay materials, three glaze mixers, storage for glazing ware, work tables and stools, spray booth.		
A6	Sculpture Studio	800	1
	Function - The design and construction of sculpture in various media. Capacity - One instructor and 20 students. Equipment- Work tables and stools, arc welder, acetylene welder, storage cabinets for hand tools, air compressor, two slop sinks, clay storage and drying area, chalk and tackboards.		
A7	Ceramic and Sculpture Storage	200	1
	Function - Storing of raw materials used in the construction of sculpture and ceramic ware. Capacity- Two people. Equipment- Shelving and bins for raw materials, direct access to loading dock, chalk and tackboards.		
A8	Crafts Workshop	600	1
	Function - Facilities for instruction and designing of objects made of metal or fibrous materials.		

Space No.	Description	Area-sq.ft.	No.
	Capacity - One instructor and 15 students. Equipment- Storage for handtools, two slop sinks, compressed air outlets, natured gas outlets, storage for raw materials, work tables and stools, chalk and tackboards.		
A9	Printmaking Studio	600	1
	Function - Instruction and investigation of the various printing techniques. Capacity - One instructor and 15 students. Equipment- Two slop sinks, one large manual printing press, two small manual printing presses, work tables and stools, storage for materials, chalk and tackboards.		
A10	Design Art Education Studio	800	1
	Function - Instruction of basic design elements and the design and construction of two and three dimensional projects. Capacity - One instructor and 25 students. Equipment- Two slop sinks, storage cabinets for handtools, storage cabinets for paper and various other materials, work tables and stools, chalk and tackboards.		
A11	Printing and Drawing Studio	1,000	1
	Function - Instruction in the various painting media and drawing techniques. Capacity - Two instructors and 30 students. Equipment- Two slop sinks, work tables and stools, storage for easels and paint mixing stands, chalk and tackboards.		

Space No.	Description	Area-sq.ft.	No.
A12	Gallery	1,000	1
	Function - Presentation of student and faculty work, the display of traveling exhibits, and storage for permanent collection. Capacity - Flexible Equipment- Display cases, movable display panels, lounge seating, and display stands.		
A13	Lavatories and Dressing Rooms	300	2
	Function - Change from street attire to studio attire. Capacity - One for ladies and one for men with a capacity of six in each one. Equipment- Two lavatories, two waterclosets and two urinals for men. Four waterclosets and two lavatories for women. Mirrors, and space for hanging clothes.		

MUSIC DEPARTMENT

B1	Chairman's Office	200	1
	Function - Private conferences with visitors, students and other instructors, general office work and counselling. Capacity - One chairman and three visitors. Equipment- Desk and chair, bookshelves, filing cabinet, and chairs for visitors.		
B2	Staff Offices	200	8
	Function - Private conferences with visitors, students, and other instructors.		

Space No.	Description	Area-sq.ft.	No.
	General office work and counselling. Capacity - One staff member and three visitors. Equipment- Desk and chairs, bookshelves, filing cabinet, and chairs for visitors.		
B3	Vocal Rehearsal Room Function - Classroom, recital hall, organ instruction and practice. Capacity - 100 Equipment- One organ and seating (100 desk and chairs)	1,500	1
B4	Instrumental Rehearsal Room Function - Classroom, and instrument rehearsal. Capacity - 70 Equipment-Seating, sheet music holders.	1,200	1
B5	Practice Rooms Function - Vocal and instrumental practice. Capacity - 2 Equipment- Chair and music stand.	60	18
B6	Organ Practice Room Function - Organ practice Capacity - 2 Equipment- Organ and stool.	70	2
	SPEECH AND DRAMATIC ARTS		
C1	Theater Function - Theatrical presentations, choral presentations, orchestra presenentations, recitals, debate competitions.	8000	1

Space No.	Description	Area-sq.ft.	No.
	Capacity - 400 Equipment- Ticket booths, stage, fixed and stepped seating.		
C2	Workshop	3000	1
	Function - Provide workspace for the construction of stage props and storage of stage props. Equipment- Storage cabinets for hand-tools, storage racks for stage props, paint and materials storage.		
C3	Dressing Rooms	350	2
	Function - Changing of public attire to costumes, changing of costumes, application and removal of make-up. Capacity - 20 people each room. Equipment- Lavatories, restrooms, closets, vanities, and stools.		
C4	Chairman's Office	200	1
	Function - Private conferences with visitors, students and other instructors. General office work and counselling. Capacity - One chairman and three visitors. Equipment- Desk and chair, bookshelves, filing cabinet, chairs for visitors.		
C5	Staff Offices	200	2
	Function - Private conferences with visitors, students and other instructors. General office work and counselling. Capacity - One instructor and 3 visitors. Equipment- Desk and chair, bookshelves, filing cabinet, and chairs for visitors.		

Space No.	Description	Area-sq.ft.	No.
C6	Private Speech instruction	100	2
	Function - Special instruction for speech therapy. Capacity - One instructor and one student or patient. Equipment- Desk, chairs, and audio equipment.		
AUDITORIUM		20,000	1
D	Function - Large group gatherings of Westmar student body and the Le Mars populace. Capacity - 1500 Equipment- Ticket booths, stage, stepped seating.		
AREAS COMMON TO ALL DEPARTMENTS			
E1	Staff Lounge	350	1
	Function - Relaxation, meetings, re-reading. Capacity - 10 instructors Equipment- Lounge chairs, table and chairs, end tables, coffee table, kitchenette (sink, hot plate, coffee pot) lamps.		
E2	Student Lounge	500	1
	Function - Relaxation, small group discussion, snacks, reading. Capacity - 20 students Equipment- Couches, end tables, chairs, snack machines, lamps, magazine racks.		
E3	Library	500	1
	Function - Study, reading and browsing. Capacity - 30 students. Equipment- Shelving for 3,000 volumes, tables, chairs, periodical racks, card catalog.		

Space No.	Description	Area-sq.ft.	No.
E4	Conference Room	300	1
	Function - Staff meetings, general conferences. Capacity - 15 Equipment- Conference table and chairs, filing cabinet, chalk and tackboards.		
E5	Secretary-Receptionist	250	1
	Function - Receiving of visitors, students and faculty. General secretarial work. Capacity - 2 secretaries. Equipment- 2 desks and chairs, office machines and accessories.		
E6	Listening Room	100	2
	Function - Music or Speech students may record their work for self criticism and practice. Capacity - 1 student Equipment- Desk and chair, tape recorder booth.		
E7	Lecture Room (A)	1,000	1
	Function - Lectures and instruction room for all departments. Capacity - 75 Equipment- Audio-visual aid facilities, seating (75 desks and chairs) chalk and tackboards.		
E8	Lecture Room (B)	400	2
	Function - Lecture and instruction. Capacity - 30 Equipment -Audio-Visual Aid facilities, seating (30 desk chairs) chalk and tackboards.		
E9	Lecture Room (C) (Seminar Room)	200	2

Space No.	Description	Area-sq.ft.	No.
	Function - Lecture instruction and group discussion. Capacity - 15 Equipment- Conference tables and chairs, chalk and tack-boards.		

SITE

SELECTION OF SITE

Since the auditorium is proposed as a part of the Fine Arts Complex, it is apparent to the author that adequate parking must be provided adjacent to the Auditorium-Fine Arts Complex. For this reason, I have selected the proposed site since it is adjacent to the proposed central campus parking lot. The proposed parking lot would be used by students living in the dormitories, commuter students, and by individuals attending activities taking place in the Auditorium-Fine Arts Complex.

SITE LOCATION

The proposed site for the Auditorium-Fine Arts Complex is on the eastern ½ of Block 10 and the vacated portion of First Avenue east and from Twelfth Street south to Eleventh Street south of the Normal Park Addition to Le Mars, Iowa, being a part of the south half (S½) of Section Sixteen (16), Township Ninety-two North (T92N), Range Forty-Five West (R45W) of the Fifth Principal Meridian.

The site is bounded on the north by Eleventh Street South, on the south by Twelfth Street South, on the east by boundary of Eleventh Avenue East,and on the west by the eastern boundary of the proposed alley.

SOIL CONDITIONS

The topsoil in the Westmar area is loess which is a fine-grained yellowish-brown, extremely fertile loam deposited by the

wind. The loess would range from a few inches to several feet thick. Beneath the topsoil (loess) is a glacial till which is an unstratified, glacial drift of clay, sand, and gravel, forming poor subsoil imprevious to water. This glacial material was deposited several thousand years ago and is several feet thick (deep). Bedrock is directly beneath this glacial till. (15:1968)

UTILITIES

There are no known underground utilities within the boundaries of the site. A complete subsurface analysis of the site is too expensive for the purpose of this thesis and the information is not presently available. Water supply and sewage are located underground at Eleventh Street southeast, and there is a storm sewer running through vacated First Avenue to Twelfth Street southeast.

Overhead utilities such as telephone and electricity are located above the proposed alley on the western boundary of the site.

PHYSICAL FEATURES

The site has 17 deciduous trees providing from 15 to 20 percent coverage of the site. The entire site is grass covered. There is a small creek running from the middle of the western boundary to the southeast corner of the site. There is a gentle slope from the northwest corner toward the southeast corner. The site is 212.5 ft along its north-south boundaries and 368.7 ft along its east-west boundaries.

SURROUNDING ENVIRONMENT

The site is bordered on the north by houses, on the south by houses, on the east by a parking lot, and on the west by houses and the new women's residence hall.

GENERAL COMMENTS

The advantage of this site is that it is close to the central campus parking area. The disadvantage of this site is that it will isolate the classrooms in the Auditorium-Fine Arts Complex from the other classroom buildings on the campus.

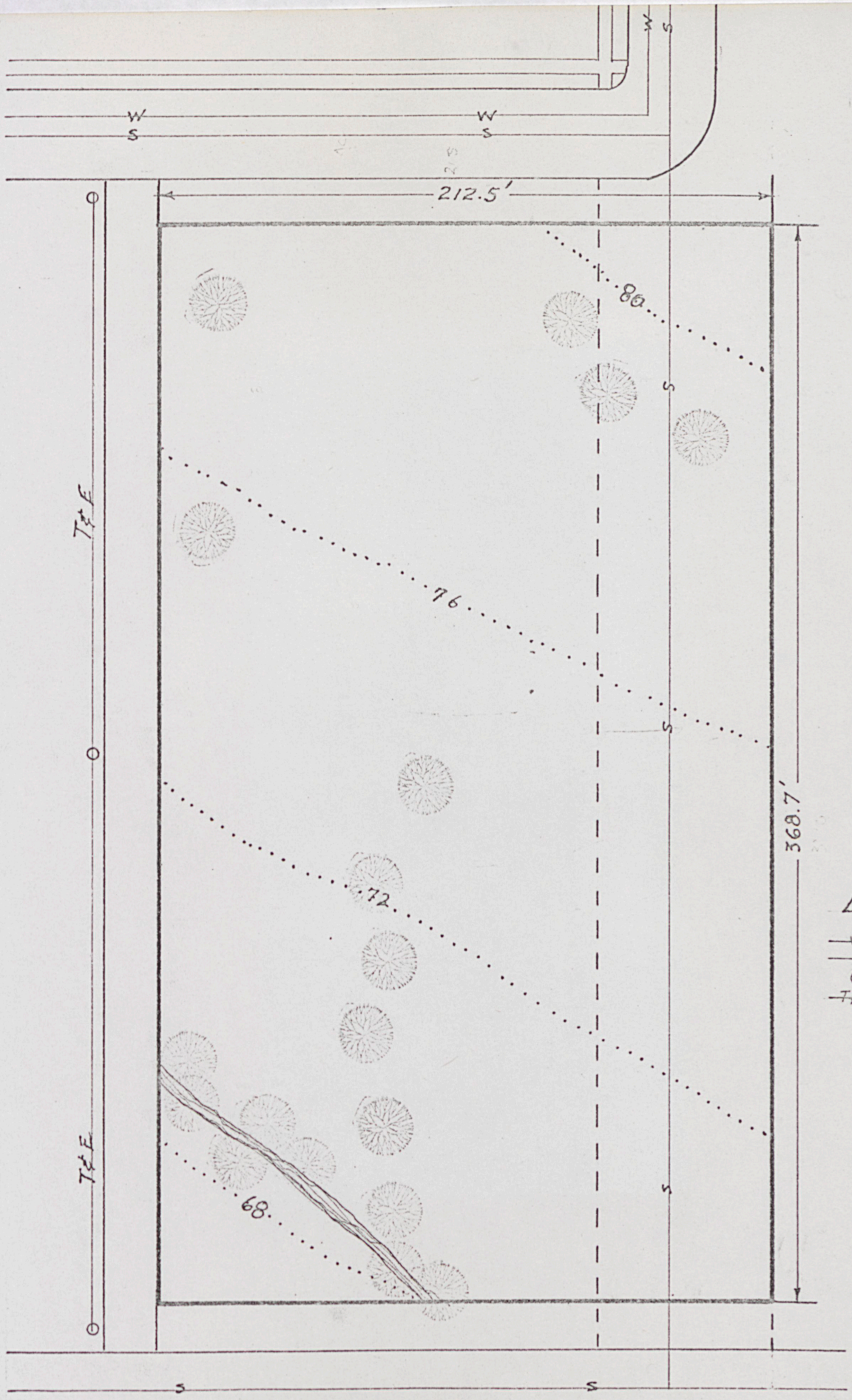


FIG 16. SITE PLAN SCALE: 1" = 50'-0"



FIGURE 17. VIEW OF SITE FROM NORTHEAST CORNER



FIGURE 18. VIEW OF SITE FROM SOUTHEAST CORNER.

AESTHETICS

The design of the Auditorium-Fine Arts Complex for Westmar College must consider three factors which are important to the town, the college, and the building itself. These three factors are: "(1) Town and Gown, (2) Westmar's character, and (3) use of facilities." (21:1968)

The first factor, "Town and Gown", is the relationship of Westmar College with the city of Le Mars. This has been a congenial relationship since Westmar's beginning. Each has contributed to the other's success. Le Mars and its populace have provided Westmar with an outstanding community for the location of a liberal arts college. Le Mars and its citizens have often given generously for the support of Westmar College.

Westmar in turn has given Le Mars higher educational standards, culture, employment, and growth. These have contributed to Le Mars' high standard of living and well being. Thus the design of the Auditorium-Fine Arts Complex should complement Le Mars as well as Westmar.

The second factor, "Westmar Character", is that spirit which has made Westmar an outstanding liberal arts college. This spirit is religious, conservative, and most of all humanistic. The Auditorium-Fine Arts Complex must reflect this spirit in its design. The scale of the Auditorium-Fine Arts Complex should be humanistic and in relationship to Westmar and its existing buildings.

The design of the Auditorium-Fine Arts Complex should reflect the conservative nature of Westmar. This can be achieved

through the honest use of materials and forms. The building must not be pretentious. Its design should reveal its true character and reflect the activities for which the building was designed. The auditorium and theater which require large volumes will be more massive than spaces where small groups will congregate. Window treatment will also assist in defining the character of the building, since there are areas where sunlight is most desirable and areas where sunlight would be a hindrance.

The Auditorium-Fine Arts Complex can be religious if it is honest and unpretentious. It must not be vulgar; yet it must be impressive.

The third factor, "use of facilities", should be considered in the design of all structures. Since the construction of a building is a considerable investment, it is only natural that the investor desires a return on his investment. It is therefore desirable that the Auditorium-Fine Arts Complex be so designed that its facilities do not lie idle, but rather are used to optimum advantage at all times.

Other influences on the design of the Auditorium-Fine Arts Complex are the existing buildings on campus and the materials employed in these buildings. The overall impression one gets of Westmar's buildings is a conglomeration of designs which in no way relate to one another. This lack of unity is characteristic of most college campuses throughout the United States.

In Westmar's case, I believe the chaos can be attributed to the lack of a strong master plan for its development in the past.

This is no longer the case, since in March of 1962 Westmar hired a landscape architect to prepare a master plan. It is worthy of mention and certainly complimentary to Westmar that they have gone to considerable expense to develop a master plan for the Westmar Campus. Westmar is under contract with a reputable architectural firm, Johnson-Jamerson and Associates of Cedar Falls, Iowa, and since 1964 greatly improved the campus character by the construction of three new buildings.

This improvment in the campus character is not because the buildings are new, but because the buildings were designed for a specific purpose, and not a forceful remodeling of a dilapidated structure.

The exterior material used on all existing buildings is brick. The brick is of various colors, texture and bond. The men's dormitory that is presently under construction is concrete and is therefore introducing a new material to the campus architecture.

ECONOMICS

The present building program at Westmar College was given impetus by President H. H. Kalas who retired July, 1968. In Garrett Kempers book History of Westmar, he cites President Kalas as having acquired an estimate for the Auditorium-Fine Arts Complex of $470,000. This figure was established in 1958 and is most likely outdated due to the inflated economy.

The costs indicated in the following table are derived from the Marshall Valuation System and are averages of final costs which include built-in equipment and furnishings.

ESTIMATION OF COST, TABLE 8.

Type	Class	Cost/square foot	No. of sq. ft.
Auditorium	Good, class B	$28.40	20,000
Theater	Good, class B	$30.31	8,000
Classroom	Good, class B	$21.45	16,230

Cost of auditorium = $568,000.00

Cost of theater = $242,480.00

Cost of classroom and offices = $ 324,600.00

Total cost of Auditorium-Fine Arts Complex = $1,135,000.00

HOW FINANCED (17:1968)

Building projects at Westmar College are financed by various means. If the building is eligible for a Title I and/or a Title III Federal law interest loan, this is generally most desirable.

The Title I Grant and the Title III Grant contribute 33 1/3 percent and 41 2/3 percent respectively towards the total cost of

the building; thus, they total 75 percent of the total building cost.

The remaining 25 percent comes from Westmar funds which usually are donations to Westmar's Capital Building Fund.

At present, it is anticipated that 66 2/3 percent of the total cost of the Auditorium-Fine Arts Complex will be covered by donations to the Westmar Capital Building Fund. The balance of 33 1/3 percent would come from a Title I Grant. This would provide a debt free building upon completion.

The Federal funds which Westmar receives for its building program come from the Office of Education through the Department of Health, Education and Welfare under the Higher Education Facilities Act of 1963 and amended in 1965.

The conditions for receiving a federal grant are that the facilities, for which the loan applies, be used for educational purposes. This coveres a variety of programs, one of which is the housing and/or feeding of students.

SUMMARY

The design for the Auditorium-Fine Arts Complex for Westmar College required consideration of the pedestrian traffic of students, professors, and Le Mars citizens.

The theater, Art Department, Music Department, and common areas are primarily for instruction; thus, I have provided a common lobby for these functions. This lobby is oriented towards the Westmar campus, and yet it is accessible from Eleventh Street and the proposed centeal campus parking lot for off-campus visitors such as people attending dramatic productions in the theater.

The auditorium is oriented to provide campus and off-campus access. Access to the auditorium will be from three directions which are: (1) Campus, (2) Parking lot, and (3) Driveway for dropping guests off.

The moving of stage equipment and musical instruments from the rehearsal rooms and workshop to the theater and auditorium required that both stages, rehearsal rooms, and workshop all be located on the same level.

The Music Department was located to eliminate sound transmission to other areas of the complex. Special wall, ceiling, and floor construction would have been necessary throughout the complex if the

Music Department had not been isolated. This type of construction is expensive and will be employed within the Music Department itself.

The theater is designed to provide three types of seating which are: (1) Frontal, (2) Thrust, and (3) Surround. Flexible seating makes it possible to present any type of a theatrical production. The section of seating adjacent to the theater shop can be moved to provide stage area for thrust and frontal seating. The seating in the theater is inclined to provide good sight lines and audience intimacy.

The continental seating provided in the auditorium was selected to provide optimum conditions for a multi-purpose hall. These conditions are: (1) Good sight lines, (2) Good hearing, and (3) Audience intimacy. The angle of elevation of the inclined floor is 9 degrees; thus, each seat has an unobstructed sight line of the stage. The fartherest seat from the stage is only 65 feet and has a seating capacity of 1500.

The seating provided in the theater and auditorium will be so designed to absorb as much sound as a person would if he were sitting in the seat; thus, the reverberation time will not vary with the size of the audience.

To decrease the dominance of the mass of the auditorium, I have put the seating underground; thus, decreasing its heighth avove ground so that it will be relative to other areas in the complex. It was necessary to put the seating underground to achieve this heighth relationship, since the volume of the auditorium must be equivalent to 200 cubic feet per seat. This particular solution permits the seating to bear on undisturbed soil; thus, eliminating the need for costly structure to support the seats.

The basis of my design is to provide separation of the various functions housed in the Auditorium-Fine Arts Complex so that each function will be a distinguishable design element. Yet each function is related to the others and must therefore be easily accessible to one another.

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