

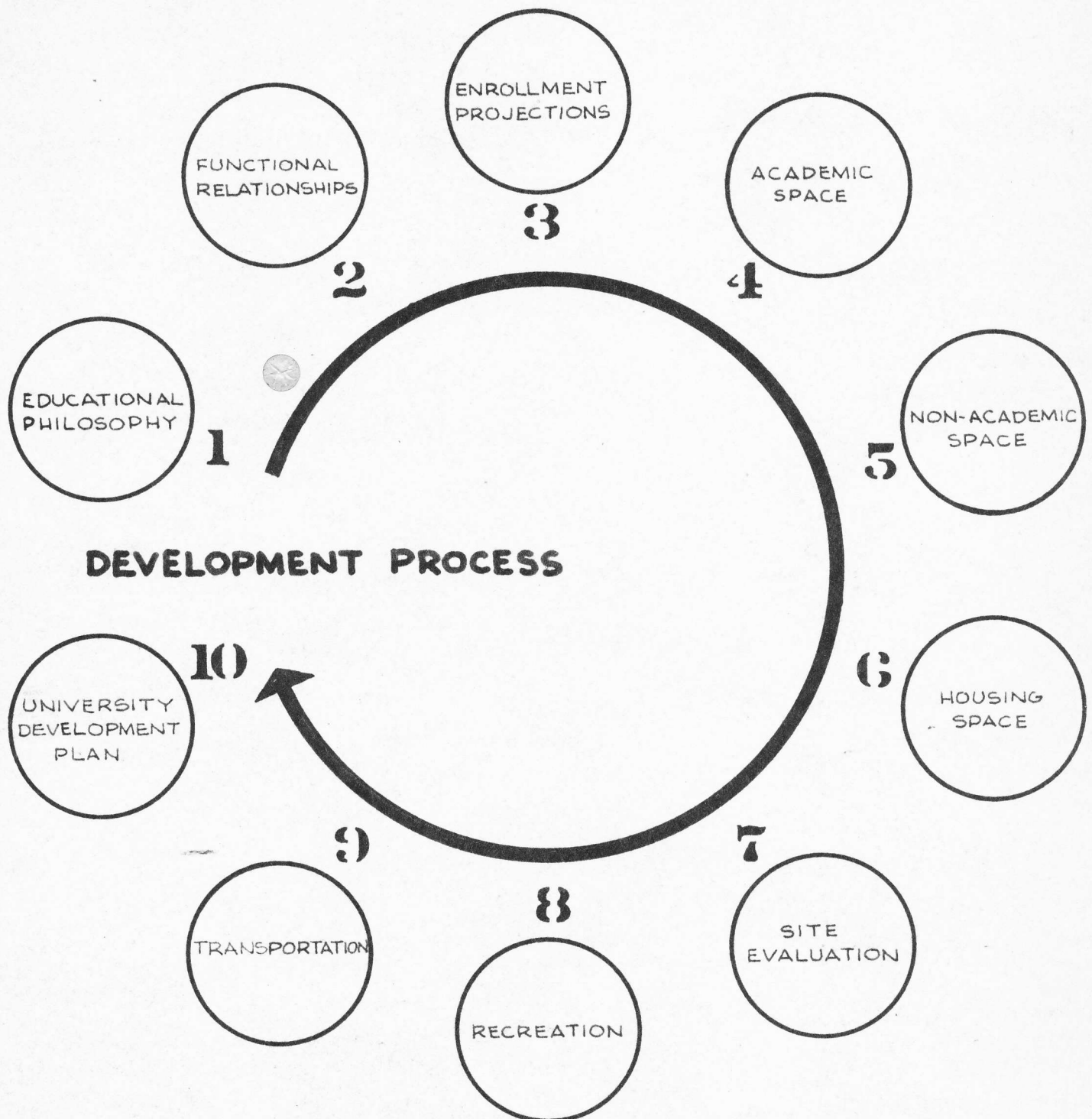
MICHIGAN STATE UNIVERSITY OAKLAND

UNIVERSITY
DEVELOPMENT
ANALYSIS



DEVELOPED AND PREPARED BY
SWANSON ASSOCIATES INC.
ARCHITECTS AND PLANNERS

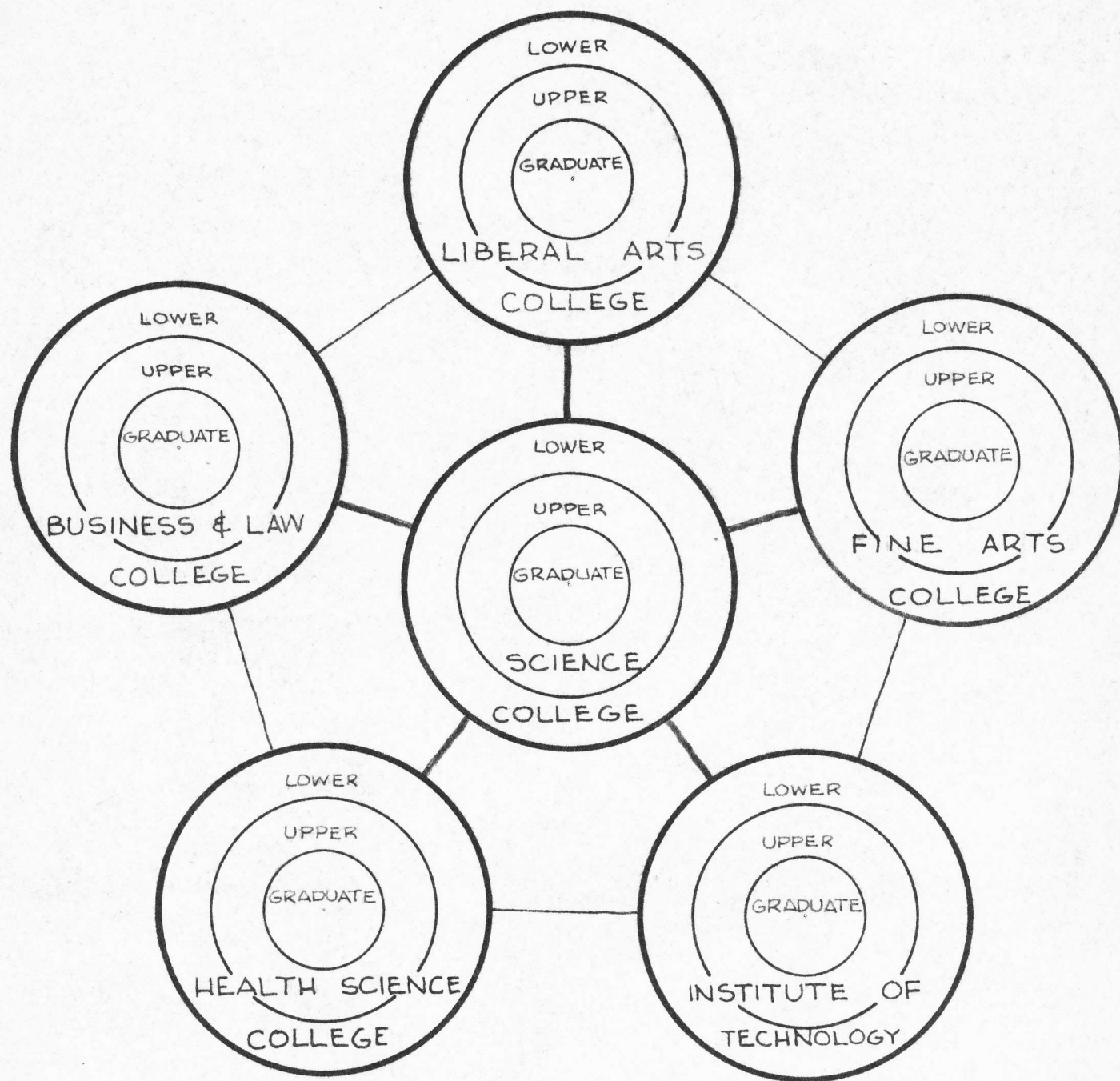
UNIVERSITY DEVELOPMENT



THE FOLLOWING DEVELOPMENTAL PROCESS FOR THE DESIGN OF A COMPREHENSIVE UNIVERSITY SUGGESTS TEN SUCCESSIVE STEPS OF EDUCATIONAL AND ARCHITECTURAL ANALYSIS PROGRESSING TOWARDS A UNIVERSITY DEVELOPMENT PLAN

EDUCATIONAL PHILOSOPHY

1a

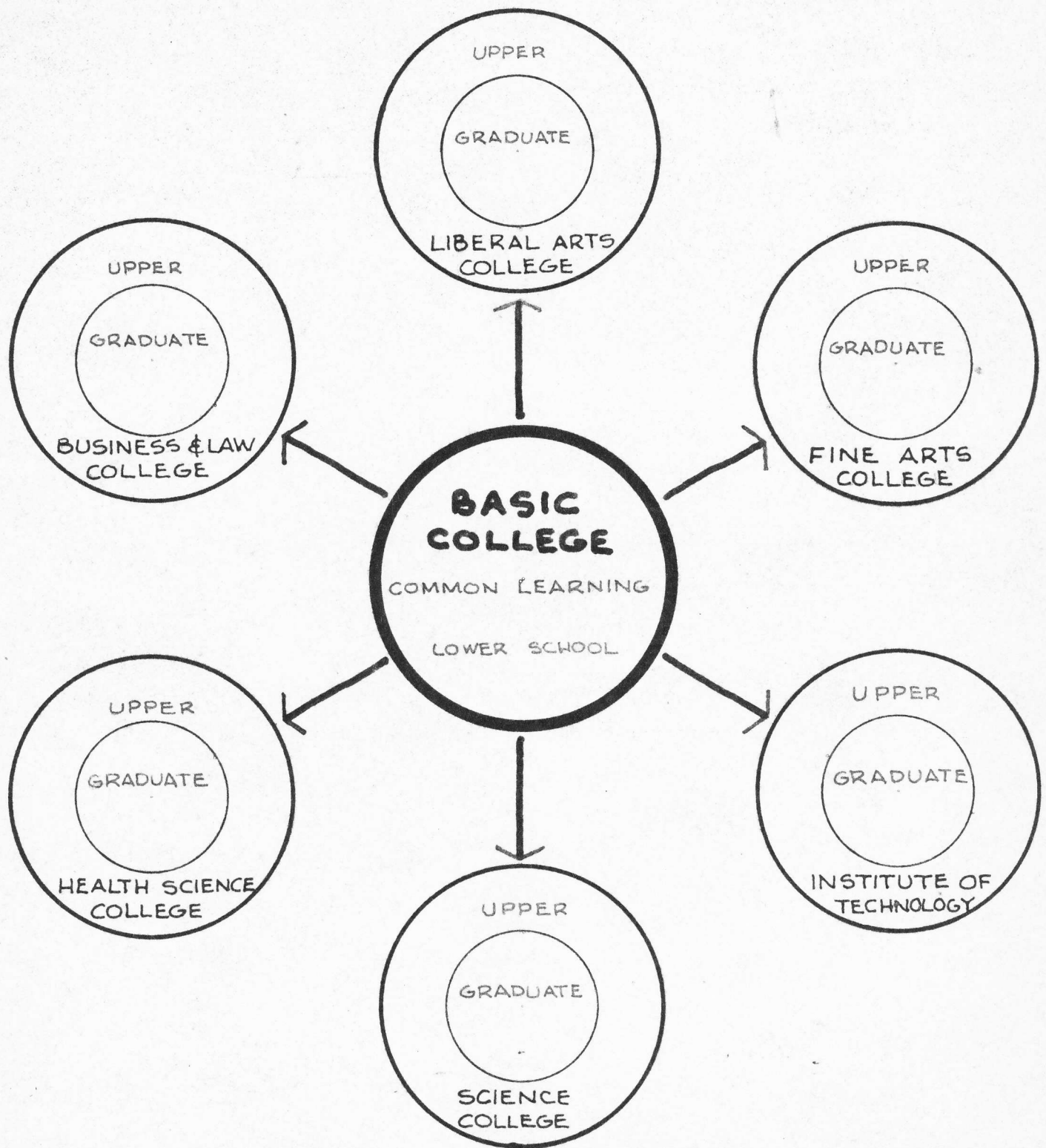


INTEGRATED SELF-CONTAINED COLLEGES

LOWER SCHOOL = FRESHMEN + SOPHOMORES

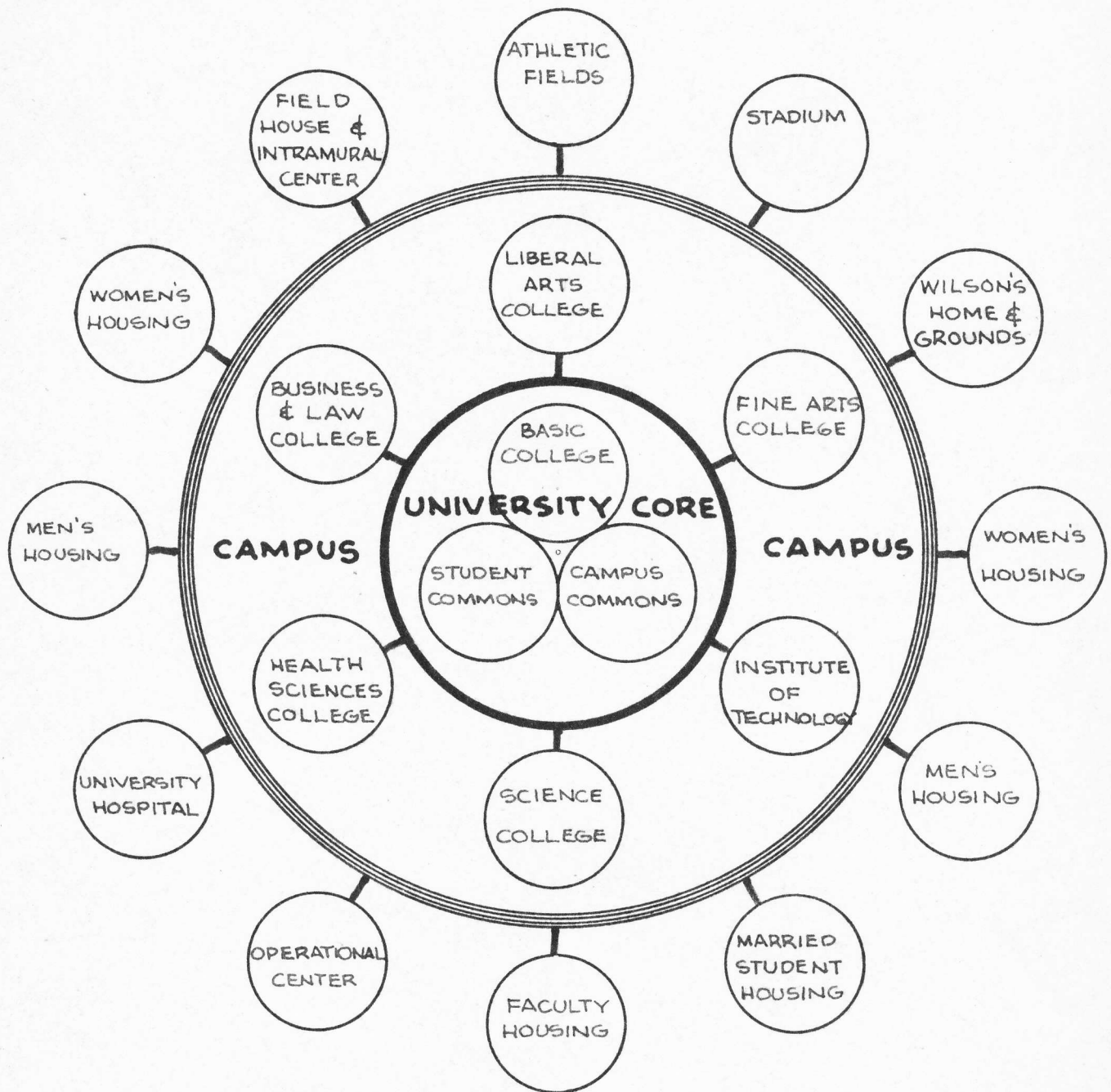
UPPER SCHOOL = JUNIORS + SENIORS

EDUCATIONAL PHILOSOPHY 1_b



CORE CURRICULUM COLLEGE

FUNCTIONAL RELATIONSHIPS 2a

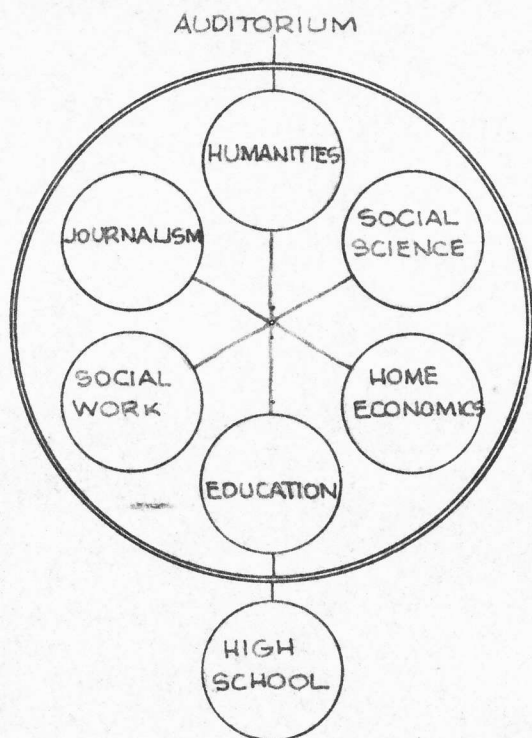


UNIVERSITY RELATIONSHIPS

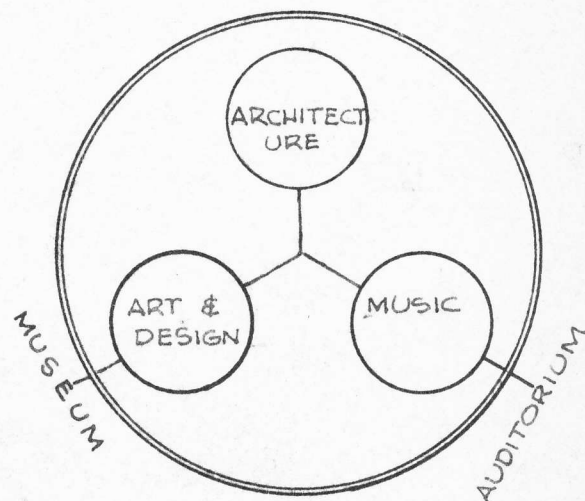
USING IC AS AN EXAMPLE

FUNCTIONAL RELATIONSHIPS

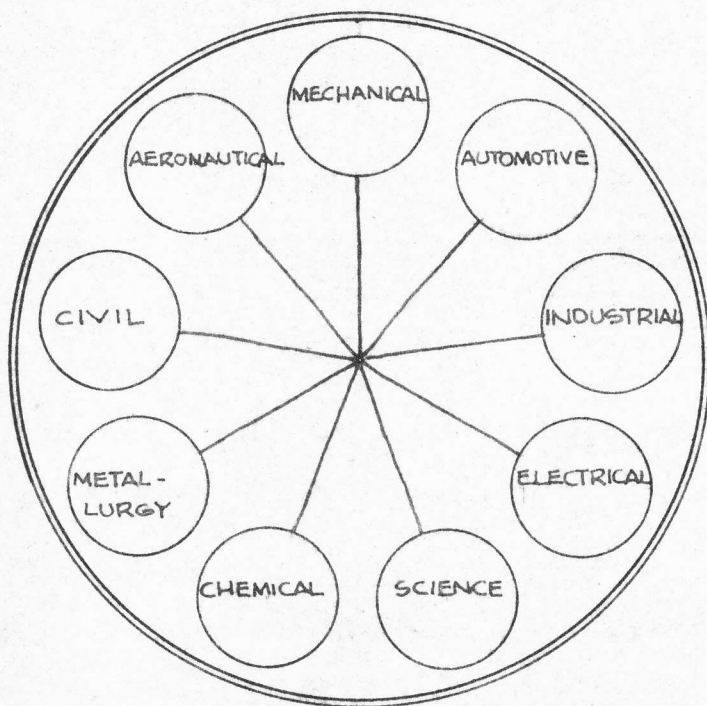
2b



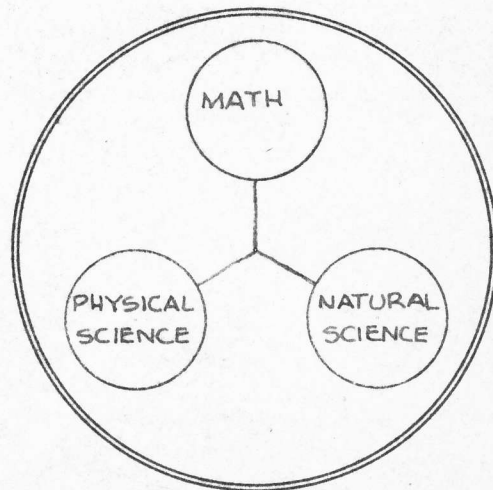
LIBERAL ARTS COLLEGE



FINE ARTS COLLEGE

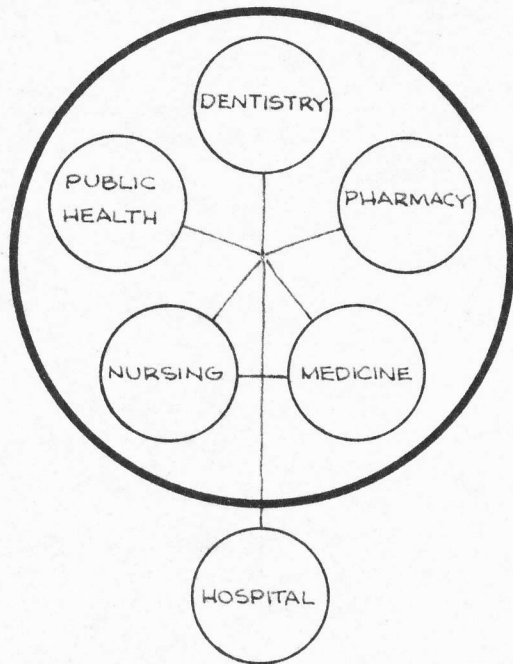


INSTITUTE OF TECHNOLOGY

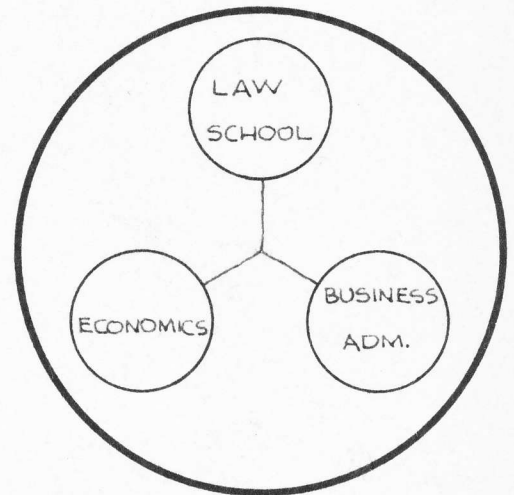


SCIENCE COLLEGE

FUNCTIONAL RELATIONSHIPS 2c



HEALTH SCIENCES COLLEGE



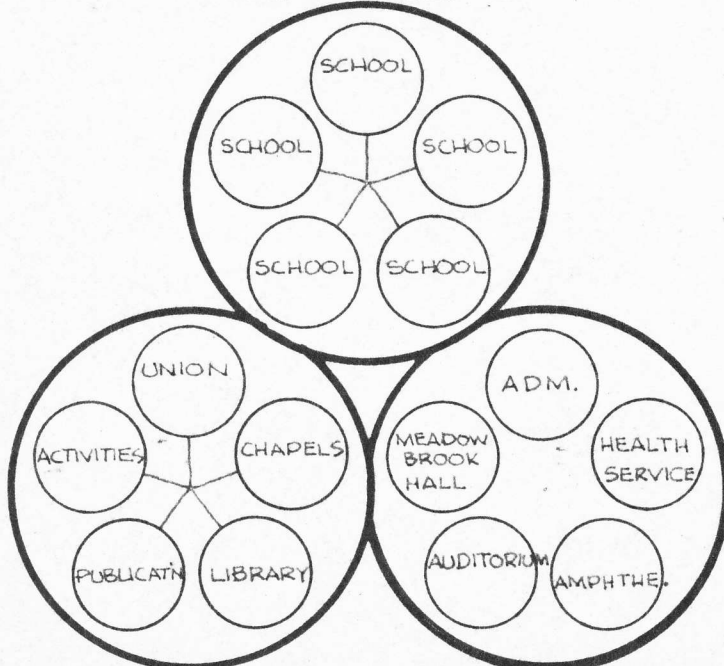
BUSINESS & LAW COLLEGE

UNIVERSITY

CORE

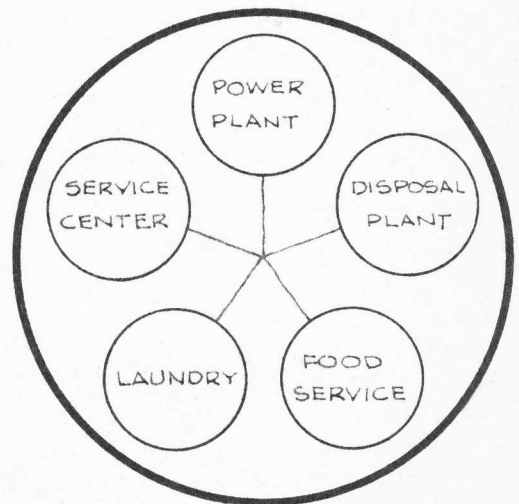
OPERATIONAL CENTER

BASIC COLLEGE


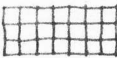
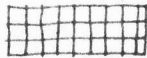









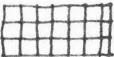







STUDENT COMMONS

CAMPUS COMMONS















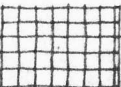
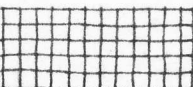
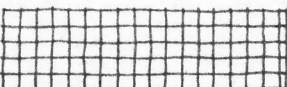



ENROLLMENT PROJECTIONS 3

	20,000 FTE	30,000 FTE	40,000 FTE
LIBERAL ARTS COLLEGE	 27 %. 5300 FTE	 23 %. 7000 FTE	 21 %. 8250 FTE
FINE ARTS COLLEGE	 4 %. 800 FTE	 5 %. 1550 FTE	 6 %. 2500 FTE
BUSINESS & LAW COLLEGE	 14 %. 2800 FTE	 13 %. 3900 FTE	 13 %. 5000 FTE
SCIENCE COLLEGE	 12 %. 2500 FTE	 13 %. 3900 FTE	 13 %. 5250 FTE
INSTITUTE OF TECHNOLOGY	 32 %. 6400 FTE	 34 %. 10150 FTE	 36 %. 14500 FTE
HEALTH SCIENCES COLLEGE	 11 %. 2200 FTE	 12 %. 3500 FTE	 11 %. 4500 FTE
UNIVERSITY ENROLLMENT TOTALS	20,000 FTE	30,000 FTE	40,000 FTE

FTE = FULL TIME EQUIVALENT STUDENTS

ACADEMIC SPACE

41


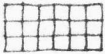
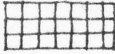





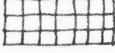




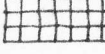
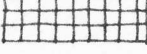












	20,000 FTE	30,000 FTE	40,000 FTE
LIBERAL ARTS COLLEGE	 43 ACRES	 59 ACRES	 70 ACRES
FINE ARTS COLLEGE	 13 ACRES	 25 ACRES	 41 ACRES
BUSINESS & LAW COLLEGE	 32 ACRES	 46 ACRES	 63 ACRES
SCIENCE COLLEGE	 32 ACRES	 52 ACRES	 72 ACRES
INSTITUTE OF TECHNOLOGY	 179 ACRES	 296 ACRES	 436 ACRES
HEALTH SCIENCES COLLEGE	 30 ACRES	 49 ACRES	 62 ACRES
TOTAL ACADEMIC ACREAGE	329 ACRES	527 ACRES	744 ACRES

AREAS BASED ON 50% UNDERGRADUATES, 50% GRADUATES,
50% PARKING, 2½ STORY BUILDINGS (AVERAGE), 15% LAND
COVERAGE FACTOR, ENROLLMENTS FROM CHART No. 3









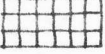


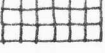



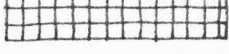
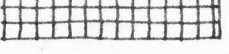
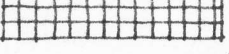
NON-ACADEMIC SPACE

5

20,000 FTE 30,000 FTE 40,000 FTE
UNIVERSITY CORE

	20,000 FTE	30,000 FTE	40,000 FTE
ADMINISTRATION	 15 ACRES	 18 ACRES	 20 ACRES
HOTEL	 10 ACRES	 10 ACRES	 10 ACRES
UNION	 10 ACRES	 15 ACRES	 20 ACRES
AUDITORIUM	 15 ACRES	 15 ACRES	 15 ACRES
LIBRARY	 15 ACRES	 20 ACRES	 25 ACRES
CHAPELS	 10 ACRES	 10 ACRES	 10 ACRES
STUDENT ACTIVITIES	 5 ACRES	 10 ACRES	 15 ACRES
STUDENT PUBLICATIONS	 5 ACRES	 5 ACRES	 5 ACRES
HEALTH SERVICE	 5 ACRES	 7 ACRES	 10 ACRES
TOTALS	90 ACRES	110 ACRES	130 ACRES

ATHLETIC PLANT

	20,000 FTE	30,000 FTE	40,000 FTE
ARMORY	 10 ACRES	 10 ACRES	 10 ACRES
FIELD HOUSE	 10 ACRES	 10 ACRES	 10 ACRES
INTRAMURAL BUILDING	 10 ACRES	 15 ACRES	 20 ACRES
WOMENS ATHLETIC BLDG.	 10 ACRES	 15 ACRES	 20 ACRES
HOCKEY RINK	 10 ACRES	 10 ACRES	 10 ACRES
STADIUM	 40 A.	 40 A.	 40 A.
PLAYING FIELDS	60 ACRES	80 ACRES	100 ACRES
TOTALS	150 ACRES	180 ACRES	210 ACRES

SERVICE CENTER

HEATING PLANT, FOOD SERVICE, MAINTENANCE SHOPS, YARD STORAGE	20 ACRES	25 ACRES	30 ACRES
GRAND TOTALS	260 ACRES	315 ACRES	370 ACRES

HOUSING

6

LAND REQUIREMENTS

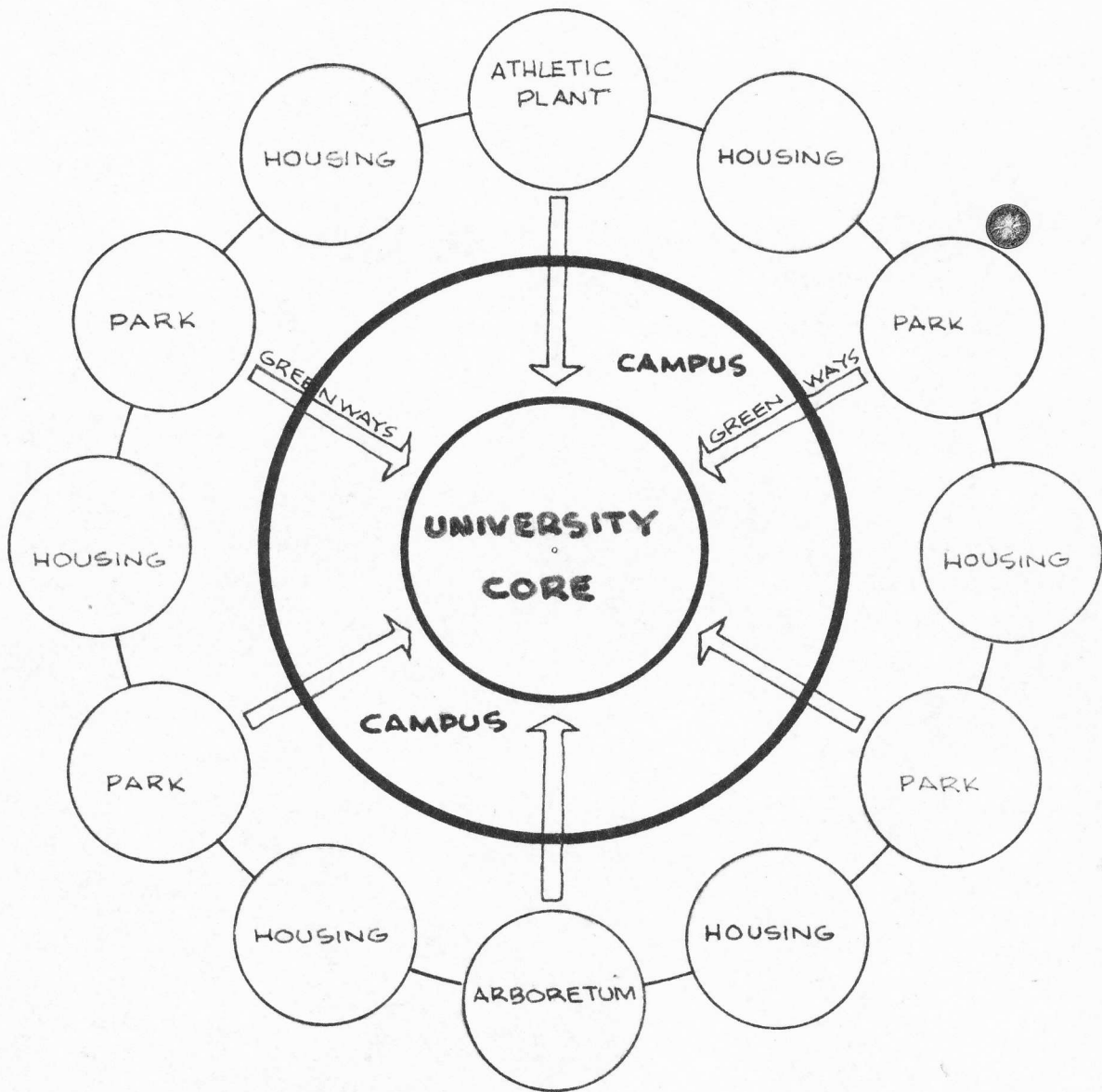
	20,000 FTE	30,000 FTE	40,000 FTE
RESIDENCE HALLS	9,600 STUDENTS 8 UNITS OF 1,200 @ 20 ACRES** PER UNIT	14,400 STUDENTS 12 UNITS OF 1,200 @ 20 ACRES** PER UNIT	19,200 STUDENTS 16 UNITS OF 1,200 @ 20 ACRES** PER UNIT
	160 ACRES	240 ACRES	320 ACRES
MARRIED STUDENTS & FACULTY HOUSING	650 FAMILIES @ 5 PER ACRE 130 ACRES	650 FAMILIES @ 5 PER ACRE 130 ACRES <hr/> 840 FAMILIES @ 8 PER ACRE 105 ACRES	650 FAMILIES @ 5 PER ACRE 130 ACRES <hr/> 1,280 FAMILIES @ 8 PER ACRE 160 ACRES
SUB-TOTAL	130 ACRES	235 ACRES	290 ACRES
ALL HOUSING	290 ACRES	475 ACRES	610 ACRES
NON-ACADEMIC	260 ACRES	315 ACRES	370 ACRES
ACADEMIC	329 ACRES	527 ACRES	744 ACRES
* TOTAL LAND REQUIRED	879 ACRES	1317 ACRES	1724 ACRES

* BUILDABLE LAND

** INCLUDES PARKING

RECREATION

PEDESTRIAN ACCESSIBILITY TO CORE VIA PARKWAYS



ATHLETIC PLANT

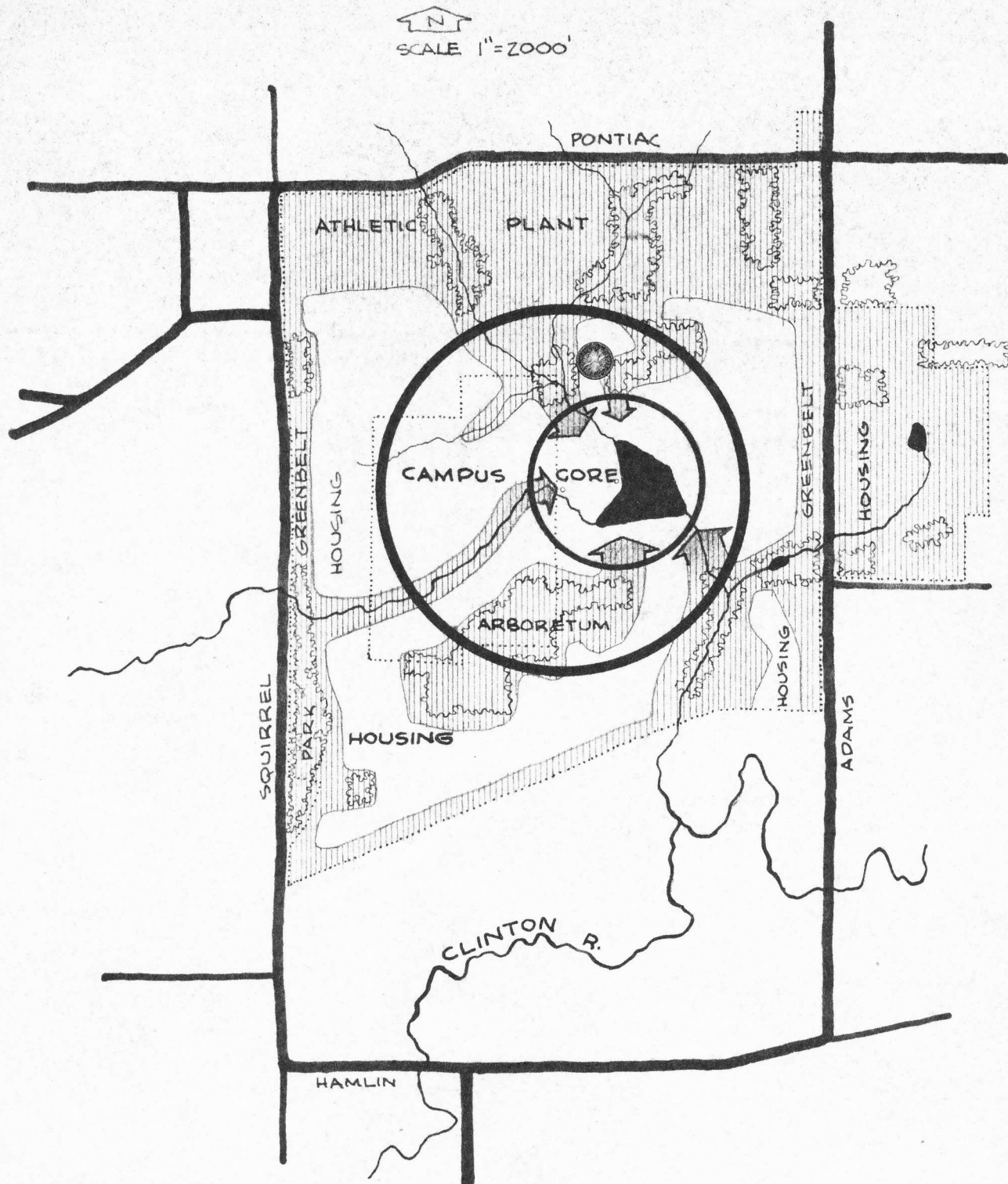
STADIUM
INTRAMURAL BUILDING
FIELD HOUSE
ATHLETIC FIELDS

PARKS

PLAYGROUNDS
PICKNIC GROUNDS
TENNIS COURTS
BASEBALL
GREENBELTS
RIVERS & LAKES
ZOO

RECREATION

7b

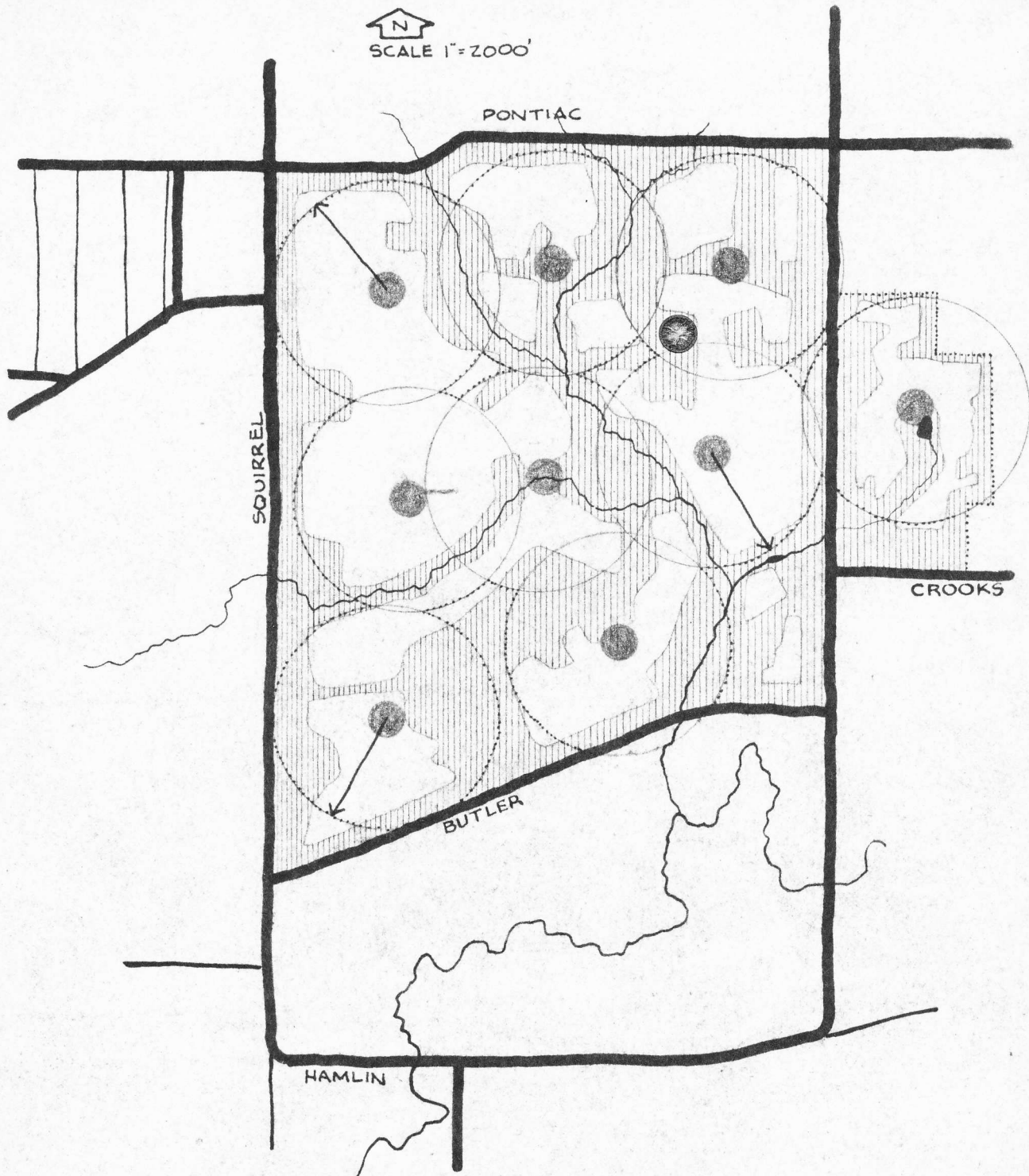


PEDESTRIAN ACCESSIBILITY TO UNIVERSITY
CORE VIA GREENWAYS & PARKS

TRANSPORTATION

Sa

PEDESTRIAN WALKING LIMITATIONS



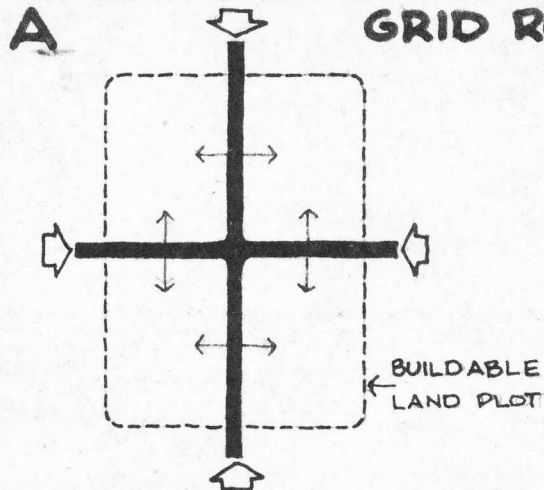
WALKING RADII = 5 MINUTE WALK OR 1500' RADIUS
BASED ON 300'/MINUTE NORMAL WALKING PACE

TRANSPORTATION

Sb

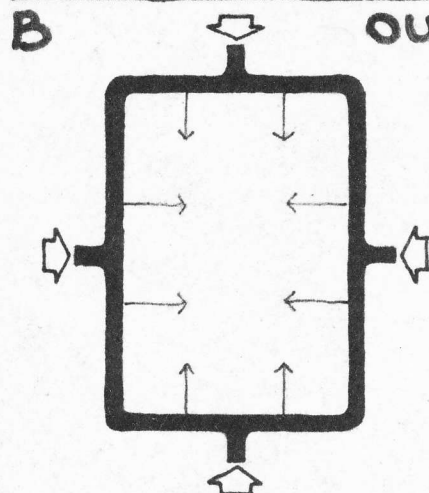
COMPARABLE ROAD SYSTEMS

A GRID ROAD SYSTEM



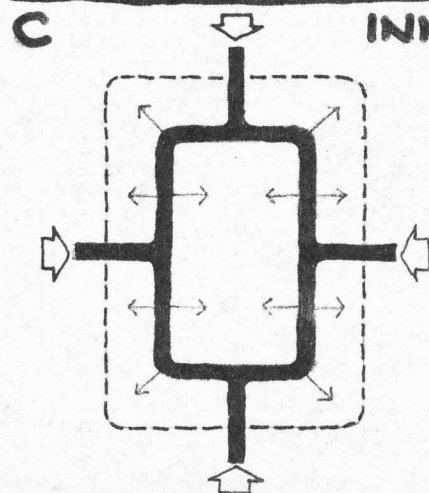
THIS TRADITIONAL GRIDIRON ROAD SYSTEM HAS THESE LIMITATIONS:
SEVERES THE LAND PLOT INTO 4 SEPARATE PLOTS, CONGESTED INTERSECTION AT LANDS CENTER, PARKING DIFFICULTIES
ASSETS: EXPANSION EASY - WALKING DISTANCES FROM ROAD ARE SMALL, GOOD ACCESSIBILITY TO PLOTS, MIN. ROAD & UTILITY LENGTH

B OUTER LOOP



THE OUTER LOOP LIMITATIONS:
DOUBLED ROAD LENGTH & LONGER WALKING DISTANCES, LAND EXPANSION IS STOPPED
ASSETS: UNIFIED INNER LAND PLOT, UNCONGESTED CENTER, EASE OF ACCESSIBILITY TO FEEDER ROAD ENDING AT CENTRAL PARKING AREAS

C INNER LOOP



THE INNER LOOP LIMITATIONS:
ROAD LENGTH = $1\frac{2}{3}$ 'A'
ASSETS: UNIFIED INNER LAND PLOT EXPANSION IN OUTER LAND PLOT EASE OF ACCESSIBILITY TO PARKING

TRANSPORTATION

S_c

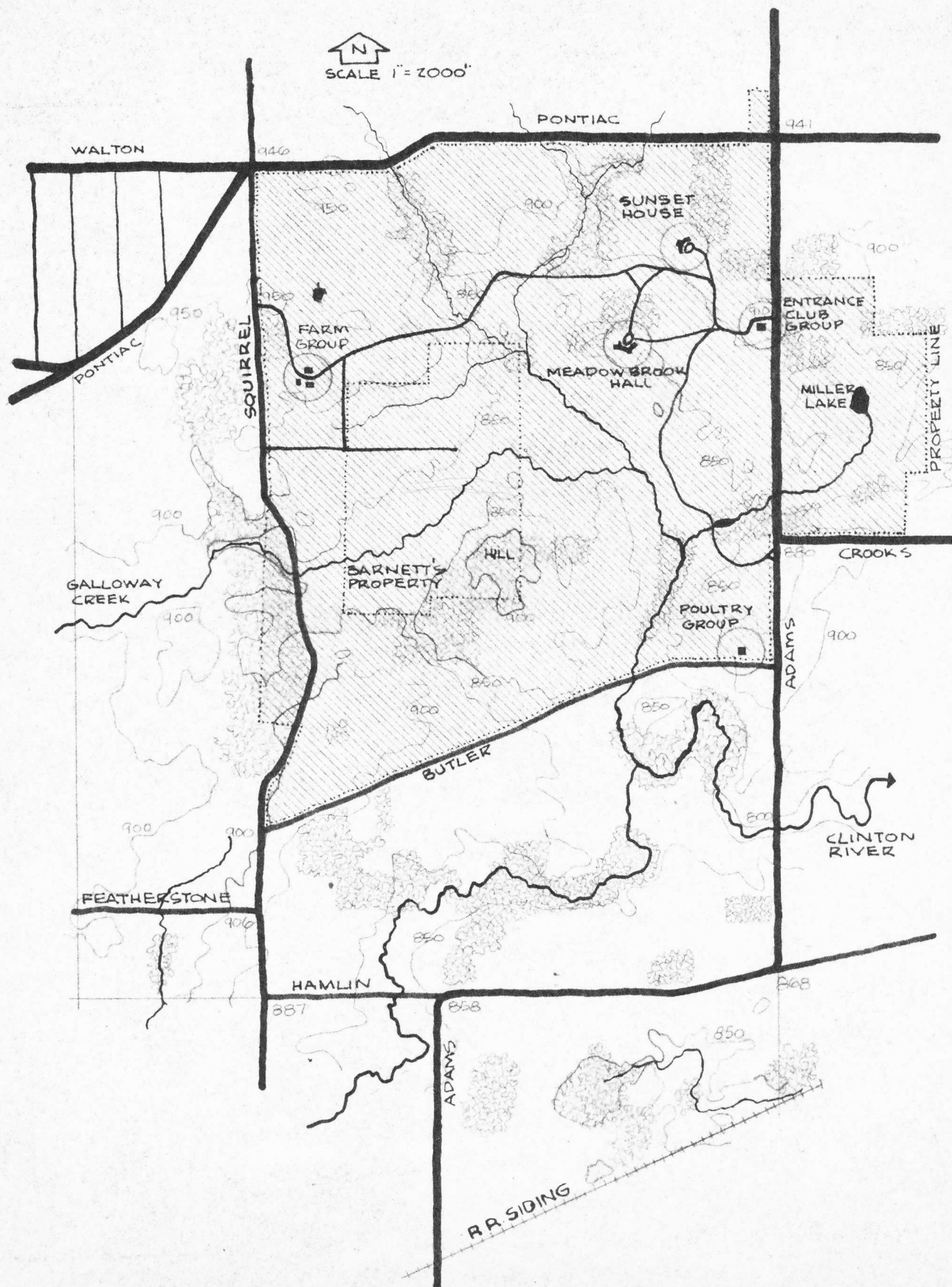
HIGHWAY SYSTEM

N
SCALE 1" = 2000'



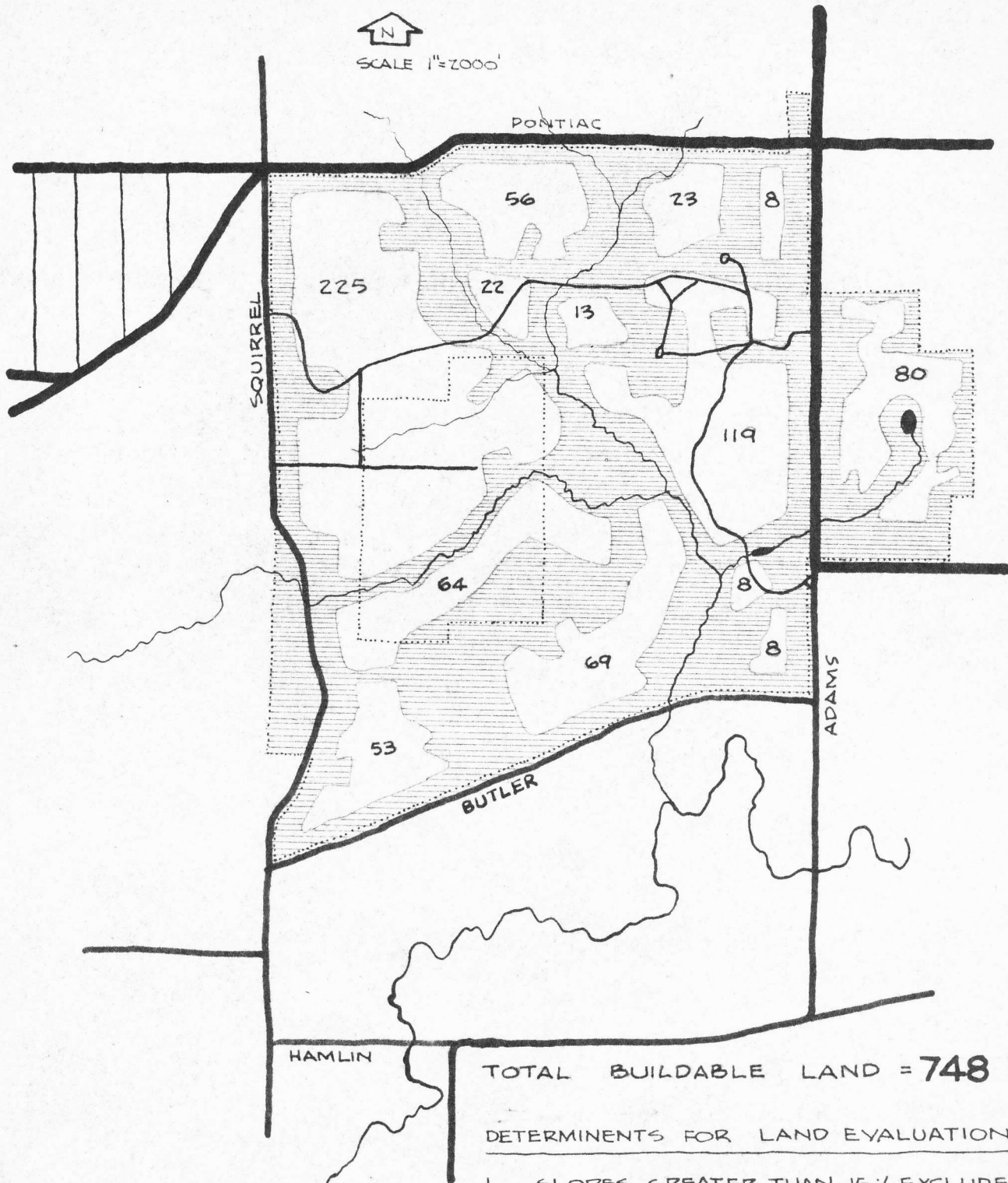
SITE CHARACTERISTICS

9a



SITE EVALUATION

9b



TOTAL BUILDABLE LAND = 748 ACRES

DETERMINENTS FOR LAND EVALUATION

1. SLOPES GREATER THAN 15% EXCLUDED
2. 300' GREEN BELT ON MAIN ROADS
3. 100' MIN. TO RIVERS & SWAMPS
4. 50' MIN. TO HEAVILY WOODED AREAS
5. 50'-200' AROUND EXISTING BUILDINGS

EXCLUDED LAND NOT SUITED FOR BUILDING

ADDITIONAL LAND

9c

