the hurst - euless - bedford chamber of commerce

bedford, texas

Submitted in partial fulfillment
of the requirements for the
degree of
Bachelor of Architecture

Texas Tech University
Dept. of Architecture
Nolan E. Barrick, Chairman

Tom E. Ferguson
Spring 1975

contents

TABLE OF CONTENTS

definition

THE CHAMBER OF COMMERCE: DEFINITION

A chamber of commerce is an organization of the business community which unites business and professional individuals and firms to create a central agency to improve business and build a better community. Any chamber of commerce is people. The majority of the members of the chamber are of the business community, but there is a place in the chamber for all who share a desire to improve the community and the conditions under which business is conducted.

The chamber of commerce organizes and directs the collective energies of the membership, to accomplish what would be an insurmountable task separately. The strength of the chamber lies in attracting the greatest number of individuals and firms to create a pool of both natural and human resources from which ideas, energy, and finances can be drawn.

The major objectives of the chamber of commerce include improvement of the economic well-being of the community, increasing wealth and prosperity, facilitating the growth of existing business, establishment of new business, and improving civic, educational, and cultural facilities. The process for meeting these responsibilities is accomplished through three steps:

1. Examination of community needs to determine what must be done to make it a better place to live and to do business.

2. Channelling of community resources to the fulfillment of these needs.

3. Organization and development of the necessary leadership to guarantee that the organization will become an effective force for expansion and improvement.

history

THE CHAMBER OF COMMERCE: HISTORICAL BACKGROUND

Near the close of the 17th century, the term "chamber of commerce" was used in Marseilles, France, where such an organization was established by the city council. Chambers of commerce occurred later in the British Isles beginning about 1783. In Germany, the Kaiser William I greatly encouraged the chamber of commerce movement, perceiving such an organization to promote trade and train young men for commercial careers. Other countries followed Germany's example, but the European chambers of commerce have little in common with the modern American organization.

Although the European chambers were associations of business men, they operate frequently as semi-public agencies given certain administrative and judicial powers with respect to trade. Some chambers, under highly centralized governments, have been used as agencies for directing and controlling economic activity in behalf of the Central Planning Authority, such as the chambers in Nazi Germany which exercised powers of life and death over individual concerns.

The American chamber is characteristic of the free enterprise system. Affording a means for the development and expression of business opinion, based on the American idea of progress and growth.

The first chamber of commerce established on the American Continent was in the state of New York, organized in 1768, was a direct result of the Stamp Tax Act, passed by the English Parliament in 1765. New York tradesmen organized in self-defense to

fight the Act and quickly perceived the advantages of such an association. The New York Chamber declared:

> "Mercantile societies have been very useful....for promoting and encouraging commerce, supporting industry, adjusting disputes relative to trade and navigation, and procurring such laws and regulations as may be necessary for the benefit of trade in general."[1]

Although the early business association was significant in promoting the sale of goods, organizing markets, enforcing rules of trade, and even operating trading floors, they limited activities directly to those related to commerce. The emergence of the chamber of commerce as a community organization came somewhat later as businessmen realized that their own prosperity was dependent on the development of a prosperous, healthy, and happy community.

[1] Chamber of Commerce Administration, Ed. by S. G. Wennberg (Chicago, Illinois, National Institute for Commercial and Trade Organization Executives, 1951), p. 19.

HURST, EULESS, AND BEDFORD: HISTORICAL ORIGINS

Hurst, Euless, and Bedford are rather old communities, but relatively new cities. Bedford was not included in the origin of Hurst and Euless, which had common origins with Peters Colony, established in 1841. Hurst remained basically an agricultural community with a population not to exceed two-hundred (200) through the year 1953. Hurst was incorporated in 1954, adopted a charter in 1956, became a Home Rule City in 1957 and adopted the Council-Manager form of government. The attraction of the suburbs to the people in Dallas and Fort Worth coupled with the location of new industries in the area, including Bell Helicopter, General Motors, and Menasco, Hurst blossomed into a planned city with a population of 10,500 by 1960.

Change occurred somewhat slower in Euless as population increased over the same time period from 200 to 4,263. Euless was incorporated as a Home Rule City in 1954 and adopted the Council-Manager form of government.

The old community of Bedford was established around the turn of the century and was a thriving center with several stores, a grist mill, and a cotton gin. The opening of U. S. Highway 80 diverted traffic away from Bedford and by 1912, it had declined to one store. Population declined to about one-hundred and growth was latent until the 1950's.

Bedford was incorporated into a city in January, 1953, with a Commission form

of government. In 1966, the city adopted the Council-Manager form of government.

The rapid growth that took place in Hurst and Euless also occurred in Bedford as can be seen in Table A.

TABLE A	POPULATION GROWTH 1940 - 1970		
YEAR	HURST	EULESS	BEDFORD
1940	NA	87	100
1950	200	200	300
1960	10,165	4,263	2,706
1970	27,215	19,316	10,049
% CHANGE 1960-1970	167.5%	353.1%	271.4%

contingencies

HURST, EULESS, AND BEDFORD: TRI-CITIES

The consolidation of the Hurst and Euless School System in 1955 and the addition of Bedford in 1959 began to mark the formation of the three cities as a working unit. Growth of the cities was enhanced by the construction of an eight lane freeway through the cities (State Highway 121A) completed in 1971.

Growth had been rapid in the three city area. Although they had developed into principally residential communities, business and industry flourished.

The cities in the Metroplex[2] area, such as Hurst, Euless, and Bedford, are contained within the social, economic, and political influences of Fort Worth and Dallas. No single community can have a great effect on the growth occurring around it which directly affects the quality of life in the area. In the spring of 1969, the Bedford Chamber of Commerce and the Hurst-Euless Chamber of Commerce merged. Collectively, a greater influence on the social, economic, and political growth within and around the "HEB" area became apparent. The Hurst-Euless-Bedford Chamber of Commerce maintains within its by-laws;

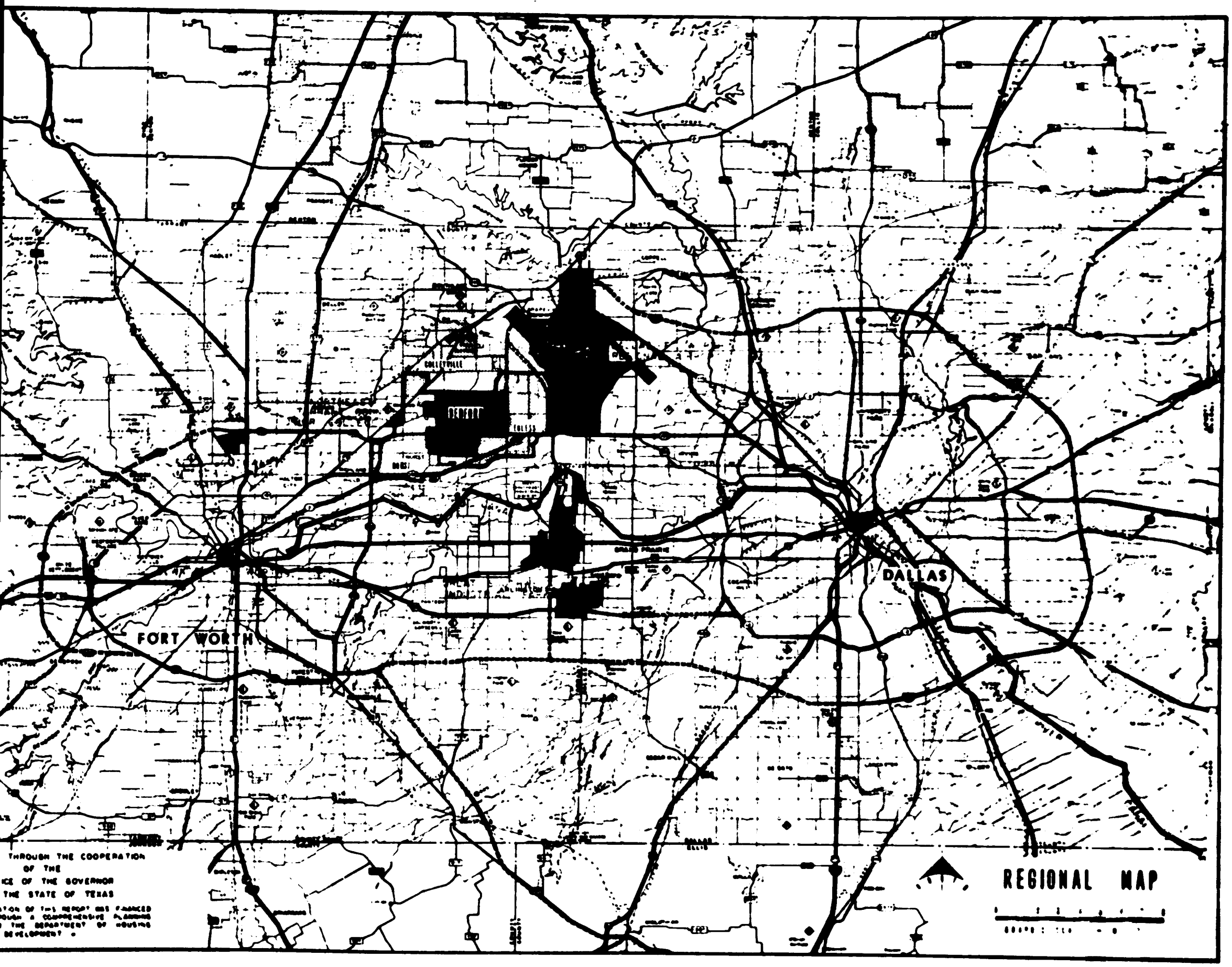
> (1) To secure to the area all enterprises that will benefit the area;

[2]See Map A, Page 3 (Tri-Cities)

(2) To promote the adoption and application of higher social, business, and professional standards;

(3) To promote and intelligently develop the resources of the area; and,

(4) To secure to the area various legislation, looking toward the welfare of the area.


COLLEYVILLE
DENTON
FORT WORTH
DALLAS
THROUGH THE COOPERATION
OF THE
OF THE GOVERNOR
THE STATE OF TEXAS
REGIONAL MAP

HURST, EULESS, AND BEDFORD: INTERRELATIONSHIP WITH THE METROPLEX REGION

The growth and the economy of the Hurst-Euless-Bedford area is directly related to the growth of the entire Dallas/Fort Worth area. This region as a financial and wholesaling center depends upon the growth of its tributary area, which was traditionally oriented toward agricultural and resources extraction, but is now rapidly increasing in manufacturing activity. This is a part of the national trend for manufacturers to move operations requiring unskilled labor out of the major cities and into the smaller cities where the cost of living is lower and an abundant labor force is available. The manufacturing growth of smaller cities will assure the growth of the Dallas/Fort Worth region as a financial and commercial center, as long as there are close transportation and communication ties between the major metropolitan center and the satellites.

The Dallas/Fort Worth Regional Airport is one of the instruments designed to meet these transportational needs. The largest and one of the world's most modern airports, it occupies 18,000 acres at the center of the North Central Texas Region.

As of 1975, the region has a population of nearly three million, is currently and will continue to witness suburbanizing and decentralizing tendencies similar to other older metropolitan areas. Initially, development will continue to

concentrate south of the regional airport and along the main travel routes between Dallas and Fort Worth. Gradually, an urban center of high density will develop north of the airport. Later, facilitated by new north-south connectors, a fourth major center will develop to the south. The location of the airport, halfway between Dallas and Fort Worth, will accelerate the tendency toward urban development in the area between the two major centers. Large land projects, such as the planned commercial industrial complex of "Bedford Forum,"[3] further substantiates trends toward merging of the two major centers.

In a report by The Regional Science Research Institute to the North Central Texas Council of Governments on the future structure of the North Central Texas Region, the consultants stated:

> Between 1968 and 1970, Tarrant County showed the continuation of a development trend which saw extensive development along Highway 183 and Highway 121. The report predicts that a secondary development center will develop in the Hurst-Euless-Bedford area, which will be immediately second in growth only to the centroids of Dallas and Fort Worth.

In the near future, the local economic market will radically change, not only in the "HEB" subregion but especially in Bedford. At present, a central business district is beginning to develop for the city between Bedford Road, Central Avenue, Highway 121,

[3]See Plate 2 (site)

and Forest Ridge Road.[4] Areas have been zoned and purchased for supporting development of commercial and office space. Sears, Roebuck and Company is designing a major regional shopping complex to be situated in the center of the city. Several neighborhood shopping centers are contemplated at scattered sites throughout the community. The most important development, in terms of local economic impact is "Bedford Forum," a major industrial/commercial development now under construction by the Bedford Forum Properties Co. A major "planned unit development," oriented towards capturing a portion of the related regional airport trade, Bedford Forum will provide substantial job opportunities and new income resources for the city and the three-city subregion. These changes will increase the resident work force and begin the diversification of the local economy.

[4] See Plate 2 (site)

organization

THE HEB CHAMBER OF COMMERCE: ORGANIZATION

Normally, a chamber of commerce exists within the realm of commitment of one community, financed through membership dues and a Board of City Development and/or an Industrial Foundation.

The Hurst-Euless-Bedford Chamber of Commerce differs in both respects. It is a business association set up as a non-profit corporation. Its Board of Directors, Committees, and manager operate solely through membership dues. Its membership of approximately 500 ranges from small, individually owned businesses to larger utility and financial institutions with dues that vary from seventy-five dollars to two-thousand six-hundred annually.

The uniqueness of the HEB Chamber of Commerce is its commitment to serve and represent three separate cities with three separate city governments. The chamber must not involve itself either positively or negatively in political or legislative matters which do not involve or affect all three cities.

The structuring of the chamber is much like that of any other chamber of commerce.[5] The government of the chamber is conducted by a Board of Directors, consisting of not less than (21) and not more than (25) members. The Board includes the Immediate Past

[5] See Organizational Flow Chart, sht. 3 of 6

President and current President of the Women's Division. All other members of the Board are elected by the entire membership of the chamber, except for two members which may be appointed by the President. The term of office for the Directors is three years.

The President conducts all meetings of the chamber, is the Chairman of the Board, and an ex-officio member of all committees.

A manager is appointed by the Board and designated as Executive Vice-President and Secretary of the corporation and shall serve until his resignation or dismissal. He has charge of the management of the property, business, and affairs of the corporation. He is an ex-officio member of all committees of the chamber, except the nominating committee.

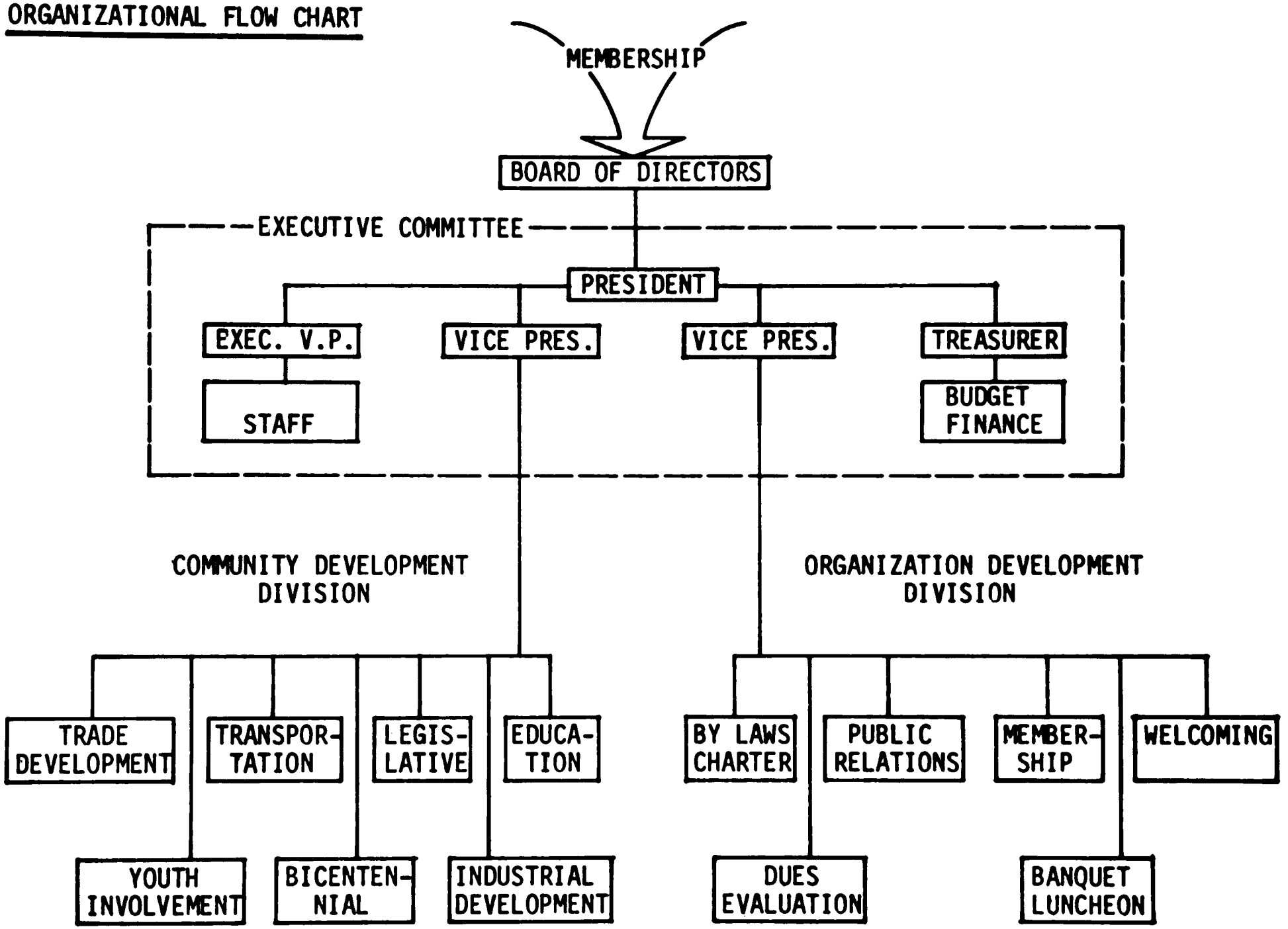
Permanent committees are appointed at the beginning of the fiscal year, composed of a chairman, co-chairman, and convenient number of members to effectively carry out its program of work. The Board authorizes and defines the powers and duties of all committees by approving an outlined program of work for that committee. Committees and their purpose for the HEB Chamber are:

TRADE DEVELOPMENT:

To generate more and better opportunities for the business people and to serve as an organizational arm for better business - government relations.

This committee sponsors sales improvement clinics; check protection and shoplifting programs; works with consumer relations programs to upgrade the image of trade

ORGANIZATIONAL FLOW CHART



establishments; conducts a community information program on "profit motive principals and the free enterprise system;" assembles and publishes, regularly, facts and figures on business and trends of business in the HEB area for use of business members in more intelligent planning and projecting.

ECONOMIC DEVELOPMENT:

To promote and actively work to attract and assist in the establishment of new and better jobs and assist wherever possible existing industry in the improvement and enlargement of their operation.

TRANSPORTATION DIVISION:

To work with existing cities agencies, area organizations and companies to assure adequate avenues and methods of transportation of goods and people to and from the HEB area.

AVIATION COMMITTEE

To assure best useage and advantages of the D/FW AIRPORT to citizens and businesses of the HEB area and explore ways the chamber can be of assistance in the promotion and development of the aviation facilities and services.

LEGISLATIVE RELATIONS

To establish a citizen involvement with local and county government to assure an adequate voice for the progressive citizen members of the HEB Chamber; to establish regular contact with elected governmental officials to express the needs and

impressions of the members of the HEB Chamber of Commerce and the community in general.

LIFE STYLE DEVELOPMENT

To make the area a more attractive and livable community with adequate services to meet the needs of individual citizens and businesses alike through citizen action and legislative enactment.

PUBLIC RELATIONS & COMMUNITY PROMOTION:

To establish an effective line of communications to members and the public to properly relate organizational goals, programs and community assets and stimulate citizen participation.

Among the responsibilities of this committee, the projects include:

A "Business Directory-Shoppers Guide" publication to be distributed in the HEB area.

To publicize chamber and community activities to the best advantage of the HEB citizens and business establishments.

To update and/or publish general promotion materials including maps, community brochures, etc.

Co-ordination of monthly luncheons and the annual banquet.

EDUCATION:

To study and work for adequate facilities and programs to meet the educational

needs of our citizenry, young and old; and to work with local educational officials to recognize and expand existing programs.

CORPORATE STRUCTURE (By-Laws):

To establish short and long range plans and projections for the chamber of commerce operations and facilities.

MEMBERSHIP DEVELOPMENT:

To obtain and service new members as well as establish an effective retention program for present members.

need

HEB CHAMBER OF COMMERCE: NEED

As late as 1974, the Hurst-Euless-Bedford Chamber of Commerce housed two rooms of the Western Hills Inn in southwestern Euless. They relocated in the Pilgrim Mini Warehouse and Office Park where they are presently situated. The facilities here are inappropriate, difficult to locate and inadequate.

Conference or committee meetings necessitate the use of meeting facilities outside the chamber office. The present facility includes one relatively large office space with adjoining reception area, and warehouse-type storage and workspace in the rear.

design criteria

HEB CHAMBER OF COMMERCE: SPACE ALLOCATION

RECEPTION

- greeting of visitors or members seeking information
- secretary-receptionist with access to reference material, files, typewriter
- seating for six to ten people
- space for visitors to review materials not to be taken from chamber
- private (enclosed) space for prospective member or resident to view promotional films
- accessibility to managers office
- accessibility to conference room

MANAGERS OFFICE

- space for desk, credenza, and necessary files
- seating for four to six visitors
- spacious enough for small meetings

CONFERENCE ROOM

- meeting space for 30 to 40 people
- storage space for stack seating
- coffee bar
- cloak closet

STORAGE

- space for file and records storage
- archives
- secretarial supplies
- storage of brochures, pamphlets, booklets
- storage of projection equipment and necessary apparatus for meetings (also may be loaned out to members)

WORK ROOM

- mailing; space for postage machine, envelope addressing
- offset machine
- copy machine (electro-static copier)
- master desensitizer (for offset machine)
- storage for printing supplies and postal supplies (address plates)

OFFICE SPACE

- two or three small offices for present part-time staff members and use for projected staff needs.
- space for additional secretary (projected)

REST ROOMS

COFFEE LOUNGE

JANITORS CLOSET

MECHANICAL

HEB AREA: CLIMATIC CONDITIONS

Altitude: 500-750 ft. above sea level

Avg. Annual Rainfall: 31.33 in.

January Min. Avg. Temp.: 35° F Lowest: -8° F

Avg. Winter Temp.: 45.9^{o} F

July Max. Avg. Temp.: 96° F Highest: 112° F

Avg. Summer Temp.: 84.9^{o} F

HEB CHAMBER OF COMMERCE: DESIGN CRITERIA (check list)

I. CONCEPT

APPROPRIATENESS

ORIGINALITY

VISUAL STRENGTH

REFINEMENT

II. LAND USE

COMPATIBILITY

ACCESS - EGRESS

automobile

pedestrian (handicapped)

SITING OF BUILDING

relation with existing structures

topography

vegetation

soil condition

sun

wind

rain, snow

views

smoke, fumes, odors
aesthetic quality
existing codes

LANDSCAPE DEVELOPMENT

originality
appropriateness
visual quality
inert materials
plants
paving
water feature
street furniture
mounds, berms, stairs, ramps
lighting
graphics
circulation

III. RELATION TO EXISTING ENVIRONS

RECOGNITION OF SCALE

COMPATIBILITY

UNIFICATION OF ENVIRONS

LAND USE COMPATIBILITY

IV. ENVIRONS CREATED WITHIN AND BECAUSE OF ARCHITECTURE

V. EXPRESSION OF TIME

- SPACIAL QUALITY
- VISUAL EXPRESSION
- USE OF MATERIALS
- STRUCTURAL CONCEPT
- ORIGINALITY

VI. HIERARCHY

VII. CIRCULATION

- CLARITY
- SIMPLICITY
- APPROPRIATENESS
- INTEGRATION WITH THE DESIGN

VIII. SPACIAL QUALITY

- EMOTIONAL QUALITY
- USE APPROPRIATENESS
- STRUCTURAL LOGIC
- ORIGINALITY

IX. FORM

RATIONAL

FUNCTIONAL RATIONALITY

STRUCTURAL RATIONALITY

HONESTY OF EXPRESSION

EMOTIONAL QUALITY

balance/imbalance
interest
unity/lack of unity
texture
color
material rationality

ORIGINALITY

X. STRUCTURE

USE APPROPRIATENESS

ECONOMY

STABILITY

VISUAL STRENGTH

EASE OF ASSEMBLY

AVAILABILITY

MECHANICAL COMPATIBILITY

XI. MATERIAL DESIGNATION

- APPROPRIATENESS
- VISUAL EFFECT
- AVAILABILITY
- COST

XII. MECHANICAL EQUIPMENT

- HEATING
- COOLING
- VENTILATION
- PLUMBING
- ELECTRICAL
- COMMUNICATIONS

XIII. NATURAL LIGHT

- ORIENTATION
- CONTROL

XIV. ECONOMICS

- COST/SQUARE FOOT
- COST OF MAINTENANCE

XV. HUMANISTIC AND CULTURAL CONSIDERATIONS

NOTE: The sequence of this check list for design criteria is not to establish a hierarchy for design considerations. It is a measure to judge the collective and individual elements of the total design.

LAND USES: DEGREE OF COMPATIBILITY

	INTERCOMPATIBILITY OF LAND USES													NATURAL DETERMINANTS									CONSEQUENCES				
	URBAN	SUBURBAN RESIDENTIAL	INDUSTRIAL	INSTITUTIONAL	AGRICULTURE		VACATION SETTLEMENT	RECREATION						SLOPE				VEHICULAR ACCESSIBILITY	AQUIFER RECHARGE AREAS	WATER SUPPLY DEPENDIBILITY	CLIMATE		AIR POLLUTION	WATER POLLUTION	STREAM SEDIMENTATION	FLOOD AND DROUGHT CONTROL	SOIL EROSION
					arable	livestock		saltwater oriented	freshwater oriented	wilderness	general recreation	cultural recreation	driving for pleasure	0-5%	5-15%	15-25%	over 25%				fog susceptibility	temperature extremes					
URBAN	○	⊖	○	◒	●	●	●	◒	◒	●	○	○	●	○	⊖	◒	●	○	●	○	◒	●	●	●	●	●	●
INSTITUTIONAL	◒	○	●	○	⊖	○	⊖	○	○	◒	○	○	⊖	○	○	⊖	◒	⊖	⊖	⊖	◒	◒	○	⊖	⊖	⊖	⊖

●	INCOMPATIBLE	●	INCOMPATIBLE	●	BAD
◒	LOW COMPATIBILITY	◒	LOW COMPATIBILITY	◒	POOR
⊖	MEDIUM COMPATIBILITY	⊖	MEDIUM COMPATIBILITY	⊖	FAIR
○	FULL COMPATIBILITY	○	FULL COMPATIBILITY	○	GOOD

SOURCE: Ian L. McHarg, Design With Nature (New York, Natural History Press, 1969), p. 144

special equipment

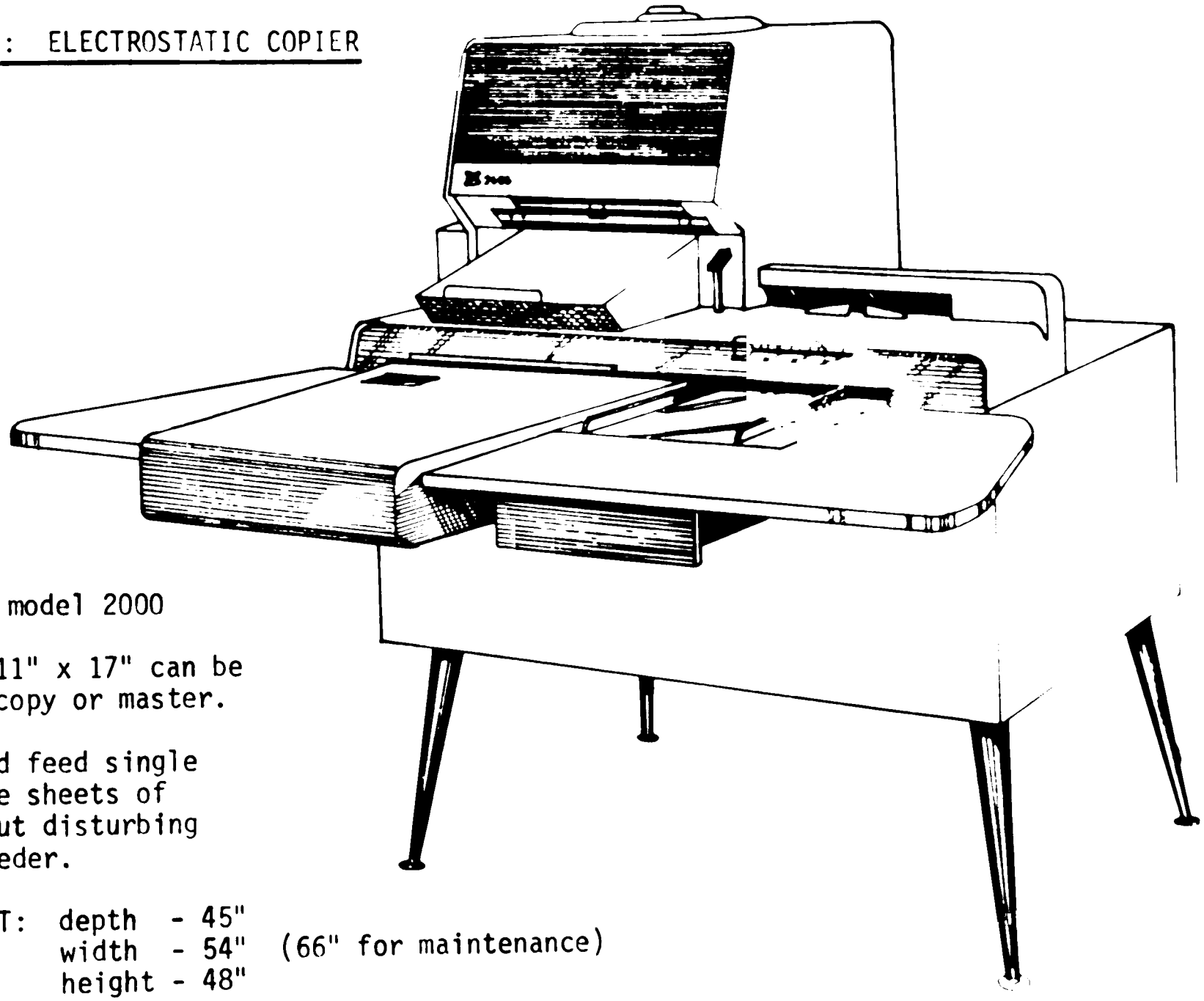
SPECIAL EQUIPMENT

ADDRESSOGRAPH - Comparable to AM class 900 Form Ejector
(For ease in addressing bulk or membership mailings.)
Accomadated by a small worktable

POSTAGE MACHINE
Accomadated by a small worktable

DESENSITIZER
Treats paper masters with electrostatic fluid prior to use on offset
Approx. 8" x 20" x 6" high (tabletop)

SPECIAL EQUIPMENT: ELECTROSTATIC COPIER



Comparable to AM model 2000

Originals up to 11" x 17" can be reproduced as a copy or master.

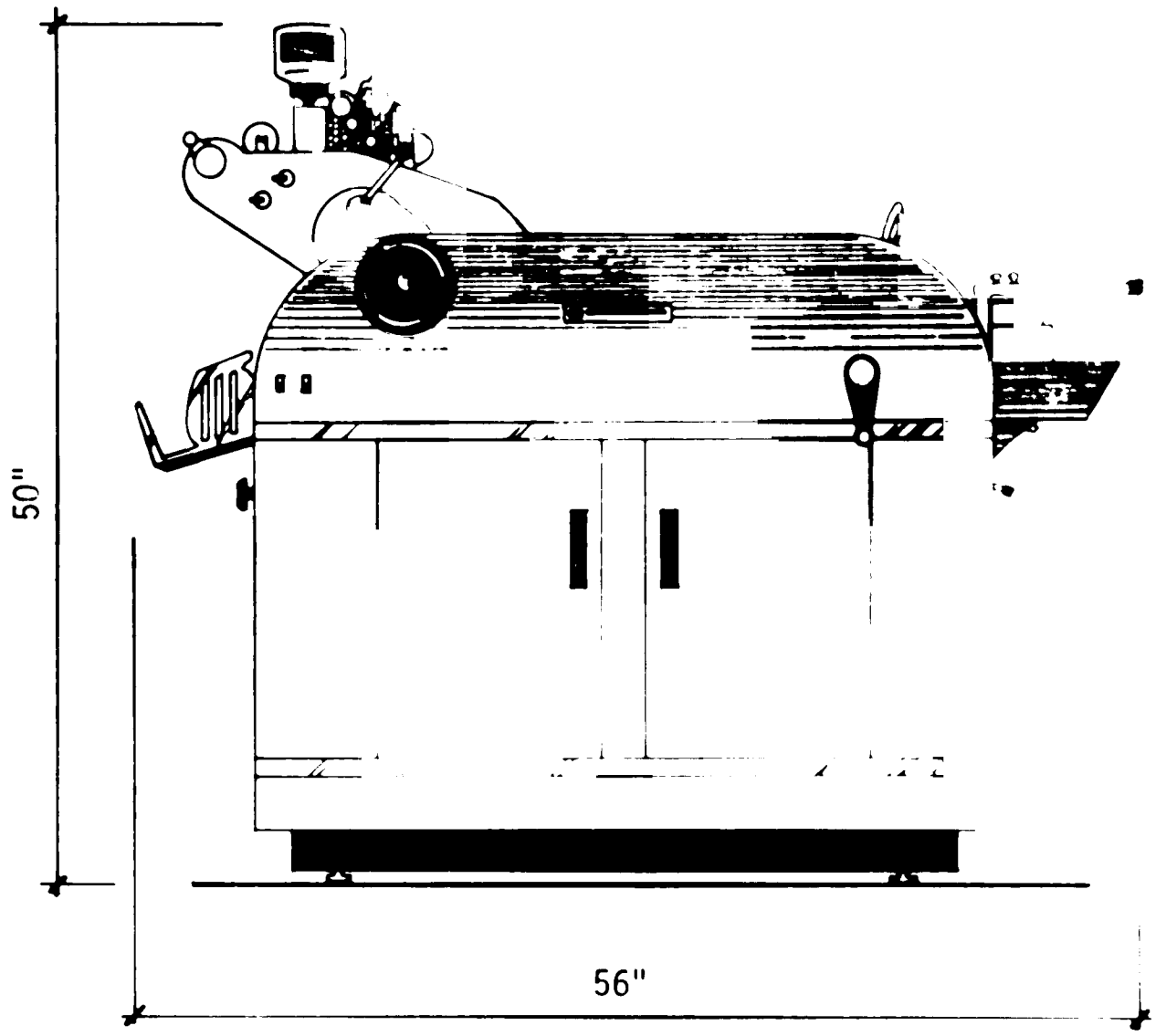
Operator may hand feed single masters or single sheets of copy paper without disturbing the automatic feeder.

SPACE REQUIREMENT: depth - 45"
width - 54" (66" for maintenance)
height - 48"

ELECTRICAL: 210V

EXHAUST FAN: 450 cfm

SPECIAL EQUIPMENT: OFFSET



Comparable to AM model 1250
2650
or, 2850

Up to 9000 copies/hour

Paper Stock Range: 13 lb. to 110 lb.

Paper Size: 3" x 5" min.
11" x 17" max.

WEIGHT: approx. 900 lbs. (gross)

ELECTRICAL: AC 115V, 50/60 Hz

SPACE REQUIREMENT: 32½" x 56" x 50" high

site

TOPO OF
HEB CHAMBER OF COMMERCE
TRACT

From: Wm. Yantis Survey
Abst. 1752

BEDFORD, TARRANT COUNTY
TEXAS

NORTH

Legend:

Property Line

+ Existing Elevations
(@ 50'-0" intervals)

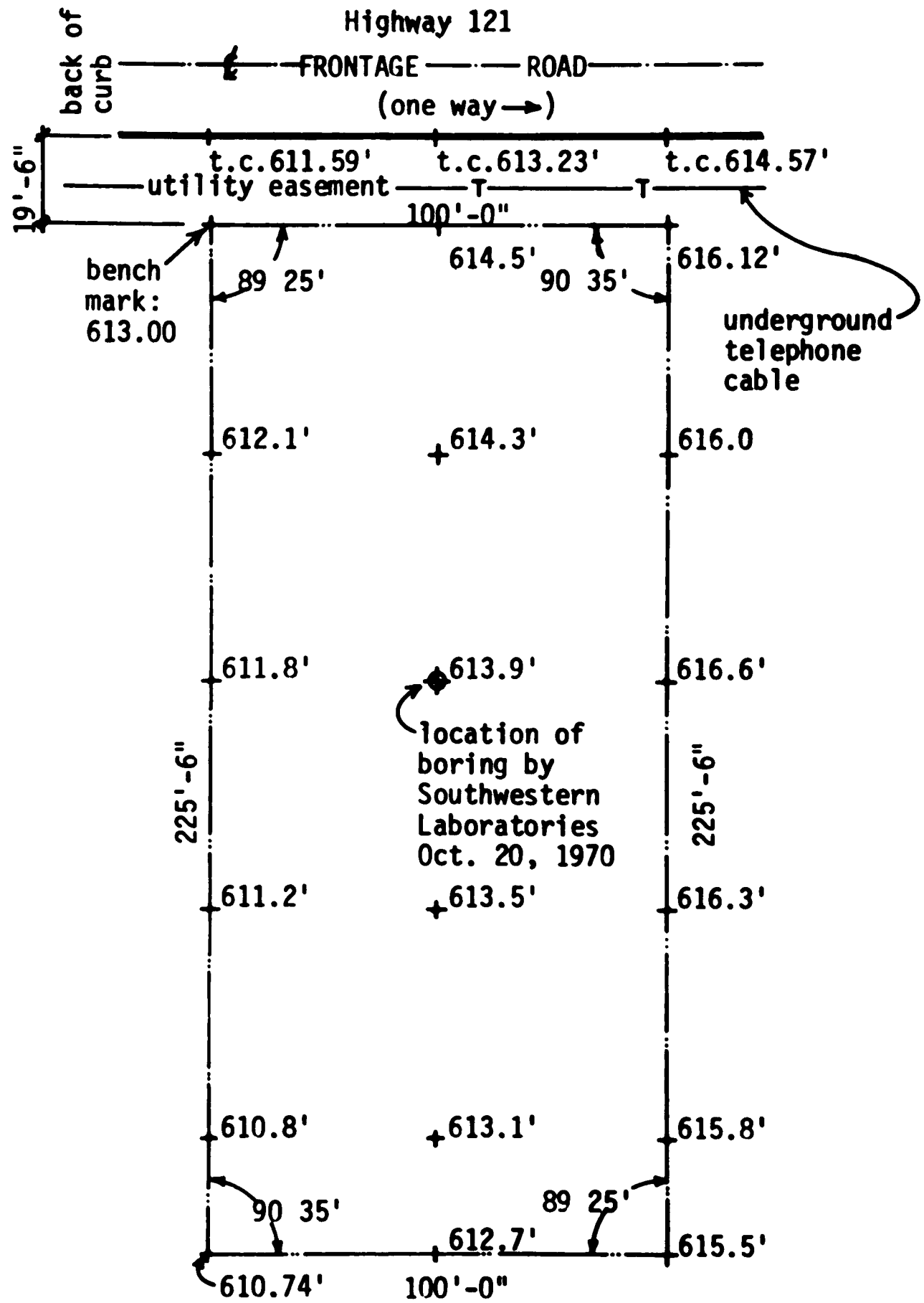
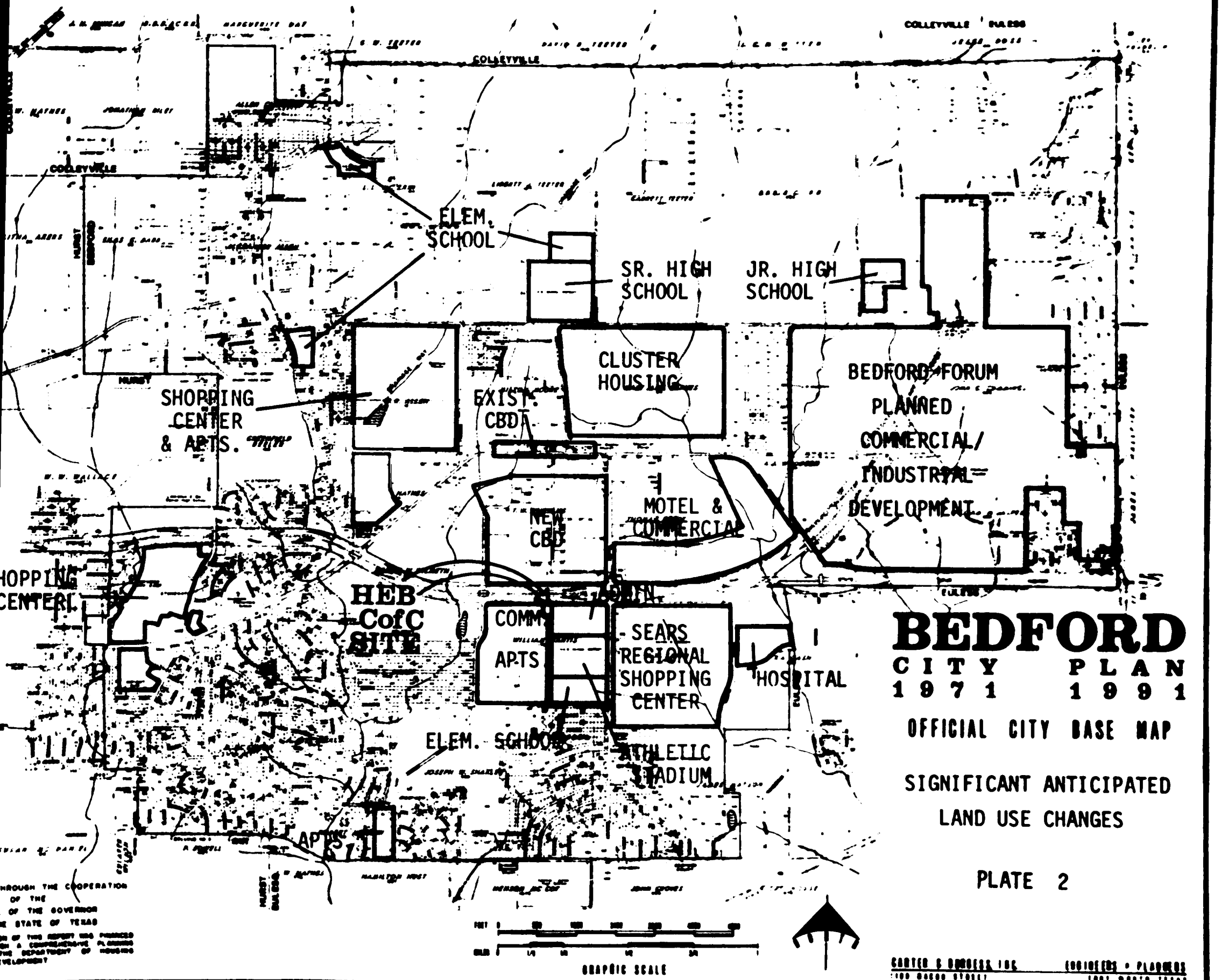
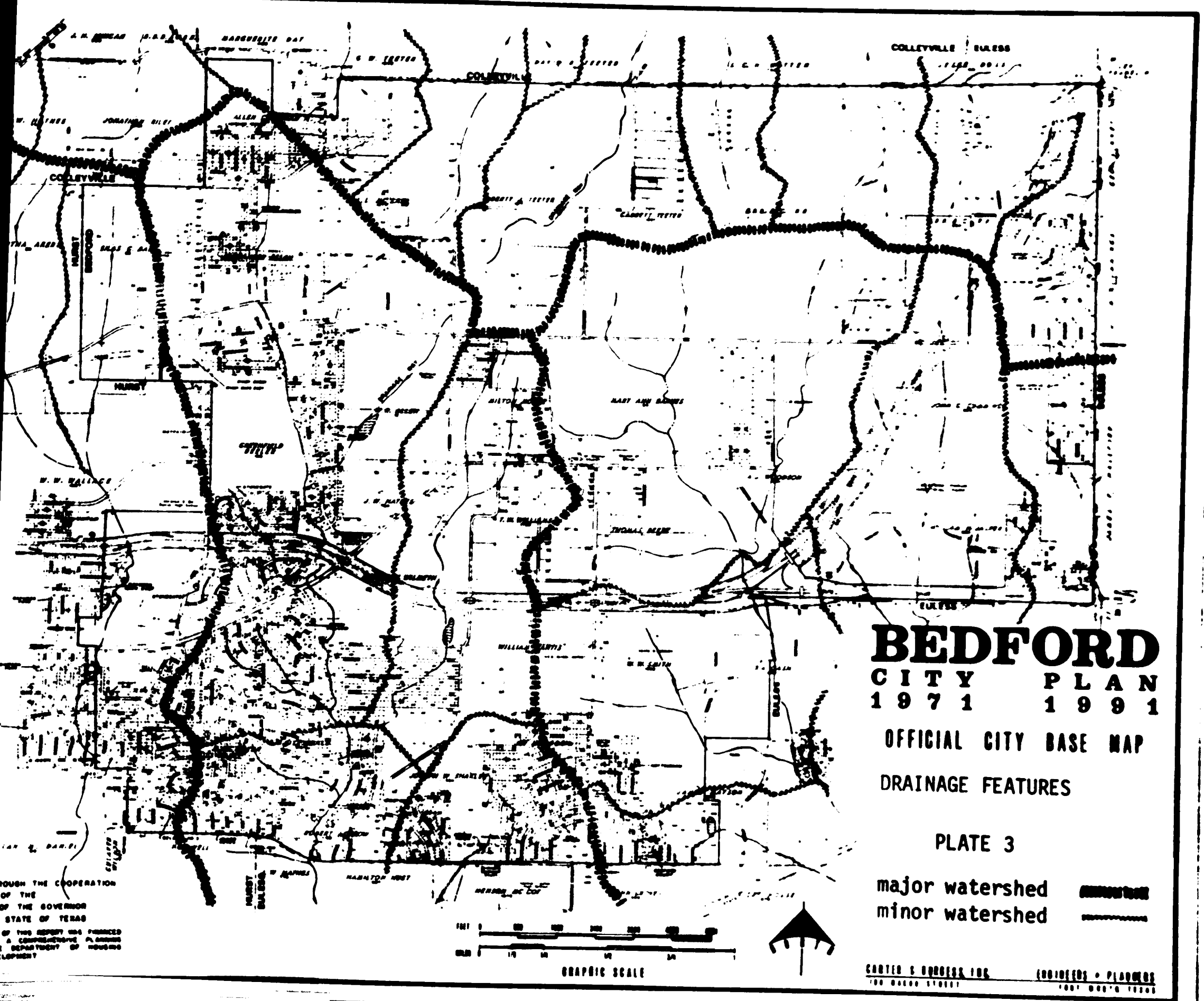


PLATE 1


COLLEYVILLE
ELEM. SCHOOL
SR. HIGH SCHOOL
JR. HIGH SCHOOL
CLUSTER HOUSING
BEDFORD FORUM
PLANNED COMMERCIAL/ INDUSTRIAL DEVELOPMENT
SHOPPING CENTER & APTS.
EXIST. CBD
NEW CBD
MOTEL & COMMERCIAL
HEB CofC SITE
COMM APTS
SEARS REGIONAL SHOPPING CENTER
HOSPITAL
ELEM. SCHOOL
ATHLETIC STADIUM
APTS
GRAPHIC SCALE
BEDFORD
CITY PLAN
1971 1991
OFFICIAL CITY BASE MAP
SIGNIFICANT ANTICIPATED LAND USE CHANGES
PLATE 2


BEDFORD
CITY PLAN
1971 1991
OFFICIAL CITY BASE MAP
DRAINAGE FEATURES
PLATE 3
major watershed
minor watershed
GRAPHIC SCALE
COLLEYVILLE
HURST
EULESS
CARTER & BURGESS INC
(ENGINEERS • PLANNERS)

HEB CHAMBER OF COMMERCE: SUBSURFACE INVESTIGATION

INTRODUCTION

The purpose of this investigation was to (1) explore the subsurface conditions, (2) evaluate the engineering properties of the soils encountered and (3) provide foundation design recommendations for the proposed structure.

FIELD OPERATIONS

The test boring for this investigation was made October 20, 1970. A truck-mounted rotary drilling rig was used to advance the boring and to obtain samples for laboratory evaluation. Cohesive soils were sampled at frequent intervals, using thin-walled, seamless Shelby tube samplers pushed into the soil with a hydraulic drive unit. The samples were extruded from the sampler in the field, logged, sealed and packaged to maintain the "in situ" moisture content and to protect them from disturbance while being transported to the laboratory for testing.

Standard Penetration tests were run when cohesionless soils were encountered. This test was conducted by recording the number of blows from a 140 pound weight falling 30 inches, required to drive a standard split-spoon sampler one foot into the soil. The disturbed

Analysis by: Southwestern Laboratories, J.L. Bratton, P.E.

samples were removed from the sampler, logged and returned to the laboratory for more detailed identification and classification.

Where the formations were of such a nature that satisfactory recovery was not obtained, in-place Texas Highway Department Cone Penetration tests were performed, from which allowable end-load bearing and frictional resistance values were estimated.

LABORATORY TESTING

Upon return to the laboratory, all samples were subjected to classification and identification tests. Atterberg Limits tests were run on representative samples of the cohesive soils in order to classify them according to the Unified Soil Classification System. Unit weight and moisture content tests were run on the undisturbed samples to determine the "in situ" conditions. These test results were combined with the Atterberg Limits and linear shrinkage test results to obtain an indication of the volume change potential of the clay soils.

Unconfined compression tests were also run on the undisturbed samples to evaluate the shear strength of the materials.

The test results are tabulated in the "Summary of Tests".

SUBSURFACE CONDITIONS

The boring drilled at this site showed that the soils encountered were mainly composed of sands, sandy clay and sandstone: Sand was encountered from the ground surface to approximately one (1) foot in depth overlying sandy clay. At a depth of four (4) feet, sands were again encountered overlying sandstone. The sandstone containing sand layers and clay seams, continued from a depth of seven (7) feet to the bottom of the boring at twenty-five (25) feet.

Results of the Atterberg Limits tests indicate that the sands encountered are inactive. The sandy clay, from a depth of two (2) to five (5) feet below ground surface proved to be moderately active and this soil will expand or contract with seasonal variations in soil moisture content.

Ground water exists in the sand layers of the sandstone at a depth of approximately fifteen (15) feet.

RECOMMENDATIONS

Foundation

We understand that the proposed structure will be a single-store lightly loaded building. We recommend a shallow spread footing type of foundation, founded at depths of two (2) to three (3) feet below ground surface. An allowable soil bearing capacity of 3,900 psf may be used in the design of the individual footings. If continuous footings are desired,

an allowable soil bearing capacity of 3,000 psf may be used.

Grade Beams

Voids will not be required beneath the grade beams at this site.

Floor Slabs

Floor slabs may be set on grade. Voids will not be required beneath the floor slabs.

LIMITATIONS

The foregoing recommendations are based on analyses which presume the condition of soil properties in the areas between the boring to have a normally uniform variation of conditions revealed by the boring.

Should any unusual conditions be encountered during construction, this laboratory should be contacted immediately so that further investigation and supplemental recommendations can be given.

SUMMARY OF TESTS

SOUTHWESTERN LABORATORIES
DATE: 10-30-70

DEPTH (feet)	TYPE OF MATERIAL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	ATTERBERG LIMITS			LINEAR SHRINKAGE (%)	PENETRATION (Blows Per Foot)	COMPRESSIVE STRENGTH (psf)	STRAIN (I)
				LL	PL	PI				
½	Brown sand	8		Non-Plastic			0			
2	Stiff rust sandy clay	29	112	33	15	18	7		3220	5.0
4-5	Dense rust & yellow							50+		
9-10	Dense rust & tan sand							50+		
14-15	Sandstone (lightly cemented)							50 * / 2"		
19-20	Sandstone (lightly cemented)							50 * / 1½"		
24-25	Sandstone (lightly cemented)							50 * / 1½"		

*Texas Highway Department Cone Penetrometer

LOG OF BORING

DATE: 10-20-70 TYPE: CORE GROUND ELEVATION: 613.9'

LEGEND: ■ SAMPLE ✕ PENETRATION ▼ WATER

DEPTH (feet)	SYMBOL	SAMPLE	DESCRIPTION OF STRATUM
			Brown sand
			Stiff rust sandy clay
5			Dense rust & yellow sand w/thin sandstone seams
10			Lightly cemented sandstone layers to 4' w/rust & tan sand layers to 1½' & thin clay seams
15			
20			Bailed to 18' Water level in 15 minutes @ 15'
25			Bottom of hole @ 25'

economics

HEB CHAMBER OF COMMERCE: FINANCING

The Hurst-Euless-Bedford Chamber of Commerce Building will be financed through a "building fund campaign." This is a drive in which 3 to 5 year pledges of funds are secured to retire the indebtedness. In the event that sufficient funds are not obtained, annual benefits would be planned such as a dinner or carnival, to raise the remainder of the debt.

The Gainsville Chamber of Commerce represents one example of this type financing. Pledges were secured for their new structure and the indebtedness was retired at the end of seven (7) years.

HURST, EULESS, and BEDFORD: ASSESSED VALUATION

CITY	YEAR	ASSESSED VALUATION
HURST	1965	$ 38,717,370
	1973	$163,896,790
EULESS	1962	$ 13,909,560
	1973	$138,068,760
BEDFORD	1966	$ 23,365,610
	1973	$ 82,068,340

HEB AREA: BANK CALL TABULATION

	INSTITUTION		
	FIRST NATIONAL OF HURST	FIRST NATIONAL OF EULESS	FIRST STATE OF BEDFORD
June 29, 1973			
DEPOSITS	$27,088,208	$11,731,636	$13,393,624
LOANS	$13,645,640	$ 7,716,364	$ 8,897,071
TOTAL ASSETS	$30,594,011	$13,394,535	$15,099,606
December 31, 1973			
DEPOSITS	$27,500,328	$12,306,577	$13,308,548
LOANS	$15,479,654	$ 7,900,068	$ 9,076,435
TOTAL ASSETS	$31,120,455	$14,020,135	$15,051,744

HEB CHAMBER OF COMMERCE: 1973-74 BUDGET

Administrative	
Salaries & Related Expense	$ 27,535
Office & Operating Expense	8,590
Travel & Convention	1,083
Auto Expense & Maintenance	1,990
Program Expense	
Community Development	500
Community Relations	250
Economic Development	1,975
Industrial Relations	690
Trade Development	545
Life Style Improvement	500
Governmental Affairs	200
Special Projects	200
Internal Affairs	
Public & Member Relations	2,125
Monthly Luncheons	210
Annual Banquet	700
Membership & Welcome	1,850
Corporate Structure & Planning	4,375
TOTAL BUDGET	$ 53,318

HEB CHAMBER OF COMMERCE: PROJECTED EXPENSE 1974-75

Administrative Expense	
Salaries & Related Expense	$ 32,444.85
Office & Operating Expense	13,529.00
Travel & Convention Expense	1,170.00
Automobile Expense	2,670.00
Program Expense	
Community Development	600.00
Community Relations	400.00
Economic Development	2,035.00
Industrial Relations	855.00
Trade Development	655.00
Life Style Improvement	780.00
Governmental Affairs	900.00
Special Projects	450.00
Internal Affairs	
Member & Public Relations	3,824.00
Luncheons & Meetings	780.00
Membership Development	6,050.00
Debt Retirement	6,000.00
Interest	250.00
	73,392.85
Unassigned Funds	6,703.63
	$ 80,096.48

HEB CHAMBER OF COMMERCE: DUES INCOME

YEAR*	INCOME
1974-75	$ 41,626**
1973-74	37,107
1972-73	26,210
1971-72	23,332
1970-71	23,336
1969-70	20,631
1968-69	17,903
1967-68	13,039
1966-67	10,973

*Fiscal Year
**Dues Pledged

HEB CHAMBER OF COMMERCE: PROJECTED INCOME 1974-75

Pledged Dues Aug. 1974 (less doubtfull)	$ 41,596.48
New Dues Increased (projected)	9,500.00
New Members Sales Gain	12,000.00
Membership Directory	3,000.00
Map Sales	4,000.00
Room Tax Contracts	9,000.00
Project Supervision	1,000.00
	$ 80,096.48

bibliography

BIBLIOGRAPHY

1. The National Institute for Commercial and Trade Organization Executives, Chamber of Commerce Administration, ed. by S. G. Wennberg, Chicago, Illinois, 1951.

2. Chamber of Commerce Management, ed. by Marvin Hurley, Washington D.C., Chamber of Commerce of the United States of America, 1960.

3. McHarg, Ian L., Design with Nature, Garden City, New York, Doubleday Natural History Press, 1969.

4. Brown, Earl, Community Social Analysis of Hurst-Euless-Bedford, Texas, Fort Worth, Texas, Texas Wesleyan College, 1972.

5. Carter & Burgess, Inc., The Bedford City Plan 1971-1991, Fort Worth, Texas, 1971.

Special thanks to the Hurst-Euless-Bedford Chamber of Commerce, the Lubbock Chamber of Commerce, and the Chamber of Commerce of the United States for their cooperation in the production of this program.

DESIGN RATIONALE

LAND USE

The siting of the building resulted from a study of the access to and egress from the structure by both automobile and pedestrian traffic. Automobile traffic is directed to the site from the west along its northern border and from the south along its eastern border.

(Note: The site is presently viewed from the north by an east-west U.S. Highway 121 A. The Bedford City plan proposes a north-south collector street bordering the east side of the site.)

These factors prompted the building to be sited at the northern section of the site with parking to the south. This allows the structure to be viewed from Highway 121 A without obstructing the view with parked cars.

BUILDING FUNCTION

Entry into the building by the public unfolds a Central Core area from which all major functions are directly connected. The Central Core was designed as a collecting point. Within the core area, a space was designed in which films or slide presentations can be viewed. Lectures or meetings may be held in this area, as well as small exhibits. The majority of the floorspace is finished with split pavers to facilitate

ZONING ORDINANCES

ACCESSORY BUILDINGS AND USES

In "S" Service Commercial Districts accessory buildings and uses customarily incident to any of the above uses are permitted. No accessory use shall be constructed to permit the keeping of articles, goods or material in the open or exposed to the public view. When necessary to store or keep such material in the open the lot or area shall be fenced with a solid fence or wall at least six (6) feet in height.

HEIGHT AND AREA REGULATIONS

In "S" Service Commercial Districts the height of buildings, the minimum dimensions of the lots and yards shall be as follows:

Height: Buildings or structures shall not exceed thirty-five (35) feet, and shall not exceed two and one-half (2-1/2) stories in height.

Front Yard: Any building hereafter constructed shall provide for a front yard, the minimum depth of which shall be at least twenty-five (25) percent of the depth of the lot, but the depth of such front yard need not be more than twenty-five (25) feet.

e. Where more than one building is located upon a lot, the parking requirements shall be based upon the total floor area of all such structures.

f. Retail, office and service buildings shall provide and maintain off-street facilities for the loading and unloading of merchandise and goods within the building or on the lot adjacent to a public alley or private service drive to facilitate the movement of traffic on the public streets. Such space shall consist of a minimum area of ten (10) feet by twenty-five (25) feet for each twenty thousand (20,000) square feet of floor space or fraction thereof in excess of three thousand (3,000) square feet in the building or on the lot used for retail, storage or service purposes.

g. Provisions shall be made for only forward direction of travel for entry onto public streets.

$$S = \frac{M}{F}$$

$$S = \frac{312}{24} = 13 \text{ in.}^3$$

From table: typical beam = <u>W 12 x 14</u>

MECHANICAL ANALYSIS

A four-pipe hot and cold all water system was employed in this structure. The building was too large to use package ac/heating units and too small for more sophisticated systems. The building is zoned into four major areas by use of five (5) fan coil units suspended from the roof structure, accessibly through the ceiling.

HEAT TRANSFER COEFFICIENT

Roof Structure

	Resistance
Outside air film	0.17
B. U. roofing	0.33
Insulation	6.50
Metal Deck	0.00
Air Space	0.81
Suspended Acoustical Clg.	0.47
Inside Air Film	0.68
total resistance =	8.96

$$U = \frac{1}{R}$$

$$= \frac{1}{8.96}$$

$$U = 0.112$$

Wall Structure

	Resistance
Outside air film	0.17
Precast Concrete	0.48
Air Space	0.97
Gypsum board	1.43
Inside air film	0.68
total R =	3.73

$$U = \frac{1}{R}$$

$$= \frac{1}{3.73}$$

$$U = .268$$

$$q = AU\,(t_2 - t_1)$$

@ Roof q = (6166 sq. ft.) (0.112) (58.5)

q = <u>40399 BTUH</u>

@ Walls q = (4140 sq. ft.) (0.268) (16)

q = <u>17752 BTUH</u>

VENTILATION AIR LOAD

Sensible Heat

$q_s = 1.08 \times Q \times (t_o - t_i)$

$q_s = (1.08)\ (1200\ cfm)\ (95-78)$

$q_s =$ <u>22032 BTUH</u>

Latent Heat

$q_l = 0.7 \times Q \times (HR_o\ HR_i)$

$q_l = (0.7)\ (1200\ cfm)\ (110-75)$

$q_l =$ <u>29400 BTUH</u>

ROOM LOAD

Walls	17752	
Roof	40399	
Lights (3400w)	13872	
People (70)	16800	21700
	88823	21700

Apparatus Load = Room Load + Ventilation Air Load

q_s = 88823 + 22032

= 110855

q_l = 21700 + 29400

= 51100

$q_t = \frac{110855 + 51100}{12000}$ = <u>13.5 tons, required capacity</u>

graphic presentation