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A CITY HALL FOR BUTTE, MONTANA

Part I
Undergraduate Thesis in Architectural Design

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

at
Montana State University

Bozeman, Montana
March, 1967

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CONDITIONS CREATING A NEED

CONDITIONS CREATING A NEED

"The City Hall clock has never kept the right time. But why should it in a place where the residents tell time by the mine whistles?" (4:6) That statement was made in reference to the "copper camp" of Butte near the end of the last century. It also refers to a colorful, rambunctious society that has disappeared and to a clock and City Hall that continue as the conditions creating a need for a new structure.

Existing Physical Conditions

The old building and its clock create a need for a new City Hall in several ways, and the most obvious of these is the building's poor physical condition. Officials from various departments in City Hall commented on the existing conditions in their respective offices.

Department of the Mayor. Space requirements in this office seem to be satisfactory according to the Mayor and his executive secretary. (19:int) However, the Mayor's present offices do little to create the dignity and civic appeal necessary to his executive operation. Drab wall, ceiling, and floor materials in the Mayor's office are much the same as those in the most menial types of work spaces within Butte City Hall.

Office of the City Clerk. Butte's City Clerk pointed out several architectural inadequacies in his office. (15:int) Vault spaces are inordinately small for necessary record-storage. Furthermore, comprehensive storage systems have been substituted for make-shift storage components within crowded storage areas. The depressing office environment found throughout the old structure also exists in this area.

Law Department. None of the necessary offices, conference rooms, or library facilities presently exist in the Law Department. Amazingly, all of these badly needed areas have been combined in one, inadequate space.

Treasury Department. The Treasury Department also suffers from a lack of adequate storage, vault, and work areas. However, the most glaring inadequacy is the poor, public-contact space in this office. The heavy public visitor traffic to the Treasury Department is presently forced to enter directly into this office from the street; long waiting lines are often extended out into the street as as a result.

Butte City Jail. Conditions in the law enforcement and detention areas of the City's jail are inadequate to say the least, according to Butte's Assistant Police Chief. (13:int) Any semblance of conditions providing "...Security, Safety, Sanitation, and Segregation" are wholly lacking. (4:18) in the detention area of the jail. Furthermore, law enforcement operations are sprawled over two floors in an inefficient arrangement of spaces whose purpose is vitally concerned with efficiency.

Existing Symbolic Conditions

Butte's City Hall fails as a badly needed exponent of public pride and efficiency. Even among the delightful architecture built during the old structure's time, the City Hall is a type of non-statement. This type of anonymity can no longer be afforded by the City's officials as their representation to the people. The recent firebombing of the City Hall's main entrance is an example of the lack of respect for civic authority that can be linked with its personification in architecture.

Exhibits 1-1 and 1-2 on the following pages show much about the conditions creating a need for a new Butte City Hall.

tte City Hall from the northeast

An article from the Montana Standard newspaper of Butte published on Dec. 25, 1966

City Hall arson foiled

Two policemen early Saturday foiled an apparent attempt to set fire to Butte City Hall.

The policemen, John Sullivan and John Gasper, reported they spotted the fire at 3:11 while in the process of investigating a traffic violation. The fire was at the street doorway of the city treasurer's office. The two patrolmen began beating out the flames and then called the fire department.

They said gasoline had been splashed over the burned area and an empty can was nearby.

Exhibit 1-1

Butte City Hall from the northwest

Entrance to the Butte City Jail

Exhibit 1-2

LOCAL CONDITIONS

LOCAL CONDITIONS

Historical Conditions

The greatest difference between a civic design problem in Butte, Montana and that in any other city in the world may be the result of the unusual and somewhat infamous history of the "copper camp". Happily, this is so. History, in this case, has developed a citizenry and an urban architecture whose influence could be a source of inspiration for a native designer rather than a limitation.

Butte's history began in 1867 when the Butte City townsite was designated by early prospectors and citizens. The mining camp was incorporated as a city in 1867, and the next year Butte had its first mayor, Henry Jacobs. Prospectors soon began to flock to the new City on the heels of lucrative silver discoveries, and by 1884 the census showed a population of 4,000 people. (2:285)

Butte's numberous ore deposits soon attracted thousands more immigrants, magnates, merchant-princes, and camp-followers whose wild society made the double-cross, civic corruption, gambling, charity, and prostitution a way of life. An account of this life is written in books such as Copper Camp, War of the Copper Kings, and Underground Warfare in Butte.

The architecture which eventually developed Butte's Victorian character began to find its roots in suburbs such as "...Seldom Seen, Dogtown, Chicken Flats and Butchertown." (2:1) The homes of Butte's miners were always ramshackle; but the theatres, saloons, and bordellos, which they so often patronized, were lush beyond belief. Photographs of several of these buildings to whom the new City Hall would be a neighbor are shown in Exhibit 2-1 on the following page.

Some older members of Butte's CBD

Exhibit 2-1

Social Conditions

The results of Butte's flamboyant history are not only architectural; they are also human. "The Richest Hill on Earth" has generated a society of mining people, and later progress has done little to change their crude, colorful, civic character. In 1967 Butte's laboring class, who has rarely betrayed their loyalty to the Democratic party, is still the influence most felt in the chambers of City Hall.

Butte's voters find it difficult to support bond issues whose objectives are increased educational facilities or a Public Library for the City. However, these are the same people who readily contribute to bar-room collections for disabled friends, "Babe Maloney", or injured athletes. Butte, on the other hand, also contains its intelligentsia. Perhaps their purpose and enterprise keeps the City alive and progressive to whatever degree progress might exist in the old City. However, these people are not typical Butte citizens. Instead an older, relatively uneducated individual is the citizen whose decisions influence Butte's future -- correctly or otherwise.

At any rate, the preponderance of these citizens is a serious social deficiency in the social structure of the City. Unfortunately, Butte has proportionately fewer young adults and high school or college graduates than any other major Montana city. (10:3)

This serious shortage of progressive young people may be the result of the somewhat depressing atmosphere of the current business environment in Butte. The City of Boston recently felt the answer to a similar problem in their City was the construction of a new seat for the City government. (8:15) As a symbol of a city's collective aspirations, a badly needed City Hall would seem particularly

appropriate for an inspirational beginning in this direction. Future developments in the CBD (Central Business District) might emulate this first step taken by the City's government in order to attract younger minds.

Economic Conditions

Past Conditions. Butte's earlier economy was based entirely on the fluctuations of mineral markets, and in particular that of copper. For example, in 1916, copper had reached a new high level of $00.25 per pound, and the miners' pay took a corresponding jump from $4.25 per shift to $4.50 per shift. (2:293) This close relationship between the prosperity of the Butte economy and the price of copper has been a characteristic of the City for many years. Interestingly, the population of the "copper camp" has also corresponded to the economic changes within the mining industry. In 1918 when copper was "high", some authorities claimed Silver Bow County's population to be almost 100,000 people. (2:295) Until 1960, however, that number had steadily diminished.

Several reasons for the gradual economic decline over past decades have been advanced. The report by Ronald Thompson Associates, It's Time for Decisions, says a $2,000,000.00 decline in the volume of retail sales for 1954 to 1958 was the result of public reaction to vacancies in older buildings of the CBD and congested traffic patterns. (10:11) The Thompson firm has also said that, "Within the last few decades, other towns in the region have come to compete with Butte for the business of the trade area population." (12:1) Many Butte citizens also speculate that labor-management conflicts in the mining industry had discouraged new businesses from establishing in Butte.

Current Conditions. Several more recent developments have caused some reason to believe this decline has finally ended. Although the majority of laborers in the Butte area are still invloved in the mining industry (approx. 3,500), several newer industries have widened Butte's

economic base. (12:1) Victor Chemical and Safeway have contributed to this improving condition. Furthermore, the completion of a major intersection between Interstate Highways in Butte has increased optimism about tourist and trucking trade increases.

The graph in Exhibit 2-2 shows that the City's population has ceased to decline. Furthermore, the graph projects and increase in population for the future. This hope has most recently been borne-out by meter statistics gathered by the Montana Power Co.

Future Conditions. Along with the projected population increase, several sources have commented on Butte's economic future. Mineral interests say, "... the adoption of far-seeing mining and metallurgical techniques and the discovery of additional ore make it possible to predict conservatively 30 to 50 years of mineral activity." (5:2) In addition, several reports say increased business activity in Butte will naturally follow because of Butte's new position as a transportation crossroads.

Geographical Conditions

Butte is located in Southwestern Montana in Silver Bow County; its position is described as Lat. 45 57 N., Long. 112 30 W. (1:14)

The CBD lies at an elevation of 5708 ft on the southern slope of a hill containing manganese, copper, and zinc along with other mineral deposits. These deposits were formed shortly after the Laramide Revolution. During the Laramide period a granitic batholith known as the Boulder batholith was formed between Helena, Montana and Butte and varies in width from 20 to 25 miles. (1:89) This formation accounts for the granite bedrock found at the proposed site.

GROWTH OF URBAN - BUTTE (based on a graph by Ronald Thompson Associates)

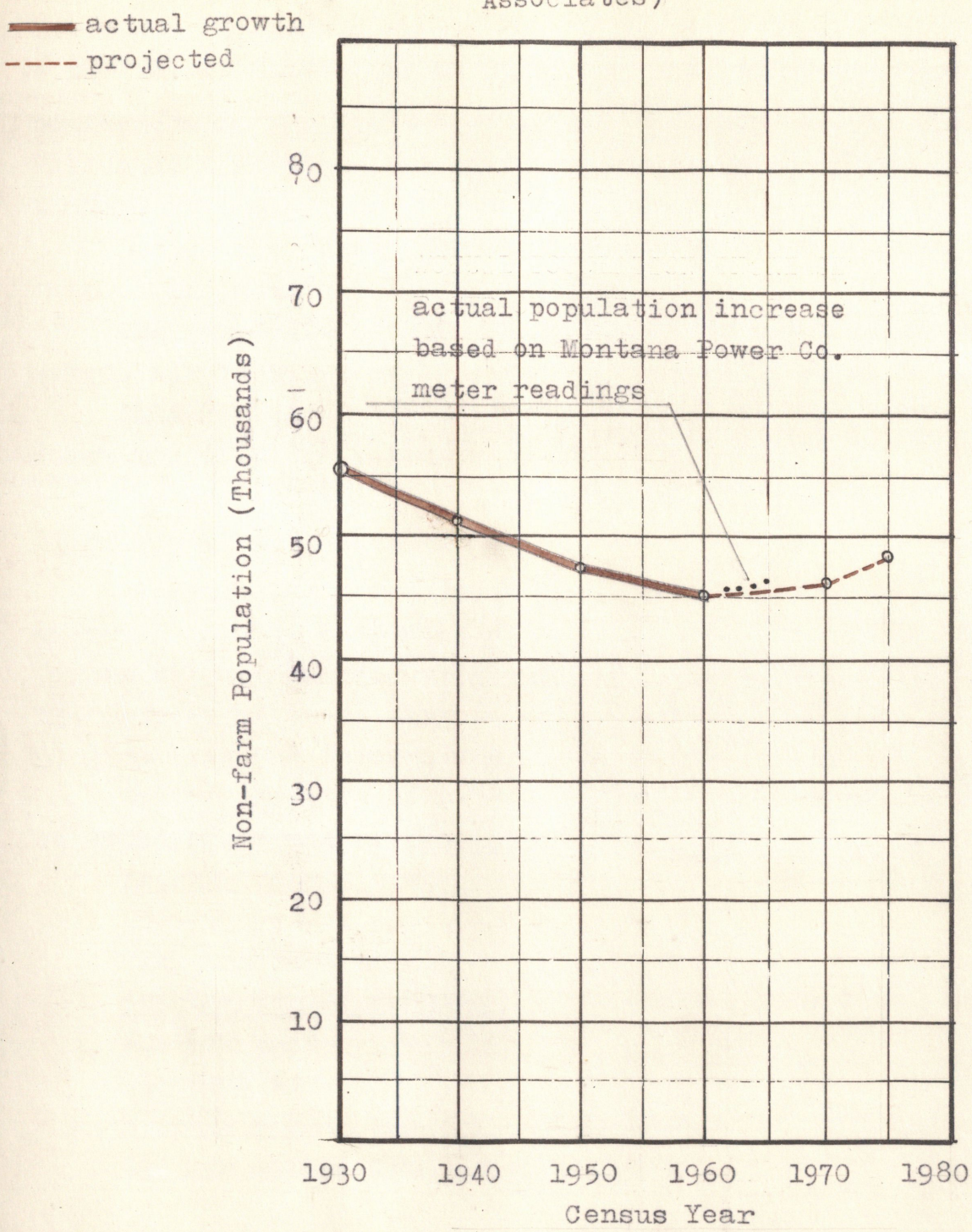


EXHIBIT 2-2

The City's newest and largest residential area lies to the south of the CBD on the Valley floor of Summit Valley. On the valley floor, Silver Bow Creek and its tributaries headwaters of the Clark Fork of the Columbia River. The Valley is flanked on the south and on the east by the Continental Divide.

Butte, the county seat of Silver Bow County, occupies much of the county's 716 sq mi area.

The mountains around the valley floor are heavily forested, although the floor itself is generally without trees.

Exhibit 2-3 on the following page shows the City's position within the valley.

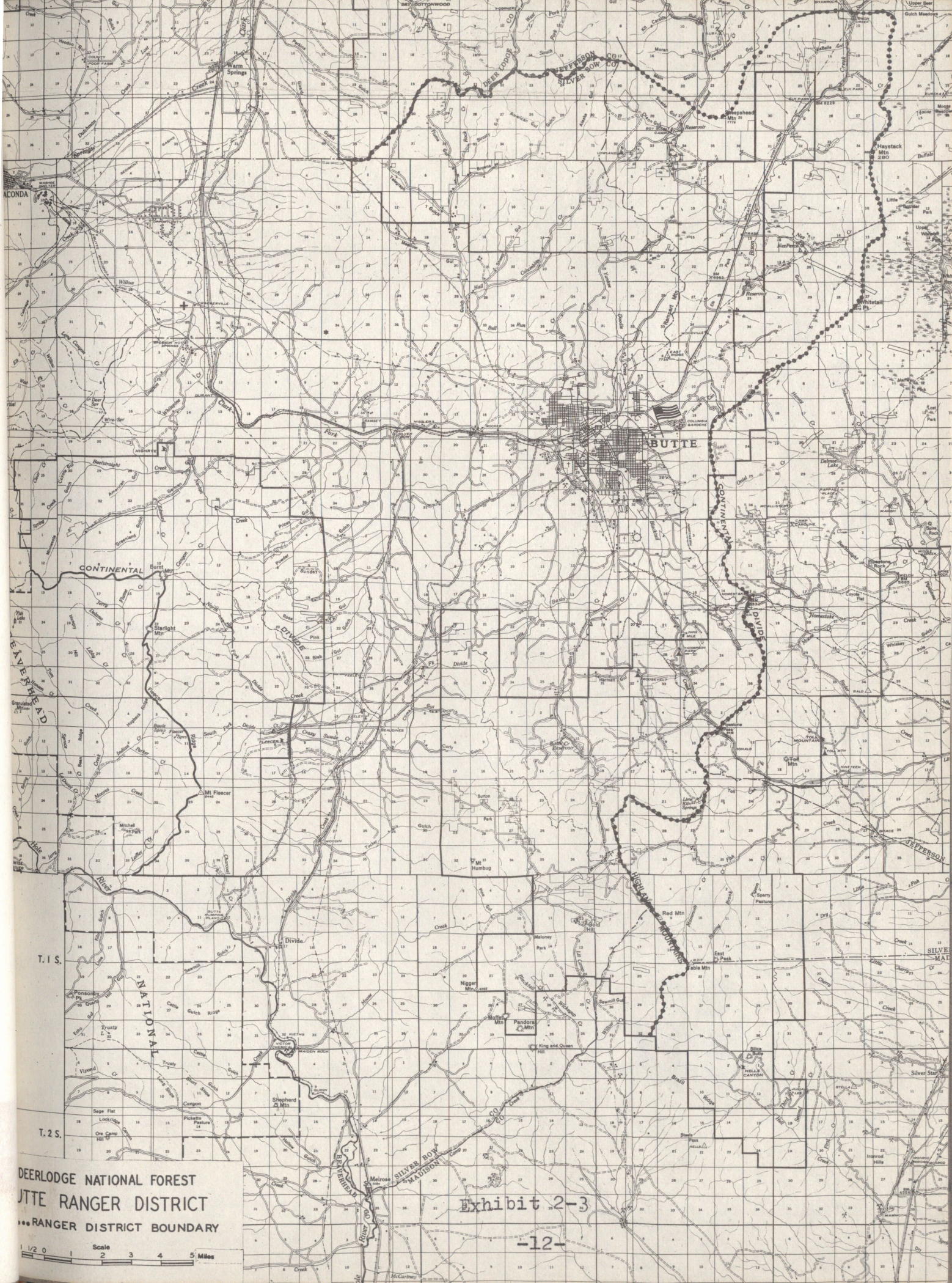
Climatological Conditions

Although Butte's climate is normally typical of Montana's over-all climate characteristics, the City frequently experiences several inordinately cold days during the winter. The coldest of these days on record was recorded on February 8, 1936 when the temperature reach 61 deg F below zero. (4:300)

Ordinarily, the City experiences the following ranges of temperature and precipitation:

Average annual precipitation (Two-thirds of which falls between May and September)	11.48 in per yr
Average annual snowfall (Seldom being enough to disrupt traffic)	50.00 in per yr
Average annual maximum temperature	52.6 deg F
Average annual minimum temperature	38.0 deg F

During the early spring, the wind generally blows from the northwest, and during summer and late fall the prevailing wind is normally from the south. The average growing season is 120 days. These facts were taken from (1:14) and (5 : 3)



DEERLODGE NATIONAL FOREST
UTTE RANGER DISTRICT
••• RANGER DISTRICT BOUNDARY

Scale
1 1/2 0 1 2 3 4 5 Miles

Exhibit 2-3

SITE CONDITIONS

SITE CONDITIONS

Site Description

The site for the proposed Butte City Hall is formally described as lots 6,7,8,9,10,11,12,13, and 14 of Block 38 of the Butte Townsite. These lots occupy the northwest corner of Block 38, and they are bounded by Park Street on the north and Main Street on the west. The location of the site is shown on Exhibit 3-1, page 14. A diagrammatical site plan is also shown on Exhibit 3-2, page 15.

Topography. The elevation of the site's northwest, northeast, southwest, and southeast corners are 5705.5 ft, 5696.9 ft, 5690.0 ft and 5687.2 ft respectively.

Utilities. Because of the site's central location in the CBD, the site has ready access to utility lines of water, gas, electricity, and sanitary sewers. See Exhibit 3-2 on page 15.

Vegetation. Furthermore, the site's central location is also the cause of the lack of any vegetation on the site.

Soil Conditions. Any topsoil on the site has been removed by previous excavation and recent demolition. The remaining rock is a granitic bedrock. (17:int)

Adjacent Environment. The site is flanked by several interesting pieces of architecture. The site's western exposure faces the Metals Bank building. The bank, very similar to the Guaranty Building in Buffalo done by Louis Sullivan, is a local landmark whose sophistication will require respect from its new neighbor. See photograph I in Exhibit 3-3 on page 17. Across Park Street, the Victorian Medical Arts building faces the site's northern exposure. It also is very typical of Butte's interesting architectural beginnings. See photograph II in Exhibit 3-3 on page 17. Because the hill drops away from the site to the south, the

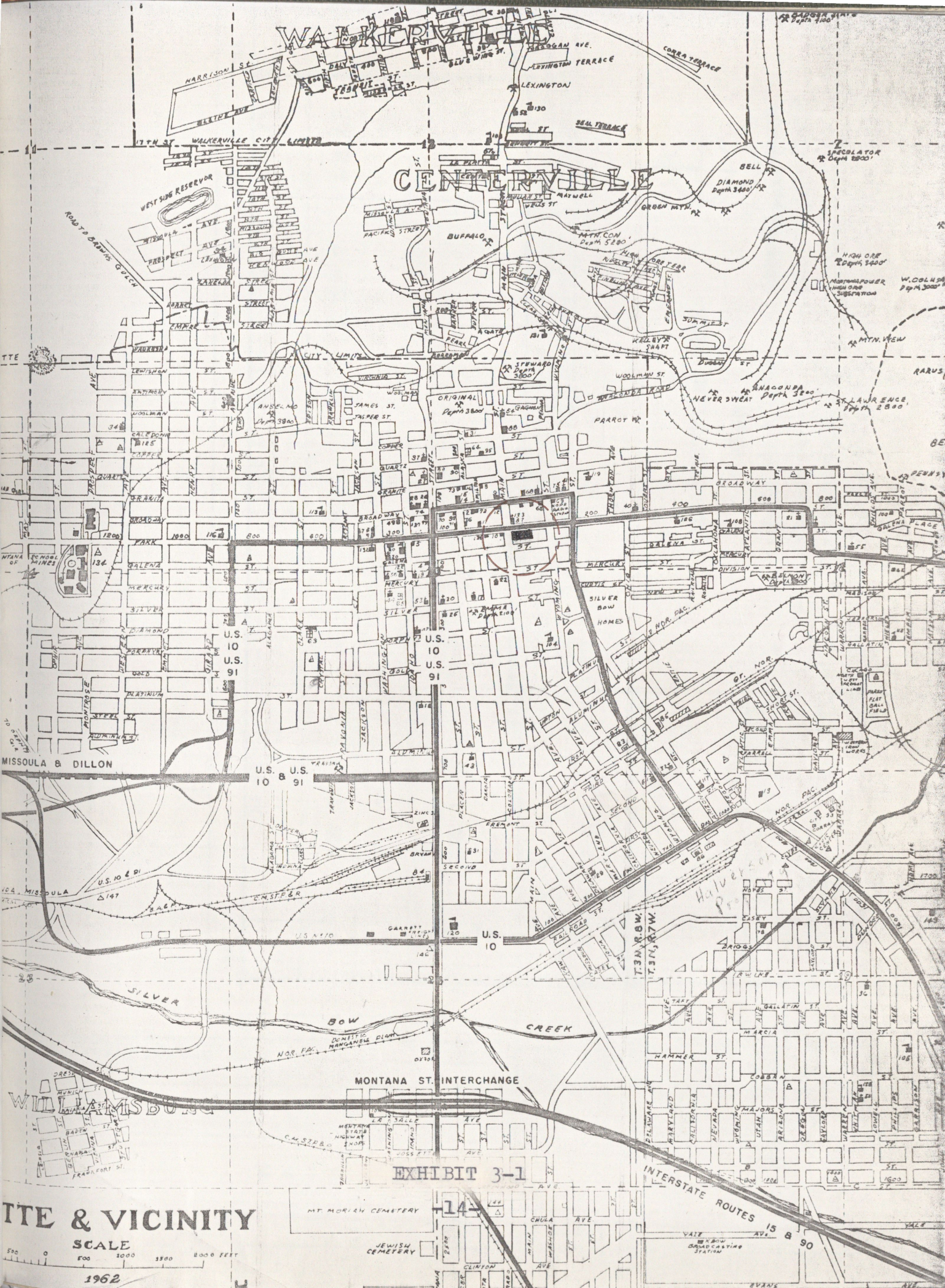
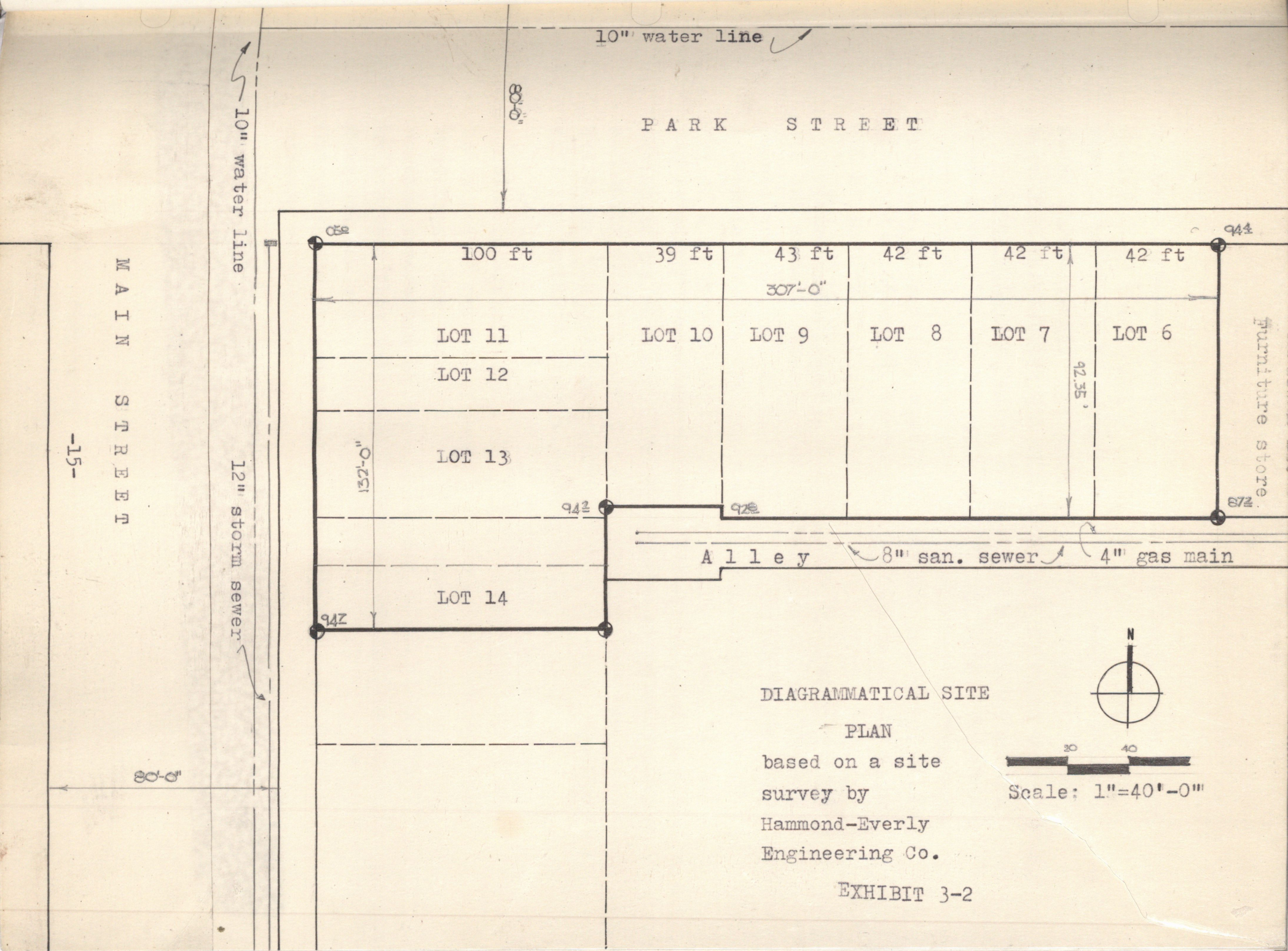


EXHIBIT 3-1

TTE & VICINITY

SCALE

500 0 1000 2000 3000 4000 FEET



DIAGRAMMATICAL SITE PLAN based on a site survey by Hammond-Everly Engineering Co.

EXHIBIT 3-2

the view in that direction includes the magnificent Rocky Mountains at the opposite end of the Summit Valley. That view is particularly enhanced when seen from positions above street level. See photograph III in Exhibit 3-3 on page 17. Park Street and Main Steet are shown in Exhibit 3-4.

Local Building Code. Butte's zoning ordinances are those prescribed in the National Building Code. The code's purpose is "...prescribing regulations governing the construction, alteration, equipment, use and occupancy, location and maintenance, moving and demolition of buildings and structures." (3: i)

Traffic Conditions. Existing traffic conditions in the CBD present several problems for this area, although recent traffic studies may have an effect on future operations in the CBD. At the present time, Park Street is part of a one-way couplet carrying traffic east. Exhibit 3-5 on page19. shows the position of this couplet in relation to the site and also the average daily traffic flow on nearby streets. According to City Planner, Leo Ballinger, the one-way couplet of Park Steet and Broadway will remain in that capacity. (14:int)

Insufficient parking space has also been a traffic problem in Butte's CBD. However, the Construction of a badly needed parking garage on Broadway has improved this situation. The location of this garage and the major parking generators in Butte's CBD are shown along with the proposed City Hall site in Exhibit 3-6 on page 20. Clearly, the off-street parking requirements of a new City Hall may be diminshed by the proximity of the new parking structure.

Photograph I. Metals Bank Building

Photograph II. Medical Arts Building

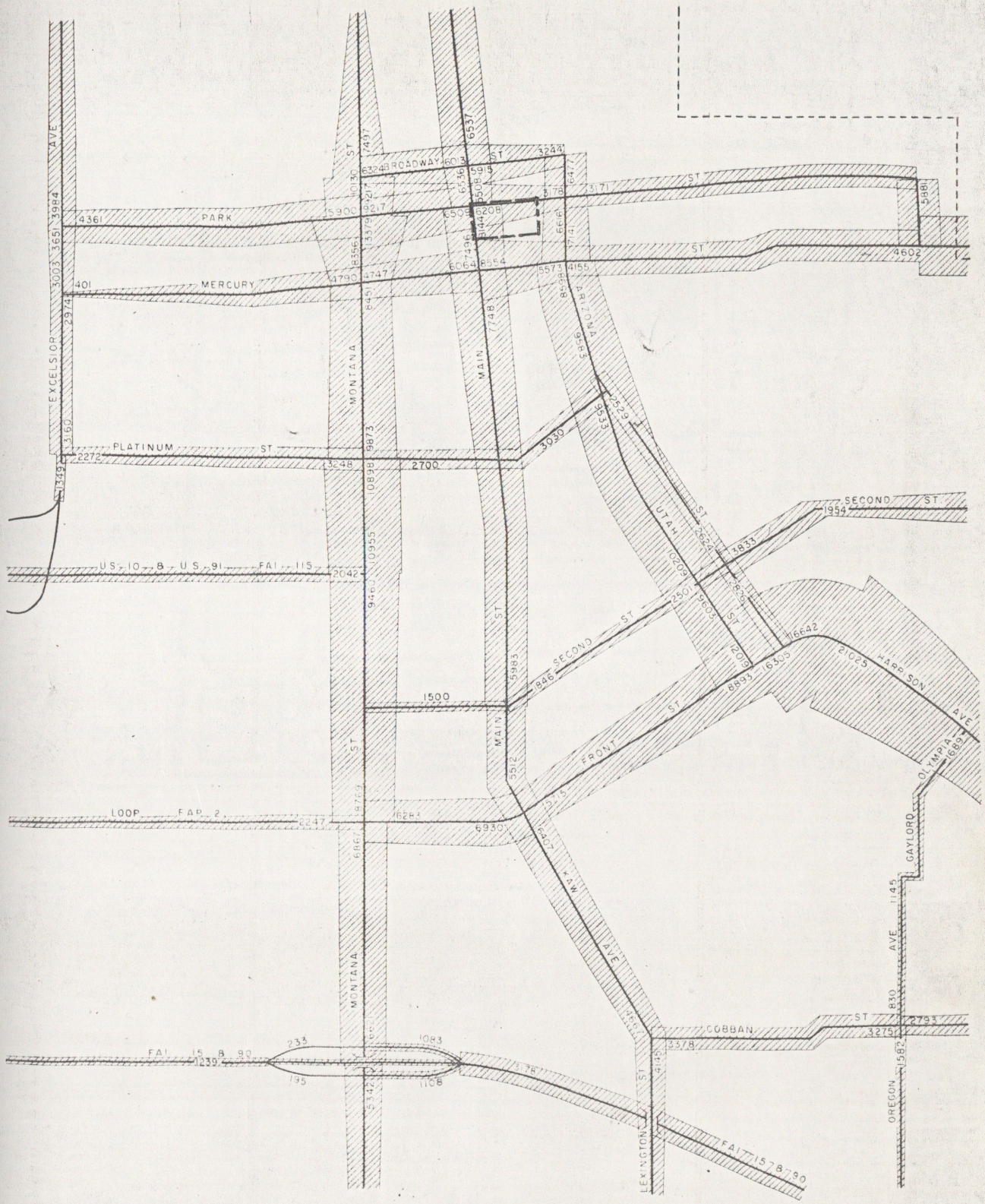
Photograph III. The Highland Mountains

Exhibit 3-3

View along Main Street

View along Park Street

Exhibit 3-4



prepared by
Montana State Highway Commission
for Butte Traffic Engineering Study,
May 1966.

ENLARGED AREA

BUTTE
TRAFFIC STUDY

AVERAGE DAILY TRAFFIC FLOW
MAJOR STREET NETWORK
1965

------ CITY LIMITS

10,000 17,000
SCALE FOR TRAFFIC BAND

EXHIBIT 4

EXISTING PARKING CONDITIONS
CENTRAL BUSINESS DISTRICT
BUTTE, MONTANA

- GARAGE PARKING
- PUBLIC PARKING
- PRIVATE PARKING
- METERED CURB PARKING
- CENTRAL AREA BOUNDARY
- PROPOSED PARKING GARAGE INFLUENCE AREA
- NUMBER OF PARKING SPACES

MAJOR PARKING GENERATORS

1. HENNESSY'S DEPARTMENT STORE
2. SEARS ROEBUCK & COMPANY
3. SAFEWAY GROCERY
4. METALS BANK
5. WOOLWORTH
6. MONTANA POWER
7. SKAGGS DRUG STORE
8. MINERS BANK
9. CITY HALL

N O R T H

SCALE IN FEET
0 100 200 300 400 500

CLARK, COLEMAN & RUPEIKS INC.
City & Regional Planning Consultants Seattle

BASIC SOURCE: MONTANA STATE HIGHWAY DEPARTMENT 1965

FIGURE 1

EXHIBIT 3-6

FUNCTIONS OF BUTTE CITY HALL

FUNCTIONS OF BUTTE CITY HALL

Butte Municipal Government

Under Butte's present charter, the City's citizens elect a mayor, sixteen alderment, and a School Board in municipal elections. The aldermen represent the eight wards of the City and act as the City's legislative body. The remaining department heads are responsible to the mayor for their authority.

The City's maintenance equipment is located in a separate complex in an industrial area, and such a complex is is not a requirement of this problem. Similarly, the School Board, Fire Department, and Public Library are semi-autonomous units whose operations are presently carried on in separate structures.

Some of the City's citizens recently advocated the merger of the City's government with that of the County of Silver Bow in a move locally known as City-County consolidation. Although this movement gained considerable impetus at its peak, it has apparently been successfully blocked by its opponents. Obviously this development, had it flourished, would have profoundly affected the feasibility of a new City Hall project. Although the movement has a large number of proponents, most knowledgeable sources feel the idea has been stopped and ahs virtually no chance of revival. (19:int)

Planning Condsiderations

The projected space requirements that are needed for efficient City operations in a new structure are the result of research among several sources of planning considerations. They include the following sources:

1. Preliminary proposals for a new Butte City Hall prepared by Walter Hinick, Architect.

2. Extensive surveys of existing conditions.

3. Interviews with department heads and key personnel concerning special space requirements, numbers and duties of City personnel, and future needs. See Exhibit 4-1 on page23. for the adjancy study.

4. Study of public visitor traffic.

5. Space standards adopted for adequate and equal space alotment among civic personnel of comparable responsibilities. See Exhibit 4-2 on page 24 for these specific standards.

The figures obtained from these considerations represent the most general type of planning criteria. The designer may feel, for instance, the symbolic importance of some spaces will require additional space for desired spatial effects. These cases are discussed under the Aesthetics section of this program.

Furthermore, these figures do not include "...general circulation, stairs, elevators, escalators, toilets, lobbies, porticos, or mechanical equipment spaces." (8:17) A common 20% circulation factor as been applied, however, to include inter-office circulation space.

Detailed Space Requirements

City Council. The City Council is composed of sixteen members who represent the eight City wards, each of which elects two of the members. The aldermen meet twice each month during the evening, and the chamber is unused during time in which the Council is not convened. The existing chamber seats 48 public visitors and the Council members in an area of approximately 2,050 sq ft which seems to be adequate. Howver, because of the symbolic importance of the City Council chambers, the present space may be reasonably increased to provide a more dignified space for the

DESIRED DEPARTMENTAL ADJANCIES

Essential

Primary

Secondary

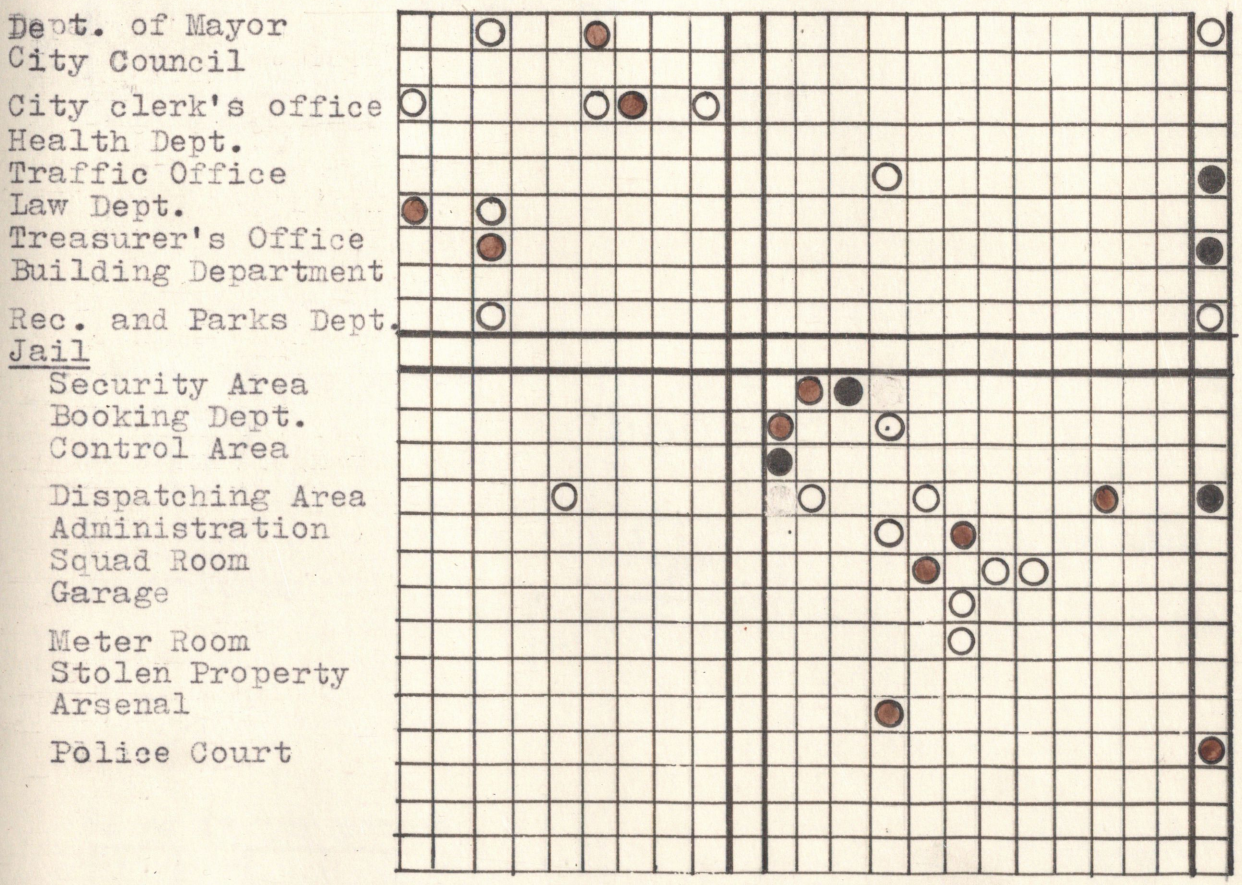
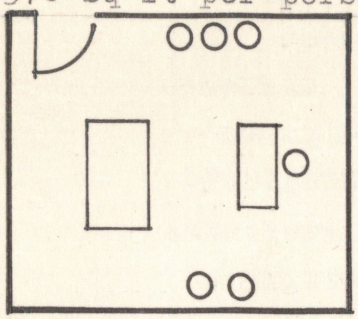


EXHIBIT 4-1

OFFICE SPACE STANDARDS

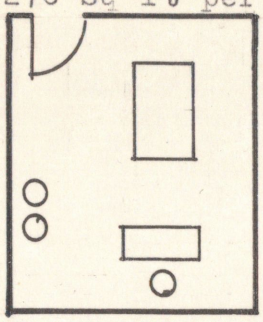
based on space standards prepared by the Government Center Commission for the city of Boston's City Hall competition

378 sq ft per person



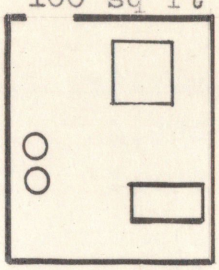
Department Head

270 sq ft per person



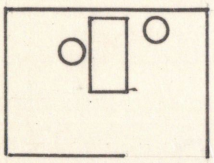
Deputy Dept. Head

180 sq ft per person



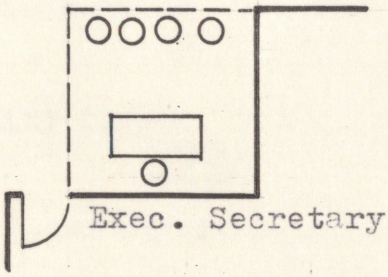
Division Head

108 sq ft per person



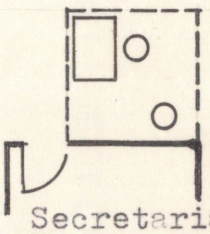
Supervisory

144 sq ft per person



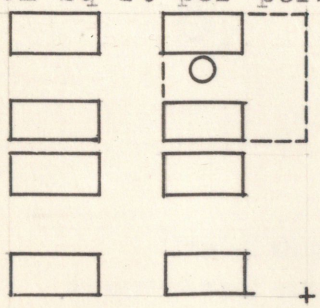
Exec. Secretary

72 sq ft per person



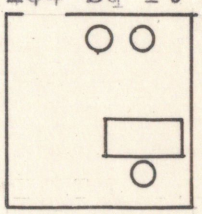
Secretarial

81 sq ft per person



Analytical

144 sq ft per person



Deputy Division Head

EXHIBIT 4-2

City's legislature. Figure "A" on this page shows the Council member's traditional seating arrangement which should be preserved.

City Council Space Requirements:

General:	Personnel	Each(sq ft)	Area(sq ft)
Council Chamber	23		1,000
Public Seating			1,400
Auxiliary:			
Committee Room			340
total personnel	23		
subtotal area			2,440
20% circulation factor			488
total area			2,928

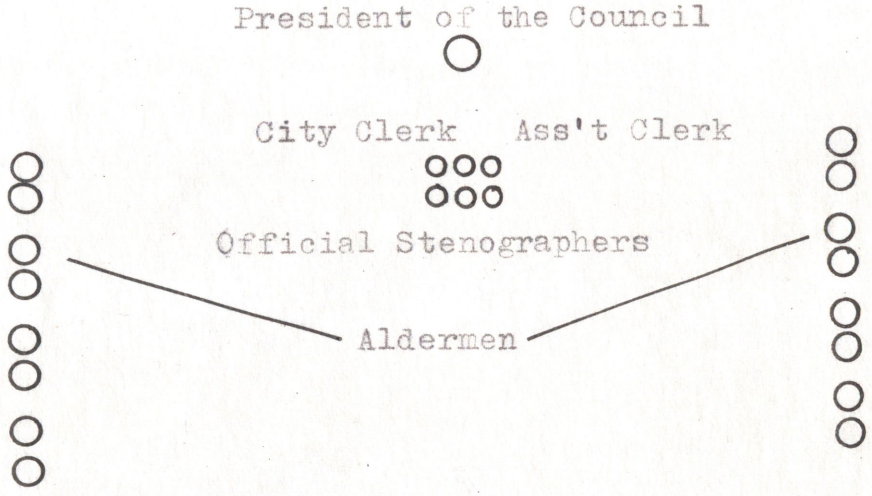


Figure "A"
City Council Seating

Department of the Mayor. The Mayor is the City's chief executive, and his department is symbolically important as a result of its prominence as the City's control center. The Mayor must co-ordinate the activities undertaken by the various City departments, confer with advisory groups, and represent the City when it deals with State and Federal government. He also constantly deals with distinguished

local leaders, and these visitors to his office are often numerous. The daily public traffic to his office may vay from 10 to 20 visitors. Frequently these visitors are groups who require the use of a conference room for as many as seven individuals.

Department of the Mayor -- Space Requirements:

	Personnel	Each(sq ft)	Area(sq ft)
Private and Semi-Private:			
Mayor's office	1	378	378
General:			
Executive secretary	1	144	144
Clerical	1	72	72
Auxiliary:			
Reception			325
Supply and files			150
Conference			250
total personnel	3		
subtotal area			1319
20% circulation factor			263
total area			1582

The Traffic Department. The Traffic Department experiences the heaviest public traffic among public contact spaces; this traffic amounts to approximately 100 visitors daily. The prupose of the Department is to receive and record traffic fines during normal business hours. Although the pay window is the busiest area within this department, recording and filing traffic records also requires a large portion of the Traffic Department's work.

Traffic Department -- Space Requirements: (next page)

The Traffic Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
General:			
Supervisory	2	108	216
Auxiliary:			
Vault			100
Pay Area			175
Records Storage			200
total personnel	2		
subtotal area			691
20% circulation space			138
total area			829

The Treasury Department. The Treasury Department pays all bills and demands owed by the City, and it is also responsible for the custody of all municipal funds. In addition, the Treasury Department assembles taxation data, audits expenditures and receipts, and issues licenses for commercial activites and City driver permits.

Because of these activites, the Treasury Department should be located in the areas of the heaviest public traffic flow. Public visitor traffic is estimated at 75 people daily. During the issuing of new City driver permits, however, this figure may reach a peak of 700 people. As a result, areas provided for the handling of long waiting lines are a planning consideration.

The Treasury Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
Department Head	1	270	270
Deputy Dept. Head	1	144	144
General:			
Secretarial	2	72	144

	Personnel	Each (sq ft)	Area (sq ft)
Auxiliary:			
Waiting			90
Counting Room			70
Vault			175
Work Room			375
Storage and Mailing			200
total personnel	4		146
subtotal area			1467
20% circulation space			293
total area			1760

The Office of the City Clerk. The City Clerk's office may be thought of as the City's "secretary". This department is responsible for the recording of City Council proceedings and the safekeeping of all official records including bonds, payrolls, bills, ordinances, and resolutions. According to the City Clerk, the office has approximately 10 public visitors daily. However, the interdepartmental visitors to this clearing house are numerous.

The Office of the City Clerk -- Space requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
City Clerk's office	1	378	378
Ass't City Clerk	1	270	270
General:			
Secretarial	2	72	144
Auxiliary:			
Reception			100
Files			200
Vault			200
Storage and mailing			360

The Office of the City Clerk -- Space Requirements: (cont'd)

total personnel	4	
subtotal area		1652
20% circulation space		330
total area		1982

The Recreation and Parks Department. The Recreation and Parks Department organizes and co-ordinates City Athletic programs and supervises the maintenance of the City's 15 skating rinks, four City parks, numerous school playgrounds and tennis courts. The Recreation Board meets at irregular intervals in this Department and requires conference space for the Board's nine members. Although athletic equipment and maintenance equipment are stored at the schools and the City Garage (Corral), storage space is required for clerical supplies and files. Four of the department's six employees are engaged in maintenance supervision, and they require only nominal office space.

Parks and Recreation Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
Department Head	1	378	378
General:			
Secretary	1	144	144
Analytical	4	81	364
Auxiliary:			
Conference			250
Files and Supply			200
total personnel	6		
subtotal area			1336
20% circulation space			267
total area			1603

The Law Department. The City Attorney and his assistant represent the City in legal matters confronting the municipal government. Some of these matters include title searches; prosecution in certain criminal proceedings; tax title foreclosures; and legal advice to the City's officials concerning contracts, bonds, etc. The Law Department has few public visitors to its offices, however, it works closely with the Mayor and personnel from the City Clerk's Office.

The Law Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
Department Head	1	378	378
Deputy Dept. Head	1	270	270
Auxiliary:			
Library			200
Conference			175
Reception			100
Files and Storage			100
total personnel	2		
subtotal area			1223
20% circulation space			244
total area			1467

City Engineering Department. The City's Engineering Department supervises 20 lighting districts within the City and is responsible for the compliance of building trades with plumbing, building, and electrical codes. Furthermore, the City's maps, plats, and engineering documents are in this department's safekeeping. Many of these documents are irreplacable and require vault-protection. Drawings requiring reproduction are reproduced by private facilities outside

the department. Public traffic to this department is light; and as a result, the department does not need to be located within heavy public traffic areas.

City Engineering Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
City Engineer	1	270	270
Plumbing Insp.	1	180	180
Electrical Insp.	1	180	180
Building Insp.	1	180	180
General:			
Secretary	1	72	72
Auxiliary:			
Drafting			275
Vault			290
Drawing storage			300
Supplies			75
total personnel	5		
subtotal area			2002
20% circulation space			400
total area			2402

The Health Department. The Health Department of the City carries on limited operations which require minimal office space. However, the health records and vital statistics compiled by this department require considerable storage area. This department attracts very little public traffic.

The Health Department -- Space Requirements:

	Personnel	Each (sq ft)	Area (sq ft)
Private and Semi-Private:			
Department Head	1	270	270
General:			
Records Storage			200

total personnel	1	
subtotal area		470
20% circulation space		94
total area		564

General Spaces: Some operations occupying considerable space in a new structure are difficult to assign to specific departments with the City Hall. Although many such operations have been excluded from general planning criteria, such as those listed under Planning Considerations on page21, the following operations occupy significant spaces.

General Spaces -- Space Requirements:

	Area (sq ft)
Central Office Supply	300
Loading and Receiving	375
Custodial Storage	400
subtotal area	1075
20% circulation space	215
total area	1290

Technical Provisions

For the purpose of establishing general planning criteria, only rule-of-thumb estimates may be applied to the spaces needed for mechanical equipment at this stage. One of these rules says 5% of the total bulding area should be devoted to mechanical functions such as heating, cooling, pumping, and air conditioning. The figures resulting from application of this rule will be the general criteria for this program.

Mechanical Area Calculations:

5% of 17408 = 870 sq ft

The designer will also assume that steam systems may be applied to both heating and air-conditioning tasks. These systems may be placed in a sub-surface location or in a penthouse arrangement. Further space refinements in this area, as in the others, will be the result of extensive professional advice obtained during the design and planning stages.

Butte City Hall General Space Requirements

	Area
City Council	2928
Department of the Mayor	1582
Traffic Department	829
Treasury Department	1760
Office of the City Clerk	1982
Recreation and Parks Department	1603
Law Department	1467
City Engineering Department	2402
Health Department	564
General Spaces	1290
subtotal area	17408
5% for Mechancial Spaces	870
total area	18,278 sq ft

FUNCTIONS OF BUTTE CITY JAIL

General Operations of the Butte City Jail

The general operation of the City's Jail may logically be divided into two categories. The first category is criminal detention, and the second is law enforcement. Although these operations are directly connected, each one merits individual planning considerations as physically different operations.

Criminal Detention Operation of Butte City Jail

Planning Considerations. Several sources contribute the information needed to establish general planning criteria for detention-area programming. These sources are the following:

1. Surveys of existing conditions in the Butte City Jail
2. Interviews with key personnel
3. Preliminary proposals for a new Butte City Jail prepared by Walter Hinick, Architect.
4. The adoption of space standards for prison space alotment to insure optimum "... Security, Safety, Sanitation, and Segregation." (4:18,20,21,50)
5. The adoption of space standards for adequate and equal space alotment among personnel of comparable responsibilities. See Exhibit 4-2 on page 24.

The Security Area

The security area should be separated physically from other police operations as much as possible in order to avoid control complications and escape opportunities introduced by non-security operations. Many authorities advocate a separate structure for the security area; however, in smaller jail operations such as Butte's this may not be practical. In any case, it is essential to keep security operations on a single level. (4:13)

FUNCTIONS OF BUTTE CITY JAIL

Furthermore, the security area should not be located at a sub-surface or basement level for several reasons. These reasons involve difficulty in providing uniform heating, insufficient natural light and ventilation, and vermin-control. (4:17)

A minium of blind spots, stairways, and other obstructions to the visibility of supervisory personnel are also essential in this area.

The security area should be controlled, as a whole, by one locked door immediately adjacent to the control center.

Arsenals or any storage of weapons should be removed from the security area.

The following functions should be the only operations included in the security area.

Cells. Cells should be specifically organized to accommodate several types of prisoners. They include the follwing types: juveniles, adult males, adult females, inebriates, and insane or emotionally agitated prisoners. A major planning consideration dictates appropriate segregation for some types of prisoners. Female prisoners, for example, should naturally be separated from the sight and sound of male inmates. Juveniles should be similarly separated from other prisoners. Although a sufficient physical distance is difficult to acquire for this purpose, masonry or concrete walls may be used to eliminate sight and sound communication. Furthermore, insane prisoners should be confined in a cell equipped with padding and solitary location. The insane inmate, or the narcotic, should be the closest prisoner to guard or supervisory stations. (4:9) (13:int)

Cell--Space Requirements:

The following space requirements were based on the space considerations mentioned in the Planning Considerations on page . However, specific per-inmate square footages were taken from (4:21).

	Personnel	Units	Unit Area	Ttl.Area
Adult male:				
one prisoner	3	3	40	120
four prisoners	8	2	64	128
six prisoners	12	2	108	216
Inebriates:				
twenty prisoners	20	1	256	256
Adult females:				
four prisoners	4	1	64	64
Juveniles:				
four prisoners	8	2	64	128
Padded cell:				
one prisoner	1	1	40	40
total capacity	56			
subtotal area				952
20% circulation space				190
total area				1142

Dayroom. The dayroom area should be included within the security area to provide a space in which privileged prisoners may spend day-time hours. Letter-writing and limited pastime activities take place in this area, and the space is monitored by an inmate known as a "trustee". Eating utensils are washed in the dayroom; therefore, a sink and limited cabinetry should be provided. Food preparation, however, takes place outside the jail area. Prisoners' showers and a lavatory are usually included in this area also.

Dayroom -- Space Requirements:

Personnel does not include insane or inebriated inmates.

Personnel	Each	Area	Showers
35	16	560	4
subtotal area		560	
20% circulation space		111	
total area		671	

Visitors' Corridor. The visiting area should also be located within the security area. In many security floor plans, this area is conveniently located next to the day-room. (4:53-60) In this way, prisoners may be separated by security fenestration from the visitors in the adjacent area, and extra space for prisoners' receiving visitors is unnecessary.

Visitors's Corridor -- Space Requirements:

Personnel	Each	Area
6	25	150
subtotal area		150
20% circulation space		30
total area		180

Booking Area. The booking area must accommodate operations such as fingerprinting, booking, photographing, prisoners' storage, records storage and filing; all these operations must take place outside the security area. The booking area is supervised 24 hours each day by at least one officer, and the area is most suitably located apart from any public access. (4:68) The extensive filing system in this area dictates a large amount of storage space. Before entering the security area, the booking area is the prisoner's last stop.

The control area is a supervisory station immediately adjacent to the only means of access to the security area. This station may be supervised by personnel from the booking area; therefore it may well be considerd as an integral part of the booking department. Preferrably, this space is enclosed by glass in order to insure safety with maximum visibility and control. Closed circuit television monitors, electric lock-control panels, security keys, duty rosters, and inmate lists are located within this space. The control

area should also be a terminus for intercom communication with the security area.

Booking Area -- Space Requirements:

	Personnel	Area
Fingerprinting		100
Photographing		100
Dark Room		125
Files Storage		300
Property Storage		120
Information		100
Jailor's Office	1	144
Control Room	1	125
total personnel	2	
subtotal area		1114
20% circulation space		223
total area		1337

Technical Provisions

Again the designer must assume material selections will be left to decisions made after more consideration in the design stages. However, some general axoms may be established for preliminary investigation concerning materials and mechancial considerations.

Obviously, perhaps, the more fire-proof type of materials should be used in jail construction. Furthermore, the durability, maintenance, and space-saving qualities of steel plate used in cell construction may suggest the use of this material rather than reinforced concrete. Similarly, these same factors may make concrete a consideration for use as a floor material within the jail area.

Lavatory fixtures should include a basin with a drinking bubbler and a toilet in cell spaces.

The bacteria-killing effects of natural light and ventilation are also to be desired in the security area. However, "...most authorities agree 500 cu ft of air space per inmate is adequate, if forced air ventialtion is provided." (4:20)

Heating and cooling in the jail area may be generated by steam facilities in the City Hall complex. In any case, these facilities should not be placed with in the security area.

Law Enforcement Operation of Butte City Jail

Municipal police operations not connected with the detention of criminals are included under this general heading; more specifically, they include public contact spaces, police administration, storage spaces, and criminal investigation areas.

Planning Considerations. See page 21.

Dispatching Area. This space is the central control area for the law enforcement department. It acts as a communications center for officers in the field, personnel with the department, and public visitors to the City Jail. For these reasons, this area must be centrally located among the other operations in the department. It must house teletype, radio, and clerical equipment. Counter-space is also required as part of the dispatching area's public contact function. According to Butte's Assistant Police Chief, a "U"-shaped arrangement of this equipment around the dispatching officer would be very satisfactory. (13:int)

Dispatching Area -- Space Requirements:

	Personnel	Area
Reception and waiting		125
Dispatching	2	380
personnel	2	
subtotal space		505
20% circulation space		101
total area		606

Administration Offices. These offices represent the executive portion of the City Jail's operation. The Chief of Police and the Assistant Chief are responsible for these positions and determine general department policy as such. Teir office duties entail large amounts of clerical work and public lieason duties.

Administration Offices -- Space Requirements

	Personnel	Area
Chief of Police	1	270
Assistant Chief of Police	1	180
personnel	2	450
subtotal area		450
20% circulation factor		90
total area		540

Squad Room. Within the squad room, activities range from law enforcement processes to officer's storage and hygiene. Law enforcement processes require space for briefing, report writing, and general meeting. Duty rosters and daily schedules are also posted in this area. Furthermore, officers use the area for locker storage of civilian apparel and personal effects. A small kitchen and shower facilities are necessary items in the squad room area.

Squad Room -- Space Requirements:

	Personnel	Each	Area
Briefing and Meeting			225
Report Writing			120
Lockers	25	14	350
Showers			200
Kitchen			75
Storage			100
personnel			
subtotal area			1070
20% circulation space			214
total area			1284

Interrogation Room. This room is used for the questioning of criminal suspects and witnesses. Its location should be well-removed from public sight or hearing. Otherwise, the interrogation room simply contains chairs and sufficient spaces for recording and polygraph equipment.

Interrogation Room -- Space Requirements:

	Area
Interrogation Room	180
subtotal area	180
20% circulation space	36
total area	216

Storage Area. Several required spaces within the law enforcement section of the City Jail should be occupied by the equipment and materials needed for law enforcement. These spaces are the garage, arsenal, stolen property storage, and the meter room.

The Butte City Jail's garage is used for the parking of the City's five patrol cars and four motorcycles. Although all of these vehicles are rarely parked at one time, the designer should allow for such a possibility and the acquisition of several additional vehicles in the future. Only the most limited types of vehicle-maintenance take place in the garage.

The arsenal's function is simple: it is that of storing weapons necessary for effective and safe law enforcement. This area should be kept under lock and key and away from the public's view.

The meter room also requires large amounts of shelved storage space; however, the meter room must also include work-space for the repair of meters and the storage of the necessary tools.

The area needed for stolen property storage may be divided logically into two necessary types of storage.

The varying number of stolen bicycles (usually about six) should be stored in suitable racks. The other types of stolen property are often of a smaller nature and can be stored in cabinets.

Storage Area -- Space Requirements:

	Area
Garage	1700
Arsenal	100
Stolen Property	210
Meter Repair and Storage	200
subtotal area	2210
20% circulation space	442
total area	2652

Police Court. Because of the Police Court's judicial capacity, it is difficult to include the court with law enforcement operations or with City Hall's processes. The court does have some connection with the City Jail, however, in one respect.

Prisoners in the jail must be tried, in most cases, in the Police Court, and the transportation of prisoners outside the security area should be kept to a minimum. Furthermore, the prisoners' entrance to the court should be separate from that of the general public's.

The judge's office or chambers should be adjacent to the the court room.

Monday-morning sessions in the court generate the largest groups of litigants, and the existing space seems to be inadequate during these sessions with a seating capacity of 38 people. As a result, a seating capacity of 50 people is recommended. Space requirements based on this capacity are tabulated on the next page.

Police Court -- Space Requirements:

	Personnel	Area
Courtroom		1700
Judge's office	1	200
personnel	1	
subtotal area		1900
20% circulation space		380
total area		2280

Butte City Jail General Space Requirements

	Area
Detention Spaces	
Security Area	
Cells	1142
Dayroom	671
Visitors' Corridor	180
Booking Area	1337
Law Enforce ment Spaces	
Dispatching Area	606
Administration	540
Squad Room	1284
Interrogation Room	216
Storage Area	2652
Police Court	2280
total area	10,908 sq ft

ECONOMIC CONDITIONS

ECONOMIC CONSIDERATIONS

Construction Costs

Obviously, to determine detailed cost estimates at this stage of research would be impossible. However, if certain general assumptions are made, some rapid, general cost estimates can be made.

One of these methods relies on cost estimating figures presented in the Marshall Valuation Service table on Calculator Figures for Public Buildings.

Before one can apply their figure, however, the follwoing assumptions must be made:

1. Assume a class "B" structure having a re-inforced concrete frame and concrete floors and roofs. (11:1/6)
2. Assume a structure with, "Highly ornamental decoration, marble, granite, high-quality metal and glass, plaster, marble trim, terrazzo and vinyl tile floors, best lightling, tiled restrooms, and many fixtures." (11:1/65)
3. Assume a six-story building.
4. Assume the classification of the jail and its equipment to somewhat the same as those in a class "B" structure.

The Calculator estimate for these assumed classifications is $30.10 per sq ft of total floor area, which has been estimated at 29,186 sq ft.

However, 1% must be added to this figure for each story over three; thus, 3% is added. Furthermore, a local multiplier of 1.04 must be applied to this calculation to allow for local variations in labor wages, etc.

As a result the final rough estimate is:

$30.10 per sq ft x 29,186 sq ft = $878,498.00

.03 x $878,498.00 = $26,354.00

($878,498.00 + 26,354.00) x 1.04 = $908,546.00

Source of Funds

Naturally, the burden of financing a new City Hall falls ultimately on the shoulders of the City's taxpayers.

In order to successfully obtain the approval for a new City Hall by the acquisition of the necessary funds, the City government must present the electorate with preliminary estimates of the total project cost and maintenance costs. Then, a bond issue must be voted on and approved by the City's citizens.

AESTHETIC CONSIDERATIONS

X

AESTHETIC CONSIDERATIONS

In this section of the program for a new Butte City Hall, I would like to write as familiarly as possible and discuss those things which I think this building should be. First, however, I would like to say a few things about my thoughts as an architectural student at the beginning of creative development, and perhaps I will generate some axoms for future elaboration in the process.

I am an "image-designer"; this term distinguishes my design process from the other general type of design process, "functional-designing". My interpretation of the first term is simply that with only rough, general planning criteria in mind, I begin conceiving the actual physical shape of the project at hand. The functional-designer, on the other hand, works on the planning or functional aspects of the structure in detail, and then begins to let that information dictate appropriate shapes. I return to these functional details, however, only to form them to meet the rigors of my images. Because of this process, one can assume two things. One assumption is that I must rely on a creative judgement based on an item not so concrete as a specific arrangement of functions or an exact system of design rules. This item is what I call "intuition", and I will discuss its relevance to the Butte City Hall image later in this section. The other assumption one may make, however, is that I may have already begun to conceive the physical shape of the Butte City Hall after having composed a program of general planning criteria in this program. This is the nature of the image-design process.

Consequently, the reader may have realized, it will be very easy for me to begin discussing the propriety of certain design decisions that I must begin with at the outset of more

detailed designing. This is because the intuition I mentioned earlier has already made many general design decisions. I may now wander only slightly within this framework of preconceived aesthetic judgements. The intuition that gives me these criteria is what makes the creative person a humanist or what might be called an extremely well-developed sensor. Furthermore, intuition is that tool which allows the architect to rely on those decisions he makes instinctively about man and his reactions to the stimulus of architecture. The architectural-aesthetician does not require advice from the behavorial sciences as to what stimulii generate which reactions in the human beings who live in his work. This is because he is a man, and hopefully by the nature of his profession -- the most sensitive type.

Perhaps I can describe more accurately how the architect develops such a wonderful tool. I will first concede, however, that the mystical quality of this basis for creation is a fact. Because the architect must make decisions for all men, he tries to become a man who is very sensitive to those creatures and their feelings about what they see and how they live. Many times these are things men themselves never consciously evaluate. But the architect must be that special type of man who does. This means his "antennae" are always fully extended to the environment about him, and the student-aesthetician consciously asks himself why he is depressed, why he is excited, or why he is indifferent to the many situations which confront him each day. This questioning soon becomes a habit for the architect; however, the small lesson in beauty he learns each time during the unconscious act enriches that sense which I have called "intuition".

Furthermore, the thing laymen term "architecture" is the architect's transcription of this sensitive personality into physical terms. I don't mean that architecture is a recognizable image of that personality; I mean that because of the decisions which the architect makes about the

things he sees, the structures he creates have to be an indication of his aesthetic complexion.

I am hoping, of course, to relate more about what can be said to be beautiful by describing a personal approach to the making of beauty.

Perhaps, then, I may proceed with the effects my intuition has had on the "images" involved specifically with a new City Hall. The greatest influence on the images seemed to come from the unique architecture which is very close to the proposed site and the unusual personality of the typical Butte citizen. Each of these influences seemed to say the same thing. That is, the building must be constructed of traditional materials. Highly sculptured motifs in pre-cast concrete would be dangerously "mod". Fashion or "gimmick" will have no place here, if indeed they have a place anywhere. Instead, the building must be one of which Butte's people are not afraid. The City's older citizens, who spend warm evenings seated in front of local taverns, must not be reluctant to do the same thing in front of their new City Hall.

In somewhat the same way, the Butte City Jail must be indicative of its function as a penal space. However, that stark indication of punishment might easily be a very beautiful symbol not at all incompatible with the office spaces in the City Hall complex. The difference between the two operations must nevertheless be made clear.

Furthermore, the high, multi-storied buildings surrounding the site create influential spacial boundaries for the site. This has been interpreted as a command for a sympathetically proportioned multi-storied structure that is noticeably erect among the stately companions nearby. Moreover, these same Victorian structures dictate that a new City Hall be strictly divorced from any recently developed commercial attachments such as glossy curtain walls or other stream-lined features.

Naturally, the interior of the City Hall should contain spaces that suggest the dignified stature of a building in which the law is made and administered. More specifically, I refer to the possiblity of the rotunda spaces within many older civic structures which effectively create the aforementioned sensation. Similarly, the symbolic offices within the City Hall operation such as the Council Chambers and the Mayors Office should generate a stately, civic feeling. This might be done through the expansive handling of these spaces and a rich, provocative handling of materials such as wall veneers, floor covering, etc. The designer must not forget, however, the industrially-bred citizen who may react unfavorably to overly-posh settings.

In summary, I want to indicate the very exciting nature of a problem that attempts to honor the old, yet remain very "now" and in the same spirit, combines the penal nature of the jail with the proud nature of the City Hall proper. All these things produce exciting and limitless substance for the operation of the "intuition" which I value so highly. I cannot conclude, however, without making an apology for the inadequate way in which I try to verbalize about the non-verbal. I can only say, as nebulous as they may seem, things such as beauty exist and can be perceived by man.

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Addenda to Part I of an Undergraduate Thesis in Architectural Design by Pete Kommers

Addendum No. 1 - Traditional council seating, pg. 25

The city council seating which was assumed as "traditional" is apparently a little less than that. In a recent interview, the mayor said the position of minor officials in front of the president's podium might be a slight hindrance; he saw no necessity for preserving the former arrangement.

Addendum No. 2 - Memorial Library and Museum

The interview with mayor Powers subsequent to the submittal of this thesis also resulted in the addition of a memorial library and museum to the program. The mayor projected a space for the display of valuable municipal historic documents and relics of past administrations. Because the collection would be relatively small and under restricted hours, 800 sq. ft. was estimated as an adequate space for this limited collection.

Addendum No. 3 - Unassigned space

The mayor also expressed a feeling that additional space might be advisable in a new structure for newer government offices. The mayor said some of these might include space for the newly - formed City-County planning board, Civil Defense, and Fire Department officials. Four similar spaces at 400 sq ft apiece equal 1600 sq ft.

Addendum No. 4 - Space standards, pg. 24

I found in detailed designing that some assumptions made in the research stage were inadequate beyond general planning for sev

several reasons.

Standards like those on pg. 24 are somewhat unsuitable for the less rigid system of personnel-occupancy of Butte's city employees. Most department heads work more closely with office employees in a less stilted space than those adopted in the thesis.

Furthermore, estimates based on existing space were somewhat large due simply to the inefficient storage and circulation arrangements in the existing spaces. These changes occured mostly in spaces where storage is a large item. The City Clerks's office and the Treasurer's office are two of these.

I felt these differences should be pointed out; however I had thought such would be the case when the spaces were designed for their operations and the different individuals who would use them.

Addendum No. 5 - Site Plan, pg. 15

A recent interview with city planner, Leo Ballinger of Butte, slightly alters the site plan shown in the thesis. Mr. Ballinger felt that Lot 14 which is presently occupied by an older building, would become the western terminus of the alley behind the site. At present, the alley is a dead-end. Mr. Ballinger said it may be more logical to plan for this eventuality due to its imminence. As a result the available land for building will not include Lot 14 as it is shown on pg. 15.

A Summary on an Undergraduate Thesis in Architectural Design by

Peter C. Kommers

June 7, 1967

I am satisfied that what was said earlier about what this project must be has been fulfilled in the design stage. The image came true, remarkably enough, by the intuitive process discussed in the thesis research.

The building fits; it belongs only to Butte, and it was determined by the unusual environment in which it was to exist.

If it belongs to Butte, my only concern is whether or not the building belongs to architecture. If architecture is the result of well executed image processes , then I should not feel so uneasy. If architecture is the experience of this space, I would like to describe my city hall in that way. Later in the paper I would like to talk about what may be the alternatives if this experience is not architecture.

The experience is to live in a very industrial city and to do two things in or about the city hall. If you are on business, you enter from the public exterior spaces with little transition to the rotunda or lobby space, whose floor surface and natural lighting differ little from those same elements on the exterior. Now, however, you are sheltered and see the outside through lace that you have seen before where you work or in places that affect your business. In order to move up in the structure, you must move out

of the rotunda of light and space to the darker and smaller feeling of the vertical circulation tube. When you leave this transportation at your destination, you face focal boxes of concrete which direct your sight back across the temporarily lost rotunda. Furthermore, the boxes focus you on a part of that facade previously mentioned and on a portion of a familiar landmark across Main Street, the Metals Bank. Nevertheless you feel you are very much contained by the place of your business because of the "closed" nature of a viewing box.

The materials around you are familiar ones. There is no need to feel uneasy about plush surroundings bordered by large pieces of glass and pristine surfaces. Instead you are faced with the same masonry that was removed when the High Ore pumping station, along with several of its companion structures, was dismantled at the cost of an expanding open-pit mine.

The plan of the area devoted to city government seems to feel equally solid. Arranged along the lateral axis of the site, the service requirements of the law enforcement agency are exposed to the access of the alley and three separate routes out of the site,

Furthermore, the marker which distinguishes those places of public use and leisure emphasizes the sense of place and the symmetrical power of the building. If your purpose in this area is to rest or view the people on the city's busiest streets, then you may contemplate their activity on terraced surfaces of exposed aggregate broken by lively bands of brick paving and random joints.

The durance vile of the city's jail is also a different, yet apropos, space. Punishment cannot be less than that in a space built for that purpose. That treatment, however, should not induce the discomfort of poor sanitation, light, and ventilation; the loss of freedom is the purpose of the space. The individual lights over each cell marks the presence of punishment to those who see those lights burning from the buildings above, yet light is admitted for those below.

If I can approach an indication of the unlimited impressions and experiences induced by a single microscape, this description would be that.

When I disussed the logic and propriety of these things before this project was reality, I would have had little trouble calling it architecture; now, however, that nomenclature is a problem for me.

The alternatives I mentioned seemed , for description's sake, to fall in two typical ways; each of these ways was experienced by me during my study of design only recently.

The first comes from amazement, I think, at the clear distribution of logic that is allowed by the philosophy and spirit of a geometrical approach to architecture. This spirit should not perhaps be named in the way I have just named it; however the appropriate name of the thought I have escapes me. At any rate, this spirit guided the building of a bridge in our school by a man who knows this spirit and speaks of it well.

X

Apparently, what I miss most in my work is the comfort or security of having such a great truth behind me so that I would always know that if the basic logic of knowing of a square and a line were followed geometrically, serious doubting after the process would never be a problem. This type of order has to be a very secure basis from which to work and upon which to build with continuing logic about the nature of many things.

I begin to feel the second alternative when I speak of, or at least contemplate, the work of Le Corbusier. The immediate fascination, I suppose, is merely with the power of shapes. This, however, is not so immediate when I consider the five years it required before I learned to see well enough to realize that power. Still, the understanding of this particular genius's logic is waiting for me to understand it. I can say, however, the distribution of logic can no longer rest in a natural development of geometry. One feels that the logic and geometry are there but that the powerful interpretation is the arbitrary thing which is so uncomfortable for me. Now, if the system follows just as naturally and as irrevocably for this man as the geometry does for the other, I have to suppose another thing. That is, I must believe that this second example of what may be called architecture is done by a man whose state is to me as sainthood is to a christian. Furthermore, if what I supposed is true, these things that I make with my image or intuitive process can in no way be a beginning for Le Corbusier's type of fruition. If this man, however, also stands on a kind of intuition, then there is

a way to know of architecture without the reliable associations of the first alternative.

I realize now that what I have just written may seem very sad (or unintellibible because of the way I speak of the thought,- a higher thing) for one who is leaving the formal process and should perhaps be more solid about his search for creation. I think, however, that this only means that whatever may be learned about the judgement on architecture, mine and that of others, will have to be fought for very hard but very happily. Perhaps it takes five years of realization to qualify for this fight. Some never qualify.

My conclusion is that the cleverness of my actions on this thesis may be somehow realized as architecture when the connection can be made between the two spirits I have mentioned and that nebulous personality I call my own.

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