

MINUTES OF THE MEETING OF THE JOINT APPROPRIATIONS
SUBCOMMITTEE ON LONG RANGE BUILDING
February 21, 1981

The meeting was called to order by JACK K. MOORE, Chairman, in room 104. All Committee members were present except Sen. Himsl. Also in attendance was Bob Robinson, Legislative Fiscal Analyst.

Testimony was given by Phil Hauck, Director of Architecture and Engineering; Tom O'Connell, Architecture and Engineering; Gene Huntington, Analyst for Budget and Planning; Bob Erickson, City Manager of Helena; Mr. Huss, realtor, and Dave Lewis, Director of Budget and Planning.

DEPARTMENT OF ADMINISTRATION

MR. HAUCK explained Land Acquisition #41. Since 1969, the legislature has presented a development plan of the state Capitol, which lists property to be acquired. Each legislature since then has appropriated a given amount of money to be used for land purchase around the Capitol. He referred to EXHIBIT A, which shows the three yellow areas of land that are the only ones not owned by the state. He explained the larger section of yellow, #1, is a vacant building site, and with the proper title on it could be available for either a building site for the Department of Natural Resources, or Worker's Compensation. He explained #2 as two pieces of residential property that there is no current need for at this time, but the state would hope to acquire when it becomes available. Number 3 area is the Montana Education Association building. At this time there is a large price tag on it, so there is no immediate need to acquire this. He stated during the next biennium there would be a need to acquire #1 land area, and there is quite a problem getting clear title to all of that area since it is broken into so many small pieces.

MR. O'CONNELL stated that the state now owns 3/4 interest and it is necessary to buy the other 1/4 interest, which amounts to around \$55,000 at today's appraisal value.

MR. HAUCK explained on the map there is a strip of land, 1A, about 40 feet wide and one block long, that the state has no interest in buying or acquiring. However, there is a possibility in order to obtain clear title to the large area this may have to be purchased. He noted this is a creek area which may have to be filled or cultivated if it is necessary to obtain this. He noted this amount for purchase would be requested from the Capitol Land Grant money.

MR. O'CONNELL stated if the state gets stuck with the 40' strip of property, they are uncertain at this time how much this would cost. He stated that the remaining 40' strip has approximately four owners, and this is where the problem lies.

Improving the Water System in the Capitol Complex, #38, was

discussed next. See EXHIBIT B.

MR. HAUCK stated a brief summary of this request is a new water distribution system within the Capitol Complex, to be tied in with the water system improvements that will be made by the city of Helena. He asked the Committee to turn to Exhibit B, page 7, which shows the existing water lines, which are at this time very inadequate to provide fire protection to the Capitol area. This amount would come out of the Long Range Building funds.

MR. ERICKSON, City Manager, explained Exhibit B to the Committee. He stated page 6 explains the breakdown on the cost to the state for the proposed water system. He noted this is an estimated cost and if this is less, then the money would be returned. However, if it is higher, then more money would be needed for the project. He wanted it noted that the majority of the state complex water mains are 4 inches. He explained page 7, there would be two deletions reflected in the two red lines between 9th and 11th on both Harris and Roberts, which at the present time is property the state does not own. He explained in his letter, EXHIBIT C, it states the city would pick up this cost at approximately \$28,000. He noted, as stated in his letter, if the cost runs more than estimated, the city would agree to credit the state so that the project could be completed. He asked at this time they would like to have a commitment for \$380,000, and work out an agreement with the Department of Administration if it is necessary to go over. He noted, as agreed with Mr. Hauck's office, the city would bring satisfactory trunk line feed on 11th Avenue and Prospect, which costs 3/4 of a million dollars and would not be charged to the state, since this is a city-wide improvement project. He noted they would like to start this project this summer. He stated this is only part of a city-wide effort to improve 22,000 feet of water lines to enhance the fire flow to all commercial and industrial buildings in Helena. He gave a brief overview on how the industrial areas would be charged their share throughout the city, and the Capitol Complex is responsible for the costs that pertain to their land ownership only.

He stated project time would begin July 1, 1981, and have the streets put back into place by October, 1981, or around four months. He stated there are no federal funds available for this project.

Acquiring Office Facilities, #33, was the next topic for discussion.

MR. HAUCK explained EXHIBIT D regarding three buildings which

house three state agencies that have become available to the state for purchase. He stated the Office of Budget and Planning have made a cost analysis whether it is economically feasible to purchase these buildings, and he would like Mr. Huntington to explain this.

MR. HUNTINGTON explained that the original request was approximately \$3.3 million to acquire and renovate the three buildings. \$700,000 was the portion of that amount that would have to be spent on renovation, and the balance was for the acquisition. All the Budget office is requesting at this time is the acquisition cost, and they looked at this request by analyzing the price of the land in terms of a lease-purchase option, or the option of continuing to rent, but with higher rents in mind if it were currently sold. They came up with a figure that was just below the break-even point, in which they could buy the building at \$1.8 million and still provide some advantage over a 20 year life to the state. The analysis was made on a 20 year period. He explained by purchasing Building I, the state would acquire some office space they do not now have. Building III also has 4,000 square feet that is currently being leased to a non-state agency that would become available. Building I is approximately 60 years old, but major repairs and maintenance have been done. Building III was built in 1972, and Building V was built in 1969.

MR. HUSS handed EXHIBIT E to the Committee, and noted the information requested would be found in this Exhibit. He stated the raw rental income from building I is \$63,069 per year. He stated that he has not isolated each of these buildings into their individual asking price, but the combined asking price is \$2.8 million. He noted he can show what the values of the buildings are that bring the price to a total of \$3.5 million, and then could factor backward. In Building I, the improvements are valued at \$695,160.

REP. BARDANOUVE asked where the depreciation had been estimated.

MR. HUSS stated there is depreciation, but the appraised values set down by Jack Moore, appraiser, are on page 8. He noted the materials presented to the Committee indicate a package of \$3.7 million and the seller is requesting a purchase price of \$2.5 million. Page 9 explains the land value and the square footage. How this amount came about was \$2.7 million for the improvements only, plus \$721,000 for the land, which equals \$3.7 million, but the seller is requesting \$2.5 million for the land and improvements. He noted this is an estimate amount of appraisal based on figures supplied by an appraiser.

He noted that Mr. Billerbeck, the owner, is at a retirement age and does wish to sell his properties. He stated that the total rents and reimbursements approximate \$330,000 a year.

MR. HUNTINGTON stated by taking the figures on page 10, you come up with a net income of \$243,478 per year or 23.8%.

MR. HUSS noted that currently the state is paying rent on Building I at \$3.15 a square foot, Building III is \$4.65 a square foot, and Building V is \$4.90 a square foot.

MR. LEWIS explained that one year ago, Mr. Billerbeck wanted to sell these buildings to the State Retirement System. He asked Mr. Billerbeck at that time not to raise any of the rents until the legislature could be talked to about purchasing the buildings. Right at this time, the average rent is around \$4.50 a square foot. Most of the office space that has been bid out over the last year is around \$7.50 or \$8.00 a square foot. The new IBM building is going to be \$14.50 a square foot. He noted if the state does not do something with these buildings, they will be sold to someone and in the long run the state will end up paying a higher rental once the leases expire. He stated that A & E would back him up on this, but the oldest building, Building I, was the best of the three.

Retrofit State Buildings for Energy Conservation, #7, was discussed next.

MR. HAUCK stated that EXHIBIT F is part of a list for a continuing program started in 1975, to retrofit many of the state buildings. He noted in 1977, the legislature authorized \$200,000, in 1979 they authorized \$1 million, so this year the request is past \$3 million, and he feels within the next 10 years the investment can be returned to the state.

THE CHAIRMAN asked for a breakdown on what was to be done to each building and the cost.

MR. HAUCK stated he would get that information. He noted the buildings with the asterisks are currently under construction, except for the Liberal Arts building in Missoula, where the members of the facility do not want the glass area reduced in their office. He explained Phase I and Phase II on Exhibit F. He stated when they request the money, part of it is used for life cycle costs, and the remaining portion of the money is used for doing the retrofit work on the previous phase. He explained that life cycle cost is when they look at a building and check all aspects that can save energy, this involves from 10 to 20 items. Some of these items may involve adding insulation, changing windows, or heat or air system, changing lights,

etc., the cost of the job is estimated, and the energy savings and the result is a life cycle cost. He noted in looking at the buildings, they first try to get to the buildings that will involve the greatest amount of savings.

REP. BARDANOUVE asked what is happening to the new buildings being built?

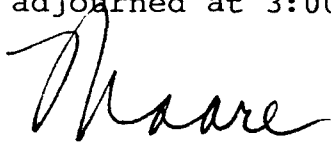
MR. HAUCK stated the new buildings are being designed to meet the energy codes, and this is one of the things that is adding a great deal of cost to new construction. He stated, in answer to the question on how long this retrofitting should take, that it will take at least 10 years just to get to the main energy wasters. After that there will be those that should have work done to them but aren't as important in priority.

MR. O'CONNELL stated by his estimates the state has over 10 million square feet of building area in which these buildings themselves are over 5,000 square feet. When Phase II is completed, the state will have studied around 2 million square feet of buildings.

REP. BARDANOUVE asked what was the progress report on the project authorized by the 1979 legislature to study having Warm Springs Hospital heated by the warm water in that area?

MR. HAUCK stated that project is not going forward very rapidly and at this time all they have done is built a well. They have not tested the well flow rate necessary to do any work on the buildings. He stated part of the problem is due to the mineralization in the soil.

There being no further discussion or comments, the meeting was adjourned at 3:00 p.m.



JACK K. MOORE, CHAIRMAN

CARSON ST.

ST.

GOVERNOR'S MANSION

SIXTH ST.

CODES

SRS

TEACHERS RETIREMENT

SANDERS ST.

ST.

BROADWAY

MOTOR POOL

FISH & GAME

VETERANS MEMORIAL MUSEUM

MITCHELL BLDG

COOSWELL BLDG

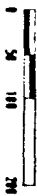
ROBERTS ST.

ST.

RECORDS MANAGEMENT

CAPITOL COMPLEX

SCALE



HIGHWAY

AVENUE

BOILER PLANT

BUDGET PROGRAM PLANNING

LIVESTOCK BLDG

LOCKEY

ESC.

BOARD OF HEALTH

WASHINGTON

CAPITOL

TRAVEL REPRODUCTION UNIT

MONTANA AVENUE

AVENUE

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

STATE CAPITOL COMPLEX HELENA, MONTANA



DECEMBER, 1980

Exhibit B

WATER DISTRIBUTION SYSTEM IMPROVEMENTS
STATE CAPITOL COMPLEX
HELENA, MONTANA

DECEMBER, 1980

1. EXISTING SYSTEM

Figure 1 shows the existing water distribution system in the Capitol Complex area. The water, for the most part, is fed to the area from a north-south 10" main on Montana and an east-west 8" main on 9th Avenue. All feeder lines within the complex are 6" in diameter or smaller, except for two blocks of 10" main on 8th Street between Montana and Roberts.

2. EXISTING FIRE HYDRANTS AND HYDRANT FIRE FLOWS

Locations of existing fire hydrants are shown on Figure 1. Hydrant pressures and flows are summarized below for the past three years. This data is based on actual field tests conducted on the hydrants.

TABLE 1
FIRE HYDRANT FLOWS

Fire Hydrant No.	1978			1979			1980		
	Pressure, PSI Static	Residual	Flow GPM	Pressure, PSI Static	Residual	Flow GPM	Pressure, PSI Static	Residual	Flow GPM
137	85	10	1377	110	45	1295	65	35	1346
138	100	20	1060	100	50	1180	70	20	1238
139	110	65	1060	110	55	1290	70	35	1293
140	75	50	914	100	60	1440	70	50	1346
141	110	65	1238	100	50	1180	75	40	1346
142	110	49	1120	90	25	1082	70	15	1046
155	60	0	553	70	-	508	75	-	-
156	60	0	528	70	-	472	-	-	-
157	85	15	708	-	-	-	-	-	-
158	95	55	1282	80	62	1120	85	20	1293
168	70	0	987	80	40	1120	75	55	1056
169	80	24	746	85	35	1050	60	20	911
403	85	20	1060	80	55	1273	90	55	1238
404	70	0	528	60	-	668	85	25	1120
405	50	20	646	50	0	528	50	-	578
406	50	25	1120	70	55	1293	70	45	1238
635	100	90	1539	95	60	1366	100	60	1397
661	55	30	1060	60	25	914	55	20	1056

3. RECOMMENDED FIRE FLOWS

The Insurance Underwriters of America have incorporated the Insurance Services Office (ISO) for the explicit purpose of assessing fire risks in a community and evaluating and rating the ability of that community to respond in the event of a fire. Fire insurance rates are established from this assessment, of which approximately 40 percent is based on the ability of the water distribution system to supply water in sufficient quantities to contain the fire.

In evaluating the City of Helena's needs, ISO designated a minimum fire flow of 4,000 gallons per minute (gpm) for the capitol complex area. The only area with a higher flow requirement is the downtown area of Helena. In establishing the recommended fire flows, ISO gives consideration to the building size, number of stories, proximity of buildings, type of construction, and other pertinent factors.

4. SYSTEM DEFICIENCIES

The area within the capitol complex imposes the highest domestic demand on the water distribution system than any other area of the City. With the high demand for peak domestic flows coupled with required fire flows, the existing distribution piping in the area is severely undersized and inadequate. The fire hydrants in the area are insufficient to supply the required fire flows to the larger structures. From Table 1 it can be seen that flows from existing hydrants are seriously deficient for fire fighting purposes and even at the insufficient flow rate, the residual pressures are below desired minimums in most cases. The wide fluctuation in the static pressures in the area also indicates serious pressure drops attributed to domestic flows only.

The number of fire hydrants are severely deficient to fight a fire in the capitol complex area. Hydrants should be in sufficient numbers to be able to provide the recommended fire flow at any location. Based on established criteria by ISO, the number of existing hydrants comprise less than 50% of the recommended amount.

5. RECOMMENDED IMPROVEMENTS

Improvements recommended to alleviate the distribution system deficiencies in the Capitol area consist of new 10" and 12" water mains running through the area and looped between Eleventh Avenue and Montana Avenue as shown on Figure 1. The proposed improvements are listed below:

- A 12-inch diameter main on Harris Street (Harris Street now closed) from Eleventh Avenue to Fifth Avenue, 10-inch to Lockey Street.
- A 12-inch diameter main on Fifth Avenue from Roberts to Harris Street.
- A 10-inch diameter main on Lockey Street from Montana Avenue to Harris Street.
- A 10-inch diameter main on Sixth Avenue from Montana Avenue to Roberts
- A 10-inch diameter main on Roberts Street from Eleventh Avenue to Lockey Street.

In addition to the new water mains, a total of 14 new fire hydrants are recommended at the locations shown in Figure 1.

6. BENEFITS TO THE STATE OF MONTANA

The State of Montana will realize several benefits from this project.

As previously mentioned, the fire flows are seriously deficient in the Capitol Complex area. This project will correct those deficiencies and provide adequate fire flows for the saving and protection of life and property.

Several buildings within the Capitol Complex have fire sprinklers installed as a fire protection scheme. However, with the present water distribution system, the required quantities of water may not be available for the sprinkler systems to function properly. The proposed distribution system under this project will assure the proper operation of these systems if the need arises under conditions of a serious fire.

The State of Montana carries a blanket fire insurance policy for all state owned structures with a composite rate from several private insurance carriers. Recognizing that there is a \$100,000 deduction per occurrence, the most significant impact that these improvements would have is the enhancement of the fire protection provided from the improved fire flows from the existing and proposed new hydrants.

Finally, the improvements will eliminate the wide fluctuation of system operating pressures which are now experienced in the area. This will reduce surges and the wear and tear on the building water systems and fixtures and will result in a longer life for the systems with less maintenance.

7. COST ESTIMATES

Cost estimates are presented in Table 2 for the recommended improvements to the distribution system. The costs include factors of 8% for contingencies, 15% for engineering and 2% for legal and administrative costs.

The costs are shown as presented in the 1978 Water Master Plan, then updated to a cost projected for mid-1981.

TABLE 2
ESTIMATED CONSTRUCTION COSTS

A. COSTS AS PRESENTED IN 1978 MASTER PLAN

Construction Cost Index ENR = 2500

2,400 L.F. 12" Water Main @ \$	22.00*	Per L.F.	=	\$ 52,800
4,900 L.F. 10" Water Main @ \$	19.50*	Per L.F.	=	95,550
10 Each 12" Valves @ \$	800.00	Each	=	8,000
19 Each 10" Valves @ \$	700.00	Each	=	13,300
2 Each 8" Valves @ \$	600.00	Each	=	1,200
5 Each 6" Valves @ \$	475.00	Each	=	2,375
15 Each Connections to				
Existing Mains @ \$	1,250.00	Each	=	<u>18,750</u>
Estimated Construction Cost				\$191,975
Congtingencies @ 8%				15,425
Engineering, - Design & Construction Services @ 15%				28,800
Legal & Administrative @ 2%				<u>3,800</u>
Total Project Cost Per 1978 Master Plan				\$240,000
Added Fire Hydrants, 14 Each @ 1,500				<u>21,000</u>
Total Project Cost - ENR 2500				\$261,000

*Unit Prices for water mains include costs for fittings, surface restoration and other miscellaneous costs.

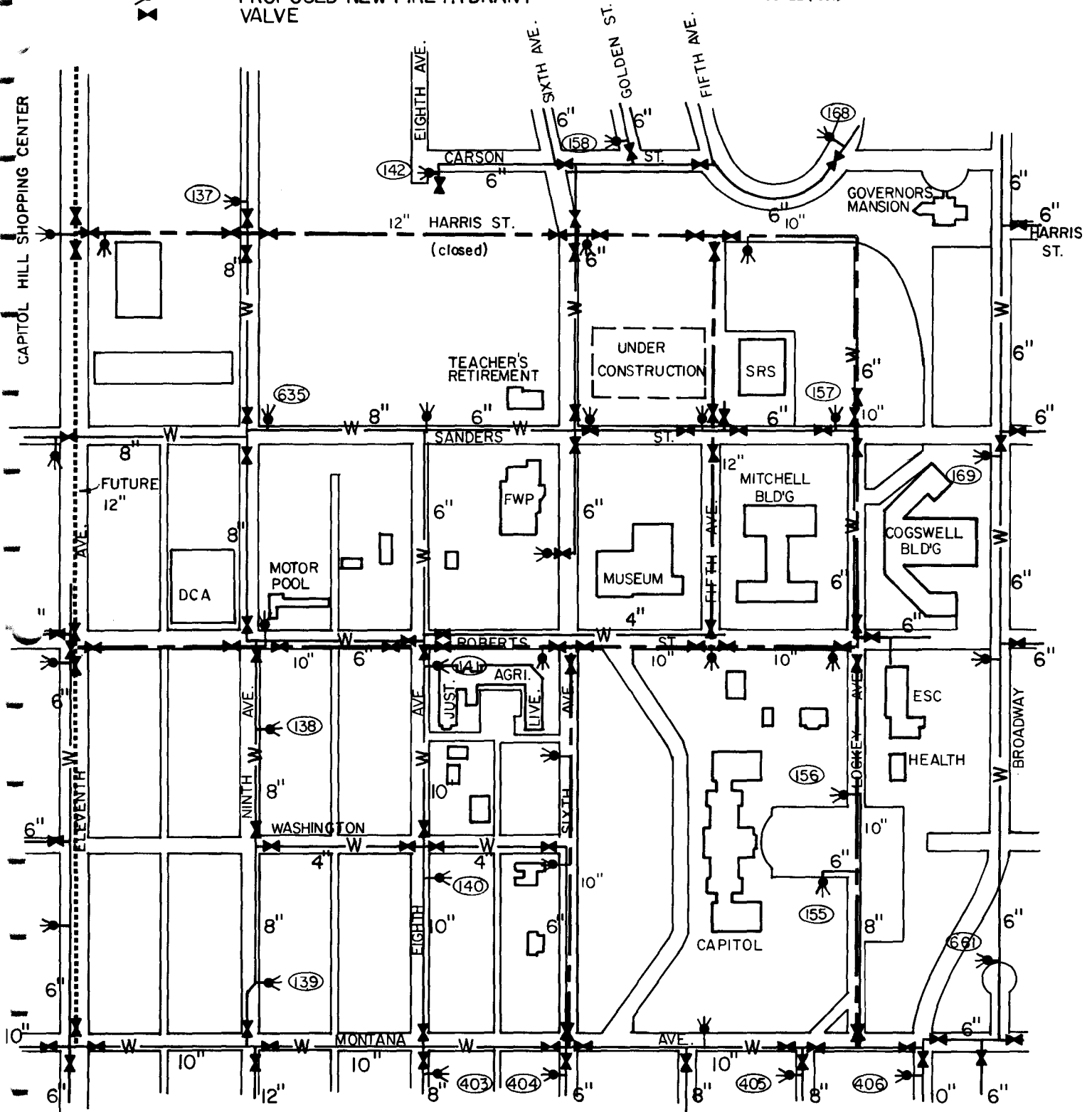
B. PROJECTED COSTS TO MID-1981

ENR Construction Cost Index - 1978	2,500
ENR Construction Cost Index, Dec, 1980	3,381
ENR Construction Cost Index projected to July, 1981	3,618
 Projected Cost to July, 1981 = $\frac{3618}{2500} \times \$261,000 =$	 \$380,000

LEGEND

- W — EXISTING WATER PIPING
- — — PROPOSED NEW WATER PIPING
- ⊕ (137) EXISTING FIRE HYDRANT & NO.
- ⊕ PROPOSED NEW FIRE HYDRANT
- ⊗ VALVE

0 50 100 200 300
SCALE (feet)

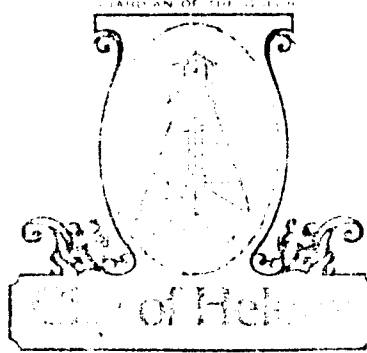


WATER DISTRIBUTION SYSTEM IMPROVEMENTS STATE CAPITOL COMPLEX HELENA, MONTANA

FIGURE 1

Commissioners
Rich D. Brown, Mayor
Michael J. DaSilva
Dale L. Johnson
James H. Nybo
Russell J. Ritter

Robert A. Erickson
City Manager



City County Admin. Bldg.
316 North Park
Helena, MT 59623
Phone 406-442-9920

January 26, 1981

Mr. Phil Hauck, Administrator
Architecture & Engineering Division
Department of Administration
1500 East 6th Avenue
Helena, Montana 59620

RE: Water Distribution System Improvements - State Capitol Complex

Dear Mr. Hauck:

As per your recent discussions with Dick Nisbet and Bob Hanson regarding the water distribution improvements proposed in the Capitol Complex area, I wish to offer the following comments relative to this important project.

First of all, it is suggested that the necessary legislation to accomplish this fund commitment in the amount of \$380,000 be included in the long-range building program now before the Legislature. You indicated this was possible and would preclude the necessity of an additional bill to cover this particular item. Should these funds be approved through the building program, the City would commit to the following:

1. We would assure that prior to or concurrent with the construction of the Capitol Complex distribution system that the construction of the 11th and/or Prospect trunk mains as proposed in our 1978 Master Water Plan will be accomplished.
2. We would commit that adequate pressures and volumes would be available to provide the requirements of the Capitol Complex as outlined in our Water Study, under normal operating conditions.
3. We would further agree to credit the State for off-site improvements necessary to complete the project that would be funded initially through the \$380,000 initial contribution. I refer to those extensions on Harris and Roberts Streets between 9th and 11th Avenues. On the basis of current estimates,

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Mr. Phil Hauck, Administrator

Page 2

January 26, 1981

it is estimated that these improvements would amount to \$27,875 including engineering and contingencies, based on 1981 dollars. This is comprised of the following estimate:

800 lineal feet of 12" water main @ \$22/foot	\$17,600
Four 12" gate valves @ \$800	3,200
One fire hydrant @ \$1,500	1,500
Engineering & Contingencies @ 25%	<u>5,575</u>
TOTAL COST	\$27,875

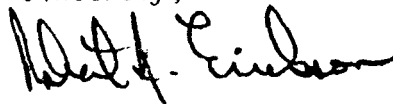
It is further agreed that as these are estimated 1981 costs, they will be inflated by the Engineering News Record Construction Cost Index at the point in time in which they are constructed.

We would condition this commitment on the basis that the current ownership of the properties on both Harris and Roberts is currently under private ownership. Should the State acquire additional properties in either of these areas, the repayment commitment would be reduced in the amount that would subsequently come under State ownership.

4. That the City be the contracting officer for the proposed improvements. We suggest this because it would be to the mutual benefit of all parties if we combine the entire area improvements into one contract package. It could be anticipated that we would be able to receive lower unit bid prices on the total construction package.

It is entirely possible that without the proposed improvements in the Capitol Complex area, the City may well be obligated to restrict construction of additional facilities until such time as we can resolve the problem. I hope you concur with these assessments, and should you need additional information or help in getting your program approved, please contact me, and I will do whatever may be required to bring this matter to a successful conclusion.

Sincerely,



ROBERT A. ERICKSON
City Manager

RAE:jme

cc: C. R. Hanson, Director of Public Service
R. A. Nisbet, Director of Public Utilities
Bill Verwolf, Assistant City Manager
Dennis Taylor, Budget & Evaluation Director

SUMMARY OF BILLERBECK PROPERTIES

Building I 27,750 square feet (Department of Institutions) 1919
State rents 18,460 square feet
Rent as of March 1, 1980 \$58,149 - \$3.15 square feet

Building III 1400 - Ninth Avenue (DCA) - 1972
28,000 square feet State leases 24,000 square feet
Rent as of March 1, 1980 \$111,600 - \$4.65 square feet

Building V 1300 Eleventh Avenue (Public Instruction) - 1969
20,000 square feet All leased to state
Rent as of March 1, 1980 \$98,000 - \$4.90 square feet

ENERGY CONSERVATION STUDY, PHASE I
STATE OF MONTANA

LIFE CYCLE COST STUDIES

Eastern Montana College
Apsaruke Hall
Petro Hall

Montana State University
Breedon Fieldhouse
* Renne Library
* Reed Hall

Capitol Complex
Employment Security Building
* Scott Hart Building

Military Affairs
Helena Armory
Womack Armory

Northern Montana College
Married Student Apartments
Morgan Hall
Student Union Building

University of Montana
* Art Annex
Elrod Hall
Fieldhouse
* Liberal Arts Building
Pool Building
The Lodge

Miscellaneous Buildings
Montana Aeronautics Commission Building
Center for the Aged

ENERGY CONSERVATION STUDY, PHASE II
STATE OF MONTANA

LIFE CYCLE COST STUDIES

University of Montana
Business Administration
Music Hall
Health Science
Central Heating Plant

Montana State University
Gaines Hall
Medical Science Lab-Cooley
Cobleigh Hall
Greenhouse
Central Heating Plant

Montana Tech
Library/Museum
Central Heating Plant

Eastern Montana College
McMullen Hall
Liberal Arts/Library

Northern Montana College
Auto Mechanics Building
Cowan Hall

Western Montana College
Main Building

Warm Springs
Receiving Hospital
Central Heating Plant

Galen
Central Heating Plant

Montana State Prison
Slaughter House
Maximum Security Building

ENERGY CONSERVATION STUDY PHASE II (continued)

Pine Hills
Central Heating Plant

Mountain View
Maple Cottage

Swan River Youth Camp
Lodge

Capitol Complex
Mitchell Building
Social and Rehabilitation Service
Capitol Heating Plant

Miscellaneous Buildings
Aviation Maintenance Shop
Combined Service Maintenance Shop
Registrars Bureau
Job Service