
PUBLIC SERVICE/CONSERVATION ELEMENT

CITY OF MONROVIA

GENERAL PLAN

Prepared by

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INTRODUCTION

The Public Facilities Plan deals specifically with estimating the future need for improvement and extension of water and sewer facilities within the city. It is based on a detailed analysis of existing systems, their condition and capacity for future service. Future needs have been projected, based on population increases in five-year increments.

The capability of the City in providing additional capacities will, along with topographic conditions, determine to some extent the rate of future growth. For this reason it is imperative that the City and public utility companies have a general idea of the utilities required for the future, when they will be needed and where they will be located. The accompanying Utilities Plan indicates those areas not served by utilities. Areas which can be served in the future should be determined by a detailed engineering study. In this connection, locations of storage and pumping facilities have not been indicated.



OBJECTIVES

The following have been established as general objectives, or goals, of the Utilities Plan:

1. Protection against potential public health dangers through the provision of adequate facilities.
2. Determine areas requiring utilities in the future.
3. Determine City policy in extending utilities into undeveloped mountainous areas.
4. Expansion of existing water supply and sewer system to accommodate future city growth.
5. Stimulation of planned growth through the expansion of utilities.
6. Determination of future utility needs in terms of plant and distribution facilities.



PRINCIPLES

Planning of long-range utility development should be accompanied by consideration of the following principles:

1. The utility service area is recognized as the developed portion of the city and that mountainous portion which can be economically served.
2. Coordination of utility planning with thoroughfares, community facilities, revitalization, densities, population and general land use planning.
3. Encouragement of concentrated land development through density control and subdivision regulations to minimize utility extension costs.
4. Revision and implementation of zoning controls to achieve proposed land uses.
5. Realization of the need for more detailed engineering studies to determine economic feasibility of certain proposals.



STANDARDS

Specific standards involved in design and construction of utility systems are implemented in detailed engineering feasibility studies. However, general broad standards are needed by Council and the Commission prior to engineering studies since line sizes and capacities are related to proposed land use patterns and densities:

1. Normal water consumption, 200-210 gallons per day per capita.
2. Minimum water mains, six inches.
3. Minimum sanitary sewer mains, eight inches.
4. Minimum storm sewers, 12 inches.
5. Fire hydrants @ 1/2.05 commercial-industrial acres; 1/2.75 residential acres.

PROPOSED IMPROVEMENTS

Water: Although the existing water system is in excellent condition from the standpoint of equipment, operation, maintenance, and administration, additional capacities to serve future population must be considered.

The following table indicates these water requirements based on per capita population projections:

	WATER REQUIREMENTS				
	1965	1970	1975	1980	1985
Daily Consumption (MGD)	6.3	7.2	7.2	9.9	12.1
Ext. Max. Daily Use (MGD)	12.9	14.6	16.0	20.1	25.0
Storage (MG)	20.3	24.8	27.8	39.0	43.0
10-hr. Fire Flow (GPM)	3500	3500	4000	4000	5000
Fire Storage (MG)	2.1	2.1	2.4	2.4	3.0
Hydrants	805				
Population (000)	31.0	35.7	40.1	50.6	60.7

Production: Future production demands can easily be met by the addition of wells in the Monrovia well farm area. A well is presently being planned that will add approximately 4.0 (MGD) to production capacity. Future wells can be added to meet increasing demands. Although the source of water appears adequate for future needs, there could be a potential problem through the lack of a general adjudication of water rights in the upper valley area with municipalities and private water companies. Early settlement of these rights, although considerable legal and engineering expense might be involved, is deemed necessary to assure long-range water availability.

Further protection for continuous water supply to the city as a standby, auxiliary, or emergency measure should be considered by connection of the system to the Metropolitan Water District upper feeder lines. This MWD line, located east of Canyon Road, should be connected to the Ridgeside facility with a 24-inch main by 1970.

Storage: Storage facility requirements for domestic water consumption as well as fire protection will increase approximately in proportion to population increases. These additional facilities are listed below in five-year increments.

1970

4.5

1975

1980

1985

Since location of land for reservoirs cannot be determined on a long-range basis, they are not shown. In many cases reservoirs can be located on land currently owned by the City. Part of the 1970 storage requirements will be met by one new 2.5 MG reservoir being planned on May Avenue.

Distribution: Additional major capital outlays are not anticipated for distribution mains with exception of the upper feeder line to MWD mains.

Pumping stations will need to be provided as production and storage requirements increase. Consideration should be given to expansion of the Cloverleaf Booster Station by 1975 to increase its capacity.

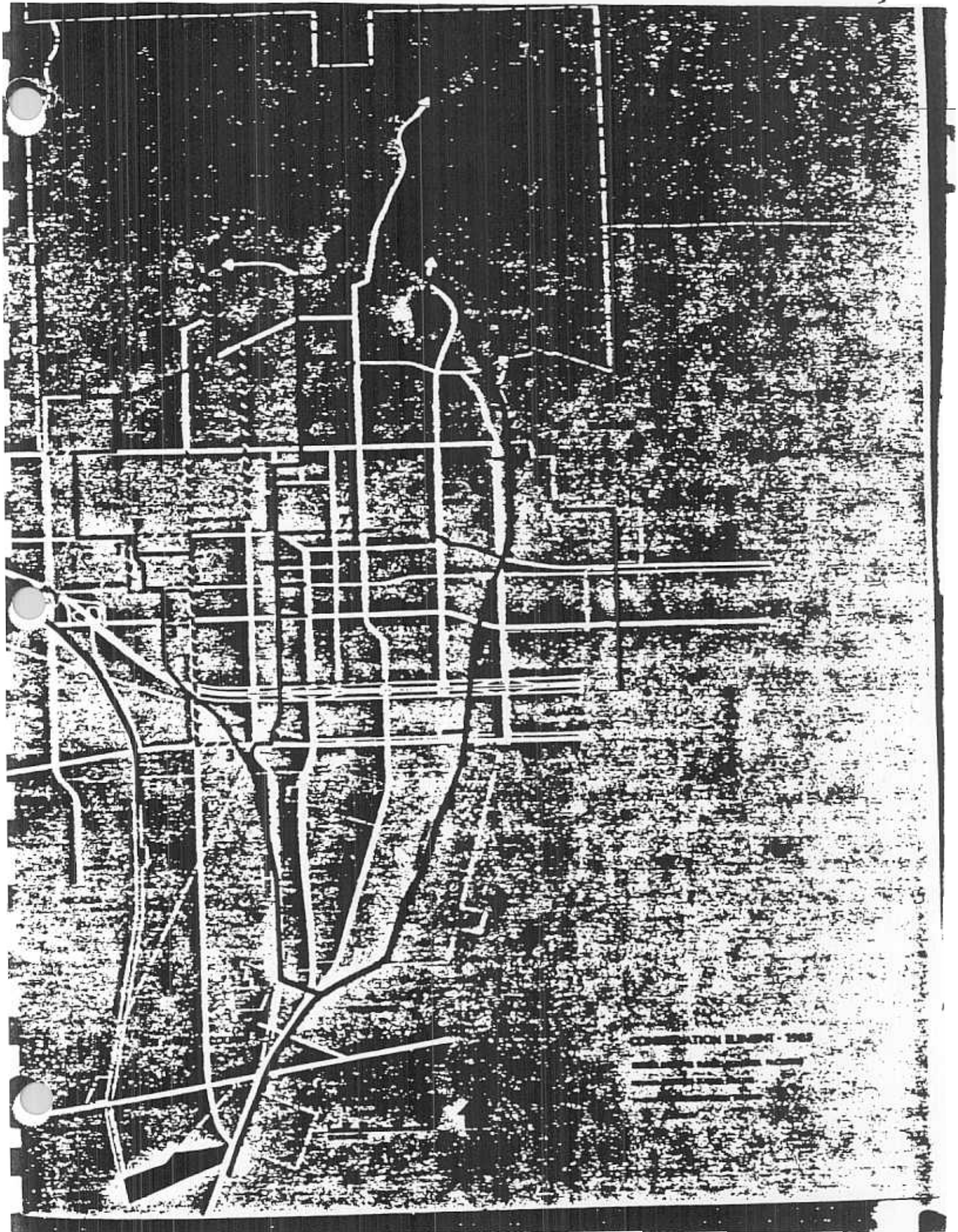
Additional Service: Should consideration be given to the annexation of the Mayflower District to the city in whole or in part, the cost of water service to the area should be calculated. Current service to the area is provided by the Southern California and Duarte Water Companies. Should annexation occur, the City could probably serve the area only if it purchased the private system. Purchase of the entire system of 2,500+ customers would probably involve an expenditure in excess of one million dollars.

Sanitary Sewers: Gradual replacement of lines in the 1912 sanitary sewer system has taken place over the past, however the majority of the system is basically comprised of older lines. From a practical standpoint, the entire system cannot be replaced at one time, but the City should budget funds for an annual gradual replacement of facilities in critical areas.

Flood Control: As indicated in the analysis of existing facilities, there exists a number of areas deficient in storm drainage and flood control facilities. These areas, shown on the accompanying Conservation Map, have been studied for improvement and were scheduled in 1964 bond issues as Project Numbers 5601 and 1118. The priority of need is also indicated on the Conservation Map. With the completion of these improvements, conservation facilities should be adequate unless major development of the hillside area should be carefully examined for effect on the existing system.

The Los Angeles Flood Control District indicates that no major projects of regional scope are planned or deemed necessary in the Monrovia area.

Refuse: Refuse collection and disposal is currently under a private contract. The local contractor has provided outstanding service in the past, and it is estimated by the City that he has the ability to provide adequate service throughout the projected planning period.



CONSERVATION ELEMENT - 1965

STATE OF CALIFORNIA

DEPARTMENT OF PUBLIC WORKS

STANDARD MAPS DIVISION

STANDARD MAP NO. 1000

SCALE 1:250,000

DATE OF ISSUE 1965

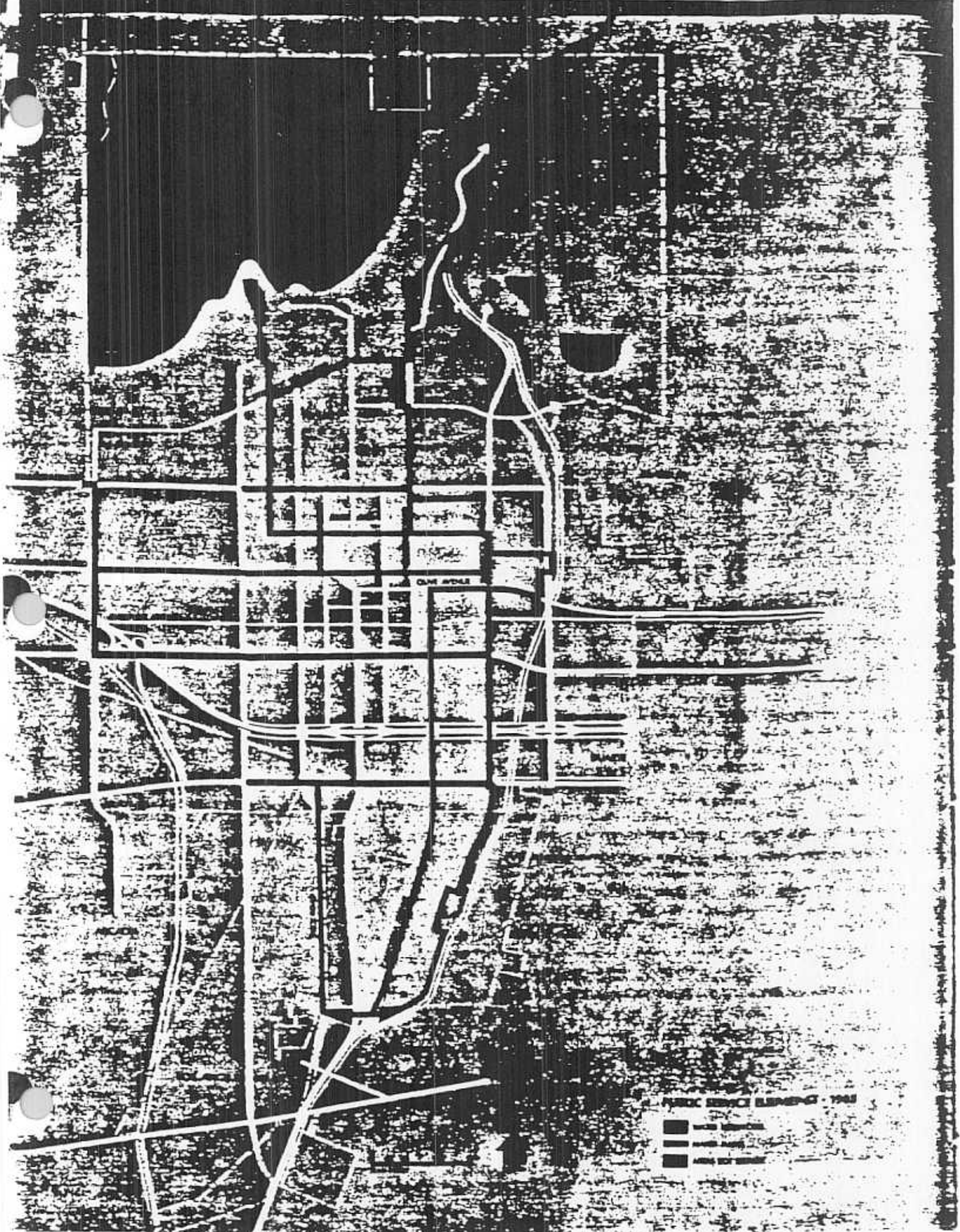
REVISION NO. 1

STANDARD MAP NO. 1000

SCALE 1:250,000

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REVISION NO. 1



PUBLIC SERVICE ELEMENTS - 1968

- WATER SERVICE
- SEWER SERVICE
- GAS SERVICE