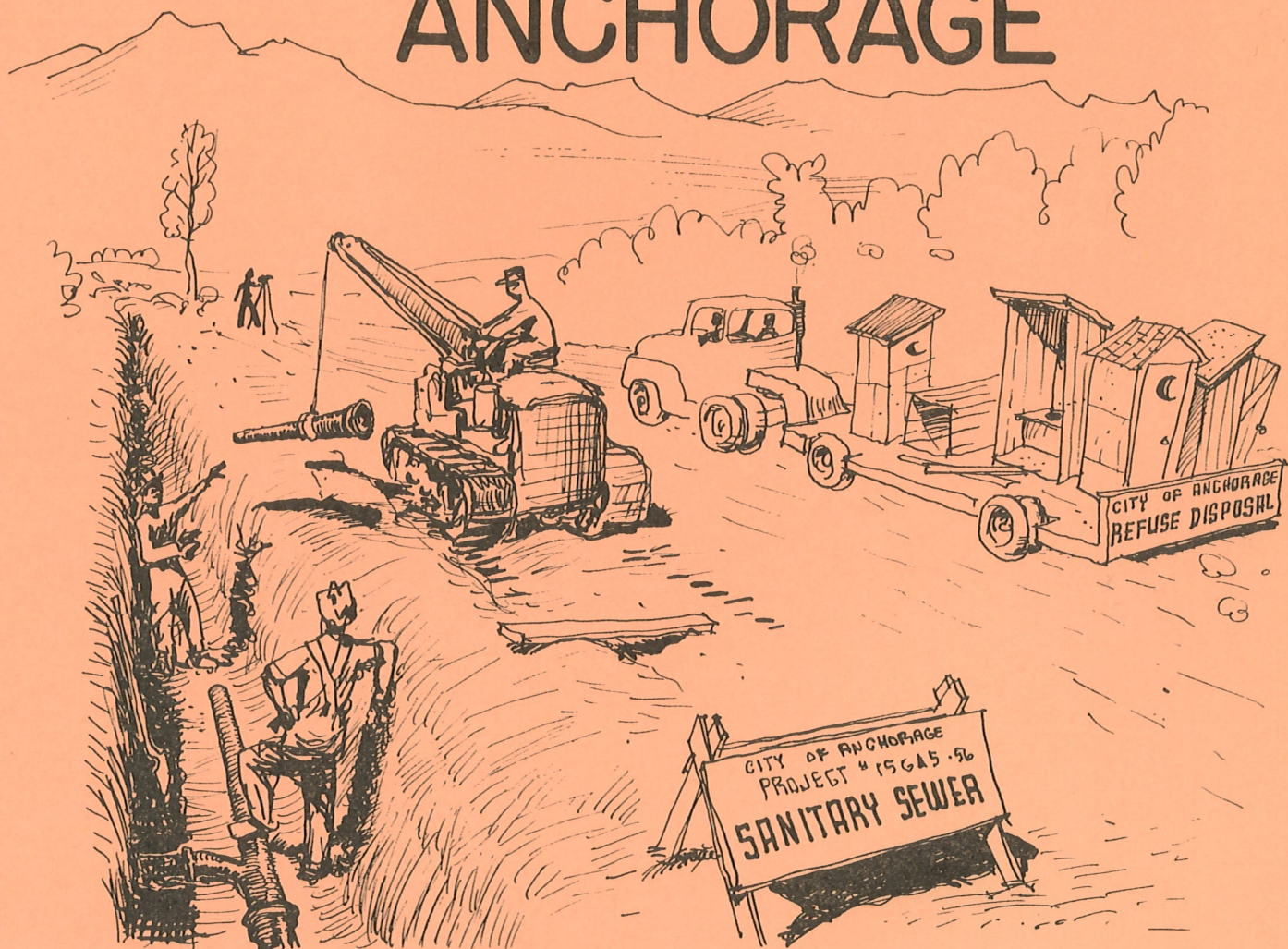


preliminary plan

# SANITARY SEWERS

FOR

# ANCHORAGE



city planning commission

ANCHORAGE

ALASKA

JULY

1955

preliminary plan

# SANITARY SEWERS FOR ANCHORAGE

The Sanitary Sewer Plan is one of a series of master plan reports being prepared under the general direction of the City Planning Commission. Other studies will eventually cover all phases of municipal life, making recommendations for the meeting of current needs and guiding future development.

Most phases of the planning program are being developed through citizens' committees composed of representatives of the entire community. Some technical phases, such as covered by this report are handled directly by the Commission with consultation by the concerned City officials. Upon the preparation of individual planning reports, they will be consolidated by the Planning Commission into a master plan, which will be based on the expressed desires, as well as the best judgement, of the people of Anchorage.

## CITY PLANNING COMMISSION

---

Chairman	Edwin B. Crittenden
Members	Robert A. Baker
	Kenneth M. Johnston
	Hewitt V. Lounsbury
	John McManamin
	L. T. Main
	Mrs. Maran Smith
Planning Director	Victor Fischer
Assistant Planner	E. Jack Schoop
	Box 400
	Anchorage, Alaska

## CITY COUNCIL

---

Mayor	Maynard L. Taylor, Jr.
Councilmen	Anton Anderson
	John M. Anderson
	Charles J. Davis
	Arthur L. Engebretson
	M. W. Peterson
	Jack H. White
City Manager	George C. Shannon
City Engineer	George O. Matkin
Sanitary Engineer	Frank E. Nyman

## SANITARY SEWERAGE IN ANCHORAGE

### Background

For thousands of years man has been concerned with the disposal of sewage. Sewer systems actually existed in 2500 B.C. Then, as today, sanitation was the main basis of efforts for safe waste disposal.

Over the years, understanding of and interest in sanitation fluctuated, and sewage disposal practice varied accordingly. The increasing concern with public health over the last decades has given added stimulus to the movement for safer disposal. The almost universal use of public water supplies has further created conditions requiring elaborate systems for carrying away water-borne sewage.

Anchorage has undergone the typical process found in developing communities. While the "old town" was served by sewers before 1940, the post-war growth outstripped the city's ability to expand its system. By 1953, however, the city had reached the point where all property within the corporate limits had been sewerred or construction was under way.

While the city was gradually meeting its problem, the situation was growing worse in the outside areas. The dense residential development found shallow wells surrounded by cesspools and privies. Health authorities determined that in some areas over forty percent of all wells were contaminated.

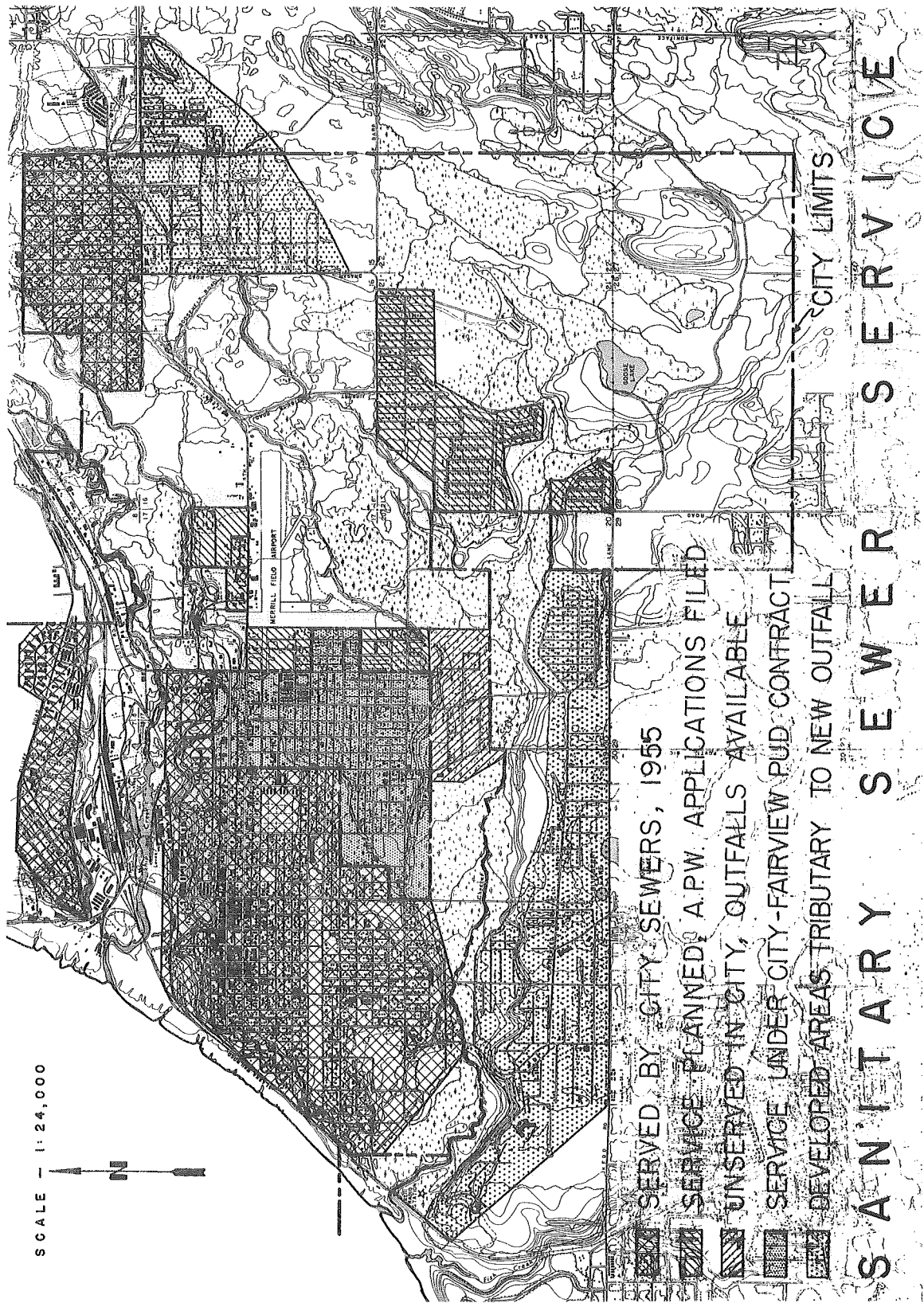
The area-wide situation has improved somewhat. City water has been extended into the Eastchester and Airport Heights-Grandview Gardens areas, the latter annexed to the city in 1954. Sewers are being constructed in recently annexed Mountain View north of the Glenn Highway and in West Chester.

### Current Situation

Due to extensive annexations during 1954, the city currently contains a number of areas in need of adequate sewerage: Mountain View south of the Glenn Highway, Airport Heights-Grandview Gardens-City View-Anchor Park area, East Chester, the Fourth Addition, and portions of the East and Third Additions.

A new sewer trunk is required to serve most of these areas. Applications have already been submitted to Alaska Public Works for assistance in financing this trunk as well as related collection systems.





SCALE - 1:24,000

- SERVED BY CITY SEWERS, 1955
- SERVICE PLANNED, A.P.W. APPLICATIONS FILED
- UNSERVED IN CITY, OUTFALLS AVAILABLE
- SERVICE UNDER CITY-FAIRVIEW PUD CONTRACT
- DEVELOPED AREAS TRIBUTARY TO NEW OUTFALL

CITY LIMITS

# SANITARY SEWER SERVICE

In conjunction with the new outfall sewer, the city has also applied to Alaska Public Works for assistance in construction of a sewage collecting system to serve Grandview Gardens, Airport Heights, City View and Anchor Park. A trunk extension of the outfall will be provided to pick up the South Mountain View area when a collection system is built there. Future trunk extensions will also take care of the Alaska Methodist College, to be built within a few years.

The East Chester area can be tied in to the existing outfall in the vicinity of Sixteenth Avenue and "C" Street. An alternative would be to service this area through a trunk line crossing Chester Creek into the new Chester Creek Trunk. In either case, the main problem will be the establishment of economic feasibility. The project may have to await a possible urban renewal project in East Chester.

The Fourth Addition and those portions of the East and Third Additions now annexed to the city must be served through connection to the private sewer serving the Anchorage Housing Corporation apartments on East Ninth Avenue. While the city has an option to purchase this sewer, service to these areas is contingent upon an agreement between the city and the Fairview Public Utility District, since streets under the latter's jurisdiction have to be traversed. At the same time, property within the District could also be served by use of the city's outfall.

#### Service Outside City

While an agreement for joint use of the sewer would permit Fairview residents to have badly needed service, the city would also gain substantially. Areas under city jurisdiction could be properly sewered. Contributions would be forthcoming towards carrying the cost of trunk construction and maintenance. Another important asset would be that in case of future annexation, the city would not have to immediately take steps toward sewer construction, since these areas would already have been served.

The proposed outfall on the south side of Chester Creek would also be able to serve areas located in the Spenard Public Utility District. Encouraging connections to this sewer would have the same advantages as those discussed in the preceding paragraph. The sewer would also be able to serve Wonder Park Subdivision, east of Mountain View. Since it is not in any public utility district, some special arrangement for serving this area would have to be made.

## SEWAGE DISPOSAL

One of the greatest problems, and one of the costliest, facing most of the municipalities in the U.S. is the sanitary disposal of sewer effluent. Water-borne sewage has over the years been disposed of into waterways adjacent or near to cities. With increased urbanization, however, pollution has become more and more of a problem. The situation has been particularly serious along waterways where other downstream cities had to utilize the water for their domestic supply. The problem for coastal cities has also been aggravated over the years, with increased amounts of sewage being washed up on the shore and polluting coastal waters.

The general answer to water pollution in the U.S. has been the construction of sewage treatment plants. While various treatment methods are used, the discharge from such plants is generally such as to have no, or very little, nuisance results.

While the extreme tidal range at Anchorage has caused much consternation from a navigational standpoint, it does result in a situation that provides a tremendous saving to the community's taxpayers. The extreme tidal range in Cook Inlet is 39 feet while the mean range is 26.7 feet. The tidal action is responsible for rapid movement of the water in the Inlet. The rapid flow, in turn, quickly carries away and disperses any sewage dumped into the Inlet, thus eliminating any health or nuisance problems.

While the tidal situation obviates the need for sewage treatment in Anchorage, it is necessary to carry the discharge from the sewers some distance out into the Inlet. Discharge too close to the shore could create backwash in the shallow water. In order to carry the sewage the necessary distance, a new 36" combined outfall has been projected. A collection sewer is to be built along the Knik Arm shore to pick up the effluent from the existing and future trunks located south of Ship Creek.

The construction of this outfall and collection system will solve Anchorage's sewage disposal needs for many years to come.