

- (8) Two schemes (described as Scheme No. 1 and Scheme No. 2) are submitted with estimates of capital costs and annual charges:—

Scheme No. 1 provides for treatment of all sewage and trade wastes at Motukorea.

Scheme No. 2 provides for the treatment of sewage and trade wastes from the northern part of the isthmus at Motukorea and from the southern part at Mangere.

(These schemes will be referred to in some detail later and it is unnecessary at this stage to give further particulars concerning them.)

26. In the meanwhile in July, 1948, the Metropolitan Board was requested by the Minister of Health to suspend the prosecution of the Motukorea scheme, it having been decided to appoint a Commission of Inquiry to inquire into all questions arising in connection therewith. In March, 1949, we were appointed to make this inquiry.

27. It will be convenient if we refer here to the present metropolitan sewerage and sewage-disposal system and to the criticisms of the system and particularly of the outfall at Orakei which have been made. It was contended that the system was a failure, and this alleged failure was used as an argument against accepting the claims made by the engineers who have recommended or approved of the Brown's Island scheme. We do not think it is necessary to discuss the criticisms at any length. They appear to overlook the fact that those responsible for the planning of the system contemplated that it might be found necessary as the population of the district increased to establish treatment-works on land at Orakei. This later became impracticable. The criticisms also disregard such important considerations as the unexpectedly rapid and large population increase which has occurred and the development of the area which followed the construction of the waterfront road. It is true that by the year 1927 the system was found to be inadequate, but in our opinion it is wrong merely on that account to condemn it as a failure. Taking into consideration the conditions existing in the year 1908, we consider that those responsible for the adoption of Mr. Midgley Taylor's scheme were justified.

PART II—FACTORS AFFECTING THE CONSIDERATION OF SEWERAGE AND SEWAGE TREATMENT AND DISPOSAL SCHEMES FOR AUCKLAND

28. There are several major factors which require to be considered in order to determine what system of sewerage and sewage treatment should be adopted for the Auckland Metropolitan District, and we think that it will be convenient if we state and examine these factors before we consider the various schemes which have been proposed.

DEFINITION OF THE DRAINAGE DISTRICT

29. (1) We have referred briefly in Part I of this report to the principal topographical features of the district (paragraph 10) and also to the boundaries of the Metropolitan Drainage District which was constituted by the Drainage Act and the division of the district into an Inner and an Outer Area (paragraph 18).

(2) In the "Memorandum on Basic Technical Data" which Mr. Porter submitted to the Drainage Board in September, 1948 (see paragraph 24), he suggested that in planning sewerage-works for a large area it is advisable to divide the area into suitable catchment areas, and he accordingly took into account not only the area comprised in the Metropolitan District but also areas beyond that district, and subdivided the whole into what he considered are five natural catchment areas, which he designated "sewerage