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Oakland County Drains

THE rapid growth and development of Oakland County has caused the Drain Commissioner to increase his force during the last few years to several times its original size in an attempt to keep pace with the demands of the public. Petitions continue to flow into the office for all kinds of drain relief—from open ditches draining farm property to complete sewer systems and disposal plants.

An idea of the growth can best be gained from the fact that the total expenditure in 1924 was less than \$200,000; in 1927 it was almost \$3,000,000. Construction work was considerably delayed in 1928 but contracts have been awarded for approximately three million dollars' worth of work and approximately that much more will be placed under contract before the end of the calendar year.

The Royal Oak Drain is the largest of those completed since our last report and is also the largest project ever built to date by this office. This is a large trunk sewer system serving part of the cities of Royal Oak and Ferndale, the Villages of Pleasant Ridge, Berkley, Huntington Woods, Birmingham and part of Southfield, Royal Oak, Bloomfield and Troy Townships. The total length of this project was 27 miles and the territory drained covered approximately 22 square miles. The size varied from pipes of 3 foot diameter at the extreme ends of the drainage district to a huge tube 15 feet by 15 feet in size at the outlet section through which two large automobiles can be driven side by side. The total cost of this drain was \$4,066,000.

The Acacia Park Drain was another large project completed in 1927. This drain afforded relief for a large territory south and west of Birmingham, including the district adjacent to the consolidated school on Pierce Street which was often flooded to such an extent that elevated walks were necessary to allow the children to get back and forth from school. This project was built in record time by the contractor, S. A. Healy, of Detroit, at a cost of \$400,000.

The East Clawson Drain, constructed in the Fall of 1927 and Spring of 1928, provided an outlet for the east half of the Village of Clawson and territory south of the village. This was a very timely and necessary piece of construction, providing a connection between the Lawson Drain and the sewer system of Clawson Village and relieving a very unsanitary condition. Cost of this project was \$275,000.

Southfield Drain No. 6, completed in the Spring of 1928, consisted of a complete lateral system of sewers for Meadowlawn Gardens Subdivision in Section 12 of Southfield Township. Cost of this work was \$40,000.

The Shanahan and Sturgis drains were constructed on clean-out petitions for open ditch work and afforded relief to about six square miles of territory in Troy Township. Old ditches had become overgrown with weeds and brush and filled up to such extent as to cause overflowing of land and very unsanitary conditions.

The Southfield Storm Sewer was recently contracted for and construction work has just been begun. The system calls for trunk lines along the Eight, Nine, Ten and Eleven Mile Roads and extending from the River Rouge easterly to the Royal Oak Drainage District. This project involves the construction of 12 miles of sewer ranging in size from three to ten feet in diameter, most of which will be built by tunnel methods. The cost of this work will be \$2,730,000. The drainage district comprises an area of 4,400 acres in the heart of the Southfield Park Development. The construction work has been divided into two contracts and it is expected that the entire system will be put into service early in the Spring of 1929. Contractors are S. A. Healy of Detroit, and R. D. Baker of Royal Oak.



Laying 60inch Pipe



Placing 9foot pipe
in position



On the Struqis Drain
Troy Township



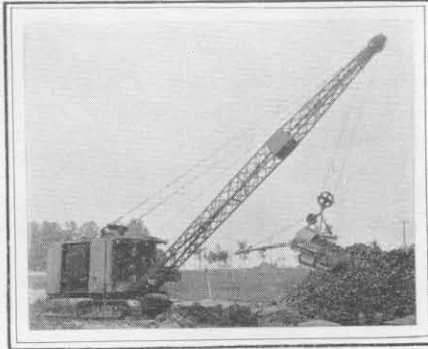
15foot Pipe—Freight Cars or
two Automobiles can pass through



Outside finish—15 ft. section



Reinforcing 15 foot pipe with Steel



50-B Drag Line Excavating Machine



Royal Oak Drain No. 7 is now under construction as a complete lateral system for Ferndale Wyoming Subdivision in the eastern part of Oak Park Village and for Leggett Farms Subdivision in the western part of the City of Ferndale. Contract price \$170,000.

The Farmington Storm Sewer is one of the most important projects proposed for early construction. This is a trunk line system running through the City of Farmington and also embracing a large territory surrounding the City. Practically the entire sewer system of Farmington was built many years ago before the city had started to develop and has now become overloaded and inadequate to care for the present needs. The proposed system will afford relief for and supplement the present system and extend same where necessary to provide an outlet for a large territory which is not now served by sewers. The estimated cost of this project is \$900,000.

The Birmingham Gardens Drain is another project of importance as it will provide trunk line outlet for the western part of the Village of Clawson, the extreme northern part of the City of Royal Oak and the eastern part of the Village of Birmingham. This project is estimated at half a million dollars.

Bloomfield Drain No. 1 will serve a territory of approximately 875 acres lying between Cranbrook and Telegraph Roads and on both sides of Maple Avenue, west of Birmingham, in the rapidly developing district of Bloomfield Village. This system is an extension of the Bloomfield Village Drain which was constructed two years ago. Estimated cost \$350,000.

Royal Oak No. 1 and Southfield No. 3 Drains will complete a trunk line system for the territory lying between the Southfield District and the Royal Oak Drainage District. The proximity of this section to the City of Detroit has made necessary the extension of these systems much earlier than was originally intended. Necessity has been determined and construction should be started this Fall.

The proposed Oakland-Macomb Drain is undoubtedly the largest county drain improvement ever contemplated. This project contemplates a complete network of trunk line sewers lying between the Eight and Thirteen Mile Roads and between Campbell Road and DeQuindre—the east county line. From DeQuindre the project extends easterly through Bear Creek and Red Run as an open drain to the Clinton River and thence easterly in the Clinton River to Lake St. Clair. At the outlet of the closed sewer sections, pumping stations will be built from which the sewage will be conveyed to an up-to-date disposal plant where it will be properly treated. The district involved covers 670 square miles of territory which extends into four counties, Oakland, Lapeer, Macomb and St. Clair; trunk sewers will be constructed to serve approximately 42 square miles of urban area; sewage disposal works will serve eleven municipalities with an estimated population as of 1930 of 100,000. Construction petitions are now being circulated for this work and it is expected that contracts will be let early in 1929.

The Pontiac Storm Sewer is a project of great importance to the City of Pontiac and the surrounding territory. The main trunk extends from the Clinton River at Union Street westerly through the heart of the city and thence northwesterly to provide an outlet for the northern part of the city and a large area in Pontiac and Waterford Townships. Branches also extend northerly to the new Oakland, Pontiac and Fisher Body plants acting as a relief enroute to many of the older sewers which were built many years ago and which were not designed for industrial development. Another branch extends southerly to the new plant of the Yellow Truck Company and into the newly annexed territory on the south. This project also includes cleaning out of the Clinton River from East Boulevard to a point east of Auburn Heights. The stream between these points is crooked and passes through considerable swamp land which together with the dam at Auburn Avenue greatly retards the velocity and creates a very unsanitary condition in this neighborhood. Proceedings in connection with this project have been contested and the matter is now in the hands of the State Supreme Court. A decision is expected early this Fall.

The West Pontiac Drain is of vital importance to the rapidly growing Village of



Sylvan Lake and to the thickly settled section of Waterford Township which lies just outside the west limits of the City of Pontiac between Elizabeth Lake Road and Sylvan Lake Village. This territory is without sewer service of any kind at the present time and because of the topography of the land and its rapid development is greatly in need of an outlet for drainage.

The Richland Gardens Drain will also serve a thickly populated territory in Section 36 of Farmington Township. This is along Grand River Avenue and just outside of the City of Detroit and contemplates a complete lateral system for the territory affected. This project has been somewhat delayed because of the widening of Grand River Road but it is expected that actual construction will be started this Fall.

ARTHUR W. SPENCER,
Drain Commissioner.