Chapter 4

EARLY CONSTRUCTION

Concurrently with progress in selecting the White's Point Outfall site, the Districts were at work in many places elsewhere. Early in 1925, bonds had been voted in Districts 1, 2, 4, 5 and South Bay Cities. With the sale of these bonds, and the availability of Districts’ funds, Warren organized his staff selecting from the engineers who had worked with him in 1924 and 1925 and persuaded one additional County employee (Fred Bowlus) to join the District staff. By May of 1925, the District staff comprised Warren (Chief Engineer); C. R. Compton (Office Engineer); H. R. Bolton (Engineer of Joint Outfall); Fred Bowlus (Engineer District 2); Arthur Cory (Engineer Districts 4 and 5); Clyde Smith (Engineer District 1 and Disposal Works); C. S. J. Williamson (Secretary); A M Rawn (Assistant Chief Engineer). Lucille Bracco, who was Warren's secretary, continued in that position until after Warren's death in 1940. Carl Reeves (Engineer South Bay Cities) had been appointed prior to the others because of the early start of work in South Bay Cities in 1924.

Field offices were established in Lawndale, Lomita, and Downey by mid-1925 and field engineering forces were collecting data to be used in design of sewers for the several areas. These offices were maintained until their use had run out in 1928.
In the meantime it was concluded that a temporary sewage treatment plant at the upper end of Bixby Slough near the settlement of Lomita should be built as a joint venture of the five large Districts to the south. Despite the fact that this location would necessitate flowing sewage from north and east of Dominguez Gap across, or under, a higher level plain, the Bixby site was well located to drain all of the northern area and, additionally, would fit well into either complete treatment with discharge of effluent directly south through Bixby Slough, or with primary treatment alone and discharge to White’s Point or any other selected site along the Palos Verdes coast. As heretofore noted, 24 acres were purchased at the Bixby site from the rather extensive Bixby family holdings in the area, at a cost of some $4,000 per acre, reflecting the relatively high property values at the time and, perhaps, some apprehension regarding the effect that the location of a sewage treatment plant in the area might have on the remainder of the Estate’s property. An interesting side light on this purchase was an attempt by a District employee to overpay the owner. The owner was sufficiently honorable to call Warren’s attention to the fact.
The employee, involved in the questionable matter, was discharged forthwith. It is interesting to note at this point that District land ownership in the Bixby site area has increased ten fold since the original purchase in the 1920's.

It was quite obvious to the engineers designing the District-wide system in 1924 and 1925 that joint ownership of some of the structures was essential if the plan were to succeed. In fact, joint ownership, operation, and administration constituted the very keystone of success in the entire plan. The Act of 1923 did not specifically authorize such action but there was nothing in the Act prohibiting it and, since the plan could not readily proceed without it, Districts 1, 2, 3 and 5 entered into a Joint Outfall contract dated November 19, 1924. Districts 1, 2, 3, 4, 5 and South Bay Cities joined in an Administration contract dated March 4, 1925.

The purpose of the joint ownership and joint administrative agreements, was to provide a practical plan for construction and operation of major trunk lines and disposal works for the joint use of Districts tributary thereto, and for an administrative organization to serve all of the Districts. Obviously such procedure would avoid a great deal of duplication in construction, maintenance and operation of the sewerage works as well as engagement of managers, engineers, legal counsel and office personnel. The economy of such joint action was substantial and, as proved by experience the efficiency of the entire project was greatly enhanced. Joint action on the part of the Districts apparently did not affect District relations with County officials in such matters as the approval and payment of warrants, etc., or in Board of Supervisors' actions relating to District procedure. It was questioned by those interested in the District bonds and their security and hence was clarified by amendment in 1931.

The strategy of joining the Districts in the two agreements and operating thereunder for a number of years was very effective. If the Districts had awaited an amendment to clarify the situation, the delay could have seriously hampered the entire plan and, if perchance the amendment were defeated, would have put the whole plan in jeopardy. By waiting until 1931 for clarifying legislation, opposition was rendered futile and the Districts were authorized to go forward with a well-established program and
plan. Bond counsel apparently did not feel the security of the bonds was endangered at any time, but did favor the 1931 amendments. The 1925 agreements, as executed, were prepared by Hugh Gordon who had previously been requested by Supervisor McClellan to serve as District Counsel, if and when the Districts were financed. Mr. Gordon served as the Districts' General Counsel from March, 1925 until 1953.

By May 1925, the Districts were operating on three fronts. The South Bay Cities District was to be sewered to the Los Angeles newly-built sewage treatment plant at Hyperion. This necessitated a contract with the City covering terms and conditions under which such disposal would be allowed. Los Angeles was agreeable to the arrangement for obvious reasons; foremost was the fact that if the Los Angeles City plant, which had just been completed, operated to contaminate the beaches of the South Bay Cities, the latter were not likely to complain since they would each be contributors to the contamination; secondly, Los Angeles had a large investment in Hyperion and, so they thought, a good plant which would satisfactorily control beach pollution. In large measure, their confidence was shared by engineers of the District who, in addition, felt that the South Bay Cities' sewage would be but a small fraction of that flowing to Hyperion and that it was better to connect to the Hyperion works initially and then, if unsatisfactory, to find other means of disposal. Finally, the fact that Hyperion offered an immediate disposal facility cannot be ruled out as a persuasive factor in the choice.

County Sanitation District 4 was also to be sewered through the Los Angeles facilities, the connection to be made at Third Street and La Cienega Boulevard. When originally formed, District 4 was entirely unincorporated territory, surrounded on three sides by Los Angeles and on the fourth by Beverly Hills. District 4 was formed primarily to provide an agency with which to contract with Los Angeles for sewage disposal. Incidentally, it was presumed that the District would provide certain trunk sewers to which Improvement Act local sewers could be connected, and would also build a trunk sewer, part of which had to be built within Los Angeles City limits, to connect with the City line. The terms offered by the City were reasonable, but the District bought
and paid for more capacity than it needed or ever used during the life of the original contract. District 4 proceeded with construction of its sewers and connected its system to the City lines in 1927.

Districts 1, 2 and 5 were to convey their District sewage to the temporary plant at the Bixby site. From the south boundary of District 2 at about Artesia Street or a little south thereof, it was planned that the District Outfall Trunk Sewer would pick up any flow from District 3 which could be reached and, after crossing under the Los Angeles Flood Control channel, would intercept the flow from District 1 and later District 8. Continuing southwest, it would join with the main trunk from District 5 and the combined sewage would then flow into the plant at Bixby Slough for treatment. During the life of the temporary plant at Bixby and until ocean disposal to White’s Point could be effected, it was planned that effluent from the temporary plant would be pumped back to Dominguez Slough and flow thence to the harbor West Basin.

The plan, exploiting joint action on the part of the several Districts, was obviously the best course to pursue although each
District could, in fact, have taken individual care of its problem. The difficulties inherent in such an individual course of action were severe. Had the Districts not consolidated their disposal efforts initially, but proceeded each with its own separately, the results could have become chaotic. Need for joint ownership and administration were resolved at this point to the great good fortune of the Districts and their efforts.

The origin of appointing District 2 as the administering agent in the Joint Outfall and Joint Administration Agreements is interesting. There were two good reasons for the action in 1924 and 1925, but both have long since disappeared and District 2 persists in its original capacity largely from custom. When joint action was originally proposed, District 2 was the only District which would have a share in all parts of the jointly owned system, but better still, the District at that time contained only one incorporated city within its boundaries. Thus, its Board of Directors comprised two members of the County Board of Supervisors and but one incorporated city official, the Mayor of Montebello. The advantages of working with such a board were quite obvious during the early, and somewhat uncertain days of District activity.
FIRST SEWAGE INTO TEMPORARY PLANT—On February 4, 1928, Chief Engineer Warren opened the gates from the joint outfall into the activated sludge plant at Bixby. The action set the plant in motion which continued—with minor interruptions and difficulties—for nearly ten years. Warren (right), Rawn (left).

Incidentally, the Board of Directors of the original District 2 were McClellan and Cogswell of the Board of Supervisors and W. D. Stephens, Mayor of Montebello. As of the date of this writing (1964), there are twenty directors in District 2, representing nineteen incorporated cities and the County Board of Supervisors. District 2 is now pretty well in the geographical center of the Districts.

Design and construction of sewers proceeded simultaneously
in Districts 1, 2 and 5 and on the joint outfall trunk leading from the south boundary of District 2 to the Bixby plant site. Construction of a temporary activated sludge plant at the Bixby site was in progress and was ready for operation by February 3, 1928, on which date Warren opened the gate into the primary sedimentation tank to set the plant in operation.

The trunk sewer leading from Compton was finished in time to turn effluent from the Imhoff Tank, serving that city, into the District system on September 19, 1927. This partially treated
sewage, which had flowed through Compton Creek for years, thereafter was confined to the sewer as far as an outlet into Dominguez Slough, where it wasted until the opening of the Bixby Plant in 1928. Following completion of the Bixby Plant, sewage of Compton was connected directly to the District lines and the local Compton plant abandoned and demolished. Sewage from Torrance, in District 5 was cut into the District system April 23, 1928, and the primary plant serving that town abandoned. Local sewerage of other cities and towns in Districts 1 and 5 proceeded apace, largely under the Municipal Improvement Act of 1911. The Districts had no control over local sewer construction at the outset, but insisted upon District approval of plans of all new sewers to be connected to District lines and inspection of completed work prior to allowing connection. A subsequent amendment to the Sanitation District Act authorized a sanitation district Board of Directors to substitute for a Board of Supervisors or a City Council in 1911 Act proceedings, but this amendment was neither made at the request of Los Angeles County Districts nor ever invoked by them.
There were the usual troubles during construction of sewers and pumping stations projected for the several Districts, but since all of the work at the time was being done by contract, the outcome, so far as the Districts were concerned, was foregone. Most of the contractors made money. Some of them actually admitted to small profits. Work was not overly plentiful and occasionally a bidder got over enthusiastic and lost a little, but by and large the jobs proceeded without more than ordinary difficulty.

In South Bay Cities, the District Engineer made the mistake of arbitrarily changing the grade of the main sewer along the beach front. Unfortunately, he lowered it to a degree that inspired the contractor to make a claim for extra payment because of water encountered. Of course, the contractor would have hit water in any event, but perhaps not quite as soon as developed. There being no way to change back to the original grade, the contractor made life miserable for all concerned, calling on heaven to witness his peril and threatening to sue the District for every cent it possessed. The change in grade was undoubtedly good engineering, but the method employed by the engineer was not, and it caused trouble. The contractor had taken bonds of the District in payment for the work, which left the District with nothing in its construction fund and very little desire to secure any more. The matter was finally settled to mutual satisfaction, but not before all and sundry in the District camp had undergone a siege of wailing that would tear the heart strings of a wooden Indian. The District Engineer, a good and reliable professional man, took a lot of ribbing. He wound up his career as engineer of maintenance of sewers for the County of Los Angeles.

The first job of any consequence in the jointly operating Districts, to be let, was in District 1 in Atlantic Boulevard. Warren, McClellen, and Pomeroy all participated in turning the first shovel full of excavation. At the time, Atlantic Boulevard was a narrow road through Maywood, paved with bituminous concrete and from the surface, the job looked quite easy. At sewer depth, however, it was wet and in quicksand, a combination to perplex all but the most experienced contractor. The contractor, Lawrence Massa, undertook to effect a railroad crossing at his opening shot at the job and it proved his undoing. He relinquished the job to
one of the best and most experienced sewer contractors in the west, Mike Mlagenovich, whose firm, Mlagenovich and Gillespie, finished the work, but not without considerable difficulty. It was a somewhat inauspicious start for the District enterprise, but a good experience and a real pleasure to see Mlagenovich iron out the difficulties. Men like Mike were scarce then as they are now, Mlagenovich, Vido Artukovich, and Frank Thibido were among the best.
Construction of the Los Angeles Central Outfall Sewer from Los Angeles to Hyperion was commenced in 1904 and completed in 1908. The fact that it traverses the City of Inglewood from northeast to southwest is undoubtedly accounted for by the fact that Inglewood was unincorporated territory until 1908. It was incorporated in February of that year. When District 5 was formed, it included Inglewood within its boundaries despite the presence of an operating Los Angeles City sewer trunk in which, it has been stated, the City would have provided capacity for Inglewood sewage. Before the Sanitation Districts were being discussed, the sewerage situation in Inglewood had become serious. Cesspools serving private dwellings, income property, and business establishments were crowded into the rear of lots and parking strips; room for new construction was running out and building was actually being restricted because of lack of public sewerage. So far as the topographical features of the town were concerned, the District system offered no advantage over the Los Angeles system and with respect to the outlook in the early 1920’s, the Los Angeles City system offered by far the cheaper and faster solution, yet, so great was the opposition to the ocean disposal works of the City at Hyperion as well as the presence of the central outfall through town, that the citizens and the officials of Inglewood supported firmly the District plan and decided to await District sewerage rather than contribute permanently to the Los Angeles line. A great deal of animosity was created by odors from the Los Angeles sewer. Sewage from Los Angeles and beyond was rankly septic by the time it got as far down the system as Inglewood and not only was offensive to citizens in the town, but was actually destroying the sewer. Steps taken by Los Angeles to confine gases to the sewer by covering manholes with concrete did much to improve the odor situation in the area. Repairs to the line have made it serviceable for many years to come and conditions at Hyperion have been vastly improved.

Without the enthusiastic support of the County Supervisors and City Mayors, acting in their respective roles as Directors of the Districts, the task of the Chief Engineer and his staff would have been much more difficult than it was. Indeed, it could have well been impossible. Only three interested officials come to mind who
rather wholeheartedly opposed the District plan. Each, undoubtedly, felt that his position in opposition was well taken, but each, in turn, succumbed to the overwhelming support and confidence of the many others.

Director Hinshaw, Mayor of Signal Hill, was so completely convinced of the necessity of conservation of water by reclaiming it from sewage that he exerted every effort to defeat the District plan, as proposed by Warren, and to substitute for it a plan designed to conserve sewage water for use in agriculture and industry. He effected the construction of a complete treatment plant for his City and later succeeded in guiding the withdrawal of the City of Signal Hill from District 3. At the dedication of the Signal Hill plant, a luncheon which Rawn attended at the request of one of the South Bay Cities' Directors, Mr. Hinshaw disclosed that water from the treatment process was to be sold to an oil
company for something over $50 per million gallons. At the time, sewage flow to the new Signal Hill plant was about thirty-five thousand gallons per day or about a million gallons per month. All costs considered, the water produced at the new plant seemed destined to cost Signal Hill between five hundred and a thousand dollars per million gallons to produce, a matter which was given some publicity by the South Bay Cities Directors. The plant was eventually abandoned and arrangements made for the District to effect disposal of the Signal Hill's sewage.

Mayor Bravender of Hermosa Beach was quite opposed to the plan to contract with Los Angeles City for disposal of South Bay Cities sewage into the new Hyperion Plant, suggesting instead that the District construct its own separate plant. At a public meeting in Hermosa Beach, well attended, the citizens gave the Mayor a pretty bad time of it and insisted upon going ahead with the plan proposed by the District. Looking back over the years and having in mind the experience with the Los Angeles plant in the interim, one is not so sure but that the Mayor may have been a little on the clairvoyant side. In 1948 the District discontinued use of the Hyperion facilities and joined with other owners of the Districts' joint sewage treatment plant at Bixby.

Director Klusman, Mayor of Torrance in 1932 and 1933, appeared very much opposed to the White's Point plan. As an individual he attracted considerable attention because of his "old world" attitude regarding the "public image" to be projected by the Mayor of the City. As a Director of Sanitation District 5, he exercised his parliamentary privileges in Board of Director meetings to criticize the District plan, claiming engineering knowledge and generally siding with those who opposed White's Point. His protestations were thoroughly discounted by the Board and the engineer and his arguments had little, if any, effect upon the final outcome.

During the days of so-called prohibition and while the great and noble experiment was being carried on, the Districts were forced by circumstances to enter the lists on the side of the law in rooting out illicit stills. The first such occurrence was the receipt of an unusual waste at the Davidson City Pumping Station in District 8. This waste had the odor of molasses, the activity of
yeast, and the corrosive effect of acid. The District chemist pronounced it as still slops and the field forces traced it through the sewers to its source. Whether or not the still was operating under protection, the District employees never tried to find out, but the operator was advised to move to some other place. He did so very promptly. In moving, he employed a prominent trucking firm in Los Angeles and found a spot on Bandini Boulevard which both he and the trucking company erroneously thought was served by sewers tributary to the Los Angeles City system where his still residue would not be easily detected because of the great volume of flow of other sewage. He may have been advised in this matter by employees of the Sanitation Districts.

Unfortunately, the Bandini sewer discharged into the District system and the effect upon the temporary plant of the Districts indicated presence of the waste almost immediately. Again the field forces traced the waste to its source on Bandini and this time the Assistant Chief Engineer called at the still site, inspected the works well enough to determine what it was, and although he saw no one during his inspection, left word for the operator to get out. Returning to Los Angeles, he called the trucking outfit, whose owners he knew very well, and told them to get in touch with their client and move him out of the District area pronto and, furthermore, to inform the District office where he located. This settled the matter. The still moved to where the slops were disposed of through the Los Angeles City sewers apparently without trouble. There was a temptation to inform the Internal Revenue, or other officers of the situation, but it seemed useless inasmuch as there appeared to be little, if any, effort on the part of anyone to conceal the operation.

From the outset, the Districts were urged by the County Civil Service Manager to adopt Civil service in the employment of staff members and other employees. Many other County employees also thought the same way. The matter was given consideration on a number of occasions, but no one ever came up with a workable plan. Sanitation Districts were both City and County; it was expected that they would expand and that their territorial composition would change from time to time. New Districts were forming and the question always reached a stalemate upon who was to
comprise the Civil Service Commission and to whom they would be responsible. Actually, civil service has never been invoked to control District employment. This has been entirely satisfactory to and for the Districts. Few efforts have been made by any persons or organizations to exercise undue influence upon District employment, and what attempts have been made have quickly failed. The very composition of the District government precludes the possibility of a concerted raid on its personnel or activities. As to its employees, the Districts have found local people, technical and otherwise, well-suited for their purposes, have had no influence exerted to employ specific individuals, and have consistently maintained salaries and wages in line with those determined for Los Angeles County employees of similar attainments. Relations with labor unions are friendly and the Districts are indebted to the unions for great assistance in prosecution of their work of construction.

The Districts were recipients of help from the various federal agencies interested in stirring up work during the depression of the late 1930's. In particular, Warren went to Washington in 1934 and, assisted by Supervisor John Quinn, wangled a splendid grant of a million dollars from Public Works Administration for use on the White's Point tunnel and ocean outfall. Federal funds were forthcoming on many occasions between 1932 and the mid '40's. They were most welcome and furthered greatly the Districts' work and accomplishments. The Districts did not find the grant conditions and limitations unduly restrictive or inconvenient, in fact, they were helpful to the extent of requiring the contractors to employ local labor and particularly what was available from the District area. Inspectors furnished by Public Works Administration to enforce federal rules were knowledgeable men of considerable experience and were helpful in ironing out the sometimes complex relations with the government. Unfortunately, Cooper, the federal inspector on construction of the ocean outfall, was killed while inspecting some trestle work at White's Point. Settlement of the matter does not seem to be of record.

Federal funds were applied on many jobs. One of interest was in Crenshaw Boulevard south of Inglewood. For this job, the Works Progress Administration agreed to provide all labor and
equipment to complete the construction of a trunk sewer. The District was to provide the material, pipe, brick, etc., and furnish a foreman for the work. March, 1936, when the job got underway, was a cold blustery month, and the ill-clad men who reported for work were neither warm nor experienced, consequently incapable of much work or effort. The soil was hard, dry gravel and clay-loam. A pick in the hands of a man, inexperienced in such labor, was totally ineffective in loosening up the material to be excavated from the trench. After the job had been in "progress" for some days, it was concluded that the wages of the foreman, which the District was paying, would amount to more before the job was finished than the cost of hiring a trenching machine to do the hard work of excavation, leaving the relatively easier job of backfilling and pipe laying to the Works Progress Administration laborers. After much argument, the Works Progress Administration officials agreed, not because the arrangement would save the District money, but rather because the road had to be kept closed during construction to protect the workers and no one could predict when the job would be finished, or indeed, if it would ever be completed under the circumstances.

In complete contrast with the Crenshaw job was one for which Works Progress Administration supplied the labor, built on Wilmington Avenue near Dominguez Slough. This was a concrete arch type of structure, poured in place, and lined with vitrified clay plates with the joints between plates filled with sand and molten sulphur mixed. The plates were first laid on the interior forms for the arch, the joints between plates filled, and then the whole thing, forms and plates, was set up in place so that when the concrete was poured in place, the plates presented an interior face which, it was hoped, would prevent the destruction of the interior conduit surface. Its effectiveness is related elsewhere. The point of this is that the Works Progress Administration Workers found themselves on a job unrelated to the business end of a pick or shovel and doing something useful, new, and interesting. Their attitude toward the job was completely different from that on Crenshaw Boulevard. The men worked eagerly and well and were reluctant to leave the job. There seems to be a lesson of some sort in this comparison and contrast. The memory of it tends to wipe
COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY, CALIF.

SANITATION DISTRICTS SEWERAGE SYSTEM
(1928)
out some of the numerous recollections of other experiences with management of Works Progress Administration and the indifference with which its benefits were accepted by recipients.

As of 1928, the Districts tributary to the Joint Disposal Plant (Bixby) and, in the case of South Bay cities and District 4, to the Los Angeles City system, comprised an area of 227.5 square miles; had constructed 114 miles of trunk sewers, including the joint trunk from District 2 to Bixby; served 275 miles of lateral sewers which had been built by others than the Districts; had constructed a three million gallon per day capacity plant at Bixby and an effluent waste line from the Bixby plant to Dominguez Slough. Two sewage pumping plants had been constructed in South Bay Cities. Population of the Districts was 299,000 and the assessed valuation $315,000,000. Flow at the Joint Disposal Plant (Bixby) was a little less than four million gallons per day.