COUNTY OF LOS ANGELES

REGIONAL PLAN of HIGHWAYS

SECTION 4

LONG BEACH-REDONDO AREA

1931

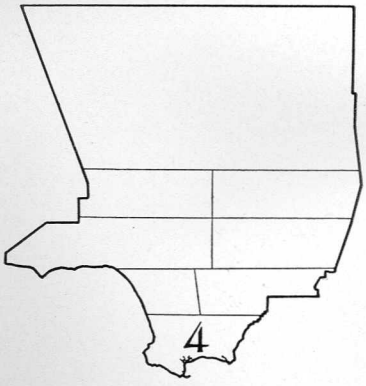
A COMPREHENSIVE REPORT

ON THE

REGIONAL PLAN OF HIGHWAYS

SECTION 4

LONG BEACH-REDONDO AREA

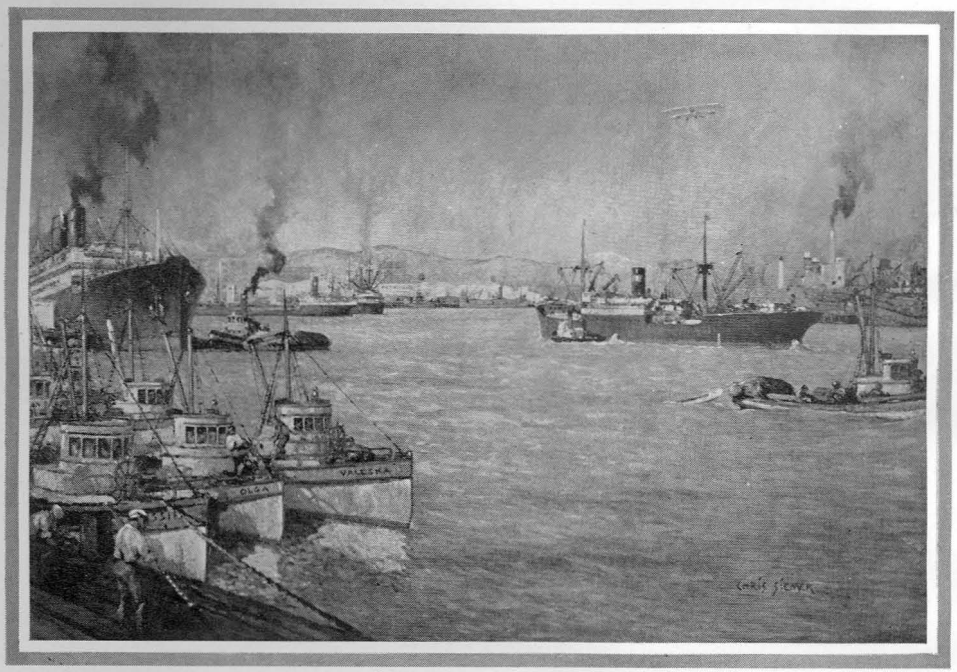


THE REGIONAL PLANNING COMMISSION

County of Los Angeles

Hall of Records, Los Angeles

1931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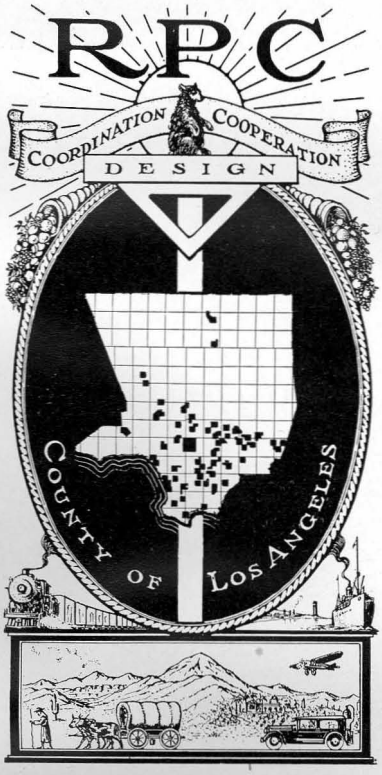
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1931

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MAP INSERTS

FOREWORD

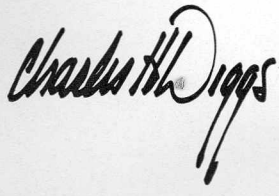
Progress on the Regional Plan for Los Angeles County is again demonstrated by this second Highway Report. On January 16, 1930, in Pasadena, five hundred persons—public officials and delegates representing civic bodies—were presented with the first Report which covered the San Gabriel Valley.

This second Report covers the Long Beach-Redondo Area, and is evidence of the support of the plan by an understanding, well-informed public. The use of this plan will assure the development of the Southern portion of the County in a well-balanced, progressive and coordinated way.

The success of our work depends at all times on the following:

1. A judicious, foresighted Commission, fair and firm in its deliberations;
2. Broad visioned direction of the work to insure coordination of the various phases;
3. Adherence to sound principles of engineering;
4. Adequate research and statistics;
5. A comprehensive plan of highways;
6. Wholesome, forward-looking guidance of land subdivision;
7. Reasonable regulation of the use of property based on comprehensive zoning;
8. Logical study of problems in landscape design;
9. Effective preparation of informational material with emphasis on visual persuasion;
10. Moulding of public opinion to a recognition of the need for, and the feasibility of the plan.

The experience of this Commission during the past eight years has proven these principles to be correct.



Director.

Mr. Charles H. Diggs, Director,
The Regional Planning Commission,
County of Los Angeles.
Dear Sir:

Pursuant to your instructions to make a study of the requirements for highway facilities for that part of the County known as Section 4, I have the honor to submit herewith a comprehensive report on the Regional Plan of Highways for the Long Beach-Redondo Area. The influences governing design of the highway plan for this section are far reaching, and many of them are peculiar to this district. The area embraces the Los Angeles-Long Beach Harbor District, the Pacific Coast Beaches and the southeast portion of the County. Although it includes the heart of the industrial activity which serves Metropolitan Los Angeles, Section 4 also embraces extensive agricultural and dairy lands and a number of rural and beach communities which are of a purely residential character.

The diversity in character of the communities served made necessary an exhaustive study of the existing and future uses of property. Extreme care has been exercised in the design of the highway system to preserve the continuity and integrity of these diversified uses, in order that through the process of comprehensive planning they may realize their greatest value. The cooperation extended by the officials and representatives of the incorporated cities in this area has been very gratifying.

The members of the Staff of the Commission have spared no pains in making the studies for this report thorough and complete in every respect. The County Surveyor's Department has effectively and efficiently fulfilled its mission in carrying out the extensive program of surveys essential to the preparation of the plan. The engineers of the County Road Department, in their whole-hearted cooperation, have given great assistance.

Their seems to be a united appreciation of the need for a comprehensive plan for the development of main thoroughfares serving the 45 incorporated cities in the County. The Regional Plan of Highways undoubtedly will obviate the necessity of continuing the payment of great sums for acquiring rights of way. It is our hope that the plan as set forth will serve as a guide for future development and be the basis for a sound program of expenditure of public funds for the construction of an adequate highway system.

Respectfully,

John J. Fox

Chief Engineer

A COMPREHENSIVE REPORT

ON THE

REGIONAL PLAN OF HIGHWAYS

SECTION 4

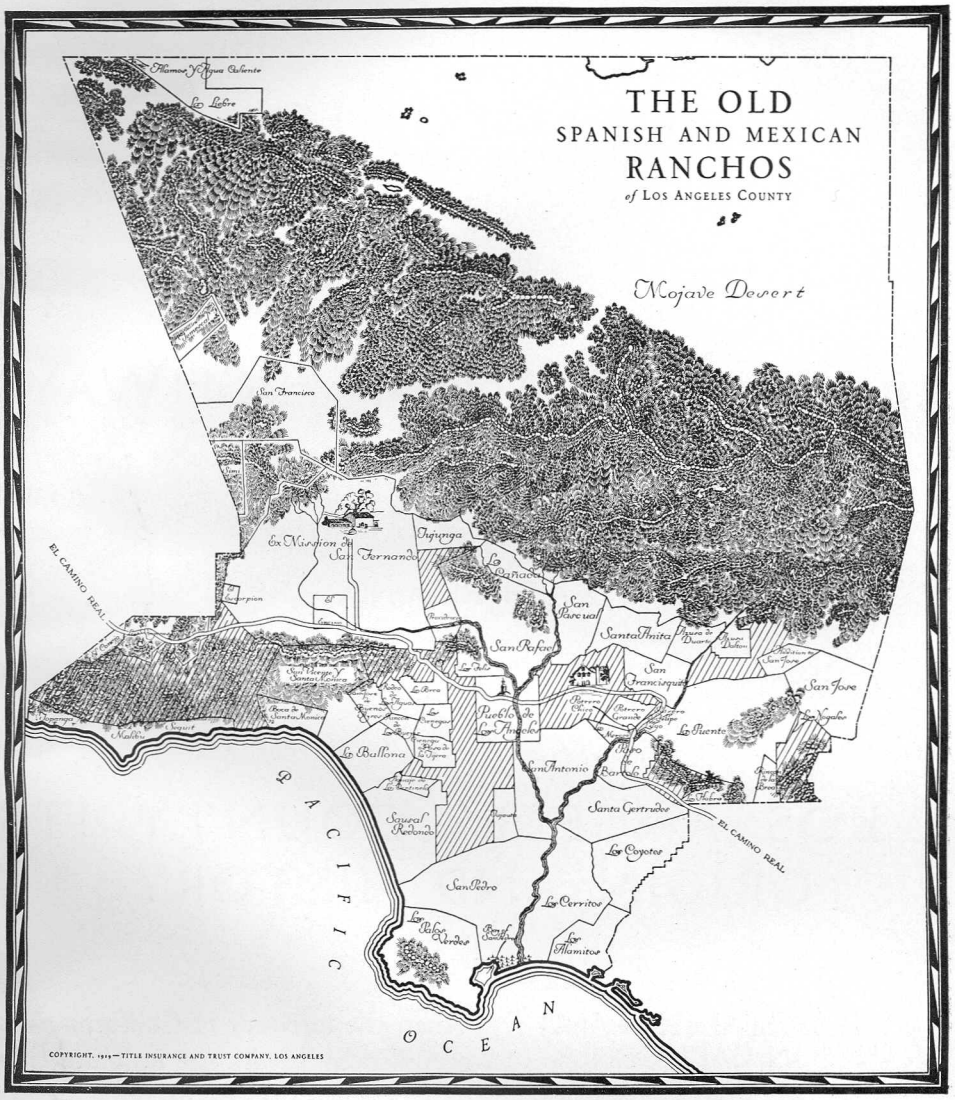
LONG BEACH - REDONDO AREA

SUBMITTED BY WM. J. FOX, CHIEF ENGINEER

I. LOS ANGELES COUNTY: ITS ORIGIN AND HISTORY

EARLIEST SPANISH LAND GRANTS IN CALIFORNIA

When the territory of California was occupied by Spain, the absolute title of lands was vested in the king, as in all new countries discovered and occupied by his subjects. Consequently, during the first years of the Spanish regime, from 1769 to 1784, there appears to have been little or no absolute individual ownership of land. As time went by, however, circumstances arose which made it necessary to establish new laws authorizing the private ownership of land. To this end specific regulations were issued by Viceroy Bucareli y Urusu, dated at Mexico City, August 17th, 1773. Under these instructions Commandante Fernando Xavier Rivera y Moncada was authorized to distribute common lands to Indians who might devote themselves entirely to agriculture and stock raising. He might also distribute lands to other settlers according to merit.



FIRST SPANISH RANCHOS IN LOS ANGELES COUNTY

Two provisional grants by Governor Pedro Fages in 1784 were the first large permanent holdings under Spanish rule. One, to Jose Verdugo, was the Rancho San Rafael (later known as Los Verdugos) in San Fernando Valley, then called the Encino Valley; the other, to Manuel Nietos, embraced about 68 square leagues or about 390,000 acres, stretching from the mountains to the sea, between the San Gabriel and Santa Ana Rivers. Two other large grants were made in 1795: Rancho Encino, and Rancho Portezuelo. Rancho Encino was pre-empted by the Mission Fathers in 1797 when the San Fernando Mission was established.

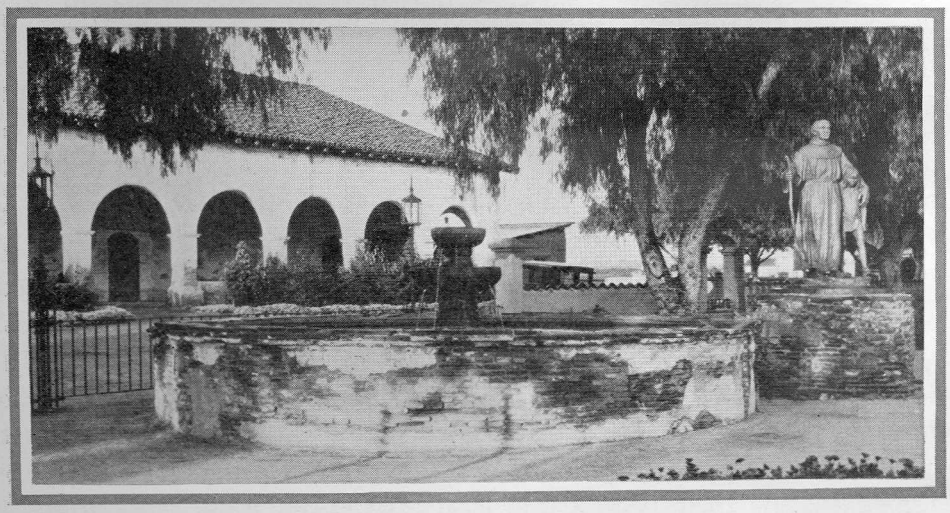
THE MEXICAN ERA

The Mexican era in the history of California began in the year 1822 and continued until the American domination in 1846—a period of twenty-five years. Spanish power, having been overthrown in Mexico, was declining in California. The climax came in 1822 when the ship San Carlos appeared in the harbor of Monterey (then the capital of California) and Conon Augustin Fernandez de San Vicente demanded the surrender of California to the Liberator of Mexico. Governor Don Pablo Vicente de Sola, not wishing blood shed, offered no resistance, and California then became a Province of Mexico.

GRANTS DURING THE MEXICAN REGIME

Ten other grants were made during the Spanish occupation of California, including Rancho San Pedro, granted to Juan Jose Dominguez by Governor de Sola, December 31st, 1822. Most of the large grants came into existence during the Mexican regime, especially after it became evident that California would soon pass into the hands of the United States.

When a petition for a grant was made the matter was generally decided by the personal standing of the applicant in the good graces of the governor. Approval of the petition, together with a general description of the land, was supposed to be entered in the official records. However, the clerk in charge, in many instances, merely made a memorandum on almost anything available, intending, no doubt, to make the official record later.



MISSION SAN FERNANDO REY DE ESPANA (1797)

In many instances the titles overlapped as a consequence of the loose way in which land was recorded at that time. Later, when the United States took possession of California, this condition required an enormous amount of investigation and legal work to ascertain the true ownerships. There were few maps and the descriptions were vague and ambiguous.

CALIFORNIA AS AN INDEPENDENT REPUBLIC

The first step in the transition of California from a Mexican province to an independent Republic occurred on June 14, 1846. On that day, there was formed the "Bear Flag" Republic, which lasted until July 9th of the same year, a period of twenty-six days. The formation of this independent Republic constitutes an important chapter in the history of California. The United States, however, was at war with Mexico. The treaty of Guadalupe Hidalgo, which ended the war, was signed February 2, 1848, making California a province of the United States. It was realized that the territory had no legal status, there being no provision for it in the Constitution of the United States. However, the people formed a State government and elected senators to Congress although California had not yet been admitted as a State.

ADMITTED TO THE UNION AND STATUS OF LAND OWNERSHIP INVESTIGATED

After four years' delay and a continued bitter fight in Congress, the State of California was admitted to the Union on September 9, 1850. The same year William Tarey Jones, a confidential agent of the Department of the Interior, was commissioned to proceed to the new state and conduct an investigation through the archives in Mexico and California to ascertain the status of land ownerships. The condition of the official records and the manner in which land grants had been made during the Mexican regime made this a most difficult task. All of the data available were collected by this Agent, and reported to the Secretary of the Interior.

COMMISSION APPOINTED TO SETTLE LAND CLAIMS

In 1852 an Act of Congress created a Commission to settle these claims. The Board organized in Los Angeles that year, and it was through the hearings and investigations conducted during the years it existed that ownerships of land, by grant and by proprietary possession were confirmed, placing them upon a firm legal basis in this state.

THE STATE SURVEYOR GENERAL'S REPORT OF LAND GRANTS IN LOS ANGELES COUNTY*

Name of Grant	*Confirmee*	*Acres*	*Date of Patent*
AGUAJE DE LA CENTINELLA	B. ABILA	2,219 26	Aug. 23, 1872
LOS ALAMITOS	A. STEARNS	28,027.17	Aug. 29, 1874
AZUSA	A. DUARTE	6,595.62	June 6, 1878
AZUSA	HENRY DALTON	4,431.47	May 29, 1876
LA BALLONA	A. MACHADO, ET AL	13,919.90	Dec. 8, 1873
BOCA DE SANTA MONICA	YSIDRO REYS, ET AL	6,656.93	July 21, 1882
BOCA DE PLAYA	E. VEJAR	6,607.37	Mar. 1, 1879
LA BREA	A. J. ROCHA, ET AL	4,439.07	Apr. 15, 1873
CAHUEGA	D. W. ALEXANDER, ET AL	388.34	Aug. 2, 1872
LA CANADA	J. R. SCOTT, ET AL	5,832.10	Aug. 1, 1866
CANADA DE LOS ALISOS	J. SERRANO	10,668.81	June 27, 1871
CANADA DE LOS NOGALES	J. M. AGUILAR	1,199.56	May 4, 1882
LOS CERRITOS	JUAN TEMPLE	27,054.36	Dec. 7, 1867
CIENEGA O PASO DE LA TIJERA	T. SANCHEZ, ET AL	4,219.34	May 22, 1873
LAS CIENEGAS	J. ABILA, ET AL	4,439.05	June 15, 1871
EL CONEJO	J. DE LA G. Y NORIEGA	48,571.56	Jan. 8, 1873
LOS COYOTES	ANDRES PICO, ET AL	48,806.17	Mar. 9, 1875
EL ENCINO	V. DE LA OSA, ET AL	4,460.73	Jan. 8, 1876
EL ESCORPION	URBANO, ET AL	1,109.65	Dec. 11, 1873
LOS FELIZ	M. Y. BERDUGO	6,647.46	Apr. 18, 1871
LA HABRA	ANDRES PICO, ET AL	6,698.57	Dec. 4, 1872
HUERTA DE CUATI	V. REID	128.26	June 30, 1859
ISL. OF S. CATALINA	J. M. COVARRUBIAS	45,820.43	Apr. 10, 1867
LA LIEBRE	J. M. FLORES	48,799.59	June 21, 1879
LOS ANGELES, CITY LANDS	CITY OF LOS ANGELES	17,172.37	Aug. 4, 1875 Aug. 9, 1866
MISSION SAN GABRIEL, LOT NEAR	BP. J S. ALEMANY	55.23	Dec. 4, 1875
MISSION SAN FERNANDO	BP. J. S. ALEMANY	76.94	May 31, 1864
MISSION SAN GABRIEL	BP. J. S. ALEMANY	190.69	Nov. 19, 1859
EX-MISSION SAN FERNANDO	E. DE CELIS	116,858.46	Jan. 8, 1873
LOS NOGALES	MARIA DE J. GARCIA, ET AL	1,003.67	June 29, 1882
LOS PALOS VERDES	J. L. SEPULVEDA, ET AL	31,629.43	June 23, 1880
PASSO DE BARTOLO, PART OF	B. GUIRADO	875.99	Sept. 27, 1867
PASSO DE BARTOLO, PART OF	JOAQUIN SEPULVEDA	207.79	Mar. 17, 1881
PASSO DE BARTOLO, PART OF	PIO PICO, ET AL	8,991.22	Aug. 5, 1881
POTRERO DE LA MISSION VIEJA DE SAN GABRIEL	VALANZUELA, ET AL	90.00	
POTRERO DE FELIPE LUGO	MORILLA & ROMERO	2,042.81	June 15, 1871
POTRERO GRANDE	J. M. SANCHEZ	4,431.95	July 19, 1859
PROSPERO TRACT	R. VALANZUELA, ET AL	23.63	Dec. 4, 1875
PROVIDENTIA	D. W. ALEXANDER, ET AL	4,064.33	Aug. 6, 1872
LA PUENTE	WORHAM & ROLAND	48,790.55	Apr. 19, 1867
RINCON DE LA BREA	G. YBARRA	4,452.59	Nov. 14, 1864
RINCON DE LOS BEYES	F. HIGUERA, ET AL	3,127.89	Aug. 27, 1872
SAN ANTONIO	A. M. LUGO	29,513.35	July 20, 1866
SAN ANTONIO, OR BODEO DE LAS AGUAS	M. R. VALDEZ	4,449.31	June 27, 1871
SAN FRANCISCO	JACOBA FELIZ, ET AL	48,611.88	Feb. 12, 1875
TRACTS NEAR SAN GABRIEL	JUAN SILVA	50.00	
	H. P. DORSEY	50.41	
	MICHAEL WHITE	78.23	Aug. 26, 1871
	JOSE LEDESMA	22.21	June 20, 1871
	J. P. DE J. COURTNEY	49.29	June 20, 1871
	FRANCISCO SALES	19.43	June 20, 1871
	DANIEL SEXTON	227.78	May 16, 1871
	JOSE DOMINGO	22.34	Aug. 23, 1871
SAN FRANCISQUITO	HENRY DALTON	8,893.62	May 30, 1867
JAN JOAQUIN	JOSE SEPULVEDA	48,803.16	Sept. 19, 1867
JAN JOSE	DALTON, PALOMARES & VEJAR	22,340.41	Jan. 20, 1875
SAN JOSE, ADDITION TO	DALTON, PALOMARES & VEJAR	4,430.64	Dec. 4, 1875
SAN JOSE DE BUENOS AYRES	B. D. WILSON	4,438.09	July 5, 1866
SAN PASCUAL	B. D. WILSON	708.57	Feb. 12, 1881
SAN PASCUAL	MANUEL GARFIAS	13,693.93	Apr. 3, 1863
SAN PASCUAL	JUAN GALLARDO	700.00	
SAN PEDRO	M. DOMINGUEZ, ET AL	43,119.13	Dec. 18, 1858
SAN RAFAEL	JULIO BERDUGO, ET AL	36,403.32	Jan. 28, 1882
SAN VICENTE Y SANTA MONICA	R. SEPULVEDA	30,259.65	July 23, 1881
SANTA ANITA	HENRY DALTON	13,319.06	Aug. 9, 1866
SAN GERTRUDES, PART	T. S. COLIMA	3,696.23	July 17, 1877
SAN GERTRUDES, PART	McFARLAND & DOWNEY	17,602.01	Aug. 19, 1870
SAUSAL REDONDO	A. I. ABILA	22,458.94	Mar. 22, 1875
SIMI	J. DE LA G. Y NORIEGA	113,009.21	June 29, 1865
TAJAUTA	E. ABILA	3,559.86	Jan. 8, 1873
TEMESAAL	R. DE LA CUESTA	13,339.07	Sept. 13, 1871
TOPANGO MALIBU SEQUIT	M. KELLER	13,315.70	Aug. 29, 1872
TEJUNGA	D. W. ALEXANDER, ET AL	16,600.71	Oct. 19, 1874

*As determined by the United States Commission and the Courts.

LOS ANGELES COUNTY CREATED

Los Angeles was one of the first counties into which the state was originally divided, on February 18th, 1850. In 1851 an act was passed by the legislature definitely fixing its boundaries. The northern boundary at that time was the Tehachapi Pass, and the county extended to the Colorado River on the east, to San Juan Capistrano on the south, and to the Pacific Ocean on the west. This boundary of the county is called the Line of 1851. From the coast to the northeast corner of the Triunfo Rancho the line of 1851 has come down without change to the present day.

COUNTY BOUNDARIES DEFINED

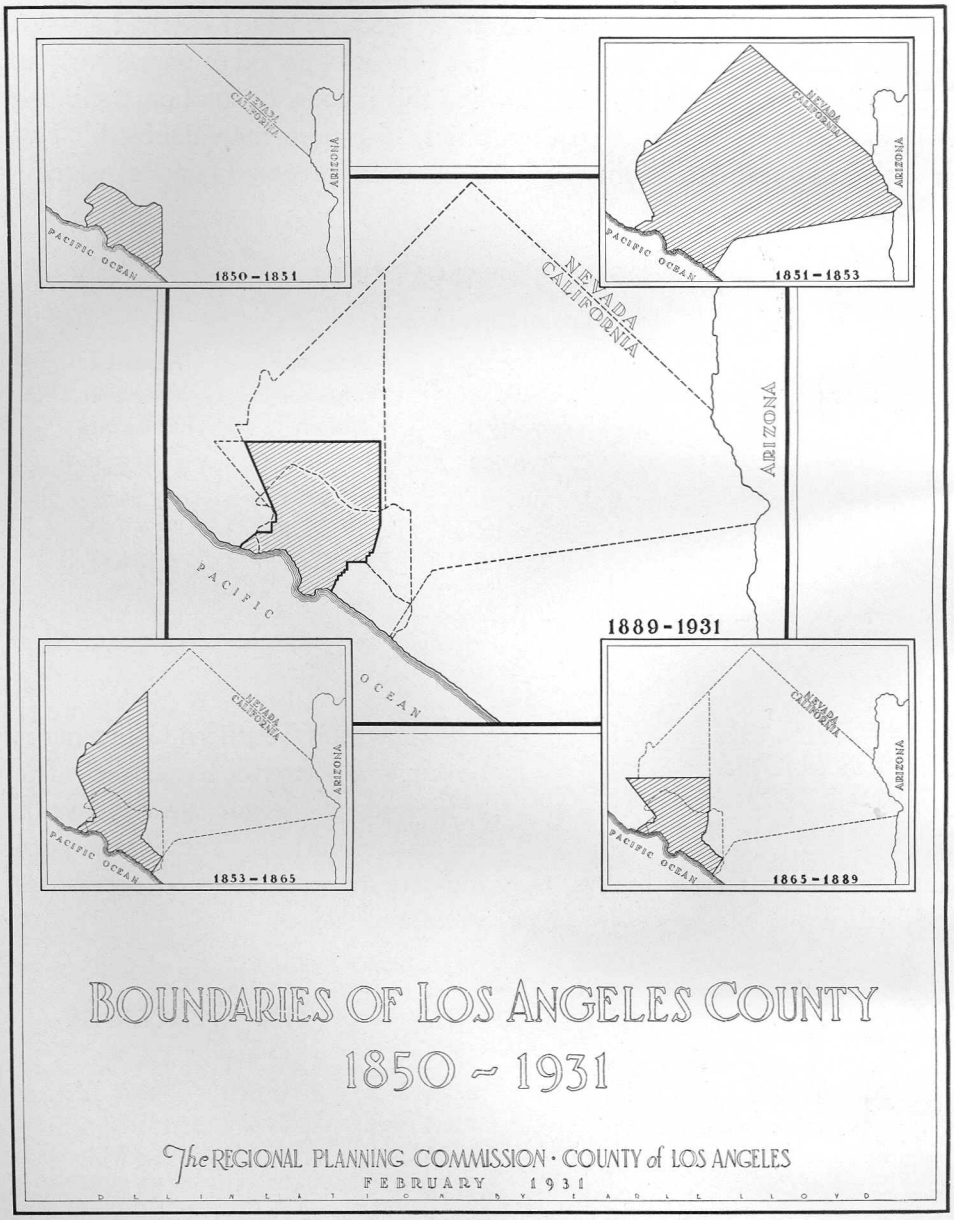
In 1853 the easterly portion of the county was separately organized as San Bernardino County. Several determinations were made which later resulted in the adoption of a legal description, included in the Political Code in 1872, in which the boundaries of Los Angeles County were defined in full. In general, the former lines were confirmed. In 1889 the southeasterly portion was separated from the county to form Orange County.

PRESENT BOUNDARY

The present boundary of the county, shown in the central figure on the opposite page, was finally established by the legislature in 1889. A detailed description is included in Section 3927 of the Political Code. While these descriptions definitely fixed the boundaries as between counties, there still remained the validity of boundaries commonly used for the purpose of assessments and collection of taxes. This question was finally settled by an act of the legislature in 1927. This act, known as Chapter 829 of the General Laws of 1927, validated the boundaries between the counties of the state for the purpose of assessment and collection of taxes.

LOS ANGELES COUNTY IN 1931

Los Angeles County now ranks tenth in size in California. Its area has been recently determined to be 4,085 square miles. The topography is rugged, ranging in elevation from sea level at the southern end to 10,000 feet at the summit of Mount San Antonio, and then receding to the plateau of the Mojave on the north where the average elevation is about 2500 feet.



BOUNDARIES OF LOS ANGELES COUNTY
1850 ~ 1931

The REGIONAL PLANNING COMMISSION · COUNTY of LOS ANGELES

FEBRUARY 1931

DELINEATION BY EAGLE LLOYD

Most of the mountainous area of the county is within National Forests. Almost all of the population is in the valleys and the coastal plains. The area between the mountains and the ocean is very fertile and productive. The soil and climate are suited to the production of a great variety and abundance of fruits, vegetables and other produce, which reached a value of $66,807,569 in 1930. The County has enjoyed a period of unprecedented prosperity in the past ten years. During this time its population, including that of the forty-five incorporated cities, has more than doubled. This growth has accentuated the need of a carefully prepared regional plan.

ASSESSED VALUATIONS

Los Angeles County

Year	Population January 1	Assessed Valuation* March 1	Assessed Valuation Per Capita
1900	170,288	$ 100,137,905	$ 588.05
1910	504,131	531,400,559	1,054.09
1920	936,455	1,207,687,344	1,289.64
1930	2,208,492**	3,499,476,797	1,584.55

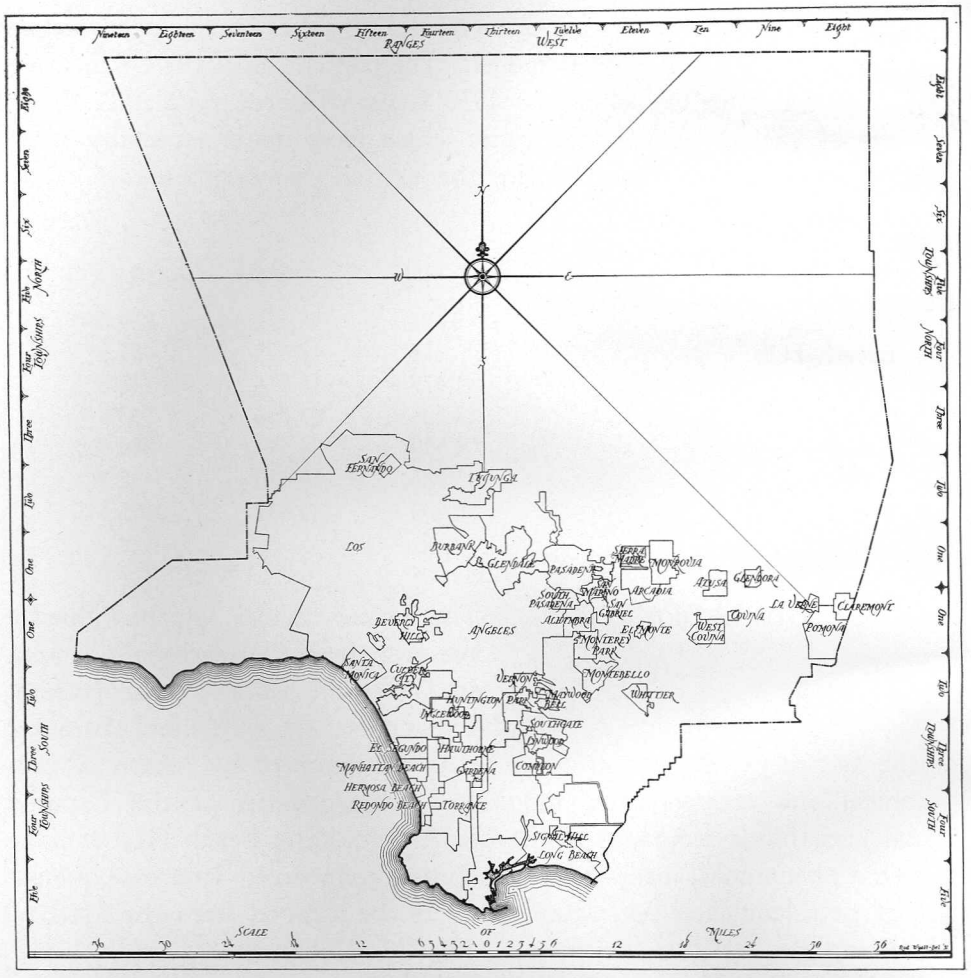
*Including all operative property, but not securities and solvent credits.
**April 1.

WHAT THE 1930 CENSUS SHOWS

The growth of Southern California is no longer a matter of conjecture. The 1930 Federal Census clearly reveals the true situation. These large populations are not merely figures; they indicate markets, services, necessities and luxuries.

AREA	1920	1930	INCREASE
City of Los Angeles	576,673	1,238,048	114.7%
Metropolitan Los Angeles*	879,000	2,115,000	140% (Est.)
Los Angeles County	936,455	2,208,492	135.8%
Southern California**	1,512,839	3,155,720	108.5%
State of California	3,426,861	5,677,251	65.7%
Pacific Coast States†	5,566,871	8,194,433	47.2%
Eleven Western States††	8,902,972	11,896,222	33.6%
United States	105,710,620	122,775,046	16.1%

*As Set up by the Government in 1920.
**Los Angeles local trade area, 14 counties.
†Washington, Oregon and California.
††Western trade area.



INCORPORATED CITIES OF LOS ANGELES COUNTY

Population according to the 1930 Census

Alhambra	29,472	Glendora	2,761	Pomona	20,804
Arcadia	5,216	Hawthorne	6,596	Redondo Beach	9,347
Avalon	1,897	Hermosa Beach	4,796	San Fernando	7,567
Azusa	4,808	Huntington Park	24,591	San Gabriel	7,224
Bell	7,884	Inglewood	19,480	San Marino	3,730
Beverly Hills	17,429	La Verne	2,860	Santa Monica	37,146
Burbank	16,662	Long Beach	142,032	Sierra Madre	3,550
Claremont	2,719	Los Angeles	1,238,048	Signal Hill	2,932
Compton	12,516	Lynwood	7,323	South Gate	19,632
Covina	2,774	Manhattan Beach	1,891	South Pasadena	13,730
Culver City	5,669	Maywood	6,794	Torrance	7,271
El Monte	3,479	Monrovia	10,890	Tujunga	2,311
El Segundo	3,503	Montebello	5,498	Vernon	1,269
Gardena	3,800*	Monterey Park	6,406	West Covina	769
Glendale	62,736	Pasadena	76,086	Whittier	14,882

*Estimated.

The growth of Los Angeles County and its cities in the past decade has been nothing short of phenomenal. The population of the County ten years ago was 936,455, while the 1930 Census records 2,208,492, or an increase of 136%. Among the cities which have made especially noteworthy increase in population during the last ten year period are:

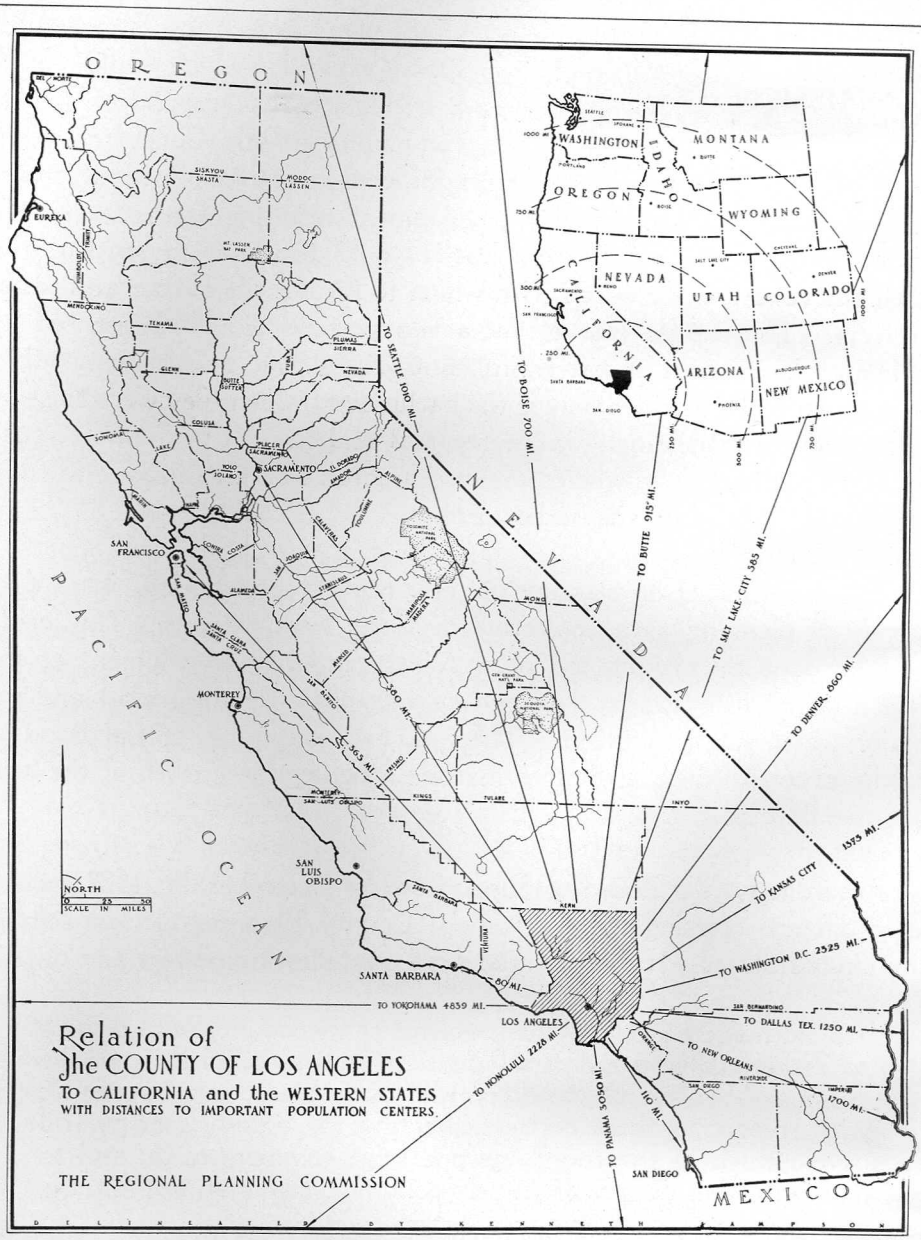
CITY	1920	1930	INCREASE
Alhambra	9,096	29,472	224.0%
Beverly Hills	674	17,429	2,485.9%
Compton	1,478	12,516	746.8%
Glendale	13,536	62,736	363.5%
Huntington Park	4,513	24,591	444.9%
Inglewood	3,286	19,480	492.8%
Long Beach	55,593	142,032	155.5%

HARBOR DEVELOPMENT

The prime factors which influence the growth of the metropolitan area are rail and water transportation. These reflect the extent and character of the territory which contributes to its development by reason of geographical and topographical influences. The opening of the Panama Canal and the development of the Los Angeles-Long Beach Harbor have caused a phenomenal increase in the county's commerce. Immense quantities of petroleum and petroleum products are shipped from the Harbor. These exports in 1930 amounted to 139,036,871 barrels.

THE COUNTY A NATURAL UNIT FOR REGIONAL PLANNING

While the rapid growth experienced in this part of the state was extremely gratifying and conducive to general prosperity, it presented serious problems in the matter of urban development. The influx of population, which was gaining in acceleration, caused many civic bodies and officials to look with alarm upon the serious consequences of the subdivision of so much land without the guidance of a comprehensive physical plan. City planning, already undertaken by many of the forty-five cities in the County, was found to be unduly limited in its activities by jurisdictional boundaries. The County, on the other hand, was seen to constitute a natural economic planning unit. The importance of having a unified scheme of development for this metropolitan region was evident.



Relation of The COUNTY OF LOS ANGELES To CALIFORNIA and the WESTERN STATES WITH DISTANCES TO IMPORTANT POPULATION CENTERS.

THE REGIONAL PLANNING COMMISSION

DELINEATED BY KENNETH GAMPSON

TIME DISTANCES

HOURS FROM LOS ANGELES ON SCHEDULED RUNS

NOVEMBER 1930

TO	BY BOAT	BY RAIL	BY BUS	BY AIR
BOISE		38	44	10½
BUTTE		40		12¼
DALLAS		44	60	13
DENVER		42	53	11¾
HONOLULU	144			
KANSAS CITY		49	84	13
NEW ORLEANS	384	56	96	17

TO	BY BOAT	BY RAIL	BY BUS	BY AIR
PANAMA	192			
SALT LAKE CITY		24	27	7¼
SAN DIEGO	5	3	4	1¼
SAN FRANCISCO	18	12	15	3
SEATTLE	67	44	51	11¾
WASHINGTON DC.		90	132	24½
YOKOHAMA	480			

CREATION OF THE REGIONAL PLANNING COMMISSION

Great plans were being launched for harbor expansion which would require a tremendous background of general community growth. Concurrent plans were under way to provide a large additional water supply for this part of the state. The community development resulting from the harbor improvement would require this, but it would also have to constitute in itself the collateral for bonds with which to finance the harbor and water projects. The capital cost of these two projects alone represented an estimated investment of approximately $500,000,000. This being a public debt, it would be justified only if the background which they were to serve developed correspondingly in degree and stability. Furthermore, such development had to be wholesome in character, well organized, and thoroughly correlated with the harbor project.

The advantages of planning in advance of construction, instead of merely re-planning as a corrective measure, were obvious. This could best be done by making the plans for the internal development of the region along with, and on the same scale as, those for the harbor and the major water supply projects. The establishment of an official body to study especially these and other matters affecting the growth of the area was therefore necessary.

Accordingly, the Board of Supervisors on December 18, 1922, passed an ordinance creating the first official County Planning Commission in the United States. It was charged with the following powers and duties:

> "(a) to make a study of the problems of the County with respect to residential and industrial districts, traffic conditions, public parks and boulevards, flood control, subdivisions, and, in general, with respect to those matters affecting the orderly growth and development of the county as one large commonwealth, and to make to the Board of Supervisors recommendations for the solution of the same;
>
> (b) to advise with the Board of Supervisors and other county officials with respect to their duties affecting any of the above matters;
>
> (c) to seek to interest the various municipalities and other political subdivisions of the county in a joint effort to understand and solve the common problems of development confronting them and the county."

HIGHWAY STUDY AUTHORIZED

A few months later, the Board of Supervisors recognized the fundamental importance of a comprehensive highway plan as the basis for all other phases of the work, and adopted the resolution, reproduced in full below, authorizing this Commission to work out such a plan with other agencies involved.

The following resolution was adopted by the Board of Supervisors of the County of Los Angeles on May 21st, 1923:

RESOLVED: That the Board of Supervisors urges the necessity of a comprehensive network of through highways, extending over the entire County;

That this system of roadways should provide for a major through traffic way at least 100 feet wide, on the section lines where practicable, or about one mile apart where topography permits. That secondary highways, not less than 80 feet in width, should be located on the half mile section lines where practicable, or at about an equal distance through rolling country, as relief thoroughfares;

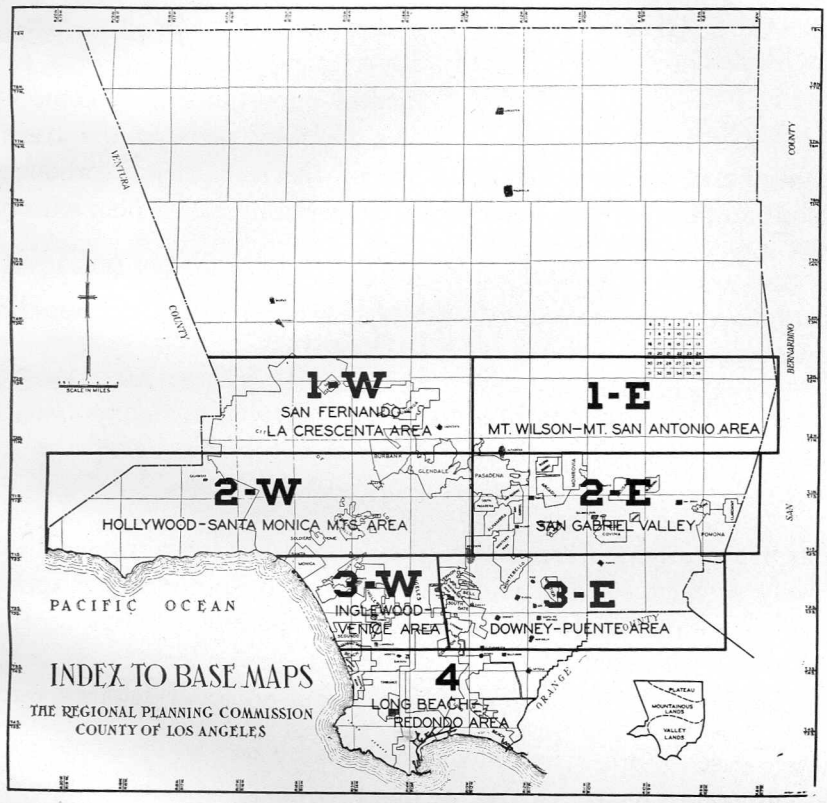
That by-pass streets, 60 feet in width, running through and parallel to the major and secondary highways, should be provided along the quarter sections where possible, to take care of overflow traffic from the major and secondary highways;

That this Board urges the need of working out this system or network of highways upon the County Surveyor, the Engineer of the County Road Department, the Regional Planning Commission, the City Planning Commission, the City Engineers, the Subdividing Engineers, and the Realtors and Realty Owners engaged in laying out new subdivisions.

And this Board of Supervisors suggests that all preliminary and final plans for subdivisions conform to this proposed comprehensive system of through highways.

L. E. LAMPTON, County Clerk
and ex-officio Clerk of the
Board of Supervisors.

This important document marks the initial step in the development of the Regional Plan of Highways, the second unit of which, now finally approved, constitutes the subject of the present report.



COUNTY DIVIDED INTO PHYSICAL SECTIONS FOR REGIONAL STUDY

The great size of the county led to the decision to divide it into sections for the purpose of regional planning studies. This method of study was made effective, as well as advantageous, by the fact that the area is made up of several natural physical divisions, identified as follows:

SAN FERNANDO-LA CRESCENTA AREA 1-W
MT. WILSON-SAN ANTONIO AREA 1-E
HOLLYWOOD-SANTA MONICA AREA 2-W
SAN GABRIEL VALLEY 2-E
INGLEWOOD-VENICE AREA 3-W
DOWNEY-PUENTE AREA 3-E
LONG BEACH-REDONDO AREA 4

It was the purpose of the Commission to make preliminary plans for the county as a whole, and then concentrate its attention upon each of these physical divisions for detailed and final plans. While the work of detailing a particular section is going forward, the foundation is being laid for the subsequent studies in each of the other sections.

HIGHWAY NETWORK OF BASIC IMPORTANCE

The major highway system is the primary element in a Regional Plan—one which is fixed in extent by calculable demands, and often partially determined as to location by topographical conditions or by established dedications. The broad outlines of the Regional Plan of Highways have already been set forth on the Commission's maps, and have been subject to continuous refinement through field and economic studies for the past five years. The location of a series of main arteries and the subsequent location of minor streets tend to fix the size and shape of remaining parcels of land. The dimensions of each particular parcel more or less influence its advantageous use. It was therefore necessary for the Commission to consider thoroughly all the various phases of community development and land uses as related to the Highway Plan.

CITY PLANNING DISTINGUISHED FROM RECONSTRUCTION

At the outset a distinction is made between *re*-planning of an already developed community and *planning*, in its true form. City planning in its very essence means the planning of the city *before*, *not after* development. Remedies can easily be suggested for an unfavorable condition once it has arisen. But these remedies, at best, can only repair in a lame way an intolerable situation. Such "curative" planning is more or less a process of general community surgery modified by compromises. Furthermore, remedial measures are costly, and dig heavily into the public purse. The cost of rectification and reconstruction items which are annually added to the bonded indebtedness of our cities and counties, when taken in the aggregate, is more than the combined operating expense of all departments of government.

TECHNICAL ABILITY REQUIRED TO PLAN CITIES

The proverbial maxim that "an ounce of prevention is worth a pound of cure" never had a better application. It is pertinent, and morally obligatory on the part of the public officers charged with the people's trust, to give special attention to those phases of community development which give rise to expense. Obviously, the best time to begin planning cities is before the land is subdivided. This, however, requires the careful attention of competent technicians. Bungling at this stage can never be wholly repaired. It is for this reason that the city planner cannot be only an engineer, an architect, or a landscape architect, but must be well equipped with the strength and best talent of all these professions.

II. THE LONG BEACH-REDONDO HIGHWAY PLAN

SECOND HIGHWAY REPORT TO BE COMPILED

This report is the second to be compiled as the result of exhaustive studies made to ascertain the county's future requirements in the matter of a regional highway system. The first embraced the entire San Gabriel Valley (Section 2-E), including its seventeen incorporated cities. The present report includes an account of the far-reaching studies which have been made to prove the feasibility of the plan. No pains have been spared to make the plan comprehensive in its scope, so that its design gives to the community a stable foundation upon which to build.

DESCRIPTION OF THE LONG BEACH-REDONDO AREA

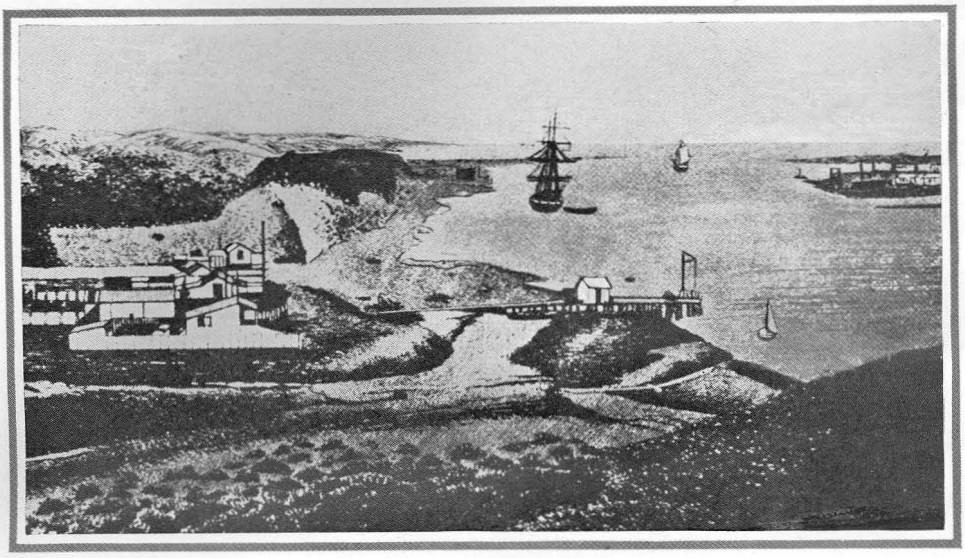
No other section of the region is as diversified in use and character as the Long Beach-Redondo Area. It comprises 200 square miles, with a population of 267,600 persons. In the central southern portion is the Los Angeles-Long Beach Harbor. Concentrated around this harbor is the heart of the major industrial activity which supports Metropolitan Los Angeles. The extreme easterly section is devoted mainly to agricultural use. In the northern central section is Dominguez Hill, marking the northerly boundary of the major industrial district. The western extremity is bordered by some of California's finest beaches. In the hill section along the coast line, between the harbor district and the beach cities, lie the beautiful Palos Verdes Estates, forming one of the nation's foremost residential communities.

TOPOGRAPHICAL FEATURES

The Los Angeles River bisects the area and terminates in the Pacific Ocean at the Long Beach Harbor. The San Gabriel River borders the Section on the east. These two rivers constitute the principal means of drainage for the county. In the summer months their beds are entirely dry. During the rainy season, however, these two rivers carry flood waters of the major portion of the county to the ocean. About one-third of the area is included within incorporated cities. Forty square miles, or 20%, is subdivided into town lots, while 4.6% is used by existing industries,


SAUSAL REDONDO
Gardena
SAN PEDRO
LOS CERRITOS
LONG BEACH
LOS ALAMITOS
SANTA MONICA BAY
HERMOSA BEACH
REDONDO BEACH
MANHATTAN BEACH
PALOS VERDES
HARBOR CITY
WILMINGTON
SAN PEDRO BAY
PACIFIC
LOS ANGELES


TOPOGRAPHICAL
MAP
LONG BEACH REDONDO AREA
COUNTY OF LOS ANGELES
SAN PEDRO BAY
LOS CERRITOS
LOS ALAMITOS
LOS COYOTES
LONG BEACH
WILMINGTON
SAN PEDRO



SAN PEDRO HARBOR IN 1878

ADOBE HACIENDA OF DON JUAN TEMPLE

and an additional 16.3% is recommended to be set aside for industrial expansion.

AREA AND TOPOGRAPHY

Area of hills	53.8	square	miles
Area of swamps	3.3	"	"
Area of water ways (rivers, washes and Alamitos Bay)	2.6	"	"
Area of Los Angeles-Long Beach Harbor (inner)	2.3	"	"
Level area	138.0	"	"
Total area	200.0	"	"

CITIES AND TOWNS

The nine incorporated cities in this section have a total area of 91.64 square miles. There are also ten unincorporated towns. The trend of population increase in the cities is shown opposite. It will be interesting to note that while the increase in the City of Los Angeles parallels that of the entire County, the growth of Long Beach and several of the other cities in Section 4 has been even more rapid.

CITY	AREA	POPULATION	
	Square Miles	Present	Ultimate
Compton	4.52	12,516	70,000
Gardena	2.89	3,800	30,000
Hermosa Beach	1.40	4,796	12,000
Long Beach	28.79	142,032	450,000
Los Angeles*	23.76	53,778	———
Manhattan Beach	3.82	1,891	60,000
Redondo Beach	5.76	9,347	85,000
Signal Hill	2.30	2,932	35,000
Torrance	18.40	7,271	150,000

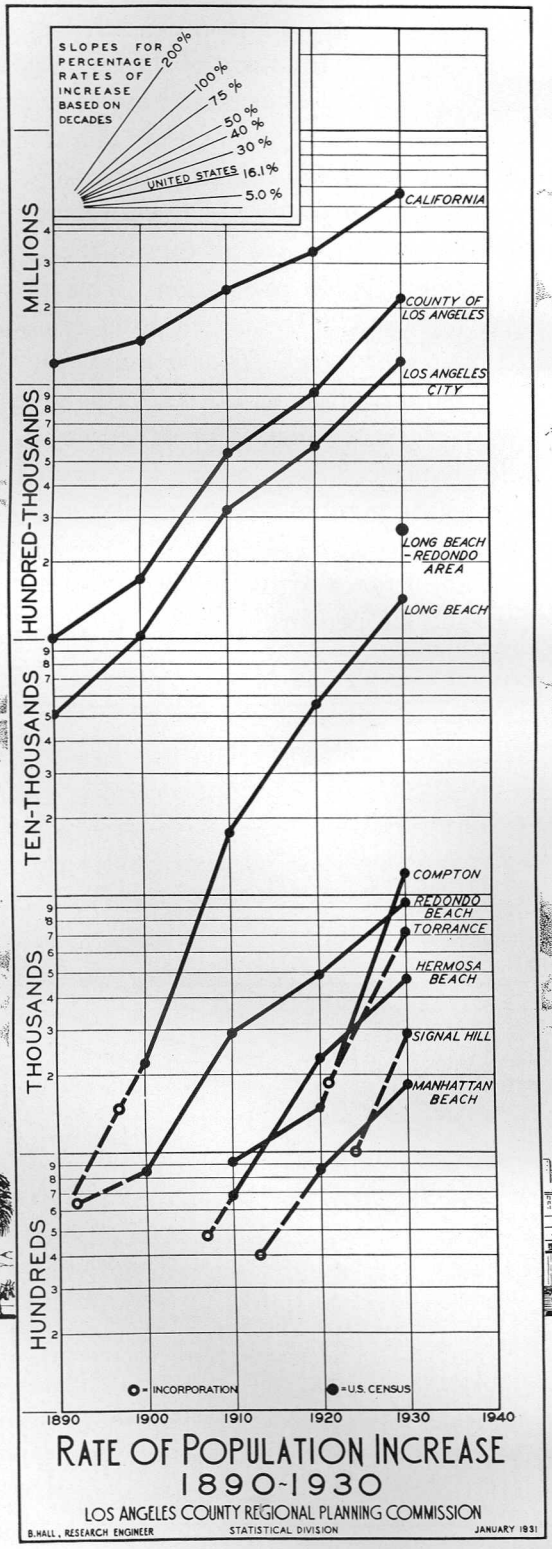
*A portion only—Wilmington and San Pedro.

UNINCORPORATED TOWNS

Artesia	Lawndale
Bellflower	Lomita
Bixby Knolls	Los Cerritos
Clearwater	Moneta Acres
Hynes	Palos Verdes

CITIES ARE DEPENDENT UPON EACH OTHER

These cities and towns are more or less dependent upon each other for their business and trade, and consequently for their future prosperity. This fact is recognized by the business men of the area, and is manifested by the formation of the Harbor District Chambers of Commerce. This fine organization is made up of representatives of the Chambers of Commerce of each city and the leaders of civic organizations. It has done much to further the prosperous development of these cities through the efforts of its various active committees, to which the organization as a whole has always given full support.



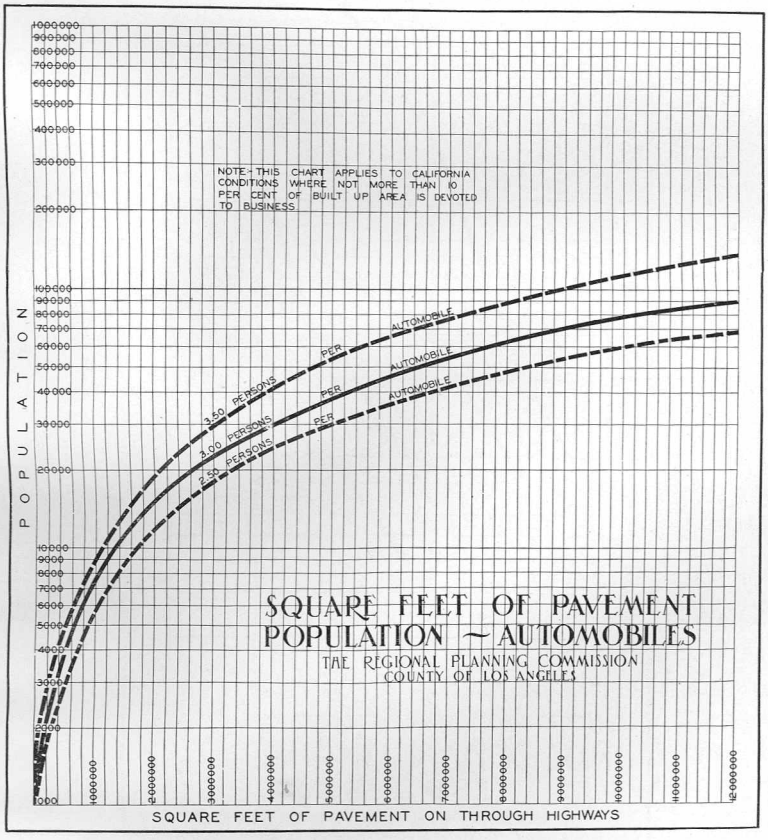
RATE OF POPULATION INCREASE 1890-1930

LOS ANGELES COUNTY REGIONAL PLANNING COMMISSION

B. HALL, RESEARCH ENGINEER — STATISTICAL DIVISION — JANUARY 1931

INFLUENCE OF THE AUTOMOBILE ON HIGHWAY DEVELOPMENT

The rapid advance in the development of the highway is a result of the increased use of the automobile, and the number of automobiles is a function of the population. The United States now has 75% of all the automobiles in existence. This extensive use of the automobile is not confined to the larger cities, for in 1929, 57% of all cars in the United States were registered in towns under 10,000 population. This is reflected in the mileage of improved highways. There is a total of 3,024,233 miles of road in the United States of which 700,000 miles, or 23%, is surfaced and improved. Taking the country as a whole, this gives a ratio of 8.83 automobiles to a mile of road. In California, however, the ratio is 83 automobiles per mile of surfaced road, or one to every 64 feet. California leads all other states in the number of automobiles in proportion to population, showing a car for each 2.74 persons. Mexico has 202 persons per car, Germany 99, and France 31; while the ratio for the entire United States is one car for each 4.6 persons.



PAVED STREET AREA REQUIRED

There is a definite relationship between automobiles and population. Experiment has shown that there is an equally definite relationship between the number of automobiles in a given area and the amount of paved street area required for safe and efficient traffic movement on through highways and major streets. The diagrams shown indicate the results of the studies made along these lines. As is usual in design, peak loads were taken as the controlling factor in working out these diagrams. Any community's requirement as to paved street area is a function of the number of automobiles operating in the district. The use of the graph shown opposite is of inestimable value for the following purposes:

1. To check existing paved highways in a city to ascertain if there is sufficient roadway space for safe and efficient traffic movement.
2. To design a through highway system commensurate with the predicted population.
3. To set up a program of highway construction based upon five- or ten-year periods of population increase.

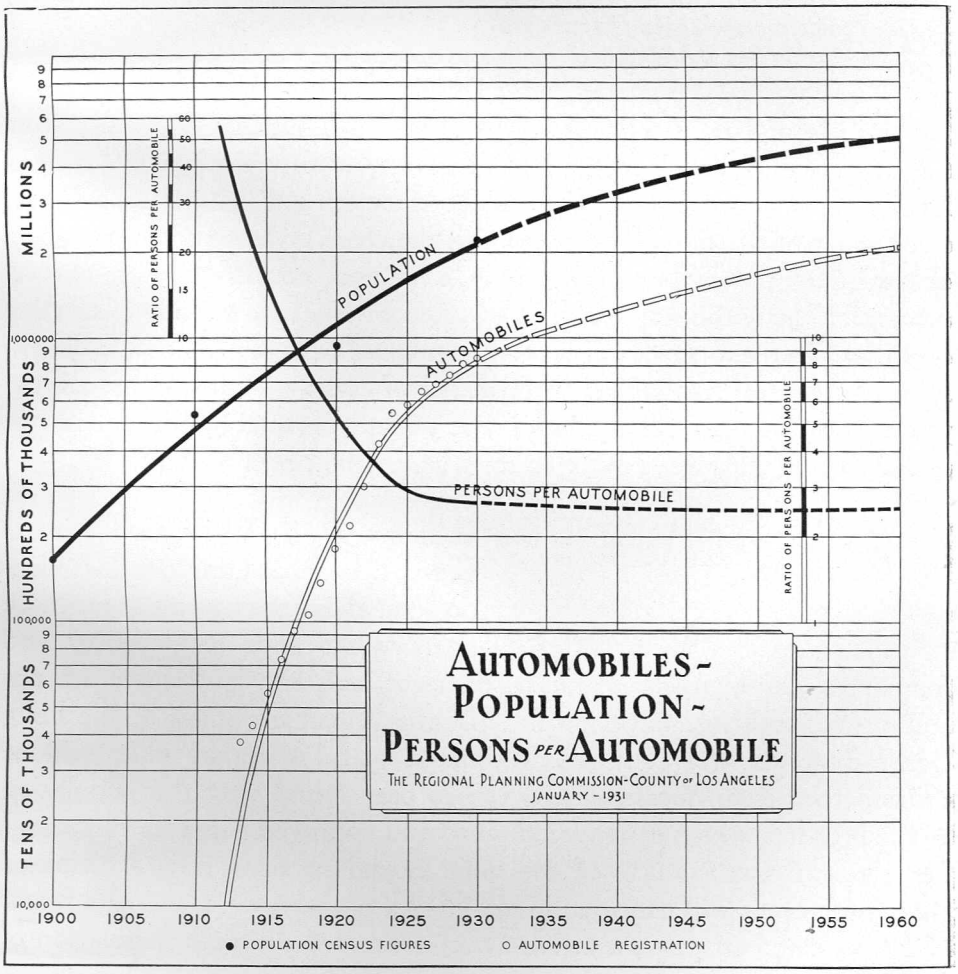
The use of the "street pavement chart" is a distinct departure from the "guess and trial" method of designing a future highway system. Knowing the percentage of travel as to direction and having an estimate of ultimate population of a community, the chart gives an accurate means of designing the highway system in a manner consistent with natural demand. The graph was constructed after an exhaustive study of existing conditions in the forty-five cities of Los Angeles County. While the dimensions and general mechanical performance of cars may change through the years, such changes will probably not affect appreciably the amount of paved through highways required for a given number of automobiles.

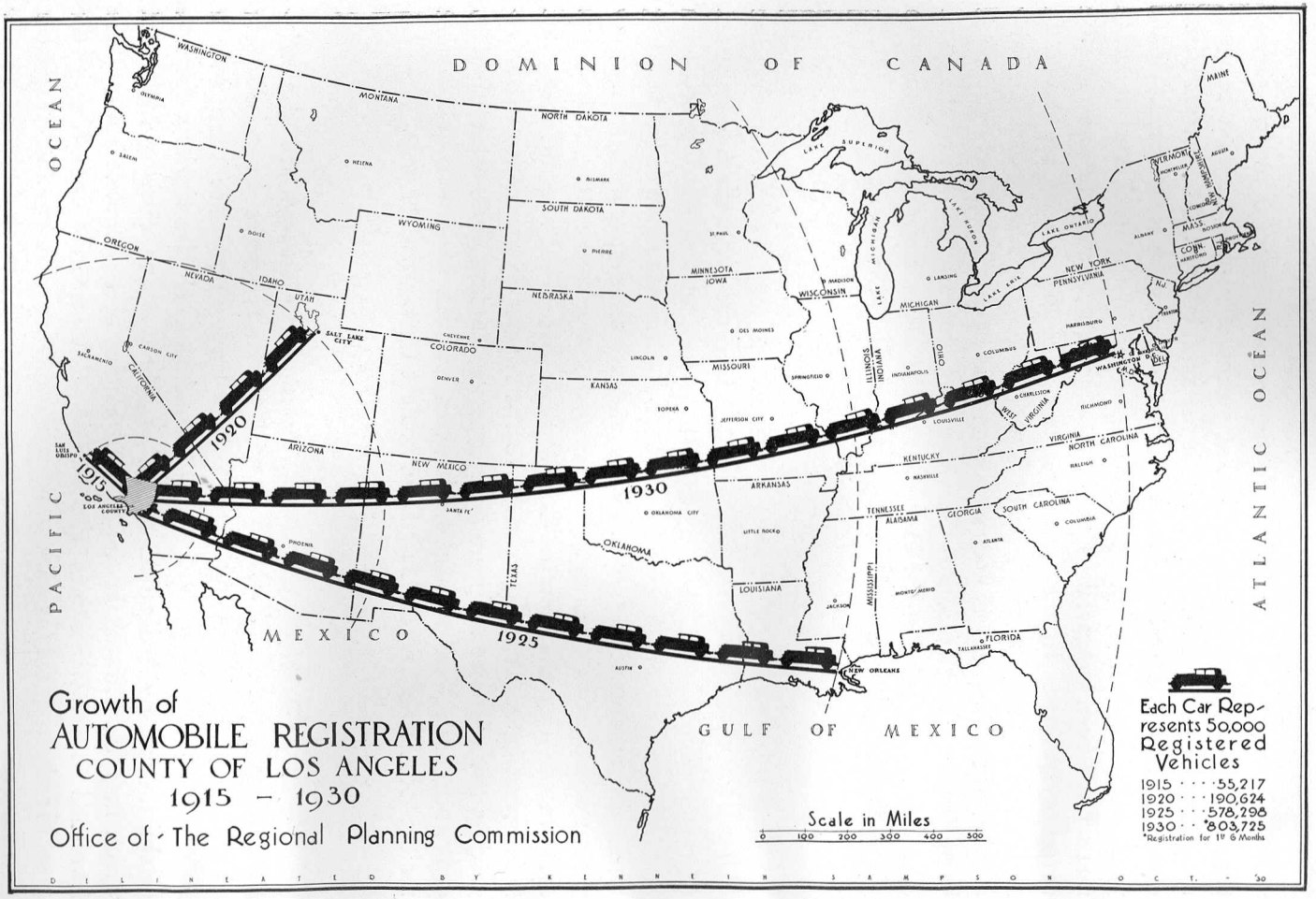
PROBABLE ULTIMATE POPULATION

In computing the anticipated ultimate population of the Long Beach-Redondo area, allowance was made for those portions set aside for industry and for harbor development, marsh lands, river beds and land otherwise unsuited for residential development. Of the 200 square miles in the Long Beach-Redondo area it is thus estimated that 156 square miles will be utilized for urban development. It has been found that the population of the property which is now subdivided and improved averages 20 persons per acre. From a study of the undeveloped portions it is anticipated that the growth will continue in about this proportion. Using the factor of 20 persons per acre we arrive at an estimated ultimate population of 2,000,000 persons.

AUTOMOBILE DENSITY INDEX

On the logarithmic graph below is shown a curve representing the population increase in the county from 1900 to 1930, with a curve showing the automobile registration from 1915 to 1930. The third curve, computed from these two indicates the "automobile density" or ratio of persons per automobile. All three curves are extended to 1960. The ratio curve has flattened out during the last five years. Its value is now 2.74 and it seems safe to assume that during the next thirty years, it will continue almost horizontal, approaching 2.5 as a limit. The increase in the number of automobiles here will therefore be directly proportionate to the increase in population during the next few decades.




DOMINION OF CANADA
PACIFIC OCEAN
ATLANTIC OCEAN
MEXICO
GULF OF MEXICO
WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
ARIZONA
COLORADO
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
MINNESOTA
IOWA
MISSOURI
ARKANSAS
LOUISIANA
WISCONSIN
MICHIGAN
ILLINOIS
INDIANA
OHIO
KENTUCKY
TENNESSEE
MISSISSIPPI
ALABAMA
GEORGIA
FLORIDA
SOUTH CAROLINA
NORTH CAROLINA
VIRGINIA
WEST VIRGINIA
PENNSYLVANIA
NEW YORK
MAINE
VERMONT
MASS.
CONN.
N.J.
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
LAKE ERIE
LAKE ONTARIO
1915
1920
1925
1930
Growth of
AUTOMOBILE REGISTRATION
COUNTY OF LOS ANGELES
1915 – 1930
Office of - The Regional Planning Commission
Scale in Miles
0 100 200 300 400 500
Each Car Represents 50,000 Registered Vehicles
1915 · · · · 55,217
1920 · · · 190,624
1925 · · · 578,298
1930 · · *803,725
*Registration for 1st 6 Months
DELINEATED BY KENNETH SAMPSON OCT. - 30

PRECISE SURVEYS MADE OF HIGHWAY PLAN

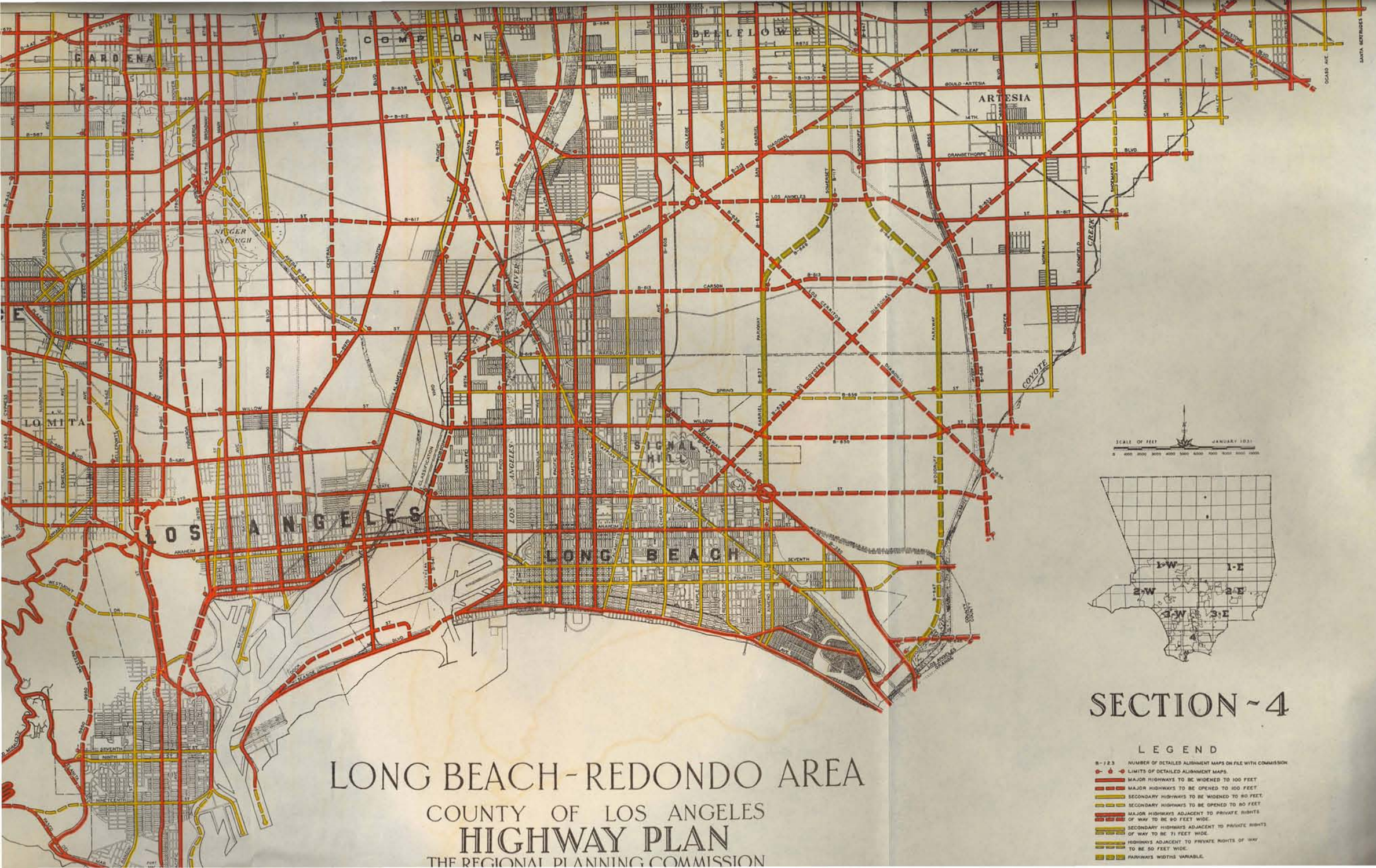
The design of the highway system has not only been studied from the standpoint of its relation to industrial development, service to the recreational areas at the beaches, and as a means of communication between the cities and communities throughout the area, but has also been carefully detailed from the standpoint of the actual properties affected. Each proposed highway has been precisely surveyed in the field, and accurate maps have been prepared to show its alignment, curvature and relation to property lines. In these surveys, ties to property lines are made, in such a manner that, when property is subdivided, the exact location of any portion of the highway is known to each land holder. Detailed maps have been prepared by the County Surveyor at a scale of 100 feet to the inch. These maps are used in the execution of the plan. Reference numbers to these detailed plans are shown on the map insert opposite.

DETAILED MAPS OF SURVEYS ON FILE WITH COMMISSION

Maps of the precise surveys are placed on file with the Commission. They are used by the County as a basis for the establishment of building lines, the acceptance of road deeds and subdivision dedications. Any person constructing a building or structure of any kind in the county must first procure a permit from the Commission. Before such permit is granted it is investigated as to its relation to the Master Plan. Official data regarding the existence of future street lines or building lines, established by ordinance, are affixed to the permit when granted, with such instructions for the location of the building as to protect these rights of way.

SURVEYS AID IN ADMINISTERING PLAN

These precise surveys are also helpful to land owners in subdividing their land. They are used in the formulation of descriptions for the establishment, by ordinance, of building lines along existing highways, which may be widened in the future. Copies of the precise surveys are furnished to representatives of the major oil companies operating in the area, in order that the location of derricks, oil refineries and other equipment may not jeopardize in any way the carrying out of a portion of the highway system when necessary.



LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

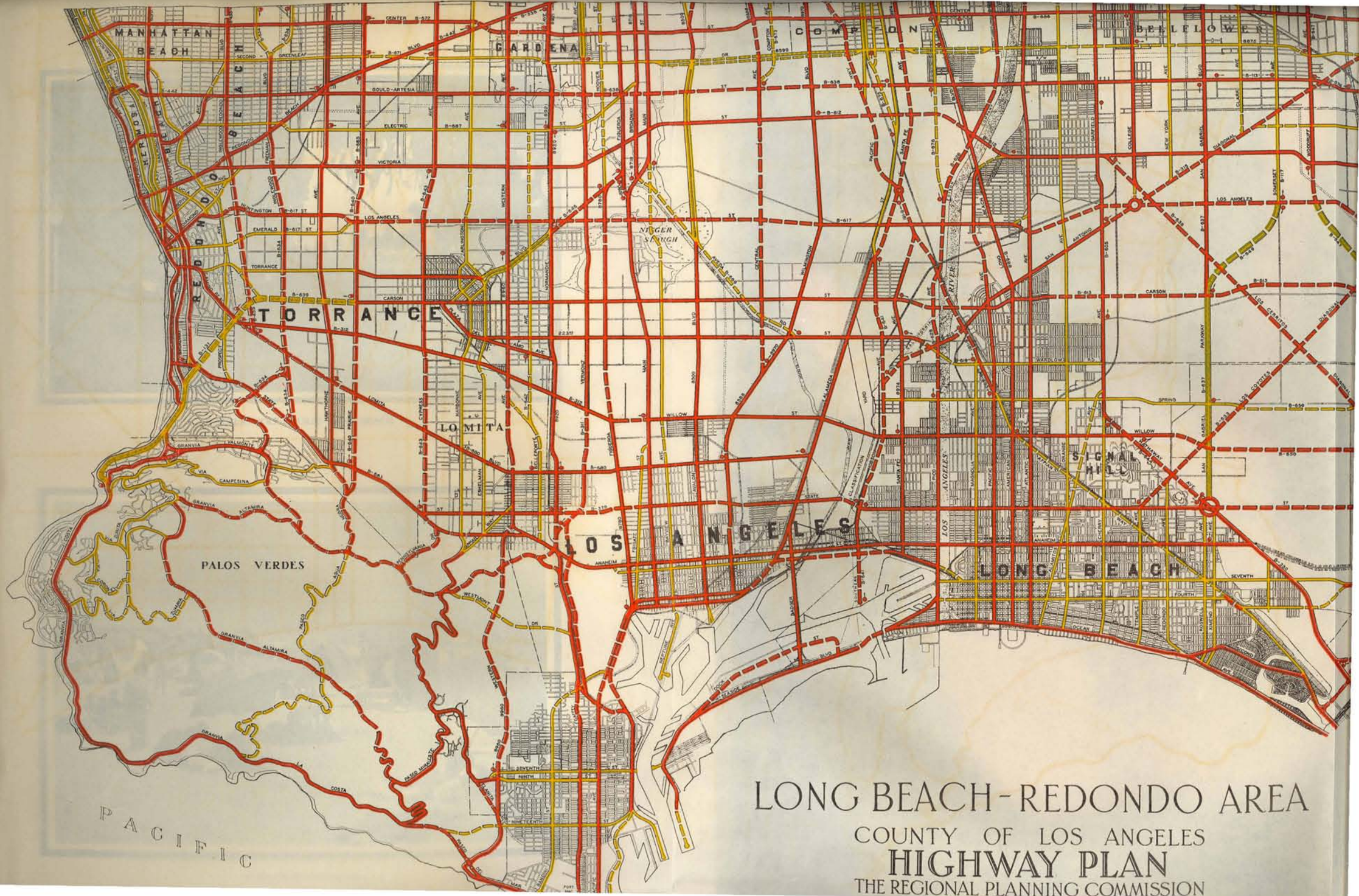
HIGHWAY PLAN

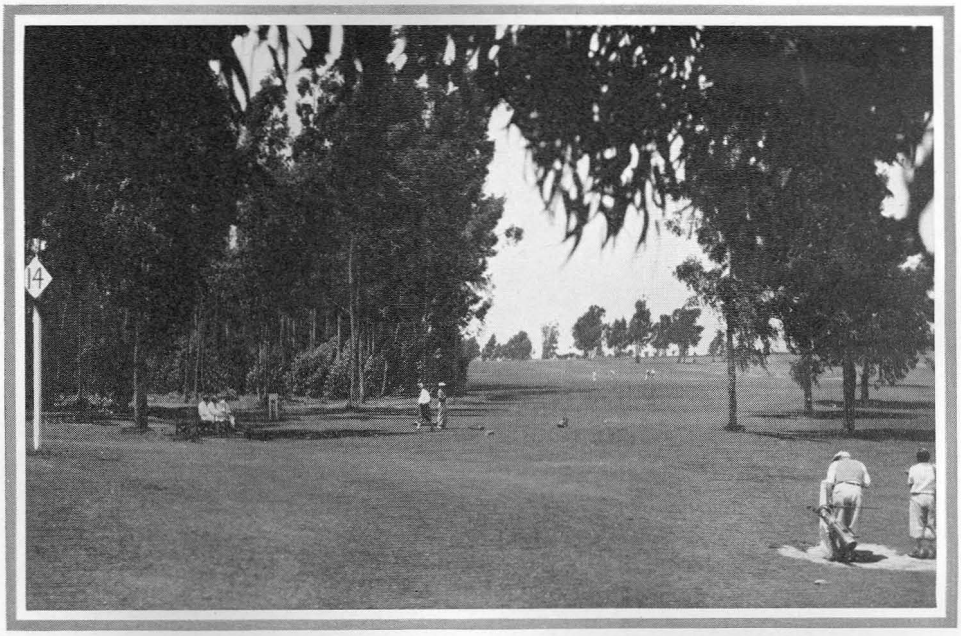
THE REGIONAL PLANNING COMMISSION

SECTION - 4

LEGEND

- B-123 NUMBER OF DETAILED ALIGNMENT MAPS ON FILE WITH COMMISSION
- LIMITS OF DETAILED ALIGNMENT MAPS.
- MAJOR HIGHWAYS TO BE WIDENED TO 100 FEET.
- MAJOR HIGHWAYS TO BE OPENED TO 100 FEET.
- SECONDARY HIGHWAYS TO BE WIDENED TO 80 FEET.
- SECONDARY HIGHWAYS TO BE OPENED TO 80 FEET.
- MAJOR HIGHWAYS ADJACENT TO PRIVATE RIGHTS OF WAY TO BE 90 FEET WIDE.
- SECONDARY HIGHWAYS ADJACENT TO PRIVATE RIGHTS OF WAY TO BE 71 FEET WIDE.
- HIGHWAYS ADJACENT TO PRIVATE RIGHTS OF WAY TO BE 50 FEET WIDE.
- PARKWAYS WIDTHS VARIABLE.


MANHATTAN BEACH
REDONDO BEACH
TORRANCE
CARSON
LOMITA
PALOS VERDES
GARDENA
COMPTON
BELLFLOWER
LOS ANGELES
LONG BEACH
SIGNAL HILL
NIGGER SLOUGH
PACIFIC
LONG BEACH - REDONDO AREA
COUNTY OF LOS ANGELES
HIGHWAY PLAN
THE REGIONAL PLANNING COMMISSION



A PUBLIC GOLF COURSE—LONG BEACH

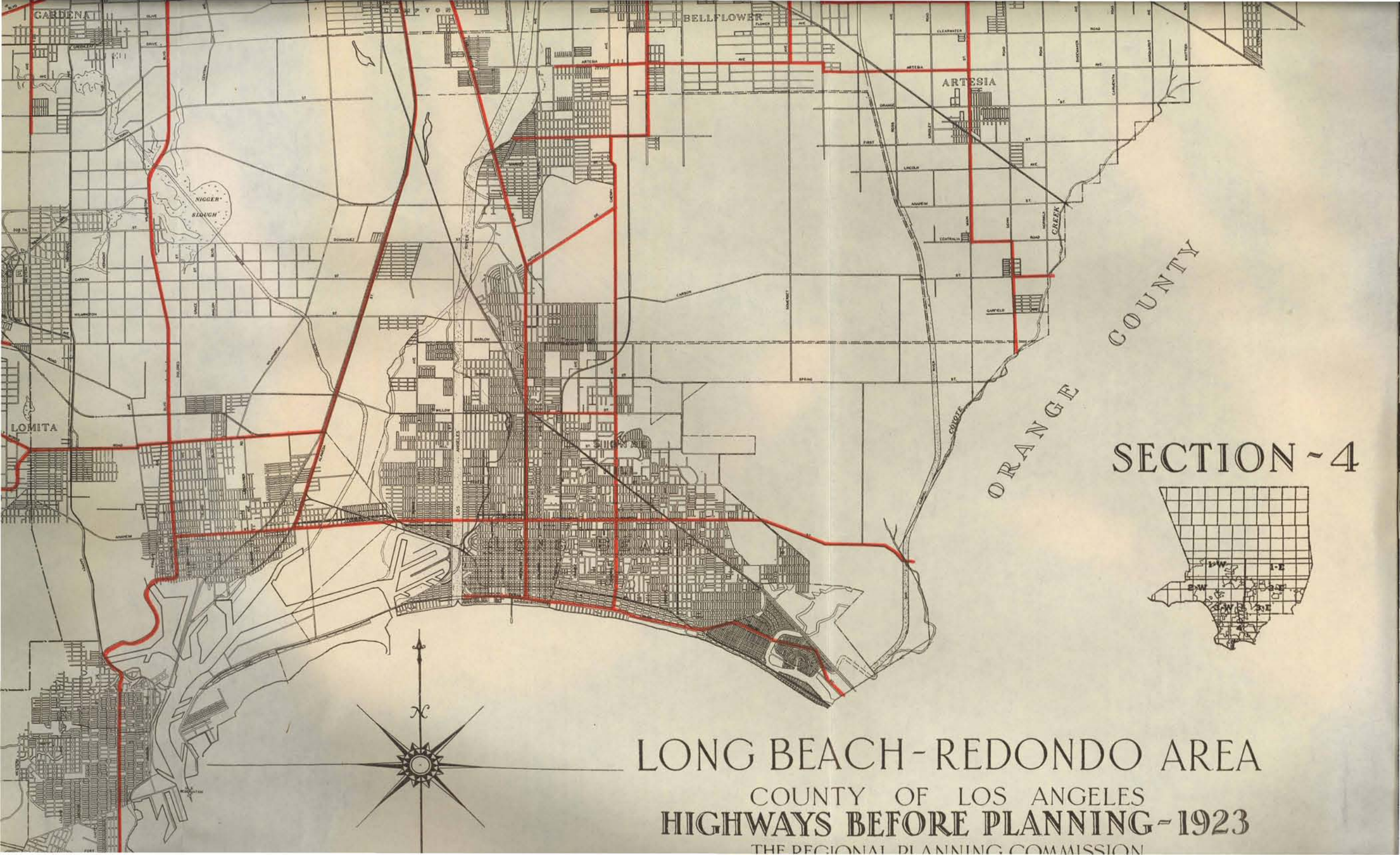
A BEACH PLAYGROUND

A PREDETERMINED PLAN DEEMED NECESSARY

In the absence of an official plan to guide the development, as occasion demands, of the future highway system, the public would have to rely mainly upon uncertainty and chance. Particularly is this true at election time, with its almost inevitable change in the personnel of our governmental representatives. These changes have occurred so often that accomplishments have been measured rather by the length of an official's term in office, than by the community's paramount needs. It has been unfortunate, but true, that at about the time an official becomes sufficiently familiar with a development problem to be of real service, his term expires. He goes out of office, and with him go the experience and the knowledge which could have been crystallized in the form of a physical plan, in order that his successor might carry on. Where there is an official plan, however, adopted as a permanent guide for the development of the community, it lives on—successive administrations add to and perfect it, and their new energies are used effectively in administering it, in accordance with the best interests of the community.

STATUS OF THE HIGHWAY SYSTEM IN 1923

There are many reasons why a predetermined plan for the development of the highway system is conducive to the orderly and economic growth of the community. But the one with the greatest appeal to the travelling public is that of directness of the thoroughfares. One's memory may lead him astray as to conditions that existed before Regional Planning was put into operation, but the best documentary evidence of what a highway plan can and will do is furnished by maps of our highways as they were. The map insert opposite shows the status of the highway system prior to the creation of the Regional Planning Commission in 1923. Even the most important thoroughfares were exceedingly disjointed and indirect. This condition is attributed to the absence of a comprehensive plan approved by the various jurisdictions involved. There was little or no contact between the engineering departments of adjacent cities, even in consideration of the continuous alignment of a single highway. The indirect routes which the motorist was required to follow were a source of general public dissatisfaction. A comparison is invited between this map and the one following page 24, as offering the most convincing indication of the importance of coordinating our highway development.

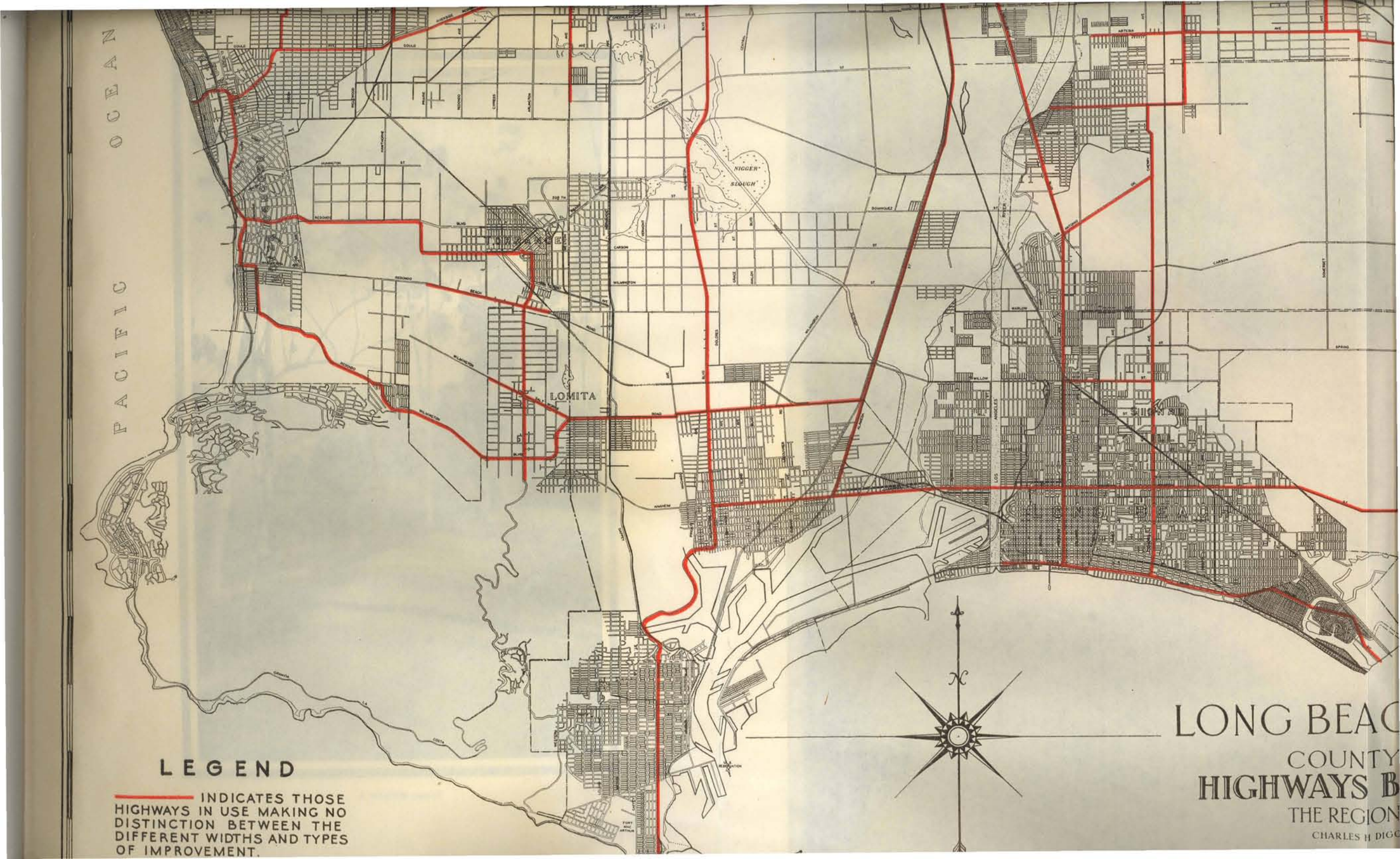


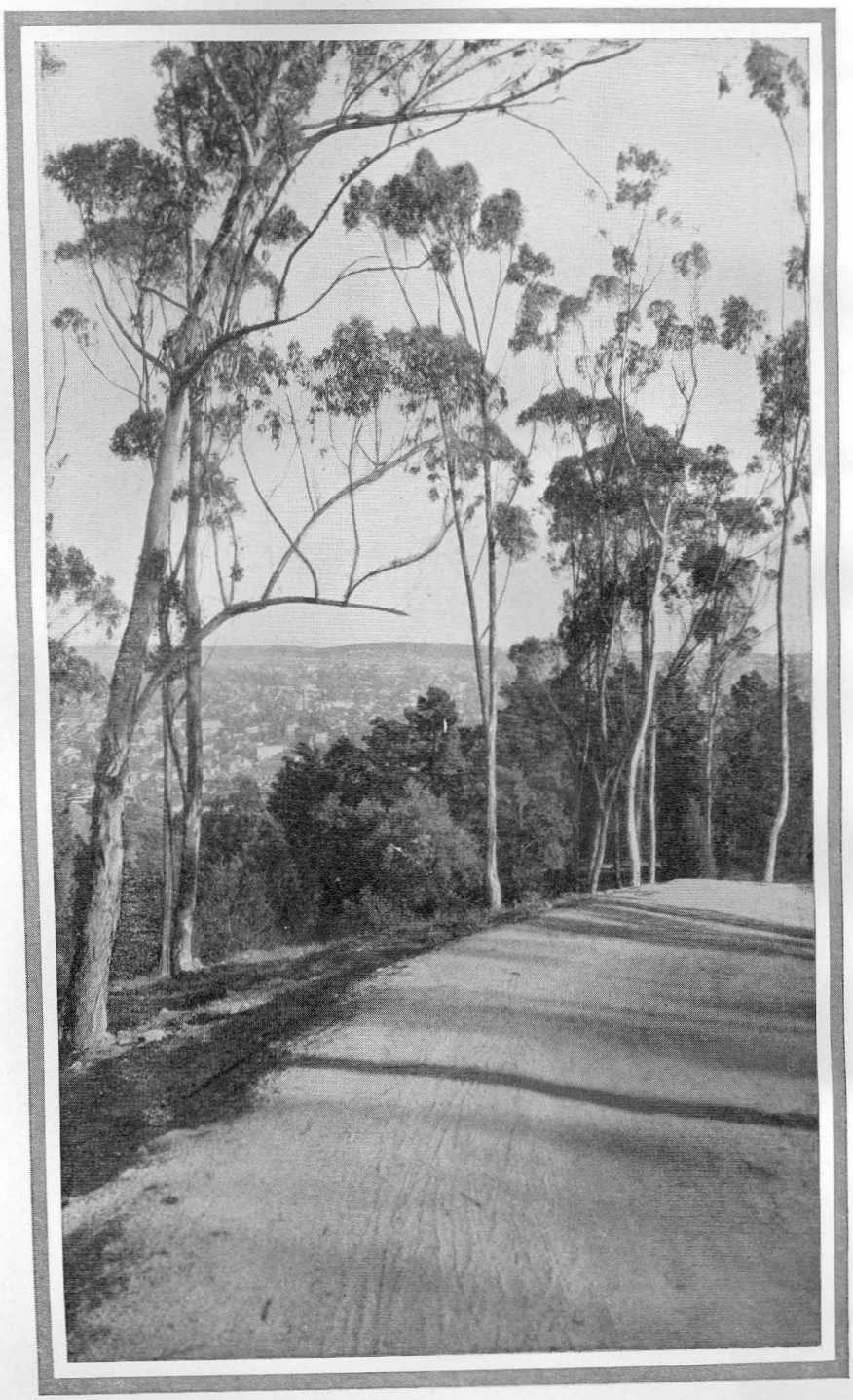
LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

HIGHWAYS BEFORE PLANNING - 1923

THE REGIONAL PLANNING COMMISSION


PACIFIC OCEAN
LOMITA
NIGGER SLOUGH
LONG BEAC
COUNTY
HIGHWAYS B
THE REGION
CHARLES H DIGG
LEGEND
INDICATES THOSE HIGHWAYS IN USE MAKING NO DISTINCTION BETWEEN THE DIFFERENT WIDTHS AND TYPES OF IMPROVEMENT.



A HILLTOP DRIVE

LOS ANGELES - LONG BEACH HARBOR

III. OFFICIAL APPROVAL AND ADOPTION OF THE PLAN

PLANS FOR INCORPORATED CITIES DESIGNED TO COORDINATE WITH COUNTY PLAN

A city or town may be thoroughly planned and yet suffer because adjoining territory under a different political jurisdiction has no plan. The inconsistencies of the unplanned section may totally defeat the efforts of the community which planned well. When the Regional Planning Commission was created, it was the intent that the whole County should be planned and developed as one great commonwealth. Since the street system is the frame-work for future development and tends generally to set the character of the community, and to determine the uses to which property can be devoted, the Regional Planning Commission properly directed its first attention to this problem. The main highway system lends accessibility to the community; the local streets form the character. Property is no more valuable than its use and is no more useful than its accessibility.

With the object of coordinating major street plans of the incorporated cities with each other and with those of the County, the Commission designed the Regional Plan of Highways without regard to political boundary lines. In this work it has enjoyed the cooperation of the officials of the incorporated cities, and the results have been extremely gratifying. It has developed a sense of security, because the scheme in its entirety has received official approval of neighboring cities and of the County government. The unified Highway Plan gave a sound basis for subdividing, zoning, selling and use of property. Utilities were located to better advantage and with greater economy.

CONTRIBUTES TO EQUITABLE PLAN OF FINANCING

Chief among the benefits of such an official Regional Plan of Highways is the ability to more equitably finance the construction costs. It assists in establishing the proper limits for assessment districts where part of the cost is paid by this means. It gives a basis for determining proper contributions from public funds, gasoline tax revenues, automobile license tax revenues, bond issues and funds derived from general taxation. Particularly does it permit the adoption of a road construction program, to be carried out over a period of years, as needed.

Every sound corporation, in carrying out a construction program, is extremely careful that its stockholders' money is spent where it will do the most good; that a piece of machinery or a building purchased is the next piece of machinery, or the next building needed for its efficient operation. It seems equally reasonable that those officers of a city, county or state government, who direct the affairs of its citizens should formulate a plan of operation for the initiation and completion of needed improvements in the order of their demand, as indicated by a thorough survey.

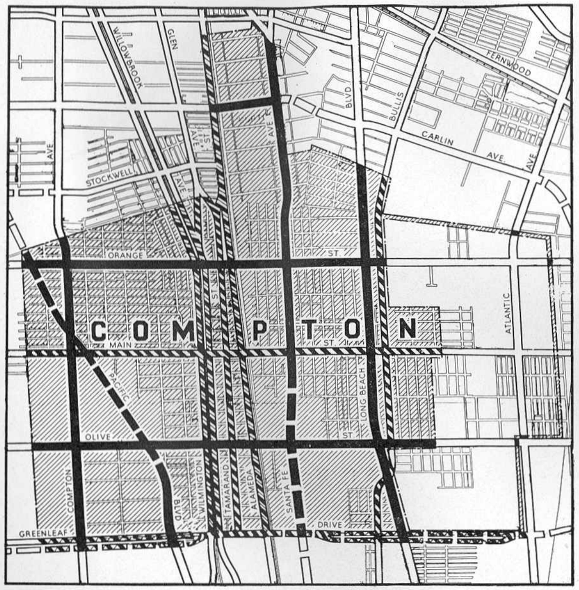
IMPROVEMENTS CAN BE SCHEDULED IN ORDER OF IMPORTANCE

Bonded indebtedness is already heavy in many places, with vitally necessary projects still far short of realization. Unless government officials plan, far in advance, the program and the budget for the execution of their public improvements, the taxpayers will soon become overburdened with financial obligations in retiring outstanding bonds for non-essentials, or ill-timed projects, and thus unable to assume the normal obligations incident to the development of water supply, sanitation, and other unquestionably necessary work. There is a regular natural sequence in the construction of the elements which constitute the physical make-up of a fully developed community. Where thorough and efficient plans are made and followed, these various elements, which constitute the whole development program, *can be scheduled* in order of importance. The budgeting of improvements should never depend upon a hit or miss process. The subdivision of land, the development of water supply, sanitation, the grading of roads, the proper placing of buildings, the location of underground structures, the improvement of thoroughfares (paving, sidewalks, tree planting, street lighting), recreational and cultural facilities—all these should follow one another in order of importance, and in accordance with the ability of the community to pay.

APPROVAL AND ADOPTION OF PLAN BY INCORPORATED CITIES

In view of the official approval and adoption of the highway plan for this area by the County Board of Supervisors and the respective city councils, the officials of the incorporated cities can carry on their major highway development programs in an orderly, economic and efficient manner. Each element of it is an integral part of a project that has united support from its origin to its destination.

THE INNER HARBOR



COMPTON HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR — W^m J. FOX, CHIEF ENGINEER
J. A MELLEN — HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 3000 4000 5000 — OCTOBER 1930

L E G E N D

- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET.
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
- RIGHTS OF WAY TO BE 71 FEET WIDE.
- PROPOSED DIVISION OF SECONDARY HIGHWAY ADJACENT TO
- POWERLINE – RIGHTS OF WAY TO BE 50 FEET WIDE.

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA

Exhibit "A" As per Resolution No 1204 City of Compton Mar. 10, 1931

APPROVED BY *Glen Lord* 3-26-31 CITY ENGINEER

CITY OF COMPTON
CITY CLERK
COMPTON, CALIFORNIA

RESOLUTION NO. 1204

WHEREAS, the City Council of the City of Compton recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Compton as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to co-ordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in cooperation with the Compton City Engineer and Planning Commission, has developed for the City of Compton a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Compton plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Compton does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Compton Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Compton, both as to width and direction as set forth on the plan.

ADOPTED this 10th day of March, 1931.

C. A. Dickison
Mayor of the City of Compton

ATTEST:
Maude Hecock
City Clerk of the City of Compton

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES
CITY OF COMPTON SS

I, Maude Hecock, City Clerk of the City of Compton, do hereby certify that the foregoing Resolution, was passed and adopted by the Council of the City of Compton, approved and signed by the Mayor of said City and attested by the City Clerk, all at an adjourned regular meeting of said Council held on the 10th day of March, 1931:

That said Resolution was adopted by the following vote on roll call:

AYES: Councilmen: Shepard, Stockwell, McKinney, Dawson, Mayor Dickison

NOES: Councilmen: None

ABSENT: Councilmen: None

Maude Hecock
City Clerk of the City of Compton

CITY OF COMPTON — INCORPORATED MAY A D 1888 — CALIFORNIA

CITY OF COMPTON

The City of Compton lies halfway between Los Angeles and the Harbor District, eleven miles from each. It is traversed by four great through highways, Compton Avenue, Alameda Street, Long Beach Boulevard and Atlantic Boulevard, which, with Redondo Beach Boulevard running east and west through the center of the city, make it easily accessible to all parts of the county. Compton is served by the Southern Pacific and Pacific Electric Railways, the latter providing fast passenger service to the City of Los Angeles. There is a large supply of natural gas available for industrial purposes, and the city is enjoying a rapid development at the present time. There were serious local drainage problems which could not have been solved by any one city working alone. Since the formation, in the many cities involved, of County Drainage Districts under a county-wide policy and plan, conditions in this area have steadily improved. Possibly the present rapid growth of Compton is due in part to this excellent example of inter-community cooperation in the handling of difficult problems. Compton is one of the half dozen oldest cities in the county, having been settled in 1867 as a Methodist agricultural colony by a group brought from Northern California under the leadership of the Reverend G. D. Compton. The town was laid out in the area lying between Main and Olive Streets, west of Alameda Street. It was incorporated in May, 1888, but its growth was very slow up to 1920, at which time its population was only 1,478 persons. The last Federal Census gave it 12,516, showing the extraordinary increase of 747%.

Area in Square Miles:	4.52	Incorporated:	1888
Population:	12,516	Class:	Sixth
Assessed Valuation:	$12,125,584	Elevation:	65 ft.

GARDENA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR — J.A. MELLEN — Wm J. FOX, CHIEF ENGINEER — HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 3000 4000 5000 — OCTOBER 1930

L E G E N D

- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
- RIGHTS OF WAY TO BE 71 FEET WIDE

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA

APPROVED BY BARNETT & STEELE by Harold A. Barnett CITY ENGINEER

Exhibit "A" As per Resolution Dated April 14, 1931 City of Gardena

City of Gardena

Gardena, California

COUNCILMEN
WAYNE A. BOGART MAYOR
A. A. BAMFORD
CHAS. A. HALE
F. M. SEVER
EARL H. STEWART

CAROLYN A. GREGORY, City Clerk
BERNICE M. BARNETT, City Treasurer
LESTER O. LUCE, City Attorney
BARNETT & STEELE, Engineers

RESOLUTION

WHEREAS, the City Council of the City of Gardena recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Gardena as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in cooperation with the Gardena City Engineer, has developed for the City of Gardena a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Gardena plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Gardena does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Gardena Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Gardena, both as to width and direction as set forth on the plan, with the

EXCEPTION, however, that the Council does not approve of the proposed course of Olive, or the proposed Riverside Redondo Boulevard.

The foregoing resolution was adopted at a regular adjourned meeting of the City Council of the City of Gardena, held on the 14th day of April, 1931, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Bamford, Sever, Hale and Bogart
NOES: Councilman Stewart
ABSENT: None

and signed and approved this 14th day of April, 1931.

ATTEST:

Carolyn A. Gregory
City Clerk of the City of Gardena, California.

Wayne Bogart
Mayor of the City of Gardena, California.

CITY OF GARDENA

Midway between the City of Los Angeles and the Los Angeles Harbor lies the fertile Gardena Valley. Here is located the newly incorporated City of Gardena, thirty minutes by interurban train from the center of downtown Los Angeles, twenty minutes from the Harbor, and only fifteen minutes from the west coast beach cities. The community has been in existence for over twenty-five years. It is the junction point for the Pacific Electric Railway lines from San Pedro and Redondo Beach to Los Angeles. The entire community is developing rapidly, with many street improvement projects recently completed and others under way. There is a considerable industrial development in and near Gardena, and most of those employed there live close to their work and own their own homes. A large acreage is devoted to agriculture in this portion of the County, and many of its finest truck farms are found there, the most important items in the crop being strawberries, sweet corn, melons and the like. There are also many poultry and rabbit breeders, and some eighty dairies with a total of 4,600 cows. The incorporated city has an area of 2.89 square miles, and it is estimated that the population is 3,800. Its officials have been actively cooperating in the preparation of a Regional Plan of Highways for the area. This youngest of the County's cities is facing a future of great possibilities with endless opportunities for constructive community planning.

Area in Square Miles: . . .	2.89	Class:	Sixth
Population:	3,800	Elevation:	42 ft.

Incorporated: September 11, 1930

HERMOSA BEACH HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H DIGGS DIRECTOR — Wm J. FOX CHIEF ENGINEER
J.A MELLEN HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 3000 4000 5000 — OCTOBER 1930

L E G E N D

- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET.
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
- RIGHTS OF WAY TO BE 71 FEET WIDE
- PROPOSED ENTRANCE TO GOULD AVENUE BETWEEN COAST HIGHWAY AND RAILROAD AVENUE TO BE 135 FEET WIDE

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA

Exhibit "A"
As per Resolution No 995
City of Hermosa Beach
November 5, 1930

APPROVED BY Chas F Hamilton CITY ENGINEER

CITY COUNCIL
JOHN W. CLARK, MAYOR
LOGAN R. COTTON
FRED J. KELTERER
LAURENCE L. LINDSEY
JAMES A. McMILLAN
B. F. BROWN, CITY CLERK

OFFICE OF CITY CLERK
CITY OF HERMOSA BEACH
CALIFORNIA

B. D. SAMSON, CITY TREASURER
THOMAS W. MARCHANT, CITY JUDGE
E. L. MESSINGER, CHIEF OF POLICE
ART G. SMITH, CITY ATTORNEY
F. C. MEAD, BUILDING INSPECTOR
WILLIAM A. STILES, STREET SUPT
CHARLES F. SAUNDERS
CITY ENGINEER

RESOLUTION NO. 995

WHEREAS, the City Council of the City of Hermosa Beach recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Hermosa Beach as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to co-ordinate the highway plans of the cities with each other and with the County plans; and

WHEREAS, the Regional Planning Commission, in co-operation with the Hermosa Beach City Engineer, has developed for the City of Hermosa Beach a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Hermosa Beach plan, fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the city engineers of the incorporated cities of the County of Los Angeles;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hermosa Beach does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Hermosa Beach Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October 19, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Hermosa Beach, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Hermosa Beach, held on the 5th day of November, 1930, by the affirmative vote of at least three councilmen, to-wit;

Ayes: Councilmen McMillan, Kelterer, Lindsey, Cotton and Mayor Clark
Noes: None
Absent: None, and signed and approved this 5th day of November, 1930.

John W. Clark, Mayor

Attest; B.F. Brown,
City Clerk of the City of Hermosa Beach.

I certify the above and foregoing to be a true copy of Resolution No. 995, of the City of Hermosa Beach, as the same appears on file in my office.

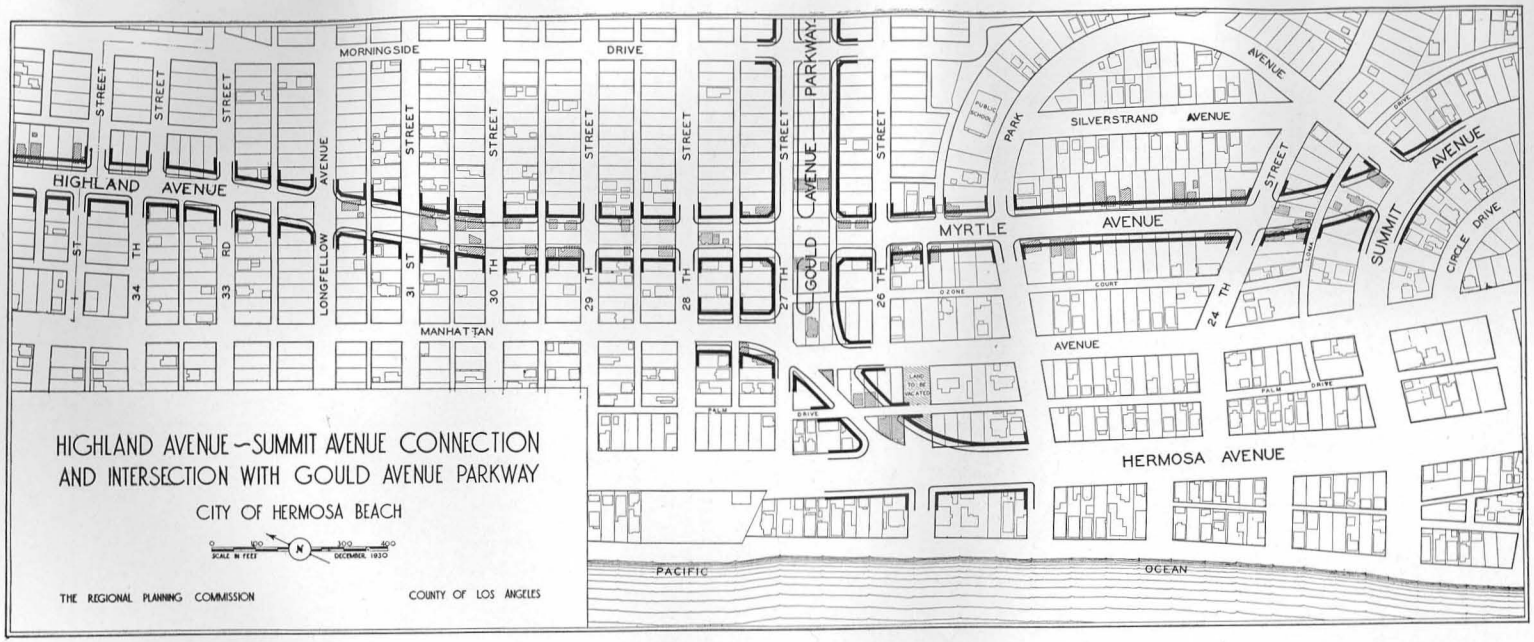
CITY OF HERMOSA BEACH INCORPORATED JANUARY 14 1907. CALIFORNIA

B. F. Brown
City Clerk, Hermosa Beach, California.

CITY OF HERMOSA BEACH

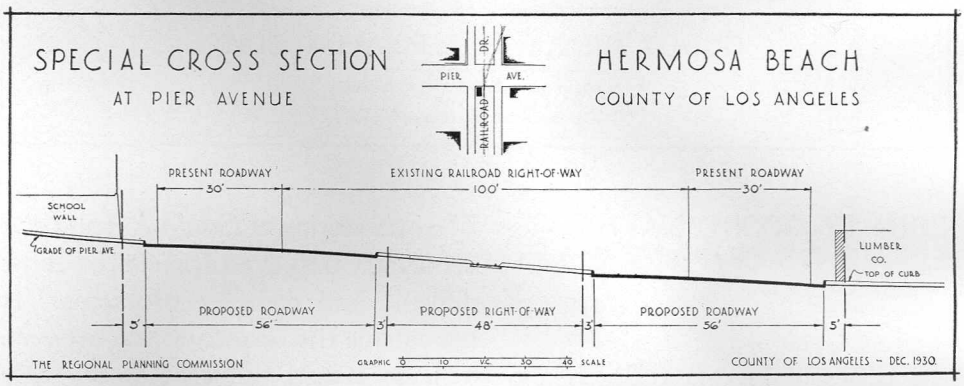
Situated on the famed Santa Monica Bay, the City of Hermosa Beach faces the tranquil Pacific Ocean on the west. It was founded in 1907 by a group of Pasadena people, who conceived the desire to establish here a high-class residential seashore community. In 1910, the population was 679; by 1920, it had reached 2,327 and doubled again in the succeeding decade, the last census showing a population of 4,796. Hermosa Beach has maintained the ideals of its founders and is noted for the absence of noisy concessions or cheap amusement devices. Its two-mile stretch of ocean beach, which was dedicated as "a public playground and common", has been guarded diligently against commercialism and maintained as an open beach which serves as a playground for many thousands of people each summer. The character of the community is essentially youth at its best, and nowhere in the southland is there a more delightful vacation spot. Surf bathing, sea fishing from the 1000-foot municipal pier, golf, tennis and dancing are available for vacationists. The summer population is accordingly much greater than the figure indicated by the census—probably almost double. Hermosa Beach is reached from Los Angeles by fast inter-urban trains, and is also served by motor stages and by local bus line. The greatest need at present is for wider and better improved main entrance highways to make it more accessible from the inland population centers. The city has an active planning commission, and its officials have taken great interest in the development of the Regional Plan of Highways.

Area in Square Miles:	1.4	Incorporated: . . .	1907
Population:	4,796	Class:	Sixth
Assessed Valuations: .	$6,812,000	Elevation:	50 ft.


HIGHLAND AVENUE
MORNINGSIDE DRIVE
LONGFELLOW AVENUE
MANHATTAN
GOULD AVENUE PARKWAY
MYRTLE AVENUE
SILVERSTRAND AVENUE
SUMMIT AVENUE
CIRCLE DRIVE
HERMOSA AVENUE
PACIFIC OCEAN
PUBLIC SCHOOL
PARK
LAND TO BE VACATED
HIGHLAND AVENUE—SUMMIT AVENUE CONNECTION
AND INTERSECTION WITH GOULD AVENUE PARKWAY
CITY OF HERMOSA BEACH
SCALE IN FEET
DECEMBER 1930
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

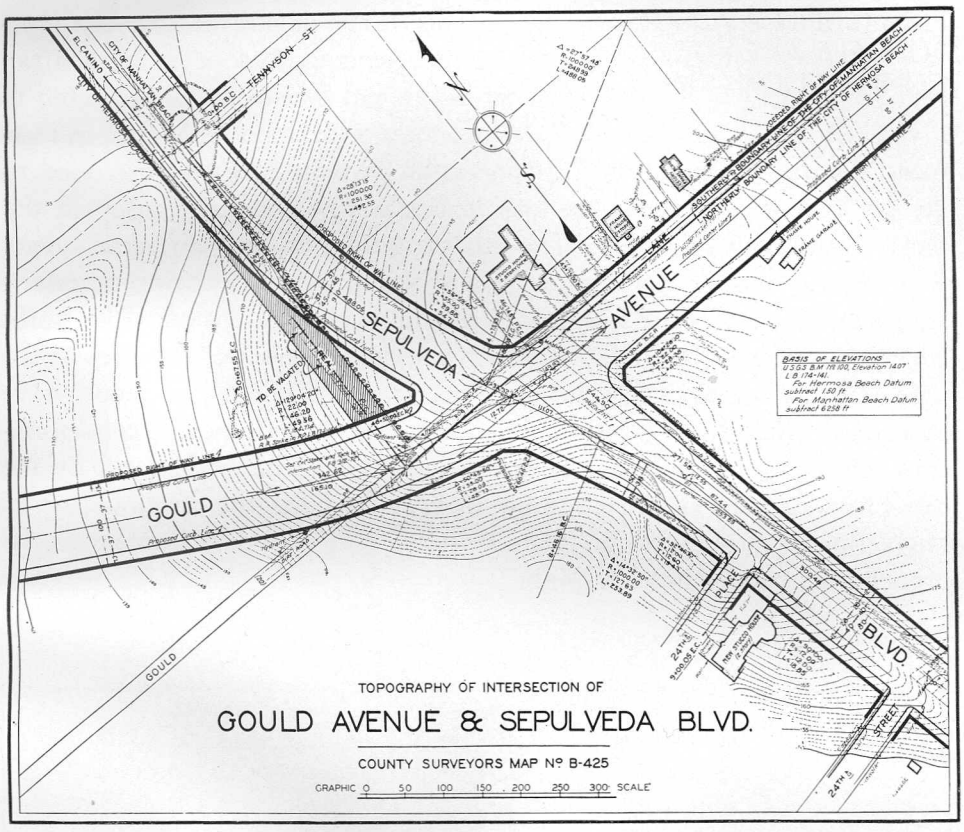
HIGHLAND AVENUE-SUMMIT AVENUE CONNECTION

This study illustrates how the present Highland Avenue in Manhattan Beach can be effectively projected to connect with Summit Avenue in Hermosa Beach. In designing this connection extreme care was exercised to do the least property damage and to conform to the topography in the most advantageous manner. The existing grades of the transverse streets were met in almost every instance, a slight modification being necessary for proper approaches to the new Highland Avenue extension. The traffic which will increase in direct ratio with the development of facilities at the beach cities will make this connection necessary. Obviously, it should have been made when the land was subdivided. The remedy now is condemnation, which, when the necessity arises, will have to be worked out by the two cities concerned. In addition to providing for the continuation of Highland Avenue southerly, this connection will give direct access to the proposed Gould Avenue Parkway.



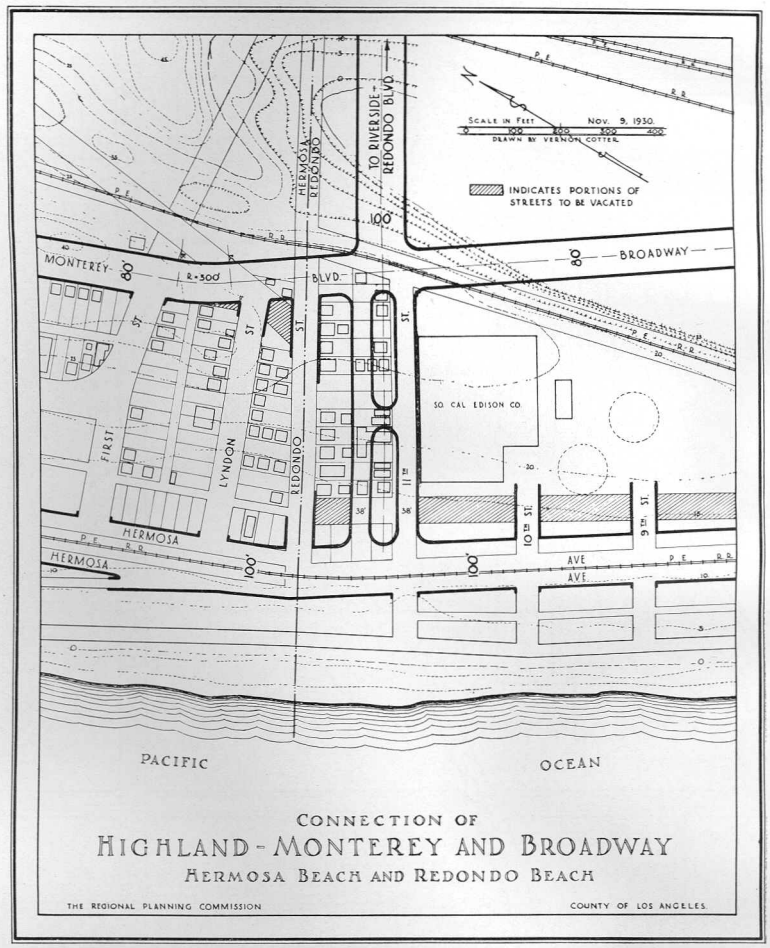
RAILROAD DRIVE AT PIER AVENUE

The Railroad Drive project is of great importance to the beach cities. It is designed as a main feeder to the various beaches. The cross-section of this project at Pier Avenue, Hermosa Beach, shows the special treatment necessitated at this point by the location of the retaining wall which supports the west end of the Pier Avenue School Playground. This treatment consists in taking more land for the roadway from the Santa Fe Railroad right of way, and narrowing to a minimum the sidewalk space. Under no circumstances should the roadway space be sacrificed.



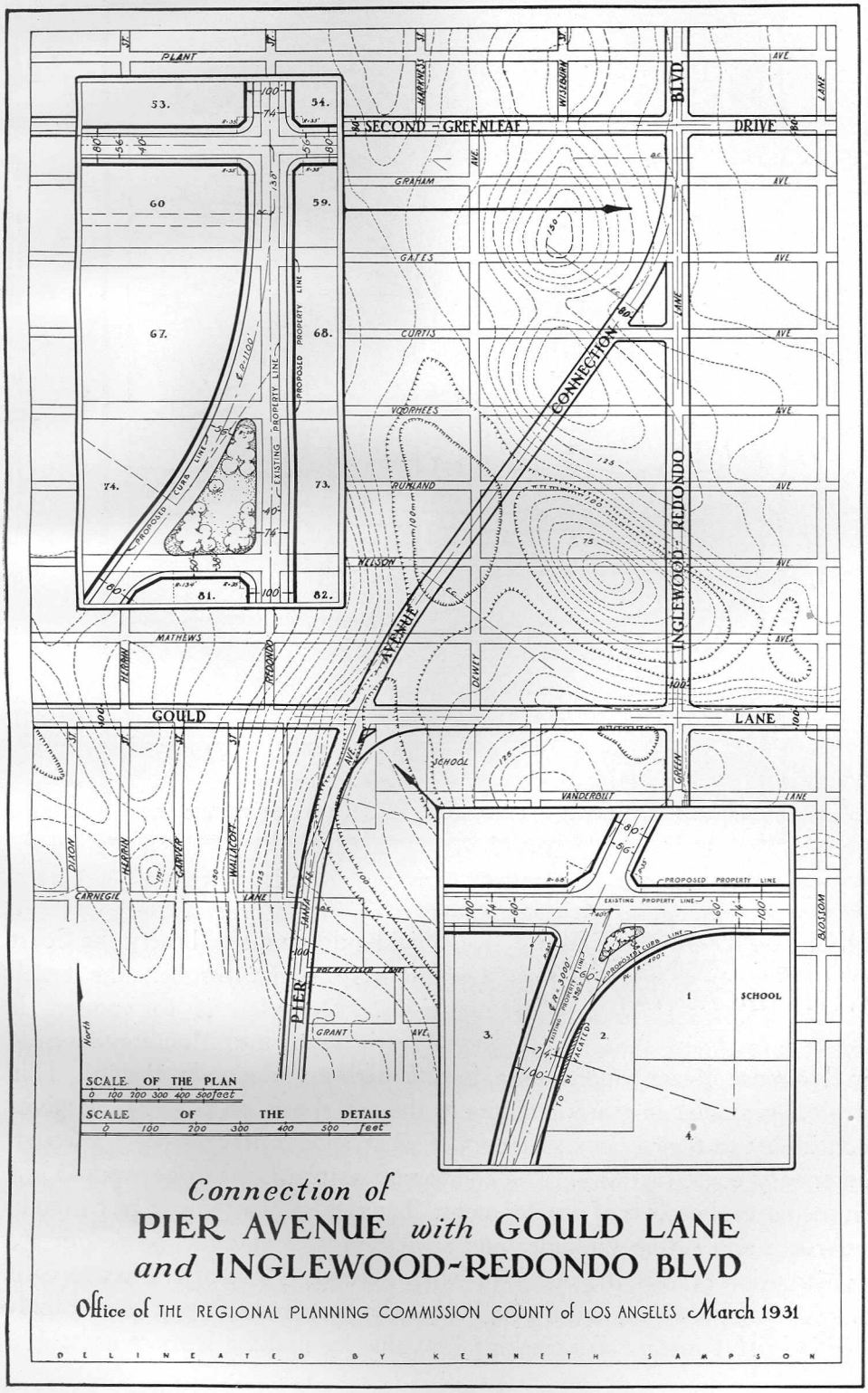
COUNTY COORDINATES ELEMENTS OF PROBLEM

The intersection of Gould Avenue and Sepulveda Boulevard presented some difficult and complex problems. It lies astride the boundary line between the Cities of Hermosa Beach and Redondo Beach. This boundary also marks the separation of the two jurisdictions for handling sections of the important Sepulveda Boulevard project. Because of changes in the topography necessary to establish suitable grades, provide adequate drainage and adjust property damage, considerable time and effort have been spent in working out this problem. The County made an exhaustive study of this situation and presented a plan which was subsequently approved by the two cities and the State Highway Commission. The design permits the construction of the Sepulveda Boulevard project in Hermosa Beach independently of the proceedings in Manhattan Beach, and at the same time provides for the future opening and widening of Gould Avenue. Thus, although developed by a piece-meal process, the intersection will be as efficiently constructed as if all built at once under a single jurisdiction.



HIGHLAND - MONTEREY AVENUE CONNECTION WITH BROADWAY

Highland Avenue will carry the Coast Highway traffic through the beach cities. The plan is to connect it directly south into Monterey Avenue in Hermosa Beach and thence into Broadway, Redondo Beach. This project is similar in many respects to the one shown on page 38. It gives continuity to the various segments of what should properly be a through secondary coast highway. The connection as planned can be worked out in the natural process of development. The right of way should be carefully guarded, and future buildings and structures so located as to permit the construction of this thoroughfare when needed. Most of the property is now of nominal value, and the highway, when constructed, will undoubtedly be the direct means of increasing its value by making it more accessible.

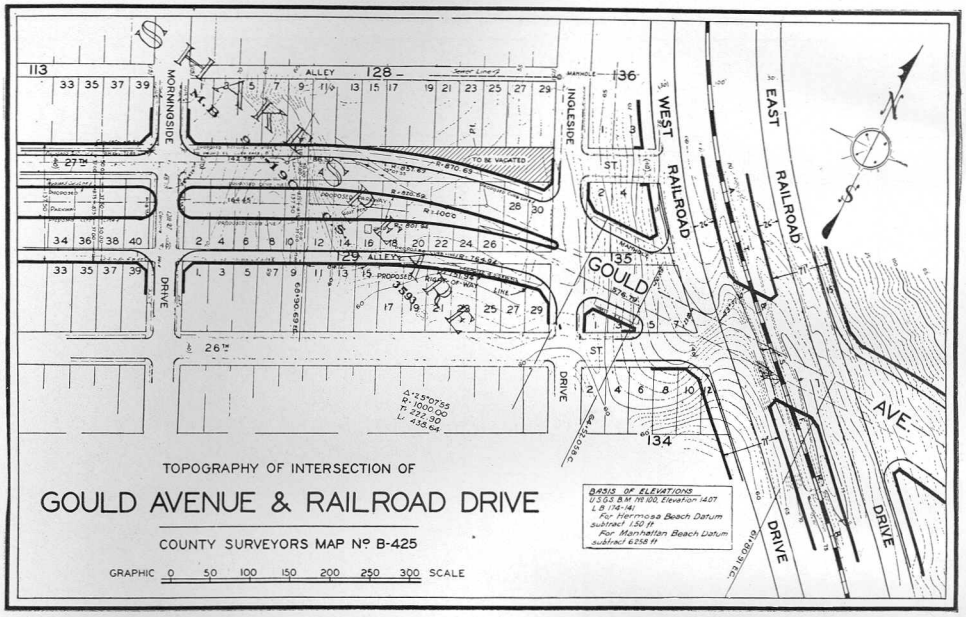


Connection of

PIER AVENUE *with* GOULD LANE *and* INGLEWOOD-REDONDO BLVD

Office of THE REGIONAL PLANNING COMMISSION COUNTY of LOS ANGELES March 1931

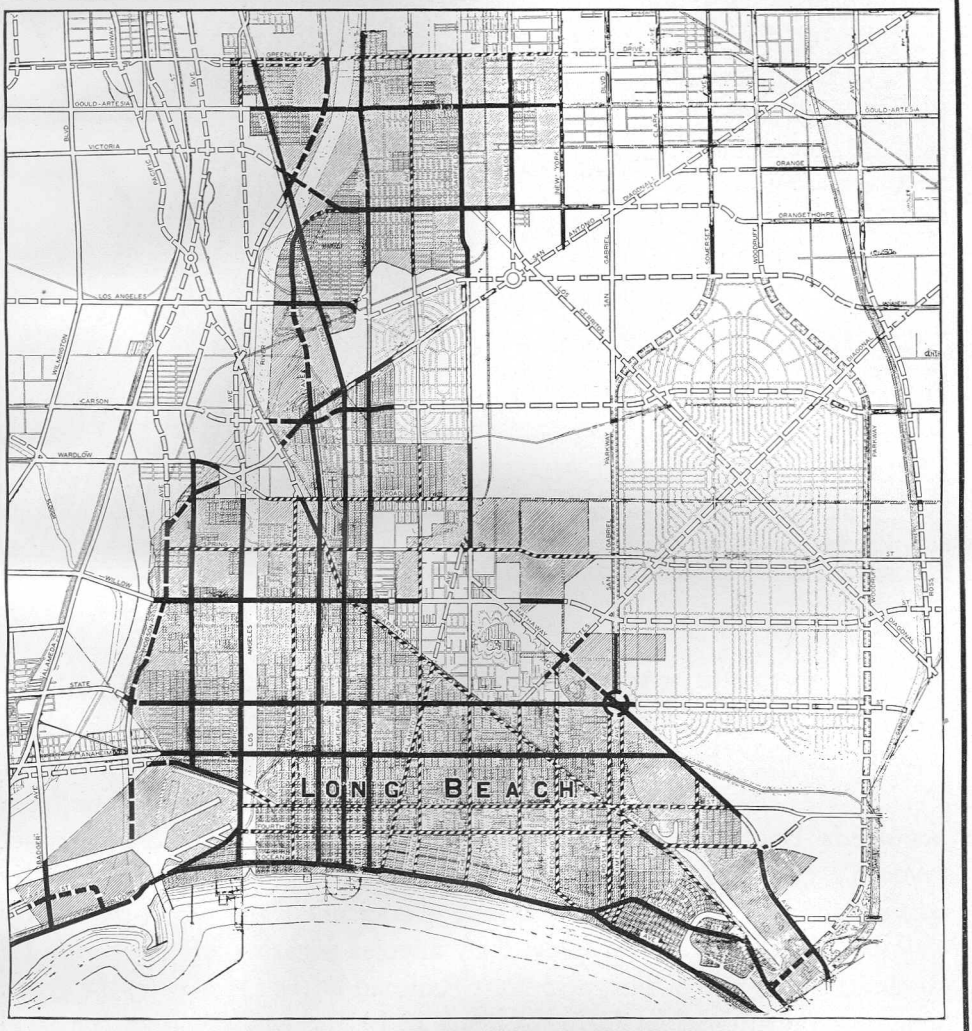
DELINEATED BY KENNETH SAMPSON



GOULD AVENUE AT RAILROAD DRIVE

This intersection is complicated primarily because of topography. Upon making a survey for the alignment of the extension of Gould Avenue from Sepulveda Boulevard westerly, it was found necessary, in order to get favorable grades, to increase the distance down the slope of the hill by curving the line to the northwest, and thence enter the beach section by way of 27th Street. This caused an angular crossing of the Santa Fe Railroad tracks and of East and West Railroad Drive. However, the grade thus determined enables Gould Avenue to be brought down to the level of the Santa Fe Railroad tracks and Railroad Drive smoothly and safely, giving favorable crossing and intersection conditions with both. Upon investigating the method of widening 27th Street, it became apparent that it would be better to take the entire row of lots between 27th Street and 27th Court because widening 27th Street to only 100 feet would leave remnants so small as to be worthless. By planning to acquire the entire block an impressive entrance is made for this important major highway, which extends from the Pacific Ocean to and through Santa Ana Canyon.

The cut on page 38 shows how Gould Avenue is continued westerly to the beach as a parkway. Although the project lies entirely within the limits of Hermosa Beach, the benefits will accrue to Manhattan Beach. The plan of financing should take this into consideration.



LONG BEACH HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION

COUNTY OF LOS ANGELES

CHARLES H. DIGGS - DIRECTOR

J. A. MELLEN - HIGHWAY ENGINEER

WM. J. FOX - CHIEF ENGINEER

LEGEND

- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
- RIGHTS OF WAY TO BE 71 FEET WIDE
- RIGHTS OF WAY TO BE 50 FEET WIDE

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA.

APPROVED BY _____ CITY ENGINEER _____ PLANNING ENGINEER

SCALE OF FEET 1000 0 1000 2000 3000 4000 JANUARY 1931

Exhibit "A"
As per Resolution Dated
April 17, 1931
City of
Long Beach

CITY OF LONG BEACH

LONG BEACH, CALIFORNIA

RESOLUTION

WHEREAS, the City Council of the City of Long Beach recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Long Beach as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to co-ordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in cooperation with the Long Beach City Engineer, City Planning Commission and Director of Public Works, has developed for the City of Long Beach a comprehensive major highway plan which will answer the city's ultimate traffic needs; and

WHEREAS, this Long Beach plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Long Beach does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Long Beach Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated April 17, 1931.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Long Beach, both as to width and direction as set forth on the plan, except that insofar as they lie within the City of Long Beach, the proposed widths of Artesia Street and South Street shall be ninety feet instead of one hundred feet.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Long Beach, held on the 17th day of April, 1931, by the affirmative vote of at least three councilmen, to-wit:

AYES:	COUNCILMEN:	Peacock, Waup, Church, Stakemiller, Barton, Wolter.
NOES:	"	None.
ABSENT:	"	Dobbin, Christie, Fickling.

and signed and approved this 20th day of April, 1931

A. E. Fickling, Mayor

CITY OF LONG BEACH INCORPORATED - 1897

ATTEST:

J. Oliver Brison,
City Clerk of the City of Long Beach.

CITY OF LONG BEACH

After the death of John Temple in 1866, the 27,000-acre Rancho Los Cerritos, including the present site of the City of Long Beach, was sold to Llewellyn Bixby for $125,000. The area upon which the city is now located was divided in 1881 into small farms with a town-site on the bluff along the ocean. In 1891, the Terminal Railroad was built from Los Angeles to Long Beach, and in 1902, the Pacific Electric Railway was extended to the town. Meanwhile, in 1897, the city had been incorporated, and it began to grow rapidly. In 1900, the population was 2,252; in 1910, it was 17,809; in 1920, 55,593. During the last decade the growth has been phenomenal, exceeding 155%, and today, with a population of 142,032, Long Beach is the second largest city in the county. The rapid growth has been due in part to extensive oil fields in and near the city, as well as to the development of the harbor and of the pleasure beaches. Long Beach has a $6,500,000 development program, and is now spending $3,000,000 for an auditorium and pier project. A well developed municipal airport has been operated for some years. There is an active city planning commission with its own technical staff. The city has ten miles of scenic shore line facing southward on the Pacific Ocean and sixteen parks with a combined area of 492 acres. A fine program of park and recreational facilities, in keeping with the character of the city, is being developed.

Area in Square Miles: . . .	28.79	Incorporated: . . .	1897
Population:	142,032	Class:	Fifth
Assessed Valuation:	$226,658,977	Elevation:	30 ft.

ANNUAL CARGO AT LONG BEACH HARBOR

Year	Tons	Value
1925	358,899	$2,952,612.02
1926	1,072,907	10,980,903.39
1927	1,472,524	20,335,962.27
1928	1,961,075	33,794,919.00
1929	2,512,092	45,497,920.00
1930	4,039,071	69,565,984.00

LONG BEACH HARBOR

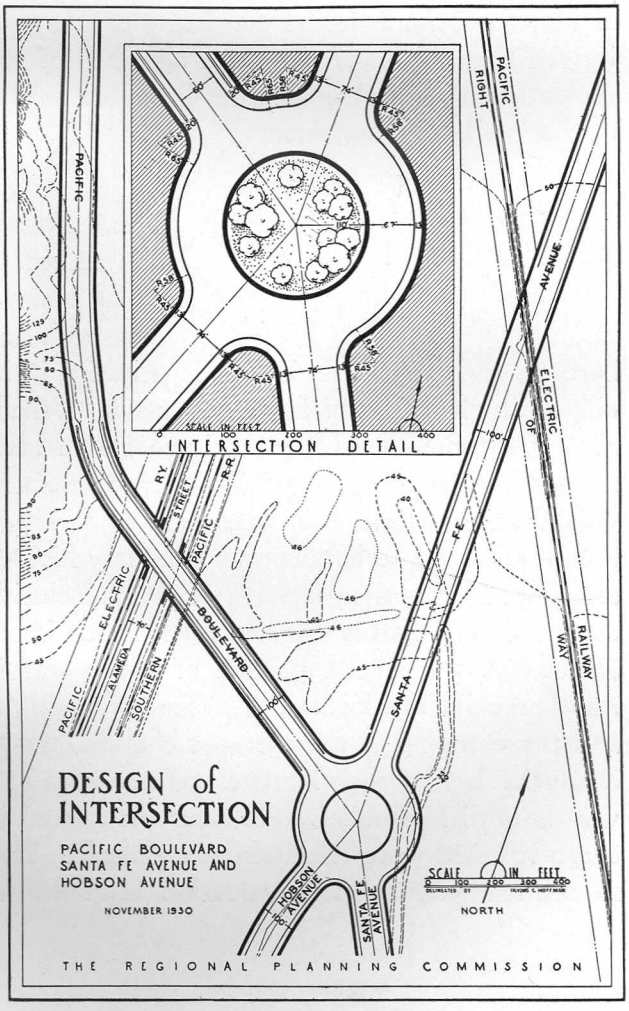
Long Beach Harbor lies immediately to the east of Los Angeles Harbor. Communication between the two ports is had by water through Cerritos Channel which is now being dredged by the federal government to a depth of 35 feet and a bottom width of 400 feet. The ultimate width of this channel will be 600 feet, with a minimum depth of 35 feet. Long Beach Harbor consists of an inner harbor and an outer harbor. The water frontage of the former is approximately 95% in private ownership, the remainder being the property of the City of Long Beach. The outer harbor, fronting on San Pedro Bay and protected in part by a curved breakwater 7300 feet in length, lies wholly within the ownership of the City of Long Beach. The city charter vests the control of the harbor district in a Board of Harbor Commissioners consisting of five qualified electors, appointed by the City Manager, with the approval of the City Council. The administration of harbor matters is vested in a Port Manager appointed by the Harbor Commission.

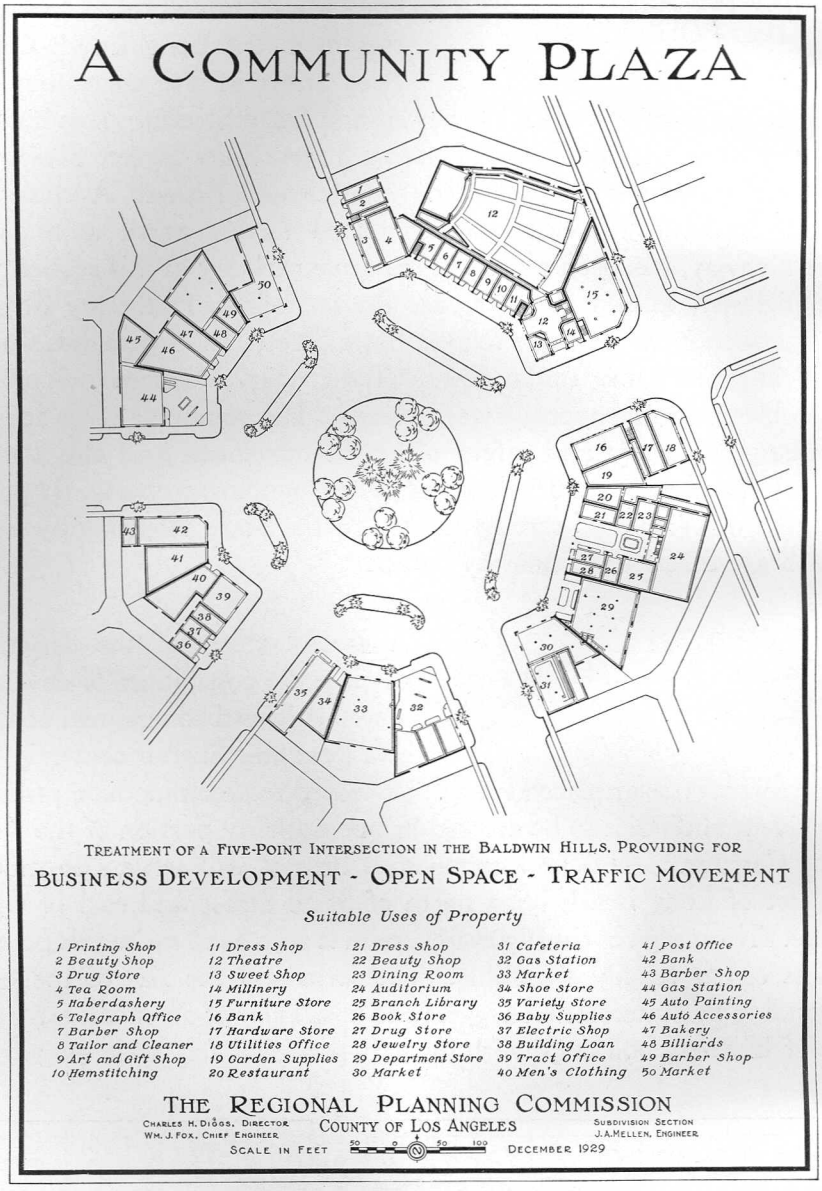
COMPREHENSIVE HARBOR DEVELOPMENT PLAN

Long Beach Harbor is being developed in accordance with a comprehensive plan embracing future improvements for both Los Angeles and Long Beach harbors, and although this plan is tentative in its nature, it will undoubtedly form the basis for future expansion. When completed in accordance with this comprehensive plan, Long Beach Harbor will provide approximately 26 miles of berthing facilities capable of accommodating 400 overseas vessels at one time and, according to a very conservative calculation, will be equipped to handle approximately 35,000,000 tons of general cargo annually. During the years 1924 to 1930, inclusive, the City of Long Beach expended on harbor development and improvements approximately $8,500,000, the largest portion of which was for the construction of a rubble mound breakwater, 7300 feet in length, two rubble mound moles, and the dredging of the entrance channel, the turning basin and interior channels. Long Beach Harbor was not open to navigation by deep draft vessels until November, 1925, and the annual increase in the amount of cargo handled since has been phenomenal. The cargo handled annually by calendar years, and its valuation, is shown in the table.

TRAFFIC CIRCLE AT PACIFIC HIGHWAY, SANTA FE AND HOBSON AVENUES

The traffic circle suggested at the intersection of these three major highways was designed after careful study of the movement of traffic and the use of surrounding property. The problem was difficult of solution by ordinary methods because of the unavoidable flat angles in the scissors-like intersection. The circle is so placed as to provide for a future grade separation at Pacific Highway and the Southern Pacific and Pacific Electric rail lines, as well as at Santa Fe Avenue and the Long Beach line of the Pacific Electric Railway. The design provides pavement area sufficient to accommodate the peak traffic load on all highways entering the circle. The inner circle is large enough to permit ease of movement and also to preclude the possibility of interruption of south-bound Pacific Highway traffic by south-bound vehicles "cutting in" from Santa Fe Avenue. The dimensions of the circle, in general, afford smooth merging of entering traffic and permit easy segregation at the respective exits. If the land around the Pacific Highway circle is to be used for business the treatment indicated on the next page might well be applied to it. Objections to the traffic circle as a poor location for business are overcome in the





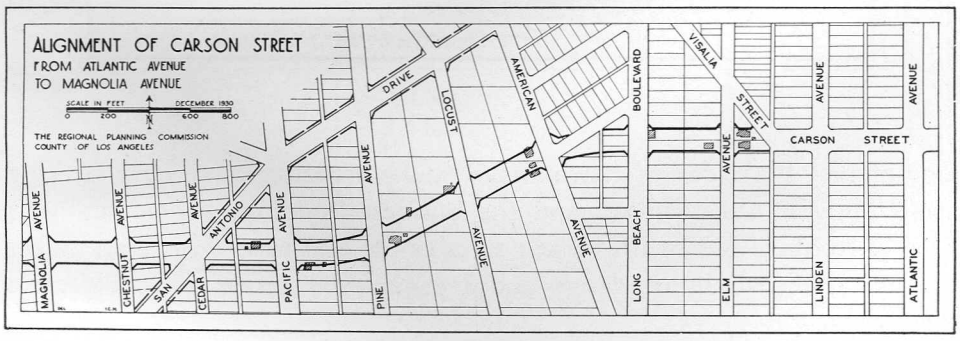
Community Plaza design shown above by the introduction of large parking areas between the roadway and the business buildings. Incidentally, a greater frontage is also thus made suitable for business. This plan makes possible unified building design and a community center of considerable distinction.

STATE STREET, HATHAWAY AND SAN GABRIEL BOULEVARD

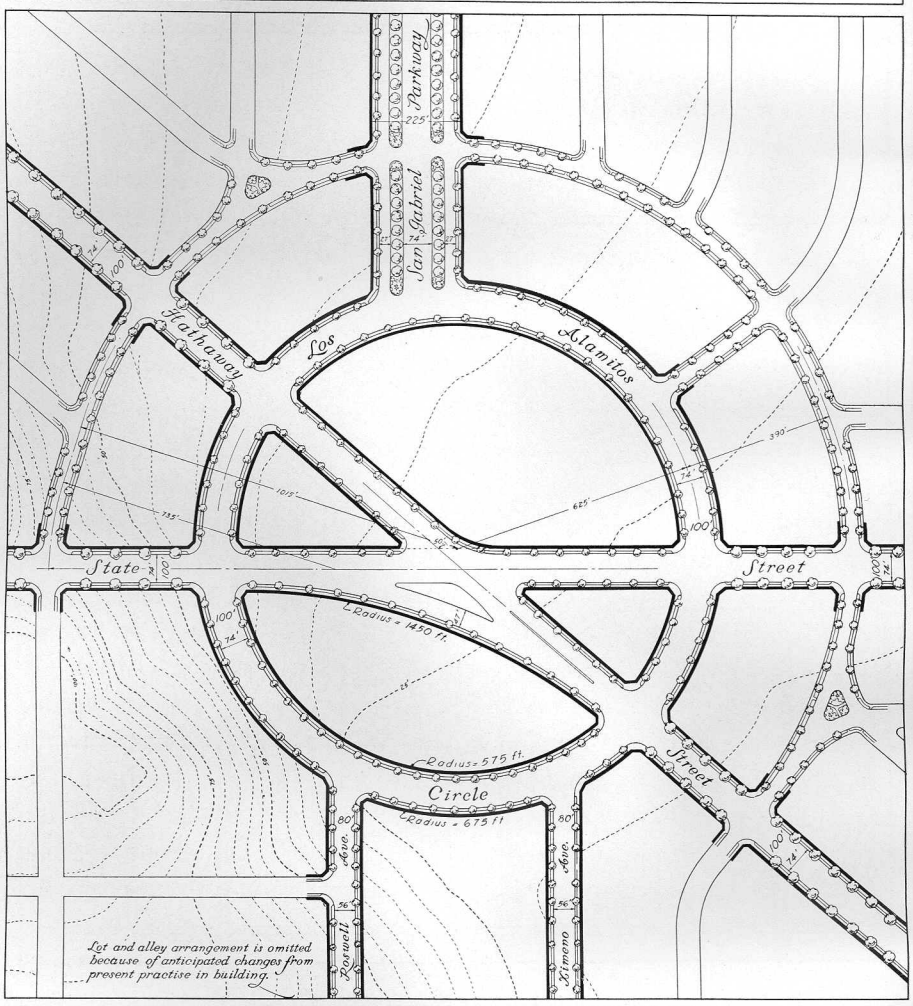
One of the most difficult problems encountered in planning the highway system in the Long Beach-Redondo Area arises in the concentration of traffic at the intersection of Hathaway and State Streets. This condition is caused by the traffic from Hathaway Street, State Street, San Gabriel Boulevard, and that from Ximeno Avenue and Roswell Avenue. San Gabriel Boulevard, having been combined farther north with another major highway, has been made a three-drive parkway in this section. The state highway, known as the Coast Route, follows Hathaway Street to this intersection, and thence follows State Street. This demands uninterrupted alignment and traffic flow. Of the many solutions proposed for this problem, the one opposite was selected. This solution affords adequate interchange of traffic and safety of traffic movement and also tends to encourage advantageous development of surrounding property. It permits the direct movement of through traffic on the State Highway by way of either State Street or Hathaway Street.

DEVELOPMENT OF COMMERCIAL CENTER

A careful study of the design will disclose the possibilities of developing a well-balanced commercial center at this location. Such a center is desirable in this particular place as it will be needed to accommodate, primarily, the residential district to be created in the southerly portion of the "Town of Los Cerritos." This new commercial district will serve also much of that part of Long Beach lying north of State Street and east of Cherry Avenue. The design of the highway system is such as to make this potential business center readily accessible. The form and the size of the blocks surrounding this intersection suggest the possibility of an effective arrangement of business buildings, with modern provision for off-street parking.



LOS ALAMITOS CIRCLE



The Regional Planning Commission

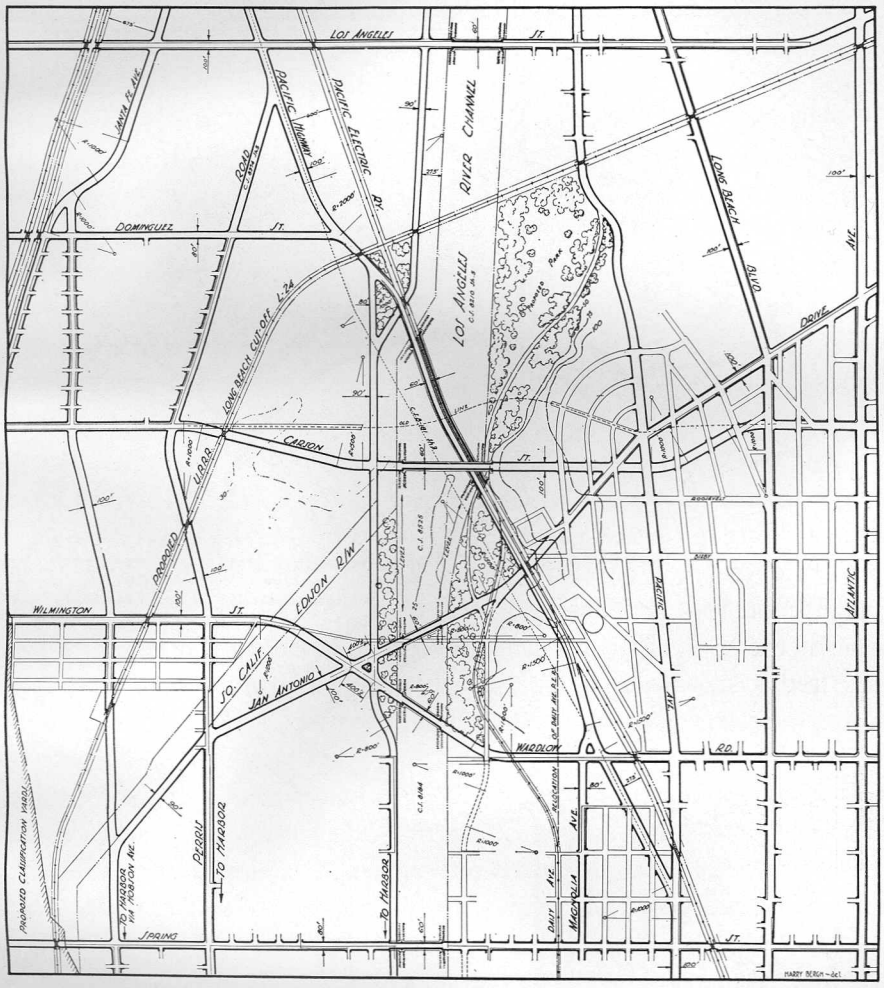
County of Los Angeles

February 1931

Scale NORTH in feet

0 100 200 300 400 500 600

DELINEATED BY TOM D. COOK



PRELIMINARY STUDY

L.A. RIVER CROSSINGS - HIGHWAY ALIGNMENTS & RELATED INTERSECTIONS

LOS ANGELES STREET TO SPRING STREET

GRAPHIC 0 600 1800 2400 SCALE

JULY 1930

THE REGIONAL PLANNING COMMISSION - COUNTY OF LOS ANGELES

CHARLES H. DIGGS – DIRECTOR

LANDSCAPE DESIGN SECTION
WERNER RUCHTI – LANDSCAPE ARCHITECT

WM J FOX – CHIEF ENGINEER

U-10

LOS ANGELES RIVER CROSSINGS

LOS ANGELES RIVER CROSSINGS REQUIRE SPECIAL STUDY

Although in general the frequency of bridges across the Los Angeles River is indeterminate, depending somewhat upon future local requirements, some of them so affect the success of the regional highway system that they have required special attention. The most complex of these river crossing problems is that presented in the area lying between Spring and Los Angeles Streets, just north of the City of Long Beach. The bridge structures involved will serve Wardlow Road, San Antonio Drive, Carson Street, Pacific Highway, Spring Street, Los Angeles Street, the Union Pacific Railroad (Harbor Line), and the Pacific Electric Railway (Long Beach Line).

The general character of the terrain and the angular direction of some of the highways have necessitated a thorough survey and a careful study of the design of the structures necessary for the future projection of these highways across the Los Angeles River. Large portions of the City of Long Beach are not now readily accessible, mainly because of the lack of these bridges and the corresponding traffic arteries. The effect of this condition upon the development of the city generally was so apparent as to warrant the special attention of the Commission. Study of the problem has resulted in a program of bridge construction, capable of being carried out systematically and progressively.

DIFFICULT TOPOGRAPHICAL CONDITIONS

The topographical conditions are rather difficult. The bed of the river has a uniform width of 500 feet, except at the Pacific Electric and Pacific Highway structure, where it is widened to 800 feet to accommodate the unusual abutments required for the combined structure and the long diagonal crossing of the river. The 275-foot right of way of the Southern California Edison Company is parallel and contiguous to the west bank of the river channel up to a point approximately 300 feet south of the proposed Carson Street crossing, where it deflects in a southwesterly direction. A levee averaging 12 feet in height borders the channel on each side. The west bank of the river, between Los Angeles Street and Spring Street, is low and flat. The greater portion of the east bank is a bluff which culminates in a commanding knoll at the east abutment of the Carson Street structure.

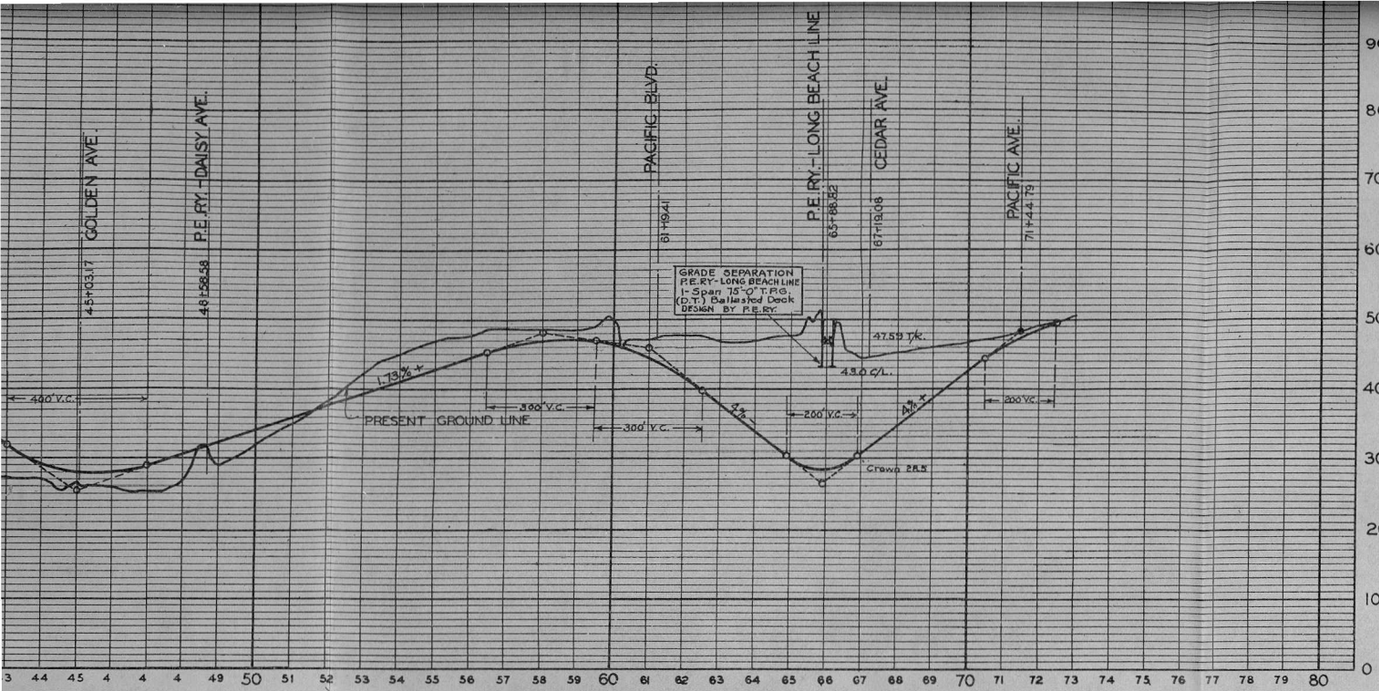
WARDLOW BRIDGE

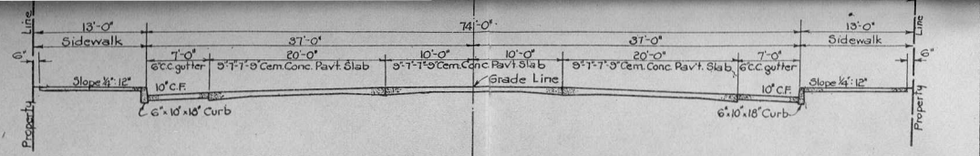
By a connection westerly across the Los Angeles River to Wilmington Street, Wardlow Road becomes a short direct route from the center of Torrance to the northern part of Long Beach, feeding into several of the important approaches to Long Beach and terminating at the Long Beach Municipal Airport. A particularly valuable connection is made by Appian Way to the Coast Highway south. Like the other river crossings, the Wardlow bridge and related improvements can be constructed independently of other projects in this vicinity.

Beginning at Perris Road, the contemplated highway crosses the right of way of the Southern California Edison Company on a long curve and continues southeasterly across San Antonio Drive and Pico Street at grade. From this point on it is a secondary highway. The reinforced concrete bridge across the Los Angeles River carries a 40-foot roadway and two 5-foot sidewalks. At the east bank of the river another long curve brings it into the existing Wardlow Road. From this point it crosses Golden Avenue, the Daisy Avenue line of the Pacific Electric Railway, Magnolia Avenue and Pacific Highway at grade, and, passing under the main line of the Pacific Electric Railway, intersects Pacific Avenue at grade. The underpass plan calls for a 40-foot roadway and a clearance of fourteen and a half feet with grades of 5% on the approaches.

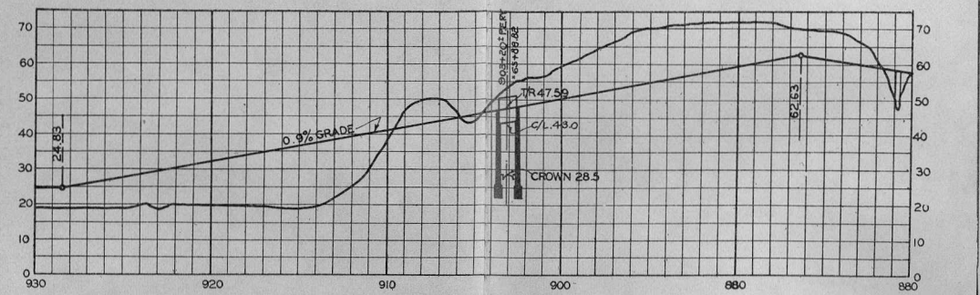
ESTIMATE OF COST

Roadway grading and excavation	358,000 sq. ft. @ 2¢	$ 7,168.00
Paving, 56 ft. wide	358,000 sq. ft. @ 30¢	107,500.00
Curbs, 6 in. x 10 in. x 18 in.	12,800 lin. ft. @ 50¢	6,400.00
Separation of grades	Pacific Electric Railway Structure	150,000.00
River bridge		275,000.00
		$546,068.00
Engineering and supervision	Plans, surveys, etc.—10%	54,600.00
	Total	$590,668.00





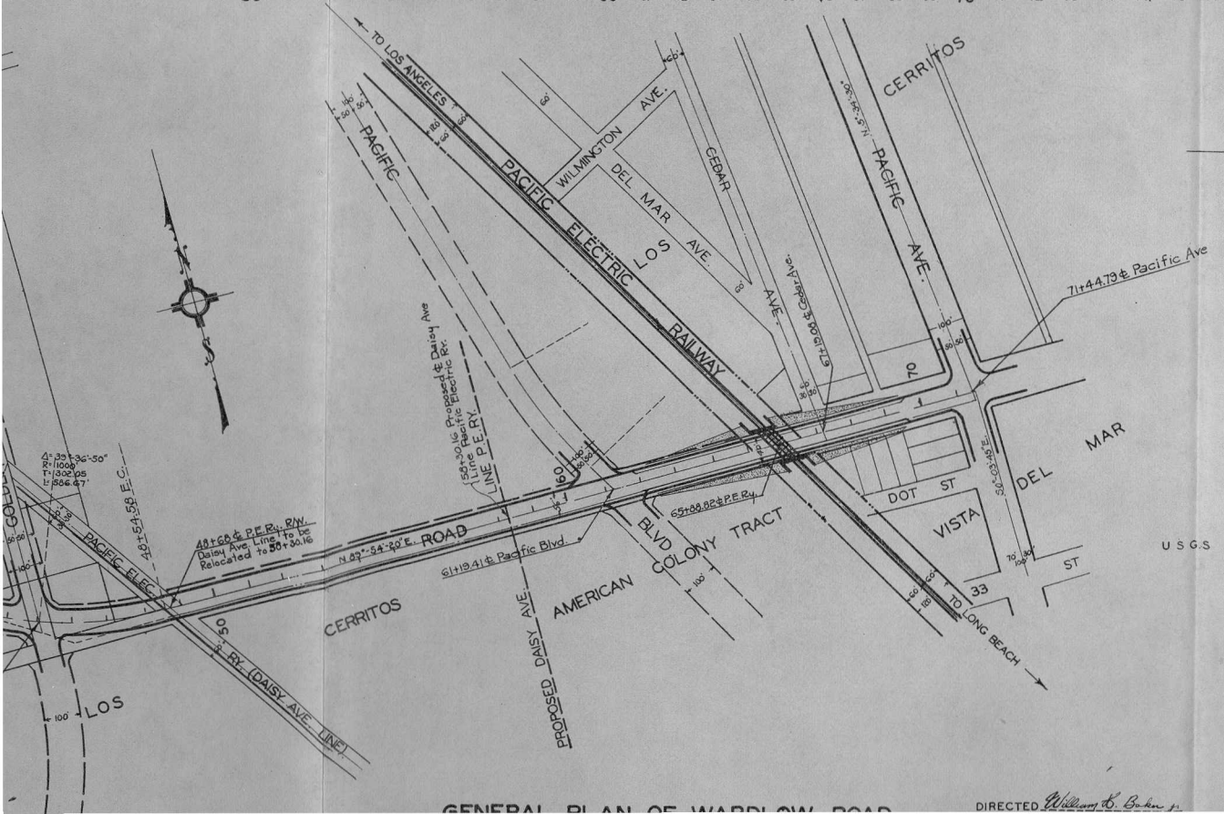
TYPICAL CROSS SECTION OF PAVEMENT



PROFILE OF PACIFIC ELECTRIC RY.

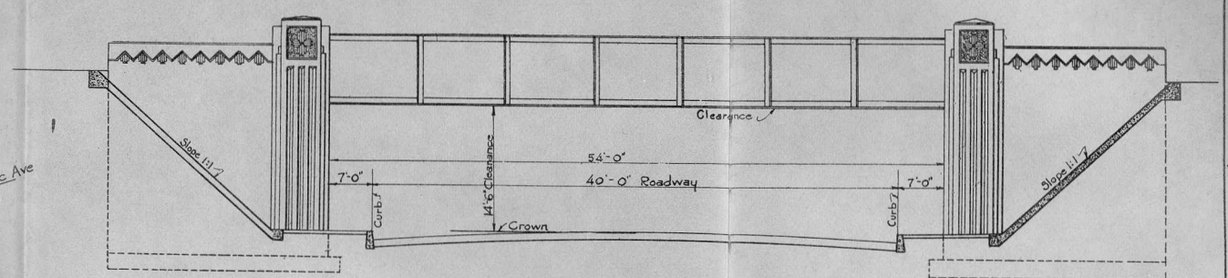
LONG BEACH MAIN LINE

SCALE HOR:- 1" = 400'
VERT:- 1" = 20'



GENERAL PLAN OF WARDLOW ROAD

DIRECTED William L. Baker Jr.



ELEVATION OF GRADE SEPARATION STRUCTURE

SCALE 1/8" = 1'-0"

COUNTY SURVEYORS REFERENCE DRAWINGS

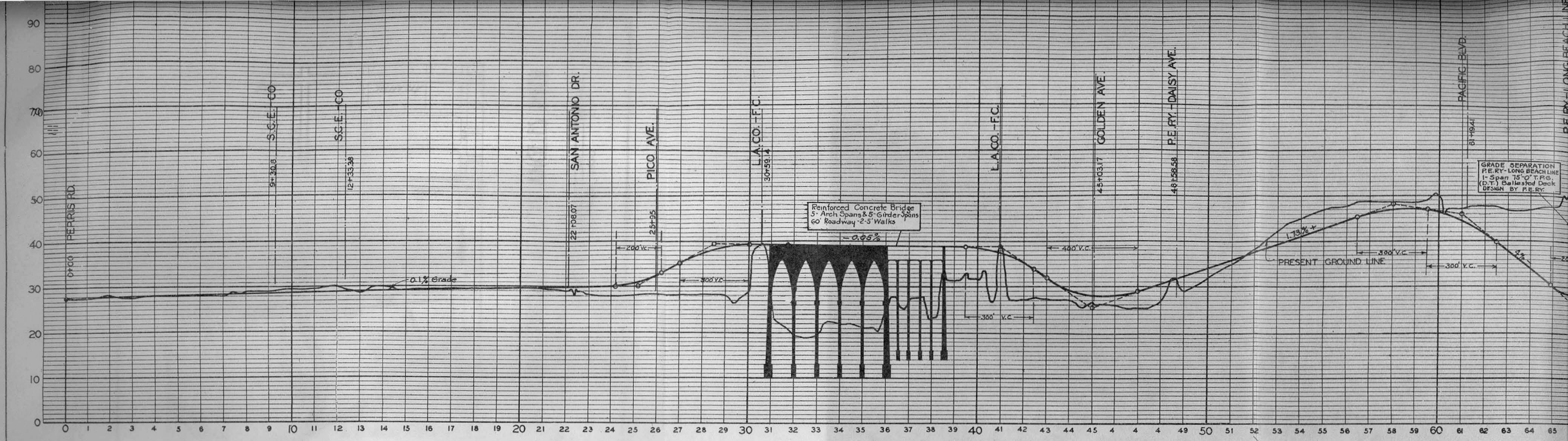
W.O.	C.S.-MAP	X-SECTIONS	PROFILES
990	B-619	B-620: 2&3.	B-620:1
		B-628: 1&2	B-628:1

COUNTY OF LOS ANGELES
ROAD DEPARTMENT

OFFICE OF BRIDGE ENGINEER LOS ANGELES, CALIFORNIA

WARDLOW ROAD
BETWEEN PERRIS ROAD AND PACIFIC AVE.
GENERAL SITUATION PLAN & PROFILE
TO ACCOMPANY REPORT
SECTION 4
THE REGIONAL PLANNING COMMISSION

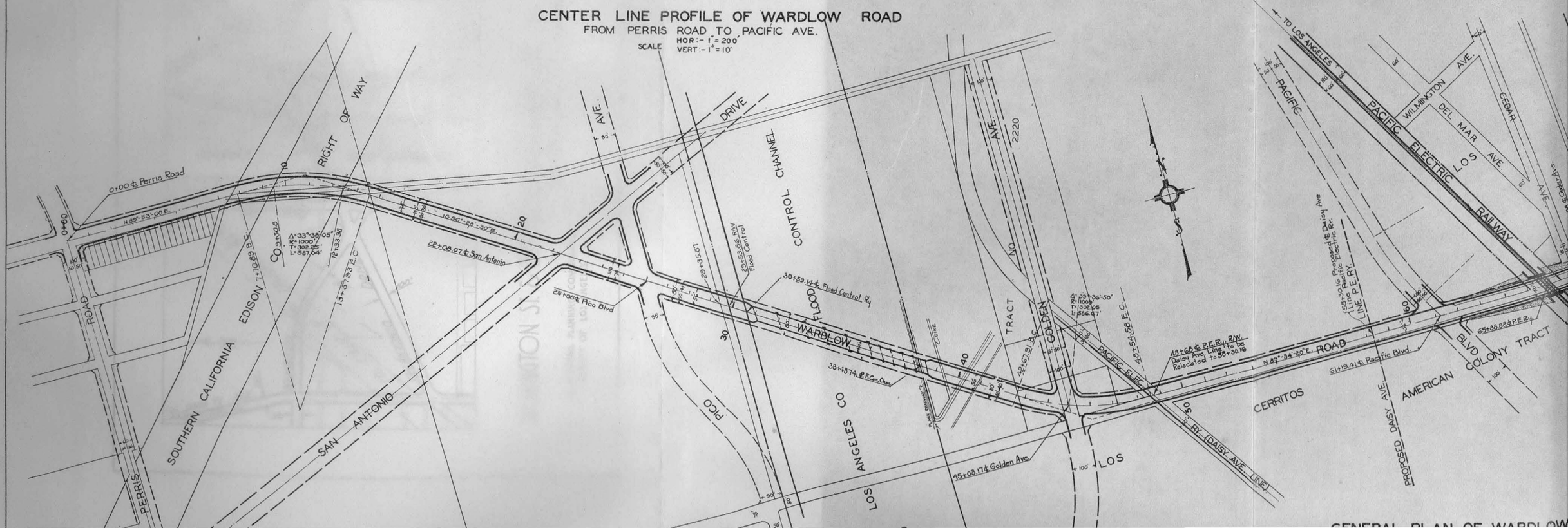
SUBMITTED [signature] SCALE As Shown DATE Jan. 22 1931



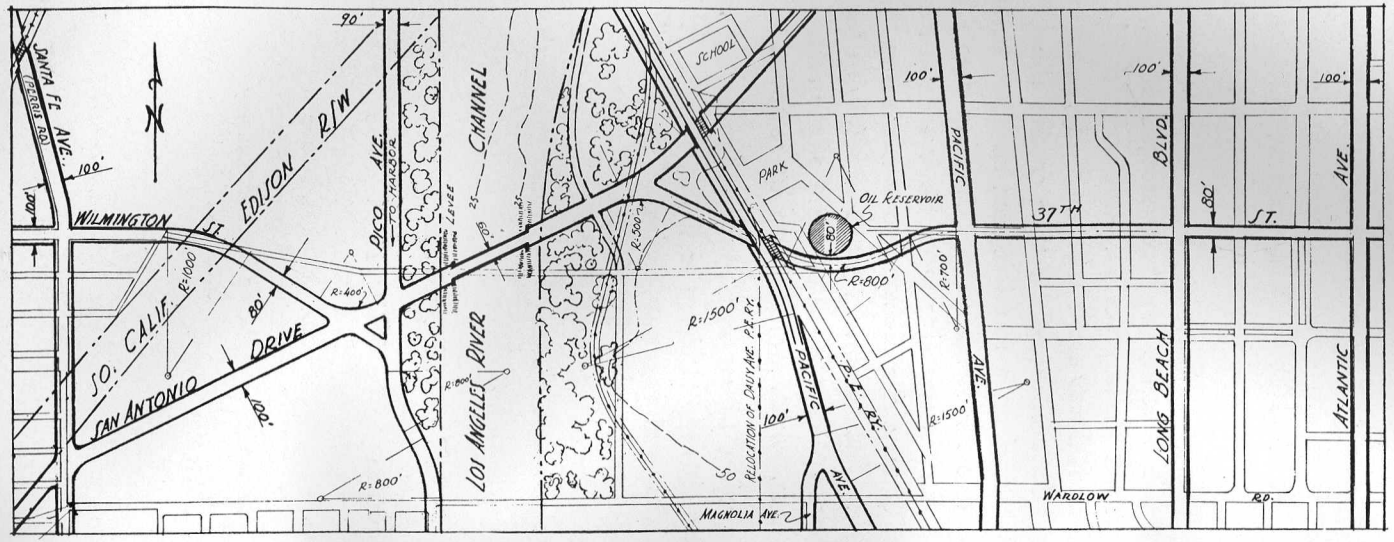
CENTER LINE PROFILE OF WARDLOW ROAD

FROM PERRIS ROAD TO PACIFIC AVE.

SCALE HOR:- 1" = 200'
VERT:- 1" = 10'



GENERAL PLAN OF WARDLOW



WILMINGTON ST. & 37TH ST. CONNECTION VIA SAN ANTONIO BRIDGE AT LOS ANGELES RIVER

SUPPLEMENTARY TO PRELIMINARY STUDY Nº U-10

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

GRAPHIC SCALE 0 600 1200 1800

SEPTEMBER 1930

MD.

SAN ANTONIO BRIDGE

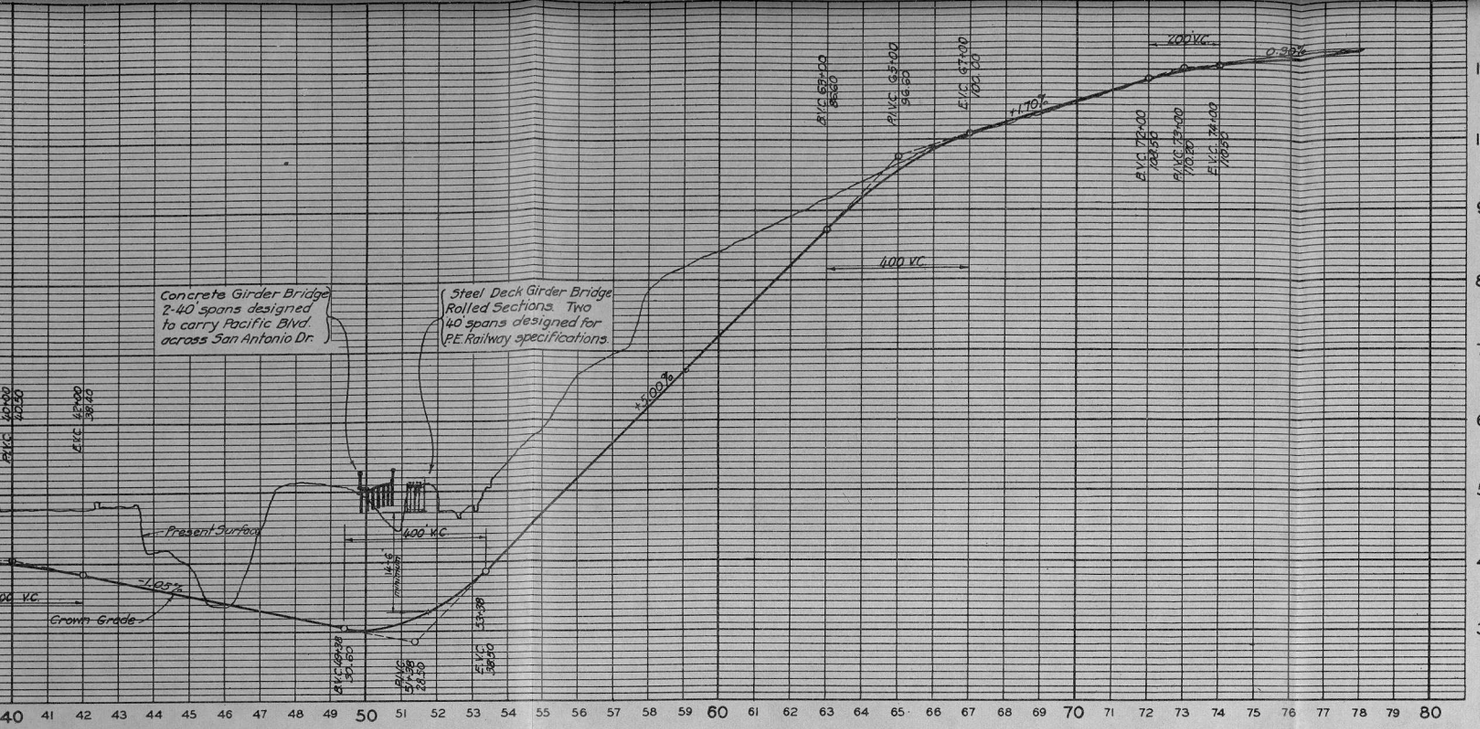
The extension of San Antonio Drive from Magnolia Avenue to Hobson Avenue is an integral part of the plan for the entire North Long Beach district. Its treatment is shown on the General Situation Plan. The construction of the San Antonio Drive Bridge can be independent of the other improvements in the plan and will fit in with a progressive construction program.

Beginning at Magnolia Avenue and extending southwesterly, San Antonio Drive passes with a clearance of 14.5 feet under the Long Beach Line of the Pacific Electric Railway and Pacific Highway, using two 30-foot roadways each with a 5-foot sidewalk. It then crosses the Los Angeles River Flood Control Channel on a multiple-arch concrete bridge having a 60-foot roadway and two 5-foot sidewalks. Crossing Pico Avenue and Wardlow Road at grade, and intersecting Santa Fe Avenue at the Southern California Edison right of way, the highway continues along this right of way to Hobson Avenue. The maximum grade is 5% with long vertical curves at the grade changes. At the easterly end of the river bridge is a large oil and water sump, which will have to be removed.

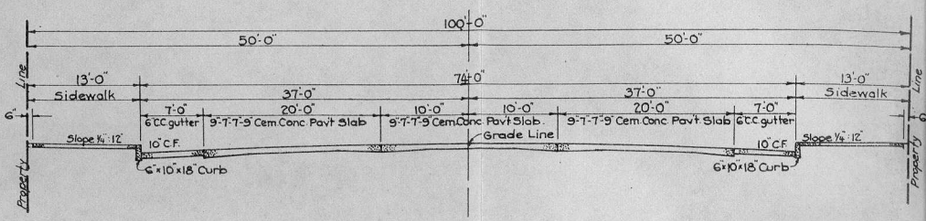
The San Antonio project serves as a principal means of connecting the Long Beach Harbor with the territory to the northeast. It forms part of what is in effect a diagonal highway projected through the Whittier Hills and extending northeasterly to San Gabriel Canyon. Traffic from the north and east is intercepted by San Antonio Drive and directed southwest to the central portion of Long Beach and the Harbor.

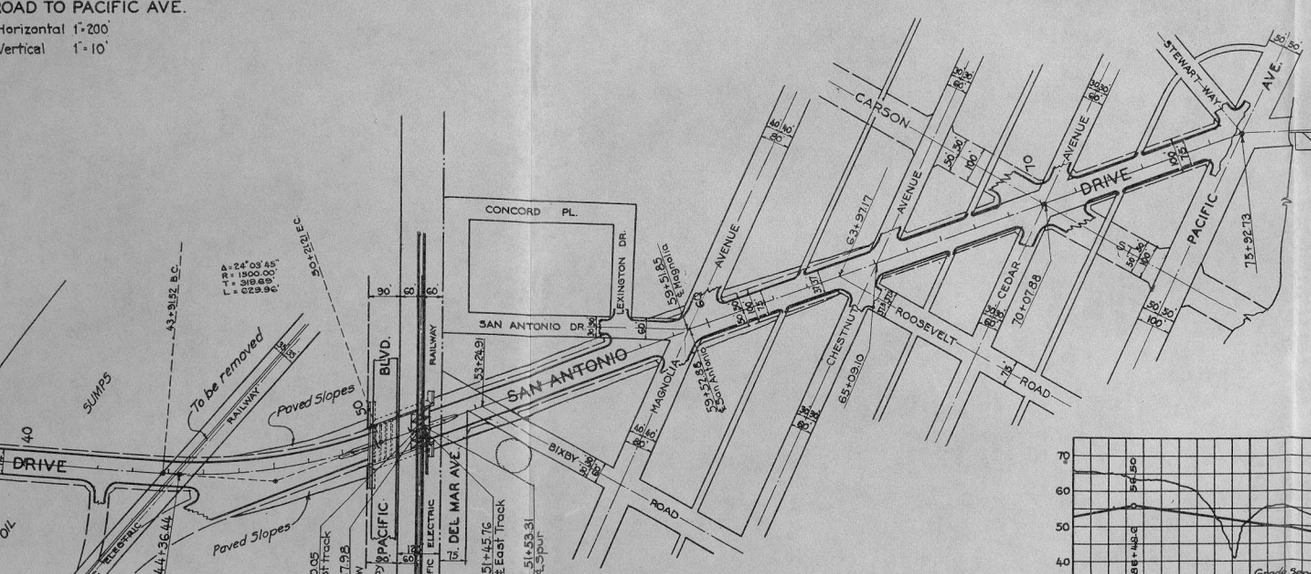
ESTIMATE OF COST

Roadway grading and excavation	508,000 sq. ft. @ 5¢	$ 25,400.00
Paving, 74 ft. wide	508,000 sq. ft. @ 30¢	152,300.00
Curbs, 6 in. x 10 in. x 18 in.	13,726 lin. ft. @ 50¢	6,863.00
Separation of grades	Pacific Highway Structure	90,000.00
Separation of grades	Pacific Electric Railway Structure	75,000.00
River bridge		380,000.00
		$729,563.00
Engineering and supervision	Plans, surveys, etc.—10%	72,950.00
	Total	$802,513.00

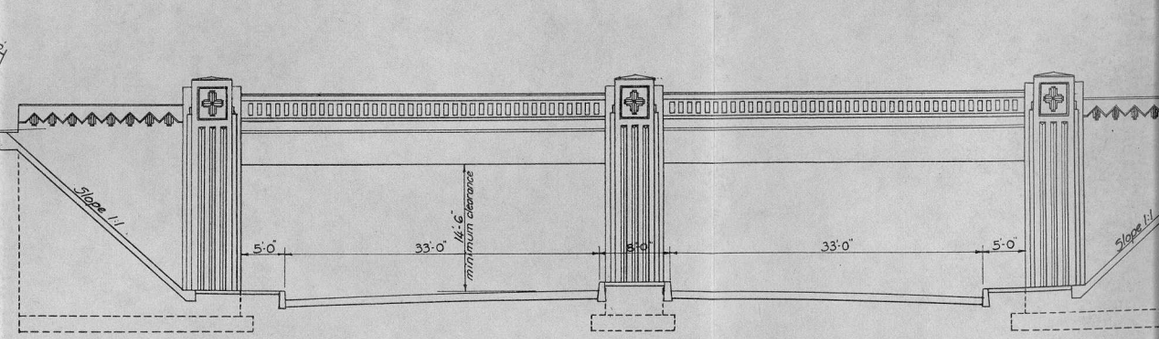


LINE PROFILE
TONIO DRIVE
ROAD TO PACIFIC AVE.
Horizontal 1"=200'
Vertical 1"=10'

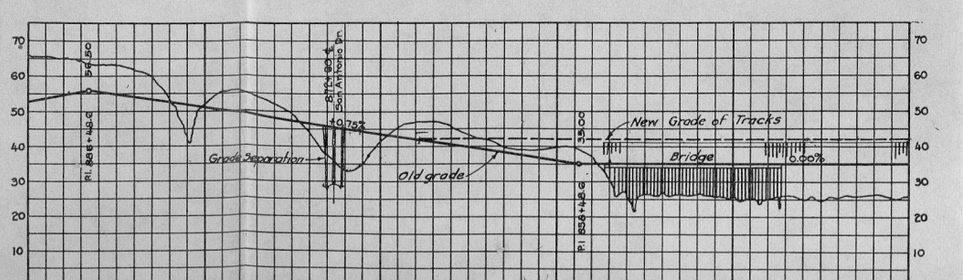




PLAN OF SAN ANTONIO DRIVE
FROM PERRIS ROAD TO PACIFIC AVE.

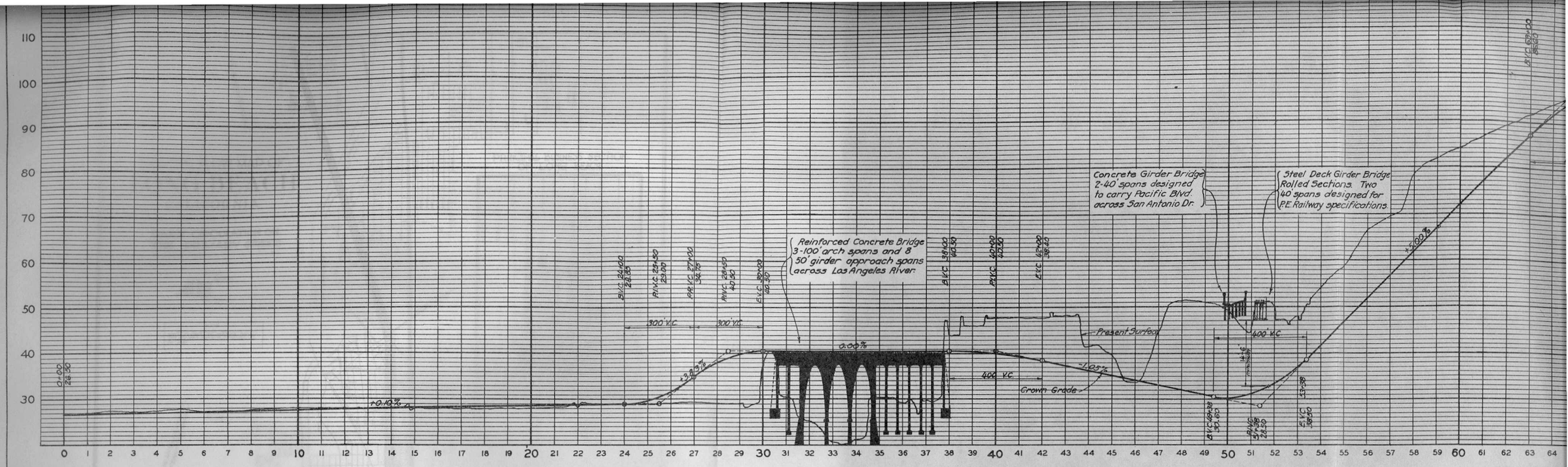


ELEVATION OF RAILWAY STRUCTURE
Scale 1/8"=1'-0"



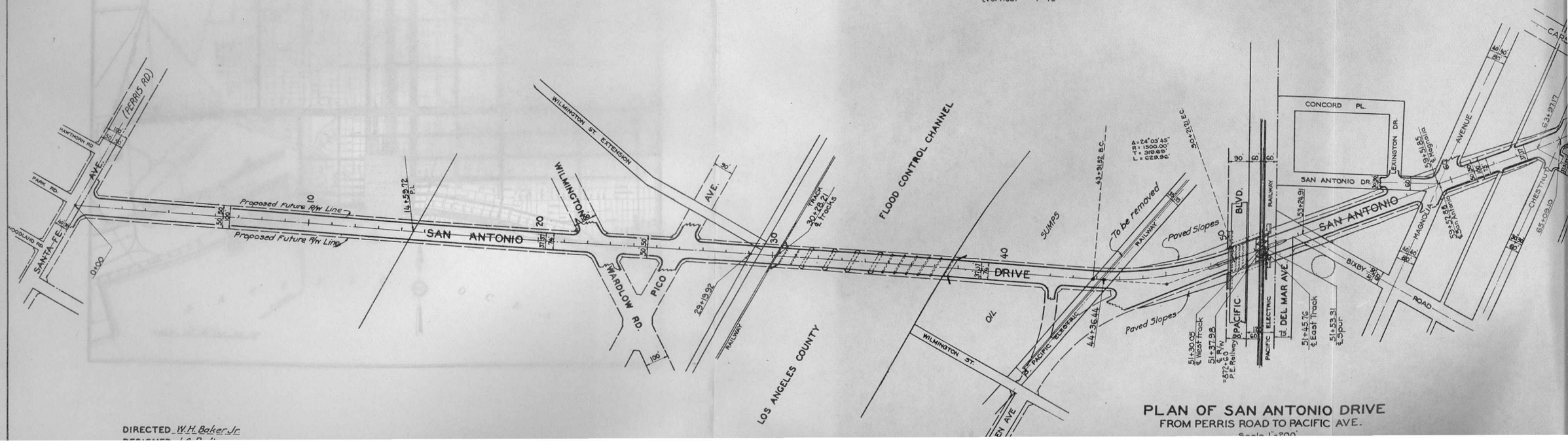
COUNTY OF LOS ANGELE
ROAD DEPARTMENT
OFFICE OF BRIDGE ENGINEER LOS ANGELES, CALIFO

SAN ANTONIO DRIVE
BETWEEN PERRIS ROAD AND PACIFIC AVE.
GENERAL SITUATION PLAN & PRO
TO ACCOMPANY REPORT
SECTION 4
THE REGIONAL PLANNING COMMISSION



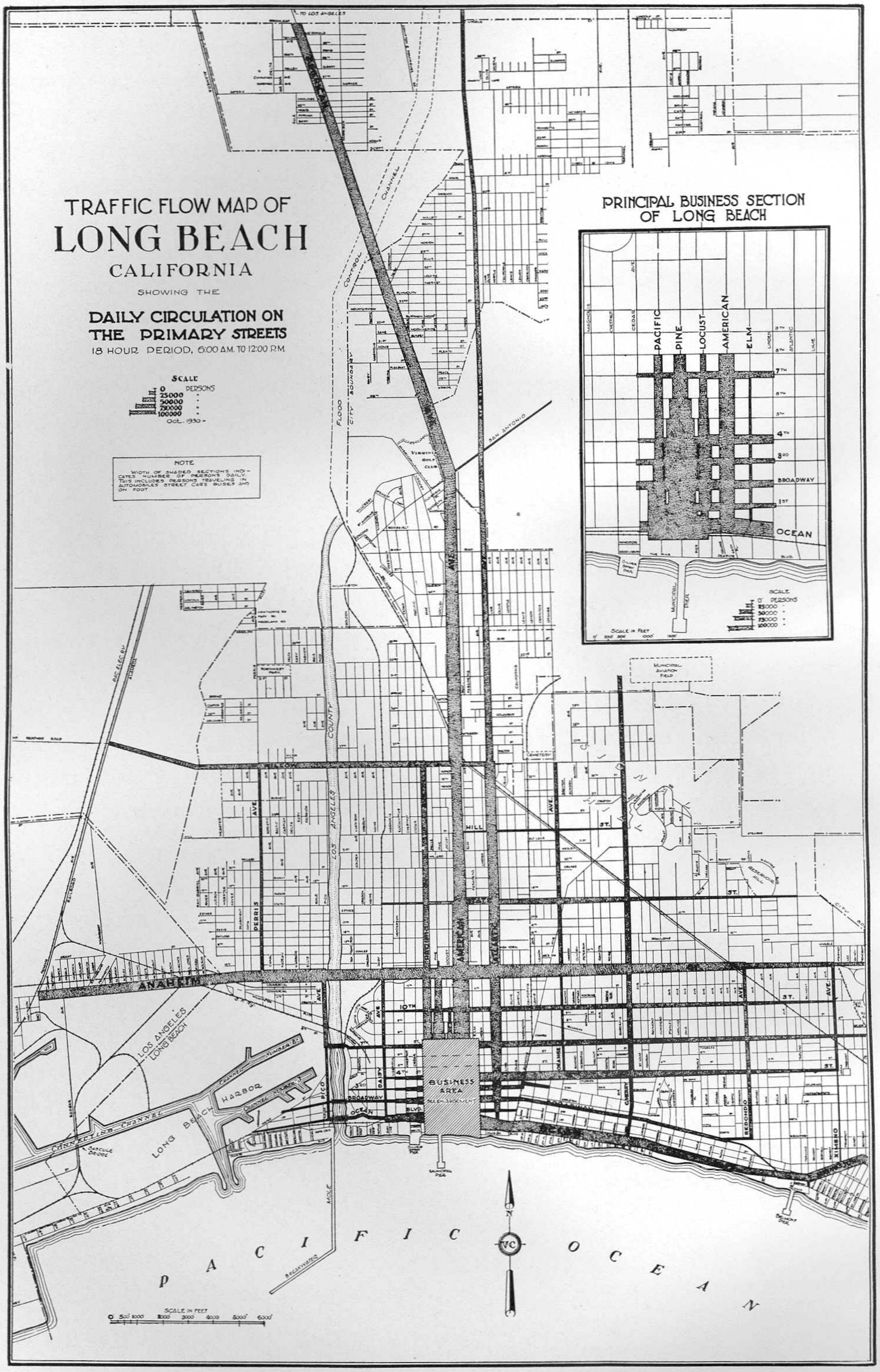
CENTER LINE PROFILE
SAN ANTONIO DRIVE
FROM PERRIS ROAD TO PACIFIC AVE.

Scale { Horizontal 1"=200'
Vertical 1"=10'



PLAN OF SAN ANTONIO DRIVE
FROM PERRIS ROAD TO PACIFIC AVE.

DIRECTED W.H. Baker Jr.


TRAFFIC FLOW MAP OF
LONG BEACH
CALIFORNIA
SHOWING THE
DAILY CIRCULATION ON
THE PRIMARY STREETS
18 HOUR PERIOD, 6:00 A.M. TO 12:00 P.M.
SCALE
0 PERSONS
25000
50000
75000
100000
Oct. 1930
NOTE
WIDTH OF SHADED SECTIONS INDICATES NUMBER OF PERSONS DAILY. THIS INCLUDES PERSONS TRAVELING IN AUTOMOBILES STREET CARS BUSES AND ON FOOT
PRINCIPAL BUSINESS SECTION
OF LONG BEACH
PACIFIC
PINE
LOCUST
AMERICAN
ELM
7TH
6TH
5TH
4TH
3RD
BROADWAY
1ST
OCEAN
MUNICIPAL PIER
SCALE
0 PERSONS
25000
50000
75000
100000
FLOOD CONTROL CHANNEL
CITY BOUNDARY
LOS ANGELES COUNTY
AMERICAN AVE.
ANAHEIM
HILL
PERRIS AVE
10TH
BROADWAY
OCEAN BLVD.
BUSINESS AREA
LOS ANGELES LONG BEACH
HARBOR
LONG BEACH
CONNECTING CHANNEL
REDONDO
XIMENO
MUNICIPAL PIER
P A C I F I C O C E A N
SCALE IN FEET

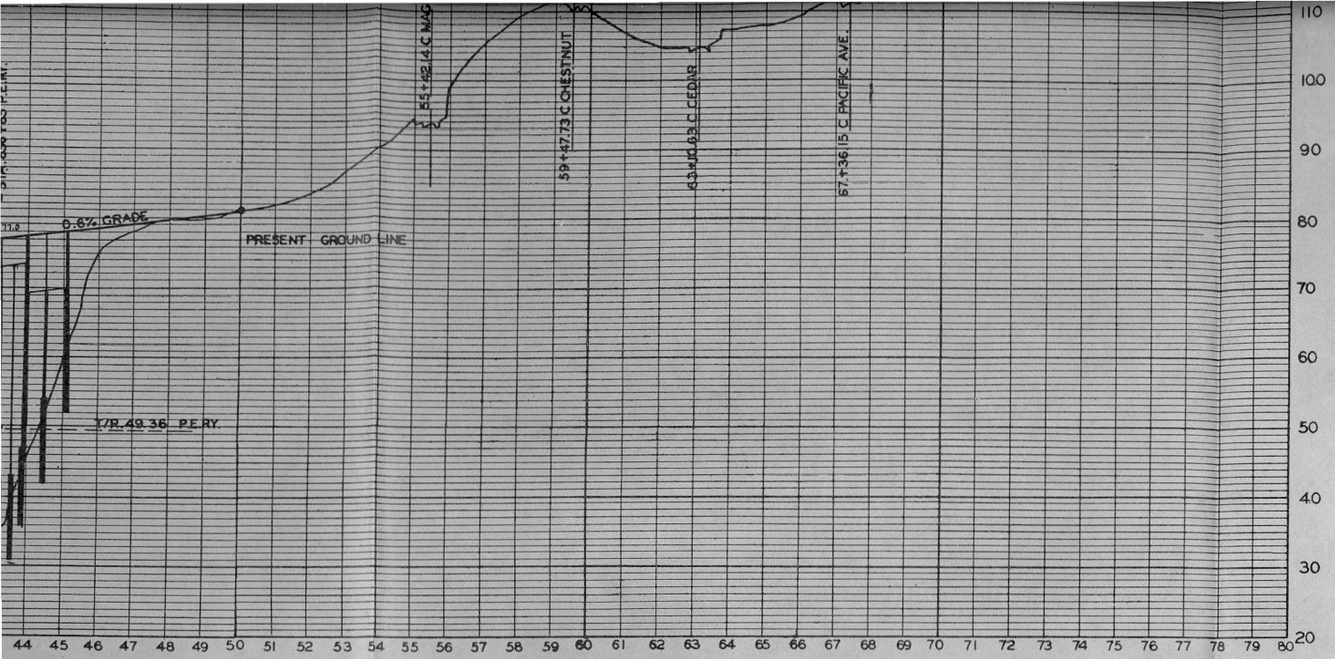
CARSON STREET BRIDGE

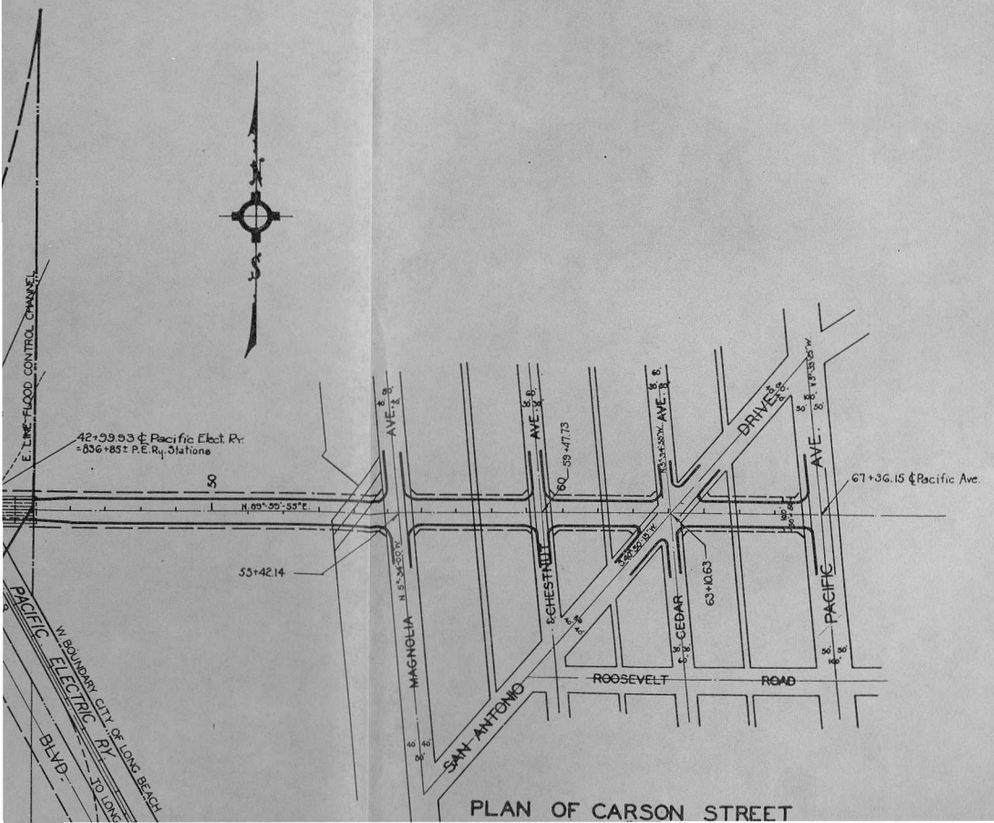
The Carson Street project is correlated with the progressive construction plan for crossings of the Los Angeles River. The bridge structure is designed in such a manner as to permit its construction to be independent of the other highway improvements and yet tied in with the completed system. It was necessary in the design to consider at all times the ultimate plan of the area so that the other highway, river and railroad crossings could be constructed without affecting the improvement of Carson Street. Certain topographical features in this vicinity, especially along the east bank of the river, made it necessary to relocate the centerline of Carson Street from Santa Fe Avenue easterly to Pacific Avenue. This relocation is the only logical place to cross the river. The difference in elevation between Perris Road and Pacific Avenue is 105 feet in a distance of 6,736.15 feet.

Extending from Perris Road easterly, crossing the proposed Long Beach cut-off of the Union Pacific System at grade, and bending slightly south of the present centerline, the new alignment crosses Pico Avenue, also at grade. It is then carried on a 4% grade over the Los Angeles River channel by means of a multiple-arch concrete bridge consisting of eight 100-foot arch spans, and over Pacific Highway on a 70-foot steel deck plate-girder span, and continues over the Pacific Electric Railway tracks by means of a low multiple rolled-section deck-girder bridge of three 45-foot spans supported on steel frame bents. The eastern approach consists of two 60-foot spans of deck plate-girders.

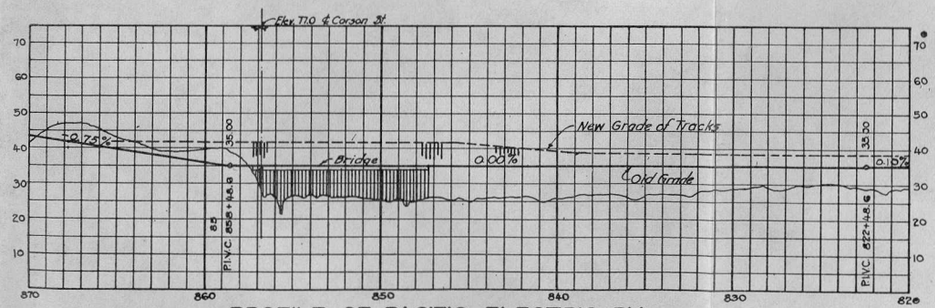
ESTIMATE OF COST

Roadway grading and excavation	414,400 sq. ft. @ 2¢	$ 8,288.00
Paving, 74 ft. wide	414,400 sq. ft. @ 30¢	124,320.00
Curbs, 6 in. x 10 in. x 18 in.	11,200 lin. ft. @ 50¢	5,600.00
River bridge	Eight 100-ft. spans	500,000.00
Bridge over Pacific Electric Railway and approaches	One 70-ft., three 45-ft., two 60-ft. spans	150,000.00
Extension of Pacific Electric Railway trestle		75,000.00
		$863,208.00
Engineering and supervision	Plans, surveys, etc.—10%	86,300.00
	Total	$949,508.00





PLAN OF CARSON STREET



PROFILE OF PACIFIC ELECTRIC RY.

SCALE HOR. 1"= 400'
VERT. 1"= 20'

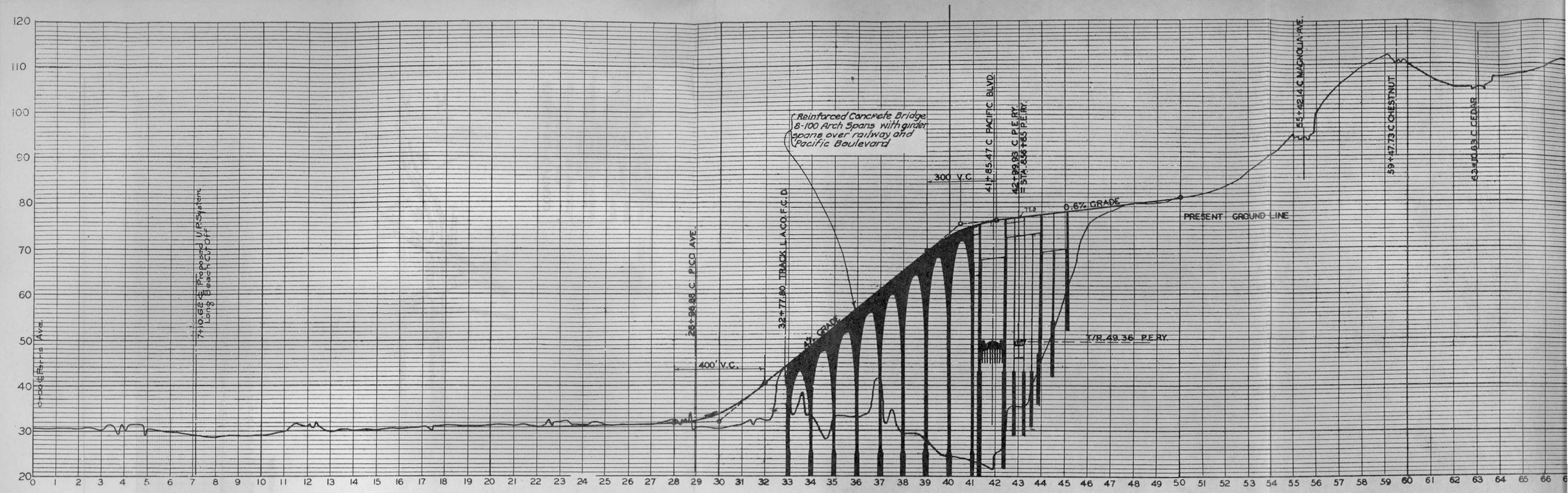
APPROVED

COUNTY OF LOS ANGELES
ROAD DEPARTMENT

OFFICE OF BRIDGE ENGINEER LOS ANGELES CALIFORNIA

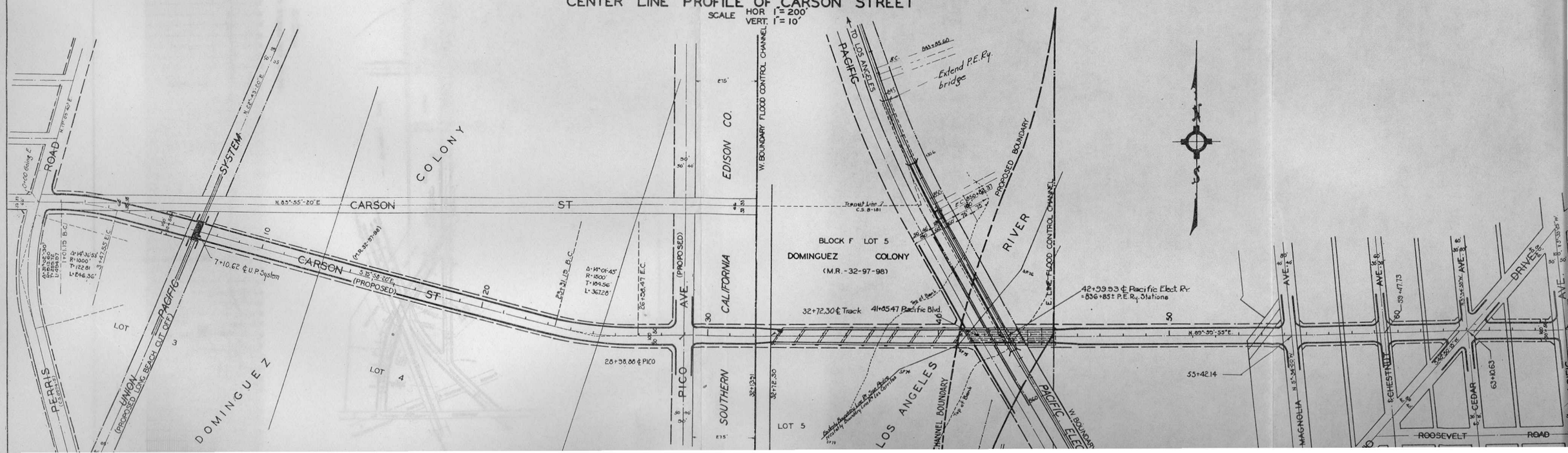
CARSON STREET
BETWEEN PERRIS ROAD AND PACIFIC AVE.
GENERAL SITUATION PLAN & PROFILE
TO ACCOMPANY REPORT
SECTION 4
THE REGIONAL PLANNING COMMISSION

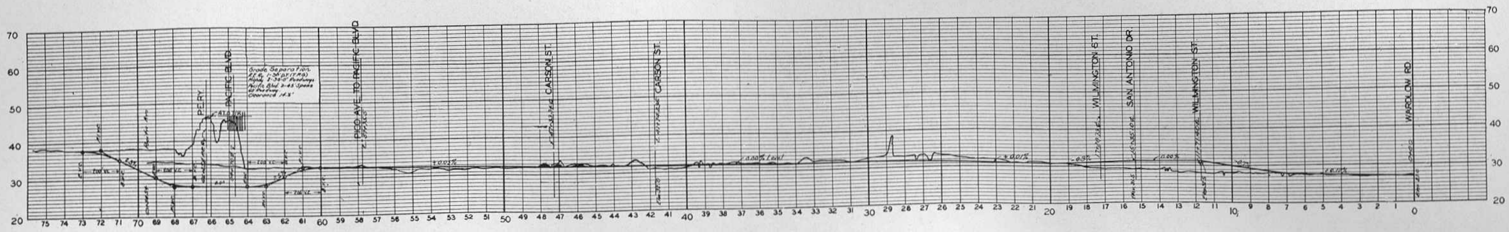
SUBMITTED		SCALE As Shown		DATE Jan 8, 1931	
BRIDGE ENGINEER	ROAD FOREMAN	O.B. NUMBER	SHEET NUMBER	TOTAL SHEETS



CENTER LINE PROFILE OF CARSON STREET

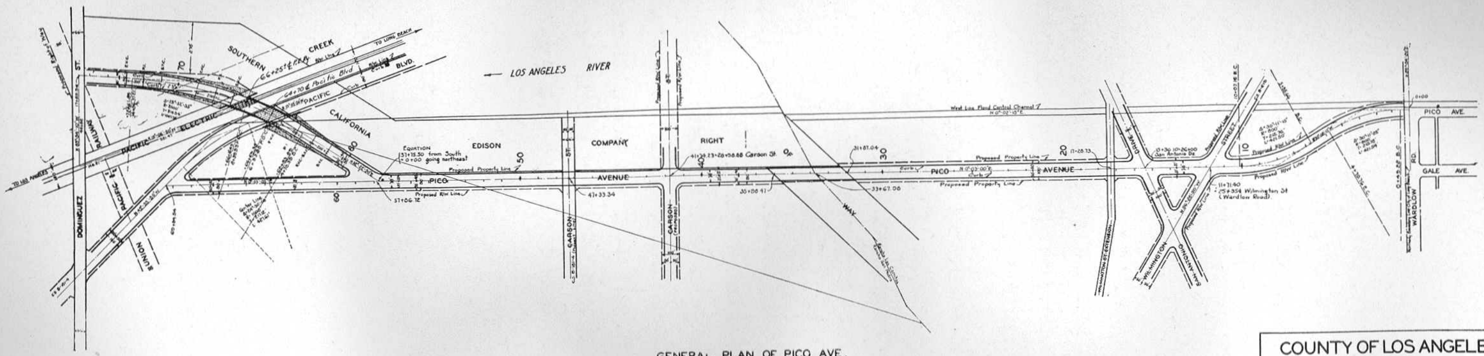
SCALE HOR. 1" = 200'
VERT. 1" = 10'





CENTER LINE PROFILE OF PICO AVE.

SCALE HOR: 1" = 200' VERT: 1" = 10'



GENERAL PLAN OF PICO AVE.

SCALE 1" = 200'

DIRECTED ____
DESIGNED ____
CHECKED ____

APPROVED ____ Chief Engineer Los Angeles County Regional Planning Commission

COUNTY OF LOS ANGELES
ROAD DEPARTMENT
OFFICE OF BRIDGE ENGINEER — LOS ANGELES, CALIFORNIA

PICO AVENUE
BETWEEN DOMINGUEZ ST. AND WARDLOW RD.
GENERAL SITUATION PLAN & PROFILE
TO ACCOMPANY REPORT
SECTION 4
THE REGIONAL PLANNING COMMISSION

SUBMITTED ____ BRIDGE ENGINEER	SCALE As shown	DATE		
APPROVED ____ ROAD COMMISSIONER	ROAD FOREMAN DIVISION	G.B. NUMBER	SHEET NUMBER	TOTAL SHEETS
		G.E.		
APPROVED ____	DRAWING NUMBER	SG-39		

PACIFIC HIGHWAY BRIDGE

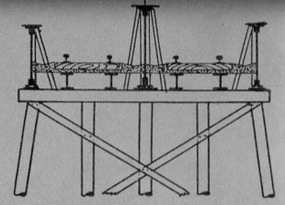
The improvement of Pacific Highway includes a highway cross-section suitable for a major traffic artery, with a bent and girder bridge over the Los Angeles River, carrying a 60-foot roadway and 5-foot sidewalks. The plan includes provisions for changing the location of the river channel and for separation of grades at Carson Street and San Antonio Drive. The gradient and vertical curves are designed to give maximum speed and safety for traffic.

The series of structures involved in this project begins at Dominguez Street. The highway goes under the Union Pacific tracks, over Pico Avenue, under the Carson Street structure and over San Antonio Drive. This massive bridge can be constructed independently of the other improvements in the comprehensive bridge plan.

The Pacific Highway project is of vital importance to the City of Long Beach. A map of the county shows that Long Beach is considerably east of the north-and-south line passing through the City of Los Angeles. There are no projects, other than Pacific Highway, that directly connect the central portion of Los Angeles with that of Long Beach. All other highways extending north from Long Beach pass considerably to the east of the City of Los Angeles. Those extending south from the business center of Los Angeles lead toward Wilmington, and persons whose destination is Long Beach have to drive eastward several miles after reaching Anaheim Street. It will be seen, therefore, that the Pacific Highway project plays a distinctive part in the Regional Plan of Highways in serving as a direct route between these two great cities.

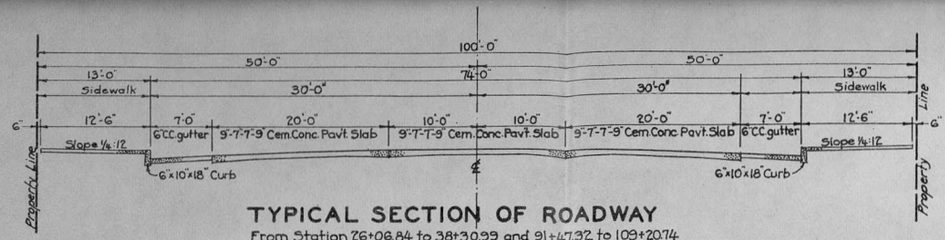
ESTIMATE OF COST

Roadway grading and excavation	504,000 sq. ft. @ 5¢	$ 25,200.00
Paving, 74 ft. wide	504,000 sq. ft. @ 30¢	151,200.00
Curbs, 6 in. x 10 in. x 18 in.	13,268 lin. ft. @ 50¢	6,900.00
River bridge		700,000.00
		$883,300.00
Engineering and supervision	Plans, surveys, etc.—10%	88,300.00
	Total	$971,600.00



SECTION OF RAILWAY BRIDGE

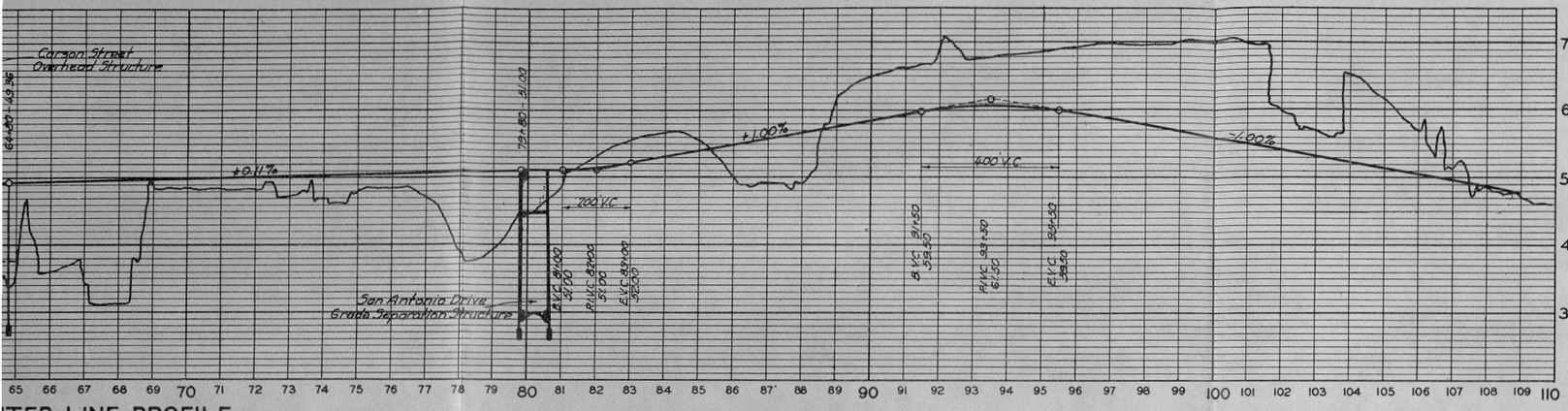
Not to Scale



TYPICAL SECTION OF ROADWAY

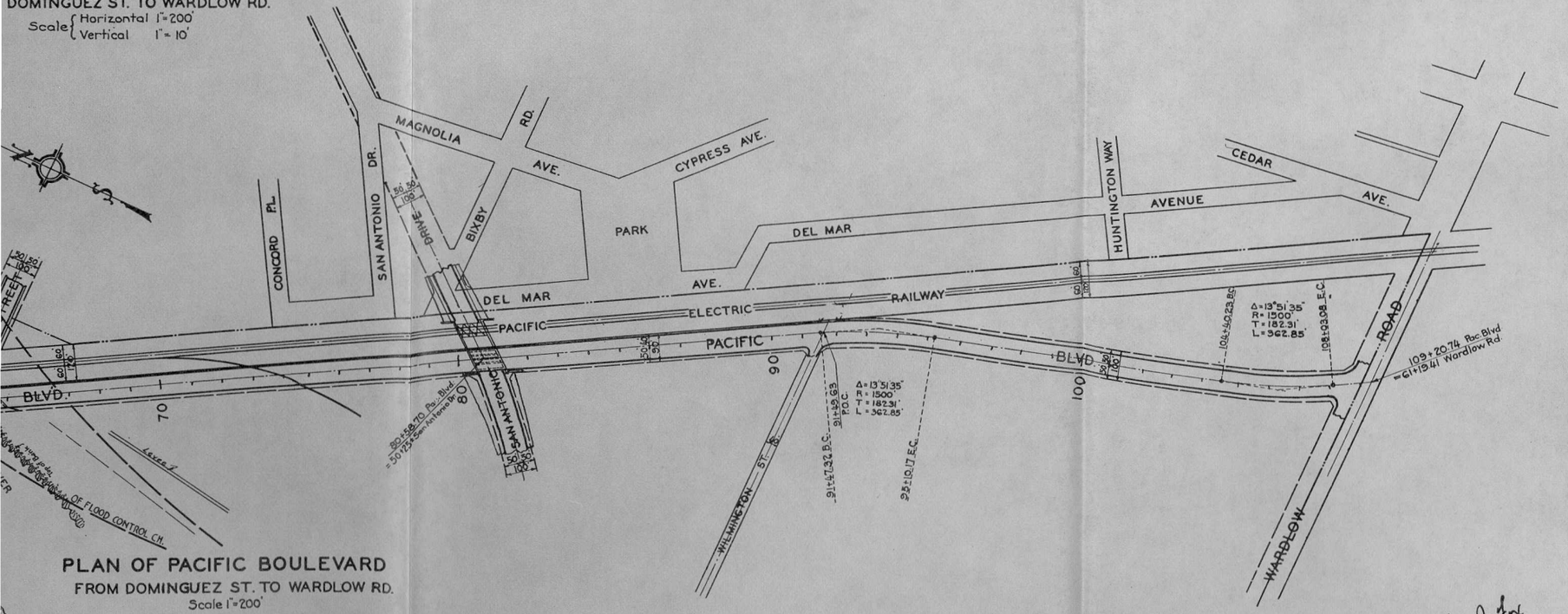
From Station 26+06.84 to 38+30.99 and 91+47.32 to 109+20.74

Scale 1/8"=1'-0"



ITER LINE PROFILE
CIFIC BOULEVARD
DOMINGUEZ ST. TO WARDLOW RD.

Scale { Horizontal 1"=200'
Vertical 1"= 10'



PLAN OF PACIFIC BOULEVARD

FROM DOMINGUEZ ST. TO WARDLOW RD.

Scale 1"=200'

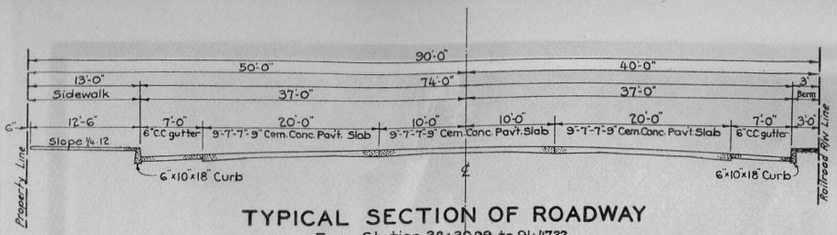
COUNTY OF LOS ANGELES
ROAD DEPARTMENT

OFFICE OF BRIDGE ENGINEER — LOS ANGELES, CALIFORNIA

PACIFIC AVENUE
BETWEEN DOMINGUEZ ST. AND WARDLOW RD.

GENERAL SITUATION PLAN & PROFIL
TO ACCOMPANY REPORT
SECTION 4
THE REGIONAL PLANNING COMMISSION

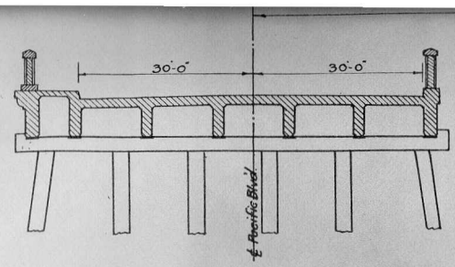
SUBMITTED Wm. D. Armstrong BRIDGE ENGINEER	SCALE As Shown	DATE Jan 8, 193		
APPROVED	ROAD FOREMAN DIVISION	O.B. NUMBER	SHEET NUMBER	TOTAL SHEET



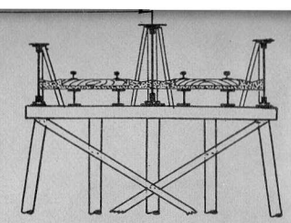
TYPICAL SECTION OF ROADWAY

From Station 38+30.99 to 91+47.32

Scale ⅛"=1'-0"

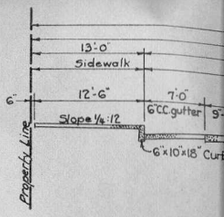


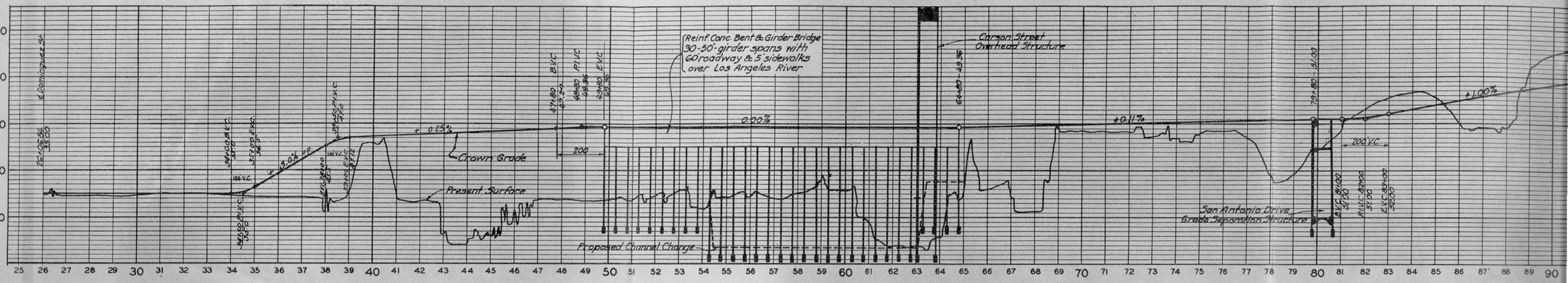
SECTION OF HIGHWAY BRIDGE



SECTION OF RAILWAY BRIDGE

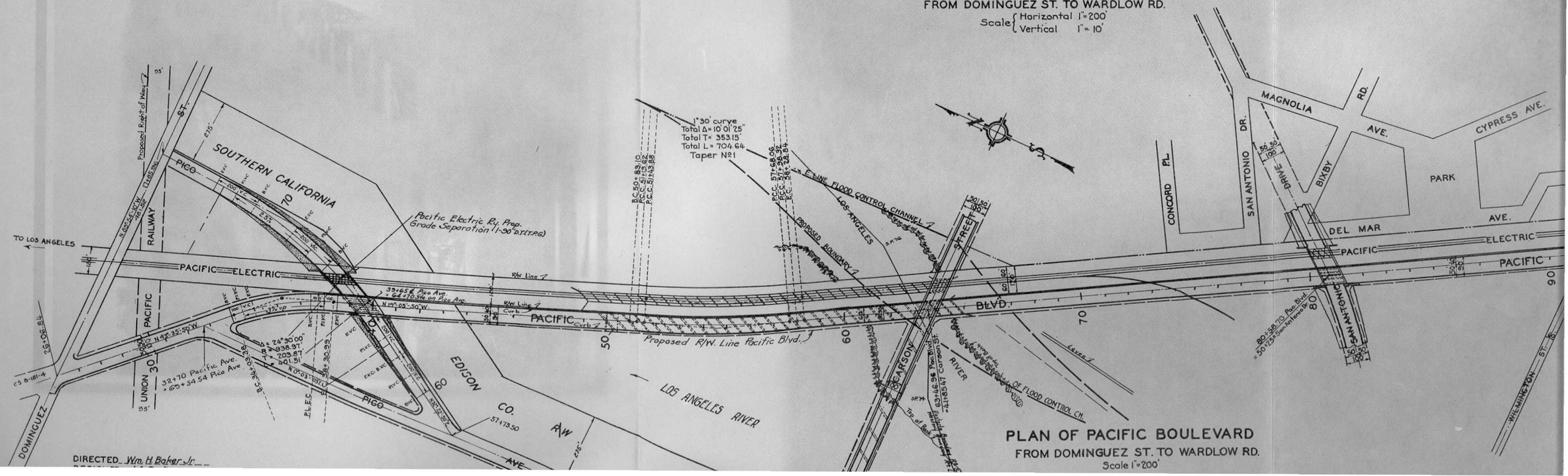
Not to Scale





CENTER LINE PROFILE
PACIFIC BOULEVARD
FROM DOMINGUEZ ST. TO WARDLOW RD.

Scale { Horizontal 1"=200'
Vertical 1"=10'

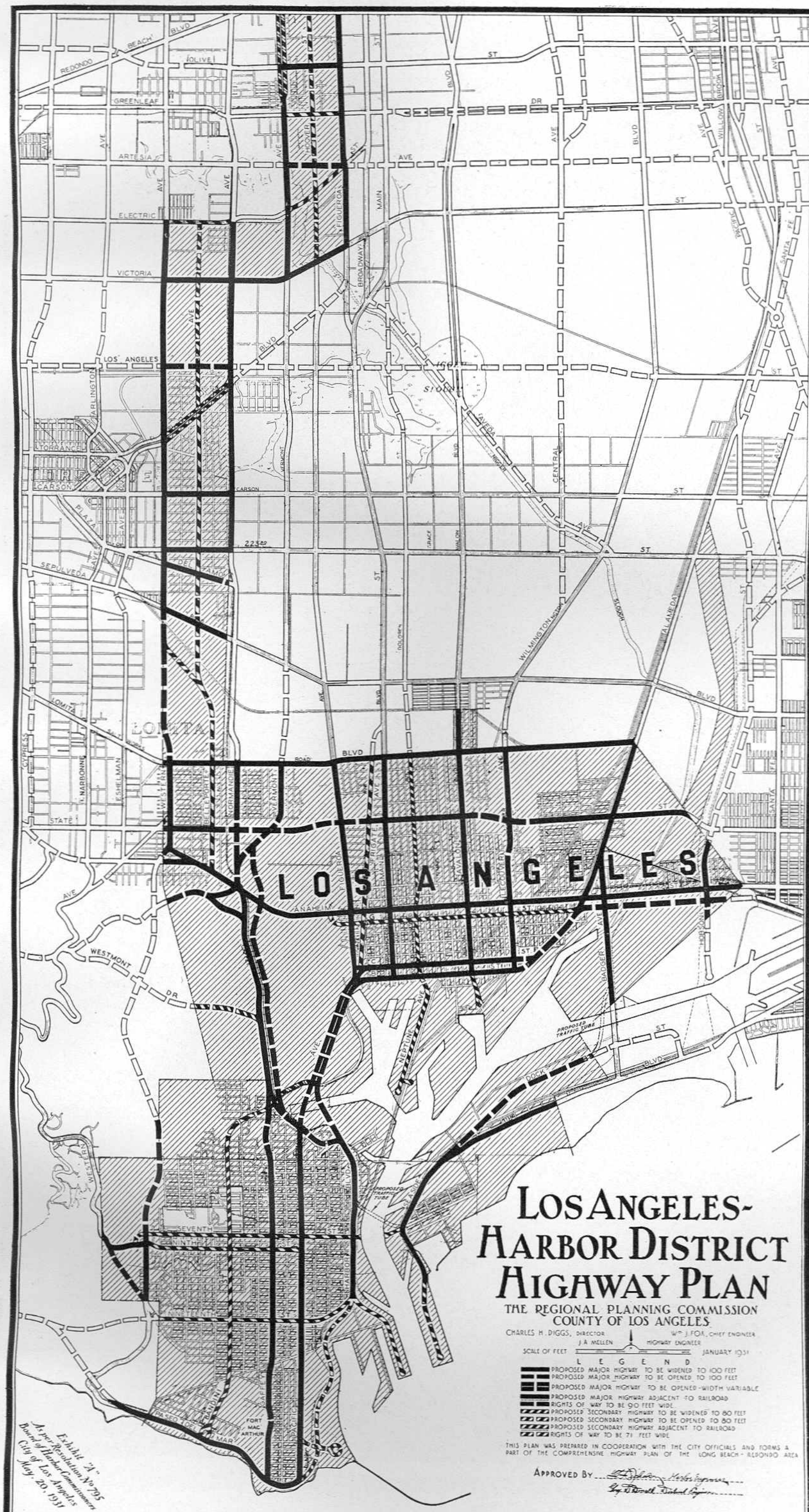


PLAN OF PACIFIC BOULEVARD
FROM DOMINGUEZ ST. TO WARDLOW RD.

Scale 1"=200'

DIRECTED Wm. H. Baker Jr.

OCEAN AVENUE PARK—LONG BEACH


LOS ANGELES-
HARBOR DISTRICT
HIGHWAY PLAN
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
WM. J. FOX, CHIEF ENGINEER
J. A. MELLEN HIGHWAY ENGINEER
SCALE OF FEET
JANUARY 1931
LEGEND
PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
PROPOSED MAJOR HIGHWAY TO BE OPENED-WIDTH VARIABLE
PROPOSED MAJOR HIGHWAY ADJACENT TO RAILROAD
RIGHTS OF WAY TO BE 90 FEET WIDE
PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
RIGHTS OF WAY TO BE 71 FEET WIDE
THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA
APPROVED BY
LOS ANGELES
Exhibit "A"
As per Resolution No 795
Board of Harbor Commissioners
City of Los Angeles
May 20, 1931

Board of Harbor Commissioners
City of Los Angeles

EXECUTIVE OFFICES
ROOM 112 CITY HALL
ADDRESS ALL COMMUNICATIONS
TO THE BOARD

W. B. ALLEN
PRESIDENT
J. A. CRAWFORD
VICE-PRESIDENT
F. M. ANDREANI
COMMISSIONER
GERALD C. FITZGERALD
COMMISSIONER
COL. F. C. WISER
COMMISSIONER
M. G. ROUSE
SECRETARY
BURT EDWARDS
GENERAL MANAGER

RESOLUTION NO. 795

WHEREAS, the Board of Harbor Commissioners of the City of Los Angeles recognize the need of a thorough plan of coordination in the matter of major and secondary highway service for the Los Angeles Harbor District as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the county for the past five years and has had in preparation a comprehensive official plan of the same to take care of the ultimate traffic needs of the County; and

WHEREAS, the said Commission by virtue of the authority vested in it by the Honorable Board of Supervisors is endeavoring to coordinate the plans of the cities and harbor districts with each other and with the County plan; and

WHEREAS, the Regional Planning Commission in cooperation with the Los Angeles Harbor Department has developed for the Los Angeles Harbor District a comprehensive major highway plan which will adequately care for the traffic needs in the harbor district for many years in the future; and

WHEREAS, this Los Angeles harbor district plan conforms to and is coordinated with the County's comprehensive regional plan which has been approved and reviewed by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE BE IT RESOLVED that the Board of Harbor Commissioners of the City of Los Angeles does hereby adopt the plan as presented by the Regional Planning Commission to be officially known as the "Los Angeles Harbor District Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A" and dated January, 1931.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through the Los Angeles Harbor District - both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the Board of Harbor Commissioners of the City of Los Angeles, held on the 20th day of May, 1931, by the affirmative vote of Commissioners, to wit:

Ayes: Allen, Crawford, Andreani, FitzGerald.
Noes: None.

SUBMITTED AND APPROVED BY

General Manager

THE CITY OF LOS ANGELES

The City of Los Angeles was founded on the 4th of September, 1781. Its name is a contraction of the Spanish name "El Pueblo de Nuestra Senora la Reina de Los Angeles," or "The Town of Our Lady, Queen of the Angels." Its original population consisted of 11 families brought overland from Mexico by Felipe de Neve, Military Commander of the California Mission Settlements. He issued orders from Mission San Gabriel for the establishment of the pueblo near El Rio Porciuncula (later known as the Los Angeles River).

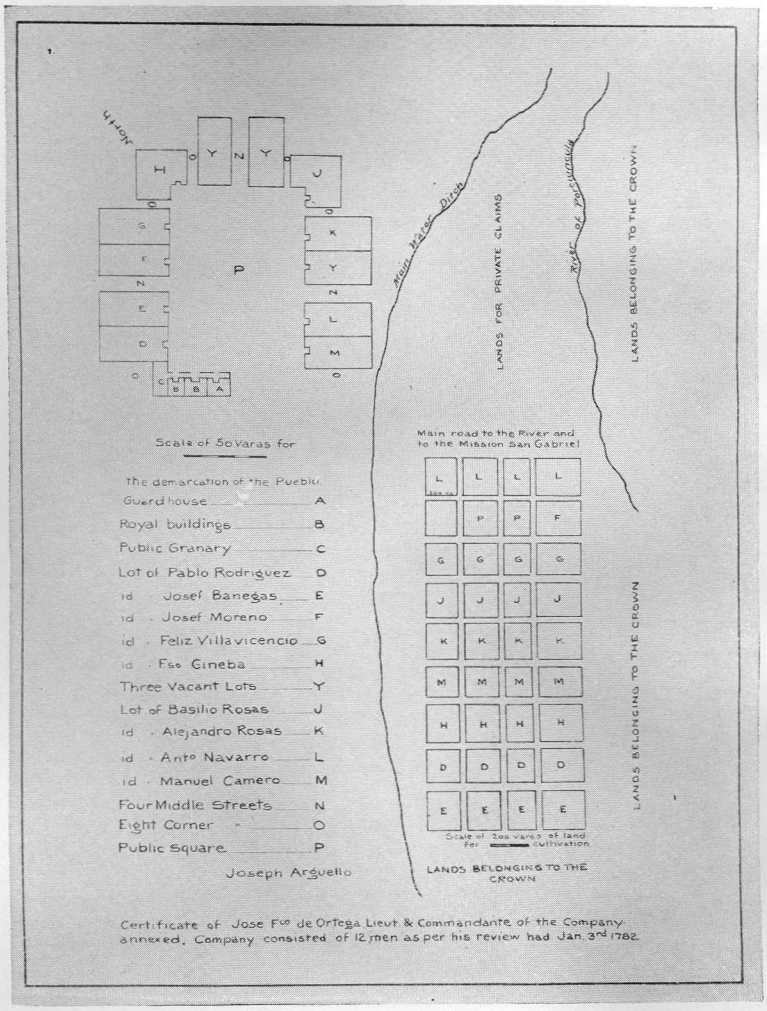
It was de Neve's intention that the settlers should develop the fine agricultural lands surrounding the pueblo to furnish food for the missions. Before leaving Mexico to establish the new pueblo, it had been his plan to take with him a group from the farming element. However, the selection was not wholly successful. In spite of the liberal offers made, there was no great enthusiasm displayed by the truly pioneering class. Instead of the twenty-four families which he desired, he started with only twelve, and one of these was lost en route.

Under the "pueblo system" each settler was permitted to cultivate fourteen acres of land outside the residential district. In addition he had free range for his stock on pueblo lands lying beyond. Equal allowances of stock and equipment were made to each family.

The first survey of the city was made by Lieutenant F. O. C. Ord in 1849. In 1850, the original site of six miles square was incorporated. Its population was then only 1,610. The present area of the city is 441.695 square miles, with a population of 1,238,048.

POPULATION

Year	County	City	Ratio
1860	11,333	4,385	2.58
1870	15,309	5,728	2.68
1880	33,381	11,183	2.98
1890	101,454	50,395	2.01
1900	170,298	102,479	1.66
1910	504,131	319,198	1.58
1920	936,455	576,673	1.62
1930	2,208,492	1,238,048	1.78



Courtesy of Security-First National Bank.

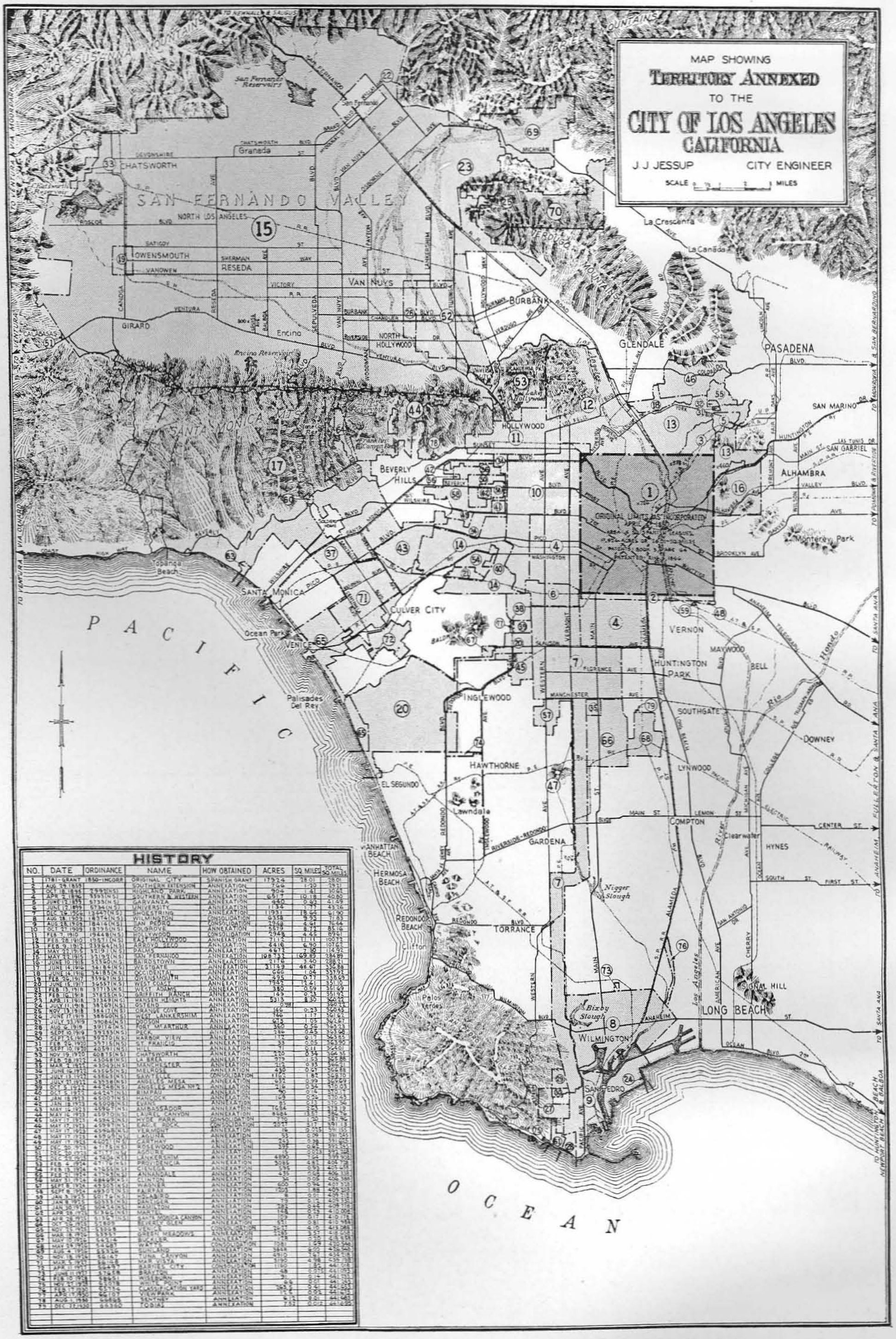
ORIGINAL PLAN OF THE CITY

The original plan of Los Angeles was quite simple. It had an area of four square leagues, or 36 square miles, centered around a plaza measuring 275 by 180 feet. In accordance with de Neve's instructions, the old plaza lay with its corners facing the cardinal points of the compass, the streets running off at right angles so that "no street would be swept by the wind." Upon three sides of the plaza were the house lots, 55 feet wide. One-half of the remaining side was reserved for public buildings, the other half was an open space. The arrangement of public and private lands is shown in the above reproduction of a sketch dated 1782.

EARLY HISTORY OF SAN PEDRO AND WILMINGTON

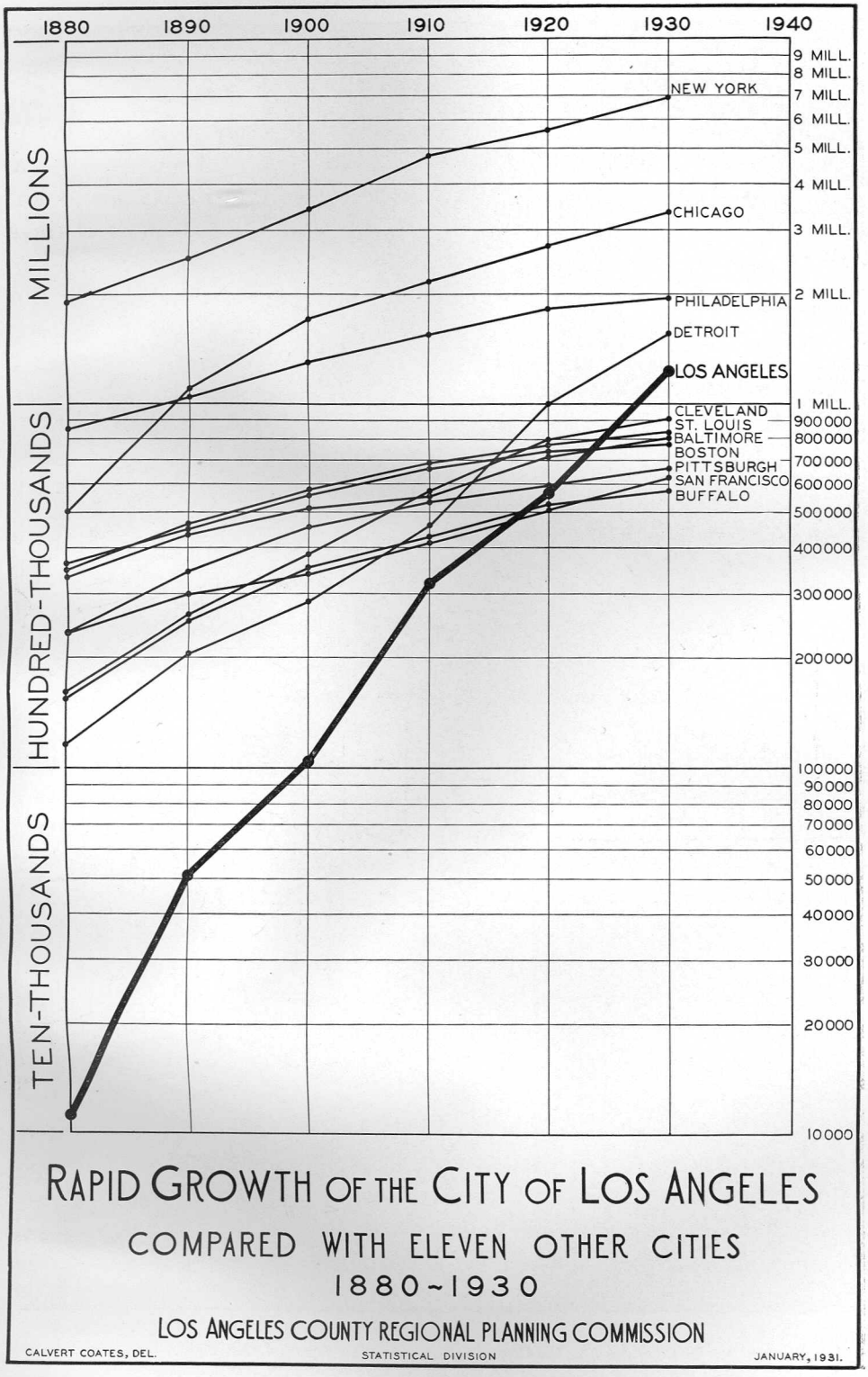
The history of Wilmington and San Pedro, once rival seaport towns but now an integral part of the City of Los Angeles, is a fascinating one. Of special interest to the regional planner is the gradual tightening of the bonds between the metropolis and its harbor. No small amount of vision and of cooperation was needed to bring about the present situation, and yet what has been done is but a beginning, and the future of the Greater Harbor District will no doubt surpass the remarkable achievements of its past. Dana, in his "Two Years Before the Mast", describes a single building at San Pedro, used for storing hides, which was probably built between 1815 and 1820. It was the first and, for a long time, the only building there. The rush of gold seekers to the northern part of the State in the early fifties created a good market for fruit. The territory around Los Angeles then began to expand as a district of orchards and vineyards. Grapes and citrus fruits were conveyed to San Pedro by wagon and thence to San Francisco in small boats.

In 1857, General Phineas Banning, who owned a freight and stage line to San Pedro, bought several hundred acres of land at the head of the San Pedro Slough, and the following year, he abandoned San Pedro in favor of this new shipping point, six miles nearer to Los Angeles. New San Pedro, which was later called Wilmington, after General Banning's birthplace in Delaware, was at the site of an Indian village called Suanga, once the largest of twenty-two Indian towns in Southern California. It was first discovered by Don Juan Rodriguez Cabrillo on September 25, 1542, only fifty years after Columbus landed at San Salvador. The land was later part of the Rancho San Pedro, granted by the Spanish government to Don Jose Dominguez. During the Civil War, the government established a military camp in Wilmington, which greatly stimulated local trade, and for a time it was "the great seaport of the South." However, in 1880, the railroad from Los Angeles to Wilmington (the first built in Southern California), which had started operation in the fall of 1869, was extended from Wilmington to San Pedro. Additional wharves were built there, and commerce soon drifted back to its old location. In 1880, the United States Census gave Wilmington a population of 911 people. Between 1871 and 1892, a million dollars was appropriated by Congress at various times for the development of what is now the inner harbor. The development of this harbor is largely responsible for the rapid growth and the prosperity of Los Angeles and its environs.



NO.	DATE	ORDINANCE	NAME	HOW OBTAINED	ACRES	SQ. MILES	TOTAL SQ. MILES
1	1781-GRANT	1850-INCORP	ORIGINAL CITY	SPANISH GRANT	17924	28.01	28.01
2	AUG 29 1859		SOUTHERN EXTENSION	ANNEXATION	766	1.20	29.21
3	OCT 18 1895	2993(N.S.)	HIGHLAND PARK	ANNEXATION	904	1.41	30.62
4	APR 2 1896	3393(N.S.)	SOUTHERN & WESTERN	ANNEXATION	6517	10.18	40.80
5	JUNE 12 1899	5733(N.S.)	GARVANZA	ANNEXATION	440	0.69	41.49
6	JUNE 12 1899	5734(N.S.)	UNIVERSITY	ANNEXATION	1134	1.77	43.26
7	DEC 26 1906	13447(N.S.)	SHOESTRING	ANNEXATION	11931	18.64	61.90
8	AUG 28 1909	18374(N.S.)	WILMINGTON	CONSOLIDATION	6358	9.93	71.83
9	AUG 28 1909	18414(N.S.)	SAN PEDRO	CONSOLIDATION	2948	4.61	76.44
10	OCT 27 1909	18775(N.S.)	COLGROVE	ANNEXATION	5579	8.72	85.16
11	FEB 7 1910	19448(N.S.)	HOLLYWOOD	CONSOLIDATION	2848	4.45	89.61
12	FEB 28 1910	19571(N.S.)	EAST HOLLYWOOD	ANNEXATION	7112	11.11	100.72
13	FEB 9 1912	23964(N.S.)	ARROYO SECO	ANNEXATION	4416	6.90	107.62
14	MAY 22 1915	32191(N.S.)	PALMS	ANNEXATION	4672	7.30	114.92
15	MAY 22 1915	32192(N.S.)	SAN FERNANDO	ANNEXATION	108732	169.89	284.81
16	JUNE 10 1915	33360(N.S.)	BAIRDSTOWN	ANNEXATION	2176	3.40	288.21
17	JUNE 14 1916	34184(N.S.)	WESTGATE	ANNEXATION	31149	48.67	336.88
18	JUNE 14 1916	34185(N.S.)	OCCIDENTAL	ANNEXATION	666	1.04	337.92
19	FEB 26 1917	35967(N.S.)	OWENSMOUTH	ANNEXATION	495	0.77	338.69
20	JUNE 15 1917	36557(N.S.)	WEST COAST	ANNEXATION	7942	12.41	351.10
21	FEB 13 1918	37713(N.S.)	WEST ADAMS	ANNEXATION	380	0.59	351.69
22	FEB 16 1918	37825(N.S.)	GRIFFITH RANCH	ANNEXATION	149	0.23	351.92
23	APR 11 1918	37349(N.S.)	HANSEN HEIGHTS	ANNEXATION	5313	8.30	360.22
24	JULY 11 1918	38269(N.S.)	OSTEND	ANNEXATION	0.98		360.22
25	NOV 13 1918	38417(N.S.)	ORANGE COVE	ANNEXATION	146	0.23	360.45
26	JUNE 17 1919	38860(N.S.)	WEST LANKERSHIM	ANNEXATION	746	1.17	361.62
27	JULY 23 1919	39084(N.S.)	DODSON	ANNEXATION	673	1.05	362.67
28	AUG 6 1919	39114(N.S.)	FORT McARTHUR	ANNEXATION	360	0.56	363.23
29	SEPT 10 1919	39233(N.S.)	PECK	ANNEXATION	286	0.45	363.68
30	SEPT 25 1919	39270(N.S.)	HARBOR VIEW	ANNEXATION	112	0.17	363.85
31	FEB 26 1920	39715(N.S.)	ST. FRANCIS	ANNEXATION	33	0.05	363.90
32	SEPT 10 1920	40591(N.S.)	HILL	ANNEXATION	71	0.11	364.01
33	NOV 19 1920	40815(N.S.)	CHATSWORTH	ANNEXATION	220	0.34	364.35
34	FEB 28 1922	43048(N.S.)	LA BREA	ANNEXATION	979	1.53	365.88
35	MAR 2 1922	43043(N.S.)	MANCHESTER	ANNEXATION	212	0.33	366.21
36	JUNE 16 1922	43565(N.S.)	MELROSE	ANNEXATION	430	0.67	366.88
37	JULY 13 1922	43863(N.S.)	SAWTELLE	CONSOLIDATION	1162	1.82	368.70
38	JULY 27 1922	43558(N.S.)	ANGELES MESA	ANNEXATION	632	0.99	369.69
39	OCT 5 1922	44248(N.S.)	ANGELES MESA No 2	ANNEXATION	216	0.34	370.03
40	OCT 5 1922	44247(N.S.)	RIMPAU	ANNEXATION	90	0.14	370.17
41	JAN 18 1923	45007(N.S.)	HANCOCK	ANNEXATION	169	0.26	370.43
42	JAN 18 1923	45008(N.S.)	EVANS	ANNEXATION	85	0.13	370.56
43	MAY 16 1923	45967(N.S.)	AMBASSADOR	ANNEXATION	1684	2.63	373.19
44	MAY 16 1923	45970(N.S.)	LAUREL CANYON	ANNEXATION	8684	13.57	386.76
45	MAY 17 1923	45942(N.S.)	HYDE PARK	CONSOLIDATION	770	1.20	387.96
46	MAY 17 1923	45997(N.S.)	EAGLE ROCK	CONSOLIDATION	2027	3.17	391.13
47	MAY 17 1923	45968(N.S.)	VERMONT	ANNEXATION	16	0.025	391.155
48	MAY 17 1923	45969(N.S.)	LAGUNA	ANNEXATION	53	0.09	391.245
49	MAY 17 1923	46021(N.S.)	CARTHAY	ANNEXATION	243	0.38	391.625
50	DEC 20 1923	47175(N.S.)	ROSEWOOD	ANNEXATION	395	0.62	392.245
51	DEC 20 1923	47177(N.S.)	AGOURE	ANNEXATION	15	0.023	392.268
52	DEC 28 1923	47404(N.S.)	LANKERSHIM	ANNEXATION	4890	7.64	399.908
53	FEB 4 1924	47176(N.S.)	PROVIDENCIA	ANNEXATION	3085	4.82	404.728
54	FEB 13 1924	47655(N.S.)	CIENEGA	ANNEXATION	595	0.93	405.658
55	FEB 21 1924	47745(N.S.)	ANNANDALE	ANNEXATION	435	0.68	406.338
56	MAY 31 1924	48469(N.S.)	CLINTON	ANNEXATION	34	0.05	406.388
57	SEPT 8 1924	49305(N.S.)	WAGNER	ANNEXATION	600	0.94	407.328
58	SEPT 8 1924	49307(N.S.)	FAIRFAX	ANNEXATION	1203	1.88	409.208
59	JAN 3 1925	50174(N.S.)	HOLABIRD	ANNEXATION	8	0.01	409.218
60	JAN 8 1925	50333(N.S.)	DANZIGER	ANNEXATION	73	0.12	409.338
61	JAN 30 1925	50434(N.S.)	HAMILTON	ANNEXATION	282	0.44	409.778
62	APR 28 1925	51366(N.S.)	MARTEL	ANNEXATION	148	0.23	410.008
63	APR 28 1925	51367(N.S.)	SANTA MONICA CANYON	ANNEXATION	109	0.17	410.178
64	OCT 26 1925	52805	BEVERLY GLEN	ANNEXATION	521	0.81	410.988
65	NOV 25 1925	53268	VENICE	CONSOLIDATION	2627	4.10	415.088
66	MAR 18 1926	53557	GREEN MEADOWS	ANNEXATION	2285	3.57	418.658
67	MAY 10 1926	54314	BUCKLER	ANNEXATION	128	0.20	418.858
68	MAY 29 1926	54687	WATTS	CONSOLIDATION	1081	1.69	420.548
69	AUG 4 1926	55326	SUNLAND	ANNEXATION	3848	6.00	426.548
70	NOV 18 1926	56147	TUNA CANYON	ANNEXATION	4910	7.67	434.218
71	MAR 5 1927	56148	MAR VISTA	ANNEXATION	3190	4.98	439.198
72	APR 11 1927	56497	BARNES CITY	CONSOLIDATION	1160	1.82	441.018
73	JUNE 11 1927	57658	BRAYTON	ANNEXATION	48	0.075	441.093
74	FEB 10 1928	58651	ROSEBURN	ANNEXATION	91	0.14	441.233
75	NOV 27 1928	62078	WHITE POINT	ANNEXATION	6.6	0.01	441.243
76	FEB 17 1930	65714	CLASSIFICATION YARD	ANNEXATION	263.5	0.41	441.653
77	APR 17 1930	66107	VIEWPARK	ANNEXATION	12.5	0.02	441.673
78	AUG 1 1930	66985	SENTNEY	ANNEXATION	6.12	0.01	441.683
79	DEC 22 1930	69360	TOBIAS	ANNEXATION	7.52	0.012	441.695

There have been 78 annexations to the City of Los Angeles, but a part of the original boundary line has remained unchanged. During the last decade the area has increased only 22%; the population 115%.



RAPID GROWTH OF THE CITY OF LOS ANGELES

COMPARED WITH ELEVEN OTHER CITIES

1880-1930

LOS ANGELES COUNTY REGIONAL PLANNING COMMISSION

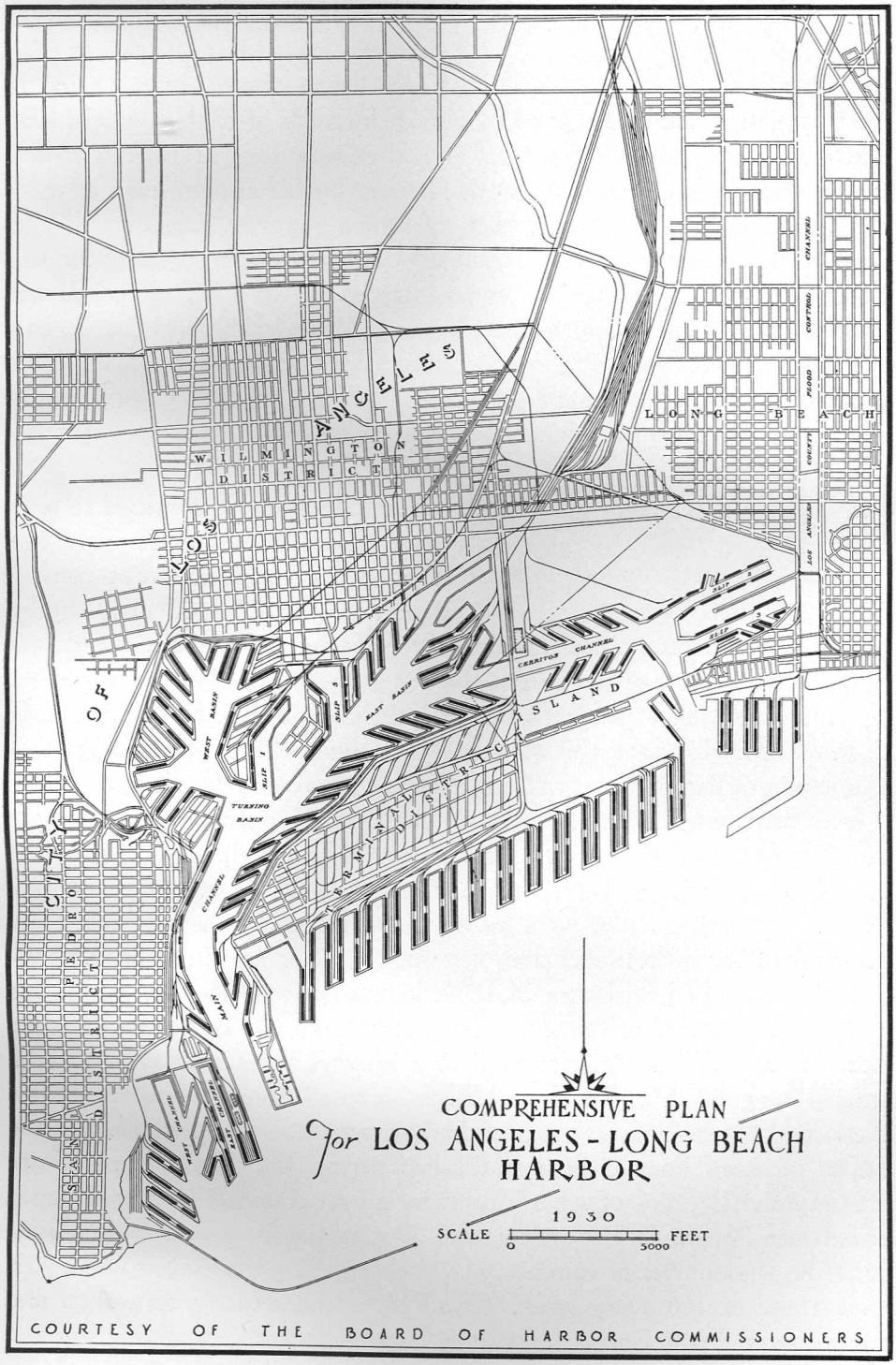
CALVERT COATES, DEL. STATISTICAL DIVISION JANUARY, 1931.

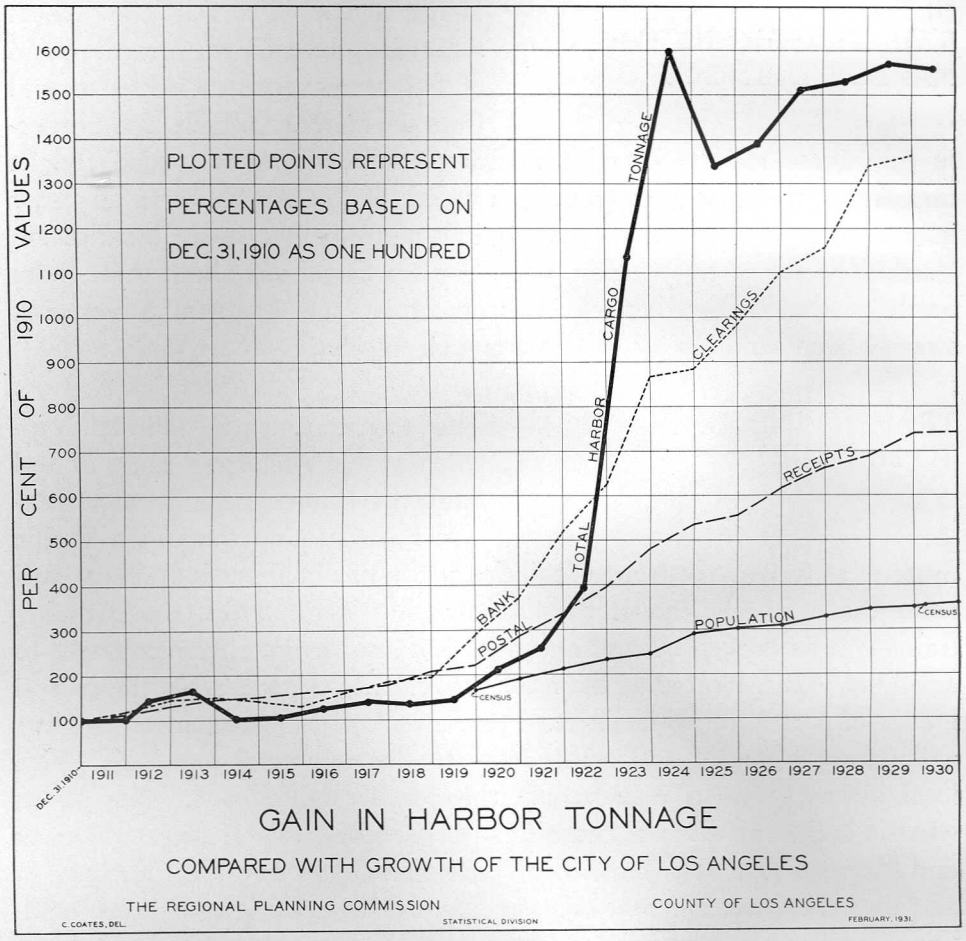
CONSTRUCTION OF THE BREAKWATER

The movement to convert the port into a deep water harbor by the construction of a breakwater at San Pedro began about 1890. Owing to the purchase of Terminal Island by outside interests in 1891, powerful local influences were thrown in favor of a rival development at Santa Monica. It was only after a ten-year struggle featured by the appointment of three separate boards of engineers, each of which reported unequivocally in favor of San Pedro, that Congress finally passed an appropriation for this important work. The breakwater was started on April 27, 1899, and was finished in 1910. It is approximately two miles in length and cost a little over three million dollars to build. Subsequent developments have proved this project worthy of being considered as perhaps the best paying investment of its kind the government has ever made.

CONSOLIDATION

Meanwhile many who wished to see a rapid development of the port had reached the conclusion that consolidation of the City of Los Angeles with the two harbor cities was desirable as it would make available the resources and credit of the parent city for extensive harbor improvements. By this time each of them had been incorporated as a city of the sixth class. Wilmington took this step at a time when efforts were being made to annex it to San Pedro or to Long Beach, only a court decision preventing it from becoming a part of the latter city. In the year 1906, the City of Los Angeles annexed the famous "Shoestring", a strip of land one-half mile wide, extending south to the boundaries of Wilmington and San Pedro. The harbor cities were by no means united in their opinion as to the desirability of consolidation, but finally, after an Enabling Act had passed the State Legislature in 1909, Wilmington on August 4 and San Pedro on August 12 of the same year voted favorably on the proposition, and the port of Los Angeles became a reality. This port is now rated among the greatest in the United States in total tonnage handled. It has the largest lumber import trade and oil export trade in the world. United States pierhead lines as now established permit the development of approximately 24 miles of wharf frontage, all on channels having a depth of between 30 and 35 feet at low tide. During the fiscal year ending June 30, 1930, the number of commercial vessels entering the harbor was 8,633, an average of 166 every week. The Port is municipally controlled and administered by a Board of Harbor Commissioners.


LOS ANGELES
WILMINGTON DISTRICT
CITY OF
LONG BEACH
SAN PEDRO DISTRICT
TERMINAL ISLAND
COMPREHENSIVE PLAN
for LOS ANGELES - LONG BEACH HARBOR
1930
SCALE
0
5000
FEET
COURTESY OF THE BOARD OF HARBOR COMMISSIONERS



LOS ANGELES HARBOR A WORLD PORT

Los Angeles Harbor has become the most important seaport on the Pacific Coast. The total tonnage handled during the fiscal year ending June 30, 1929, was 26,099,245 tons. Among American ports it is first in intercoastal tonnage, second in exports, and third in total commerce. The Federal Government has assisted in its development by the expenditure of $11,554,552 for the construction of breakwaters and dredging operations. The major expenditures, however, have been met by the City of Los Angeles with bond issues and other moneys aggregating $30,000,000. There are 40 miles of waterfront with twelve miles of wharves, of which eight miles are owned and operated by the City. A belt-line railway, also owned and operated by the City, serves the harbor district.

ULTIMATE PLAN FOR RAIL TRAFFIC IN THE HARBOR DISTRICT

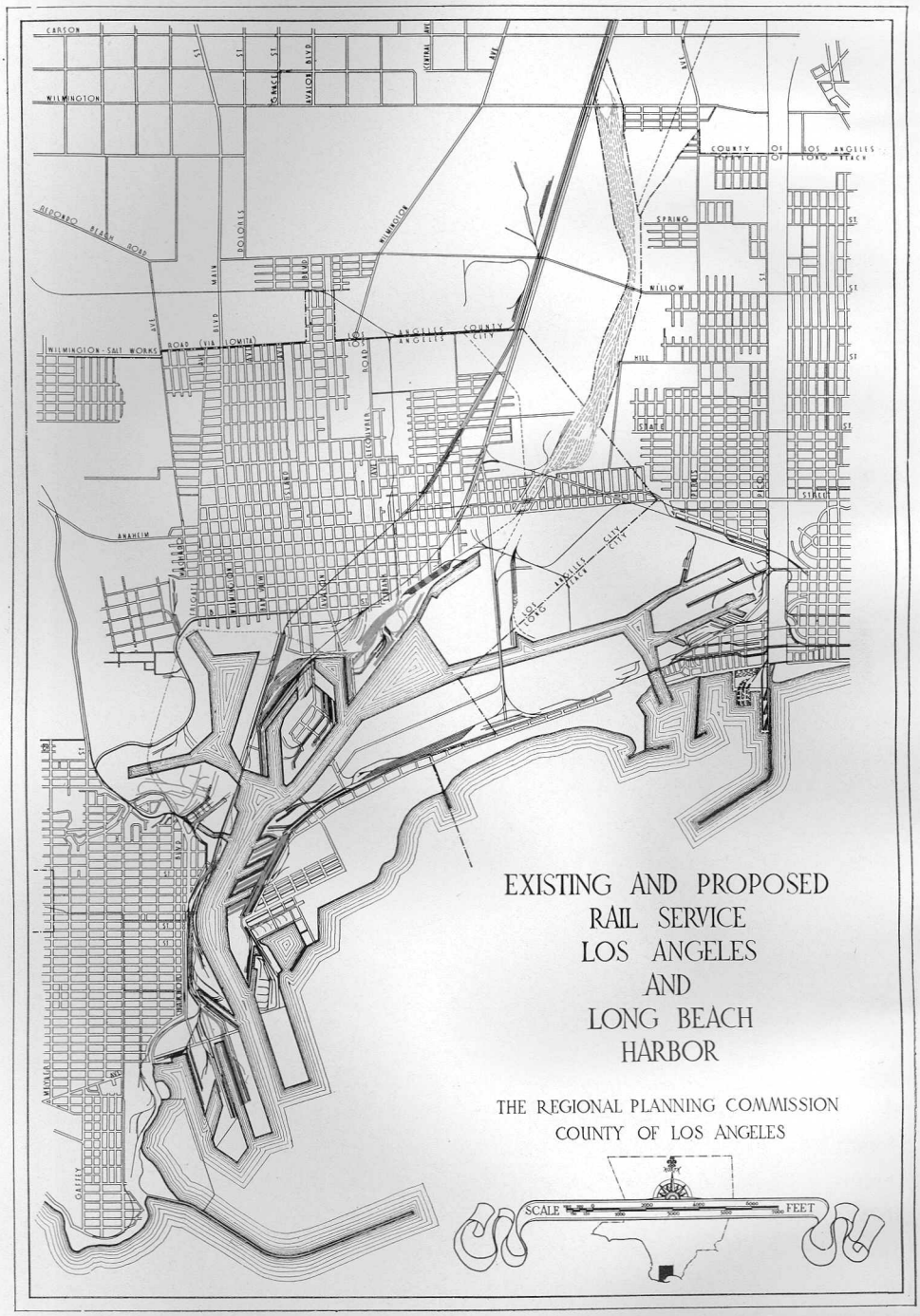
Under a comprehensive plan which will greatly simplify the present routes of freight movement by rail to and from the Harbor District, and properly coordinate rail traffic with highway traffic, trains of loaded freight cars arriving from the metropolitan center of Los Angeles and all other inland points will terminate in a spacious municipally-owned Classification Yard. The site of this yard, east of Alameda Street and about three miles north of the harbor, between Carson Street and Anaheim Street, has already been acquired by the City of Los Angeles.

TRAFFIC INBOUND TO HARBOR

The transcontinental railroads, including the Atchison, Topeka and Santa Fe Railway, the Southern Pacific Railway, and the Union Pacific System, as well as the freight facilities of the Pacific Electric Railway, will enter the northerly end of the Classification Yard. Here, the incoming trains will be broken up and rearranged in smaller units for movement to assembly yards, located at the most convenient points to serve the several groups of port terminal facilities. From these smaller yards, switch engines will take the loaded and empty cars to the individual terminals. Five local assembly yards now handle the port's requirements. One serves what is known as the San Pedro District; another, Pier A Street Wharves and Mormon Island; a third, the Wilmington District north of Slip No. 5; and the other two, different parts of Terminal Island. Two or more additional local yards, as needed for future terminal development, will be provided at convenient locations.

OUTBOUND TRAFFIC TO METROPOLITAN AREA AND INLAND POINTS

When incoming water-borne cargo is unloaded from the ship directly into railroad cars or from the transit shed to cars, the procedure will be reversed. Switch engines will pick up the loaded cars in small units and take them to the local yards where they will be assembled in trains of proper length for transfer to the Classification Yard. Trains moving from Terminal Island assembly yards will go northerly across the Badger Avenue Bridge over the Cerritos Channel, thence over the unified rail facilities, under the Anaheim Street Viaduct and into the south end of the Classification Yard. Trains moving from the San Pedro District will proceed northerly around the West Basin of the Port over a route considerably shortened



EXISTING AND PROPOSED RAIL SERVICE LOS ANGELES AND LONG BEACH HARBOR

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

THE OUTER HARBOR

by filling a portion of the west slip and eliminating unnecessary curvature, thence over unified rail facilities south of, and approximately parallel to, B Street, Wilmington, under the Anaheim Street Viaduct and into the Classification Yard. Traffic from the Wilmington and Long Beach Harbor Districts will also reach the Classification Yard by way of the Anaheim Street Viaduct. There, all these cars will go through the more elaborate process of classification into longer trains destined to the metropolitan area and to other inland points.

ADVANTAGES OF UNIFIED OPERATION

The ultimate development will thus be ideal from the standpoint of efficiency of operation, eliminating the duplication of trackage and particularly avoiding grade crossings, with their consequent delay and loss of life, at all points in the Harbor District. The plan involves abandoning, for through freight service, the existing Southern Pacific, Pacific Electric and Union Pacific lines to the harbor. This will eliminate a series of dangerous grade crossings. Some of these lines will, however, be maintained as lead tracks, from which spurs will serve the industrial property in that vicinity. All the railroads under this plan would route their freight traffic northerly from the Classification Yard through the low and relatively undeveloped territory along the Los Angeles River Flood Control Channel. Here, conditions are ideal for convenient and economic separation of grades and for the development of the right of way in such a manner as to avoid costly congestion. The present main line of the Atchison, Topeka and Santa Fe Railroad, reaching the Harbor District through Torrance and Wilmington and under the Anaheim Street Viaduct, will remain in service as part of a secondary belt-line system designed to serve the industrial development provided for in the district lying northerly of the Harbor.

GROWTH OF HARBOR BUSINESS

YEAR	SHIPS ENTERED	CARGO TONNAGE	PASSENGERS NUMBER	LUMBER BOARD FT.	MERCHANDISE TONS	OIL EXPORT BARRELS
1900	509	216,857				
1902		501,992	25,000*	242,094,600	14,167	7,150
1907		1,091,311	200,000*	466,224,600	48,306	346,294
1908		983,699				
1912	2,935	2,453,300	399,415			
1913	3,009	2,760,039		720,883,800	337,939	1,268,131
1917	2,320	2,312,387	288,917	469,449,600	361,375	5,050,500
1922	3,816	6,533,589	566,694	616,451,400	636,156	20,803,101
1923	5,476	18,870,102		1,086,828,600	1,531,066	45,131,860
1927	6,944	25,133,963	819,134	1,252,657,142	3,095,108	133,418,267
1929	7,888	26,099,245	1,020,781	1,220,146,680	4,151,709	138,140,648

*Estimated.

CONNECTION OF ALAMEDA STREET WITH B STREET BY EXCESS CONDEMNATION

The basic problem in this study was the location of a much needed truck highway joining Alameda Street (via Railroad Avenue at Anaheim Street) to B Street, and continuing westerly to a border highway around the harbor. The easterly extension of G Street was to connect this new route to Wilmington Boulevard (Long Beach) and the extreme eastern part of Long Beach Harbor. The alignment shown leaves 200 feet between the railroad and the highway to permit industrial development.

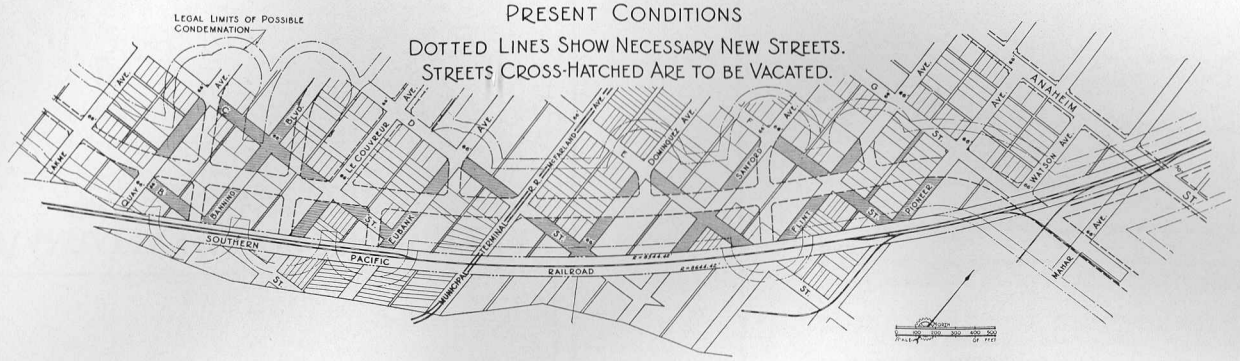
Preliminary studies along this line showed that it would tend to produce frequent and awkward intersections, including a number of "six-point" intersections, and numerous remnants of land of odd shapes and small sizes without possibility of rail service. The line as finally designed is so located that under the recent amendment to the state constitution (Section 14½), the project could be carried out advantageously by means of excess condemnation. In this way a number of new local street connections would be opened, while the remnants referred to, and some additional property, would be acquired. Thus, all the land would be put into one holding and could be resubdivided, and the unnecessary old streets vacated.

VALUABLE INDUSTRIAL PROPERTY CREATED

It would then be possible to produce parcels of proper size and shape for industrial use and to arrange for the beginning in this subdivision of a system of industrial lead tracks as shown. These would follow the old alleys as far as G street, enabling an immense area, now zoned for industry, to attract and develop industries. A drill track north of, and parallel to, the new highway would connect with the Southern Pacific and the Municipal Terminal Railroads, reducing the number of highway crossings to a minimum. Under the new plan the blocks are longer, almost all of the awkward intersections are eliminated, and there are no six-point intersections.. If the highway should be driven through without resubdivision, the severance damages would be very high—nearly as much as the cost of acquiring the land required in this plan. The odd pieces of land left over would decrease in value, thus causing a loss to the city and county in taxes. Under the plan as shown the sale of the industrial property created would reduce the cost of the improvement materially, while all of the property in the entire area as far as G Street would increase in value.

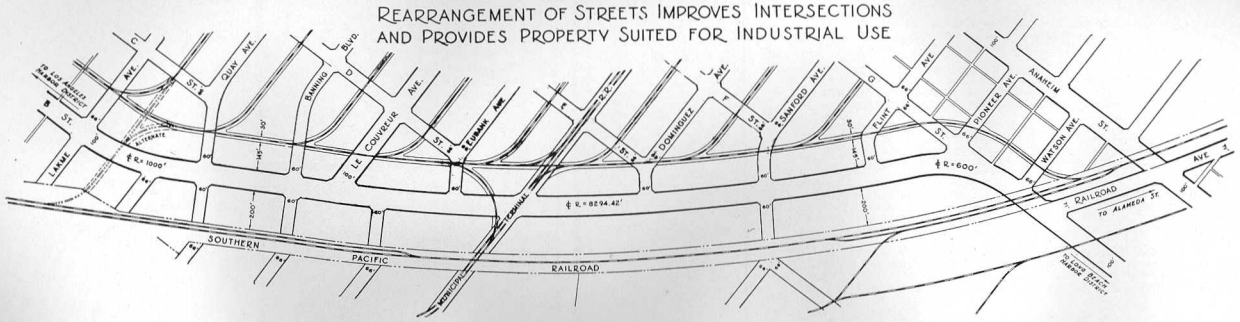
PRESENT CONDITIONS

DOTTED LINES SHOW NECESSARY NEW STREETS.
STREETS CROSS-HATCHED ARE TO BE VACATED.



PLAN FOR DEVELOPMENT

REARRANGEMENT OF STREETS IMPROVES INTERSECTIONS
AND PROVIDES PROPERTY SUITED FOR INDUSTRIAL USE



CONNECTION OF ALAMEDA STREET WITH G STREET AND B STREET

WILMINGTON

THE REGIONAL PLANNING COMMISSION — COUNTY OF LOS ANGELES — JANUARY 1931

MANHATTAN BEACH HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR — Wm J. FOX, CHIEF ENGINEER

J. A. MELLEN, HIGHWAY ENGINEER

SCALE OF FEET — JANUARY 1930

L E G E N D

- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD
- RIGHTS OF WAY TO BE 71 FEET WIDE

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA.

As per Resolution dated November 6, 1930 City of Manhattan Beach

APPROVED BY L. E. Lull CITY ENGINEER

CITY COUNCIL

G. E. DELAVAN, Jr., Mayor
ROBT. H. CRAIG, Public Utilities and Water
CARL D. EDWARDS, Streets
GEO. C. KNOX, Finance and Fire
JOHN F. JONES, Police

CITY OFFICERS

MERRITT J. CRANDALL, Clerk, Assessor
J. CHATTWOOD, Treasurer, Tax Collector
FRANK L. PERRY, Attorney
L. C. LULL, Engineer
PAUL L. BLACK, Water Supt., Street Supt.
GEO. W. DOWNING, Police Judge
H. S. BOARDMAN, Chief of Police
W. S. ROBBINS, Bldg. Inspector

RESOLUTION

WHEREAS, the City Council of the City of Manhattan Beach recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Manhattan Beach as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Manhattan Beach City Engineer, has developed for the City of Manhattan Beach a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Manhattan Beach plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Manhattan Beach does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Manhattan Beach Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated January, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Manhattan Beach, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Manhattan Beach, held on the 6th day of November, 1930, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Craig, Edwards, Jones, Knox and Mayor Delavan
NOES: None
ABSENT: None

and signed and approved this 6th day of November, 1930.

ATTEST:

CITY OF MANHATTAN BEACH CALIFORNIA

G. E. Delavan
Mayor

Merritt J. Crandall
City Clerk of the
City of Manhattan Beach

CITY OF MANHATTAN BEACH

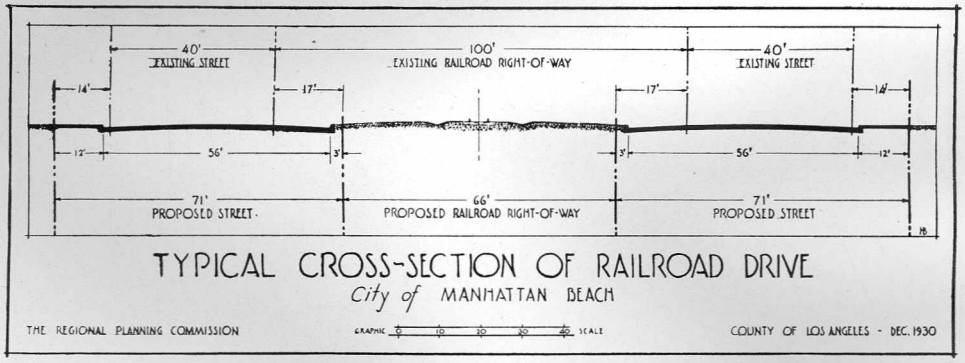
Eighteen miles by existing highways from the heart of the business center of the City of Los Angeles, Manhattan Beach occupies one of the many fine stretches of beach frontage to be found in the County. Because of this fortunate location its residential and recreational features will doubtless predominate for many years to come. A municipally-owned concrete pier extends 900 feet into the ocean, and is frequented by great numbers of fishermen, who make excellent catches of all variety of surf fish. The city owns two miles of bathing beaches, completely equipped and well maintained. Social, educational and civic activities are typical of the progressive spirit of this community. But the city includes more than just beach frontage; it has a fertile back country. A little distance from the ocean, the land dips into a valley with excellent soil, offering exceptional possibilities for truck-farming and flower raising, the latter being already successful from a commercial standpoint. There are, moreover, a number of industries, including several tile products factories, in successful operation. The number of all year residents has shown a steady and healthy development. The city was incorporated in 1912, and had a population of 859 in 1920. The last census gave it 1,891, but the figure is deceptive, for many persons who are permanent residents of other parts of the county own cottages here, and spend the summer months "at the beach." The population of the city is doubled by guests and tourists during the summer season. A city planning commission has been appointed, which is now taking up its duties.

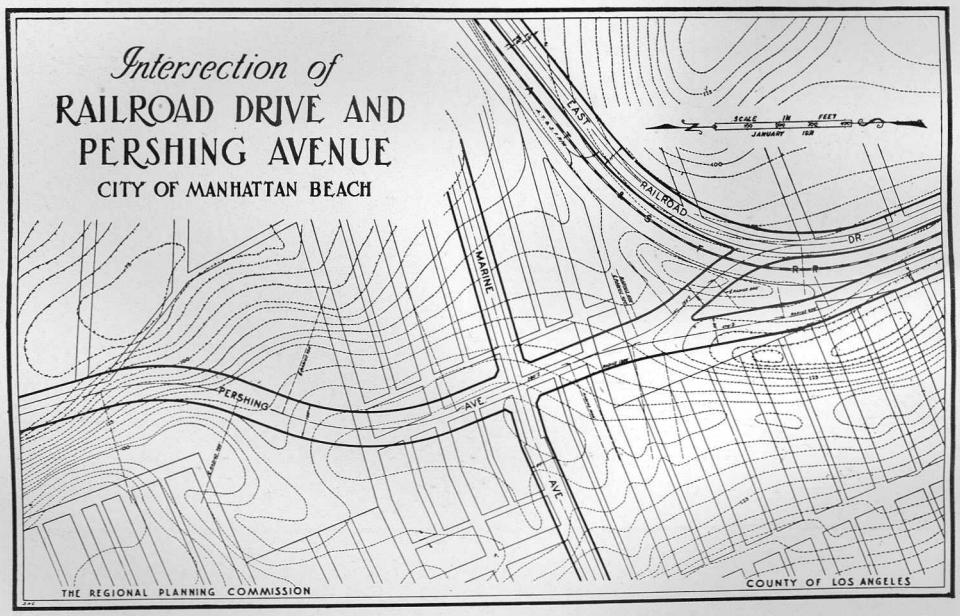
Area in Square Miles: . . .	3.82	Incorporated: . . .	1912
Population:	1,891	Class:	Sixth
Assessed Valuation: .	$8,541,960	Elevation:	84 ft.

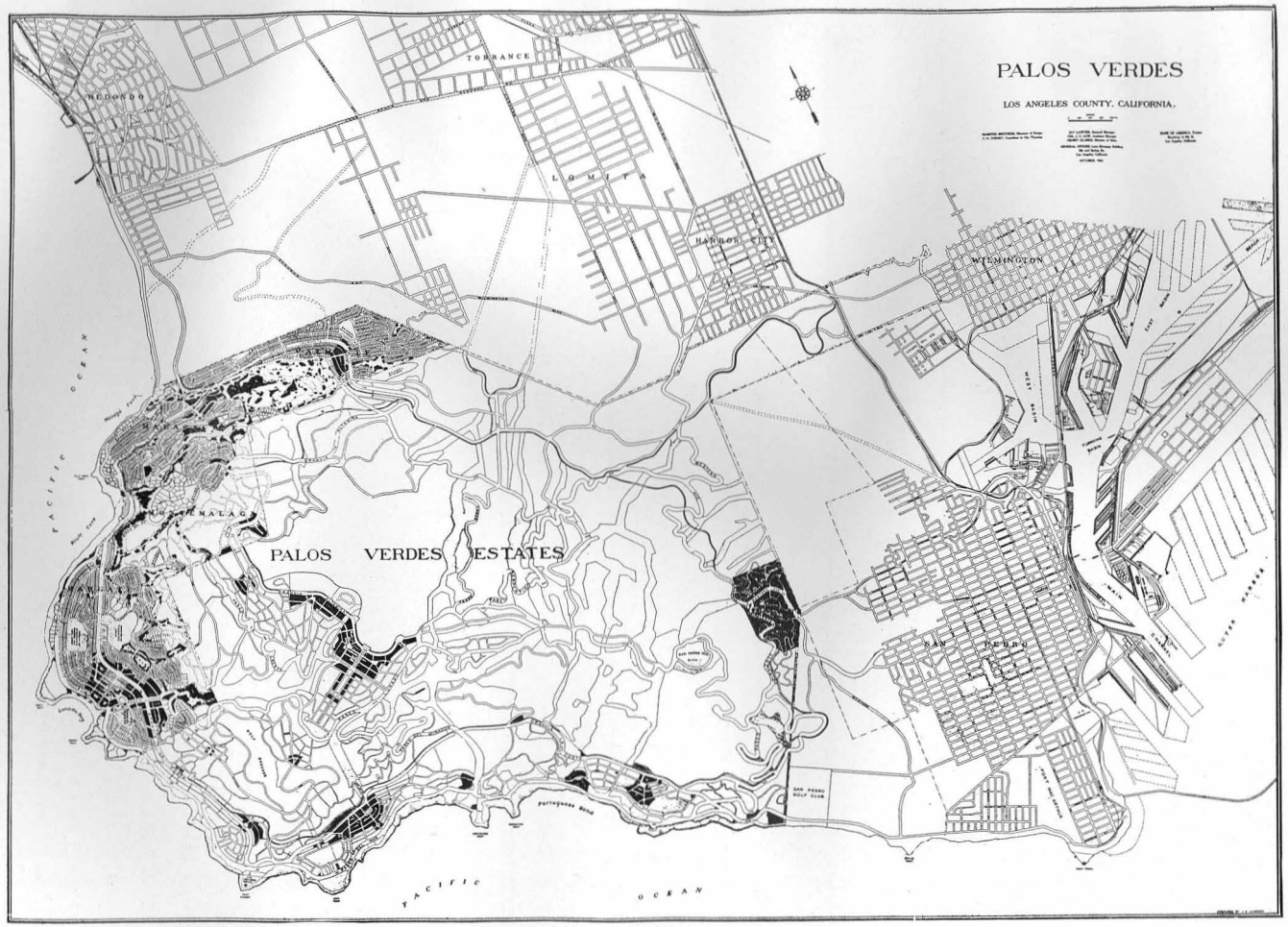
PROPOSED HIGHLAND AVENUE CONNECTION

OPENING OF HIGHLAND AVENUE

The highway system in the beach cities may be divided into three classes: (1) those used as main feeders, (2) those intended for through traffic, and (3) those directly on the beach front which are used exclusively for local circulation. Highland Avenue is generally regarded as the principal traffic feeder to the cities of Manhattan Beach and Hermosa Beach. Its usefulness, however, is greatly curtailed by indirectness. This will be largely remedied by the opening of the portion between Summit Avenue and 33rd Street, as shown on the photograph opposite.

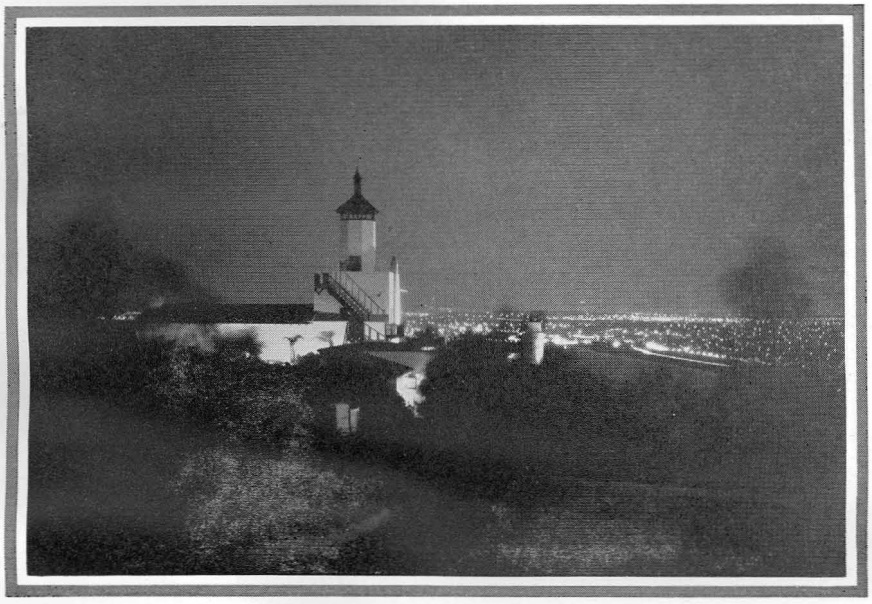


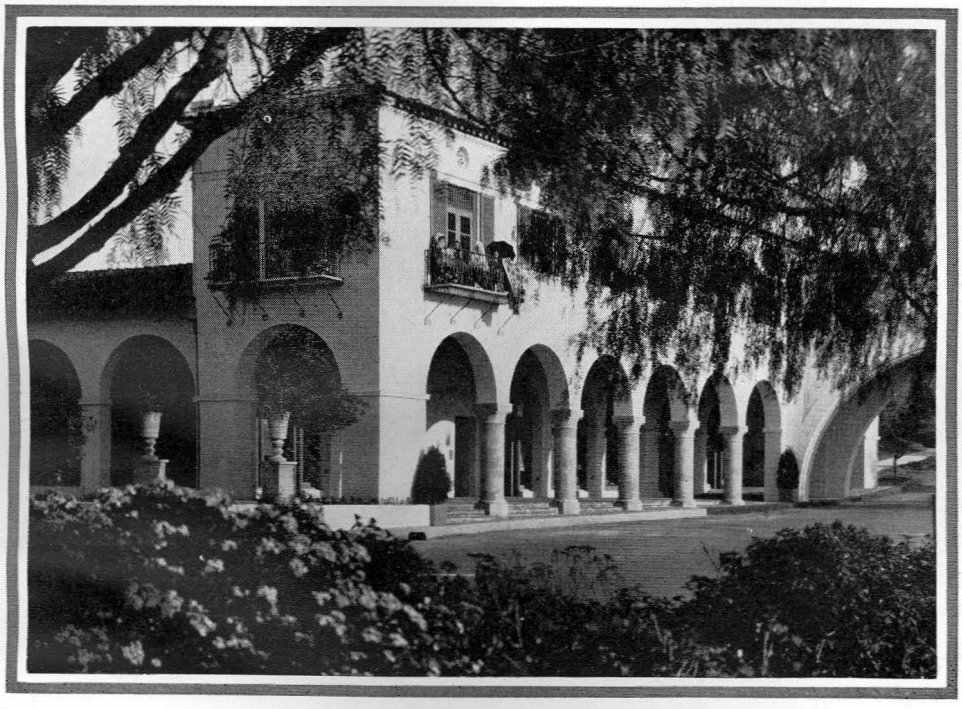



PALOS VERDES
LOS ANGELES COUNTY, CALIFORNIA.
TORRANCE
REDONDO
LOMITA
HARBOR CITY
WILMINGTON
SAN PEDRO
PACIFIC OCEAN
PALOS VERDES ESTATES
PACIFIC OCEAN

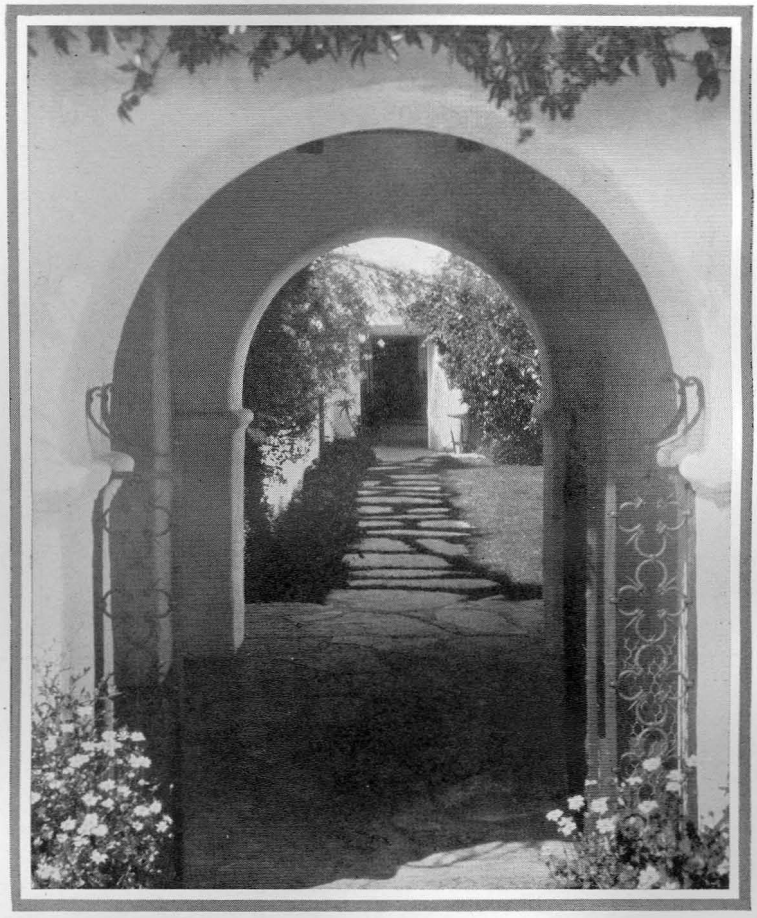
PALOS VERDES ESTATES

The Rancho de Los Palos Verdes can be identified with the earliest Spanish exploration of Cabrillo. But its history really begins with the arrival of the Spaniard Don Dolores Sepulveda, who settled there in 1822, following the Mexican Revolution. In 1846 the Mexican governor Don Pio Pico made the final grant of the property to the Sepulveda family, in whose hands it remained for many years. It was the scene of several skirmishes between the American and Californian troops in 1847. In 1913 Mr. Frank A. Vanderlip purchased 16,000 acres of the property intending to divide it into large estates. These plans did not materialize and in 1923 the Palos Verdes Project took over the 3,200 acres now being developed as a suburb of small estates in accordance with a very complete plan made by Olmsted Brothers. Palos Verdes Estates is unique not only because it was planned entirely in advance, but also because its plan cannot be rendered ineffective by subsequent, unrelated neighboring development. The boundaries nearly coincide with the natural limits beyond which inharmonious development could do it no harm. More important, however, the future street plan of Palos Verdes has been assured of adequate coordination with adjacent territory by its incorporation into the Regional Plan of Highways. An unusual combination of hills, ocean and tempered climate, with fertile adobe soil, has made possible a community of exceptional beauty. The plan is notable for its large park and recreation area—more than 25% of the total. Of this, 700 acres, including nearly five miles of coast line have already been deeded to the Homes Association. Provision was made in advance for eight school sites, deeded to the Homes Association, which transfers them at nominal cost to the school district as they are needed. Two such transfers have already been made. A considerable acreage in streets and parkways leaves less than 50% of the area for private ownership. In this area more than 92% of the lots are restricted for single family residence. The greatest distinction of the plan, however, lies in the methods devised for insuring its fulfillment. This is accomplished in a very effective manner through the Palos Verdes Homes Association, the organization of property owners which maintains the restrictions and operates the parks and recreational facilities; and the Art Jury, established by the restrictions as an independent body, which passes on all building plans. This exercise of architectural control of private buildings, allowing great latitude for individual expression, has been exceptionally successful and has earned nation-wide commendation.

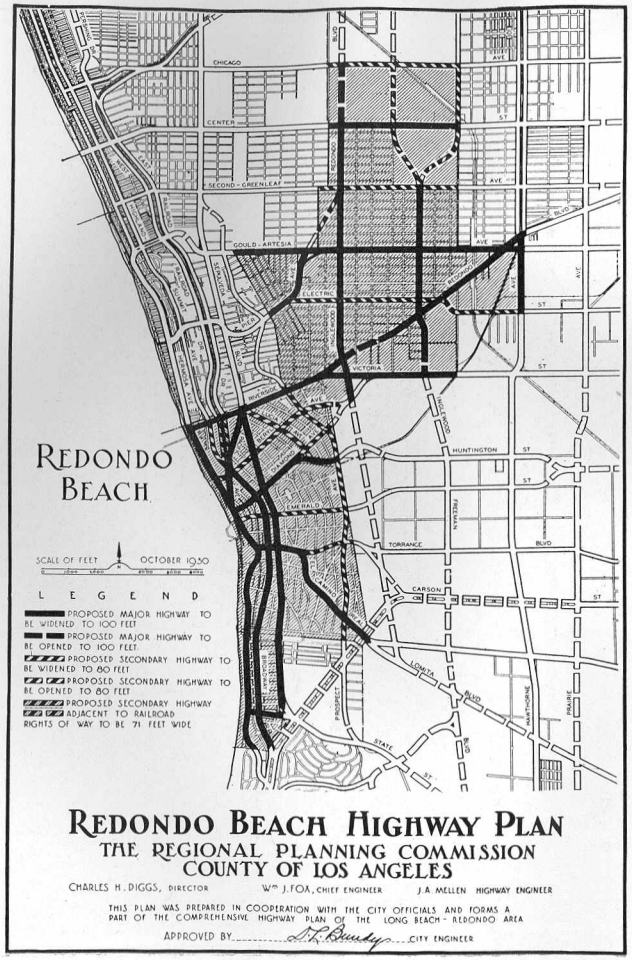




COMMERCIAL BUILDINGS, PALOS VERDES



PLEASING ARCHITECTURE, PALOS VERDES



REDONDO BEACH HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR Wm J. FOA, CHIEF ENGINEER J. A. MELLEN HIGHWAY ENGINEER

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA

APPROVED BY ..... CITY ENGINEER

CITY OF REDONDO BEACH

-REDONDO BEACH-
C·A·L·I·F·O·R·N·I·A

CITY COUNCIL
DR. JOHN M. CLARKE, MAYOR
ALBERT G. BAILEY
DR. FRANK W. HUFF
HENRY J. McNALLY
DR. J. RUSSELL SHEA

RESOLUTION NO. 622

WHEREAS, the City Council of the City of Redondo Beach recognizes the need of a thorough plan of co-ordination in the matter of major and secondary highway service for the City of Redondo Beach as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past eight years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to co-ordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in cooperation with the Redondo Beach City Engineer and Planning Commission has developed for the City of Redondo Beach a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Redondo Beach plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Redondo Beach does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Redondo Beach Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Redondo Beach, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Redondo Beach, held on the 5th day of March, 1931, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Bailey, Huff, McNally, Shea and Mayor Clarke.
NOES: None. ABSENT: None.

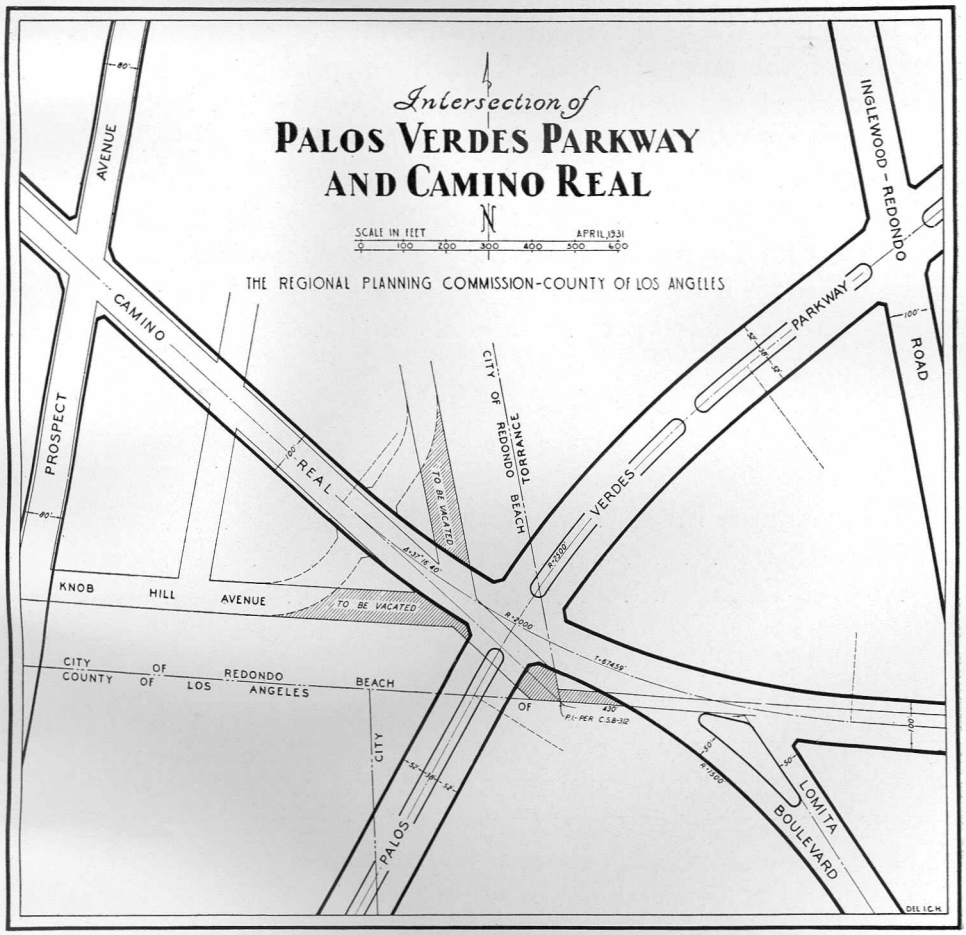
and signed and approved this 5th day of March, 1931.

CITY OF REDONDO BEACH
ATTEST:
City Clerk of the City of Redondo Beach

John M Clarke
Mayor

CAMINO REAL AT PALOS VERDES PARKWAY

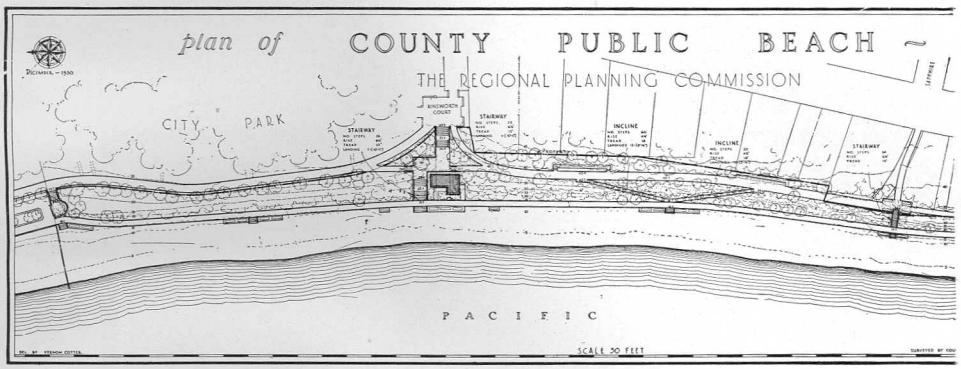
The construction of the Palos Verdes Parkway in the vicinity of its intersection with Camino Real requires a great amount of grading. The heavy cut required at this point results in an advantage to surrounding property rather than in a detriment. The small knoll which now exists there will be levelled to the grade of the parkway by "borrows" which are necessary to make fills to the northeast. This levelling process will undoubtedly make the knoll more desirable for high class residential purposes. It will also permit the construction of Camino Real and the parkway without the use of excessive grades.



CITY OF REDONDO BEACH

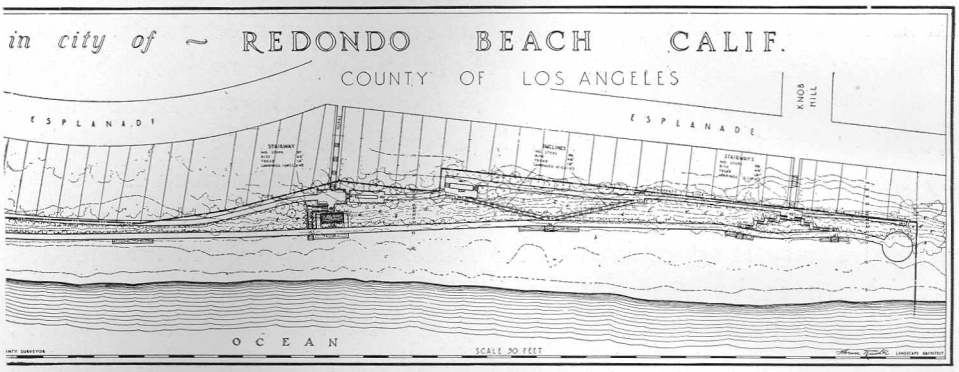
The early history of Redondo Beach is teeming with romance, and dates back to September 28, 1542, when Captain Juan Cabrillo, a Portugese navigator employed by the King of Spain, anchored at the southerly end of Santa Monica Bay, from the crescent shape of which it takes its name. The establishment of Camp Latham in 1861 brought some trade to the port, which had been established to serve the nearby salt works in the early fifties. In 1888, a narrow gauge railroad was built, connecting it with Los Angeles, and a considerable lumber trade developed. The city was incorporated in 1892. For many years, the municipal park extending along the bluff above the ocean, with its variety of tropical trees and plants, has been one of the local attractions. In 1923, this was increased by the purchase of the seven-acre tract formerly comprising the Huntington-Redondo Hotel and grounds. Fishing piers, an excellent bathing beach and a well-developed amusement zone are features of the city. There is an active planning commission which has been constantly interested, among other things, in the development of a system of highway entrances commensurate with the popularity of the city's broad beaches. A complete zoning ordinance is being prepared, and work is now under way on plans for the recreational and park facilities of the city.

Area in Square Miles:	6.19	Incorporated:	1892
Population:	9,347	Class:	Sixth
Assessed Valuation:	$10,980,152	Elevation:	45 ft.



NECESSITY FOR IMPROVEMENTS ON PUBLIC BEACHES

On May 19, 1930, the Board of Supervisors of Los Angeles County, mindful of the need for additional public beach frontage, consummated negotiations for acquiring a strip of beach 3,660 feet long, lying within the City of Redondo Beach. But it was not enough merely to purchase the land; walks, service buildings, and other equipment were to be installed. The design plan for this work is shown above. The location of buildings, ramps, stairways and walks has been carefully fitted into the precipitous slope immediately adjacent to the beach proper. In an area of this length at least two large comfort stations were needed. One of these is to be located at the end of Ainsworth Court, and the other at the foot of the Topaz Street entrance.



A long promenade is to be constructed along the upper level. A second walk, at the base of the slope, may also be used as a service drive for the maintenance of the beach. These two long promenades, flanked at convenient points by park benches, are connected down the slope by nine stairways to accommodate comfortably the thousands of people who will annually visit this beach. The buildings, stairs, retaining walls, walks and ramps should be so designed as to blend with the color and character of the surrounding bluffs.

This area, relatively speaking, is small. It is generally realized that it should be developed from year to year as public funds are available, but it is important for that development to follow a definite plan. If this procedure is wise in small areas, is it not also reasonable that a plan—just as thoroughly studied, but broader in scope—should be made to cover the entire beach situation?

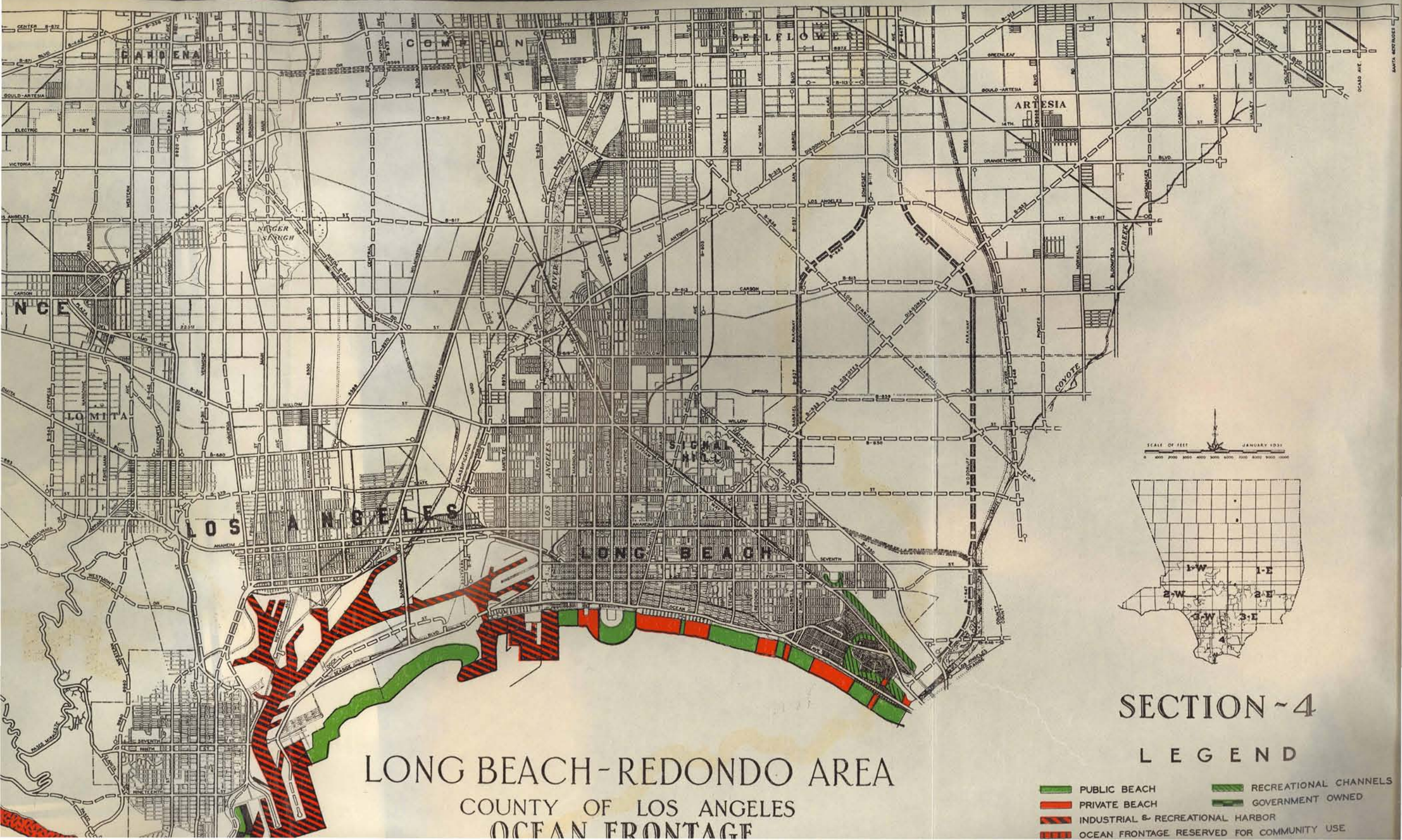
COUNTY BEACHES AND RECREATION

The beaches of Los Angeles County are among its greatest assets. People from all over the nation have been invited to come here and enjoy them. But they are already overcrowded. Unfortunately, little has been done by the public to acquire and develop the coast line, and much of the best beach property has been privately exploited. The total county-owned beach frontage is approximately 3.5 miles, and it is obvious that further provision must be made for the recreational requirements of our ever-increasing population. The difficulty is that too many industrialists, business men, and, in fact, the majority of the taxpaying public still feel that the necessity of making public provision for recreation is of secondary importance. They are overlooking the fact that when the need makes itself more keenly felt, it may be too costly or too late.

The highway program to care for future traffic needs is being given careful and thorough study. A broad and comprehensive plan to reserve industrial areas is being laid down, and future cities are being planned to house industrial workers and their families. This great new population will need increased facilities for recreation. No planning can be considered complete that does not include comprehensive plans for local community recreational centers, well-placed school-playgrounds, neighborhood and regional parks, adequate beaches and other recreational features.

All of this is particularly true with respect to the ocean frontage of the county, which is rapidly diminishing in availability and increasing in price. The map insert shows the present situation. Much has been said about it, but little has been done. It is only on the basis of a definite study, a definite plan and a definite procedure that the county can properly obtain and maintain one of its chief assets—the beaches.

The various departments of the county government who are most interested in these matters have made excellent progress towards the development of a definite policy, and an Interdepartmental Committee on Parks and Recreation has been formed. This Committee, which meets at regular intervals for a study of these questions, is composed of representatives of the County Forestry Department, the County Recreation Department and the Regional Planning Commission. Its aim is better coordination of effort and the establishment of a well-defined plan for the acquisition of recreation and park areas.



LONG BEACH - REDONDO AREA

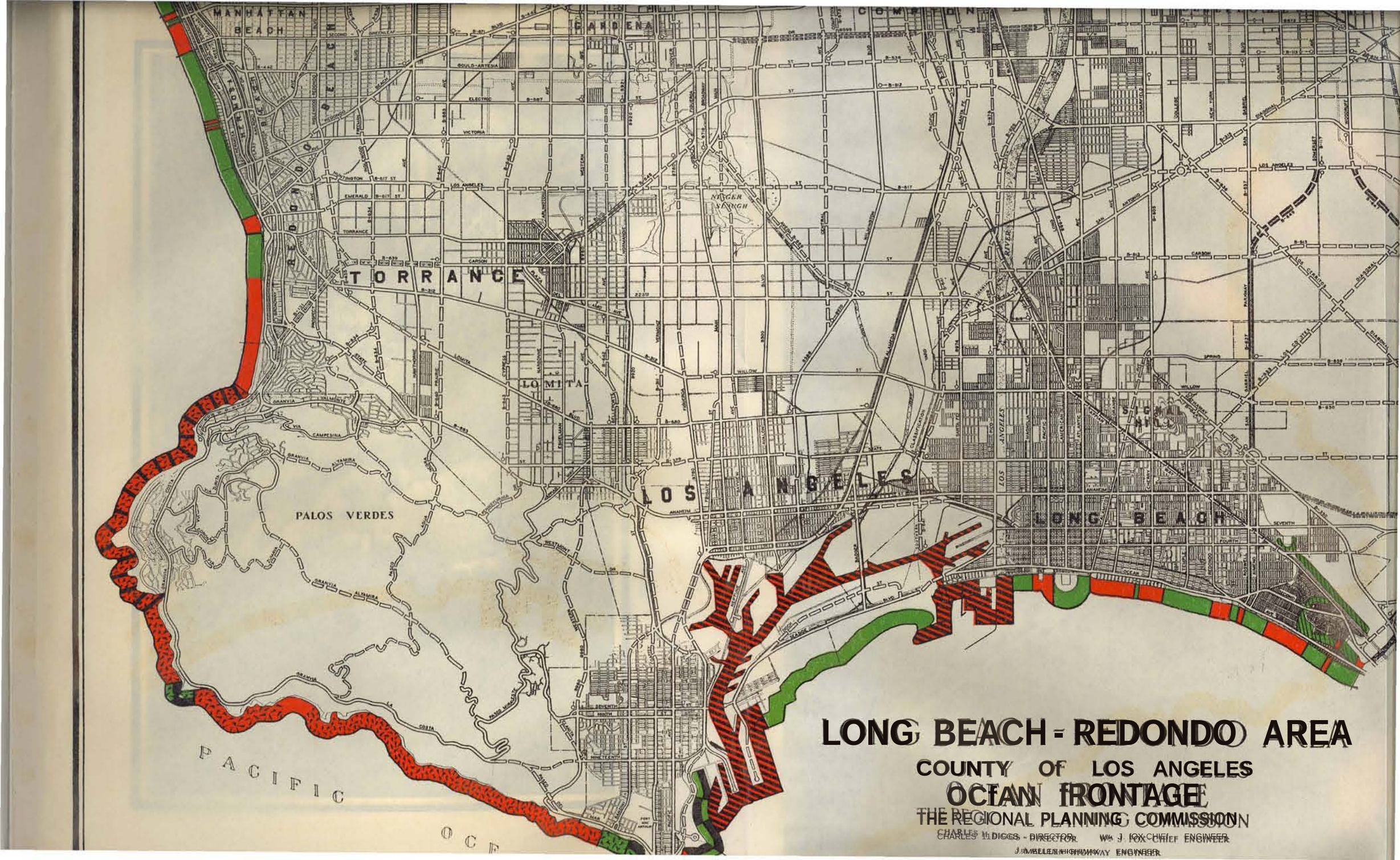
COUNTY OF LOS ANGELES

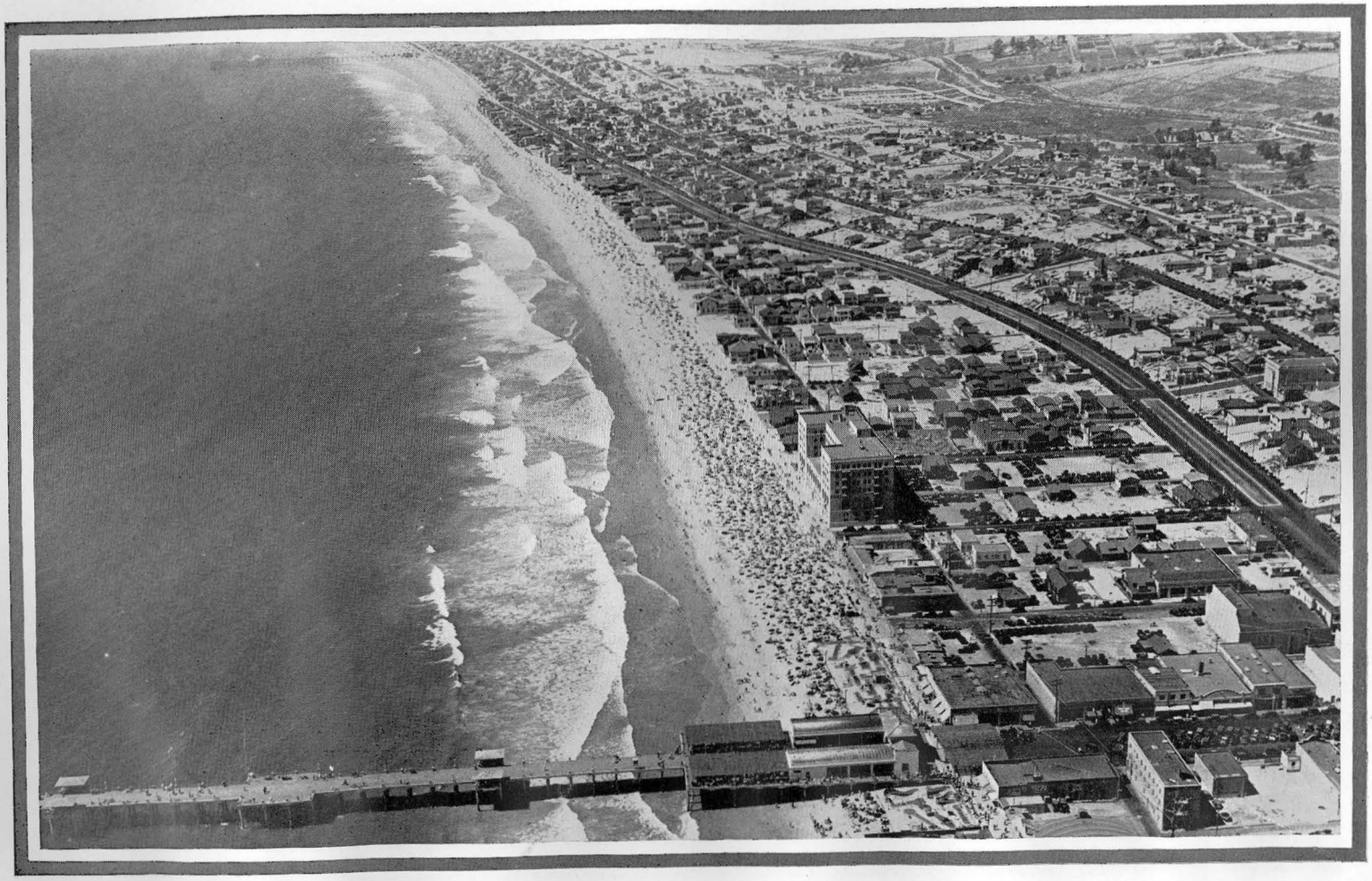
OCEAN FRONTAGE

SECTION ~ 4

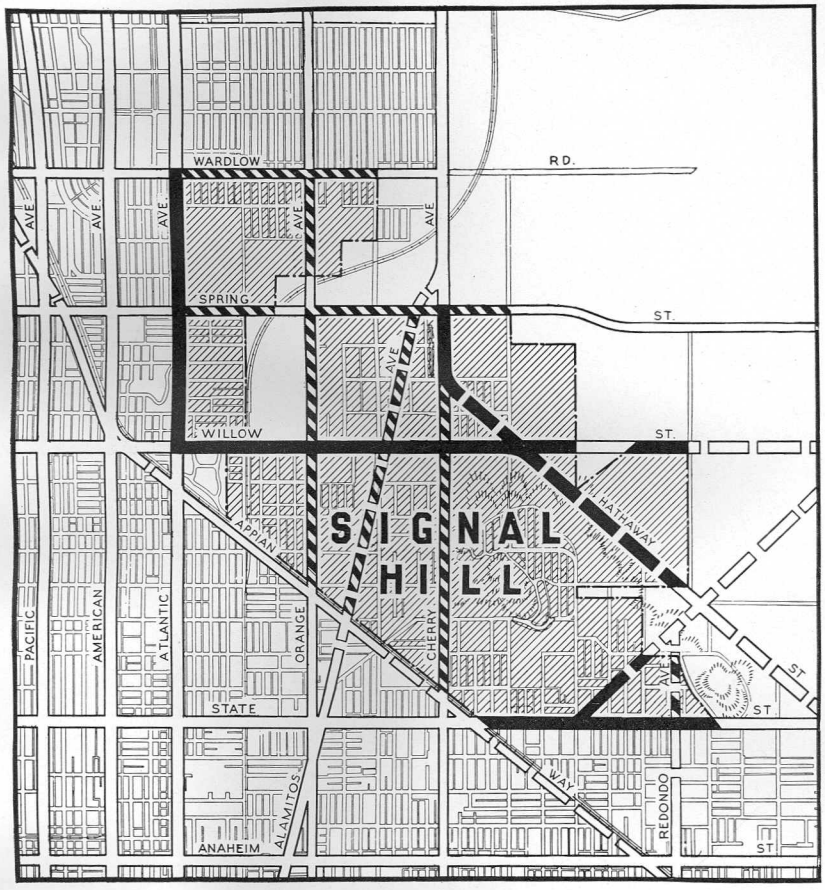
LEGEND

- PUBLIC BEACH
- PRIVATE BEACH
- INDUSTRIAL & RECREATIONAL HARBOR
- OCEAN FRONTAGE RESERVED FOR COMMUNITY USE
- RECREATIONAL CHANNELS GOVERNMENT OWNED


MANHATTAN BEACH
REDONDO BEACH
HERMOSA BEACH
GARDENA
TORRANCE
LOMITA
PALOS VERDES
LOS ANGELES
LONG BEACH
SIGNAL HILL
NIGER SLOUGH
PACIFIC OCEAN
LONG BEACH - REDONDO AREA
COUNTY OF LOS ANGELES
OCEAN FRONTAGE
THE REGIONAL PLANNING COMMISSION
CHARLES H. DIGGS - DIRECTOR
WM. J. FOX - CHIEF ENGINEER
J. MILLER - HIGHWAY ENGINEER



THE BEACHES OF LOS ANGELES COUNTY ARE AMONG ITS GREATEST ASSETS



SIGNAL HILL HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR — Wm J. FOX, CHIEF ENGINEER

J. A. MELLEN — HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 3000 4000 5000 — OCTOBER 1930

L E G E N D

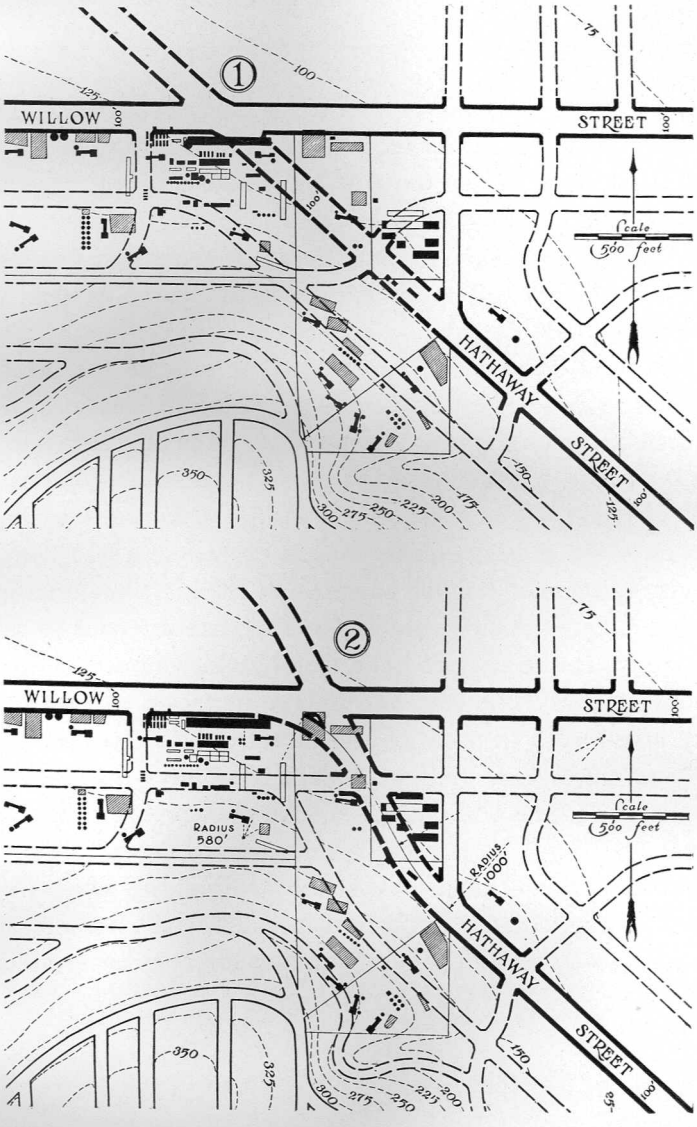
- PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY OFFICIALS AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE LONG BEACH - REDONDO AREA

CITY OF SIGNAL HILL

One of the most unusual cities in the United States is Signal Hill. In the hazy past, the Indians took frequent advantage of its heights as a look-out point, and in the days of the Padres, it was often used as a point from which to send warning to the San Gabriel Mission when danger threatened. Its slopes then passed in rapid succession through various phases, serving as grazing land, barley field, flower garden, residential section and finally as the miracle oil field of the continent. Oil was first discovered there in June, 1921, and from that time to the present, Signal Hill has been the scene of extensive oil-well drilling operations. Practically the entire area of the city is now given over to oil production and incidental operations. At the present time there are within the corporate limits some 1,200 derricks. The yield of oil at its maximum reached 243,000 barrels per day. At present, under a rigid curtailment program, the daily production is in excess of 100,000 barrels. In 1924, although its inhabitants were few in number, the city voted to incorporate in order to avoid a proposed annexation to the City of Long Beach, which now entirely surrounds it. The vote at that time was 342 to 211 in favor of incorporation, an exceedingly small vote in view of the fact that its assessed valuation at that time was thirty-four million dollars, exceeding in wealth any city of like size in the entire United States. At the present time, although its population is only 2,932, it is exceeded in assessed valuation by only eight cities in the County. The provision for arterial highways in a district of this kind is particularly important because the character of drilling operations increases the difficulty of making changes in established lines.

Area in Square Miles:	2.25	Incorporated:	1924
Population:	2,932	Class:	Sixth
Assessed Valuation:	$34,917,331	Elevation:	80 ft.



ALTERNATE DETAILS

INTERSECTION of WILLOW and HATHAWAY STREETS

SIGNAL HILL

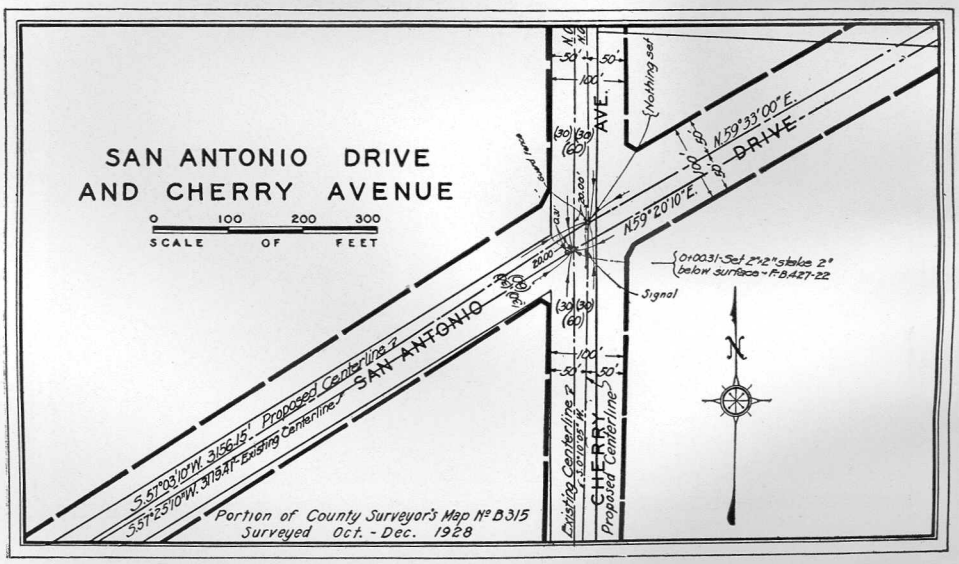
THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES OCTOBER 1930

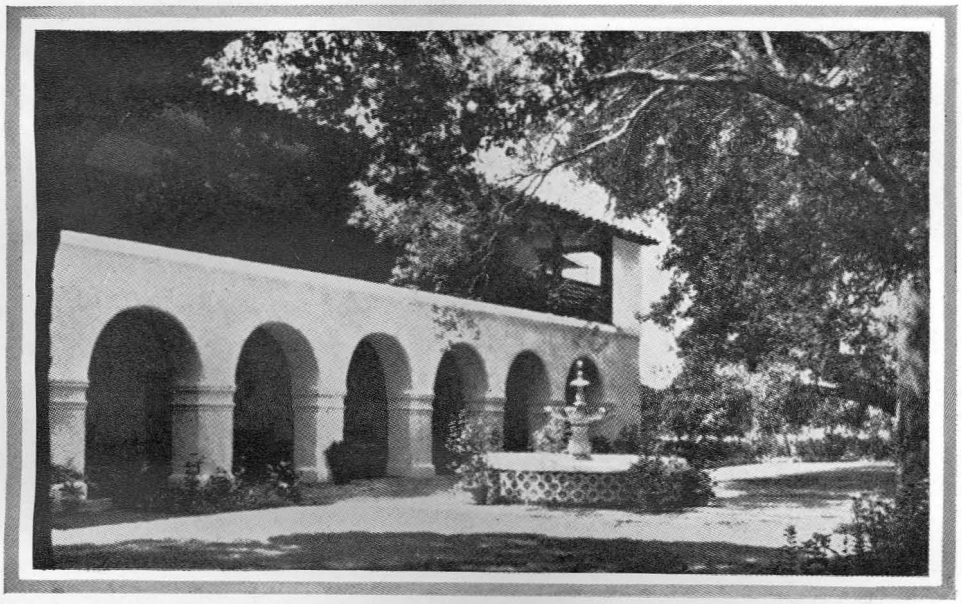
HATHAWAY STREET AT WILLOW STREET

Willow Street and Hathaway Street are major highways of prime importance. The ultimate connection of the two is necessary to the full development of the Highway Plan of this section. Hathaway Street, recognized as an important part of the State Highway System, follows an old ranch line on the northeasterly slope of Signal Hill. It acts as an "intercepter" artery for north and south traffic, and likewise serves to direct east-bound traffic southeasterly to the Coast Highway. The present use of the land in the vicinity by various oil companies is of such a nature as to preclude the immediate construction of the straight extension shown although the traffic situation would undoubtedly be relieved if it could be made now.

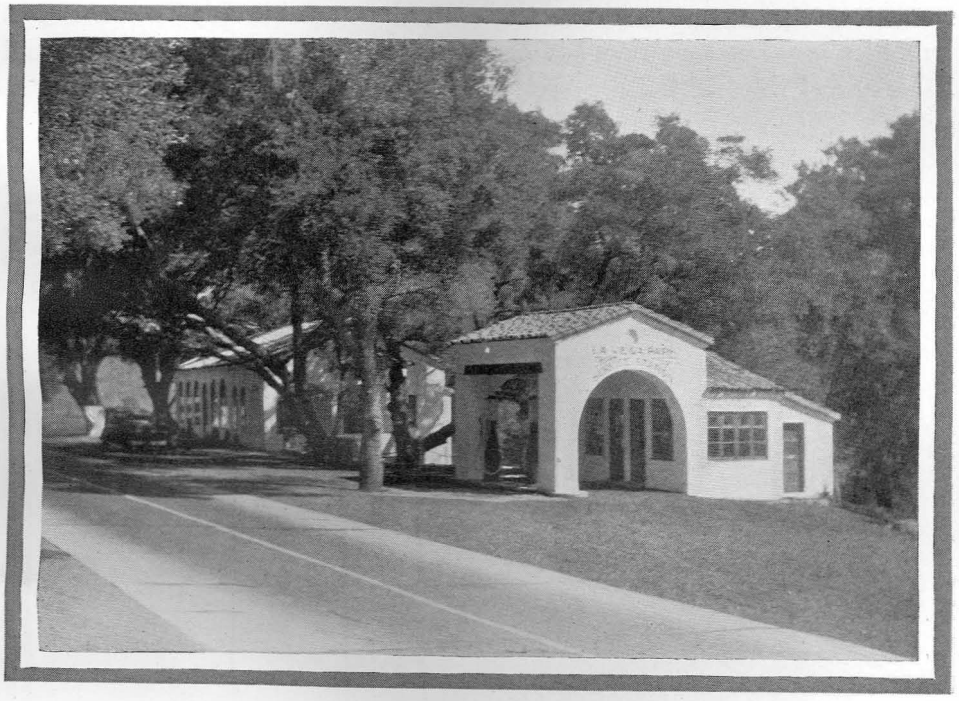
RECOMMENDED TREATMENT

The treatment recommended as a solution of this problem is that shown in the upper half of the drawing, which provides for the prolongation of Hathaway Street northwesterly to connect directly into Cherry Avenue. As the oil refineries move or reconstruct their equipment in this vicinity, such changes should be so adjusted as to fit the solution proposed. In the course of time, as the oil refineries and their incidental uses go out of existence in this general vicinity, the land will be resubdivided, or developed for other use. At that time the connection shown in Study No. 1 should be provided for and built.





A ROADSIDE INN

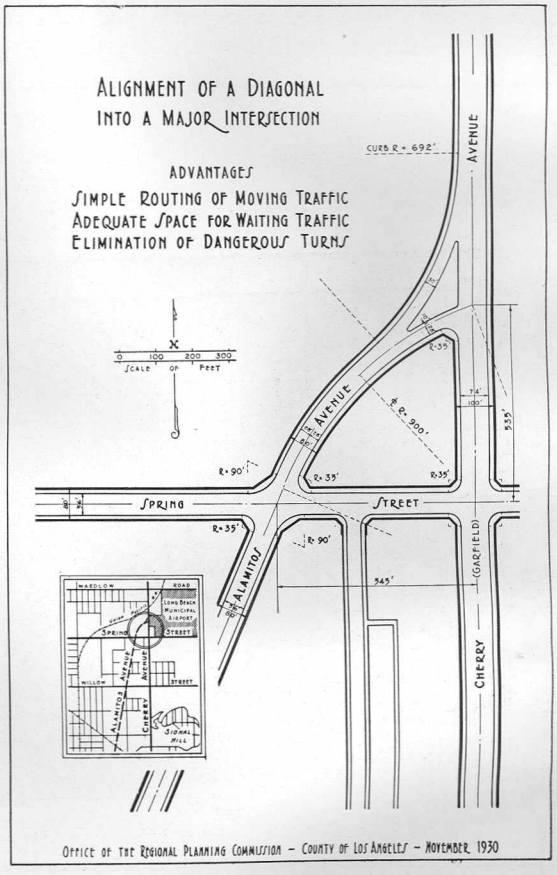


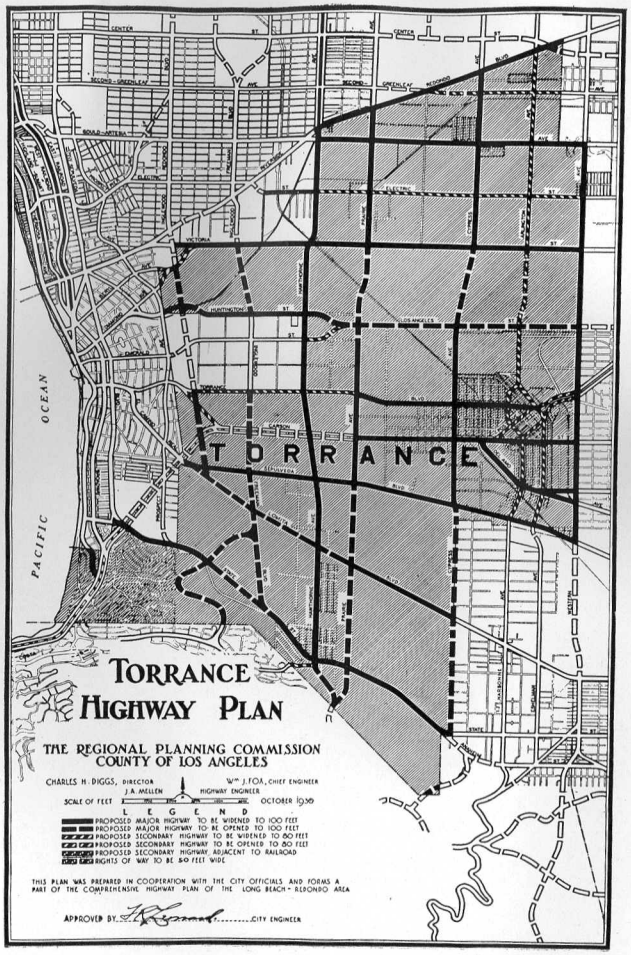
A SERVICE STATION

ALAMITOS AVENUE AT CHERRY AVENUE—A TRAFFIC PROBLEM

The solution recommended for the intersection shown here provides a curve of long radius for the right hand traffic southbound from Cherry Avenue into Alamitos Avenue, so that no stop will be necessary. It also provides for the safe entrance of the north bound Alamitos Avenue traffic into Cherry Avenue, at as near a right angle as practicable. In addition to the entire right half of Alamitos Avenue, which swings easterly to Cherry Avenue, an extra 10 feet is provided between the center line of Alamitos Avenue and the southerly curb line of the traffic island to allow more space for cars waiting to enter Cherry Avenue.

The traffic island shown separates the northbound and southbound traffic moving on Alamitos Avenue. This "island" is in reality a part of the intersection, and should be kept free of any obstructions to clear vision. The dimensions have been determined in such a manner that with either synchronized or progressive signal control, vehicles will normally be stopped only once before traversing the entire triple intersection. Alamitos Avenue is not only a diagonal short-cut from the center of Long Beach to Cherry Avenue, but also has its northerly terminus at the Long Beach Municipal Airport. By a continuation of the roadway design suggested here, it will be possible to create a very efficient and impressive entrance to the airport and to facilitate traffic movement as well.





ALBERT H. BARTLETT, City Clerk
L. O. STEVENS, Deputy City Clerk
FRANK R. LEONARD, City Engineer
PERRY G. BRINEY, City Attorney
CHARLES T. RIPPY, City Recorder
HARRY H DOLLEY, City Treasurer
G. M CALDER, Chief of Police
WM. GASCOIGNE, Street Supt.
B. F. HANNEBRINK, Fire Chief

CITY COUNCIL
JOHN DENNIS, Mayor
G. A. MAXWELL
G. A. R. STEINER
C. B. BELL
E. C. NELSON

CITY OF TORRANCE

TORRANCE, CALIFORNIA

RESOLUTION NO. 485

WHEREAS, the City Council of the City of Torrance recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Torrance as related to the County Regional Plan of Highways; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation of the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Torrance City Engineer, has developed for the City of Torrance a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Torrance plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the City Engineers of the incorporated cities of Los Angeles County;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Torrance does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Torrance Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1930.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and secondary highways in and through Torrance, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Torrance, held on the 20th day of January, 1931, by the affirmative vote of at least three councilmen, to-wit:

AYES: TRUSTEES: Bell, Nelson, Smith, Steiner & Dennis.
NOES: " None.
ABSENT: " None.

and signed and approved this 21st day of January, 1931.

CITY OF TORRANCE * INCORPORATED 1921 * CALIFORNIA

John Dennis
Mayor of the City of Torrance.

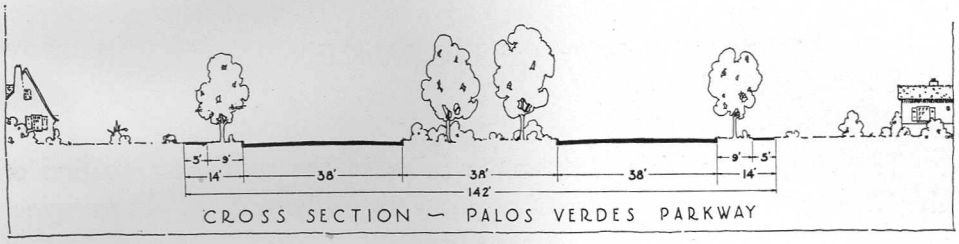
ATTEST:

A. H. Bartlett
City Clerk of the City of Torrance.

CITY OF TORRANCE

Torrance, comprising 18.4 square miles in the southwest portion of the County, is the fourth largest city in area in the county. The original portion of the city, which was incorporated in 1921, was considerably smaller in area. It was planned by Olmsted Brothers for Jared Sidney Torrance, the founder, then President of the Dominguez Land Company, along rather unusual lines, with an attractive Prado leading from the centrally located school to the commercial center. The latter lies between the east-west and the north-south branches of El Prado, the double-drive highway which forms the principal entrance to the city from Western Avenue. The population, which at the time of incorporation was estimated to be 1,875, has increased until in the 1930 census it was 7,271. Torrance is distinctively an industrial town. The Pacific Electric car shops, the great steel mills, the refineries and many other industries furnish employment to thousands of workers. But this industrial prominence has not been obtained by sacrificing other civic and economic advantages. Extensive annexations during the last few years have given the city contact with the Pacific Ocean just south of Redondo Beach and control of a large area of relatively undeveloped land southwest of the older portion of the city. Here, Torrance has a remarkable opportunity—homes, industrial sites, adequate highways and a first-class airport can be organized in a well-balanced arrangement through the application of planning principles.

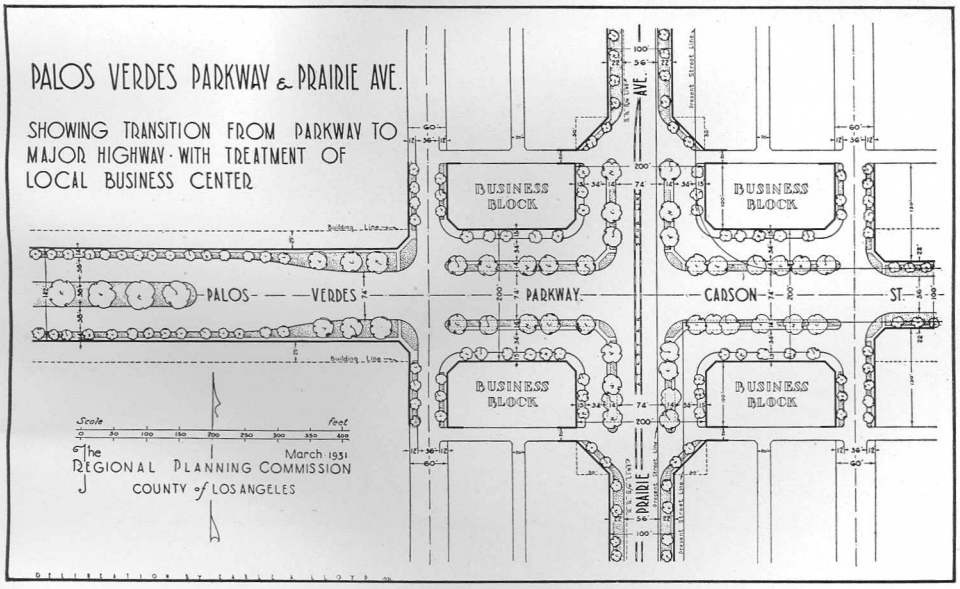
Area in Square Miles:	18.40	Incorporated:	1921
Population:	7,271	Class:	Sixth
Assessed Valuation:	$28,717,422	Elevation:	71 ft.



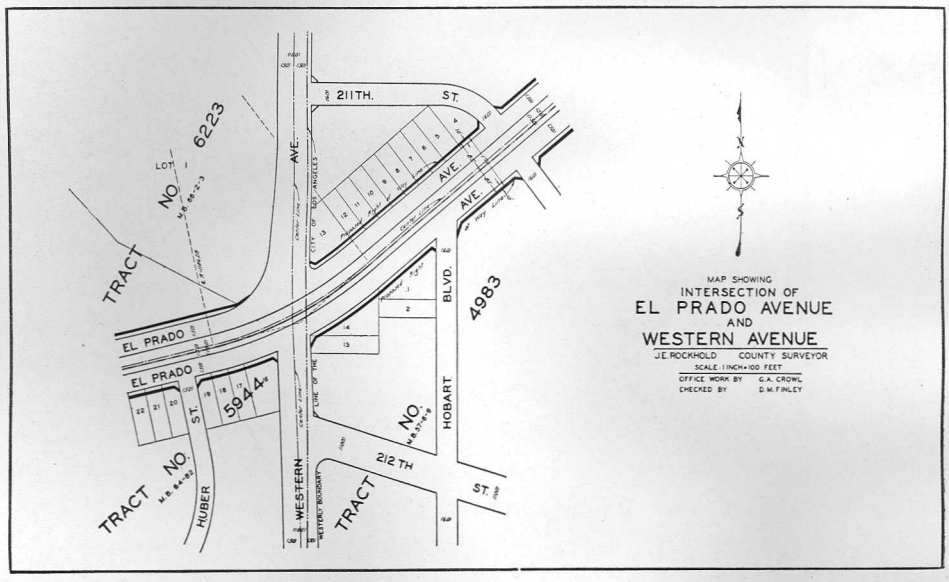
CROSS SECTION — PALOS VERDES PARKWAY

PALOS VERDES PARKWAY AT PRAIRIE AVENUE

At Prairie Avenue, in the City of Torrance, the Palos Verdes Parkway changes from a double-drive thoroughfare to a single major highway. West of this intersection, it has two 28-foot roadways separated by a park strip, within a right of way 142 feet wide. On the east, the right of way is 100 feet, with a single roadway 56 feet wide. Prairie Avenue, at which the transition occurs, is itself a major highway, and the intersection, because of its strategic location with respect to the surrounding residential area, is a logical location for a local shopping center. This unusual combination of circumstances offered many difficulties from a planning viewpoint, and it is with full appreciation of all the complex elements involved that the composite solution shown here has been prepared. A liberal use of planting

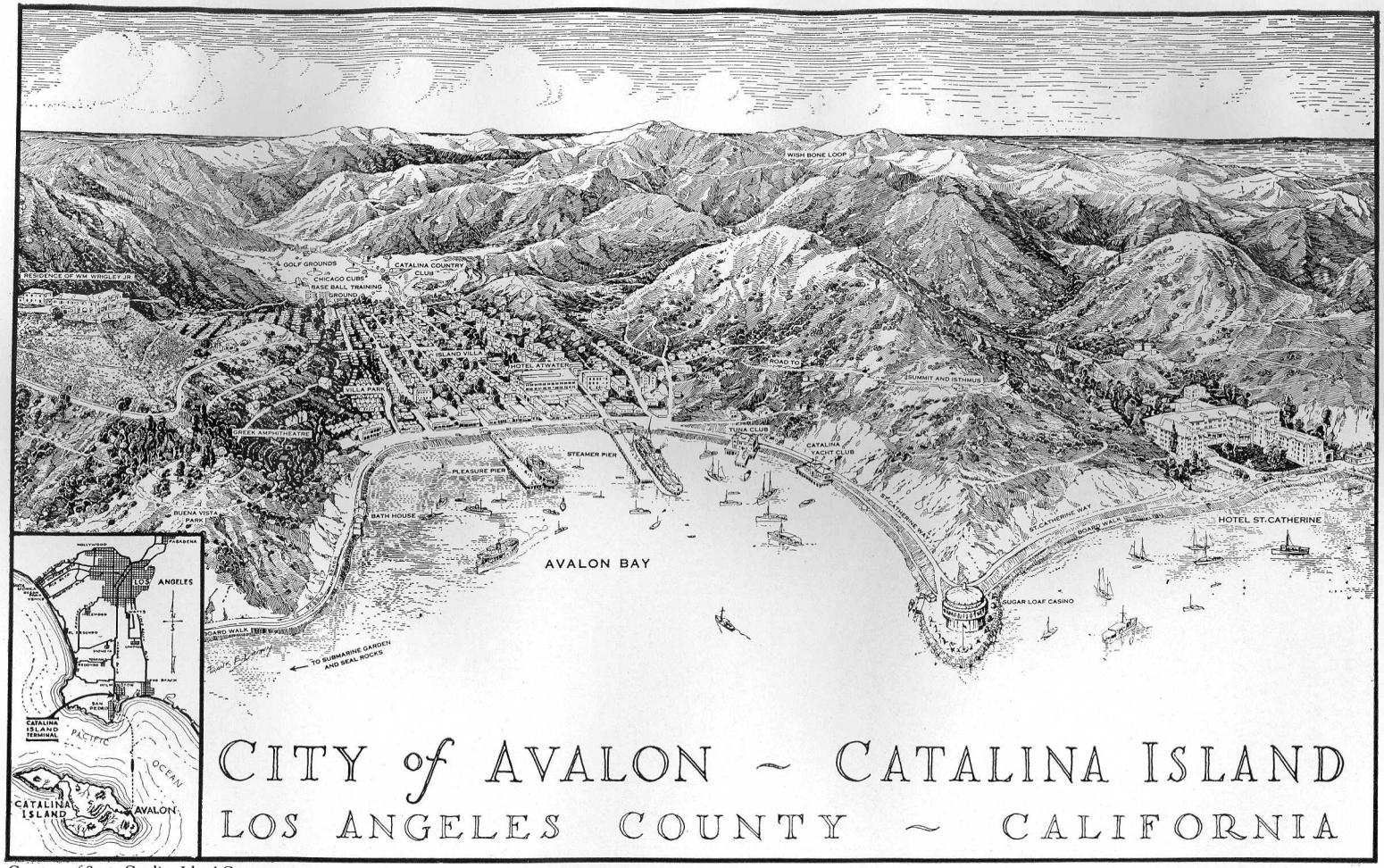


gives the neighborhood business center an attractive appearance, and carries the park atmosphere into the shopping center, augmenting rather than impairing the utility values of the business blocks. The commercial buildings and automobile parking incident thereto are accommodated by local service roadways, entirely separated from the pleasure traffic moving along the parkway.



WESTERN AVENUE AT EL PRADO

El Prado is the gateway to the City of Torrance. A great deal of study has been given to the extension of El Prado northeasterly to cross Normandie Avenue, Vermont Avenue and Figueroa Street. This will make the City of Torrance directly accessible from the central portion of Los Angeles. The intersection with Western Avenue is difficult because of topography. Since El Prado is below the normal grade of Western Avenue, the ideal solution would be a separation of highway grades. The estimated cost was such that this plan was not considered practical at present. It is therefore recommended that the crossing be at grade for the time being. In the future when it is financially feasible to separate highway grades, the possibility of a separation here will warrant serious consideration.



CITY of AVALON ~ CATALINA ISLAND

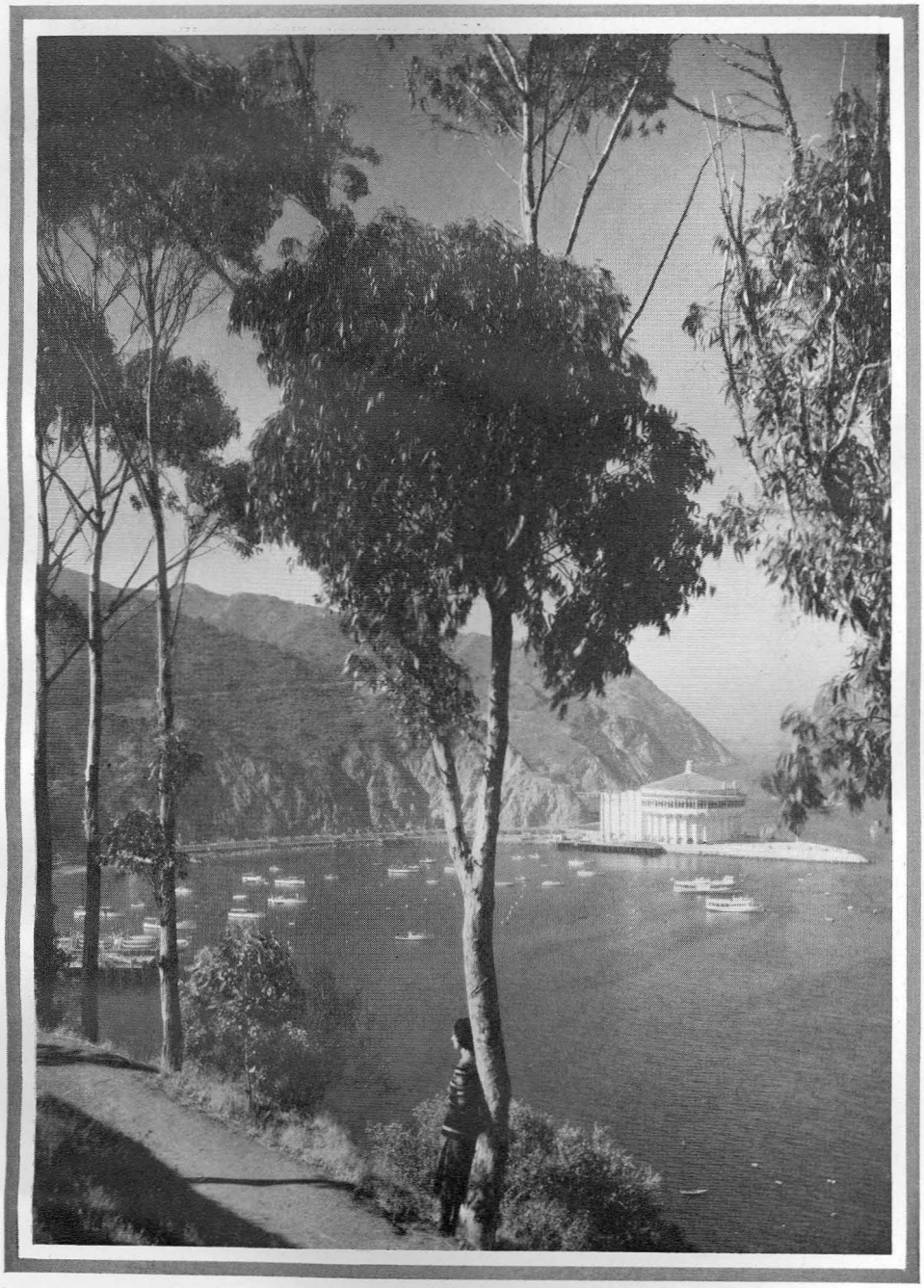
LOS ANGELES COUNTY ~ CALIFORNIA

Courtesy of Santa Catalina Island Company

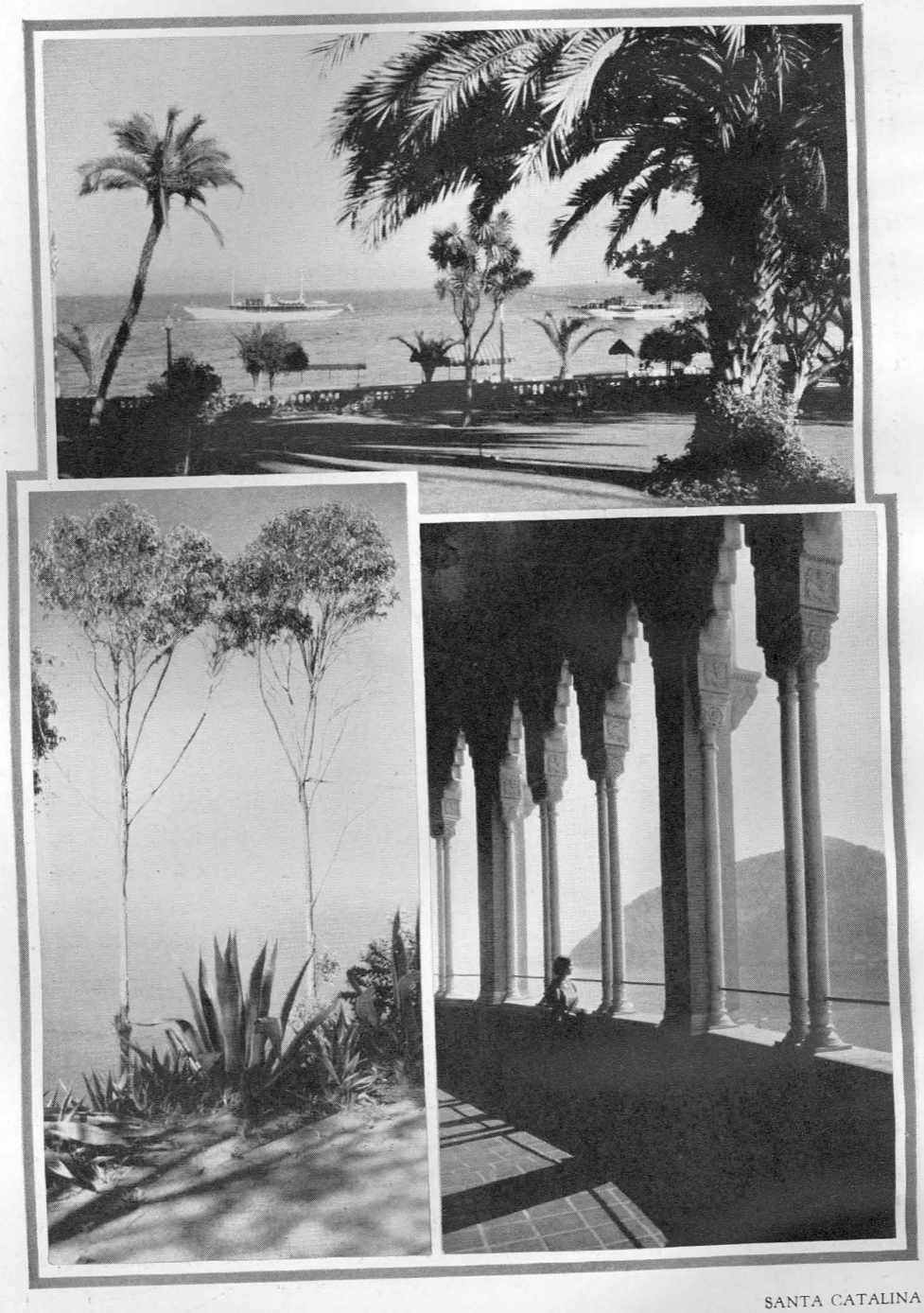
CITY OF AVALON

The history of Avalon is essentially that of the island upon which it is situated. Santa Catalina, largest of the channel islands, is 26 miles distant from the mainland with which it is connected by excursion steamers operating on a regular schedule. The island was discovered in 1540 by Cabrillo, who first named it "La Vittoria." In 1602 Don Sebastian Vizcaino renamed it Santa Catalina. It was deeded to Pio Pico by Mexico, and by him, to Nicholas Covarrubias. James Lick was the next owner. He ousted the squatters and established sheep and goat herds, later selling to G. Shatto, who in 1885 made an effort to subdivide and sell the island piecemeal. Discovery of a small deposit of silver, however, made it possible to sell the whole island to an English syndicate for $15,000. After that, the island became the property of the Bannings, from whom it was acquired by its present owner, William Wrigley, Jr., in 1919. Avalon is famous as a pleasure resort and as a rendezvous for deep-sea fishermen. Among the many attractions it holds for the tourist are the Submarine Gardens, which are visited in glass bottom boats, the aviary, the Indian museum and the beautiful new Casino. There are a number of fine hotels, and many wealthy persons maintain summer residences on the hills around the bay. Avalon was incorporated June 26, 1913, and when the census was taken seven years later, had a population of 586. In 1930, the population was 1,897. During the summer season, however, when the "tent cities" are full, there are often over 10,000 people on the island. Owing to the unusual conditions of ownership, the growth of Avalon can be subjected to wise control to a larger degree than is usual with American cities, and the evils of land speculation and over-subdivision have been conspicuously absent. Perhaps not as much advantage of this has been taken as was possible, but the future will doubtless see the building up at Avalon of one of the most charming and beautiful communities in the world.

Area in Square Miles: . . .	1.00	Incorporated: . . .	1913
Population:	1,897	Class:	Sixth
Assessed Valuation: .	$4,191,370	Elevation:	15 ft.



AVALON BAY



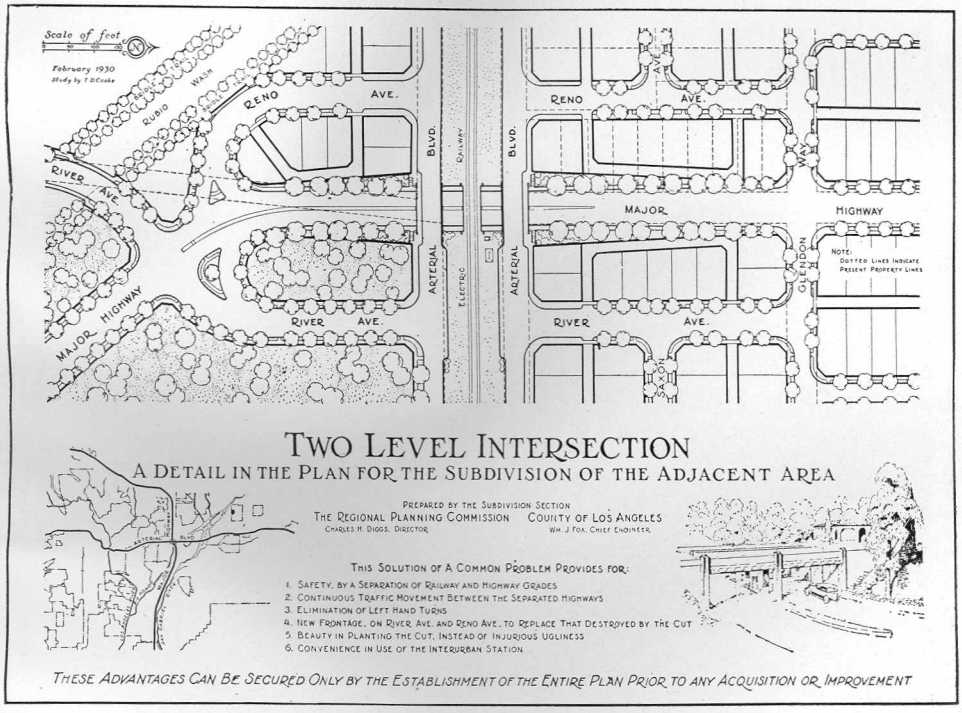
SANTA CATALINA

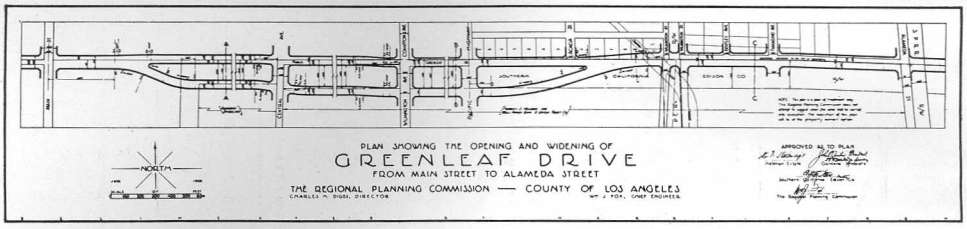
HIGHWAY INTERSECTIONS IN UNINCORPORATED TERRITORY

TWO LEVEL INTERSECTIONS

Although the separation of grades between rail and highway is more or less common, the separation of two intersecting highways is not so generally accepted. It is not advocated that this solution be universally adopted, even at highly congested intersections. The density of traffic, however, is causing it to be seriously considered in certain cases. Where such a separation is necessary, it must be designed with care, or property damage will result, out of all proportion to the benefit in the relief of traffic.

There is one special case, illustrated in the drawing below, where there is a highway parallel and adjacent to the railroad. Under these circumstances, if a transverse highway is being separated in grade from the railroad, it is usually wise to carry it under or over the parallel highway as well. Not to do so would create a blind intersection at the bottom of the cut, more dangerous than the original crossing.



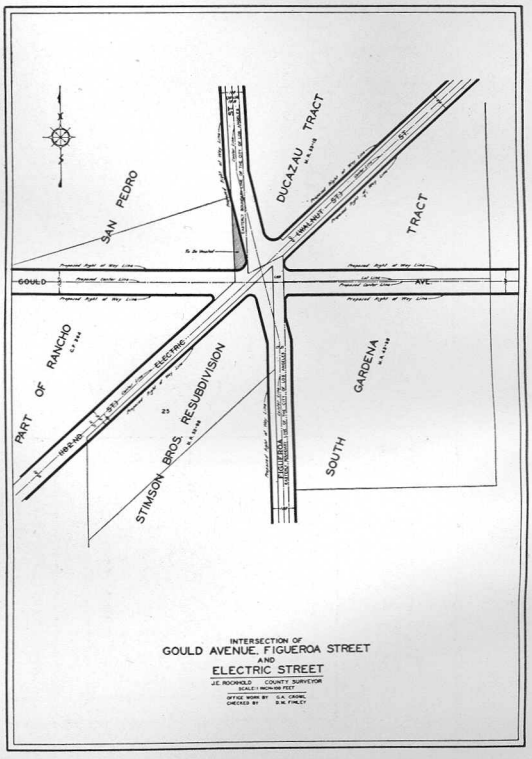


GREENLEAF DRIVE BETWEEN MAIN STREET AND ATLANTIC BOULEVARD

The Greenleaf Drive project, a secondary highway, extends from the ocean to the east boundary line of the county. Special treatment is necessary where it adjoins the north side of the right of way of the Southern California Edison Company between Main Street and Atlantic Boulevard. Under ordinary circumstances a single roadway would be sufficient. But here, in order to provide frontage for property on the south side of the power line, it will be necessary to place a roadway along each side. With a one way traffic plan this will permit three lines of moving vehicles and one parking lane on each roadway.

GOULD AVENUE AT FIGUEROA STREET

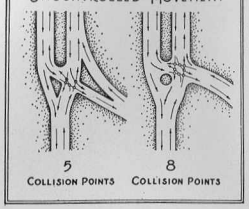
The situation presented here is one that should be avoided if possible. The meeting of two major highways and a secondary highway produces the unsatisfactory "six-point" intersection. In this case, however, it was not practical to change the alignment of either of the major highways, while the secondary, already existing, serves as the only means of access to valuable and highly improved property. The remedy now is signal control.



INTERSECTION OF AVALON BOULEVARD AND AVEDA ROAD

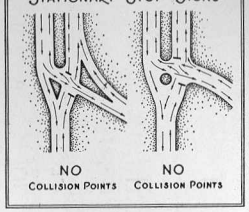
ALTERNATE DESIGNS

UNCONTROLLED MOVEMENT



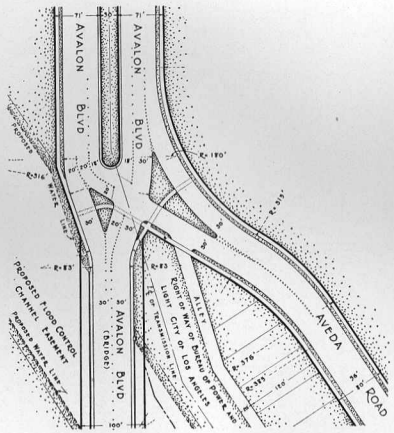
5 COLLISION POINTS 8 COLLISION POINTS

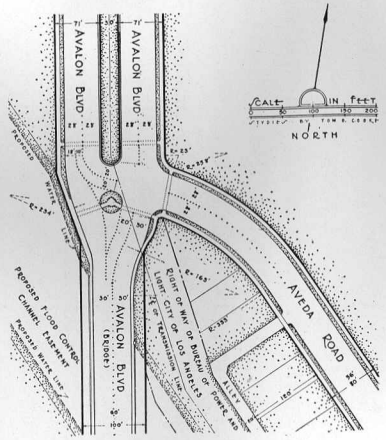
STATIONARY "STOP" SIGNS



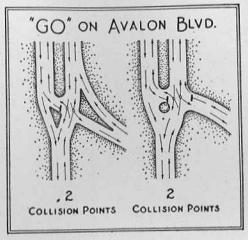
NO COLLISION POINTS NO COLLISION POINTS

TRAFFIC ANALYSIS
NO SIGNAL CONTROL



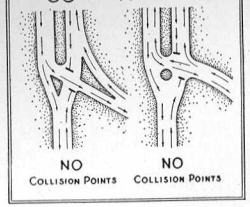


"GO" ON AVALON BLVD.



2 COLLISION POINTS 2 COLLISION POINTS

"GO" ON AVEDA RD.



NO COLLISION POINTS NO COLLISION POINTS

TRAFFIC ANALYSIS
SIGNAL CONTROL

THE REGIONAL PLANNING COMMISSION • COUNTY OF LOS ANGELES • DECEMBER 1930

AVALON BOULEVARD AT AVEDA ROAD

The problem to be solved in this intersection is two-fold; (1) the transition of a single major highway (Avalon Boulevard) into a double drive, and (2) the introduction of a diagonal secondary highway along the Gardena Valley Flood Control Channel. The existence of the transmission line, with its angle points as shown in the diagram, not only makes a double street necessary northerly from this point, but also restricts the area within which the treatment of the elements of the intersection may be varied. This area is further restricted by the existence of the flood control channel which fixes the direction of Aveda Road and the location of a future bridge-head.

Two solutions are given here, selected after study of a number of slightly varying schemes. The only essential difference between these two solutions is the segregation of right turn traffic moving from Aveda Road into Avalon Boulevard in the first, or "island", scheme. This feature together with the general alignment of the two islands has the effect of discouraging two-way traffic on the double-drive of Avalon Boulevard. In addition to this very desirable result, it also reduces the number of vehicles within the "congestion area" of the intersection, shown in the small diagrams by the crossing of the arrows which indicate "direction lines" of traffic. The collision points indicated by these crossings represent the various different *chances for collision* between vehicles rather than actual locations or probabilities. The *number* of these collision points is a measure of the congestion rather than actual danger involved in passing through the intersection. In an ordinary right-angle intersection, there are sixteen such collision points.

OFFERS MORE THAN USUAL SAFETY

A glance at the diagram shows that, under the most unfavorable conditions, either plan for this intersection offers greater safety and less congestion than a normal four-way intersection. Since several of the arrows represent directions of movement that are highly improbable, the danger of collision is even less than the numbers indicate. There is little choice, on this basis, between the two plans. The "island" scheme directs traffic more accurately, but it is not so clear to the approaching driver as the "circle" scheme. Moreover, the simplicity of the latter gives it a pleasing appearance of orderliness and formality lacking in the other. For this reason the circle scheme is recommended.

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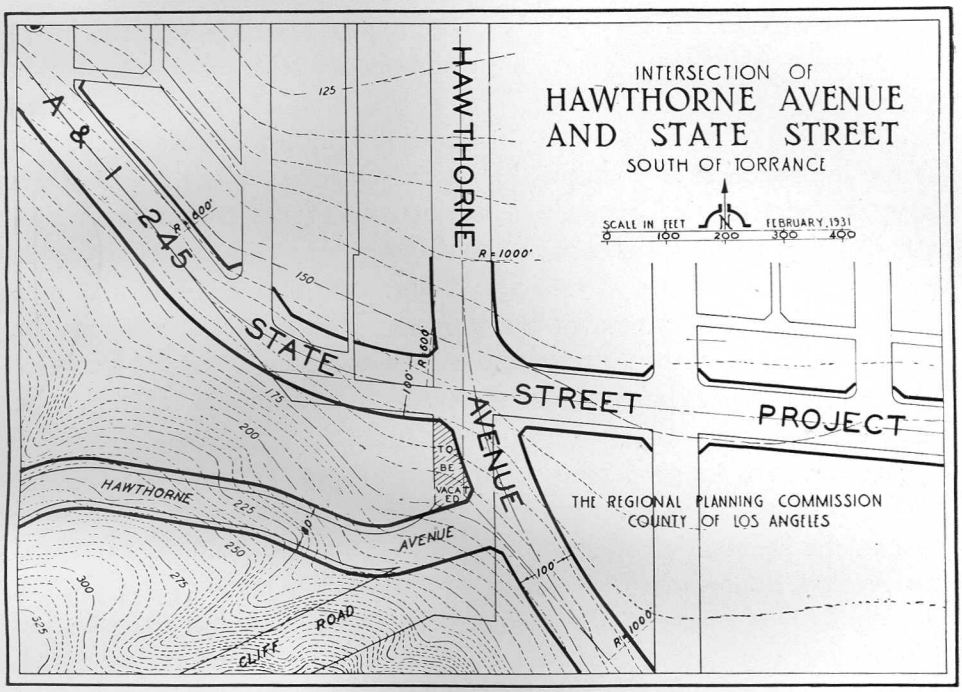
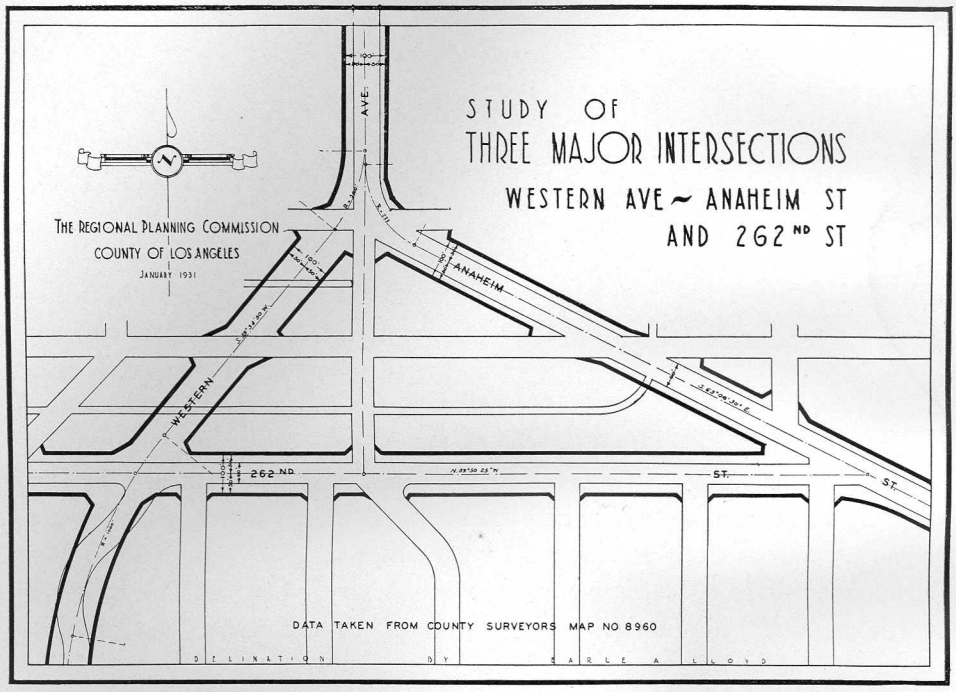


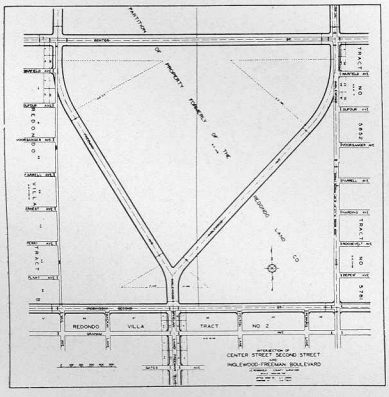
COOPERATION WITH THE COUNTY SURVEYOR

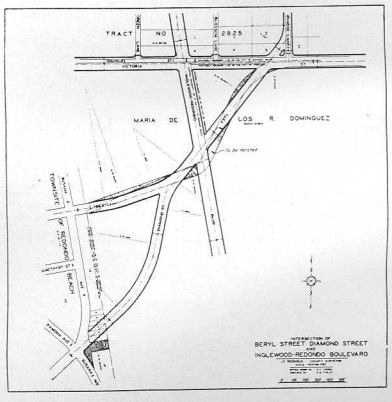
These illustrations of intersections in unincorporated territory are excellent examples of coordination of the Regional Planning Commission and the County Surveyor's office. At all stages of highway planning, the latter is frequently requested by the Commission to furnish accurate information in the form of instrument surveys of proposed routes. These surveys are the bases of many of the detailed studies in this report; on the other hand, controlling factors for many of the highway surveys are first determined by studies made by the Commission. Only the closest cooperation between the two departments has saved the Regional Planning Commission from the necessity of maintaining its own survey parties to precise its work in the field. The four drawings shown here represent different stages in the exchange of effort and information. For example, the Regional Planning Commission used the exact alignment of State Street as a beginning in determining the proper method of extension of Hawthorne Avenue. The final survey of the Hawthorne Avenue extension will be made by the Surveyor's office according to this study. The upper drawing opposite is a simplified rendering of a County Surveyor's map that defined preliminary plans prepared by the Planning Commission.



The two drawings below were made in the County Surveyor's office in the course of preparing final maps. Construction drawings will eventually be made from these survey maps.

The value of such precise surveys lies not only in the assurance of correct, properly related alignments, but also in the opportunity given the owners to proceed with the economical development of adjacent land according to a definite plan.





IV. PROBLEMS INVOLVED IN THE DESIGN OF THE HIGHWAY PLAN

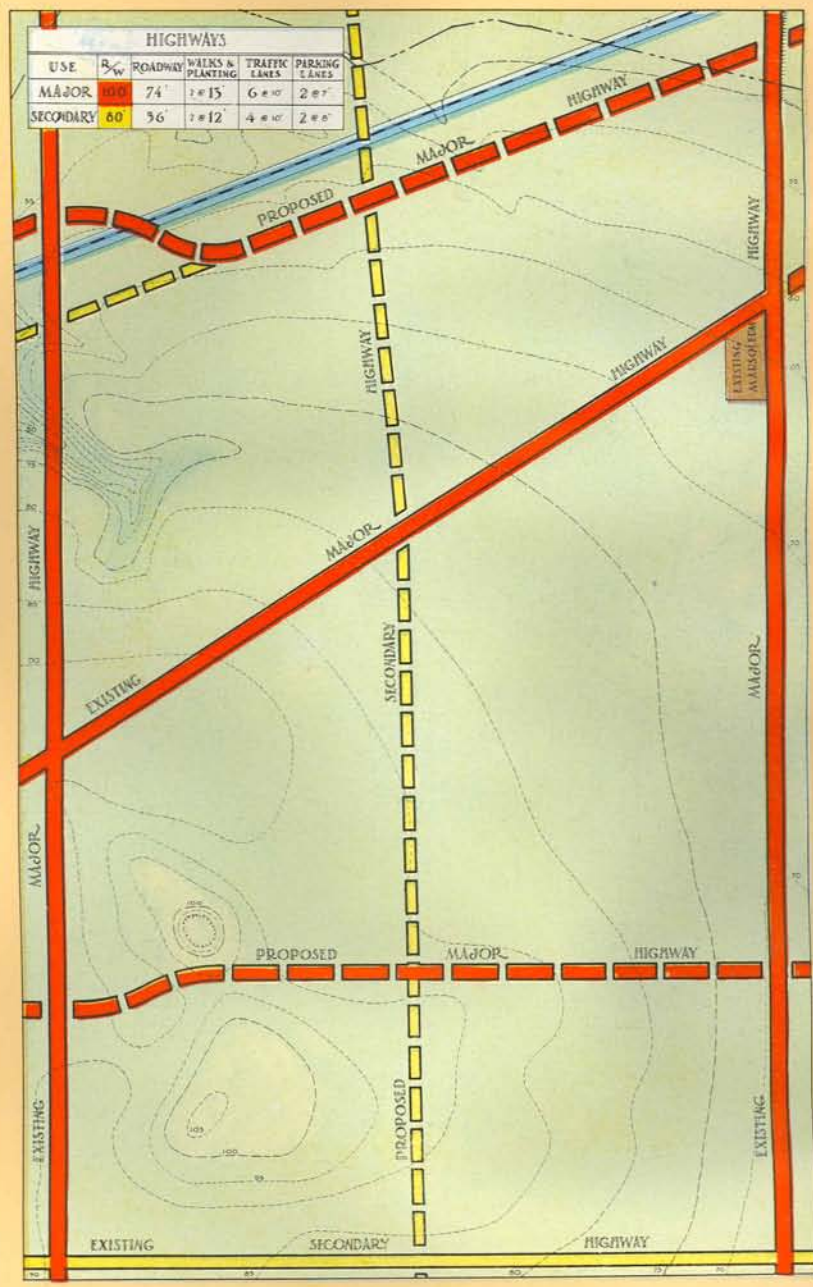
DESIGN FOR A COMMUNITY PLAN

The earlier planning can be undertaken, the more powerful it becomes as an instrument for the prevention of waste and the production of an ideal community. To illustrate the value of such planning in advance, based upon a thorough analysis of future community needs while the land is still in acreage, a series of plans is shown on the following pages, representing an actual design prepared in the office of the Commission. Part of this tract of 1,000 acres has already been subdivided by the owner in accordance with the design suggested, and an extensive tree planting program is being inaugurated this year.

An essential and outstanding feature of the design is the careful proportioning of the various types of uses so as to make zoning easy and natural. Space is provided for industries, business, homes, parks and public buildings in such a way that each has enough space, and, moreover, space so selected as to be the most desirable for that particular use.

All this has been carefully related to the surrounding territory as well, and it is believed that under such circumstances, attempts at the establishment of non-conforming uses will be rare indeed. The possibility of estimating with considerable exactness the total ultimate population of the area under this plan will make it easy to make proper provision for public utilities of all kinds without wasteful reconstruction.

Another feature of importance is the sense of unity which is given by the use of a definite focal point for the community business center, the provision of gracefully curved streets bringing all parts of the area into easy communication, and the continuity of the parks and parkways. This will result in a balanced growth, and will lead to orderliness and beauty. The only fixed considerations limiting the design in this case were the existing railroad line at the north, the locations of major highways as established by studies for the Regional Plan (shown opposite) and the economic necessities involved in the desire to produce a plan that would commend itself to the business sense of the owners.



1-HIGHWAYS

8.3 PERCENT of TOTAL AREA

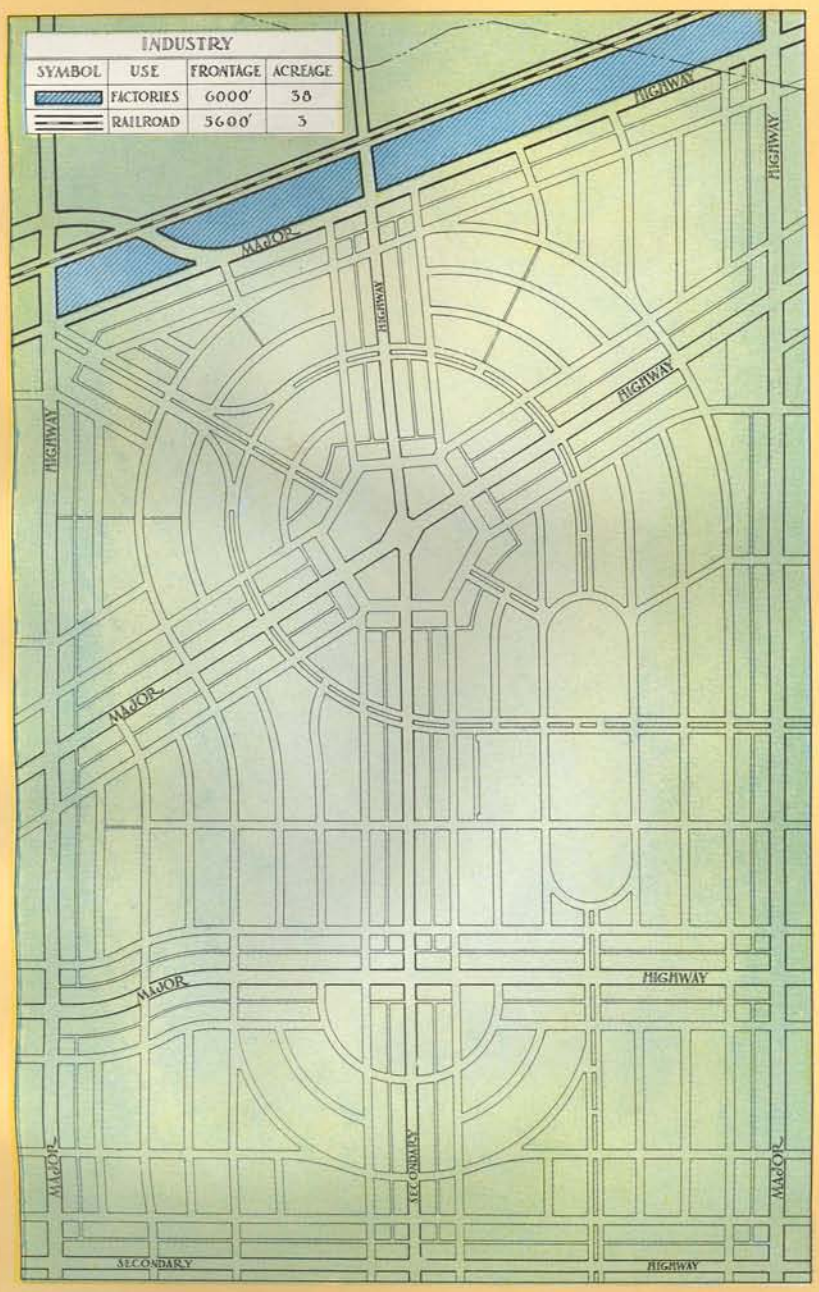
Scale 0 500 North 1500 2000 Feet

May 1930

The REGIONAL PLANNING COMMISSION · COUNTY of LOS ANGELES

CHARLES H. DIGGS - DIRECTOR

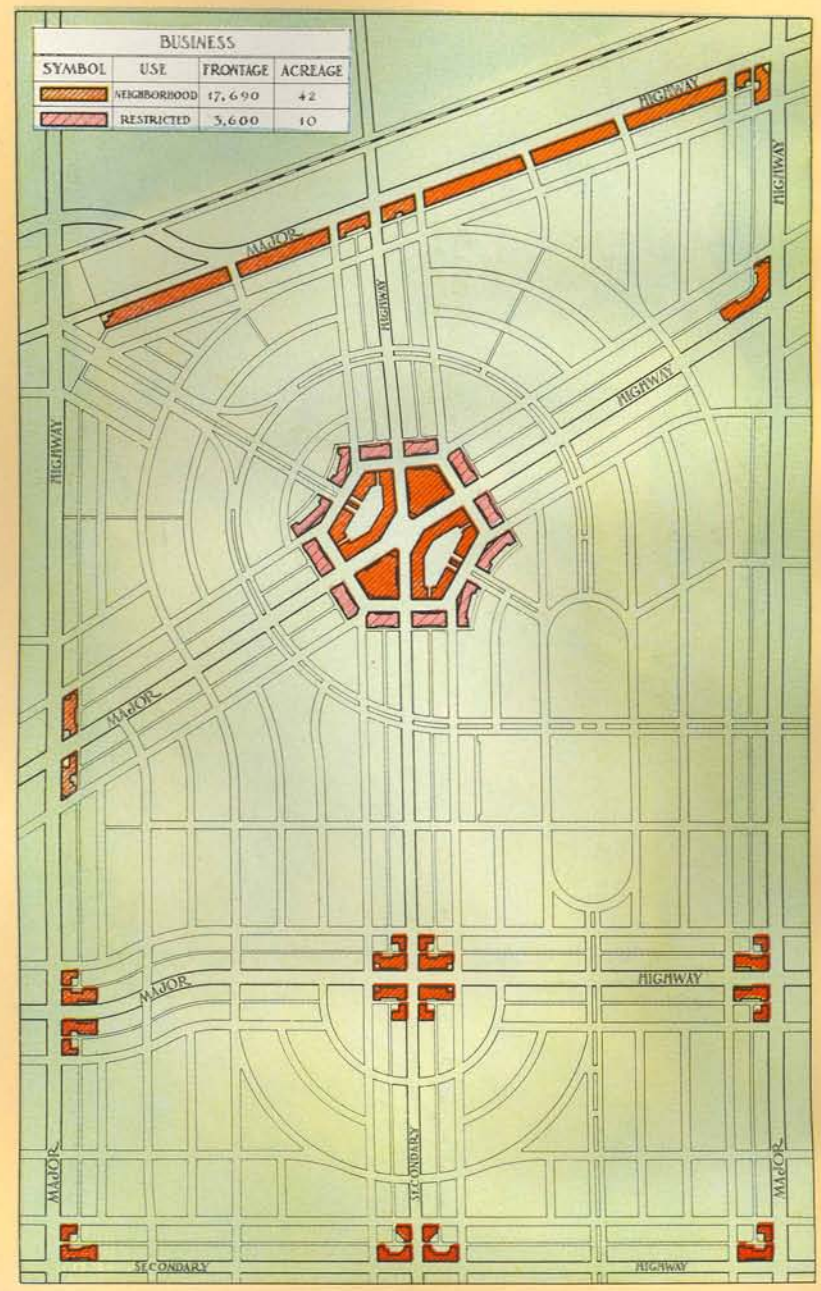
BY KENNETH SIMPSON



2 - INDUSTRY

4 PERCENT of TOTAL AREA

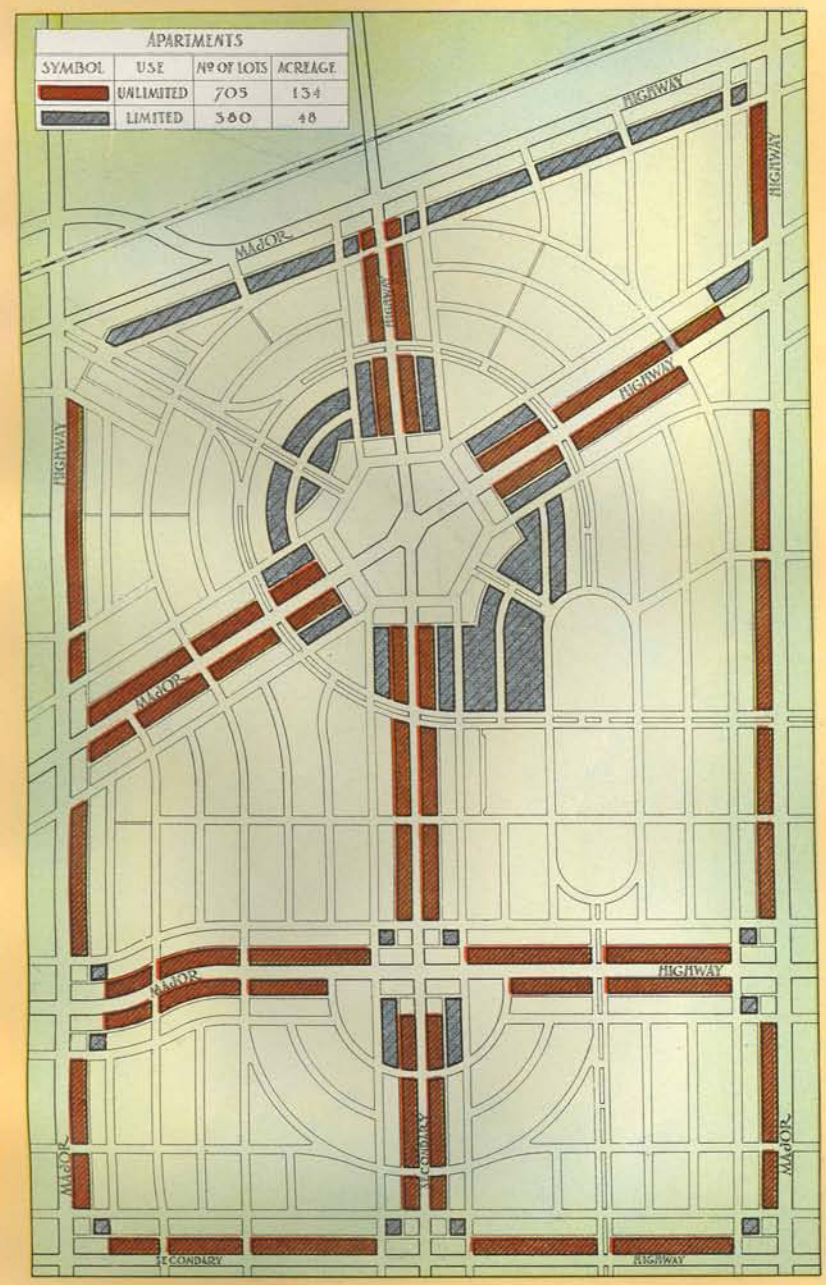
A natural location for small Factories – where Transportation Facilities are best – is along the Railroad – Large deep lots are provided.



3 - BUSINESS

5 PERCENT of TOTAL AREA

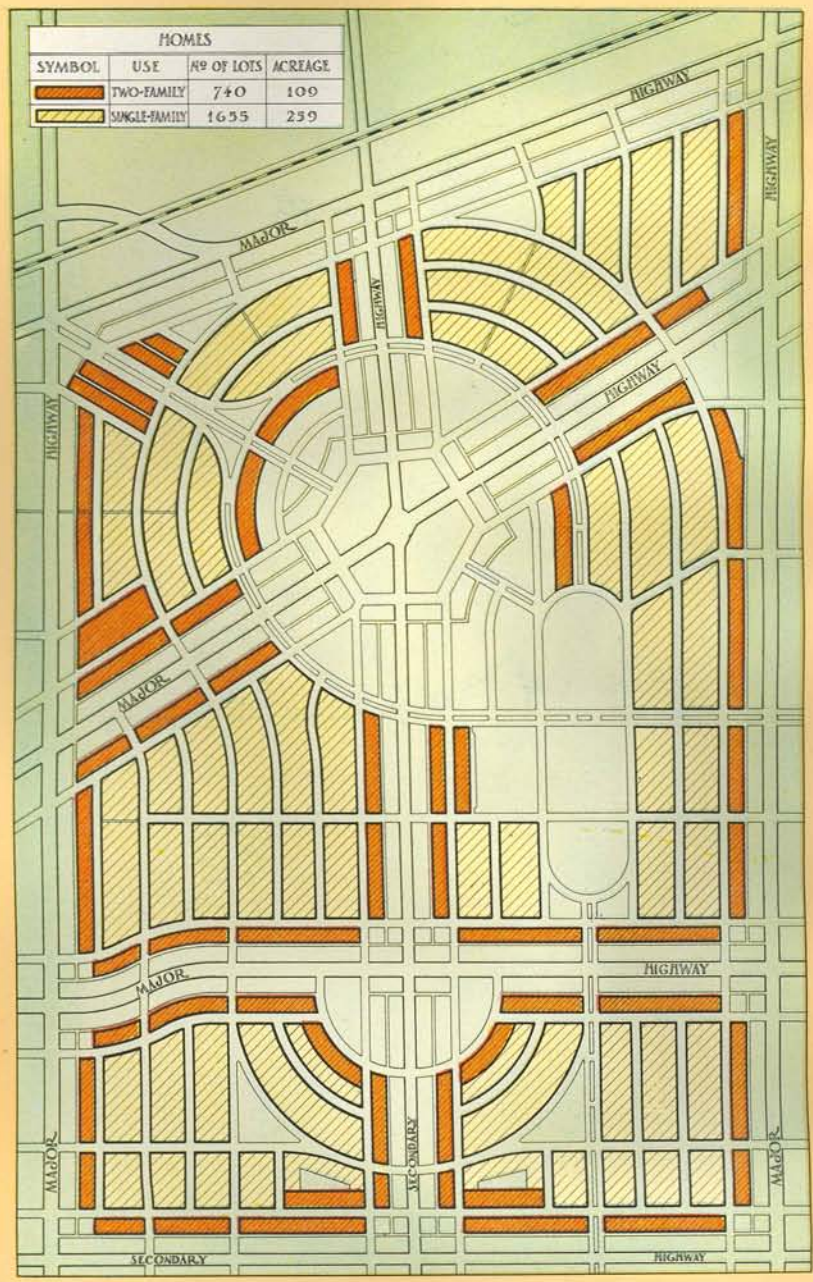
A modern arrangement of Commercial Properties at Travelled Centers - not too extensive - is shown. Note adequate space for Automobile Parking.



4 - APARTMENTS

15 PERCENT of TOTAL AREA

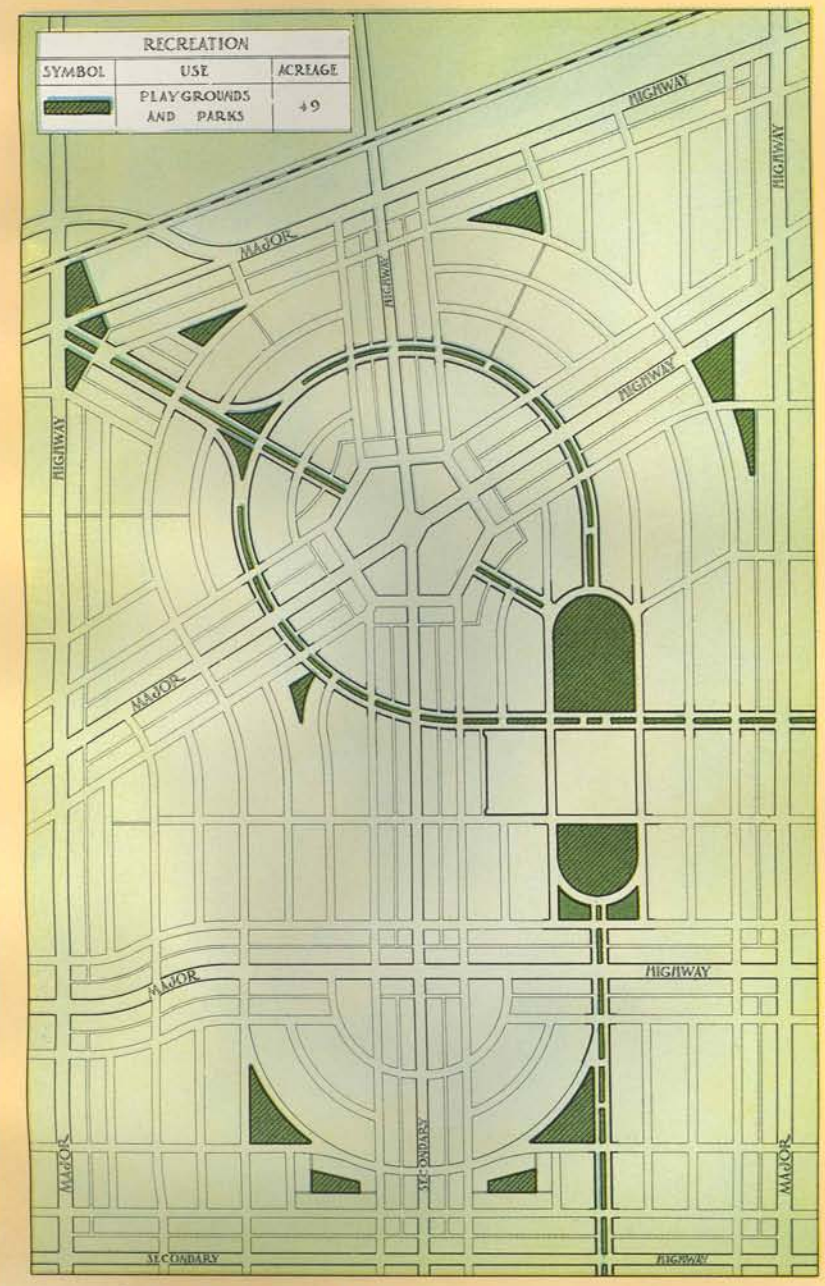
Apartments provide a natural Intermediate Use for areas which are not needed for Business - nor secluded enough for Private Homes.



5-HOMES

37 PERCENT of TOTAL AREA

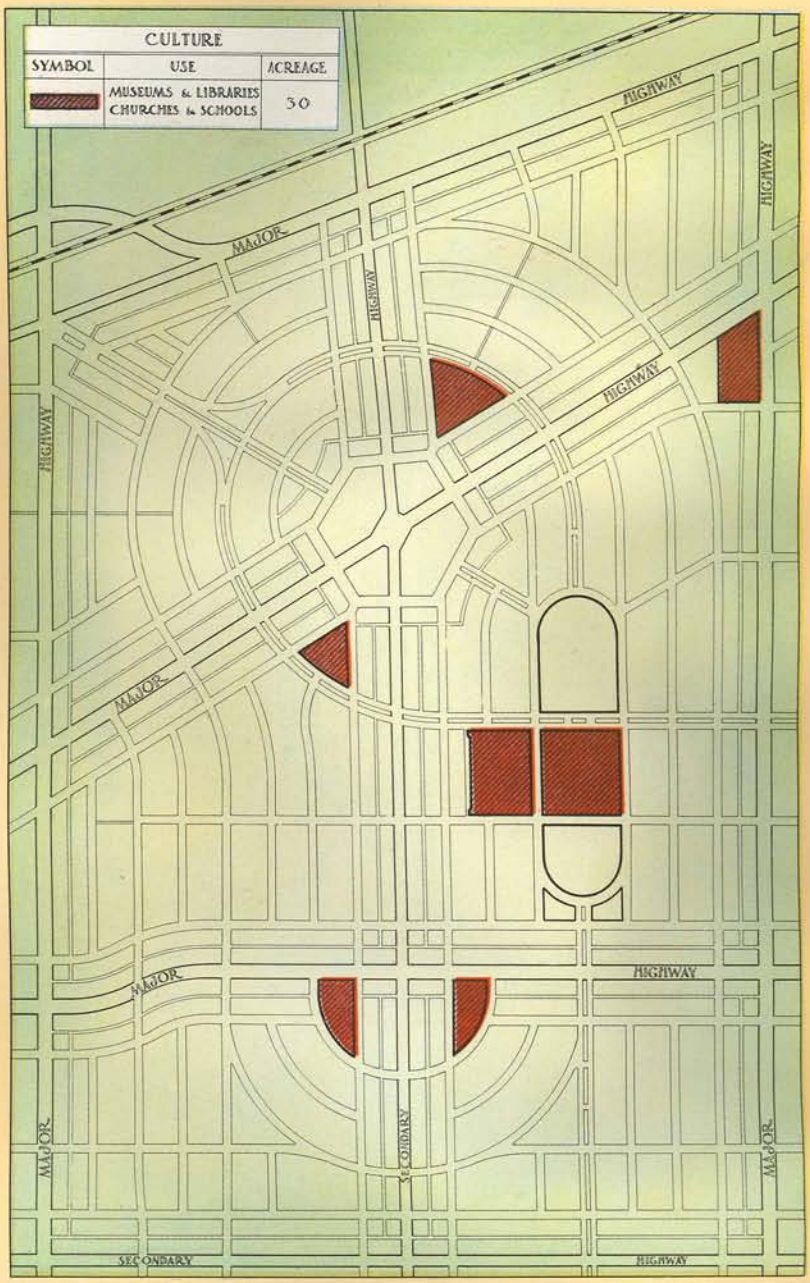
Quiet Residential Streets within each unit of the design are removed from the Disturbance and Danger of Through Traffic - yet easily accessible.



6-RECREATION

5 PERCENT of TOTAL AREA

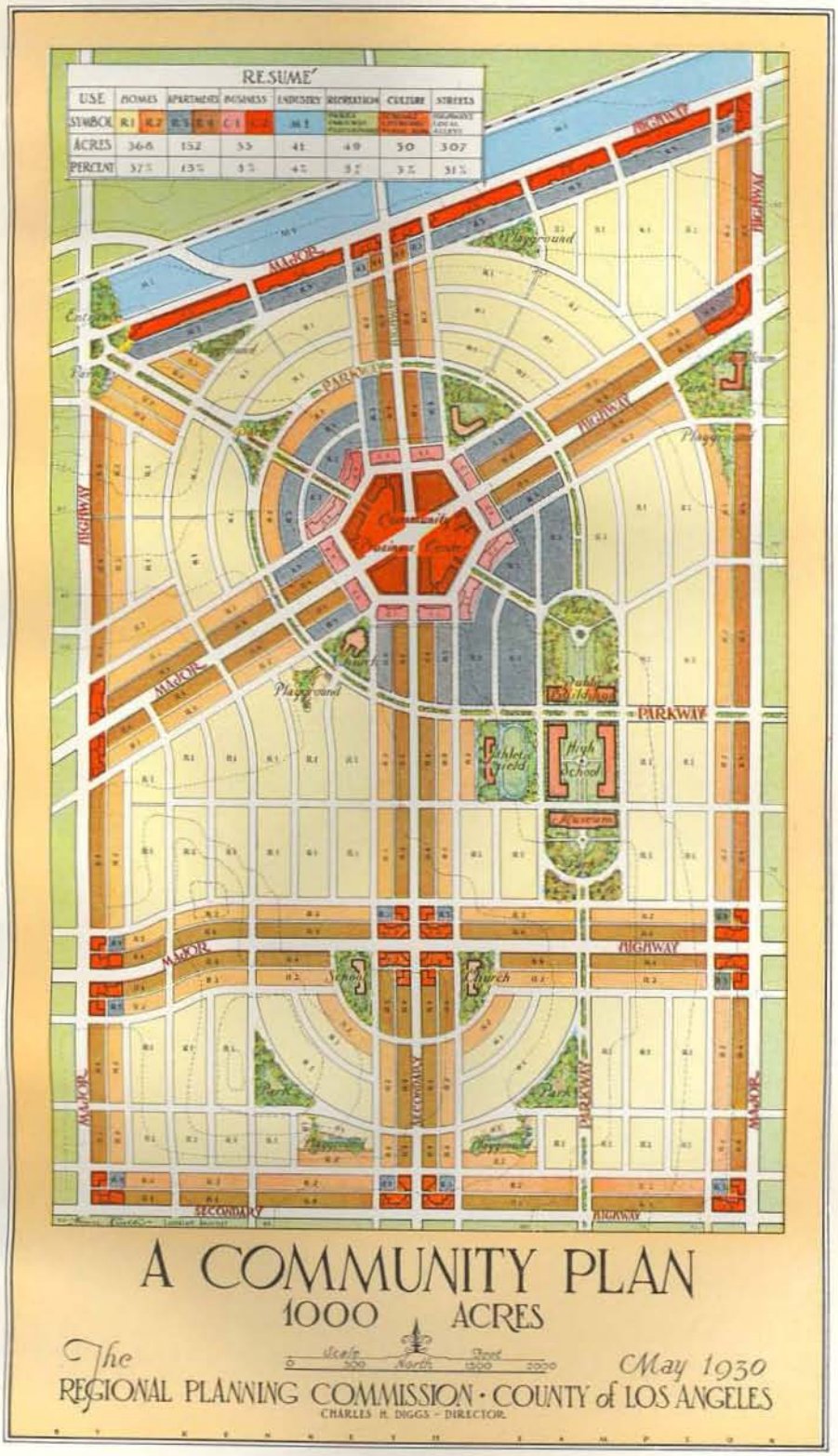
The Parks and Parkways form a Unified Scheme making the Community more Beautiful and Livable and increasing the Value of nearby Property.



7-CULTURE

3 PERCENT of TOTAL AREA

Public and Semi-Public Buildings will find Here adequate Sites ready at hand – instead of facing the Expense of combining several Small Lots.



A COMMUNITY PLAN
1000 ACRES

Scale 0 500 North 1000 2000 Feet

The REGIONAL PLANNING COMMISSION · COUNTY of LOS ANGELES

CHARLES H. DIGGS - DIRECTOR

May 1930

COMMUNITY DESIGN CREATES AND PROTECTS PROPERTY VALUES

The area involved is large enough to constitute an independent townsite. A community business center is shown as the central feature of the plan. This business section is to be entirely encompassed by an attractively planted parkway, and made readily accessible from all directions. Adequate off-street parking space for automobiles is provided.

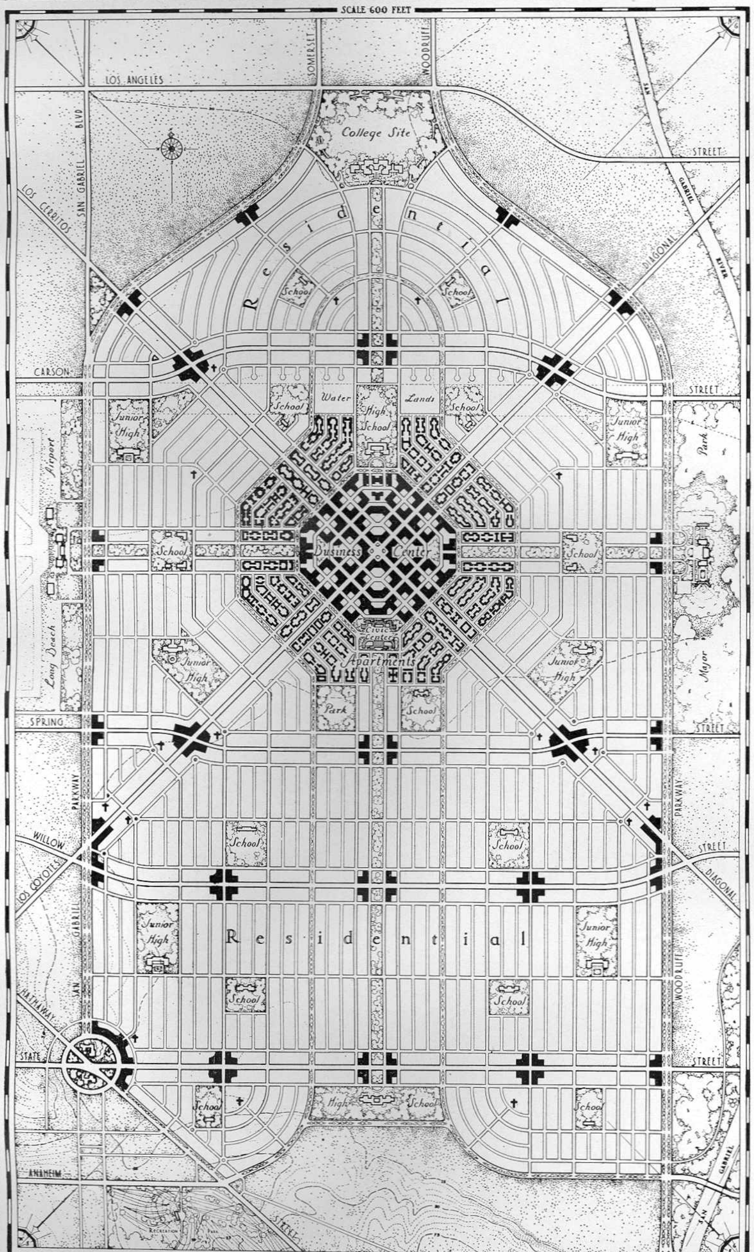
Each segment of the plan is bounded by major and secondary highways, which set it off as a neighborhood unit, so designed internally as to protect single family dwelling districts (shown in yellow) from the disturbing influences of traffic. Recreation facilities are provided within each segment. The neighborhood shopping centers are sufficiently removed from these single family dwelling districts to avoid a conflict of values, yet are easily accessible.

The size and proportions of the areas given over to each type of land use are in accordance with the Commission's findings as to the proper relationship between population, industrial acreage, and business lots as adapted to this particular area. There are 2.35 acres of industrial land for each 1,000 persons, and 50 feet of business frontage for each 100 persons. These ratios between the amounts of land designated for the various uses have been very carefully adjusted to conform to the laws of supply and demand, according to observed conditions in existing communities elsewhere in the county. Failure to adhere to them in subdividing land and selling real estate will have a serious influence upon the economic structure of the entire commonwealth.

DESIGN COSTS NO MORE

A final fact of considerable importance is that it will require no greater expense to prepare this raw land for the market under the plan here presented than it would to develop the usual monotonous rectangular system. Yet the most unattractive piece of property in this design is better and of greater actual value (although it costs no more) than the best lot, under like conditions, in a "checker-board" tract. The ideal use of each lot here is fixed by the design itself—and the result is balance, charm and lasting value.

This example of community design includes and typifies many of the fundamental problems of city planning. The design as finally accepted, and now being carried out, is a striking demonstration of planning in practice.



A TOWN PLAN
IN RANCHOS
LOS CERRITOS & LOS ALAMITOS

The REGIONAL PLANNING COMMISSION — COUNTY OF LOS ANGELES

CHARLES H. DIGGS – DIRECTOR. WERNER RUCHTI – LANDSCAPE ARCHITECT. Wm J. FOX – CHIEF ENGINEER.

APRIL 24 1931

DELINEATION BY VERNON COTTER

NEED OF A PLAN FOR THE RANCHO LOS CERRITOS

The Montana Ranch, located northeasterly of the City of Long Beach, embraces the larger portion of the original Rancho Los Cerritos, which is a part of the grant from Spain to Manuel Nietos. Still largely undeveloped, this great ranch presents a rare opportunity for the ideal application of city planning principles and methods. Directly adjoining the ranch to the south are three large land holdings owned by Mrs. Susanna Bixby Bryant, Mr. Fred Bixby and The Bixby Land Company. Any development of any one of these holdings should be based upon a comprehensive plan including them all. With such a plan established, each independent development will contribute materially to the enhancement in value and attractiveness of the adjoining holding, as well as of the surrounding communities in general.

The total area of that part of these four ownerships lying within this county is approximately 10,000 acres. Taken as a unit this property presents an opportunity to develop a new community complete in every respect. It seems evident that in the natural course of development the nucleus of that new community will be fixed at some point in this area. Each street, road or highway built there will tend to fix the character of that future city. Roads and highways are even now being projected, one by one, to and through this large area, although so far it has not been marred by the unrelated, piece-meal subdivision development which sooner or later fringes the border of most of our American cities.

CERTAINTY OF DEVELOPMENT

The Rancho Los Cerritos and a large portion of the Rancho Los Alamitos have been held inviolate from the hands of land speculators since the time of the original Spanish grants, through the Mexican era, and under the regime of the United States to the present day. To permit this historic land to become a mediocre collection of commonplace streets, houses, and shops would be deplorable. There is no doubt that some portions of this great area will be developed in the near future. Three major road projects, which are going forward rapidly with the approval of the owners of the property involved, indicate that this critical time is not far off. If these first three roads, and those which follow, are not arranged according to a comprehensive, predetermined plan, the tragedy of the commonplace which has been mentioned will be unavoidable.

A DISTINCTIVE PLAN PRODUCED

The Regional Planning Commission has been fully appreciative of its responsibility with respect to the actual and potential qualities inherent in the Ranchos Los Cerritos and Los Alamitos. It has carried out a careful study of a detailed development plan for the remaining 10,000 acres of these two great ranchos, conducive to the best interests of the owners. The Commission's technical staff has studied the problem from the standpoints of engineering, landscape architecture and economics. These studies, since they were not hampered by existing development, have made more use of creative design than is possible in the usual adaptive planning. The plan of Los Cerritos typifies the fundamental application of certain principles of city planning. It demonstrates the practice and procedure which encourage the best use of the land and obviate subsequent readjustment. The design represents character, and suggests a natural community life, thought and action in a pleasant environment. It is conducive to qualities of community charm and community comfort, and at the same time assures the maximum security of values.

SITUATION CALLS FOR UNUSUAL ALIGNMENTS

The plan contains certain features which may seem at first glance to be contrary to the principles followed in the highway plan for other parts of the county. But a clear understanding of the real problem shows that this scheme is in harmony with, and a definite part of, the larger plan. The two diagonal highways will serve a real need in providing for the two principal movements of traffic on direct lines, that is, (1) from Los Angeles southeast to the Orange County Beaches and San Diego, and (2) from the San Bernardino-Pomona region to Long Beach and the harbor district. The two parkways which border the plan are equally logical. Two of the highways from the north cannot be carried directly south because of the Bixby Hills and Alamitos Bay. But the traffic originating in the San Gabriel Valley, which will be carried by these highways, will be destined mainly for the harbor district to the west and the Coast to the southeast. It is proper then, as well as necessary, to turn them to the east or west where they join to form the two parkways. These parkways are unusually wide, but require no greater proportion of land than would be needed if all the highways were carried straight through on section lines. The diagonals also replace, to some extent, these diverted highways, making the interior of the area easily accessible.

EACH SEGMENT A NEIGHBORHOOD UNIT

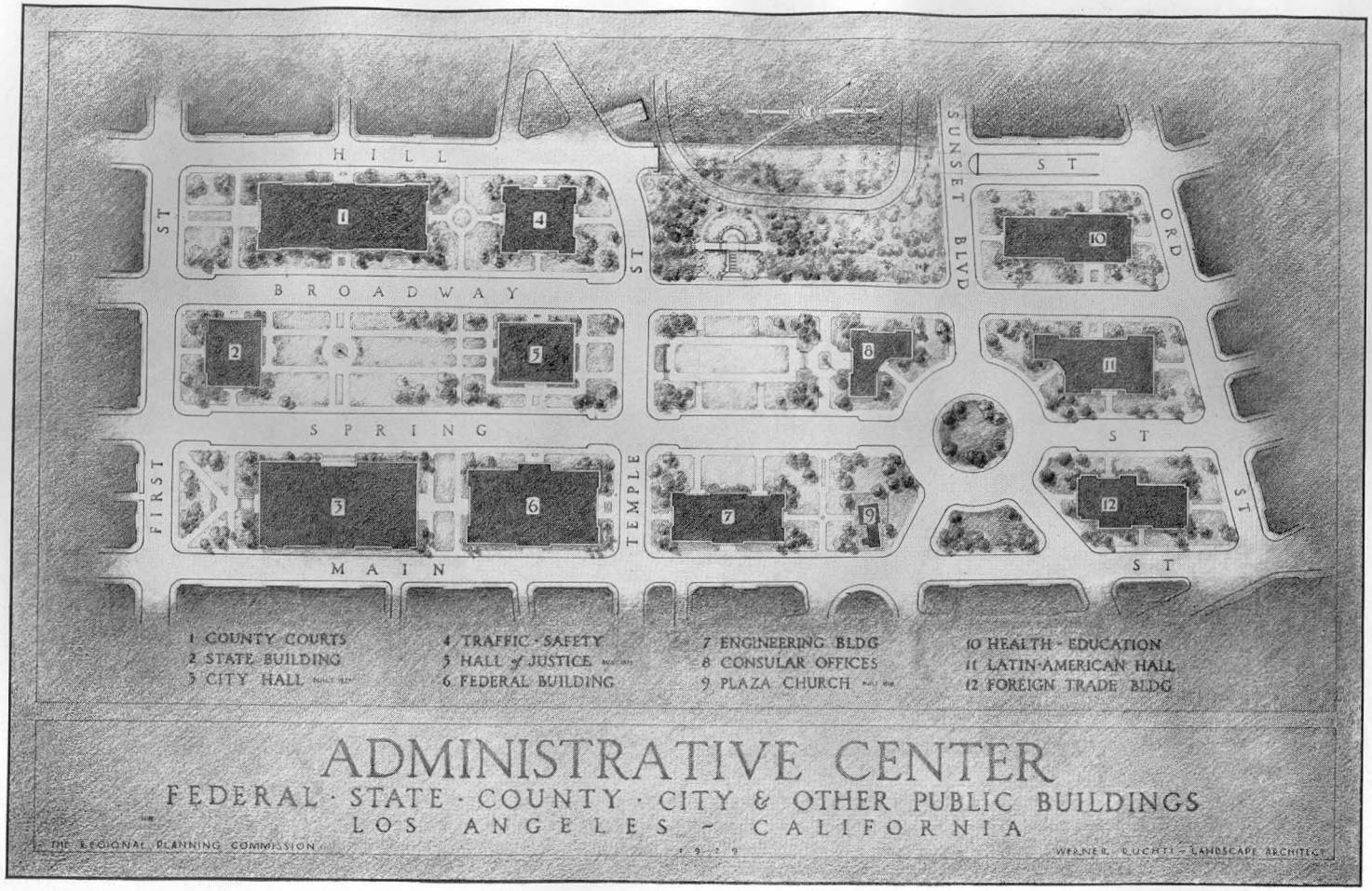
The main highways are direct and frequent, and yet they are so arranged that there is no congestion of many highways at a single point. The small number of crossings on these main highways results not only in safety and convenience for travellers upon them but also protects the interior streets from annoyance and danger of traffic. This arrangement of streets, by its very pattern, tends to regulate the uses to which the property is best suited. The individuality of each parcel of land is significant. The use is fixed by the design so that zoning by ordinance becomes merely a perfunctory matter. The protection offered each use embraced in the design is apparent. Differentiation between business districts, for example, and residential districts is accomplished by the degree of accessibility or seclusion rather than by arbitrary boundaries fixed by a zoning ordinance. The segments bounded by these main highways are thus seen to be well defined residential units protected not only against traffic annoyances but also against encroachment by non-conforming uses.

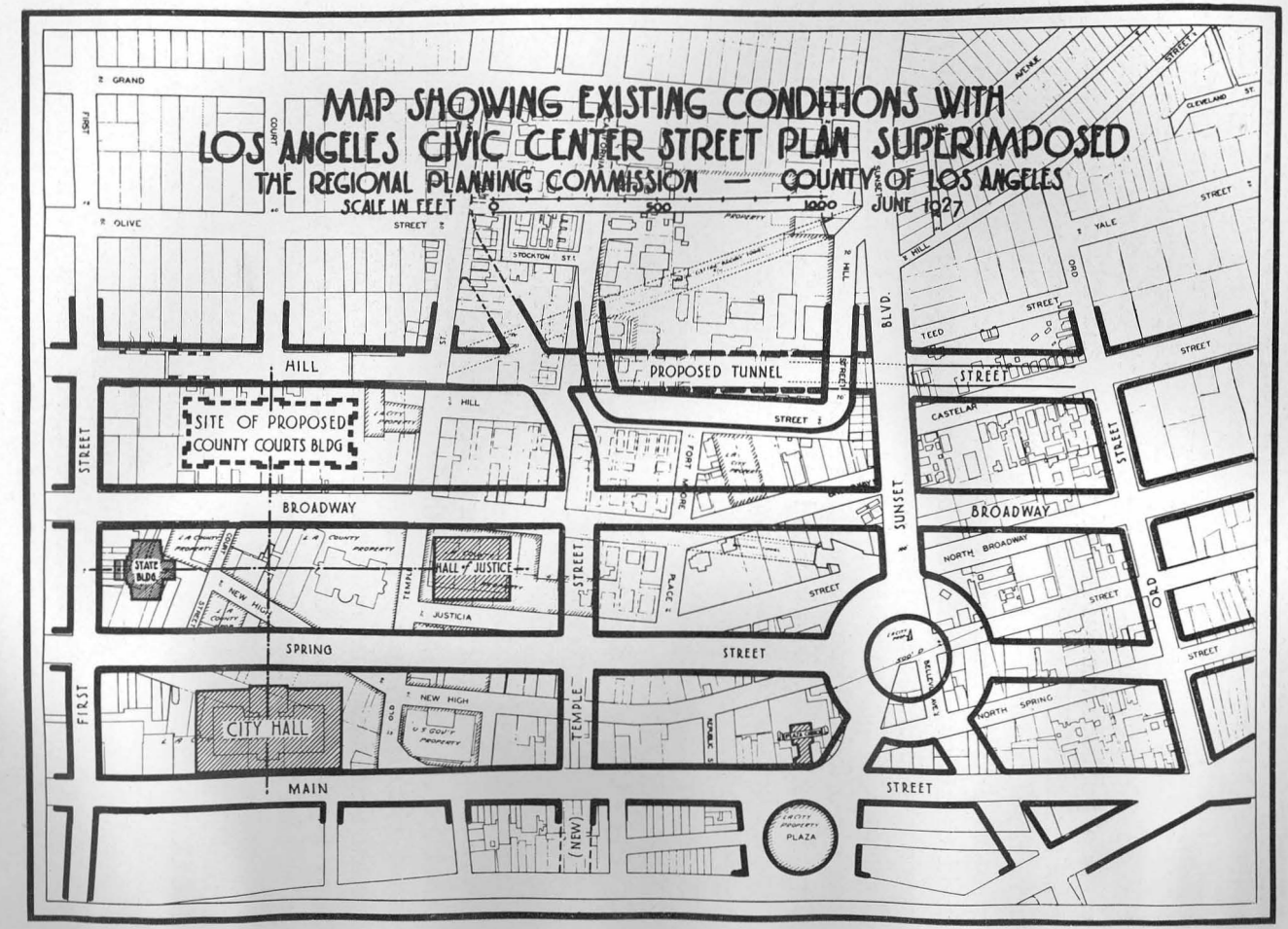
Adequate neighborhood playground and recreation facilities are easily and economically located in each segment. Elementary school sites can be so placed that no small children have to cross busy highways. It is proposed that the land holder retain these areas at acreage prices, in order that they may be made available to the proper authorities when needed.

In addition, six junior high schools, two senior high schools, and a college are provided for. The distribution of these has been very carefully worked out in relation to the population and to one another. 20 acres are allowed for each elementary school; 30 acres for each junior high school; 50 acres for each senior high school; and 130 acres for the college site. It is anticipated that these areas, together with the park mall down the center (which also cares for a difficult drainage problem) and the large park areas along the San Gabriel River Channel will serve the recreational needs of the community.

Ample provision is made for apartment houses just outside the central business district, the gradation of uses being such as to protect property values. The civic center is conveniently located and carefully planned.

There is no space within the limits of this plan for industry, but that important property use is still cared for within the limits of property controlled by the same interests. In the adjacent area just north of the Long Beach Airport is a considerable extent of land which is well located and adapted for industrial use.


HILL
ST
BROADWAY
SUNSET BLVD
ORD
ST
SPRING
FIRST
TEMPLE
MAIN
1 COUNTY COURTS
2 STATE BUILDING
3 CITY HALL
4 TRAFFIC - SAFETY
5 HALL of JUSTICE
6 FEDERAL BUILDING
7 ENGINEERING BLDG
8 CONSULAR OFFICES
9 PLAZA CHURCH
10 HEALTH - EDUCATION
11 LATIN-AMERICAN HALL
12 FOREIGN TRADE BLDG
ADMINISTRATIVE CENTER
FEDERAL · STATE · COUNTY · CITY & OTHER PUBLIC BUILDINGS
LOS ANGELES - CALIFORNIA
THE REGIONAL PLANNING COMMISSION
1929
WERNER RUCHTI - LANDSCAPE ARCHITECT


MAP SHOWING EXISTING CONDITIONS WITH
LOS ANGELES CIVIC CENTER STREET PLAN SUPERIMPOSED
THE REGIONAL PLANNING COMMISSION — COUNTY OF LOS ANGELES
SCALE IN FEET 0 500 1000
JUNE 1927
GRAND
OLIVE
HILL
STREET
PROPOSED TUNNEL
SITE OF PROPOSED COUNTY COURTS BLDG
BROADWAY
SPRING
MAIN
FIRST
STATE BLDG.
HALL of JUSTICE
JUSTICIA
CITY HALL
NEW HIGH
TEMPLE
SUNSET BLVD.
CASTELAR
NORTH BROADWAY
NORTH SPRING
PLAZA
(NEW)

THE ADMINISTRATIVE CENTER STREET PLAN

NEED FOR A CITY AND COUNTY ADMINISTRATIVE CENTER

As long ago as 1923 the general location for the City and County Administrative Center in the City of Los Angeles was decided upon by the electors. Many plans were proposed, which collectively did much to develop public consciousness of the needs and advantages of such an Administrative Center, particularly when the people voted a large sum of money for public buildings. Naturally, all concerned wished the money to be used to the best advantage and many realized that such a result could be achieved only on the basis of a comprehensive plan covering present and future needs. The Board of Supervisors requested the Regional Planning Commission to prepare a design for an Administrative Center that could form a basis for an agreement between the County and the City of Los Angeles. This involved not only the location of public buildings, but also, because of existing physical conditions, the solution of a serious highway traffic problem.

COMMISSION'S PLAN GIVEN FULL APPROVAL

The Administrative Center Street Plan shown here was approved on December 5th, 1927, by both the County and the City of Los Angeles. The area covered by the official plan is bounded on the north by Ord Street, one block north of Sunset Boulevard. Main Street and First Street form the easterly and southerly boundaries respectively, while Hill Street with its northerly projection forms the westerly boundary. At the present time, four of the main heavily traveled north and south thoroughfares of downtown Los Angeles either border, pass through, or come to an end in, the Administrative Center as thus defined.

CHANGES IN TOPOGRAPHY REQUIRED

The arrangement of all the public buildings in a group around a well-designed, open mall, however desirable in principle, could not be adhered to in this location. The particular portion of the city involved now forms a distinct barrier to traffic because of its topography and its narrow, crooked and closed-end streets. It was essential to care for the heavy north and south traffic on Spring, Broadway, and Hill Streets by projecting them northerly from the present alignment south of First Street

straight through the area in question. Spring Street from the south now terminates at Temple Street, and from the north makes an angular termination at Sunset Boulevard. The opening and widening from Temple Street to Sunset Boulevard of this important thoroughfare is now under way and will be completed during this year, in accordance with the plan.

The tunnel on Broadway will be eliminated when this street is carried through directly to North Broadway at Ord Street. The present Hill Street tunnel is to be eliminated when Hill Street is widened and extended through a new tunnel from California Street. This new tunnel will pass under Sunset Boulevard to the intersection of Castelar and Ord Streets. Surface ramps are provided for access to Sunset Boulevard.

From Sunset Boulevard to First Street which is an equally important east and west thoroughfare is a distance of no less than 2300 feet. No direct line now exists across the Administrative Center between these two. The need for a relief artery was obvious. Temple Street was therefore relocated so as to pass to the north of the Hall of Justice, and to connect directly with Aliso Street at Los Angeles Street. This relatively simple treatment makes possible a maximum use of two important streets which now come to an end in this general area. The Temple Street re-alignment and the new Hill Street Tunnel will necessitate elimination of the present Hill Street approach to the top of the knoll between Temple Street and Sunset Boulevard. For access to the hilltop the present Hill Street connection to Sunset Boulevard is left unchanged, and a similar one is proposed on the south to connect with California Street.

USE OF CIRCLE AT FIVE-POINT INTERSECTION

A circle, 500 feet in diameter, is provided to care for the movement of traffic at the five-way intersection of Sunset Boulevard, Spring Street and Macy Street. This type of treatment for a five-point intersection has been found very successful, wherever the circle is made sufficiently large. Aside from its very practical advantages, the location of this circle, with respect to the old plaza circle and as a point of termination for Spring Street, will permit its being made a spot of much interest and beauty. The inner circle would make an adequate site for an appropriate monument in commemoration of the founding of Los Angeles. On the blocks surrounding the circle there should be buildings designed to harmonize with the architecture of the early days, as expressed in buildings still standing at the old plaza, and also with that of the present day, as exemplified by the City Hall, the Hall of Justice, and the new State Building.

DEVELOPMENT OF THE MAJOR HIGHWAY

GRADUAL DEVELOPMENT MADE POSSIBLE BY PLANNING

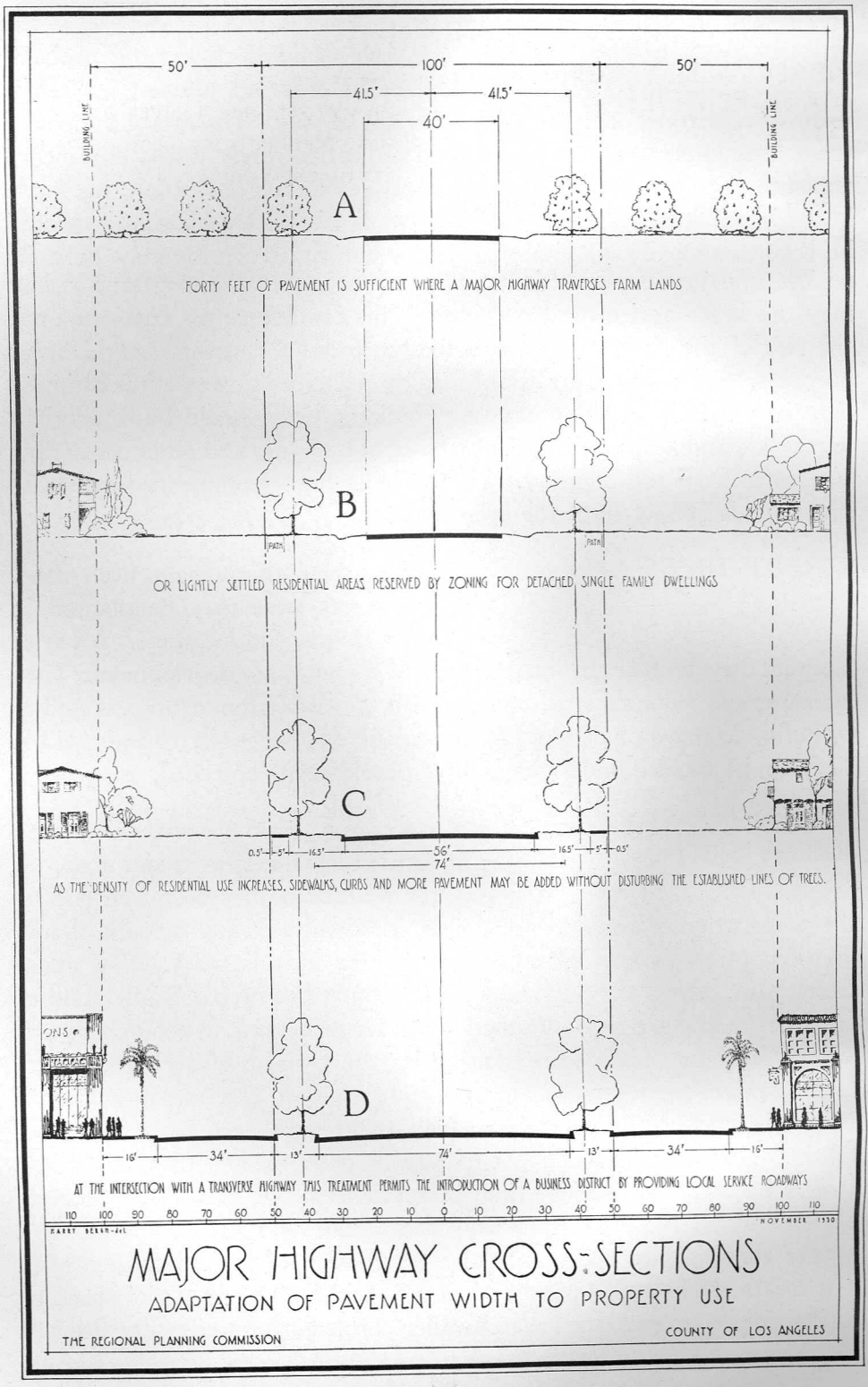
Experience has demonstrated that the highway system can develop in a very natural manner after a comprehensive plan has been prepared and officially adopted. But this is true only when the studies preliminary to the design of the highway plan have been thorough. The transition from farm land to highly improved city lots is a great one, and usually takes place gradually. It is therefore rarely practicable or advisable to accomplish the transition from country road to city street in one step. A more normal development can be best assured through the adoption and administration of highway policies which will gradually and progressively bring about the desired results. In general, such policies should prescribe that partial construction undertaken at any time be adjusted to the final plan.

WHEN PLAN SHOULD BE FORMULATED

The ideal time to start formulating a major street plan is when the land is still in ownerships of large acreage. The fact that the land is being used for agricultural purposes assists, rather than hinders, the formulation of the plan. This plastic stage affords the best opportunity to work out a proper street plan which will become the framework for orderly development and form the character of the future community. Such a plan gives the present and future land owners a predetermined design which will assure them the best use and therefore the greatest value of the land. In setting forth the plan thus far in advance, care must be exercised that it is not exploited to the detriment of the land owner.

THE FIRST PUBLIC DEDICATION

The first step in the administration of the plan is taken when the first road is offered for dedication. This road may be necessary at that time simply as a means of access to farm land and of value to only one or two property owners. Its future importance, however, requires that its alignment conform to that prescribed for it in the plan. Where such dedication is offered, other than as a part of a subdivision, it is not necessary that the ultimate width indicated in the plan be required in the first instance. If the alignment is as prescribed, additional width can readily be procured when the land is subdivided.



MAJOR HIGHWAY CROSS-SECTIONS

ADAPTATION OF PAVEMENT WIDTH TO PROPERTY USE

THE REGIONAL PLANNING COMMISSION

COUNTY OF LOS ANGELES

SETBACK LINES

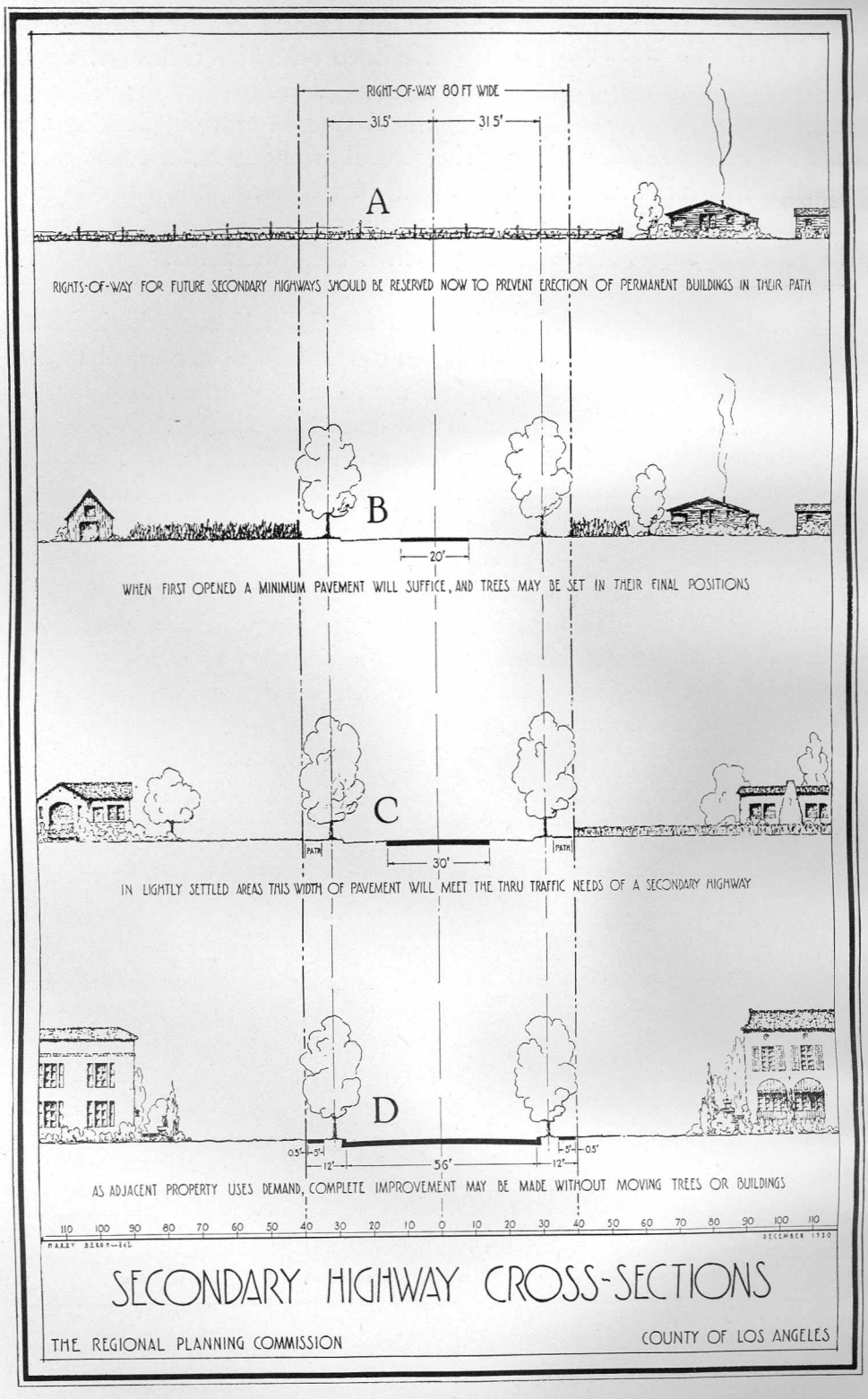
It is possible and practicable to establish building lines and setback lines in order to prevent encroachment of structures upon the ultimate right of way. The establishment of these lines immediately after the first dedication rarely works any inconvenience upon the land owner. If for any reason full dedication was made in the initial step, only such surfacing as is absolutely necessary should be constructed. Then, although no permanent structures may be built on the unpaved portion of the right of way, the adjoining land owner may use it for agricultural purposes. This condition may continue until the rest of the right of way is actually needed for streets and highway purposes. Setback lines are established by ordinance to protect the ultimate right of way. In addition to these, building lines should be established to regulate and keep uniform the distance of buildings and other permanent structures from the highway. The building line recommended on major highways is 50 feet from the property line.

STREET TREES

When these things have been done, the street trees may be planted in their permanent locations. When so planted they become an integral part of the ultimate development. Time increases the value of street trees and it is very discomforting, as well as wasteful, to move or destroy them because of changes in roadway width. This can be avoided under the plan of development proposed.

RECORDING THE SUBDIVISION

Recording of the subdivision map constitutes the next major step. If the foundation has been well laid by the preparation of a major street plan, in advance of any thought of subdivision, rarely is any difficulty encountered at this point. If a major street plan, after a thorough and careful study, has been officially adopted and the people are well informed as to its provisions, the purchase and sale of land for subdivision is made on the premise of such provisions. Little reason then remains for non-conformity. The manifestation of selfish motives on the part of one land owner is reduced by the rights of others. The full width of right of way as prescribed in the plan should always be dedicated at the time of subdivision. A policy can properly be established requiring such full dedication, without exception, as a proper condition for acceptance and recordation of the subdivision map. The treatment from this point on becomes principally a matter of installing further improvements, such as sidewalks, curbs, gutters and public utilities.



SECONDARY HIGHWAY CROSS-SECTIONS

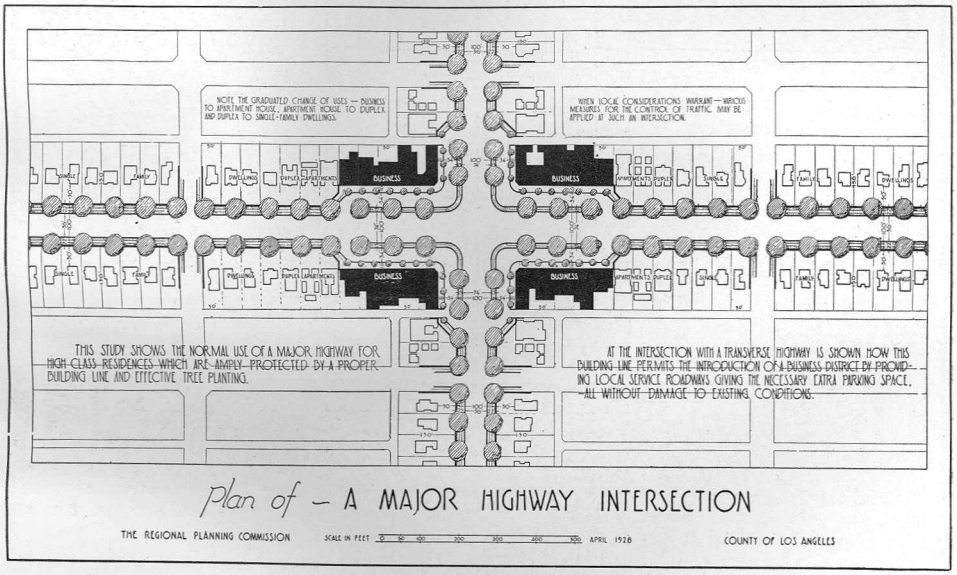
THE REGIONAL PLANNING COMMISSION

COUNTY OF LOS ANGELES

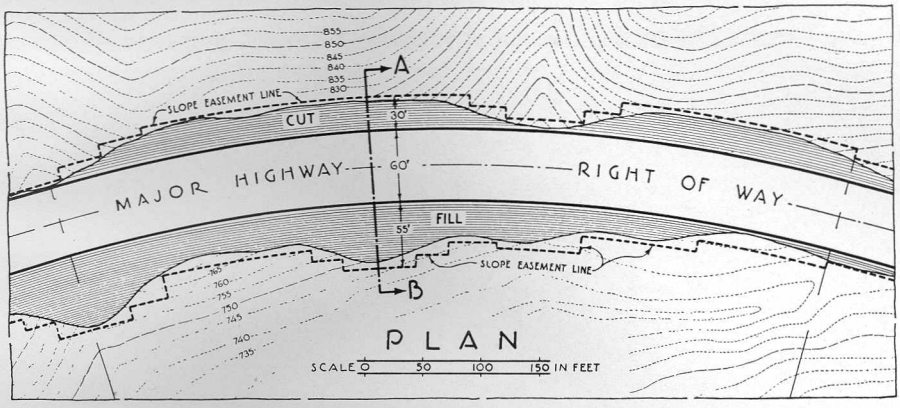
LOCAL SERVICE STREETS IN BUSINESS DISTRICTS

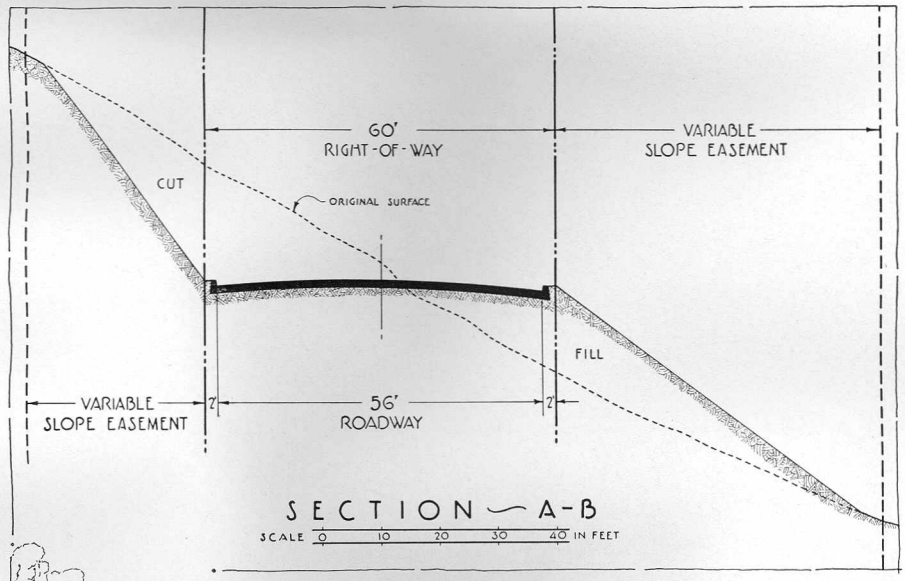
In the case of business centers established on major highways, experience has demonstrated the value and effectiveness of providing local service streets for automobile parking. The general arrangement of such service streets is shown in the drawing. They offer a space where the motorist may park his car out of the line of fast through traffic while shopping. One of the principal causes of traffic congestion is thus eliminated.

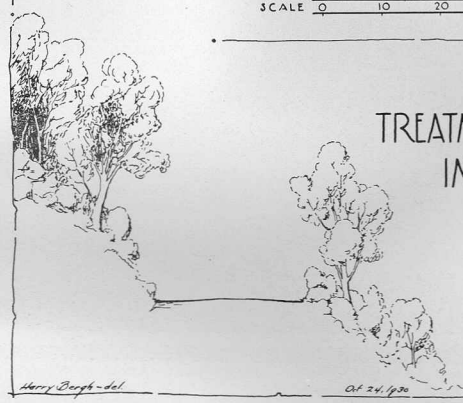
From the standpoint of the business man himself, the additional investment necessary to accomplish this treatment is justified by the benefits. Under ordinary circumstances 90% of the purchasing power to support a neighborhood business originates in the immediate vicinity. Only about 10% can be expected from the purchaser in transit. If traffic becomes so congested as to discourage the patronage of the residents in the immediate neighborhood, the loss in trade cannot be recovered from the transient purchaser. The local service street then becomes the means of maintaining local patronage. Under this plan, business blocks are located on the same building line as the dwellings farther down the street. The general character of the street and shopping center is greatly improved, traffic is facilitated, and the good appearance of the community is enhanced by the orderly arrangement of buildings.



RESULT OF FORESIGHT IN ROADSIDE PLANTING







TREATMENT OF MAJOR HIGHWAYS IN MOUNTAINOUS TERRITORY

USING A MINIMUM RIGHT-OF-WAY WITH EASEMENTS TO PROVIDE FOR CUT & FILL

Harry Bergh-del. Oct. 24, 1930

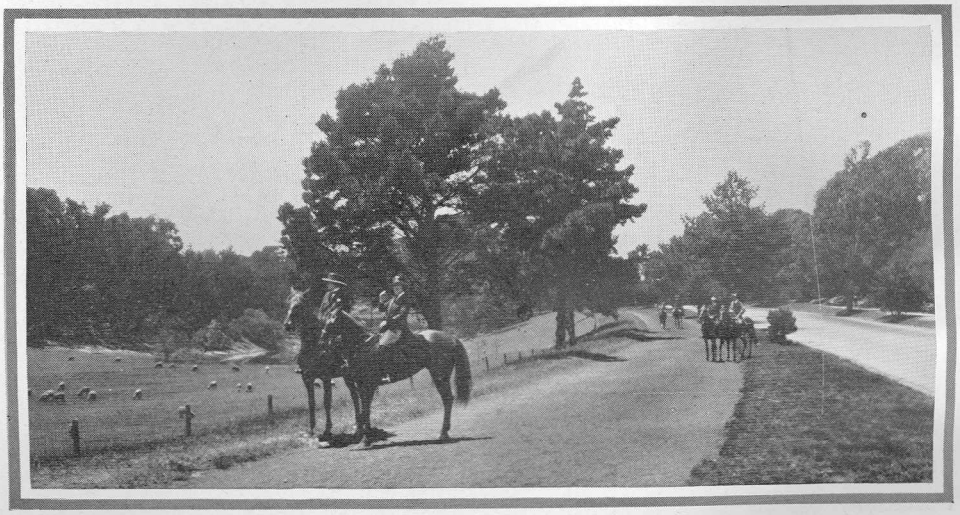
The REGIONAL PLANNING COMMISSION
COUNTY of LOS ANGELES

TREATMENT OF MAJOR HIGHWAYS IN MOUNTAINOUS TERRITORY

This study suggests a policy that can properly be followed in the acceptance of rights of way for major highways through mountainous terrain. Ordinarily, major highways have a total width of 100 feet, with a roadway of 74 feet between curbs. Experience has proved that such a wide roadway is not always necessary in mountainous country. A lesser roadway width is, in many cases, permitted. The proper width of the right of way in such cases requires careful consideration. The treatment illustrated provides for the dedicating of a right of way 60 feet wide, and the granting of easements for the construction of cuts and fills. In this way a minimum amount of land is acquired for street purposes.

SLOPE EASEMENTS FOR CUTS AND FILLS

The widths of these slope easements which supplement the dedicated width will vary with topography. The cuts and fills necessary to bring the road to the established grade, and the construction of culverts, intakes and headwalls are thereby provided for without excessive property damage. After the work is constructed, the slope easements may be vacated and these cuts and fills can and should be effectively planted to improve their appearance and give the slopes greater stability. The land owner may then construct buildings and improvements out to the dedicated right of way line.



BRIDLE PATHS ARE A VALUABLE ASSET

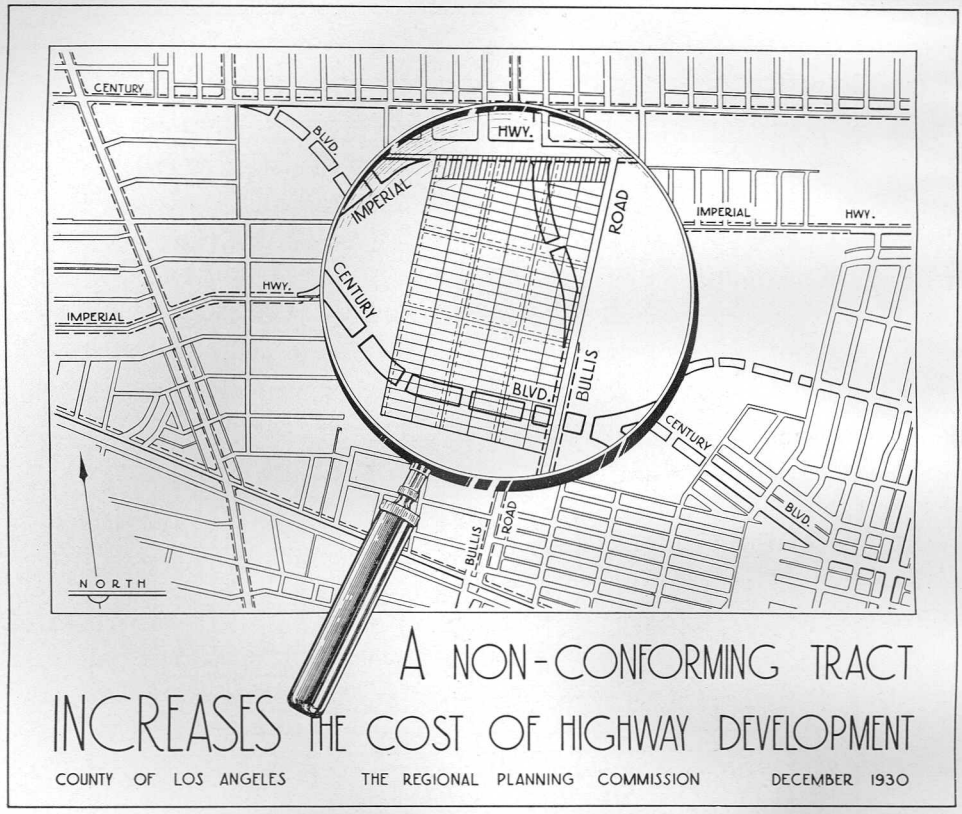
RESPONSIBILITY OF REALTOR

After a community plan has been officially adopted, the success of its application depends largely upon the cooperation of the realtors and land owners in the subdivision of property. A non-conforming subdivision may cause the community great expense in rectifying vital features which fail to conform to those prescribed in the plan. In the end, the realty profession, and real estate generally, suffers because of such non-conformities.

Subdivisions of this type also cause blighted conditions which result in injury to land values throughout the community. An example of this is shown opposite. Here an unrecorded subdivision was placed on the market and sold by "metes and bounds" so that there now exist one hundred different ownerships. All face heavy assessments, and some, the loss of their property by condemnation proceedings, since it is now necessary to condemn certain highway connections which should have been made by dedication in a regularly recorded tract at the time of subdivision.

THE MENACE OF METES AND BOUNDS SUBDIVISIONS

By reason of the fact that the subdivision was sold by metes and bounds the streets were never accepted by the public authorities. They remain private streets, and the public authorities have no legal means of maintaining or improving them. The cost of improvement and maintenance must therefore be borne by the property owners. But this cannot be done equitably because many of the purchases were made for speculation, and lots were sold to persons in all parts of the country. As a result, the few owners who have constructed homes in this tract must bear the entire burden of maintaining their own streets. They cannot make use of the improvement statutes for the construction of street lights, sewers, water or pavement, because these statutes can be used only for construction on public thoroughfares. A subdivision placed on the market by metes and bounds is thus truly a menace to all concerned. It causes a burden on the taxpayers in general, and the work of assessment and taxation is appreciably increased by the lengthy, burdensome technical descriptions necessary where there is no recorded subdivision map.



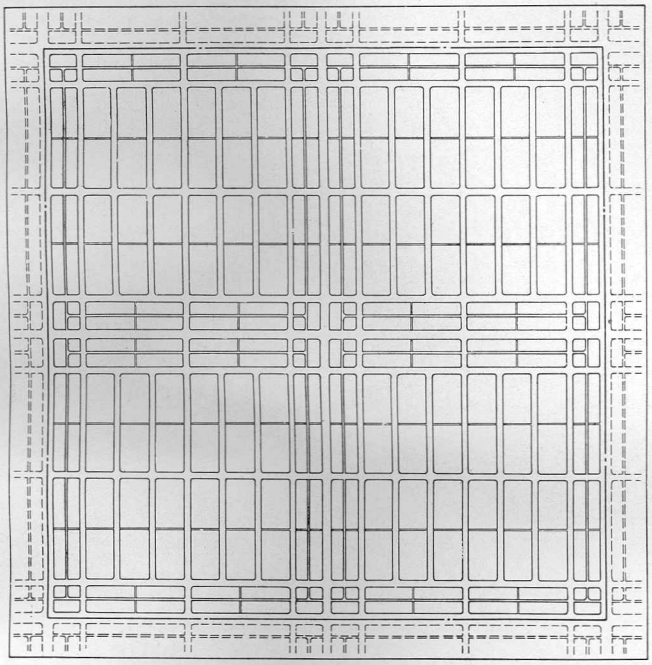
THE BUYER IS USUALLY THE LOSER

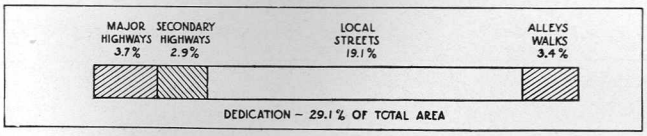
A person buying land in an unrecorded tract sold by metes and bounds description pays dearly for his property in the end, regardless of how cheap the initial purchase may have been. As a rule the placing of a metes and bounds tract on the market is actuated by the desire to avoid a public duty. The original subdivider soon gets "out from under," but those purchasing land in such a tract, and the public in general, suffer for years the unfortunate consequences, most of which can never be relieved.

COST OF CONDEMNING CENTURY BOULEVARD

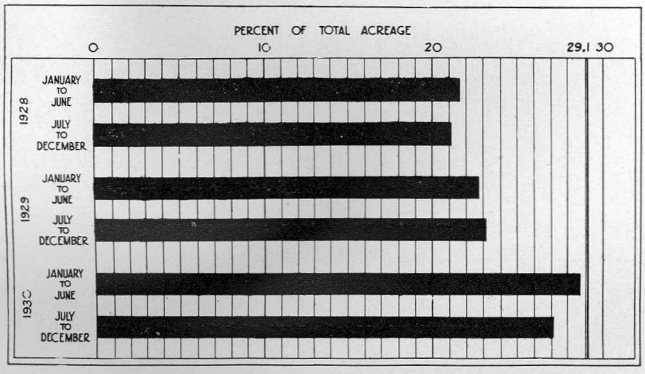
Lineal feet of dedications	0.00
Assessment for entire subdivision	$12,285.07
Assessment on property fronting on highway	9,479.11
Assessment per front foot of highway frontage	10.00*

*For condemnation of land only. Does not include assessment for paving or other improvements.





SUBDIVISION OF A SQUARE MILE WITH NECESSARY DEDICATIONS



ACTUAL DEDICATIONS OCCURRING IN A PERIOD OF THREE YEARS

PERCENTAGES OF STREET AREA

RESIDENTIAL SUBDIVISIONS – LOS ANGELES COUNTY

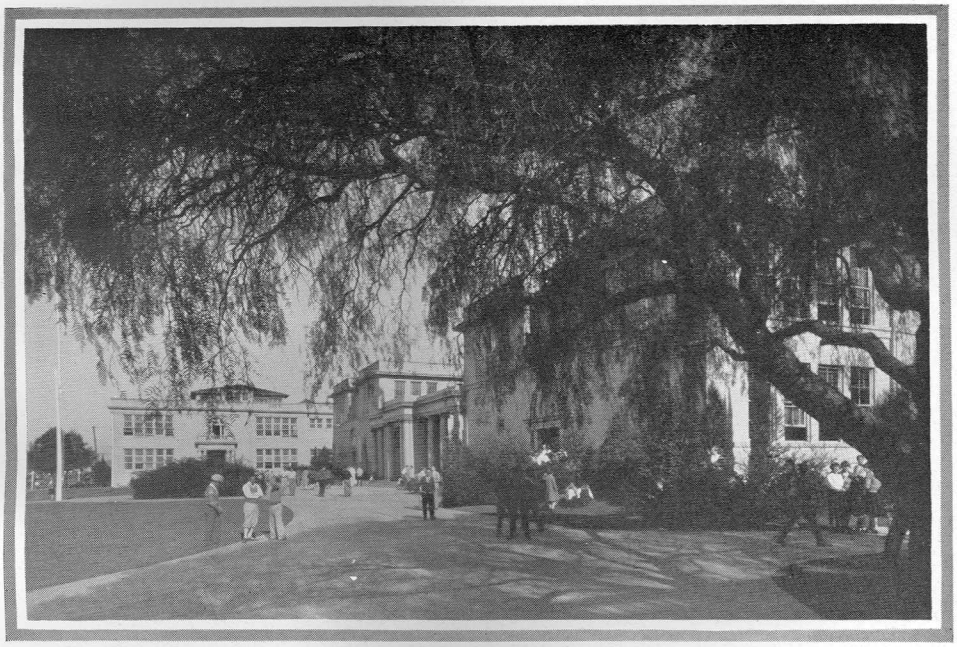
THE REGIONAL PLANNING COMMISSION

SUBDIVISION REGULATIONS

The regulations for the subdivision of land now in use in Los Angeles County were prepared by the Regional Planning Commission in January, 1923, and adopted by the City and County Engineers' Association in June of that year. During the eight years they have been in use, these regulations have been changed very little, the revisions consisting only of minor additions and changes in phraseology. Recently they have been given proper legal form with the assistance of the County Counsel's office, in anticipation of their adoption in ordinance form. A brief outline of the standards contained in the proposed ordinance follows:

REQUIREMENTS FOR THE SUBDIVISION OF LAND

1. REGIONAL HIGHWAY PLAN
   - (a) Subdivision to conform to the Regional Plan of Highways.
2. LOTS
   - (a) Lot area to be not less than 5,000 square feet.
   - (b) Average lot width to be not less than 50 feet.
   - (c) Each lot to have frontage on a street.
   - (d) Lots fronting on major and secondary highways to have a depth not less than 140 feet.
3. MAJOR HIGHWAYS
   - (a) By-pass streets to be provided within 600 feet of the intersections of major highways.
   - (b) Width of major highways to be not less than 100 feet, except as follows:
   - (c) Where a major highway is divided by a railroad right of way the width on each side of the right of way is to be 60 feet;
   - (d) Where a major highway adjoins one side of a railroad right of way the width may be reduced by omitting the parking and sidewalk widths;
   - (e) Somewhat greater widths may be required where parkways are involved;
   - (f) Somewhat lesser widths may be approved by the Planning Commission in mountainous areas.
4. SECONDARY HIGHWAYS
   - (a) Width of secondary highways to be not less than 80 feet, except as follows:
   - (b) Where a secondary highway is divided by a railroad right of way the width on each side of the right of way is to be 50 feet;



PUBLIC SCHOOL SITES ARE RESERVED AT ACREAGE PRICES IN MODERN SUBDIVISIONS

(c) Where a secondary highway adjoins one side of a railroad right of way the width may be reduced by omitting the parking and sidewalk widths.

5. LOCAL STREETS

(a) In general, the width of local streets to be not less than 60 feet.
(b) The width of very short streets in residential sections to be not less than 50 feet.
(c) The width for local streets on steep hillsides to be not less than 30 feet.
(d) Local streets to conform with neighboring existing streets and to be in proper alignment for the most advantageous development of the locality.

6. GENERAL STREET REQUIREMENTS

(a) Part width streets to conform to county surveys.
(b) Part width streets establishing a future lay-out to have a minimum width of one-half of the ultimate width.
(c) Streets to intersect at as near a right angle as is practical.
(d) In general, streets to extend to the boundary of the subdivision.
(e) Adequate turning areas to be provided at the ends of dead-end streets.

7. GRADES

(a) Grades, in general, not to exceed 6%.

(b) Grades not in excess of 10% may be approved where a lower grade can be shown to be impractical.

8. SET BACK LINES

(a) In certain specific cases where development will be so retarded as to make very wide streets uneconomical, lesser widths may be accepted by the Planning Commission where front, side or rear set back lines are established in lieu of such ultimate widths.

9. CURVE RADII

(a) Center line radii of major and secondary highways to be, in general, not less than 500 feet.

(b) Center line radii of major and secondary highways in mountainous areas to be not less than 300 feet.

(c) Center line radii of local streets to be not less than 75 feet.

(d) Reverse curves of major and secondary highways to be separated by a tangent of not less than 150 feet.

10. INTERSECTIONS

(a) Streets or highways to intersect at an angle of not less than 30 degrees.

(b) Block corners to be rounded or cut off in conformity with the standards of the Planning Commission. (See page 147).
(A table showing these standards is contained in the ordinance.)

11. ALLEYS, EASEMENTS

(a) Alleys 20 feet in width to be in rear of all lots fronting on major and secondary highways, except where zoned by ordinance for single family residence.

(b) Easements to be shown on all rear lot lines where alleys are not provided.

(c) A cut-off to be shown at the intersection of alleys 10 feet from the point of intersection.

12. BLOCK SIZES

(a) Blocks to be not over 1,000 feet in length.

(b) Blocks to have sufficient depth to allow for two tiers of lots.
(Topography, or the adjoining lay-out, may make necessary a modification of these block requirements.)

13. PEDESTRIAN WAYS

(a) Pedestrian way, not less than 10 feet in width, to be shown through each block more than 700 feet in length.

(b) Grade of pedestrian ways not to exceed 30%, except as follows:

(c) Where stairways are provided the grade of pedestrian ways not to exceed 50%.

14. TRAILS

(a) Trails 10 feet in width may be provided in mountainous areas where streets are impractical.

(b) No point on any trail to be over 1500 feet, measured along its center line, from the nearest public street.

(c) The grade of a trail not to exceed 30%.

(d) For each lot served only by a trail, 200 square feet of accessible parking area to be reserved or dedicated.

15. LOT LINES

(a) The side lines of lots to be approximately at right angles to the street line.

16. GRADE SEPARATIONS, RAILROADS

(a) The lay-out of the subdivision to conform with plan for grade separations.

(b) Lots adjoining proposed cuts or fills for grade separations to have a frontage upon a street other than the street involved in the separation.

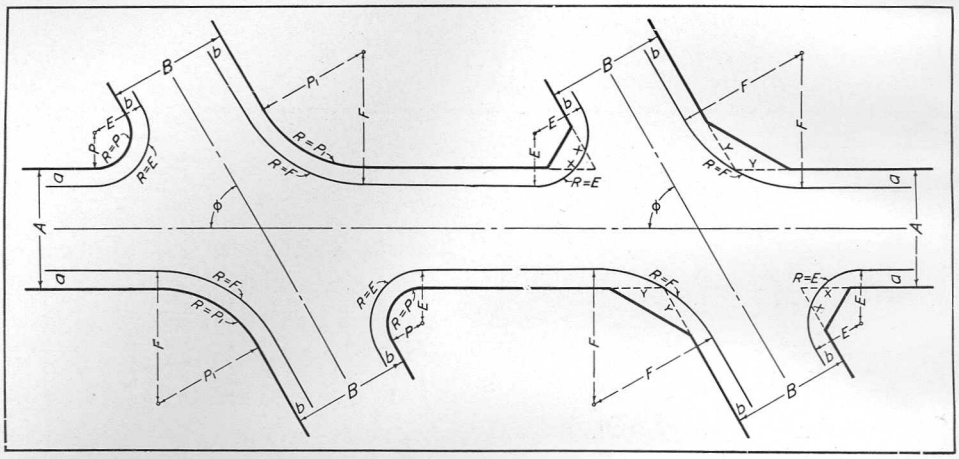
(c) Streets and highways in industrial areas to be parallel to, and one lot depth distant from, railroad rights of way.

17. MODIFICATIONS

(a) Whenever the land involved in any subdivision is of such size or shape, or is subject to such title limitations of record or is affected by such topographical location or conditions, or is to be devoted to such usage, that it is impossible or impractical in the particular case for the subdivider to fully conform to these regulations, such modification thereof as is reasonably necessary or expedient may be authorized.

CURB RETURNS AND CORNER CUT-OFFS

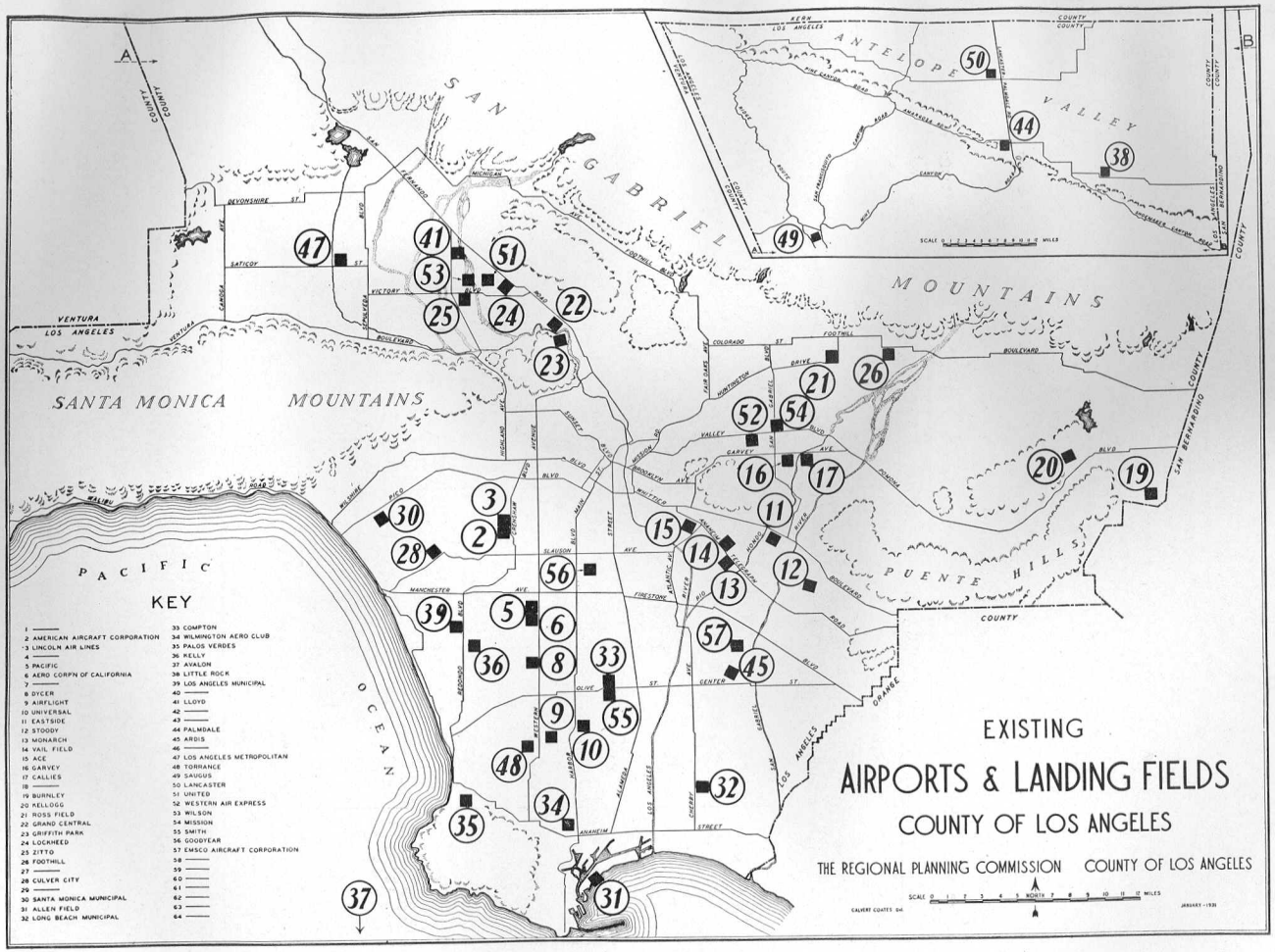
The figures contained in the table shown on the opposite page represent efficient dimensions for corner cut-offs and curb returns. The values were obtained by an analytical study of the matter, based on observation of traffic and economic conditions in the field. The analysis may be resolved into four major divisions. The first three of these have to do with safety, the fourth, with architecture and economics. Safety involves consideration of (1) visibility for traffic *approaching* an intersection, (2) traffic movement *within* an intersection, and (3) pedestrian crossings. Field tests were made of actual performance in regard to turning radii and the effects of turning vehicles in congested intersections. These three considerations led to the determination of values finally accepted as the most efficient,



Angle †	Width of R/W		Distance from Curb to Property Line		Radius of Curb Return		Radius of Property Line		Cut-off at Property Line	
	‡A	B	a	b	E	F	P	P_1	X	Y
30°	60	60	13	13	25	35	12	22	..	..
	60	80	13	12	25	156	*	*	42	27
	60	100	13	13	25	156	12	143	42	27
	80	80	12	12	25	156	13	144	42	27
	80	100	12	13	25	156	*	*	42	27
	100	100	13	13	25	156	12	143	42	27
45°	60	60	13	13	28	28	15	15	..	..
	60	80	13	12	35	112	*	*	42	37
	60	100	13	13	35	112	22	99	42	37
	80	80	12	12	35	112	23	100	42	37
	80	100	12	13	35	112	*	*	42	37
	100	100	13	13	35	112	22	99	42	37
60°	60	60	13	13	28	28	15	15	..	..
	60	80	13	12	35	90	*	*	33	36
	60	100	13	13	35	90	22	77	33	36
	80	80	12	12	35	90	23	78	33	36
	80	100	12	13	35	90	*	*	33	36
	100	100	13	13	35	90	22	77	33	36
75°	60	60	13	13	28	28	15	15	..	..
	60	80	13	12	35	46	*	*	21	22
	60	100	13	13	35	46	22	33	21	22
	80	80	12	12	35	46	23	34	21	22
	80	100	12	13	35	46	*	*	21	22
	100	100	13	13	35	46	22	33	21	22
90°	60	60	13	13	28	28	15	15	..	..
	60	80	13	12	35	35	*	*	17	17
	60	100	13	13	35	35	22	22	17	17
	80	80	12	12	35	35	23	23	17	17
	80	100	12	13	35	35	*	*	17	17
	100	100	13	13	35	35	22	22	17	17

†—The complete table gives values for intermediate angles.
‡—See corresponding letters on diagram. The values of E, P, and X are for the acute angle and those of F, P_1, and Y are for the obtuse angle on the opposite corner.
*—Intermediate value such as to produce uniform sidewalk width.

from a practical standpoint. (It is impossible to find one value that satisfies *ideally* all three conditions of safety.) As to the architectural problems involved in the matter of corner cut-offs, it is being demonstrated that they should, and often do, become a means of solving the problem initially set up by the other factors. Under the hands of skilled architects, the apparent loss is transformed into an asset, giving increased values due to higher efficiency of the building in such matters as better light and air, and greater advertising value of corner show windows.


KEY
1 ——
2 AMERICAN AIRCRAFT CORPORATION
3 LINCOLN AIR LINES
4 ——
5 PACIFIC
6 AERO CORPN OF CALIFORNIA
7 ——
8 DYCER
9 AIRFLIGHT
10 UNIVERSAL
11 EASTSIDE
12 STOODY
13 MONARCH
14 VAIL FIELD
15 ACE
16 GARVEY
17 CALLIES
18 ——
19 BURNLEY
20 KELLOGG
21 ROSS FIELD
22 GRAND CENTRAL
23 GRIFFITH PARK
24 LOCKHEED
25 ZITTO
26 FOOTHILL
27 ——
28 CULVER CITY
29 ——
30 SANTA MONICA MUNICIPAL
31 ALLEN FIELD
32 LONG BEACH MUNICIPAL
33 COMPTON
34 WILMINGTON AERO CLUB
35 PALOS VERDES
36 KELLY
37 AVALON
38 LITTLE ROCK
39 LOS ANGELES MUNICIPAL
40 ——
41 LLOYD
42 ——
43 ——
44 PALMDALE
45 ARDIS
46 ——
47 LOS ANGELES METROPOLITAN
48 TORRANCE
49 SAUGUS
50 LANCASTER
51 UNITED
52 WESTERN AIR EXPRESS
53 WILSON
54 MISSION
55 SMITH
56 GOODYEAR
57 EMSCO AIRCRAFT CORPORATION
58 ——
59 ——
60 ——
61 ——
62 ——
63 ——
64 ——
SAN GABRIEL MOUNTAINS
SANTA MONICA MOUNTAINS
ANTELOPE VALLEY
PUENTE HILLS
PACIFIC OCEAN
VENTURA COUNTY
LOS ANGELES COUNTY
ORANGE COUNTY
EXISTING
AIRPORTS & LANDING FIELDS
COUNTY OF LOS ANGELES
THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES
JANUARY - 1931

THE AIRPORT SITE AND REGIONAL PLANNING

The airport is the gateway to the modern city. Air transportation has so established itself in our modern life that it is now pronounced an economic necessity. As part of its planning activities, every city should prepare an airport development program that will provide for its future needs on the basis of real economy. The selection of airport sites is properly a part of city and regional planning, and, as such, should be in conformity with other features of the future development program. If properly selected, a satisfactory financial return can be shown for the investment involved. To make the investment economically sound, however, the following principles must be rigidly adhered to.

1. The site should be selected by qualified experts.
2. The land should be owned in fee or held in a long-term lease.
3. The airport should be accessible to those served with a maximum surface transportation time of 20 minutes.
4. The field should be of the highest rating proportionate to the use for which it is intended.
5. Proper legislative control should be enforced over surrounding development.
6. The field should be properly related to the community served and to other fields.
7. The future highway system should be planned to provide facilities for aviation development. No highway should be so planned as to injure an ideal site for a future airport.

AIRPORTS AS A COMMUNITY ASSET

Three hundred million dollars have been spent in this country in the past year and a half for airports by more than a thousand communities. If aviation is to continue growing as it has a right to grow, it must enlist the services of the flyer himself, the architect, the civil engineer and the city planner, as it has enlisted the services of the scientist, the navigator and the motor expert.

THE HISTORY OF AVIATION

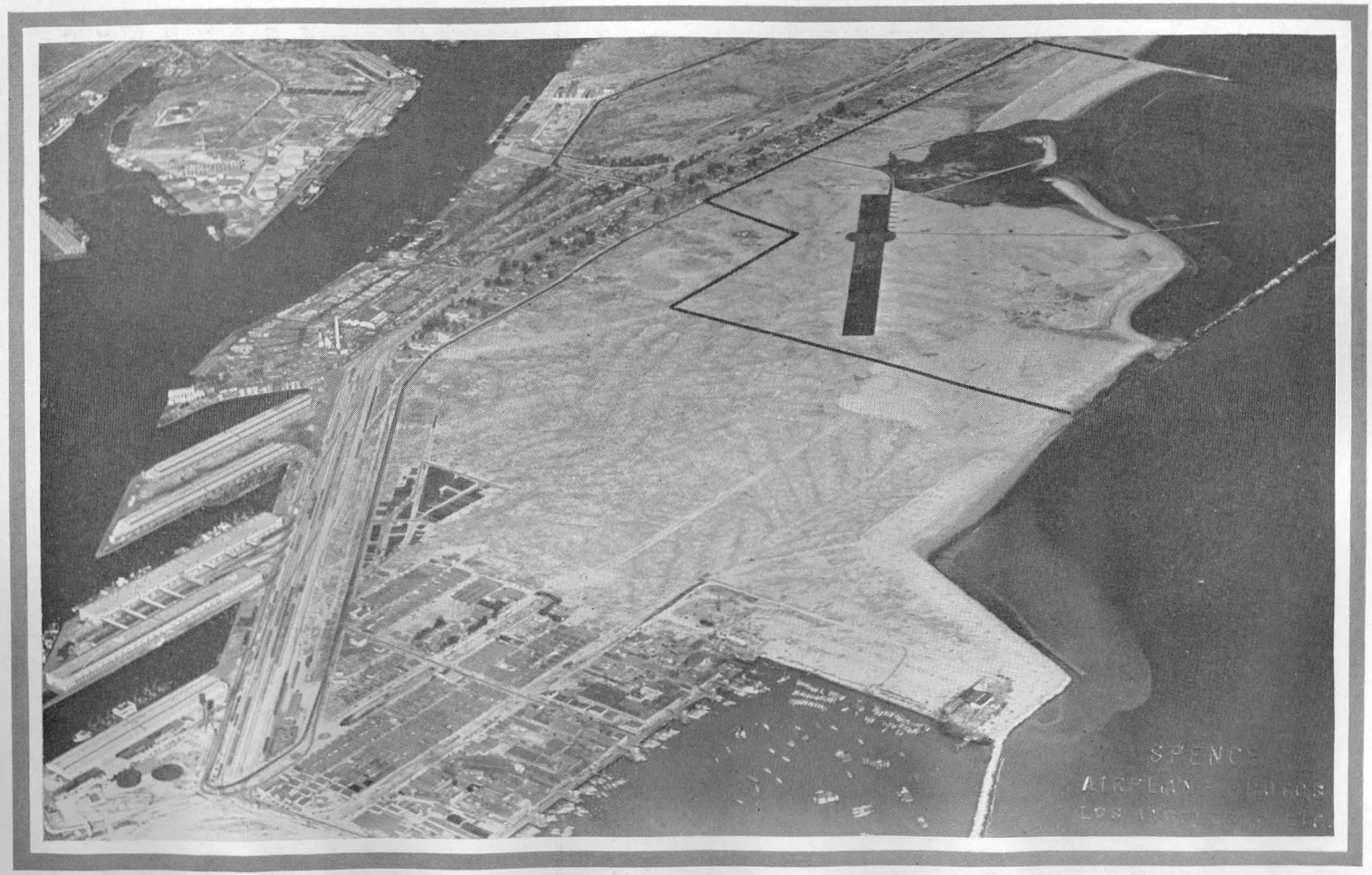
On December 17, 1903, Wilbur and Orville Wright flew the first practical power airplane of man-carrying size. These two brothers fabricated the airplane of actuality which had been the dream of centuries. The world was startled by the fact that man had flown. The World War gave the development of aviation its greatest impetus. New aircraft factories were built. Hundreds of aeronautical engineers and designers were given an opportunity to demonstrate their skill. During the war 10,000 pilots were trained. Since the Armistice the majority of these men have become civilian flyers and developers of civilian aviation. Today, flying is taken as a matter of fact. Its safety has been reasonably established, and even a trans-Atlantic flight surprises us but little. The airplane is an indispensable factor in our social and economic life. The application of aviation into civil life has been achieved.

PROGRESS OF THE UNITED STATES IN CIVIL AERONAUTICS

	1927	*1928*	*1929*	*1930*
Total miles flown	5,870,489	10,673,450	25,141,499	36,945,103
Passengers carried	8,679	49,713	173,405	417,505
Express and freight carried	2,263,580	1,848,156	1,866,879	2,869,255
Total pounds of mail	1,654,165	4,063,173	7,772,014	8,324,255
Miles of airways	9,122	16,667	36,000	49,549
Lines in operation	23	63	97	122
Airports, Municipal	240	368	453	549
Airports, Private and Commercial	263	365	495	564

FIRST AIR MAIL CONTRACT

In 1926, the first air mail contract was signed. This same year might be designated as the one during which the American air transport first developed. Operations in the United States during 1926 and 1927 compared favorably with those of the eight year old transport net of Europe. The airways of the world show a greater mileage than did the railroads on their twenty-fifth anniversary. Flying is now an established method of transportation. The near future will doubtless see it still more generally adopted.



ALLEN FIELD, TERMINAL ISLAND

GROWTH OF AVIATION FROM A STANDPOINT OF SECURITIES

In 1928, the State Corporation Commissioner of California approved twenty-five permits for the promotion of companies to engage in air transportation and the construction of airplanes, motors and bodies. These companies represent more than $50,000,000 in securities, all of which has been invested in California to establish passenger, freight and parcel routes.

SAFETY OF AVIATION ESTABLISHED

The vital statistics of the United States, England and other countries, indicate that the number of deaths in aviation per million of population is uniformly low. Comparing records of all scheduled operations (mail, passengers, and express) in the United States for the last half of 1930 with those for the last half of 1929, shows marked progress in safety in every respect. Scheduled air transport operators flew 6,680,825 miles per fatal accident in the 1930 period as against 1,062,677 in the corresponding 1929 period.

SAFETY OF AVIATION

	Year	*Scheduled Flight Mileage*	*Total Fatalities*	*Fatalities per Million of Population*
United States	1926	4,428,772	160	1.5
United States	1927	5,809,992	214	1.6
British Air Lines*	1922–1924	2,596,000	15	1.4
British Air Lines	1925–1927	2,471,000	None	None
Luft Hansa Europe	1925–1927	12,604,000	22	1.7 per million miles

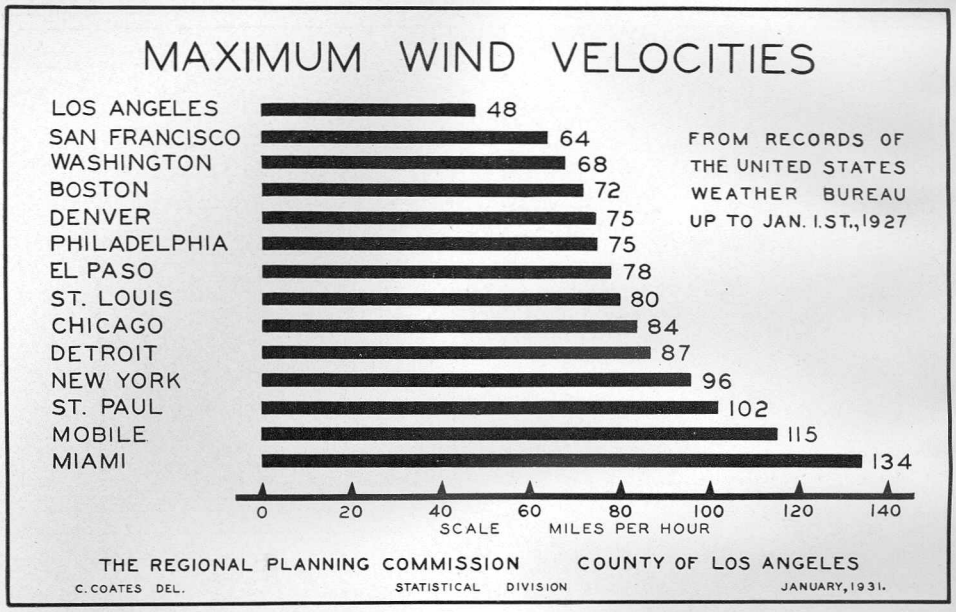
ACCIDENTS ON SCHEDULED AIR TRANSPORTS—UNITED STATES

Year	Accidents		Fatalities		Miles Flown		
	Total	Fatal	Pilots	Passengers	Total	Per Accident	Per Fatality
1928	86	12	9	13	10,673,450	124,110	485,152
1929	137	24	22	18	25,141,499	183,510	628,537
1930	91	9	8	24	36,945,203	405,990	1,154,538†

*British and German planes, in 1927, averaged 98% and 99% successful flights, respectively, and the former in a period of 8 years have made 1,916 flights for each fatality.

†During the last half of 1930, the number of *passenger* miles of scheduled flight per *passenger* fatality was 25,741,316.

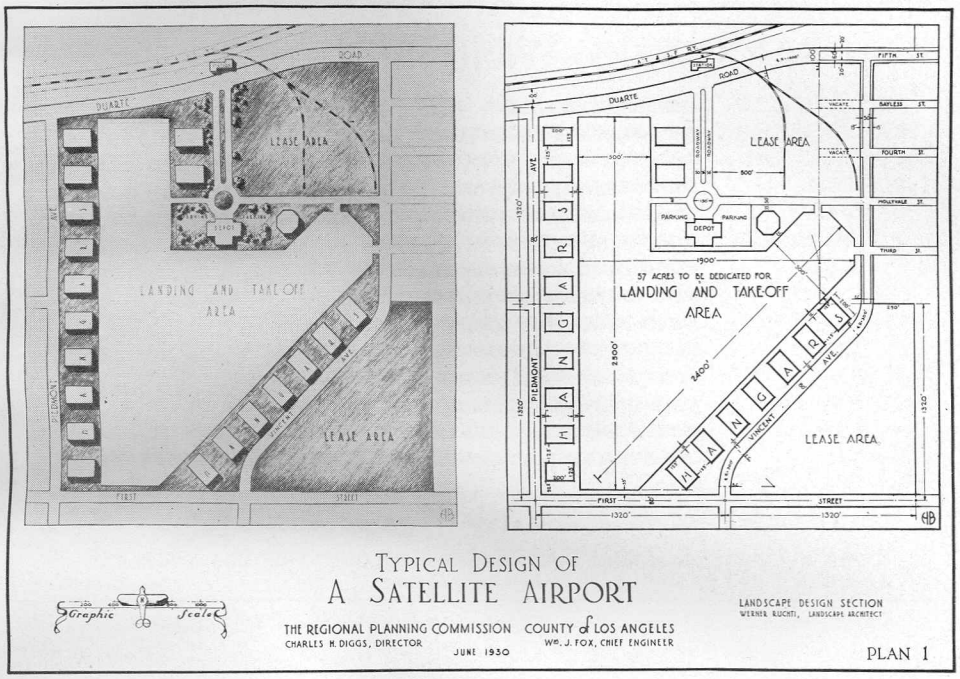
The records kept by the United States Department of Commerce show that during 1930 almost 14% of these accidents were due to inefficient airports or the lack of emergency landing fields. Provision for well designed airports, properly placed, is therefore one of the chief factors affecting the safety, as well as the future development, of aviation. Regular inspection of planes and engines, licensing of pilots, weather report services, lighting of airways and radio directional beacons are providing a high degree of safety for the passenger on regular air lines. Equal safety in taking off and landing can be secured only when adequate ground facilities are available.



COMMERCIAL ADVANTAGES OF AIR TRANSPORT

Aviation has demonstrated in many ways its ability to compete commercially with older methods of transportation. Bankers of Los Angeles report that constant use of air mail for the dispatch of financial paper saved $7,000,000 in a single year, chiefly in interest losses avoided. Repair parts, for the lack of which whole factories have been forced to suspend operations to the detriment of owner and worker alike have been sped through the air to shorten the costly delay. An oil tanker, chartered at $1,500 a day spent $297 to bring an engine part by air, and saved two days, which meant $3,000. A camera attachment cost $700 for express shipment by plane, but the two days saved netted the motion picture company $10,000.

Cut flowers, strawberries, advance samples of merchandise, perishables of all kinds—are examples of business makers for aviation. The business man who is now enabled to cross the continent in 32 hours will frequently find that a trip by air actually costs less, because of the lesser need of sleeping accommodations and food, than a similar trip by rail. This, coupled with the saving in time, will place aviation in direct competition for certain types of travel, not only with trains, but with the private automobile as well.



EXISTING AIR TRANSPORT LINES

The eight existing transport lines in the county indicate the substantial status of commercial aviation in this section of the country. Regular lines operate to the north, east and south, with planes that make from one to three round trips daily. Plans are now under way to develop a regular passenger line between the metropolitan area of Los Angeles and the Hawaiian Islands. When this is accomplished, the County of Los Angeles will be the focal point of aviation in the west.

AIR SUPREMACY

The Aeronautics Branch of the Department of Commerce reports that there are 1393 airports and landing fields in the United States. California leads the other States with a total of 143. The County of Los Angeles has at the present time 52 airports and landing fields in operation, about 37% of the state's total. Climatic conditions here are very favorable to aviation. The people are air-minded and, if ground facilities are made adequate, Southern California will lead the world in aviation.

AIRPORTS IN THE UNITED STATES

JANUARY 1, 1931

States	Total number of airports	Total expenditures to date	States	Total number of airports	Total expenditures to date
ALABAMA	10	$ 1,156,000	NEVADA	9	$ 161,000
ARIZONA	26	508,000	NEW HAMPSHIRE	7	143,000
ARKANSAS	12	387,500	NEW JERSEY	21	7,748,000
CALIFORNIA	**115**	**13,165,000**	NEW MEXICO	16	297,000
COLORADO	20	892,000	NEW YORK	61	19,890,000
CONNECTICUT	10	1,330,000	NORTH CAROLINA	16	721,000
DELAWARE	2	374,000	NORTH DAKOTA	13	112,000
DISTRICT OF COLUMBIA	2	892,000	OHIO	55	6,205,000
FLORIDA	33	1,556,000	OKLAHOMA	34	2,280,000
GEORGIA	14	532,000	OREGON	22	1,516,000
IDAHO	7	84,000	PENNSYLVANIA	57	4,655,000
ILLINOIS	50	6,102,000	RHODE ISLAND	5	90,000
INDIANA	24	1,433,000	SOUTH CAROLINA	12	398,000
IOWA	31	441,000	SOUTH DAKOTA	19	160,000
KANSAS	43	3,178,000	TENNESSEE	9	714,000
KENTUCKY	10	142,000	TEXAS	66	3,854,000
LOUISIANA	12	327,000	UTAH	4	327,000
MAINE	7	264,000	VERMONT	6	65,000
MARYLAND	8	1,935,000	VIRGINIA	16	322,000
MASSACHUSETTS	26	5,898,000	WASHINGTON	22	1,518,000
MICHIGAN	44	14,892,000	WEST VIRGINIA	8	134,000
MINNESOTA	16	1,333,000	WISCONSIN	42	1,087,000
MISSISSIPPI	9	193,000	WYOMING	11	178,000
MISSOURI	16	4,787,000			
MONTANA	19	201,000			
NEBRASKA	16	481,000	TOTAL	1,113*	$115,068,500

*Of this total 549 are municipal and 564 are private and commercial ports.

MILITARY ADVANTAGES OF AIRPORTS

Without question permanent terminals will greatly expedite the development of the airplane industry. It would further encourage private individuals to fly and own airplanes. But above all, it would permit the proper training of pilots, both active and reserve, for national defense purposes. The more pilots that are developed, the more planes that are manufactured, and the more airports that are located on such a substantial basis, the stronger is our government's position for national defense, for, as a military weapon, the airplane is now recognized as more effective than any other branch of the Service.

AIR MAIL

Since the establishment of air mail lines, Los Angeles County has become the heaviest user of air mail in the world. Airplanes operated over the route between Los Angeles and Salt Lake City travelled 852,000 miles during 1930. These planes have arrived exactly on time 996 times out of 1,000 throughout the entire period that the line has been in operation. The air mail load carried over this route was as follows:

Year:	1926	1927	1928	1929	1930
Pieces:	2,856,560	8,122,800	15,804,000	30,304,400	33,757,520

LONG BEACH MUNICIPAL AIRPORT

MAJOR AIR TERMINAL

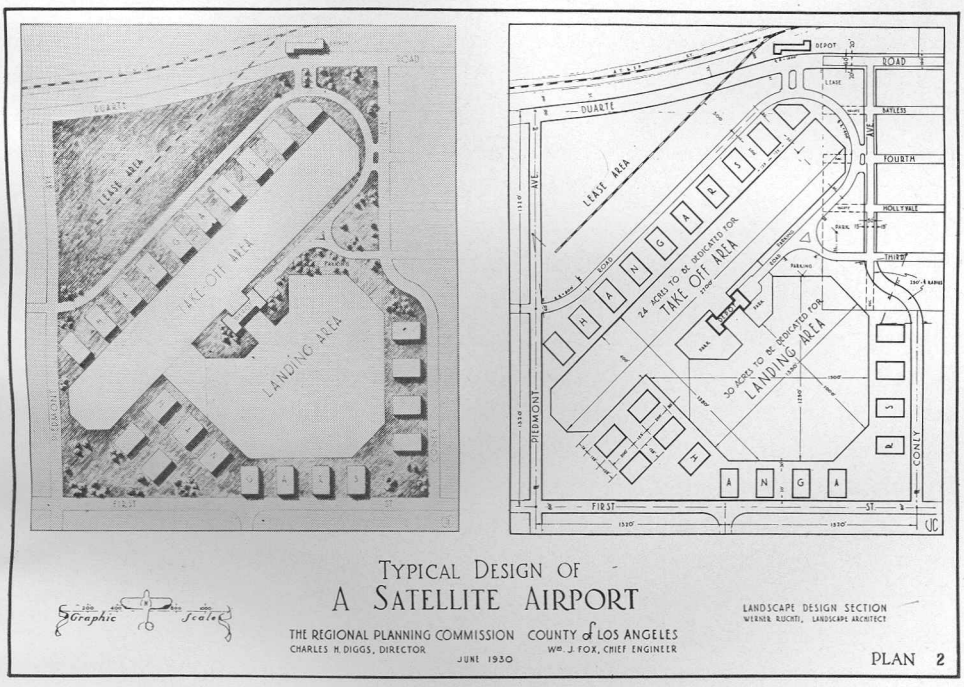
For the purpose of this report a major air terminal is defined as an airport of sufficient size to permit the safe and efficient operation of the largest transport planes now in service or likely to be placed in service. It must have a runway at least 5,000 feet long and 400 feet wide, or be equipped with apparatus or mechanism to permit the taking off of planes in like number and with the same degree of safety as would the runway stipulated. It must also provide a separate landing area which will permit landings in all directions. This landing area should be at least 2,500 by 2,500 feet, or should be equipped with apparatus or mechanism to make it equivalent, in safety and number of landings. A major air terminal should have sufficient space for the erection of storage hangars for at least 200 airplanes, and adequate space for shops, manufacturing plants, and a passenger and freight depot. It should be adequately served by both rail and highway transportation facilities, and located conveniently near to a large population, either actual or potential. In general, it should warrant the highest "rating" of the Aviation Division of the Department of Commerce.

SATELLITE AIRPORT

A satellite airport is defined as a field designed for the accommodation of ships smaller and of lesser wing spread than transport planes. It should be of sufficient size to permit the construction of a runway of at least 2,500 feet in length. It should also have hangar space for the storage of airplanes in accordance with the population served. Air rights must be secured to permit planes to acquire an altitude of 500 feet before leaving field, and to land from an elevation of 500 feet without trespassing on adjoining property. Satellite fields accommodate private planes, commercial taxi planes, light military planes and police planes, and serve as emergency landing places. In selecting locations, certain fundamental principles of city planning must be recognized. Aviation is still in its infancy, and consideration must be given to the probable future growth and character of the community which a given airport is to serve. Most important of all, the location of roads and the selection of sites for airports and landing fields must be very thoroughly coordinated from two standpoints: first, that the proper transportation service to and from the airport may be established and developed, and second, that the location of the highways may be such as not to cut up any large flat areas which are particularly adapted to airport purposes.

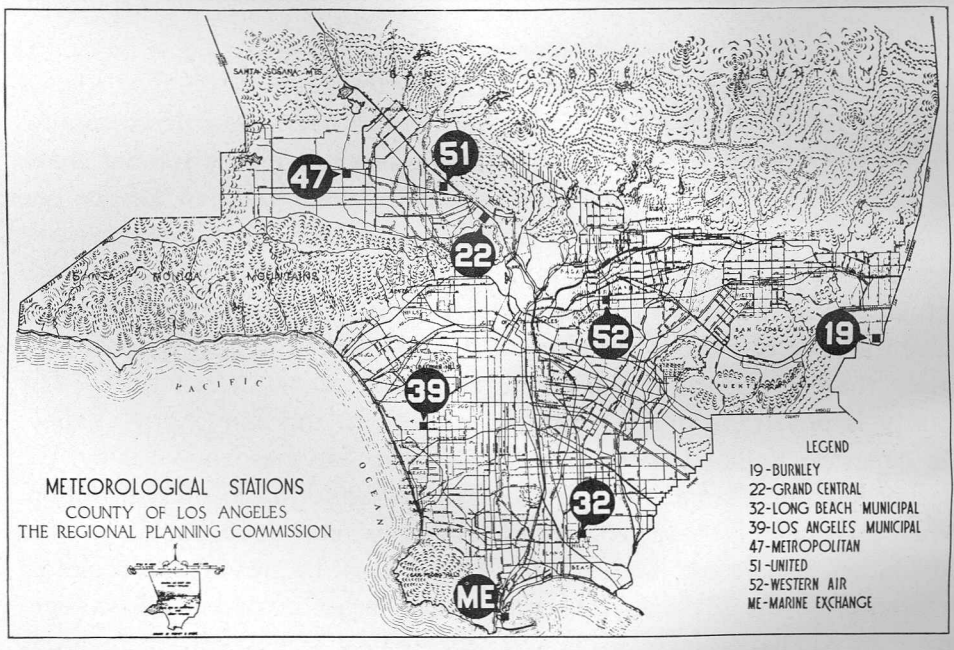
AVIATION AND ROAD BUILDING

The automobile has created the suburbs, the airplane will develop the countryside. People who used to live in the city now live ten miles out in the suburbs. People who now live in the suburbs can soon live fifty miles out in the countryside. In point of time, our offices, stores and factories are as near as they have always been. It is not the miles we count, but the minutes. Hundreds of attractive regions will become accessible through the air. As a matter of fact, nearly all the effect which the airplane will bring, can be summarized as a "broadening out." Aircraft will increase rather than reduce the need for good roads. The automobile increased the travel habit, and events may yet show that the railroads have been more helped than hurt by the automobile. Similarly, it will eventually be seen that the airplane has increased, rather than decreased, the utility of automobiles. Nearly all branches of transportation are stirred by new methods of locomotion. Those who are looking after the public's interest have an obligation to fulfill in looking into the future and making every effort to plan for and secure the facilities which will inevitably be required to make the wholesome development of this type of transportation possible.

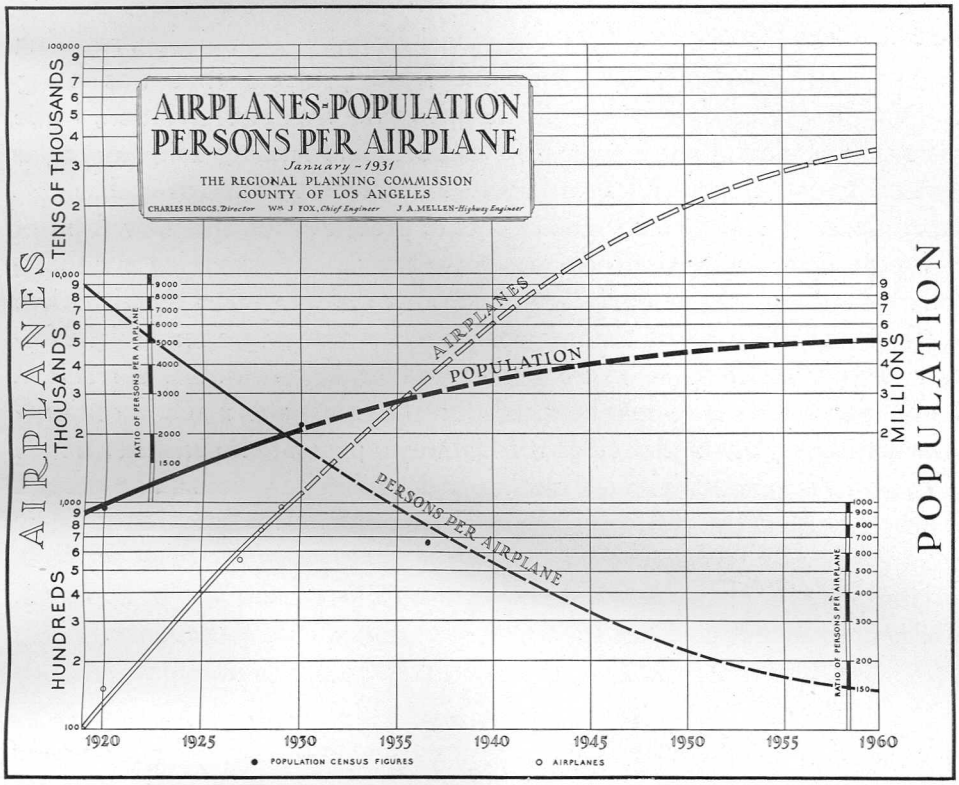


AVIATION SURVEY OF LOS ANGELES COUNTY

In the latter part of 1927, the Regional Planning Commission, realizing the rapid progress that was being made in the matter of aviation, made the study of ground requirements for airports and landing fields a regular part of its planning activities. It was obvious that thorough and wholesome planning ought to include adequate provision for this new form of transportation. Otherwise there was grave danger of discovering our shortcomings too late to economically adjust our development to the situation. It was quite evident that the improper location of a single road might forever destroy a site for a future airport and landing field. As a result, a study of airports that would be needed in the future was made in conjunction with the plans and studies for highways, population densities, trends of population, industrial sites, zoning and land subdivision. The process of incorporating the results of these studies into a master plan is being accomplished as fast as the information is obtained in the field, set forth on the plans in the office, and endorsed by official and public approval. The procedure outlined has led to very good results in this county.



These stations cooperate with the Commission in preparing daily weather reports (see page 165).



AIRPLANES IN LOS ANGELES COUNTY AND PERSONS PER AIRPLANE

In 1920 there were only 150 airplanes owned and operated in this county. The latest check on the number, made in 1929, gave a total of 945, or one airplane to every 2,000 persons. The drawing shows graphically the rapid increase in airplane "density," both actual and anticipated in Los Angeles County. Indications are that by 1960 the ratio of persons per airplane will be reduced to 150, which would imply the existence of 35,000 airplanes in the county at that time. The county is physically divided into seven sections, the San Gabriel Valley, the Antelope Valley, Central Los Angeles, the San Fernando Valley, the Harbor District, the Pacific Coast Beach Section and the Southeast Section. When each one of these geographical divisions reaches its capacity as to population, airport and landing field facilities must be provided sufficient to accommodate the airplanes that are to be expected in that particular section. As population increases in any geographical section, airport facilities should be developed accordingly. This will be more easily and economically done, if planned for in advance.

ENGINEERING SKILL REQUIRED IN SELECTION AND DESIGN OF AIRPORTS

The success of the airplane as a safe and efficient means of transportation is largely dependent upon the selection and design of the area upon which planes must land and take off. To gain public confidence in this form of transportation, airport sites must be selected on the basis of engineering judgment coupled with the advice of flying experts. These sites should be laid out to the best advantage with the aid of engineering skill. The right to fly even air mail over a community might be jeopardized by the occurrence of one or two serious accidents. Nor is the need for technical ability limited to large fields. The methods and cost of constructing runways varies with soil conditions and requires engineering skill. Hangars without central roof columns are required. Buildings, flood lighting systems and airway beacons are needed. In fact, the laying out of a landing field is in many respects like planning a small city.

FORMATION OF AERONAUTICAL ADVISORY COMMITTEE

Although the Commission is equipped with a technical personnel of engineers, architects and landscape architects, it was realized that it must be fortified with proper aeronautical advice to obtain a true understanding of aviation problems and requirements. An Aeronautical Advisory Committee composed of expert flyers from the Army and Navy, United States Department of Commerce, air transport companies, aerial police, and civilian flyers, was formed.* With the aid of this committee, the studies, designs and accomplishments of the Commission were placed upon a basis as nearly scientific as possible. All the existing fields in the county were first surveyed to determine the essential facts concerning them.

DATA SECURED IN AIRPORT SURVEY

1. Location
2. Description
3. Runways and landing areas
4. Obstructions and hazards
5. Equipment
6. Improvements
7. Conditions of ownership
8. Class
9. Area
10. Elevation
11. Drainage conditions
12. Soil conditions
13. Meteorological data
14. Transportation facilities
15. Name of operator
16. Date

This data was then tabulated, plotted on maps, and evaluated. It was found that there were fifty-two fields in operation. They were of all sizes, shapes and conditions of ownership.

* The following were selected to serve on this committee: Woodruff De Silva, Ethelbert Favary, Major John Jeffers, Lt. Eston B. Koger, U.S.N., Capt. E. E. McDaneld, Lt. Lawrence McNeil, Lt. Phillip J. Meanye, Lt. Donald Parkinson, Lt. Col. Roscoe Turner, Lt. Duff Wilson, Archie Zimmerman, Lt. Paul Penland, Lt. Wm. J. Fox.

SIZES OF EXISTING AIRPORTS

Size	Number of Fields
20 to 30 acres	15
30 to 50 acres	6
50 to 100 acres	7
100 to 160 acres	7
250 acres	1
380 acres	1
640 acres	1
Not determined	14
Total	52

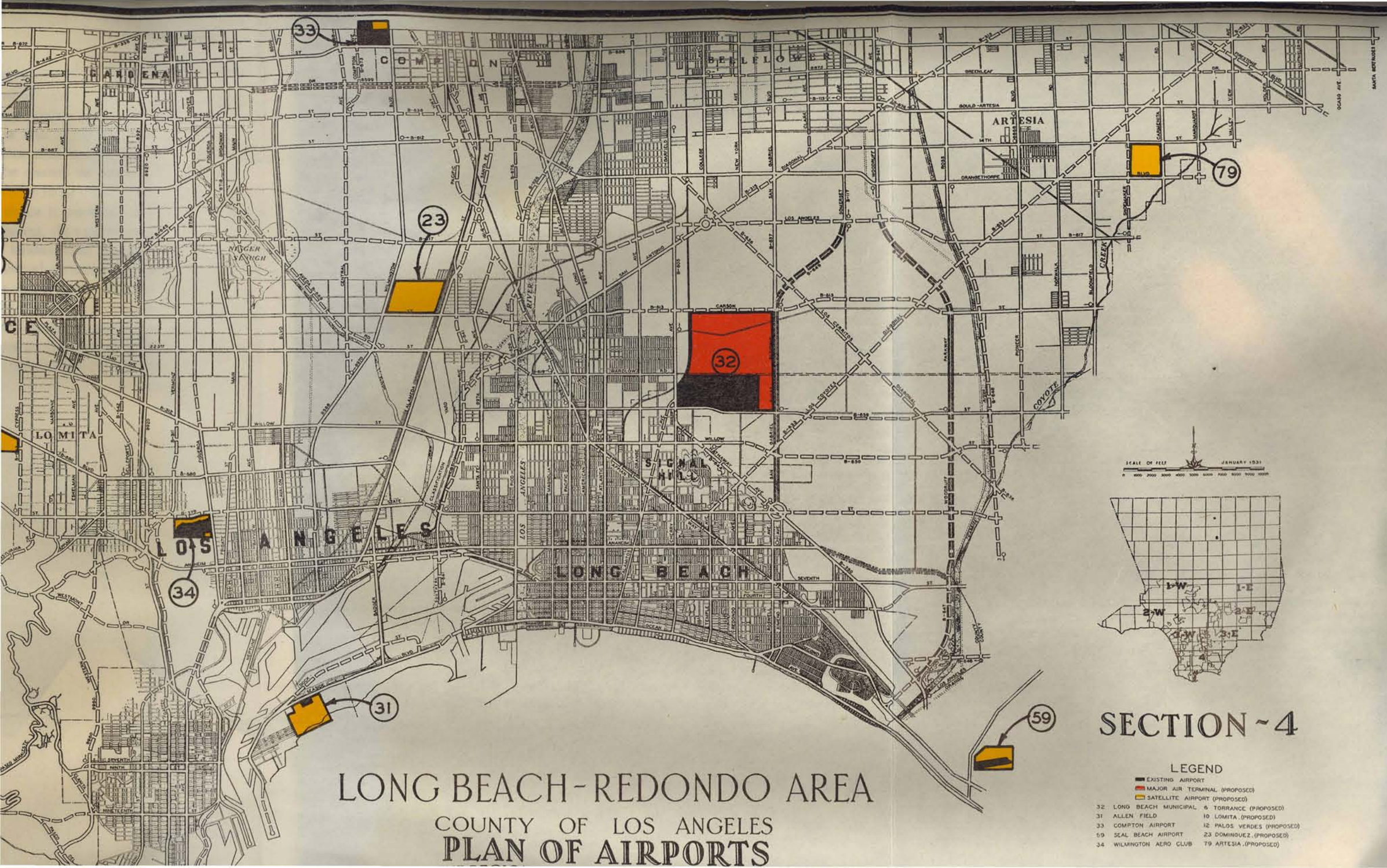
RATING AIRPORT SITE

Each physical division of the county was first studied separately. The Aeronautical Advisory Committee assigned six qualified pilots and observers to the job of flying, each over a given sector, with instructions to select sites independently and to make a full aerial survey and a report on the tentative future sites selected by the Commission's staff. An engineering analysis was made of each, giving full consideration to the findings of the observers and pilots. Each site was then given a rating, on a purely mechanical and relative basis, as shown in the table.

RATING OF AN IDEAL AIRPORT

Surrounding topography	10
Physical condition of site	20
Location with respect to other fields	10
Transportation facilities	10
Accessibility	15
Utilities	5
Local hazards	15
Drainage	5
General desirability	10
Total	100

When evaluating each factor for a site under study, the conditions which result in a certain rating were analyzed, and their relative value established. For example, if the drainage cost on five airport sites was $3,000, $5,000, $25,000, $4,000 and $10,000, it is obvious that the one costing $3,000 would be the cheapest, and would warrant the maximum rating of 5.00 points. The other ratings would then be 3.00, 0.60, 3.75, and 1.50, respectively. The engineering analysis of a site included physical characteristics, cost of grading, drainage, flood protection, and removal of hazards, its relation to present and future population centers, and its status as part of the Master Plan. It included also a financial analysis of the earning ability of the field.



LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

PLAN OF AIRPORTS

SECTION - 4

LEGEND

- EXISTING AIRPORT
- MAJOR AIR TERMINAL (PROPOSED)
- SATELLITE AIRPORT (PROPOSED)

32	LONG BEACH MUNICIPAL	6	TORRANCE (PROPOSED)
31	ALLEN FIELD	10	LOMITA (PROPOSED)
33	COMPTON AIRPORT	12	PALOS VERDES (PROPOSED)
59	SEAL BEACH AIRPORT	23	DOMINGUEZ (PROPOSED)
34	WILMINGTON AERO CLUB	79	ARTESIA (PROPOSED)

LONG BEACH-REDONDO AREA

COUNTY OF LOS ANGELES

PLAN OF AIRPORTS

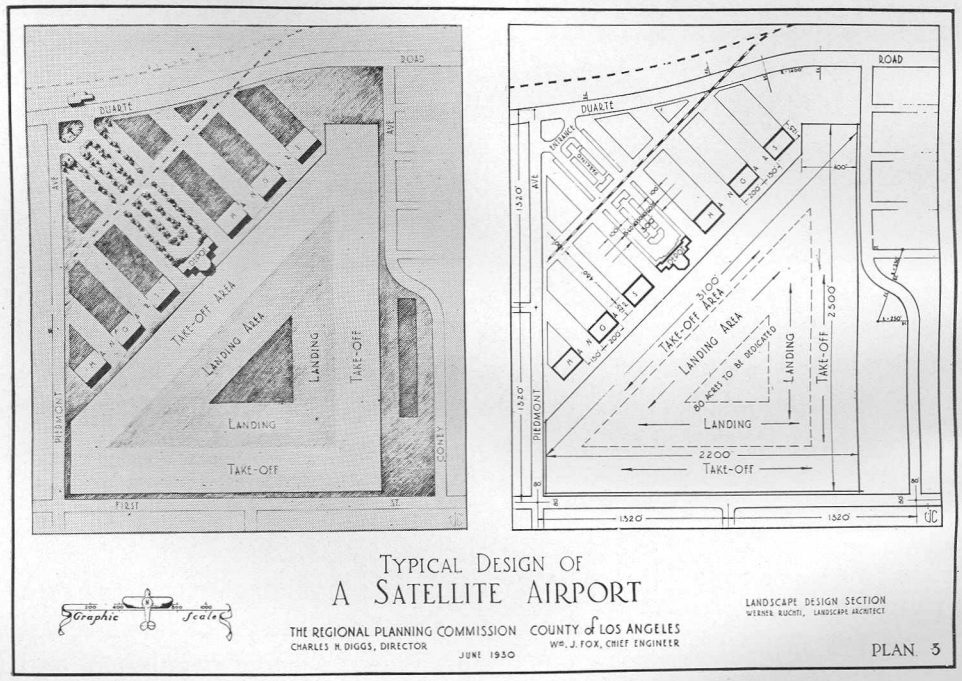
THE REGIONAL PLANNING COMMISSION

CHARLES H. DIOOS DIRECTOR Wm. J. FOX-CHIEF ENGINEER

J.A. MELBURN-HIGHWAY ENGINEER

ADVANTAGES TO INDUSTRY OF PERMANENT AIR TERMINALS

The establishment of adequate large air terminals, which are owned in fee with permanency guaranteed, is important because this alone gives to transport companies and manufacturers of airplanes and accessories a reliable and secure location for these industries. The owners do not then have to fear cancellation of their leases because the land is to be subdivided. Under these conditions they can proceed with confidence to develop their business, whereas short term leases tend to cripple progress. At a permanent airport all have the opportunity of using the master landing field and runways. The leases of occupancy for the various individual concerns can be written for as long a period as desired. These leases would cover only the land actually occupied, thus obviating the necessity of carrying the tremendous overhead of a separate landing field for each transport company or manufacturer. Zoning to regulate the development of the surrounding territory so as not to interfere with flying is possible only where the use is likely to be of long duration.



EXISTING AIRPORTS

The drawing on page 148 shows the number and location of the 52 airports and landing fields in the county in operation at the time of submitting this report. These fields are of various sizes, shapes and conditions of ownership. The number and locations change frequently for 90% of them are being operated on a 90-day lease basis or less. Many operators can obtain only 30-day leases. As soon as the owner has the opportunity to subdivide or lease the land for a more profitable purpose, the airport operator must vacate and seek some other location. This situation is a great handicap to aviation development in general. The operators are reluctant to construct permanent improvements and it is difficult under these conditions to negotiate loans for developing commercial aviation.

OWNERSHIP OF AIRPORTS

LOS ANGELES COUNTY

	Number	Acreage
Total leased airports	39	2,277
Airports owned by operator	8	570
Airports owned by the public	5	784
Total	52	3,631

Length of lease	30 days	60 days	90 days	1 yr.	2 yrs.	3 yrs.	5 yrs.	10 yrs.
Number of airports	20	2	3	2	1	4	4	3

SELECTION OF SITES

An engineering analysis was made for each airport site. On the basis of these studies the best were selected, by the process of elimination, to provide the county with airport facilities in a comprehensive way. The general plan was so designed and arranged that the existing airports which had received a satisfactory rating were properly recognized. The proposed future airports were so arranged and situated as to serve the ultimate population and were so chosen that the development of the sites themselves could be accomplished when necessary. The official highway plan of the County was adjusted to conform to and preserve both the existing and the proposed airports.

SELECTION WITH RESPECT TO GROWTH TRENDS

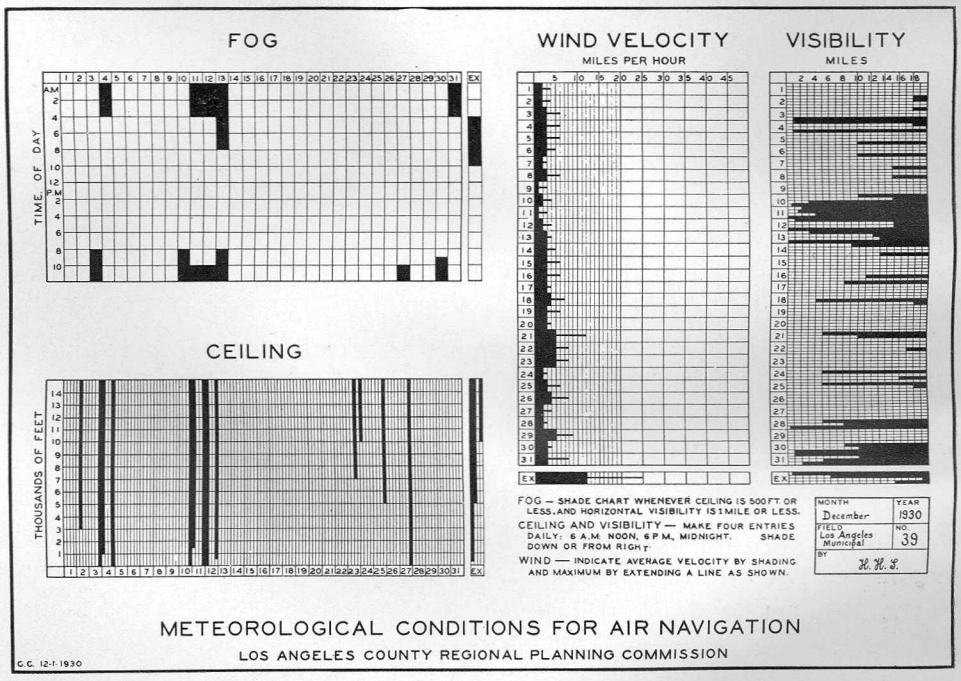
The selection of airport sites is based on a careful study of land areas, growing and shifting population, and industrial and residential development. It is part of the Master Plan, and, as such, is in conformity with the

future program of highway construction. This will result in great economies and will aid the community in keeping abreast of the developments in this new field.

At a strategic location in each physical division of the county, a site for a major air terminal was selected, from which would operate transport planes, cargo planes, and all large aircraft. Between and around these are the sites of the present and proposed satellite airports, each serving a local population center or providing for emergency landings.

ZONING OF AIRPORTS AND SURROUNDING PROPERTY

There has been some question as to the use zone into which air terminals may properly be placed. While there may be a certain amount of industrial activity incidental to the operation of an airport, this should be under strict regulation and supervision so that it does not interfere with the safe conduct of the terminal. Air terminals are a special class of use, somewhat like railroad passenger stations. The airport site could therefore be put down as a commercial use with allowance, under special permit, for certain types of light industrial use.

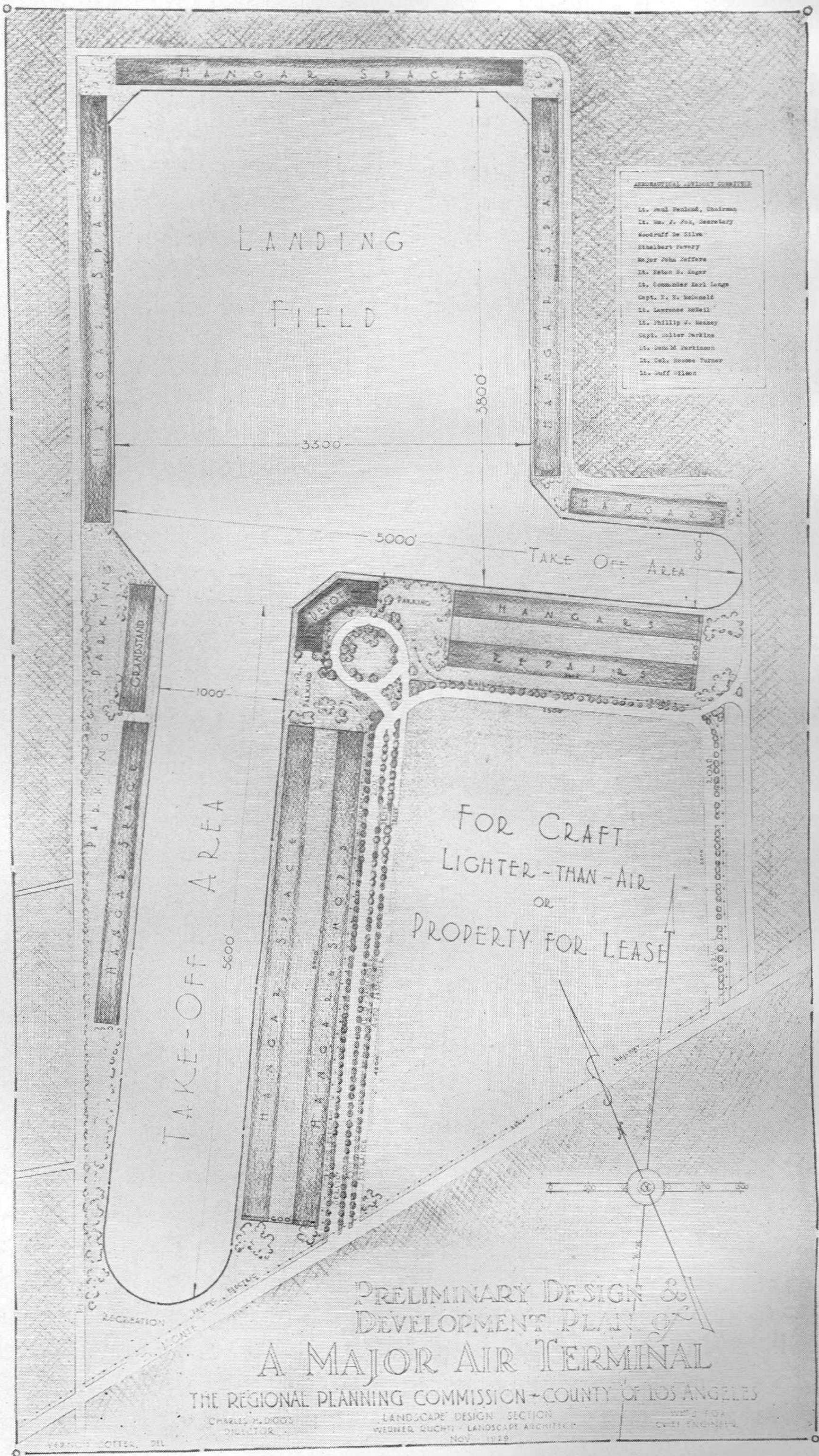


Daily weather reports like this are received from various points in the County, (see map on page 159).

A serious problem which confronts us today is the proper regulation of the use of property surrounding air terminals. Commercial air transport companies operating on a permanent basis need assurance that they will be protected, not only from detrimental industrial uses, but from obstructions to the full use of runways and landing areas, due to the erection of high buildings. Regulation of the height of nearby buildings is important as it gives the airport operators assurance that they will have the fullest possible use of the field, and adds to the safety of passengers. But before any such regulations can be legally applied to surrounding territory, there must be some assurance that the terminal is a permanent institution. It is then possible, through zoning, to apply a reasonable set of regulations in the interest of the general public, governing the height of buildings within certain prescribed areas. The most important thing, however, and one that should be borne in mind at all times, is that any such regulation of property surrounding air terminals must be predicated upon the certainty that the area will always be used as an air terminal. This can, of course, be satisfactorily established only when the field is owned by the public. If it is privately owned, it would be very doubtful whether any height limit regulations could reasonably be applied to surrounding territory.

DESIGN OF THE MAJOR AIR TERMINAL

Special attention is given to the design of the major air terminal for the reason that the area involved and the design of the field itself must be commensurate with the population served. The future population density gives a fair basis for the calculation of facilities required. At the outset, it is recognized that the major air terminals will have the greatest concentration of aircraft operation. The area of the immediate physical division that each major air terminal serves ranges from 200 to 300 square miles with an ultimate population of from 1,000,000 to 3,000,000. One of the chief factors in the safety of the airplanes as a means of transportation is the proper and efficient design of the airport. In the design of all major air terminals one of the basic principles that has been followed in the plan is to provide for the separation of the landing area and the runways for taking off. Another is to have runways of sufficient length to permit landings on the field in the event of a "dead stick." It has been quite definitely established that this arrangement adds greatly to the safety and efficiency of the port. Such a design will permit the simultaneous landing and taking off of a squadron of planes; it likewise permits the landing or the continuous taking off of individual ships, on schedule or off schedule, without interference, danger or delay.


HANGAR SPACE
LANDING FIELD
3500'
3800'
5000'
TAKE OFF AREA
HANGARS
REPAIRS
DEPOT
PARKING
GRANDSTAND
1000'
HANGAR SPACE
TAKE-OFF AREA
5600'
HANGAR SHOPS
FOR CRAFT LIGHTER-THAN-AIR OR PROPERTY FOR LEASE
RECREATION
PRELIMINARY DESIGN & DEVELOPMENT PLAN OF
A MAJOR AIR TERMINAL
THE REGIONAL PLANNING COMMISSION - COUNTY OF LOS ANGELES
CHARLES H. DIGGS DIRECTOR
LANDSCAPE DESIGN SECTION
NOV. 1929

SIZE OF AIR TERMINALS DETERMINED BY THE COURTS

The actual dimensions that should be adhered to in airport design have been a subject of much speculation. It remained for the courts to finally decide the status of the airplane as a means of transportation, as related to the vested rights of persons owning real property. Perhaps the most noted case in this regard is that of Swetland vs. Curtiss Airports Corporation, decided in the United States District Court of Ohio, July 7, 1930. This decision will tend to fix definitely the general dimensions of airports.

The Court held that an airport is not a nuisance *per se*, but may be so located or conducted as to be a nuisance; that the landowner below did not own the air space above 500 feet so as to make passage through it a trespass; that legislation with regard to passage through this air was a proper adjustment of rights under its police power; and that passage through the air space less than 500 feet above plaintiff's land was a trespass and would be enjoined. *"Until the progress of aerial navigation has reached a point of development where airplanes can readily reach an altitude of 500 feet before crossing the property of an adjoining owner, where such crossing involves an unreasonable interference with property rights or with effective possession, owners of airports must acquire landing fields of sufficient area to accomplish that result.* In such instances to fly over the lands of an adjoining owner at lower altitudes, the owners of airports must secure the consent of adjoining property owners, or acquire such right by condemnation when appropriate enabling statutes are enacted".

The effect of this decision is to declare definitely that fields one mile square for major air terminals are insufficient unless additional land or air rights over adjoining property are acquired. This point is well illustrated by the drawing shown opposite. Rights of neighboring land owners and of the public are definitely stated in hundreds of Supreme Court decisions.

ULTIMATE AIRPLANE DENSITY

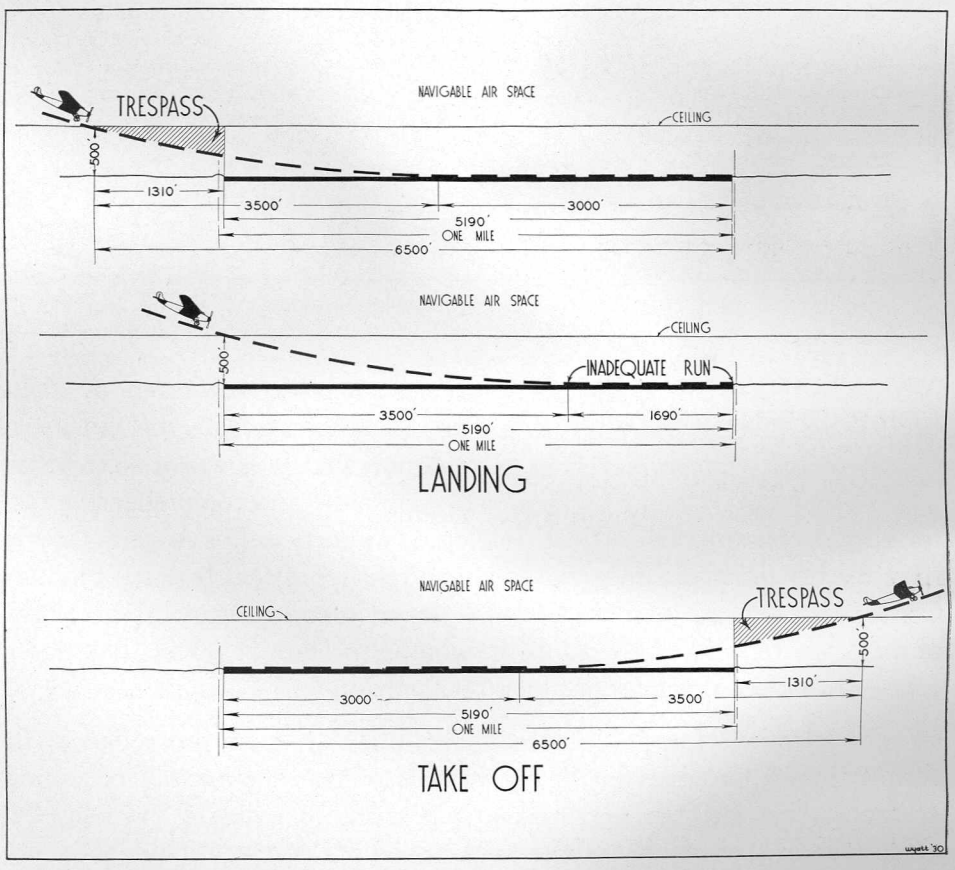
It is possible to estimate, by methods outlined on page 21, the ultimate population which the cities in the Long Beach-Redondo Area may expect to attain within their present limits. The probable number of airplanes that will have to be accommodated in each, based on this population, with allowance made for the type of city, is indicated in the table which follows. It is not claimed that these figures are absolute, but they do indicate

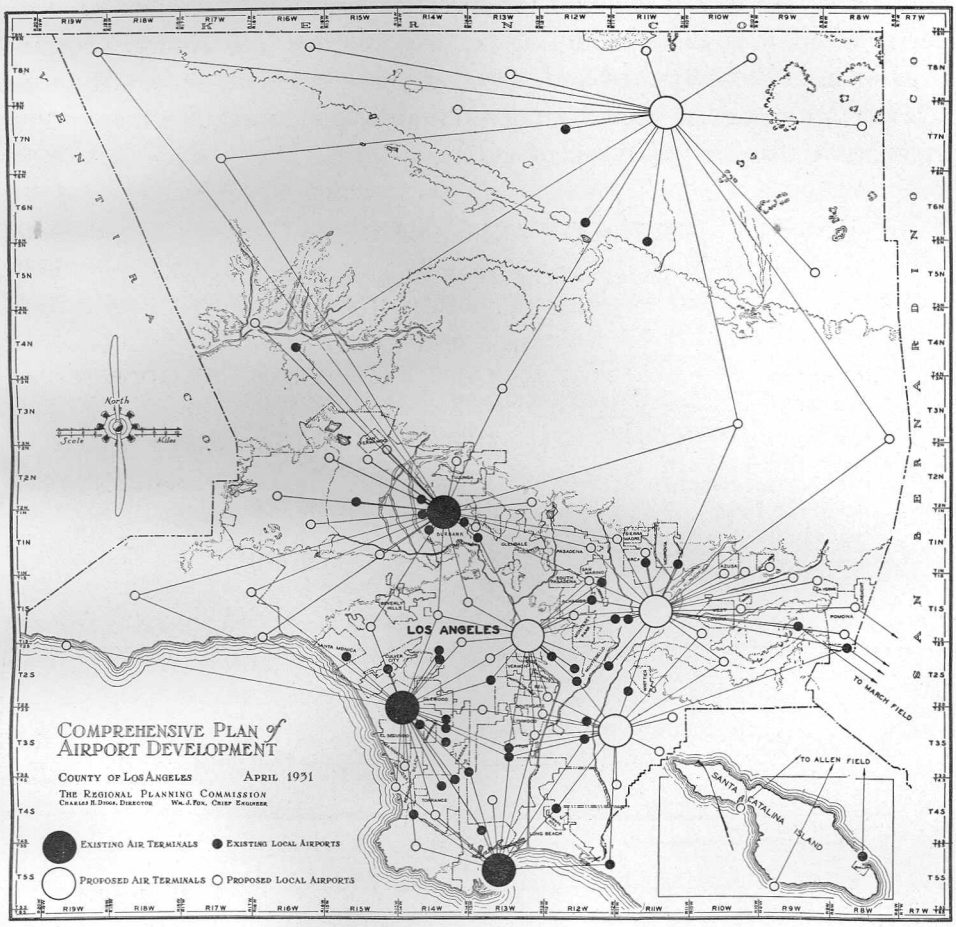
in a rather exact way the need for adequate provision of ground facilities for aviation, if these cities are to be prepared for the future. Suitable areas should be designated and, if not acquired outright, at least reserved against such uses as would render it impossible to acquire them at the right time, for the purposes of aviation.

ULTIMATE AIRPLANE DENSITY

Cities in Long Beach-Redondo Area

City	*Area Square Miles*	*Ultimate Population*	*Number of Airplanes*
Compton	4.52	70,000	700
Gardena	2.89	40,000	300
Hermosa Beach	1.40	20,000	150
Long Beach	28.79	450,000	4,000
Manhattan Beach	3.82	60,000	500
Redondo Beach	6.19	90,000	800
Signal Hill	2.25	35,000	350
Torrance	18.40	150,000	1,000





APPLICATION OF THE COMPREHENSIVE PLAN

It is generally recognized by those vitally interested in the future of aviation that it is essential to follow a systematic and comprehensive plan for airport construction. Those developing airports in Los Angeles County have the benefit of the impartial study and advice of the Regional Planning Commission and its Aeronautical Advisory Committee; and the selection of major air terminals or local fields, whether private or public, has closely followed the recommendations here set forth.

The selection of a site in accord with the plan gives protection in the form of zoning, provides for the proper construction and location of ground-transportation facilities and makes it possible to regulate the height of structures in the vicinity of the field.

THE HIGHWAY PLAN AND GRADE CROSSING CONTROL

EXCESSIVE NUMBER OF GRADE CROSSINGS

The most casual survey will indicate that we have greatly erred in permitting so many grade crossings. Crossings exist at many hazardous locations where they are not needed and a great many new ones are constantly being opened. Little or no effort is being made to close unimportant crossings. It has been found that in the Long Beach-Redondo Area, which covers approximately 200 square miles, there are now (January 1, 1931) 422 legal grade crossings, and 80 private grade crossings. In the San Gabriel Valley, an area comprising 250 square miles, where a similar study was made, there were found to be 460 grade crossings. 50% of the crossings in both of these areas are at unimportant locations and are of little or no general public convenience.

FACTORS TO BE CONSIDERED

1. The frequency of grade crossings should correspond to the public convenience and necessity, having due regard for the railroads' position as an indispensable factor in our commercial and economic world.
2. It should be recognized that every grade crossing is a potential hazard and a source of great economic losses in the form of accidents, danger to life, delays and traffic congestion.
3. Where crossings at grade unavoidably exist, we should strive to prevent two mediums of transportation from occupying the same space at the same time.
4. Equitable consideration should be given to the safe and expeditious movement of both rail and vehicular traffic.
5. Crossings of rail lines should be permitted only on important thoroughfares that carry large volumes of motor vehicle traffic.
6. The grades of highways should be separated from those of railroads wherever and whenever economically possible, because of the tremendous amount and the ever-increasing size of vehicular traffic loads and of the loss of life and other economic losses due to grade crossing accidents and delays.

In view of these factors, it is evident that successful control of grade crossings can be secured only by the adoption of certain definite principles.

PRINCIPLES OF PROCEDURE

1. A comprehensive plan of actual and proposed major and secondary highways should be prepared by the proper authorities and officially adopted.
2. Using this comprehensive plan as a basis, a program of grade crossings should be prepared, providing for the establishment of new crossings only where absolutely necessary and for the abandonment of unessential, unimportant and dangerous crossings.
3. A systematic program of grade separation projects at designated locations should be prepared and a financial program set up for carrying it out.
4. A definite amount of money should be set aside each year for carrying out this grade separation program.
5. Grade crossings in the vicinity of grade separations should be closed and traffic directed through the underpass or overpass structure.

6. New crossings should not be granted or permitted at grade until public necessity and conformity with the comprehensive plan have been established.
7. Regular conferences should be held with public officials in order that they may become familiar with these problems and with the plan, use their influence to secure the closing of unnecessary crossings under their jurisdiction, and be encouraged to foster a program for the separation of grades where economically feasible.

HIGHWAY PLAN A NECESSARY BASIS

The basis for dealing with grade crossings and grade separations, either actual or proposed, is a comprehensive plan of the existing and proposed major and secondary highways, covering a large area. It is impossible to deal fairly and intelligently with a single application for a grade crossing or grade separation without knowing what the city, county or state authorities plan as the ultimate development of through highways for the locality. A zoning plan setting forth the predetermined uses of adjacent property is also extremely valuable. When such plans are available, all grade crossings should be confined to the major and secondary thoroughfares, except where others are necessary for fire protection or some other absolute established public necessity. In determining such public necessity, the movement of traffic over a railroad should certainly be considered a public necessity of prime importance. Railroads have been and still are the backbone of commercial and industrial development, and anything which retards or jeopardizes the free movement of trains will have a similar reactionary effect on all business, social and commercial enterprises.

The map insert shows the ultimate highway plan of the Long Beach-Redondo Area and the location of all existing and proposed grade crossings, together with that part of the County's five-year Grade Separation Program affecting this area. It is evident from a study of this map that if the crossings were confined to the important thoroughfares as suggested, and kept under proper control, it would be reasonable to hope that separation of grades might eventually be carried out at all points where it is justified.

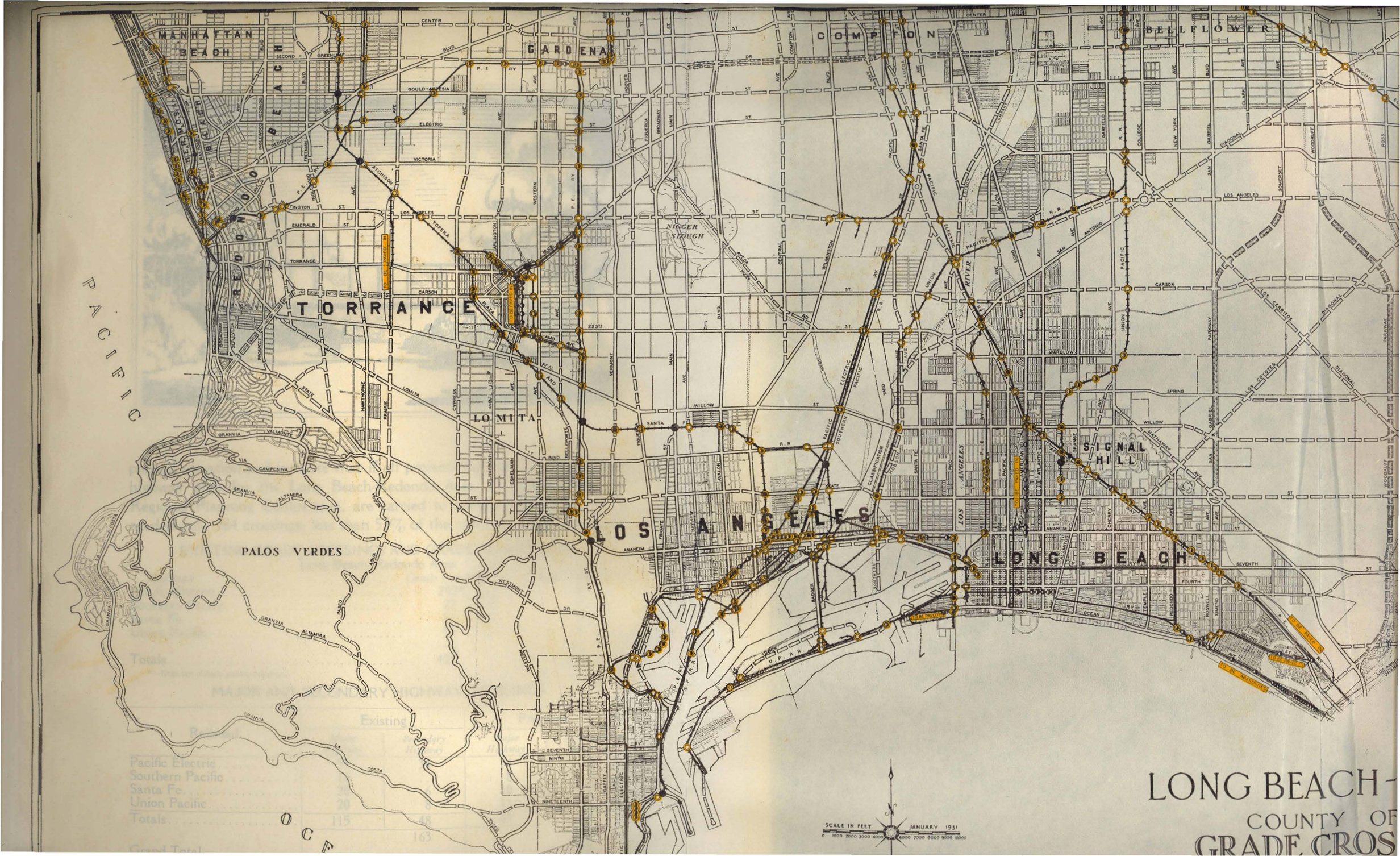
NEED FOR PROPER CONTROL

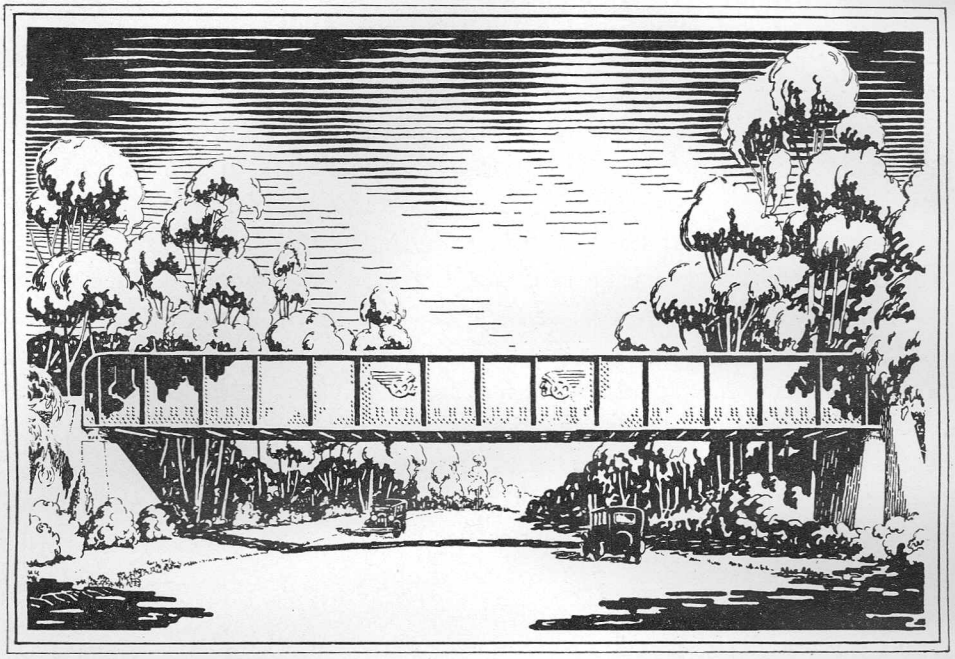
This analysis indicates that without strict cooperative grade crossing control there will be six times as many crossings as are necessary in this area. If this should happen, each major railway line, whether steam or electric, would become, in effect, nothing but a local street car line, and would be rendered practically useless as a medium of transportation for either passengers or freight. The two tables which follow summarize the

LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

GRADE CROSSING CONTROL


MANHATTAN BEACH
REDONDO BEACH
HERMOSA BEACH
GARDENA
COMPTON
BELLFLOWER
TORRANCE
LOMITA
SIGNAL HILL
LOS ANGELES
LONG BEACH
PALOS VERDES
PACIFIC OCEAN
NIGGER SLOUGH
SCALE IN FEET
JANUARY 1931
LONG BEACH-
COUNTY OF
GRADE CROS



present situation and indicate that if all projects included in the ultimate highway plan for the Long Beach-Redondo Area, as proposed by the Regional Planning Commission, are carried to completion, there will be needed only 264 crossings, less than 52% of the number now in existence.

EXISTING GRADE CROSSINGS AND GRADE SEPARATIONS
Long Beach-Redondo Area

Railroad	*Grade Crossings*	*Grade Separations*
Pacific Electric	292*	8
Southern Pacific	22	1
Santa Fe	51	4
Union Pacific	57	3
Totals	422	16

*—Does not include private crossings.

MAJOR AND SECONDARY HIGHWAY CROSSINGS

Railroad	Existing		Proposed	
	Major Highway	*Secondary Highway*	*Major Highway*	*Secondary Highway*
Pacific Electric	59	34	34	18
Southern Pacific	16	..	8	3
Santa Fe	20	6	10	8
Union Pacific	20	8	11	9
Totals	115	48	63	38
		163		101
Grand Total				264

FORMATION OF COUNTY GRADE CROSSING COMMITTEE

The large number of accidents occurring at railroad and highway grade crossings in Los Angeles County was in 1923 made the subject of an intensive study by the public authorities. It appeared from the information obtained that this particular phase of the traffic problem merited further consideration and that the policy of granting further crossings at random would have to be changed. A committee was accordingly formed under the name of the Los Angeles County Grade Crossing Committee. It was composed of officials and engineers of city, county and state governments and the general managers of the five railway lines. It included also, ex-officio, a representative of the State Railroad Commission. The purpose of this committee was to conduct inquiries, to make investigations of applications for new grade crossings in the county, to encourage and recommend the separation of grades wherever feasible, and to oppose all applications for new grade crossings that are deemed unwarranted or hazardous.

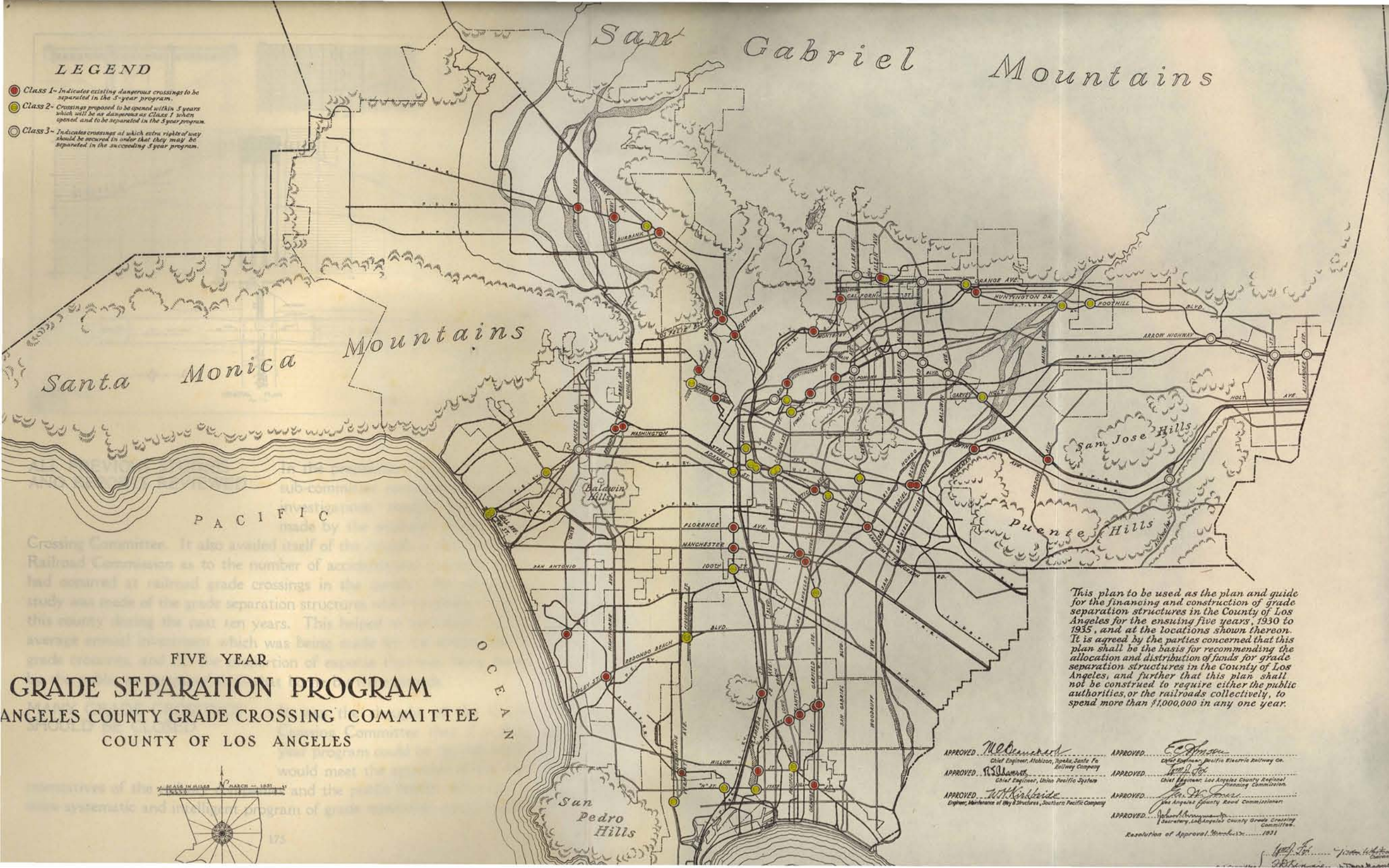
FIVE-YEAR GRADE SEPARATION PROGRAM

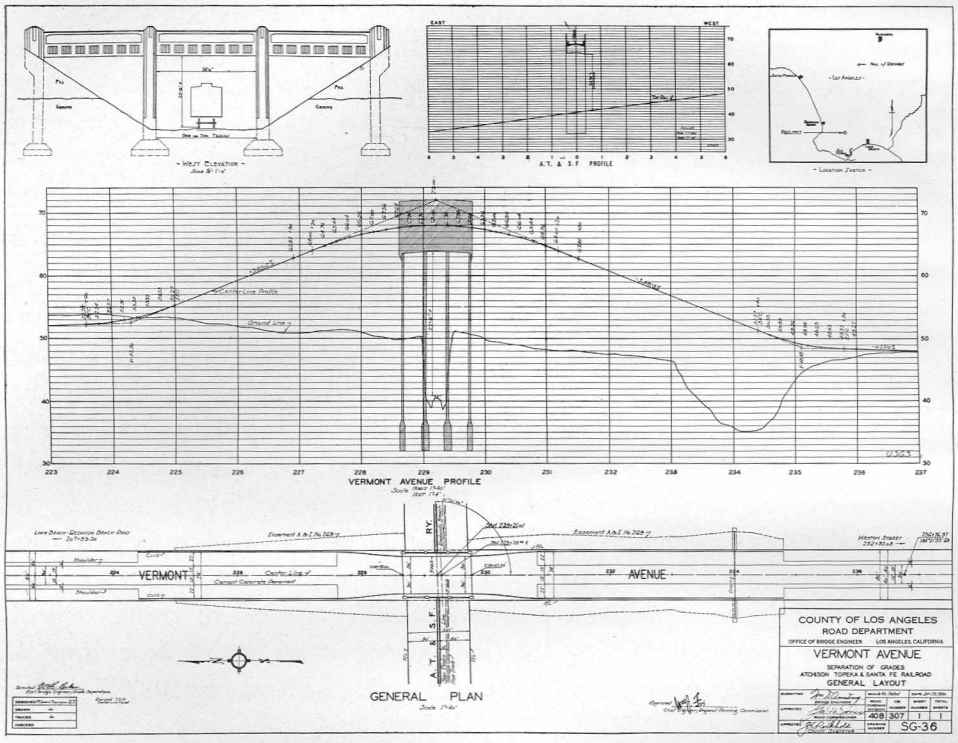
The Grade Crossing Committee realized the necessity of making definite recommendations as to a consistent procedure for the future. A sub-committee was therefore appointed on March 20, 1930 to prepare a five-year grade separation program for the County of Los Angeles. The following officials were selected as members of this sub-committee:

> Gordon Whitnall, Director, League of California Municipalities; E. E. East, Chief Engineer, Automobile Club of Southern California; C. K. Bowen, Assistant Engineer, Pacific Electric Railway, Chairman; Dan Crosman, Office Engineer, Southern Pacific Railroad; M. C. Blanchard, Chief Engineer, Santa Fe Railroad; R. L. Adamson, Chief Engineer, Union Pacific Railroad; E. C. Johnson, Chief Engineer, Pacific Electric Railway; Geo. W. Jones, Road Commissioner, Los Angeles County; Wm. J. Fox, Chief Engineer, Los Angeles County Regional Planning Commission.

The purpose was to select the crossings on each railway line which it was thought advisable to separate during the coming five-year period. The committee was to be guided in its studies by the following:

1. Those extremely hazardous crossings at which a great many fatal accidents had occurred.
2. Those crossings which were involved in connection with major highways which were under legal proceedings to be opened across railway lines, where such crossing, when open, would be extremely hazardous.
3. The ability of the public authorities and the railway lines to allocate annually sufficient funds to carry out the program.
4. The economic losses caused by traffic delays at grade crossings.


San Gabriel Mountains
Santa Monica Mountains
PACIFIC OCEAN
Baldwin Hills
San Jose Hills
Puente Hills
San Pedro Hills
LEGEND
Class 1- Indicates existing dangerous crossings to be separated in the 5-year program.
Class 2- Crossings proposed to be opened within 5 years which will be as dangerous as Class 1 when opened and to be separated in the 5 year program.
Class 3- Indicates crossings at which extra rights of way should be secured in order that they may be separated in the succeeding 5 year program.
FIVE YEAR
GRADE SEPARATION PROGRAM
ANGELES COUNTY GRADE CROSSING COMMITTEE
COUNTY OF LOS ANGELES
SCALE IN MILES
MARCH — 1931
This plan to be used as the plan and guide for the financing and construction of grade separation structures in the County of Los Angeles for the ensuing five years, 1930 to 1935, and at the locations shown thereon. It is agreed by the parties concerned that this plan shall be the basis for recommending the allocation and distribution of funds for grade separation structures in the County of Los Angeles, and further that this plan shall not be construed to require either the public authorities, or the railroads collectively, to spend more than $1,000,000 in any one year.
APPROVED M C Brainerd
Chief Engineer, Atchison, Topeka, Santa Fe Railway Company
APPROVED R S Lemmon
Chief Engineer, Union Pacific System
APPROVED W K Kirkbride
Engineer, Maintenance of Way & Structures, Southern Pacific Company
APPROVED E O Thompson
Chief Engineer, Pacific Electric Railway Co.
APPROVED Tom J. Fox
Chief Engineer, Los Angeles County Regional Planning Commission.
APPROVED John R. Jones
Los Angeles County Road Commissioner
APPROVED Robert Brownell
Secretary, Los Angeles County Grade Crossing Committee.
Resolution of Approval November 1930



ALL PREVIOUS STUDIES AND REPORTS REVIEWED

In the preparation of its report, the sub-committee reviewed all previous investigations, studies and reports made by the engineers of the Grade Crossing Committee. It also availed itself of the records of the California Railroad Commission as to the number of accidents and fatalities which had occurred at railroad grade crossings in the county. An exhaustive study was made of the grade separation structures which had been built in this county during the past ten years. This helped to determine (1) the average annual investment which was being made for the elimination of grade crossings, and (2) the proportion of expense that was being borne by the public as compared with that borne by the railroads.

MANY GRADE CROSSINGS SHOULD BE CLOSED

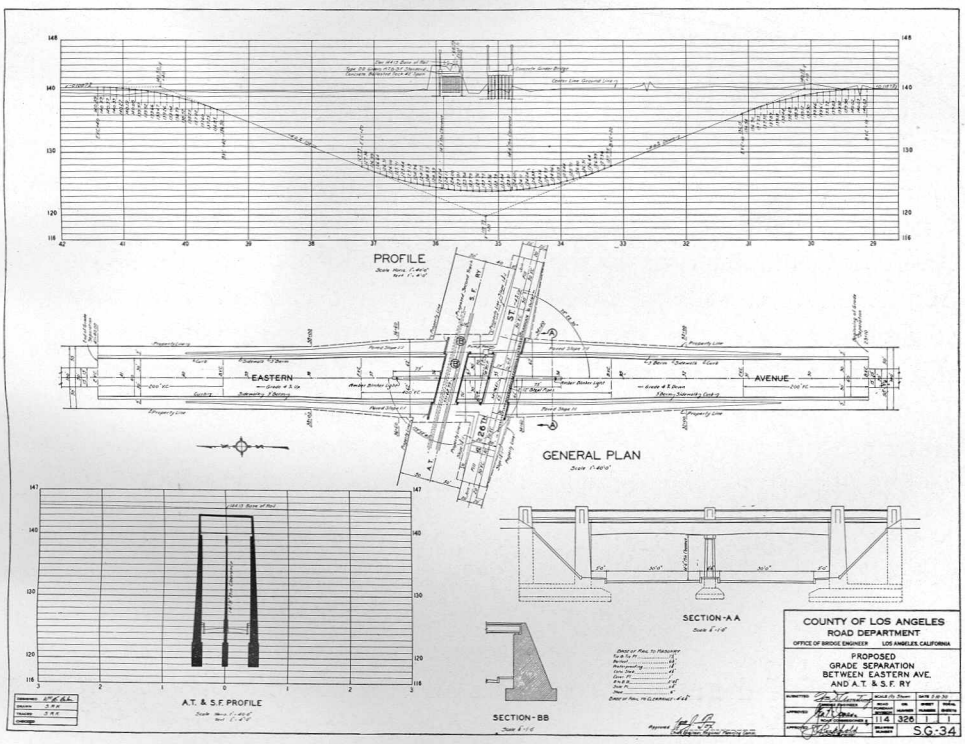
It was the thought of the Grade Crossing Committee that if a five-year program could be devised which would meet the approval of the representatives of the railway companies and the public bodies concerned, a more systematic and intelligent program of grade separation would follow.

After many years of dealing with applications for opening grade crossings, it was apparent to all that such a program would be of great assistance in judging the merits of future applications.

In the County of Los Angeles there are now about 3,000 grade crossings. (About 30% of these are termed "private" crossings, since they have no legal status.) Of this total, 50% are unwarranted, and should be closed. Many are at improper locations and should be closed when new crossings are opened at locations which better serve the general public.

ONLY CERTAIN RAILWAY LINES JUSTIFY GRADE SEPARATION

In the studies made in the preparation of the five-year program the relative importance of the various rail lines, as affecting the necessity of grade separations, was carefully weighed. There are many branch lines of the combined railway system in this County which do not, and never will, warrant the expense of grade separation, as there is no great hazard at these crossings, nor any appreciable economic loss by reason of traffic delays. A map was prepared showing the lines along which the consideration of grade separation is warranted. This map will be extremely helpful to the



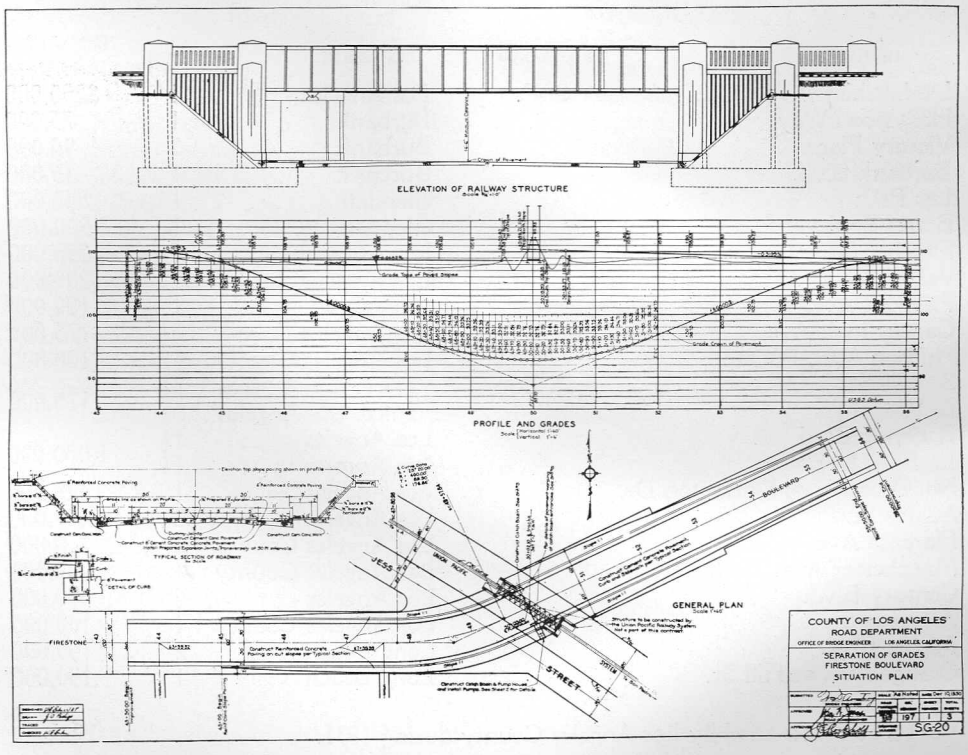
Grade Crossing Committee in dealing with future applications for grade crossings, or grade separation structures, and in determining the relative importance of intersecting highway and railway lines.

SEPARATIONS TO BE CONSTRUCTED DURING THE YEAR 1931

The entire program as finally worked out by the sub-committee calls for 70 crossings to be separated in the five-year period, or about 15 each year. As a start in this direction the County of Los Angeles now proposes to separate, in the year 1931, six of the crossings as proposed in the program:

1. Washington Boulevard and Union Pacific, at Vernon.
2. Firestone Avenue and Union Pacific, near South Gate.
3. Atlantic Boulevard and Santa Fe, near Maywood.
4. Ripley Avenue and Santa Fe, at Redondo Beach.
5. Vermont Avenue and Pacific Electric, at Gaffey Street, Los Angeles.
6. Victory Place and Southern Pacific, at Burbank.

Funds have been allocated for this purpose, and three of the separations are now under construction.



The City of Los Angeles proposes to separate three crossings in the same period, and the State Highway Commission one, making a total of ten separations constructed as the first year's contribution toward bringing about the execution of the program. It is estimated that the total cost of carrying out the program will be $12,386,000, or $2,477,200 annually, of which approximately 50% will be paid by the railway companies and 50% by the public.

PLAN AND PROGRAM RECEIVES OFFICIAL APPROVAL

The five-year program has been checked and revised by all interested parties. In order to assist in the preparation of the annual budget for capital expenditure, the plan and program were submitted to the officials of the railway lines and of the public bodies for approval and endorsement. The representatives of both the railways and the public bodies have endorsed and approved the plan and program as here set forth.

GRADE SEPARATIONS TO BE CONSTRUCTED IN FIVE-YEAR PROGRAM

HIGHWAY	RAILROAD	LOCATION	CLASS	ESTIMATED COST
Lankershim Blvd.	S. P.	Los Angeles	1	$250,000
Hollywood Way	"	Burbank	1	75,000
Victory Place	* "	Burbank	2	90,000
Burbank Blvd.	"	Burbank	1	75,000
Los Feliz	"	Glendale	1	500,000
Brand Boulevard	"	Glendale	1	500,000
Fletcher Dr.	"	Los Angeles	1	250,000
Valley Blvd.	"	Los Angeles	1	200,000
Fremont Ave.	"	Alhambra	1	100,000
Garvey-Holt Ave.	"	Los Angeles County	2	175,000
Hudson Ave., Puente	"	Los Angeles County	1	100,000
Second St.	P. E.	Venice, Los Angeles	2	175,000
Del Ave.	"	Venice, Los Angeles	2	
Redondo Blvd.	"	Los Angeles	1	1,000,000
La Brea Ave.	"	Los Angeles	1	
No. Broadway-Huntington Dr.	"	Los Angeles	1	440,000
Adams St.	"	Los Angeles	2	400,000
Florence Ave.	"	Los Angeles County	1	250,000
Manchester Ave.	"	Los Angeles County	1	250,000
Century Blvd.	"	Los Angeles	2	300,000
Alameda St.	"	Los Angeles County	1	100,000
Pacific Blvd.	"	Long Beach	2	100,000
Orange Ave. at Hill St.	"	Long Beach	1	150,000

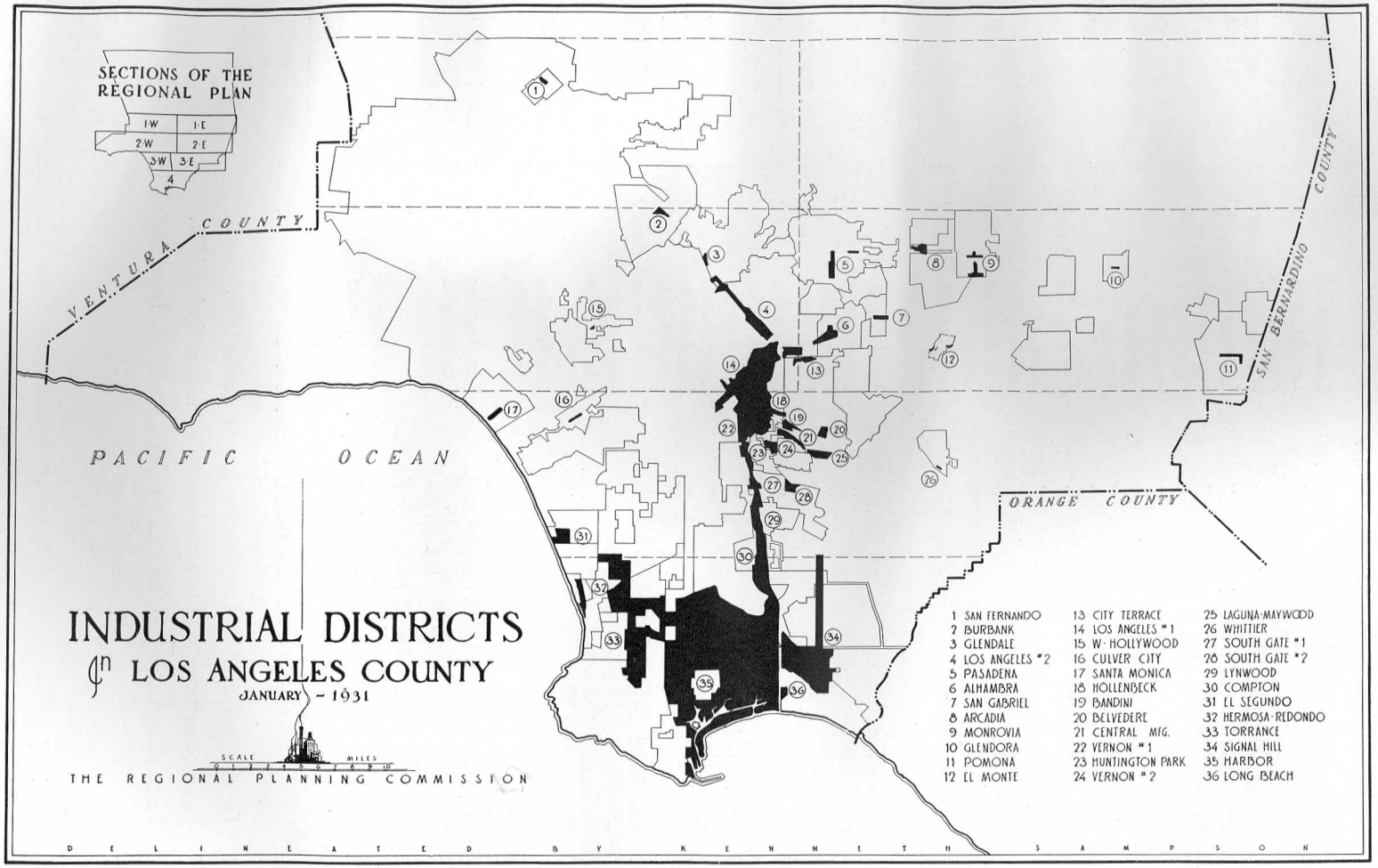
*To be constructed by Los Angeles County during 1931.

HIGHWAY	RAILROAD	LOCATION	CLASS	ESTIMATED COST
Vermont Ave. at Gaffey St.	†P. E.	Los Angeles	2	120,000
Telegraph Rd.	"	Los Angeles County	1	155,000
Ripley Ave.	*S. Fe	Redondo Beach	1	115,000
Sepulveda Blvd.	† "	Manhattan Beach	1	40,000
Vermont Ave.	"	Los Angeles County	1	46,000
Monterey Rd.	"	So. Pasadena	1	250,000
California St.	"	Pasadena	1	150,000
Allen Ave.	"	Pasadena	1	100,000
Foothill Blvd.	"	Pasadena	2	100,000
Orange Ave.	"	Arcadia	2	100,000
Huntington Dr.	"	Arcadia	1	300,000
Maine Ave.	"	Los Angeles County	2	100,000
Foothill Blvd.	"	Azusa	2	150,000
Atlantic Blvd.	† "	Los Angeles County	1	175,000
Industrial Ave.	"	Los Angeles County	2	75,000
Downey Rd.	"	Vernon	2	150,000
Washington Blvd.	*U. P.	Los Angeles County	2	250,000
Atlantic Blvd.	U.P.& S.P.	South Gate	1	250,000
Manchester Ave. (Firestone Blvd.)	*U. P.	South Gate	1	100,000
Garfield Ave.	"	Los Angeles County	2	100,000
Garfield Ave.	"	Montebello	2	150,000
San Gabriel Blvd.	"	Los Angeles County	1	200,000
Cherry Ave.	‡ "	Los Angeles County	1	———
Orange Ave.	‡ "	Los Angeles County	1	———
Atlantic Blvd.	‡ "	Los Angeles County	1	———
Long Beach Blvd.	‡ "	Long Beach	1	———
Perris Rd.	‡ "	Los Angeles County	1	———
Willow St.	‡ "	Long Beach	1	———
Durfee Road	"	Los Angeles County	1	200,000
Fifth Ave.	"	Los Angeles County	1	250,000
Silver Lake at Sunset	P. E.	Los Angeles	1	450,000
1st St.-Beverly Blvd. at Glendale Blvd.	"	Los Angeles	2	600,000
Ramona-Fowler	"	Los Angeles	2	200,000
Figueroa St. between Manchester and 190th	"	Los Angeles	2	130,000
Soto St. at Alhambra Ave.	S. P.	Los Angeles	2	500,000
Lemon St.	"	Los Angeles	2	500,000
Washington Blvd. (23rd St.) West of Los Angeles River	S. Fe	Los Angeles	2	600,000
Washington Blvd. at Butte St.	S.F.& U.P.	Los Angeles	2	
N & O Sts.-State St. Extension	S. Fe	Wilmington	2	300,000
		Grand Total		$12,386,000

*To be constructed by Los Angeles County during 1931.

†To be constructed by State Highway Commission during 1931.

‡To be constructed and financed by Union Pacific Railroad during 1931.


SECTIONS OF THE REGIONAL PLAN
1W
1E
2W
2E
3W
3E
4
VENTURA COUNTY
SAN BERNARDINO COUNTY
ORANGE COUNTY
PACIFIC OCEAN
INDUSTRIAL DISTRICTS
IN LOS ANGELES COUNTY
JANUARY - 1931
SCALE MILES
0 1 2 3 4 5 6 7 8 9 10
THE REGIONAL PLANNING COMMISSION
1 SAN FERNANDO
2 BURBANK
3 GLENDALE
4 LOS ANGELES #2
5 PASADENA
6 ALHAMBRA
7 SAN GABRIEL
8 ARCADIA
9 MONROVIA
10 GLENDORA
11 POMONA
12 EL MONTE
13 CITY TERRACE
14 LOS ANGELES #1
15 W. HOLLYWOOD
16 CULVER CITY
17 SANTA MONICA
18 HOLLENBECK
19 BANDINI
20 BELVEDERE
21 CENTRAL MFG.
22 VERNON #1
23 HUNTINGTON PARK
24 VERNON #2
25 LAGUNA-MAYWOOD
26 WHITTIER
27 SOUTH GATE #1
28 SOUTH GATE #2
29 LYNWOOD
30 COMPTON
31 EL SEGUNDO
32 HERMOSA-REDONDO
33 TORRANCE
34 SIGNAL HILL
35 HARBOR
36 LONG BEACH
DELINEATED BY KENNETH SAMPSON

THE HIGHWAY PLAN AND INDUSTRIAL DEVELOPMENT

HEART OF INDUSTRIAL ACTIVITY

The industrial district which lies within the Long Beach-Redondo Area, forms the real heart of the industrial background of the entire Los Angeles metropolitan area. On this account, its potentialities for future development are particularly significant. We will do well to give serious attention to the several vital factors upon which depend the extent, rate and magnitude of our future industrial development, because these in turn are directly reflected in 90% of all other economic programs and in the general prosperity of the county.

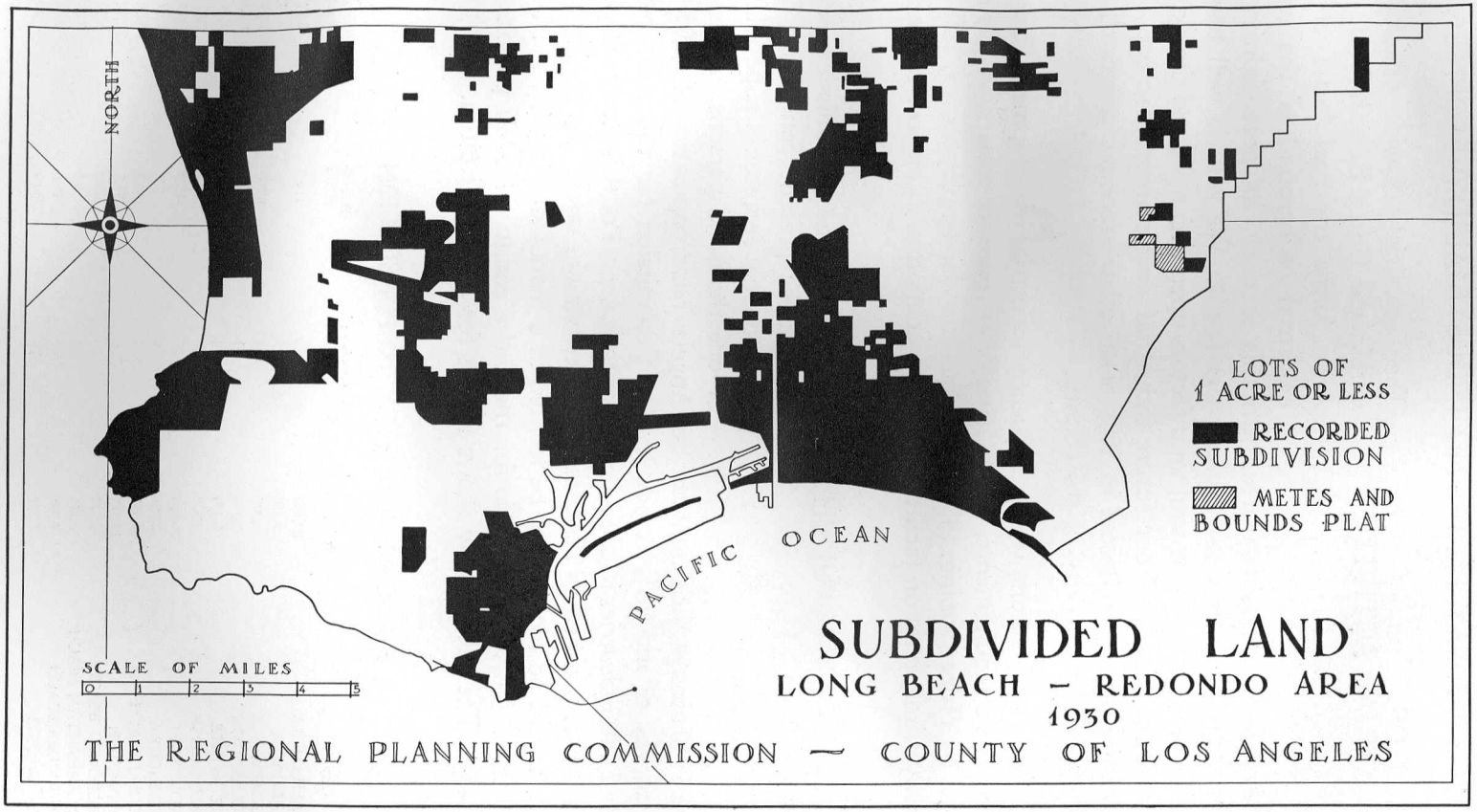
These vital factors which influence industrial development are (1) primary land requirements, (2) availability of space for expansion, (3) protection by proper zoning, (4) housing facilities for employees, (5) rail and highway transportation facilities, and (6) location with respect to market.

RELATION OF POPULATION AND INDUSTRY

Surveys by the Commission reveal that under present conditions here, one industry represents a population of one thousand persons. According to the 1930 census, the County of Los Angeles has a population of 2,208,492. The survey of industries made by the Commission for the same period shows 2,150 industries in operation. For the purpose of this study an industry has been defined as any establishment which, under the zoning ordinance, would be required to be located in a manufacturing (M-1, M-2 or M-3) zone. This gives a ratio for the entire county of 1,027 persons per industry. The table below shows figures for individual cities.

RATIO OF INDUSTRY TO POPULATION

City	Population	Number of Industries	Area in Acres	Average Acreage
ALHAMBRA	29,472	30	119.0	3.97
ARCADIA	5,216	4	8.5	2.12
AZUSA	4,808	4	150.0	3.75
CLAREMONT	2,719	3	54.0	1.80
EL MONTE	3,479	4	9.7	2.42
MONROVIA	10,890	11	21.1	1.92
POMONA	20,804	20	18.5	.93
GLENDORA	2,761	4	7.5	1.87
LONG BEACH	142,032	137	416.5	3.04
COMPTON	12,516	11	31.1	2.74
REDONDO BEACH	9,347	10	35.2	3.52
MANHATTAN BEACH	1,891	2	6.0	3.00
HERMOSA BEACH	4,796	4	16.0	4.00
TORRANCE	7,271	78	2854.9	36.50


NORTH
LOTS OF
1 ACRE OR LESS
RECORDED
SUBDIVISION
METES AND
BOUNDS PLAT
PACIFIC OCEAN
SCALE OF MILES
0 1 2 3 4 5
SUBDIVIDED LAND
LONG BEACH – REDONDO AREA
1930
THE REGIONAL PLANNING COMMISSION — COUNTY OF LOS ANGELES

DIVERSIFIED CHARACTER OF CITIES

It is remarkable how consistently this ratio of 1,000 persons per industry holds throughout the regional area in the cities mentioned. This is even more striking when one considers how diversified in character and size these particular cities are. They range in population from 1,000 to 141,000. Some are purely agricultural centers, some are in the heart of, or bordering on, intensive industrial districts, and some are self-contained cities surrounded by agricultural territory. There are others bordering upon the Pacific Ocean which are cities of the recreational type.

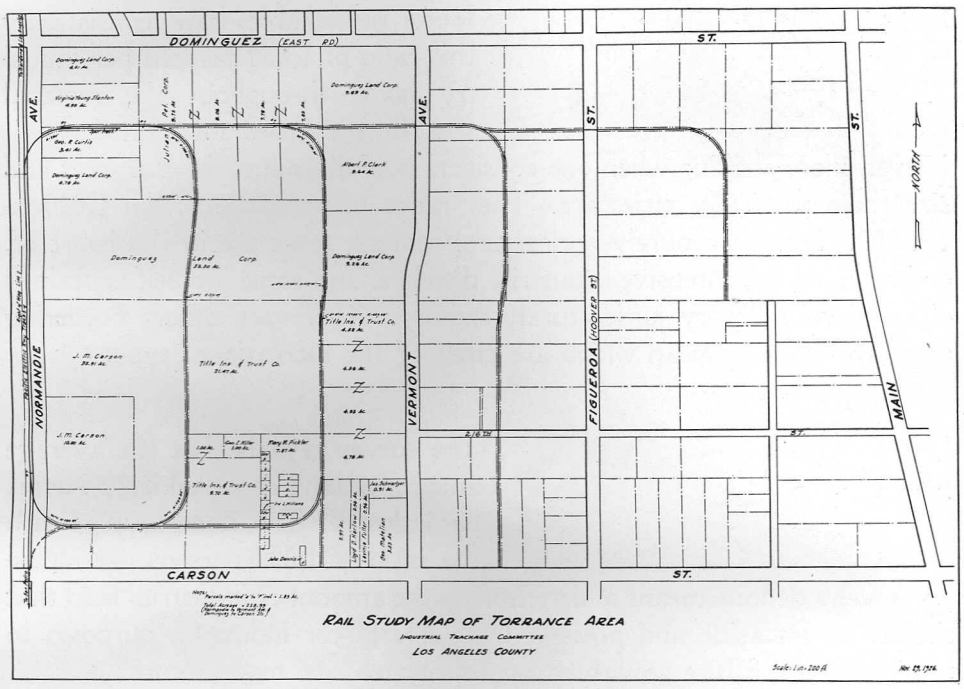
LAND AREA FACTOR

The survey reveals that the average amount of land occupied is 2.35 acres per industry. This item, coupled with the ratio of 1,000 persons per industry, gives a definite means of determining the amount of industrial land that should be set aside and preserved exclusively for industrial purposes in order that the future growth of the county may be made secure.

Assuming that the relationship of 1,000 persons per industry will continue to apply in the future, and by simple arithmetic relating it to the ultimate population of 15,000,000 anticipated for this metropolitan area, it is found that to support such a population there will eventually be needed 15,000 industries. Multiplying this number of industries by 2.35 acres (the average area occupied), we find that there must be provided for industrial use 35,300 acres, or approximately 55 square miles.

INDUSTRIAL DISTRICTS SHOULD BE PLANNED IN ADVANCE

Industrial development is just as vital as water supply to the future of the metropolitan area of Los Angeles County. Attention should therefore be directed to all the influences which tend to retard or curb industry. Our growth in terms of population can be no greater than our industrial expansion. To the degree that we comprehensively plan and design the industrial development of the cities in this area on such a basis, and so provide for their wholesome development; to that extent will we enjoy steady growth and prosperity—with the right thing in the right place, all in harmonious relationship.



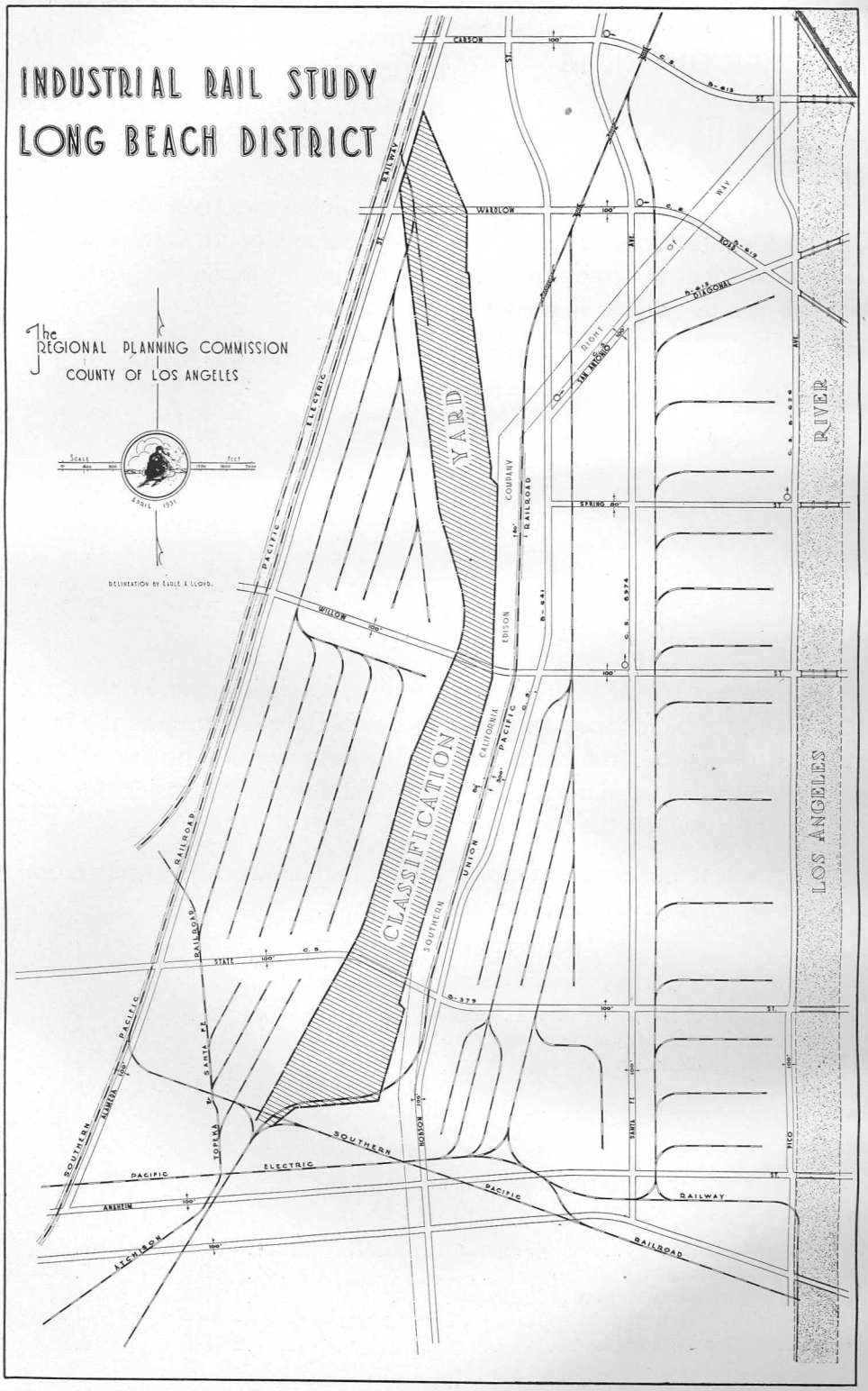
RESULT OF IMPROPERLY SUBDIVIDING IDEAL INDUSTRIAL PROPERTY

The tragic story of having portions of ideal industrial property contiguous to railway lines subdivided for some other use manifests itself in two ways. It means (first) wiping off the map the most ideal industrial land we possess. This property should be devoted to manufacturing use in order to support the residential, business and commercial development which is dependent upon it. It means (second) that since such a subdivision acts as a barrier to industrial leads and spurs, it will prevent them from being projected internally to serve other lands which are being held by the owners for industrial purposes. Unwise development of these areas results in industries being brought into the courts by owners of near-by homes who seek to have the industry curtailed, or eliminated entirely, on the ground that it is a nuisance. Nor is it a valid answer to assert that such land need be sold for residential purposes because of natural demand. Unless we assume that the primary use of land in this area is to remain forever agricultural, there will be little need for residential property of any sort if we fail to provide adequately for industrial expansion. The drawings on this and the following page show efficient arrangement of leads and spur tracks to serve industrial land.

INDUSTRIAL RAIL STUDY
LONG BEACH DISTRICT

The REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

DELINEATION BY EARLE A. LLOYD.



RELATION OF INDUSTRIAL DISTRICT OF "SECTION 4" TO OTHER DISTRICTS

There are other major industrial districts in the County, which are indispensable units in our economic structure. But the area embraced by Section 4 of the Regional Plan will be called upon to furnish 75% of the industrial land needed to support the ultimate population of Los Angeles County. It has at present in operation more industries than the Vernon, Central Manufacturing, Bandini, Laguna-Maywood, South Gate and City Terrace districts all combined. The possibilities for expansion in all the districts mentioned are limited and inadequate.

COMPARISON OF EXISTING INDUSTRIAL DISTRICTS
Los Angeles County

	Industries	Acres	Average
CITY TERRACE	33	24.90	.75
VERNON, NUMBER 1	202	566.90	2.80
VERNON, NUMBER 2	59	98.69	1.67
VERNON, NUMBER 3 (CENTRAL MANUFACTURING)	31	33.35	1.07
BANDINI	15	61.13	4.07
RIVERSIDE DRIVE	12	7.04	.59
LAGUNA-MAYWOOD	8	29.75	3.61
BELVEDERE	7	23.80	3.40
HUNTINGTON PARK-FLORENCE	48	67.42	1.40
SOUTH GATE	15	61.91	4.12
SAN GABRIEL VALLEY	108	254.00	2.35
LONG BEACH	140*	336.47	2.39
	678	1,545.36	2.28

*—Does not include oil wells, but does include oil by-products, plants and refineries.

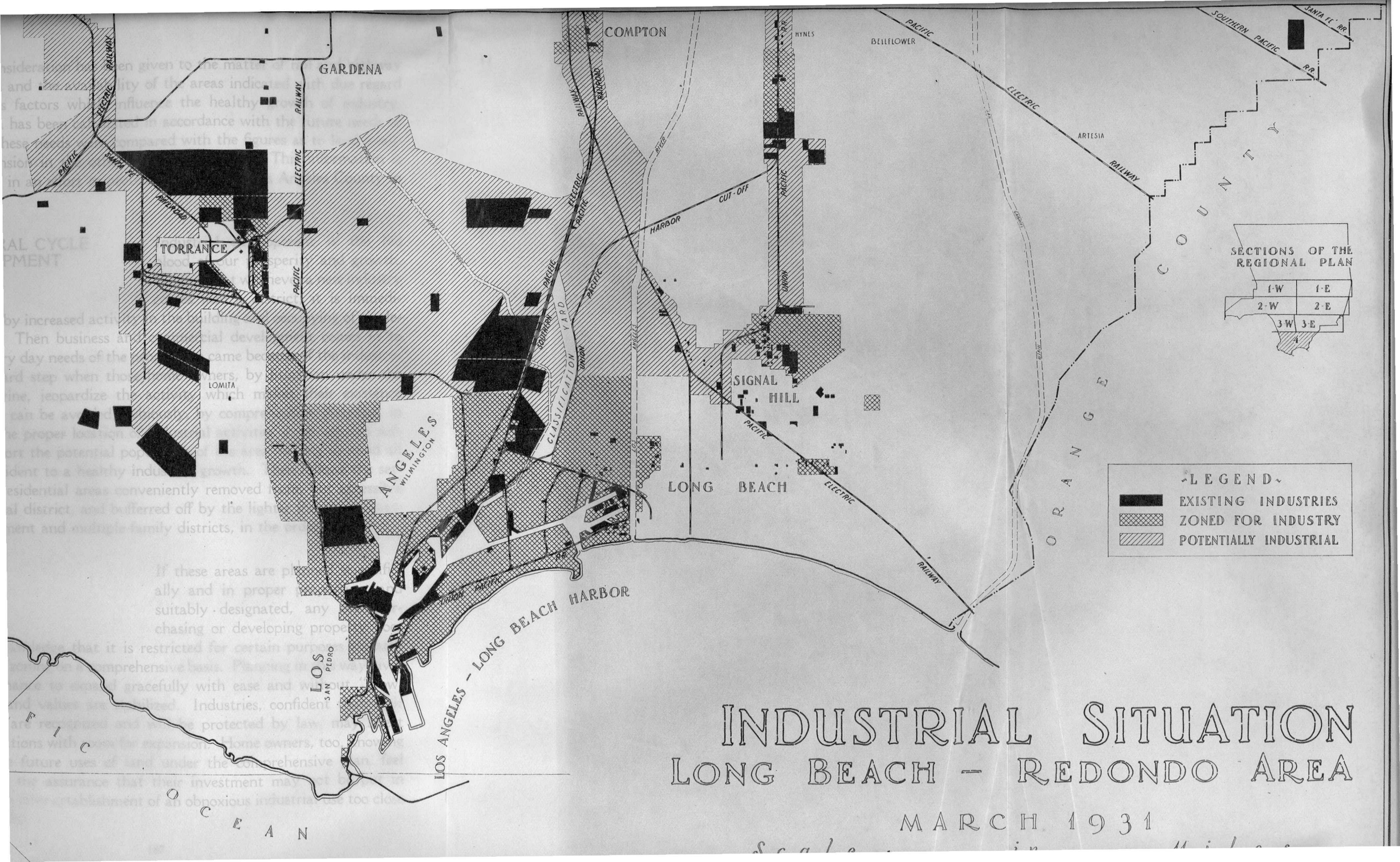
In summing up the entire industrial situation, it is apparent that our attention must be focussed on the Long Beach-Redondo Area as the place in which to plan for the basic industrial development. The areas which may be regarded as natural locations for industrial expansion for this district are shown on the map insert.

The present industrial situation at the harbor and the areas recommended for additional expansion are as follows:

INDUSTRIAL ACREAGE
Long Beach—Redondo Area

Total number of industries now in Section 4	404
Population in area, including incorporated cities	267,000
Number of Industries occupying 1 to 3 acres	334
" " " " 4 " 10 "	62
" " " " 10 " 100 "	41
" " " " 100 " 500 "	6
" " " " 500 " 1000 "	2
Average number of acres per industry	2.35

	Acres	*Sq. Mis.*
Existing industries	5,900	9.2
Now zoned for industries (additional)	7,400	11.6
Potential industrial expansion (additional)	13,440	21.0
Total needed for industry	26,740	41.8



INDUSTRIAL SITUATION
LONG BEACH - REDONDO AREA

MARCH 1931

Careful consideration has been given to the matter of rail and highway transportation and the availability of the areas indicated with due regard to the various factors which influence the healthy growth of industry. The total area has been calculated in accordance with the future needs of the region. These needs were compared with the figures as to land available for expansion in the other industrial districts. This information is now advanced in an effort to protect the future of Los Angeles County in this respect.

THE NATURAL CYCLE OF DEVELOPMENT

Industrial development is the life blood of our prosperity and growth. We find that whenever a new industry comes into a district, it is immediately followed by increased activity in the building and occupying of single-family homes. Then business and commercial development comes in to satisfy the every day needs of the people who came because of the industry. It is a backward step when those home owners, by litigation under the nuisance doctrine, jeopardize the activity which makes their existence possible. This can be avoided, ovbiously, by comprehensive planning, in advance, for the proper location of industrial activities in an amount sufficient to support the potential population of the area, having in mind all the factors incident to a healthy industrial growth. Then follows the setting aside of residential areas conveniently removed from, but accessible to the industrial district, and bufferred off by the lighter industries, commercial, apartment and multiple-family districts, in the order named.

ZONING BY DESIGN

If these areas are planned scientifically and in proper proportion, and suitably designated, any one purchasing or developing property does so with full knowledge that it is restricted for certain purposes through the medium of zoning on a comprehensive basis. Planning in this way gives our cities a chance to expand gracefully with ease and without "growing pains." Land values are stabilized. Industries, confident that their acts and uses are recognized and will be protected by law, may select permanent locations with room for expansion. Home owners, too, knowing in advance the future uses of land under the comprehensive plan, feel comfortable in the assurance that their investment may not be put in jeopardy by the later establishment of an obnoxious industrial use too close to their domiciles.

TRANSPORTATION FACILITIES FOR INDUSTRY

The design of the highway system to serve the harbor district has been carefully thought out, having in mind the topography of the area, the ultimate use of the property, the resulting demand for highway access, and convenience of communication throughout the area. Highways were planned to serve the industrial needs of the harbor district and the central area of Los Angeles, as well as the pleasure traffic between the recreation area at the beaches and the residential population around the various commercial centers. Particular attention has been directed to the relative use of rail lines and highways for the movement of freight in the harbor district. There are two general conditions in this respect:

FREIGHT MOVEMENTS

Long Beach-Redondo Area

1. EXPORTS AND IMPORTS AT HARBOR

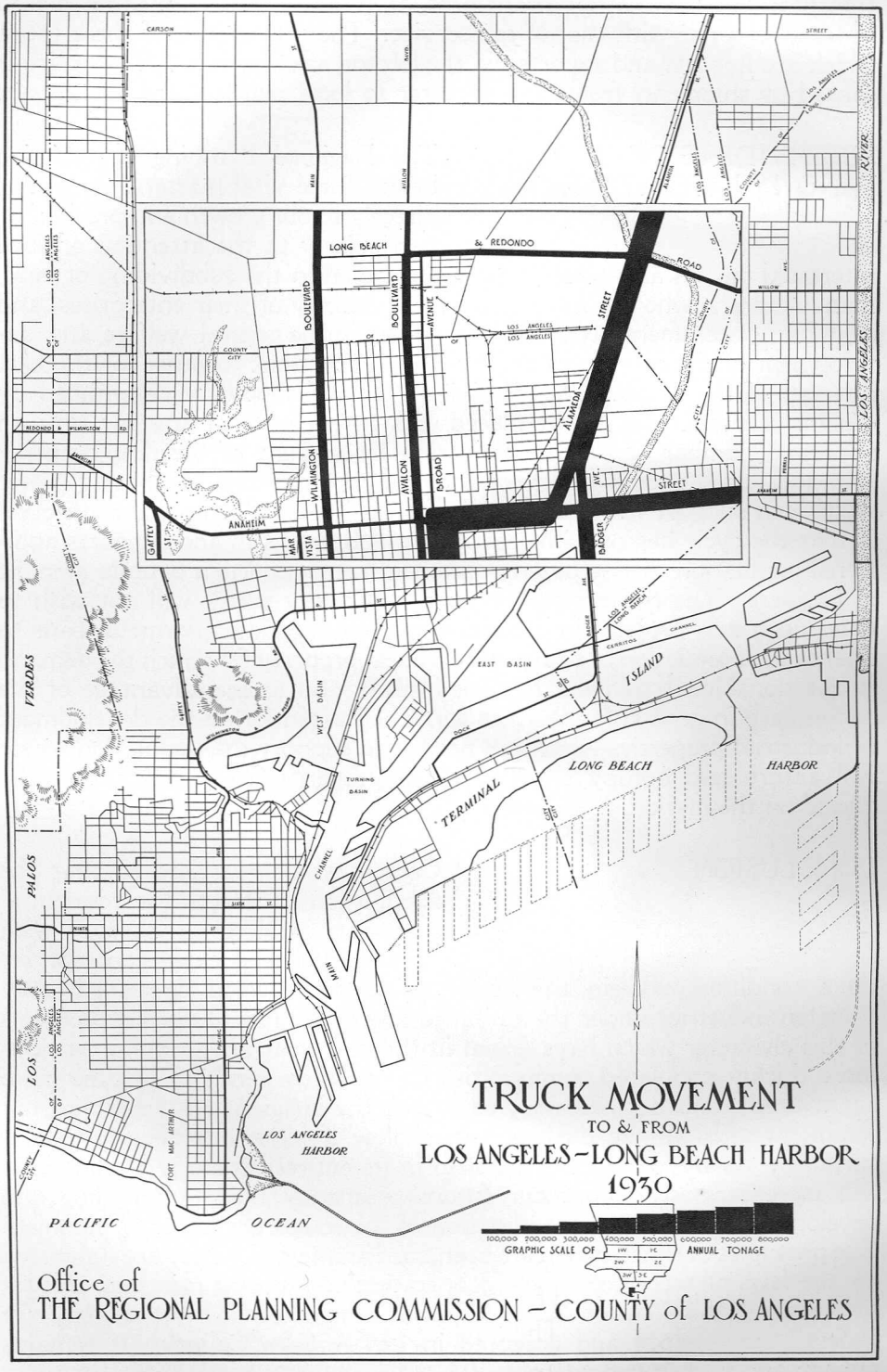
Means of Transportation	*Exports*	*Imports*
Railroads	4.37%	68.50%
Pipelines	94.30%	0.00%
Trucks	1.33%	33.50%
	100.00%	100.00%

2. IN AND OUT OF INDUSTRIES

Means of Transportation	In		Out	
	Tons per month	Percentage	Tons per month	Percentage
Railroads	68,172	57.0	88,284	35.5
Trucks	51,878	43.0	157,317	64.5
Total	120,505	100.0	245,601	100.0

USE OF TRUCKS FOR HAULING

Observations over a period of time show a steady increase in the use of trucks for hauling imports from the harbor and outbound shipments from local industries to the harbor. The annual inbound freight from all points to the industries in the harbor district is estimated at 1,441,000 tons, the outbound, at 2,840,000 tons (exclusive of all oil transported by pipe lines). Of the total inbound freight which is 4,281,000 tons annually, 58.4% is now handled by truck. These figures are given simply to show that in the development of a healthy industrial district of any magnitude, highway


LONG BEACH & REDONDO ROAD
BOULEVARD
AVENUE
STREET
ALAMEDA
AVALON
BROAD
WILMINGTON
ANAHEIM
GAFFEY
MAR VISTA
BADGER
LOS ANGELES RIVER
EAST BASIN
WEST BASIN
TURNING BASIN
CHANNEL
MAIN
DOCK
TERMINAL ISLAND
LONG BEACH HARBOR
LOS ANGELES HARBOR
PACIFIC OCEAN
PALOS VERDES
TRUCK MOVEMENT
TO & FROM
LOS ANGELES-LONG BEACH HARBOR
1930
GRAPHIC SCALE OF ANNUAL TONAGE
100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000
Office of
THE REGIONAL PLANNING COMMISSION - COUNTY of LOS ANGELES

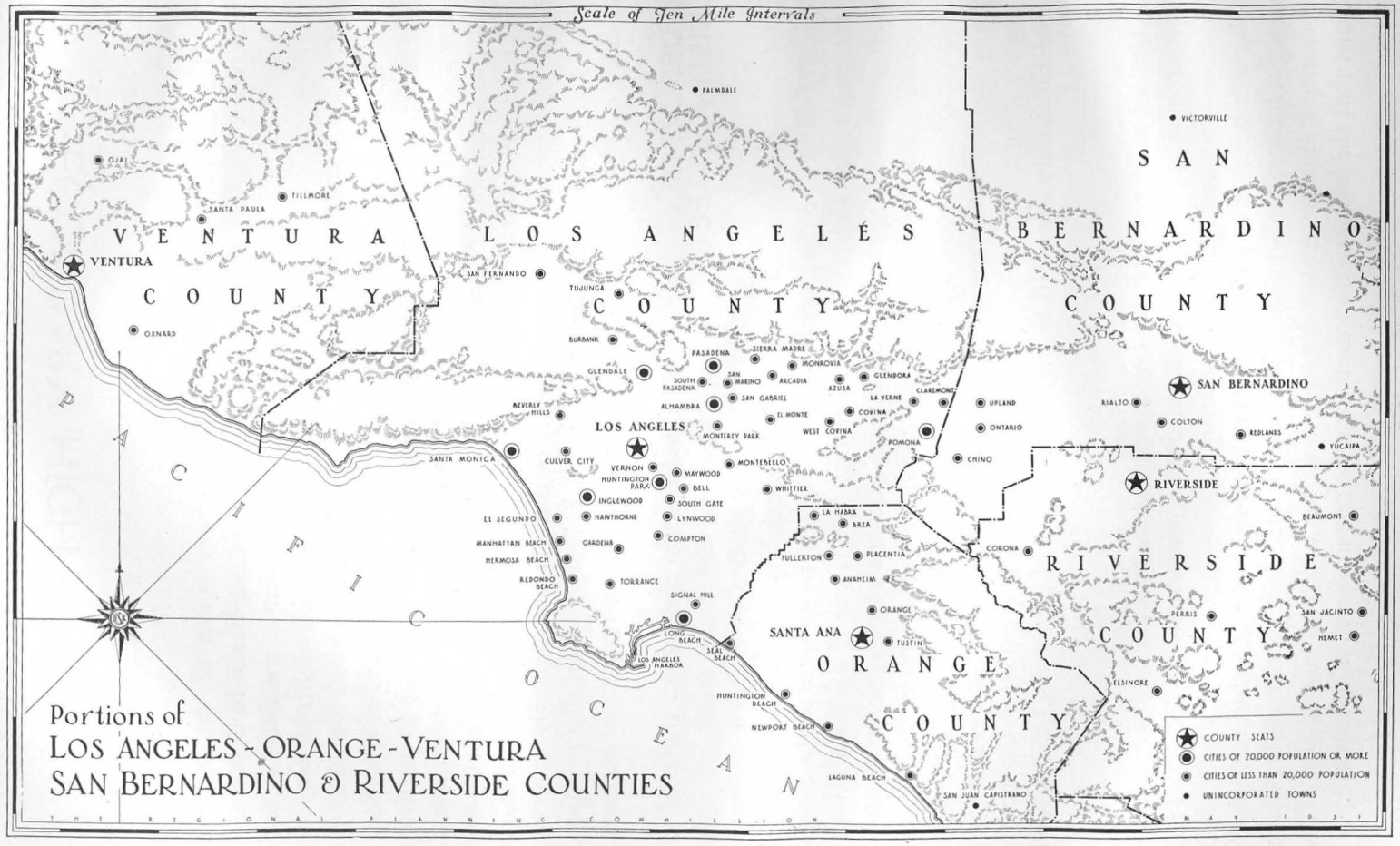
transportation plays a significant part, and its importance must be placed at least on a par with that of rail service. The proportions of these totals which are imports and exports via the harbor, as compared to that which is caused by shipments from manufacturer to local markets are not known.

SUBDIVIDING OF LAND IS INVOLVED

The Regional Planning Commission brings these vital matters, pertaining directly to our growth and prosperity, particularly to the attention of such interested parties as realtors, who are engaged in the subdividing of land, manufacturers, who are interested in the security of their enterprises, and chambers of commerce, which are interested in the general welfare and development of the county, in order that all may work together for the best interests of the whole. The subdivision of land should be determined by design. There should not be placed upon the market at any one time an abnormal number of residential lots. The amount of business property sold and zoned should be in correct proportion to the purchasing power which can support it. The fact of greatest importance in this connection is that the cycle begins with industry, which brings in and supports additional population, whose buying power in turn supports a definite amount of business. The realtors of Los Angeles County surely will not wish to enter upon new projects in subdivision, or to negotiate enormous loans to finance the production of additional business property for which the demand is questionable. It is more to their interest and to the advantage of the community in general for them to turn their attention to the development of industrial properties which are needed to support the population which will absorb and occupy the residential property being subdivided and placed on the market.

CONCLUSION

Care must be exercised so that the subdivision of tracts for residential purposes will not interfere with normal industrial expansion, nor set up a condition wherein the residential district, when developed, may threaten industries under the nuisance doctrine. The numerous problems of this character which have arisen in the past year are alarming. In our more thickly populated communities this problem tends to become more aggravated. It is not necessary to stretch the imagination to see that our commonwealth will be dealt a severe blow if industrial development is curtailed. As we look at the problem in its entirety there is nothing that will more seriously injure our future prosperity than subdividing and developing land without consideration of the sound principles of planning. The principles outlined here have been tried and tested. They are supported by the laws of economics. The cooperation of business men and officials in preparing this Plan of Major Highways indicates clearly that they are generally understood and accepted in Los Angeles County. It remains only to apply them consistently.


Scale of Ten Mile Intervals
VENTURA COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
ORANGE COUNTY
VENTURA
SANTA PAULA
FILLMORE
OJAI
OXNARD
SAN FERNANDO
TUJUNGA
PALMDALE
VICTORVILLE
BURBANK
GLENDALE
PASADENA
SIERRA MADRE
MONROVIA
SOUTH PASADENA
SAN MARINO
ARCADIA
AZUSA
GLENDORA
CLAREMONT
LA VERNE
ALHAMBRA
SAN GABRIEL
EL MONTE
COVINA
WEST COVINA
BEVERLY HILLS
LOS ANGELES
MONTEREY PARK
POMONA
UPLAND
ONTARIO
CHINO
RIALTO
COLTON
REDLANDS
YUCAIPA
SAN BERNARDINO
RIVERSIDE
BEAUMONT
SANTA MONICA
CULVER CITY
VERNON
MAYWOOD
HUNTINGTON PARK
BELL
WHITTIER
MONTEBELLO
INGLEWOOD
SOUTH GATE
LYNWOOD
HAWTHORNE
EL SEGUNDO
COMPTON
GARDENA
MANHATTAN BEACH
HERMOSA BEACH
REDONDO BEACH
TORRANCE
LA HABRA
BREA
FULLERTON
PLACENTIA
ANAHEIM
CORONA
SIGNAL HILL
LONG BEACH
LOS ANGELES HARBOR
SEAL BEACH
ORANGE
SANTA ANA
TUSTIN
PERRIS
SAN JACINTO
HEMET
ELSINORE
HUNTINGTON BEACH
NEWPORT BEACH
LAGUNA BEACH
SAN JUAN CAPISTRANO
PACIFIC OCEAN
Portions of
LOS ANGELES - ORANGE - VENTURA
SAN BERNARDINO & RIVERSIDE COUNTIES
COUNTY SEATS
CITIES OF 20,000 POPULATION OR MORE
CITIES OF LESS THAN 20,000 POPULATION
UNINCORPORATED TOWNS
THE REGIONAL PLANNING COMMISSION
MAY 1931

V. SCHEDULE OF MAJOR AND SECONDARY HIGHWAYS

STATUS OF THE HIGHWAY PLAN

The present status of the highway plan in the Long Beach-Redondo area is clearly shown in the detailed tabulation of existing rights of way on the following pages, and on the insert map opposite page 206. An analysis of the facts there set forth forcefully demonstrates the need of a comprehensive regional plan to guide street dedications. This is true particularly where a single highway project passes through several political jurisdictions, as shown in column 7 of the schedule. Column 4 shows the wide range of variance which exists in the width of right of way along different parts of the same project. The serious effect of this is more strikingly apparent when it is realized that the alignment of buildings is equally irregular, adhering closely to the so-called "property line" of each particular segment.

WIDENING OF EXISTING STREETS

Under such conditions, the cost of acquiring the extra width of right of way needed in the case of major and secondary highways is the chief source of distress to the property owner, who may be included in the assessment district for a street widening project. He is one of a comparatively small group who are called upon to bear the expense of a project, usually of general public benefit. Where no official plan exists and in the absence of legislation to protect it, the acquisition by special assessments of rights of way and the condemnation or removal of encroaching structures produces a heavy financial burden. This in many cases has rendered the bonds unsalable and has resulted in the abandonment of proceedings for needed improvements.

Undoubtedly much of this heavy cost can be avoided by the establishment of building lines by ordinance, once a comprehensive highway plan has been prepared. Such an ordinance, however, since it affects only structures built subsequent to its passage must, to be of value, have been passed sufficiently in advance of building development to materially reduce severance and other related damages when the widening takes place. This means that the highway plan itself must be prepared well in advance.

RECOMMENDATION FOR ESTABLISHING FUTURE STREET LINES

When the building line ordinance is made use of as outlined for the protection of rights of way to be acquired by the public, it should be administered in conjunction with some provision for compensating any property owner when the use of his property is shown beyond doubt to be restricted unduly by conforming to such an ordinance. The procedure for establishing future street lines, together with compensating owners where damage is alleged and proved is set forth in Sections 13, 14, 14a and 14b of the Planning Act, General Laws of California 1929, Chapter 838. With a comprehensive plan precised as to the future street lines and the administration of the building line ordinance as provided for in the above named sections, the rights of way for the highway system can be preserved in an advantageous manner and the actual land acquired at a later date by deed. A brief of the sections referred to is given here.

SECTION 13 . . . . prepare detailed and precised maps of the various streets indicated thereon as major streets, showing the location of the proposed future outside lines of such streets . . . In the preparation of such precised maps, the planning commission shall make or have made a careful examination of all parcels of property, any part of which is included within the proposed future lines of such streets. Before recommending to the legislative body . . . the commission shall hold at least two public hearings thereon . . . The commission shall cause a post-card notice of such hearing to be mailed, postage prepaid, to each of the owners of property, any part of which may be included within the proposed future lines of such street as shown on such precised map . . . Upon the adoption of any such precised street map by the legislative body and the establishment by ordinance of the future street lines shown thereon, the clerk . . . shall file a copy thereof, together with said ordinance, with the building inspector or other administrative official having charge of the issuance of building permits in said . . . county.

SECTION 14. If any owner of property . . . shall claim that the adoption of said precised street plan constitutes the taking of his property by the said . . . county, he shall, within three months . . . file notice of his claim with the clerk of the governing body . . . In the event that said . . . county shall fail within three months after filing of the claim as aforesaid to acquire a limited easement over said property for the life of the said precised street plan, or to begin condemnation proceedings for the acquisition thereof, or to vacate by ordinance the precised street plans so far as it applies to claimant's property, then said precised street plans shall automatically be declared, so far as claimant's property is concerned, to be vacated . . . In the event that any owner of property lying within the boundaries of such precised street plans . . . shall fail to file a claim as specified in this section, such owner or claimant shall be conclusively deemed to have waived any claim for damages by reason of the easement over and across his property . . . but he shall not be deemed to have waived any title to the property within any precised street plan or any interest therein other than the right to erect or construct thereon a building without first complying with the provisions of section 14a of this act.

SECTION 14a. No person who has been compensated in accordance with the provisions of Section 14 or who has waived his right to indemnity thereunder, shall erect or construct . . . any building capable of human habitation or use, fences and walls excluded, within the boundaries of any street shown on such precised street plan until three months after he has filed with the clerk of the governing body an affidavit setting forth his intention immediately to build thereon, the character of the proposed building, its estimated cost, the price at which he will convey to said . . . county a street easement over his property in accordance with the provisions of said precised street plan . . . From and after the filing for record of any precised street plan no permit shall be issued for the construction of any building or structure . . . fences and walls excluded, on any part of the land between the future lines of any street shown on such precised street plan until the applicant therefor can demonstrate to the body issuing such permits that such property has been released from the effects of said precised street plan under the provisions of section 14 or this section of this act.

SECTION 14b. Any . . . county, is hereby authorized to levy a tax of not to exceed two mills per dollar of assessed valuation for the purpose of creating a revolving fund for the purpose of compensating property owners under the provisions of sections 14 and 14a of this act . . .

RECOMMENDATION

It is recommended that Los Angeles County proceed under Sections 13, 14, 14a and 14b of the Planning Act, General Laws of California 1929, Chapter 838, to protect and develop the Regional Plan of Highways.

SCHEDULE SHOWS MILEAGES INVOLVED

In the Schedule which follows, 172 separate projects, which taken together make up the Regional Plan of Highways for the Long Beach-Redondo Area, are listed in alphabetical order. The lighter type gives further details as to each of these. Column 6 indicates the portions which are to be opened or to be widened as compared to those which are already dedicated full width. All figures refer to public right of way—not roadway or paved, widths.

MAJOR AND SECONDARY HIGHWAYS

Long Beach-Redondo Area

Status	*Miles*	*Percentage*
To be widened	454.71	59.0
To be opened	227.07	29.5
Existing (full width right of way)	88.68	11.5
Total	770.46	100.0

Classification	*Miles*	*Percentage*
Major Highways	521.53	67.7
Secondary Highways	232.50	30.2
Parkways	16.43	2.1
Total	770.46	100.0

SCHEDULE OF MAJOR AND SECONDARY HIGHWAYS

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	(6) LINEAR FEET To be Opened	(6) LINEAR FEET Full R/W Existing	(7) Jurisdiction
ALAMEDA STREET. Total length 57,000 ft.				**71–90**	**52,300**	**4,700**		
Alameda St.	Dixon Ave.	Oaks Ave.	50–40	71	4,900			Co. & Com.
Alameda St.	Oaks Ave.	Greenleaf St.	60–45–40	71	9,950			Compton
Alameda St.	Greenleaf Dr.	Dominguez St.	60–50	71	15,600			County
Alameda St.	Dominguez St.	Classification Yards	50	90	3,550			County
Alameda St.	Classification Yards	223rd St.	50	90	1,900			Co. & L.A.
Alameda St.	223rd St.	Lomita Blvd.	50	90	8,950			County
Railroad Ave.	Lomita Blvd.	B St.	60–50	90	7,450	4,700		L.A.
ALAMITOS AVENUE. Total length 17,600 ft.				**80**	**9,400**	**8,200**		
None	Cherry Ave.	Spring St.		80		800		L. Beach
None	Spring St.	21st St.		80		5,950		Sig. Hill
Alamitos Ave.	21st St.	Ocean Blvd.	75	80	9,400	1,450		L. Beach
ALTAMIRA-GAFFEY CONNECTION. Total length 3,900 ft.				**100**		**3,900**		
None	Granvia Altamira	Gaffey St.		100		3,900		L. A.
AMESTOY AVENUE (GARDENA). Total length 7,850 ft.				**80**	**7,850**			
Amestoy Ave.	Arlington St.	Vermont Ave.	60–70–40	80	7,850			Gardena
ANAHEIM STREET. Total length 60,650 ft.				**100**	**50,350**	**3,800**	**6,500**	
Citrus St.	Red. & Wilm. Rd.	Eshelman Ave.	50	100	1,050	3,800		County
262nd St.	Eshelman Ave.	Alta Vista Ave.	60	100	1,800			County
262nd St.	Alta Vista Ave.	President Ave.	50	100	1,450			L. A.
Anaheim St.	President Ave.	Long Beach B.L.	60–66–70	100	25,800			L. A.
Anaheim St.	Long Beach B.L.	Hathaway Ave.	100–120–80	100	20,250		6,500	L. Beach
ANAHEIM-WESTERN CONNECTION. Total length 1,300 ft.				**100**	**1,300**			
Anaheim St.	Governor St.	President Ave.	50	100	1,300			L. A.
APPIAN WAY (LOMITA). Total length 5,050 ft.				**80**	**3,000**	**2,050**		
None	Governor Ave.	Los Angeles B. L.		80		450		L. A.
Appian Way	Los Angeles B. L.	Narbonne Ave.	25	80	3,000	1,600		County
APPIAN WAY (LONG BEACH). Total length 30,550 ft.				**80–71–90**	**12,600**	**17,950**		
West American Av.	Pacific Ave.	Long Beach Blvd.	50	80–71	1,900	1,250		L. Beach
Alley	Long Beach Blvd.	Nieto St.	10	90–71		16,100		L. Beach
Appian Way	Nieto Ave.	Second St.	60	71	5,500	600		L. Beach
ARLINGTON AVENUE. Total length 38,650 ft.				**80**	**27,600**	**5,250**	**5,800**	
Arlington St.	Virginia Ave.	158th St.	70	80	1,300			Co. & Gard.
Arlington St.	158th St.	Riv.-Red. Blvd.	60	80	650			Gardena
Arlington Ave.	Riv.-Red. Blvd.	Border Ave.	60–70	80	12,600	4,000		Torrance
Border Ave.	Border Ave.	Redondo Blvd.	70	80	1,600			Torrance
Cabrillo Ave.	Redondo Blvd.	213th St.	50	80	400			Torrance
Cabrillo Ave.	213th St.	223rd St.	2 x 38	80			3,600	Torrance
Cabrillo Ave.	223rd St.	Torrance B. L.	100–80	80		300	2,200	Torrance
Eshelman Ave.	Torrance B. L.	262nd St.	50	80	11,050	950		County
ARLINGTON AVENUE (TORRANCE). Total length 3,200 ft.				**80**	**3,200**			
Arlington Ave.	Border Ave.	Marcelina Ave.	60	80	3,200			Torrance
ATLANTIC AVENUE. Total length 45,350 ft.				**100**	**32,450**		**12,900**	
Atlantic Ave.	Edward St.	Compton B. L.	100	100			1,050	County
Atlantic Ave.	Across Shoestring Strip		100	100			100	Compton
Atlantic Ave.	Compton B. L.	Jackson St.	100–80	100	1,200		150	County
Atlantic Ave.	Jackson St.	Long Beach B. L.	100	100			1,100	L. Beach
Atlantic Ave.	Long Beach B. L.	Lincoln St.	90	100	300			County
Atlantic Ave.	Lincoln St.	52nd St.	90–80–100	100	8,600		2,400	L. Beach
Atlantic Ave.	52nd St.	San Antonio Dr.	80	100	5,100			County
Atlantic Ave.	San Antonio Dr.	Ocean Blvd.	100–80	100	17,250		8,100	L. Beach
AVALON BOULEVARD. Total length 45,050 ft.				**2x71-100**	**42,450**	**1,950**	**650**	
Avalon Blvd.	155th St.	L.A.Power L.R/W	60–80	100	2,600	1,950		County
Avalon Blvd.	L.A.Power L.R/W	Nigger Sl. Channel	2 x 45	2 x 71	13,200			County
Avalon Blvd.	Nigger Sl. Channel	Bonds Drive	66–80	100	13,700			County
Avalon Blvd.	Bonds Drive	B Street	80	100	11,950			L. A.
Avalon Blvd.	B Street	Water Street	66–100	80	1,000		650	L. A.
AVEDA ROAD. Total length 15,500 ft.				**80**		**15,500**		
None	Broadway	223rd St.		80		15,500		County
B STREET (WILMINGTON). Total length 7,100 ft.				**100**	**7,100**			
B Street	Frigate Ave.	Lecouvreur Ave.	66	100	7,100			L. A.
BADGER AVENUE. Total length 10,200 ft.				**100**	**10,050**	**150**		
Badger Ave.	Young St.	Long Beach B.L.	60–50	100	6,750			L. A.
Badger Ave.	Long Beach B.L.	Seaside Blvd.	50	100	3,300	150		L. Beach
BANDINI STREET. Total length 17,250 ft.				**80**	**13,000**	**3800**	**450**	
Bandini St.	Gaffey at Basin St.	Margaret St.	70	80	2,350	3,000		L. A.
Bandini St.	Margaret St.	Seventh St.	70	80	1,950	350		County
Alma St.	Seventh St.	37th St.	70–60	80	8,700	450		L. A.
Alma St.	37th St.	Paseo del Mar	2x60	2x60			450	L. A.

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	To be Opened	Full R/W Existing	(7) Jurisdiction
BAYVIEW AVE.-NEPTUNE AVE. Total length 37,500 ft.				**80**	**20,900**	**12,400**	**4,200**	
Dolores St.	Main & Griffith Sts.	Lomita Blvd.	50-25	80	11,250	10,700		County
Bayview Ave.	Lomita Blvd.	B St.	60-66	80	9,650	500		L. A.
Neptune Ave.	B St.	W. Basin Channel	80	80		1,200	4,200	L. A.
BELLEPORTE AVENUE. Total length 29,400 ft.				**80**		**15,250**	**13,880**	
Denker Ave.	Electric St.	Lomita Blvd.	80	80		14,570	9,930	L. A.
Belleporte Ave.	Lomita Blvd.	Anaheim St.	100-80	80		950	3,950	L. A.
BERYL STREET. Total length 7,800 ft.				**80**	**500**		**7,300**	
Beryl St.	Hermosa Ave.	Redondo B. L.	60-80	80	500		5,250	Redondo
Beryl St.	Redondo B. L.	Torrance B. L.	80	80			1,050	Red. & Tor.
Beryl St.	Torrance B. L.	190th St.	80	80			1,000	Torrance
BLOOMFIELD AVENUE. Total length 25,850 ft.				**100**	**25,850**			
Norwalk & Artesia	1300' N. of Center	Orangethorpe Ave.	60	100	11,800			County
Bloomfield Ave.	Orangethorpe Ave	S. Line Tr. 8079	80	100	1,450			County
Main St.	S. Line Tr. 8079	Carson St.	60	100	8,250			County
Main St.	Carson St.	Orange Co. B.L.	30	100	4,350			Orange & L.A. Cos.
BROADWAY. Total length 12,850 ft.				**100**			**12,850**	
Broadway	155th St.	Main St.	100	100			12,850	County
BROADWAY (REDONDO BEACH). Total length 12,400 ft.				**100**		**350**	**12,050**	
Broadway	Highland & Pacific	Avenue A	100	100		350	7,400	Redondo
Catalina Ave.	Avenue A	Palos Verdes Pkwy.	100	100			4,650	Redondo
BURTON AVENUE (COMPTON). Total length 1,650 ft.				**100**	**1,650**			
Burton Ave.	Alameda St.	Santa Fe Ave.	60	100	1,650			Compton
C STREET (WILMINGTON). Total length 8,000 ft.				**100**	**7,450**	**550**		
C St.	Figueroa St.	McFarland Ave.	66	100	7,450	550		L. A.
CAMINO REAL-WILLOW STREET. Total length 93,560 ft.				**100**	**69,460**	**22,100**	**2,000**	
Camino Real	Opal St.	Knob Hill Ave.	80	100	4,800			Redondo
L.Beach & Red. Rd.	Knob Hill Ave.	Martha Ave.	25	100	4,650			Torrance
State St.	Martha Ave.	Madrona Ave.	50	100	3,900			Torrance
Camino Real	Madrona Ave.	Walnut St.	58-50	100	10,400			Torrance
Camino Real	Walnut St.	Western Ave.	50	100	900			Co. & Torr.
L.Beach & Red. Rd.	Western Ave.	Normandie Ave.	25-55	100	3,175			L. A.
L.Beach & Red. Rd.	Normandie Ave.	Main St.	55-50-20	100	5,925	1,600		County
Rocha St.	Main St.	Wilmington Ave.	50-58	100	6,250			County
L.Beach & Red. Rd.	Wilmington Ave.	Classification Yards	50	100	9,500			County
L.Beach & Red. Rd.	Classification Yards	Los Angeles B.L.	50	100	600			L. A.
L.Beach & Red. Rd.	Los Angeles B.L.	Long Beach B.L.	50	100	150			County
Willow St.	Long Beach B.L.	Pico Ave.	50-100	100	3,300		1,300	L. Beach
(Bridge)	Across Los Angeles River Channel			100			700	L. Beach
Willow St.	De Forrest Ave.	Atlantic Ave.	80-60	100	5,950			L. Beach
Willow St.	Atlantic Ave.	Myrtle Ave.	60	100	850			L.B. & S.H.
Willow St.	Myrtle Ave.	California Ave.	60	100	350			Signal Hill
Willow St.	California Ave.	Orange Ave.	60	100	1,250			L.B. & S.H.
Willow St.	Orange Ave.	Temple St.	60	100	5,300			Signal Hill
Willow St.	Temple St.	Signal Hill B.L.	60	100	1,100			L. Beach
Willow St.	Signal Hill B.L.	Newport Ave.W.S.	60	100	1,050			L.B. & S.H.
Willow St.	Newport Ave.W.S.	Newport Ave.E.S.	60	100	60			L. Beach
Willow St.	Newport Ave. E.S.	Orange Co. B.L.	60	100		20,500		County
CARMENITA ROAD. Total length 13,600 ft.				**100**	**13,600**			
Carmenita Rd.	S.P. R/W	Orangethorpe Ave.	60	100	11,800			County
Carmenita Rd.	Orangethorpe Ave.	Orange Co. B.L.	30	100	1,800			Orange & L.A. Cos.
CARSON STREET. Total length 85,750 ft.				**100**	**49,100**	**34,150**	**2,500**	
Carson St.	Prairie Ave.	El Prado	2x30-80	100	7,100			Torrance
Carson St.	El Prado	Western Ave.	2x70-70	100	3,350		500	Torrance
Carson St.	Western Ave.	Normandie Ave.	70	100	3,050			L.A.
Carson St.	Normandie Ave.	Long Beach B.L.	50-60-66	100	24,950	4,250		County
Carson St.	Long Beach B.L.	California Ave.	100	100		4,700	2,000	L. Beach
Carson St.	California Ave.	Orange Co. B.L.	60-75	100	10,650	25,200		County
CENTER STREET. Total length 126,700 ft.				**100**	**109,550**	**11,850**	**5,300**	
Center St.	The Strand	Wiseburn Ave.	80-40-60	100	10,250			Manhattan
Center St.	Wiseburn Ave.	Inglewood Ave.	40	100	5,275			Redondo
Center St.	Inglewood Ave.	Cypress Ave.	40-60-65	100	5,275	5,200		County
158th St.	Cypress Ave.	Center Line Sec. 26	50	100	1,300			County
158th St.	Center Line Sec. 26	Arlington St.	50	100	1,350			Co. & Gard.
None	Arlington St.	Riv.-Redondo Rd.		100		800		Gardena
None	Riv.-Redondo Rd.	Torrance B.L.		100		650		Torrance
La Ballona St.	Torrance B.L.	Olive St.	60	100	1,450	3,100		Gardena
Olive St.	Olive St.	Vermont Ave.	60	100	2,000			Gardena
161st St.	Vermont Ave.	Figueroa St.	60-80	100	2,700			L.A.
Olive St.	Figueroa St.	Avalon Blvd.	60-70-40	100	5,200			County
Olive St.	Avalon Blvd.	Compton B.L.	60-50-33	100	7,400			County
Olive St	Compton B.L.	Alameda St.	33-57	100	6,700			Compton
Olive St.	Alameda St.	Long Beach Blvd.	42-51-75	100	3,650			Compton
Olive St.	Long Beach Blvd.	Compton B.L.	90	100	1,650			Compton
Olive St.	Compton B.L.	Compton B.L.	85-50-60	100	2,325			County
Olive St.	Across Shoestring Strip		61	100	100			Compton

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CENTER STREET (Continued).								
Olive St.	Compton B.L.	Gibson St.	66.5	100	1,525			County
Olive St.	Gibson St.	Michigan Ave.	70-80-60	100	5,850			County
Center St.	Michigan Ave.	Western Ave.	60-100-80	100	38,950	2,100	5,300	County
Center St.	Western Ave.	Center Line Sec. 26	75-70	100	3,950			County
Center St.	Center Line Sec. 26	Orange Co. B.L.	30	100	2,650			Orange & L.A. Cos.
CENTRAL AVENUE. Total length 27,250 ft.				**100**	**10,100**	**17,150**		
Central Ave.	E St.	Wilmington Ave.	40-50	100	10,100	17,150		County
CLARK AVENUE. Total length 10,500 ft.				**80**	**8,150**	**2,350**		
Clark Ave.	Linden St.	Long Beach B.L.	60-70-75	80	8,150			County
None	Across Shoestring Strip			80		100		L. Beach
None	Long Beach B.L.	San Antonio Dr.		80		2,250		County
COLLEGE AVENUE. Total length 15,100 ft.				**100**		**1,200**	**13,900**	
Ocean Ave.	Jefferson St.	Lincoln St.	100	100			3,900	County
Richfield Ave	Lincoln St.	Poppy St.	100	100			4,850	L. Beach
Ocean Ave.	Poppy St.	South St.	100	100			3,000	Co.& L.B.
Ocean Ave.	South St.	Market St.	100	100			2,150	County
None	Market St.	San Antonio Circle	100	80		1,200		County
COMPTON AVENUE. Total length 6,300 ft.				**80**		**6,300**		
None	E St.	Central Ave.		80		6,300		County
CYPRESS AVENUE. Total length 36,500 ft.				**100**	**19,600**	**15,600**	**1,300**	
Cypress Ave.	Virginia St.	158th St.	85 to 150	100			1,300	County
Cypress Ave.	158th St.	Red. Beach Blvd.	60	100	1,650			County
Cypress Ave.	Red. Beach Blvd.	203rd St.	60-80	100	8,850	4,000		Torrance
Cedar Ave.	203rd St.	Madera St.	80	100	9,100	700		Torrance
None	Madera St.	Red.& Wilm. Blvd.		100		10,900		Co.& Torr.
DIAMOND STREET. Total length 3,300 ft.				**80**		**1,500**	**1,800**	
Diamond St.	Huntington St.	Redondo B.L.	80	80		200	1,800	Redondo
None	Redondo B.L.	Beryl Ave.		80		1,300		Torrance
DIAMOND-HUNTINGTON-L. A. STS. Total lgth. 103,225 ft.				**100**	**38,725**	**64,500**		
Diamond St.	Pacific Ave.	Juanita Ave.	80-60	100	3,400			Redondo
Huntington St.	Juanita Ave.	Torrance B.L.	70	100	1,700			Redondo
None	Torrance B.L.	Henrietta St.		100		2,000		Torrance
Huntington St	Henrietta St.	Hawthorne Ave.	50	100	5,300			Co.& Torr.
Huntington St.	Hawthorne Ave.	Western Ave.	50	100	1,400	12,100		Torrance
None	Western Ave.	Normandie Ave.		100		3,050		L. A.
Del Amo St.	Normandie Ave.	Long Beach B.L.	66	100	9,900	19,600		County
Los Angeles St.	Long Beach B.L.	Long Beach B.L.	60-70	100	3,950	350		L. Beach
None	Long Beach B.L.	Ross Ave.		100		26,950		County
None	Across Shoestring Strip			100		100		L. Beach
Anaheim St.	Long Beach B.L.	P. E. Ry. R/W	30-60-50	100	11,750	350		County
Anaheim St.	P. E. Ry. R/W	Orange Co. B.L.	20	100	1,325			Orange & L.A. Cos.
DOCK STREET. Total length 14,600 ft.				**100**		**13,100**		
None	Altoona Place	Long Beach B.L.		100		8,600		L. A.
None	Long Beach B.L.	Seaside Ave.		100		4,500		L. Beach
EASTERN AVENUE. Total length 1,300 ft.				**100**		**1,300**		
None	Olive St.	Edward St.		100		1,300		County
EAST RAILROAD DRIVE. Total length 22,400 ft.				**71**	**17,650**	**4,750**		
E. Railroad Dr.	Rosecrans Ave.	Center St.	40-50	71	6,050	2,300		Manhattan
E. Railroad Dr.	Center St.	Hermosa B.L.	30-25	71	3,000	700		Manhattan
E. Railroad Dr.	Hermosa B.L.	Fourth St.	30-25	71	7,200	400		Hermosa
Cochise Ave.	Fourth St.	Redondo St.	30	71	200	650		Hermosa
Francisca Ave.	Redondo St.	Pacific Ave.	40	71	1,200	700		Redondo
ELANITA DRIVE. Total length 4,150 ft.				**100-80**		**4,150**		
None	9th St. at Western	Los Angeles B.L.		100		2,950		L. A.
None	Los Angeles B.L.	19th St.		80		1,200		County
ELECTRIC STREET. Total length 33,390 ft.				**80**	**25,170**	**900**	**7,320**	
Harriman Lane	Kruttschnitt Ave.	Inglewood Ave.	40	80	6,150	900		Redondo
Electric St.	Inglewood Ave.	Hawthorne Ave.	60-100	80	1,700		950	Co. & Red.
Electric St.	Hawthorne Ave.	Western Ave.	60-80-100	80	11,820		1,320	Torrance
182nd St.	Western Ave.	Washington Ave.	60	80	1,350			Gar.&L.A.
182nd St.	Washington Ave.	Normandie Ave.	60	80	1,700			Co.&L.A.
182nd St.	Normandie Ave.	Vermont Ave.	80-90	80			2,750	County
182nd St.	Vermont Ave.	Figueroa St.	80-40-60	80	1,000		2,300	L. A.
Walnut St.	Figueroa St.	Broadway	60	80	1,450			County
ELENA AVE.-PALOS VERDES PKWY. CON. To. lgth. 800 ft.				**100**		**800**		
None	Elena Ave.	Palos Verdes Pkwy.		100		800		County
EMERALD STREET. Total length 14,250 ft.				**80**	**6,300**	**3,450**	**4,500**	
Emerald St.	Pacific Ave.	Redondo B.L.	80	80			4,500	Redondo
Spencer St.	Redondo B.L.	Hawthorne Ave.	50	80	5,300	1,650		County
Spencer St.	Hawthorne Ave.	East Line Lot 35	50	80	1,000			Torrance
None	East Line Lot 35	Prairie Ave. Extn.		80		1,800		Torrance

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	 To be Opened	 Full R/W Existing	(7) Jurisdiction
FIGUEROA STREET. Total length 44,000 ft.				**100**	**34,150**	**9,850**		
Figueroa St.	155th St.	Victoria St..	80–60	100	10,200			Co. & L.A.
Figueroa St.	Victoria St.	Lomita Blvd (E)	50–60	100	15,450	8,300		County
Figueroa St.	Lomita Blvd. (E)	Lomita Blvd. (W)	60	100	200			Co. & L.A.
Figueroa St.	Lomita Blvd. (W)	B St.	60–45	100	8,300	1,550		L. A.
FIRESTONE BOULEVARD. Total length 11,200 ft.				**100**		**9,600**	**1,600**	
Firestone Blvd.	Leland Ave.	Central Ave.	100	100		9,600	1,600	County
FOURTEENTH STREET (ARTESIA). Total length 29,850 ft.				**80**	**27,550**	**2,300**		
Fourteenth St.	San Antonio Dr.	Long Beach B.L.	30	80	4,350	2,300		County
Fourteenth St.	Across Shoestring Strip		30	80	100			L. Beach
Fourteenth St.	Long Beach B.L.	Marquardt Ave.	40–50–60	80	20,400			County
Fourteenth St.	Marquardt Ave.	Orange Co. B.L.	15	80	2,700			Orange & L.A. Cos.
FOURTH STREET (LONG BEACH). Total length 29,250 ft.				**80**	**16,750**	**6,000**	**6,500**	
Fourth St.	Pico Ave.	Appian Way	80–60	80	12,650	1,700	6,500	L. Beach
Colorado St.	Appian Way	Manila Ave.	60	80	4,100			L. Beach
None	Manila Ave.	Hathaway Ave.		80		1,500		Co. & L.B.
None	Hathaway Ave.	Seventh St.		80		2,800		County
FREEMAN AVENUE. Total length 5,500 ft.				**80**	**700**	**4,800**		
Vail Ave.	Chicago Ave.	Robinson St.	30	80	700	4,800		Redondo
FRIGATE AVENUE. Total length 11,450 ft.				**80**	**9,600**	**1,850**		
None	Main St.	Lomita Blvd.		80		1,500		County
Frigate Ave.	Lomita Blvd.	E St.	33–63–30	80	8,600			L. A.
Frigate Ave.	E St.	C St.	45	80	1,000			L. A.
None	C St.	Figueroa St.		100		350		L. A.
G STREET-WILMINGTON BLVD. Total length 25,200 ft.				**100-80**	**10,800**	**10,500**	**3,900**	
G St.	Anaheim St.	Alameda St.	66	80	9,700	1,500		L. A.
G St.	Alameda St.	Long Beach B.L.	66	100	300	6,800		L. A.
Wilmington Blvd.	Long Beach B.L.	Pico Ave.	100	100		1,100	3,900	L. Beach
None	Pico Ave.	Seventh St.	50	80	800	1,100		L. Beach
GAFFEY STREET. Total length 27,100 ft.				**90-100**	**24,100**	**3,000**		
Gaffey St.	Anaheim St.	Paseo del Mar	70–80	90–100	24,100	3,000		L. A.
GAFFEY ST.-WILM.& SAN PEDRO RD.CON. To. lgth. 500 ft.				**100**		**500**		
None	Gaffey at Basin St.	Battery St. at Wilm. & S. Pedro		100		500		L. A.
GARFIELD-CHERRY AVENUE. Total length 46,300 ft.				**100**	**46,300**			
Michigan Ave.	Jefferson St.	Lincoln St.	60–80	100	3,900			County
Cherry Ave.	Lincoln St.	Artesia St.	60–80–90	100	2,600			L. Beach
Cherry Ave.	Artesia St.	South St.	70–80	100	5,200			L. Beach
Cherry Ave.	South St.	52nd St.	60–70	100	3,650			Co. & L.B.
Cherry Ave.	52nd St.	Bixby Rd.	60	100	8,550			County
Cherry Ave.	Bixby Rd.	Wardlow Rd.	80	100	2,850			Co. & L.B.
Cherry Ave.	Wardlow Rd.	Spring St.	70	100	2,550			L. Beach
Cherry Ave.	Spring St.	19th St.	60	100	7,250			Signal Hill
Cherry Ave.	19th St.	Ocean Blvd.	60–75	100	9,750			L. Beach
GLEN AVENUE (COMPTON). Total length 650 ft.				**80**		**650**		
Glen Ave.	Oaks Ave.	Tamarind St.		80		650		Compton
GOULD-ARTESIA AVENUE. Total length 119,400 ft.				**100**	**90,900**	**28,500**		
27th St.	Hermosa Ave.	AT&SF R/W, W.	50	137.5	1,250			Hermosa
None	Railroad Dr. West	Camino Real		100		1,600		Hermosa
Gould Lane	Camino Real	Harper Ave.	20–40	100	1,450			Her.& Ma.
Gould Ave.	Harper Ave.	Dewey Ave.	40	100	3,500			Ma.& Red.
Gould Lane	Dewey Ave.	Inglewood Ave.	50	100	5,700			Redondo
Gould Lane	Inglewood Ave.	6th St.	60	100	800			Red. & Co.
L. A. & Red. Road	Sixth St.	Second St.	75–70	100	1,200			Red. & Co.
None	Second St.	Hawthorne Ave.		100		600		Redondo
Strawberry St.	Hawthorne Ave.	Illinois St.	50–70–60	100	11,800			Torrance
Strawberry St.	Illinois St.	Western Ave.	60	100	1,300			Co.,T.& G.
Strawberry St.	Western Ave.	Moore Ave.	60	100	1,350			Gardena
Strawberry St.	Moore Ave.	E. Line Tr. 5753	60	100	650			Co.&Gard.
Strawberry St.	E. Line Tr. 5753	Vermont Ave.	60	100	1,150	2,400		County
None	Vermont Ave.	Figueroa St.		100		2,750		L. A.
Artesia St.	Figueroa St.	Long Beach B.L.	33	100	3,400	19,650		County
Artesia St.	Long Beach B.L.	Long Beach B.L.	33	100	300			Co. & L.B.
Artesia St.	Long Beach B.L.	Harrison Ave.	33	100	1,050			L. Beach
Artesia St.	Harrison Ave.	Atlantic Ave.	70–80–50	100	4,350			L. Beach
Artesia St.	Atlantic Ave.	Cherry Ave.	50–80–95	100	5,300			L. Beach
Artesia St.	Cherry Ave.	Amsell Ave.	75–60–80	100	3,200			L. Beach
Artesia St.	Amsell Ave.	New York Ave.	90–60–80	100	1,950			L. Beach
Artesia St.	New York Ave.	Woodruff Ave.	60	100	10,350			County
Hacienda Ave.	Woodruff Ave.	Palo Verde Ave.	50	100	1,350	1,500		County
Artesia Ave.	Palo Verde Ave.	Westminster Rd.	60	100	24,200			County
Artesia Ave.	Westminster Rd.	Orange Co. B.L.	30	100	5,300			Orange & L.A. Cos.
GRANVIA ALTAMIRA (NORTH) Total length 34,200 ft.				**100**		**32,700**	**1,500**	
Granvia Altamira	Montemalaga Pl.	Los Angeles B.L.	100	100		29,000	1,500	County
None	Los Angeles B.L.	Verm't at Anaheim		100		3,700		L. A.

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	(6) To be Opened	(6) Full R/W Existing	(7) Jurisdiction
GRANVIA ALTAMIRA (SOUTH). Total length 42,950 ft.				**100**		**38,000**	**4,950**	
Granvia Altamira	Montemalaga Pl.	Paseo Miraleste	100	100		38,000	4,950	County
GRANVIA LA COSTA-PASEO DEL MAR. Total lgth. 71,900 ft.				**100**	**41,300**	**6,000**	**24,600**	
Puerta Del Norte	Palos Verdes Pkwy.	Torrance B.L.	100	100			400	Torrance
Puerta Del Norte	Torrance B.L.	Via Corta	100	100			1,500	County
Granvia La Costa	Via Corta	Via Caleta	166–190	100			18,500	County
P.Verdes Cst. Hwy.	Via Caleta	Pacific Ave. Con.	50	100	32,500			County
Pacific Ave.	P.Verdes Cst.Hwy.	W. Line White Pt.	60	100	2,800	6,000		County
Pacific Ave.	W. Line White Pt.	Weymouth Ave.	70	100	1,900			Co. & L.A.
Paseo Del Mar	Weymouth Ave.	Roxbury St.	100	100			4,200	L. A.
Paseo Del Mar	Roxbury St.	Pacific Ave.	2x30–80	100	4,100			L. A.
GRANVIA VALMONTE. Total length 12,850 ft.				**100**	**3,000**	**3,550**	**6,300**	
Granvia la Costa	Via del Puente	Via Capay	100	100			500	County
Granvia Valmonte	Via Capay	Granvia Altamira	50–166	100	3,000	3,550	5,800	County
HARBOR BLVD. (SAN PEDRO). Total length 21,450 ft.				**100-80**	**5,900**	**8,000**	**7,550**	
None	Pacific Ave. Extn.	Viewland Place		100		2,000		L. A.
Wilm. & San Pedro	Viewland Place	Powell St.	50	100	800			L. A.
Harbor Blvd.	Powell St.	14th St.	80–120–60	100	3,900		3,000	L. A.
Harbor Blvd.	14th St.	17th St.	200	100			900	L. A.
Harbor Blvd.	17th St.	39th St.	80	80		6,000	2,850	L. A.
Bluff Place	39th St.	Pacific Ave.	40	80	1,200			L. A.
HATHAWAY AVENUE. Total length 28,450 ft.				**100**	**1,700**	**12,400**	**14,350**	
Hathaway Ave.	Cherry Ave.	Hill St.	80	100	850	5,300		Signal Hill
Hathaway Ave.	Hill St.	Bennett Ave.	60	100	250	3,550		L. Beach
Hathaway Ave.	Bennett Ave.	Manila Ave.	100–60	100	600	3,550	4,650	Co. & L.B.
Hathaway Ave.	Manila Ave.	Colorado St.	100	100			2,000	County
Hathaway Ave.	Colorado St.	Long Beach B.L.	100	100			2,850	L. Beach
Hathaway Ave.	Long Beach B.L.	San Gabriel River	100	100			4,100	Co. & L.B.
Hathaway Ave.	San Gabriel River	Orange Co. B.L.	100	100			750	L. Beach
HAWTHORNE BOULEVARD. Total length 36,150 ft.				**190-100**	**26,500**	**3,550**	**6,100**	
Hawthorne Ave.	Virginia Ave.	Redondo Bch. Blvd.	2x60	190	5,950			County
Hawthorne Ave.	Redondo Bch. Blvd.	Electric St.	60	100	3,150			Red.& Tor.
Hawthorne Ave.	Electric St.	190th St.	60	100	2,750			Co.& Torr.
Hawthorne Ave.	190th St.	Huntington St.	60	100	3,450			Torrance
Hawthorne Ave.	Huntington St.	Red.-Torrance Rd.	50	100	4,000			Co.& Torr.
Hawthorne Ave.	Red.-Torrance Rd.	Walnut St.	100–75–50	100	6,850	850	4,350	Torrance
Hawthorne Ave.	Walnut St.	Torrance B.L.	100–40–80	100	350	2,700	1,750	Torrance
HIGHLAND AVENUE. Total length 21,000 ft.				**80**	**10,900**	**3,950**	**6,150**	
Highland Ave.	Manhattan B.L.	35th St.	50–60	80	9,450			Manhattan
Highland Ave.	35th St.	26th St.	50–60	80	550	1,200		Hermosa
Myrtle Ave.	26th St.	24th St.	60	80	900			Hermosa
Monterey Blvd.	24th St.	Redondo St.	80	80		550	6,150	Hermosa
None	Redondo St.	Brdwy.-Pacif. Ave.		80		2,200		Redondo
HOBSON AVENUE. Total length 30,350 ft.				**100**	**7,400**	**21,600**	**1,350**	
Harbor View Ave.	Santa Fe Circle	223rd St.	50	100	2,750	8,000		County
Webster Ave.	223rd St.	Long Beach B.L.	40	100	1,000	1,900		County
Webster Ave.	Long Beach B.L.	Twentieth St.	50	100	900	7,700		L. Beach
Hobson St.	Twentieth St.	Los Angeles B.L.	50	100	1,800			L. Beach
Hobson St.	Los Angeles B.L.	Long Beach B.L.	50–100	100	950	1,200	1,350	L. A.
None	Long Beach B.L.	Cerritos Channel		100		2,800		L. Beach
HOLDER AVENUE. Total length 6,550 ft.				**80**	**4,300**	**2,250**		
(No Name)	1300′ N. of Ctr. St.	Orange Co. B.L.	15–30–60	80	4,300	2,250		County
HOOVER STREET. Total length 13,250 ft.				**80**	**3,650**	**9,600**		
Hoover St.	155th St.	190th St.	25–30	80	1,250	9,600		L. A.
Hamilton St.	190th St.	Knox St.	50	80	2,400			L. A.
INGLEWOOD-FREEMAN BLVD. Total length 32,650 ft.				**80-100**	**13,900**	**18,750**		
Inglewood Ave.	Chicago Ave.	Dufour Ave.	60–70	80	3,300			Co.& Red.
Phelan Lane	Dufour Ave.	Ives Lane	40	100	5,300	3,100		Redondo
Lilienthal Lane	Ives Lane	190th St.	30	100	1,300	650		Redondo
None	190th St.	Huntington St.		100		3,700		Torrance
Valerie St.	Huntington St.	Red.-Torrance Rd.	50	100	4,000			County
None	Red.-Torrance Rd.	State St.		100		11,300		Torrance
INGLEWOOD-REDONDO BLVD. Total length 26,000 ft.				**100**	**9,350**	**16,650**		
Green Lane	Chicago Ave.	Dominguez St.	40	100	9,350	3,800		Redondo
None	Dominguez St.	Beryl St.		100		850		Red.& Tor.
None	Beryl St.	Torrance B.L.		100		2,650		Torrance
None	Torrance B.L.	Red.-Torrance Rd.		100		4,050		County
None	Red.-Torrance Rd.	Lomita Blvd.		100		5,300		Torrance
JASPER STREET. Total length 2,600 ft.				**80**		**2,600**		
None	Red.-Torrance Rd.	Palos Verdes Pky.		80		2,600		Torrance

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LOMITA BOULEVARD. Total length 43,800 ft.				**100**	**33,900**	**9,900**		
Lomita Blvd.	Redondo B.L.	Torrance B.L.	40	100	6,550	9,100		Torrance
Lomita Blvd.	Torrance B.L.	Red.& Wilm. Blvd.	50–65	100	6,600			County
Weston St.	Red.& Wilm. Blvd.	Normandie Ave.	50	100	2,725			L. A.
Lomita Blvd.	Normandie Ave.	Curve	50–65	100	4,575			Co. & L.A.
None	Curve	Figueroa St.		100		500		County
Lomita Blvd.	Figueroa St.	Avalon Blvd.	40–50–30	100	5,550			Co. & L.A.
Reyes St.	Avalon Blvd.	Lakme Ave.	70	100	1,050			L. A.
Reyes St.	Lakme Ave.	Banning Blvd.	50	100	475			Co. & L.A.
Lomita Blvd.	Banning Blvd.	Alameda St.	30–60	100	6,375	300		Co. & L.A.
LONG BEACH BLVD.-AMERICAN AVE. Total lgth. 51,250 ft.				**100**	**41,350**		**9,900**	
Long Beach Blvd.	McMillan St.	Greenleaf St.	80–90–100	100	7,150		2,300	Compton
Long Beach Blvd.	Greenleaf St.	S. Line Tr.10396	80–85–90	100	14,550			L. Beach
Long Beach Blvd.	S. Line Tr. 10396	Visalia Ave.	80	100	3,250			Co. & L.B.
Long Beach Blvd.	Visalia Ave.	Bixby Rd.	96–92.5	100	2,550			L. Beach
Long Beach Blvd.	Bixby Rd.	Wardlow Rd.	77.5	100	2,800			L. Beach
Long Beach Blvd.	Wardlow Rd.	Willow St.	100–90	100	3,200		2,000	L. Beach
American Ave.	Willow St.	Anaheim St.	42 & 32	100	7,850			L. Beach
American Ave.	Anaheim St.	Ocean Blvd.	124	100			5,600	L. Beach
LOS ALAMITOS CIRCLE. Total length 3,925 ft.				**100**		**3,925**		
None	(Intersection of Hathaway Ave.,			100		1,450		County
None	State St. and San Gabriel Blvd.)			100		2,475		L. Beach.
LOS ANGELES-ATLANTIC CON. Total length 1,200 ft.				**80**		**1,200**		
None	Elm St.	Long Beach B.L.		80		400		L. Beach
None	Long Beach B.L.	Atlantic Ave.		80		800		County
LOS CERRITOS DIAGONAL. Total length 33,500 ft.				**100**		**33,500**		
None	South St.	Long Beach B.L.		100		21,250		County
None	Across Shoestring Strip			100		150		L. Beach
None	Long Beach B.L.	Orange Co. B.L.		100		12,100		County
LOS COYOTES DIAGONAL. Total length 53,100 ft.				**100**	**900**	**52,200**		
Ellis Ave.	Temple Ave.	Obispo Ave.	60	100	900	850		Signal Hill
None	Obispo Ave.	Long Beach B.L.		100		3,150		L. Beach
None	Long Beach B.L.	Somerset Ave.		100		9,500		County
None	Somerset Ave.	Long Beach B.L.		100		150		L. Beach
None	Long Beach B.L.	San Gabriel River		100		11,750		County
None	Across Shoestring Strip			100		100		L. Beach
None	San Gabriel River	2000′ N.E. of Center		100		26,700		County
LUCIA AVENUE. Total length 3,500 ft.				**80**	**3,500**			
Lucia Ave.	Anita St.	Huntington St.	70	80	3,500			Redondo
LUITWIELER AVENUE. Total length 6,600 ft.				**100**	**6,600**			
Luitwieler Ave.	1300′ N. of Ctr. St.	Center St.	60	100	1,300			County
Central Ave.	Center St.	Tulare Ave.	75	100	2,600			County
Central Ave.	Tulare Ave.	Artesia Ave.	75–45	100	2,700			Orange & L.A. Cos.
MAGNOLIA AVE. (LONG BEACH). Total length 18,800 ft.				**80**	**18,450**	**350**		
None	Pacific Hwy. Con.	Wardlow Rd.		80		350		County
Magnolia Ave.	Wardlow Rd.	Ocean Blvd.	70–75	80	18,450			L. Beach
MAIN STREET. Total length 44,000 ft.				**100**	**44,000**			
Main St.	155th St.	Santa Louisa St.	60–80–90	100	21,300			County
Main St.	Santa Louisa St.	Lomita Blvd.	90–80–85	100	12,700			County
Wilmington Blvd.	Lomita Blvd.	B Street	80–73–66	100	10,000			L. A.
MAIN STREET (COMPTON). Total length 12,300 ft.				**80**	**11,000**		**1,300**	
Main St.	Dwight St.	Spring St.	60–80	80	5,900		1,300	Compton
Main St.	Spring St.	Long Beach Blvd.	64–67	80	3,050			Compton
Main St.	Long Beach Blvd.	Holly Ave.	70–60	80	2,050			Compton
MANHATTAN-HERMOSA AVENUE. Total length 35,000 ft.				**80-100**	**21,800**	**1,900**	**11,300**	
Manhattan Ave.	Manhattan B.L.	First St.	50–80–90	80	3,600	1,900	3,700	Manhattan
Manhattan Ave.	First St.	35th St.	80	80			200	Ma.& Her.
Manhattan Ave.	35th St.	27th St.	80–40	80	1,450		150	Hermosa
Manhattan Court	27th St.	26th St.	40	137.5	300			Hermosa
Hermosa Ave.	26th St.	Redondo St.	2x25	100	7,450			Hermosa
Hermosa Ave.	Redondo St.	Diamond St.	70	100	3,950			Redondo
Pacific Ave.	Diamond St.	Opal St.	90	100	1,900			Redondo
Catalina Ave.	Opal St.	Pearl St.	150	100			650	Redondo
Esplanade	Pearl St.	Paseo de la Playa	90–80–100	100	3,150		5,000	Redondo
Calle Miramar	Paseo de la Playa	Palos Verdes Pky.	100	100			1,600	Torrance
MARINE AVENUE. Total length 16,550 ft.				**80**	**16,300**	**250**		
Marine Ave.	The Strand	Wiseburn Ave.	60–80–40	80	11,000	250		Manhattan
Marine Ave.	Wiseburn Ave.	Inglewood Ave.	40	80	5,300			Co.& Red.
MARQUARDT AVENUE. Total length 10,500 ft.				**80**	**10,500**			
Marquardt Ave.	1300′ N. of Ctr. St.	14th St.	35–40–60	80	9,200			County
Marquardt Ave.	14th St.	Orange Co. B.L.	15	80	1,300			Orange & L.A. Cos.
MONETA AVENUE. Total length 2,950 ft.				**100**	**2,300**	**650**		
Moneta Ave.	Griffith St.	Main St.	60	100	2,300	650		County

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NARBONNE AVENUE. Total length 19,800 ft.				**80**	**4,100**		**15,700**	
Marcelina Ave.	Cabrillo Ave.	Carson St.	70	80	1,500			Torrance
Arlington Ave.	Carson St.	Camino Real	70–80	80	2,300		1,900	Torrance
Narbonne Ave.	Camino Real	Torrance B.L.	65	80	300			Torrance
Narbonne Ave.	Torrance B.L.	Western Ave.	80	80			13,800	County
NEPTUNE CROSSING STREET. Total length 650 ft.				**80**	**650**			
Cross St.	Neptune Ave.	Pier A St.	60	80	650			L. A.
NEW YORK AVENUE. Total length 13,900 ft.				**80**	**13,900**			
New York Ave.	Jefferson St.	Flower Ave.	60	80	3,850			County
New York Ave.	Flower Ave.	Long Beach B.L.	60–70	80	4,750			Co. & L.B.
New York Ave.	Across Shoestring Strip		60	80	100			L. Beach
New York Ave.	Long Beach B.L.	San Antonio Dr.	60	80	5,200			County
NINETEENTH ST. (SAN PEDRO). Total length 14,150 ft.				**80-100**	**7,750**	**5,000**	**1,400**	
None	Paseo del Mar	Weymouth Ave.		80		5,000		County
Nineteenth St.	Weymouth Ave.	Crescent Ave.	60–70	80	7,750			L. A.
Crescent Ave.	Nineteenth St.	Sixteenth St.	100	100			1,400	L. A.
NINTH STREET (SAN PEDRO). Total length 9,650 ft.				**80-100**	**6,600**		**3,050**	
Ninth St.	Western Ave.	Dodson Ave.	100	100			2,300	L. A.
Ninth St.	Dodson Ave.	Pacific Ave.	80–60	80	6,600		750	L. A.
NORMANDIE AVENUE. Total length 44,800 ft.				**100**	**39,350**	**3,750**	**1,700**	
Normandie Ave.	Carter Ave.	Rosecrans Ave.	30	100	1,300			Co.&Gard.
Normandie Ave.	Rosecrans Ave.	170th St.	66–30–60	100	8,400	450		Gardena
Normandie Ave.	170th St.	Sherman Ave.	60	90	350			Co.&Gard.
Normandie Ave.	Sherman Ave.	Electric St.	60	90	3,950			County
Normandie Ave.	Electric St.	190th St.	66	90	2,700			L. A.
Normandie Ave.	190th St.	225th St.	66	90	13,000			Co. & L.A.
Normandie Ave.	225th St.	228th St.	66	90	1,200			County
Tomlinson Rd.	228th St.	L.Beach & Red. Rd.	40	90	2,100			County
Normandie Ave.	L.Beach & Red. Rd.	N.L. San P.Vil.Tr.	80	90	3,900			County
Normandie Ave.	N.L.San P. Vil.Tr.	Lomita Blvd.	100	100			1,700	County
Amaranth Ave.	Lomita Blvd.	Anaheim St.	50	100	2,450	3,300		L. A.
NORWALK ROAD. Total length 27,150 ft.				**80**	**25,850**		**1,300**	
Norwalk Rd.	Lawrence St.	Spruce St.	25–75–50	80	3,200			County
Norwalk Rd.	Spruce St.	Orangethorpe Ave.	30–40–60	80	8,550			County
Norwalk Rd.	Orangethorpe Ave.	Harvey Way	50–40–60	80	8,400			County
Norwalk Rd.	Harvey Way	Grant Ave.	80–40	80	1,400		1,300	County
Norwalk Rd.	Grant Ave.	Long Beach B.L.	65–40–60	80	3,350			County
Norwalk Rd.	Across Shoestring Strip		60	80	100			L. Beach
Norwalk Rd.	Long Beach B.L.	Orange Co. B.L.	60	80	850			County
OCASO AVENUE. Total length 3,900 ft.				**80**	**3,900**			
Cerritos Ave.	1300′ N. of Ctr.St.	Center St.	40	80	1,300			County
Cerritos Ave.	Center St.	Tulare Ave.	25	80	2,600			Orange & L.A. Cos.
OCEAN BLVD. (LONG BEACH). Total length 32,950 ft.				**100**	**10,600**		**22,350**	
Ocean Ave.	Water St.	Bridge	100	100	3,450		700	L. Beach
Ocean Blvd.	Bridge	Termino Ave.	100	100	4,400		13,800	L. Beach
Ocean Blvd.	Termino Ave.	49th Pl.	30 & 25	100	4,900			L. Beach
Ocean Blvd.	49th Pl.	52nd Pl.	25	100	1,150			L. Beach
Ocean Blvd.	52nd Pl.	72nd Pl.	15 & 5	100	4,200			L. Beach
Ocean Blvd.	72nd Pl.	74th Pl.	5	100	350			L. Beach
ORANGE AVE. (LONG BEACH). Total length 45,800 ft.				**80**	**34,450**		**11,350**	
Maple Ave.	Edward St.	Lincoln St.	60	80	3,900			County
Orange Ave.	Lincoln St.	Jackson St.	60–70–80	80	8,950		2,350	L. Beach
Orange Ave.	Jackson St.	Bixby Rd.	80	80			8,650	County
Orange Ave.	Bixby Rd.	Wardlow Rd.	60	80	2,950			L. Beach
Orange Ave.	Wardlow Rd.	31st St.	61.5–71.5	80	1,850			Signal Hill
Orange Ave.	31st St.	Spring St.	61.5	80	600			L. Beach
Orange Ave.	Spring St.	Willow St.	60	80	2,600			L.B.& S.H.
Orange Ave.	Willow St.	Hill St.	60	80	2,600			Signal Hill
Orange Ave.	Willow St.	Ocean Blvd.	60–75–80	80	11,000		350	L. Beach
ORANGE STREET (COMPTON). Total length 10,850 ft.				**100**	**10,850**			
Orange St.	Compton B.L.	Willow St.	50–33–60	100	7,600			Compton
Orange St.	Willow St.	Poinsettia Ave.	80–65–50	100	2,400			Compton
Orange St.	Poinsettia Ave.	Compton B.L.	70–33–66	100	850			Compton
PACIFIC AVE. (LONG BEACH). Total length 34,700 ft.				**100**	**5,500**	**5,150**	**24,050**	
Lester St.	South St.	Chestnut Ave.	40	100	750	600		L. Beach
Pacific Ave.	Chestnut Ave.	Del Mar Ave.	50–100	100	3,200	4,550	8,100	L. Beach
Pacific Ave.	Del Mar Ave.	3rd St.	80–100	100	1,550		14,800	L. Beach
Pacific Ave.	3rd St.	Ocean Blvd.	50–60–100	100			1,150	L. Beach
PACIFIC AVENUE (REDONDO). Total length 4,200 ft.				**100**	**4,200**			
Pacific Ave.	Anita St.	Diamond St.	80–40	100	4,200			Redondo
PACIFIC AVENUE (SAN PEDRO). Total length 24,100 ft.				**164-100**	**11,700**	**6,500**	**5,900**	
Wilm.& S.Pedro Rd.	B St.	Curve	100	164	1,300			L. A.
None	Curve	Harbor Blvd.(Prop.)		164		4,600		L. A.
None	Harbor Blvd.(Prop.)	Wilm. & San Pedro		100		1,900		L. A.
Pacific Ave.	Wilm. & San Pedro	Paseo Del Mar	80–100	100	10,400		5,900	L. A.

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	(6) To be Opened	(6) Full R/W Existing	(7) Jurisdiction
PACIFIC HIGHWAY. Total length 33,550 ft.				**100**	**350**	**33,200**		
Pacific Blvd.	Rosecrans Ave.	Greenleaf Dr.	60	100	350	9,300		Compton
None	Greenleaf Dr.	Wardlow Rd.		100		21,650		County
None	Wardlow Rd.	31st St.		100		2,250		L. Beach
PALOS VERDES PARKWAY. Total length 26,100 ft.				**120 to 282**		**13,850**	**12,250**	
Paseo del Mar	Granvia La Costa	Via Arroyo	120	120			4,200	County
Paseo del Mar	Via Arroyo	Via Rosa	166	166			2,150	County
Paseo del Mar	Via Rosa	Puerta del Norte	166	166			600	Torrance
Palos Verdes Pkwy.	Puerta del Norte	Via Monte d'Oro	282	282			3,600	Torrance
Palos Verdes Pkwy.	Via Monte d'Oro	Redondo B.L.	225	225			500	Redondo
Palos Verdes Pkwy.	Redondo B.L.	Avenue I	225	225			1,200	Torrance
Palos Verdes Pkwy.	Avenue I	Torrance B.L.		142		3,900		County
Palos Verdes Pkwy.	Torrance B.L.	Redondo B.L.		142		450		Torrance
Palos Verdes Pkwy.	Redondo B.L.	Torrance B.L.		142		300		Redondo
Palos Verdes Pkwy.	Torrance B.L.	Madrona Ave.		142		9,200		Torrance
PASEO AGUA NEGRA. Total length 35,000 ft.				**80-100**		**35,000**		
None	Torrance B.L.	Gr'nvia Altamira N.		100		2,800		County
None	Gr'nvia Altamira N.	Granvia La Costa		80		32,200		County
PASEO MIRALESTE. Total length 17,900 ft.				**100-150**	**13,900**		**4,000**	
Granvia Miraleste	Western Ave.	W. Line Tr. 9302	150	150			4,000	County
Paseo Miraleste	W. Line Tr. 9302	Granvia la Costa	50	100	13,900			County
PENNSYLVANIA DRIVE. Total length 4,450 ft.				**100**	**2,000**	**2,450**		
Pennsylvania Dr.	Anaheim St. Extn.	Torrance B.L.	50	100	2,000	450		County
None	Torrance B.L.	County B.L.		100		900		Torrance
None	County B.L.	Granvia Altamira		100		1,100		County
PERSHING DR.-W. RAILROAD DR. Total length 21,000 ft.				**100-71**	**13,150**	**7,850**		
Grandview Ave.	Rosecrans Ave.	18th St.	40	100	800	3,600		Manhattan
W. Railroad Dr.	18th St.	Longfellow Ave.	40-50	71	3,750	1,500		Manhattan
W. Railroad Dr.	Longfellow Ave.	Redondo St.	30-25	71	8,600	450		Hermosa
None	Redondo St.	Broadway		71		2,300		Redondo
PICO AVENUE. Total length 44,700 ft.				**100-90**	**21,650**	**20,450**	**2,600**	
Com. & Dominguez	Olive St.	Long Beach B.L.	50	100	2,600			County
Com. & Dominguez	Long Beach B.L.	67th St.	50	100	1,850			L. Beach
Com. & Dominguez	67th St.	Scott St.	50	90	750	2,000		L. Beach
Pico Ave.	Scott. St.	Long Beach B.L.	80	90	1,750	1,350		L. Beach
None	Long Beach B.L.	Wardlow Rd.		100		15,800		County
Pico Ave.	Wardlow Rd.	State St.	50-80	100	9,100	1,300		L. Beach
Pico Ave.	State St.	Ocean Blvd.	100-60	100	5,600		2,600	L. Beach
PIER AVENUE. Total length 11,000 ft.				**100-80**	**5,300**	**3,150**	**2,550**	
Pier Ave.	Hermosa Ave.	Harper Ave.	100-80	100	2,100		2,550	Hermosa
Santa Fe Ave.	Harper Ave.	Gould Lane	60	100	3,200			Redondo
None	Gould Lane	Nelson Ave.		80		800		Manhattan
None	Nelson Ave.	Graham Ave.		80		2,350		Redondo
PIER AVENUE-GOULD LANE CON. Total length 200 ft.				**60**		**200**		
None	Santa Fe Ave.	Dewey at Gould		60		200		Redondo
PIONEER BOULEVARD. Total length 30,450 ft.				**100**	**24,500**	**5,300**	**650**	
Pioneer Blvd.	Laurence St.	Sosa Ave.	60-75-70	100	17,200			County
Pioneer Blvd.	Sosa Ave.	Centralia Rd.	80-100	100	900		650	County
Pioneer Blvd.	Centralia Rd.	Long Beach B.L.	60-50	100	4,950	2,350		County
None	Across Shoestring Strip			100		100		L. Beach
Pioneer Blvd.	Long Beach B.L.	Orange Co. B.L.	45	100	1,450	2,850		County
PLAZA DEL AMO. Total length 9,250 ft.				**100**	**4,450**	**300**	**4,500**	
Plaza Del Amo	Carson St.	Western Ave.	110-2x39	100	1,400		4,500	Torrance
Plaza Del Amo	Western Ave.	Los Angeles B.L.	2x40	100	3,050	100		L. A.
None	Los Angeles B.L.	Normandie Ave.		100		200		County
POST AVENUE (TORRANCE). Total length 2,500 ft.				**80**	**2,500**			
Post Ave.	Redondo Blvd.	Carson St.	2x30	80	2,500			Torrance
PRAIRIE AVENUE. Total length 35,750 ft.				**100**	**18,700**	**17,050**		
Prairie Ave.	Virginia Ave.	Riv.-Redondo Blvd.	20-60-70	100	4,900			County
Prairie Ave.	Riv.-Redondo Blvd.	Spencer St.	60	100	6,850	5,100		Torrance
Madrona Ave.	Spencer St.	Torrance B.L.	40-60	100	6,950	11,950		Torrance
PROSPECT AVENUE. Total length 25,100 ft.				**80**	**11,600**	**3,300**	**10,200**	
Prospect Ave.	Camino Real	Gould Lane	40	80	950	1,500		Manhattan
Prospect Ave.	Gould Lane	Second St.	80	80			6,700	Hermosa
Ramona Ave.	Second St.	Jasper St.	70-80	80	3,750	400	3,500	Redondo
Marguerita Ave.	Jasper St.	Redondo B.L.	70	80	3,900	150		Redondo
Tulita Ave.	Redondo B.L.	Ave. I (State St.)	15-60	80	3,000	1,250		County
REDONDO AVE. (LONG BEACH). Total length 12,800 ft.				**80**		**3,800**	**9,000**	
None	Los Coyotes Diag.	Summit Rd.		80		550		L. Beach
None	Summit Rd.	State St.		80		1,300		Signal Hill
Redondo Ave.	State St.	Ocean Blvd.	80	80		1,950	9,000	L. Beach

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REDONDO BEACH BOULEVARD.	**Total length 35,300 ft.**			**100**	**27,200**	**7,450**	**650**	
Eleventh St.	Hermosa Ave.	Pacific Ave.	50	100	650	1,475		Redondo
Anita St.	Pacific Ave.	Slauson Lane	100–70	100	2,650	3,525	650	Redondo
Ripley Ave.	Slauson Lane	Clark Lane	20–50	100	2,100			Redondo
Ripley Ave.	Clark Lane	Second St.	30–40	100	3,100	800		Redondo
L.A. & Red. Blvd.	Second St.	Hawthorne Ave.	70	100	850			Co. & Red.
Riv.-Redondo Blvd.	Hawthorne Ave.	Ashley St.	50–75	100	350			Co. & Torr.
Riv.-Redondo Blvd.	Ashley St.	Prairie Ave.	95–80–75	100	2,500			Co. & Torr.
Riv.-Redondo Blvd.	Prairie Ave.	Gardena B.L.	60–30	100	7,000			Co. & Torr.
Riv.-Redondo Blvd.	Gardena B.L.	Torrance B.L.	60	100	2,800			Tor. & Gar.
Riv.-Redondo Blvd.	Torrance B.L.	Vermont Ave.	60	100	5,200	1,650		Gardena
RIVERSIDE-RED. BLVD. (GARDENA).	**Total length 1,700 ft.**			**80**	**1,700**			
Riv.-Redondo Blvd.	Red. Beach Blvd.	Vermont Ave	60	80	1,700			Gardena
ROSECRANS AVENUE (GARDENA).	**Total length 4,950 ft.**			**100**	**4,950**			
Rosecrans Ave.	Hobart Blvd.	Normandie Ave.	60	100	2,300			Co. & Gard.
Rosecrans Ave.	Normandie Ave.	Vermont Ave.	60	100	2,650			Gardena
ROSECRANS AVE. (MANHATTAN BCH.).	**To. lgth. 12,450 ft.**			**100**	**12,450**			
Rosecrans Ave.	The Strand	El Segundo B.L.	60	100	1,450			Manhattan
Rosecrans Ave.	El Segundo B.L.	Wiseburn Ave.	25–40–50	100	11,000			M. & El Seg.
ROSS AVENUE.	**Total length 35,850 ft.**			**100**	**15,300**	**20,550**		
Studebaker Rd.	1300′ N. of Ctr. St.	Orangethorpe Ave.	60	100	11,900			County
Ross Ave.	Orangethorpe Ave.	Long Beach B.L.	60	100	3,400	11,250		County
None	Across Shoestring Strip			100		100		L. Beach
None	Long Beach B.L.	Orange Co. B.L.		100		9,200		County
ROSWELL AVENUE.	**Total length 10,550 ft.**			**80**	**8,500**	**2,050**		
Roswell Ave.	Los Alamitos Circle	Ocean Blvd.	60–40	80	8,500	2,050		L. Beach
SAN ANTONIO CIRCLE.	**Total length 940 ft.**			**80**		**940**		
None	L.A. St. & San Antonio Diag. Intersection			80		940		County
SAN ANTONIO DIAGONAL.	**Total length 46,620 ft.**			**100**	**11,400**	**35,220**		
None	Hobson St.	Perris Rd.		100		2,100		County
None	Perris Rd.	Long Beach B.L.		100		1,500		L. Beach
None	Long Beach B.L.	Del Mar Ave.		100		3,700		County
None	Del Mar Ave.	Country Club Dr.		100		700		L. Beach
San Antonio Dr.	Country Club Dr.	American Ave.	75–80–70	100	2,800			L. Beach
San Antonio Dr.	American Ave.	Long Beach Blvd.	60	100	800			L. Beach
San Antonio Dr.	Long Beach Blvd.	W. Line Tr. 10579	60	100	700			County
San Antonio Dr.	W. Line Tr. 10579	California Ave.	80	100	2,000			Co. & L.B.
San Antonio Dr.	California Ave.	Long Beach B.L.	60	100	5,100	16,020		County
None	Across Shoestring Strip			100		200		L. Beach
None	Long Beach B.L.	Brentwood Dr.		100		11,000		County
SAN GABRIEL BOULEVARD.	**Total length 21,250 ft.**			**100**	**21,250**			
Cerritos Ave.	Algeroma St.	Long Beach B.L.	60–80	100	8,150			County
Cerritos Ave.	Across Shoestring Strip		66	100	100			L. Beach
Cerritos Ave.	Long Beach B.L.	Carson St.	66–80	100	13,000			County
SAN GABRIEL PARKWAY.	**Total length 23,300 ft.**			**225**	**14,550**	**8,750**		
Cerritos Ave.	Somerset Ave.	Long Beach B.L.	80	225	4,850	8,750		County
Cerritos Ave.	Across Shoestring Strip		80	225	100			L. Beach
Cerritos Ave.	Long Beach B.L.	Long Beach B.L.	80	225	6,750			County
Cerritos Ave.	Long Beach B.L.	Stearns Ave.	80	225	1,300			L. Beach
Cerritos Ave.	Stearns Ave.	Alamitos Circle	80	225	1,550			L.B. & Co.
SAN PEDRO STREET.	**Total length 1,950 ft.**			**80**	**1,950**			
San Pedro St.	155th St.	Olive St.	60	80	1,950			County
SANTA FE AVENUE.	**Total length 51,350 ft.**			**100**	**32,500**	**18,850**		
Santa Fe Ave.	Agnes St.	Euclid-Pine Ave.	80	100	3,250			Co. & Com.
Santa Fe Ave.	Euclid-Pine Ave.	Main St.	80–60–40	100	5,950			Compton
Santa Fe Ave.	Main St.	Olive St.	50	100	700	1,950		Compton
Munk Ave.	Olive St.	Greenleaf Dr.	40	100	1,350	1,300		Compton
Santa Fe Ave.	Greenleaf Dr.	Long Beach B.L.	40–80–60	100	6,650	15,600		County
Perris Rd.	Long Beach B.L.	Spring St.	60–40–70	100	3,500			L. Beach
Perris Rd.	Spring St.	Wilmington Blvd.	50–40–60	100	11,100			L. Beach
SANTA FE CIRCLE.	**Total length 940 ft.**			**80**		**940**		
None	Inter. Santa Fe Ave.	Pacific Highway		80		940		County
SANTA GERTRUDES AVENUE.	**Total length 1,300 ft.**			**80**	**1,300**			
Sta. Gertrudes Ave.	1300′ N. of Ctr. St.	Center St.	25	80	1,300			Orange & L.A. Cos.
SANTIAGO AVENUE.	**Total length 3,450 ft.**			**80**	**3,450**			
Santiago Ave.	Hathaway Ave.	Colorado St.	60	80	3,450			L. Beach
SEASIDE BOULEVARD.	**Total length 26,300 ft.**			**80-100**	**21,400**	**4,900**		
S. Seaside Ave.	S. End Prop. Quarantine Sta.	S. End Fish Harbor	60	80	1,300	2,500		L. A.
S. Seaside Ave.	S. End Fish Harbor	Division Pl.	60–80	100	12,200			L. A.
Seaside Blvd.	Division Pl.	E. Side Channel	60	100	7,200	2,400		L. Beach
Water St.	E. Side Channel	Ocean Ave.	40	100	700			L. Beach

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SECOND ST.-GREENLEAF DRIVE.	**Total length 122,800 ft.**			**80**	**75,150**	**39,450**	**8,200**	
Second St.	The Strand	Dewey Ave.	40–60	80	8,750			Manhattan
Second St.	Dewey Ave.	Wiseburn Ave.	40	80	400			M. & Red.
Robinson St.	Wiseburn Ave.	Inglewood Ave.	40	80	5,300			Redondo
Robinson St.	Inglewood Ave.	Riv.-Redondo Blvd.	60–70	80	5,300	2,800		County
San Pedro St.	Riv.-Redondo Blvd.	Illinois St.	60	80	3,925	2,300		Torrance
San Pedro St.	Illinois St.	Maine St.	70	80	3,275			Gardena
Wilmington St.	Maine St.	Gardena B.L.	50	80	750	950		Gardena
Wilmington St.	Gardena B.L.	Gardena B.L.	50	80	250			Co.& Gard.
Wilmington St.	Gardena B.L.	Vermont Ave.	50	80	1,650			Gardena
168th St.	Vermont Ave.	Figueroa St.	50–30	80	1,750	900		L. A.
Wilmington St.	Figueroa St.	Ed. Power Line	60–70–30	80	2,000	425		County
Greenleaf Dr.	Ed. Power Line	Compton B.L.	30	2x50	2,360	7,600		County
Greenleaf Dr.	Compton B.L.	Santa Fe Ave.	30–40	80	5,550	2,425		Co.& Com.
Greenleaf Dr.	Santa Fe Ave.	Long Beach B.L.	25	2x50	350	1,425		Co.& Com.
Greenleaf Dr.	Long Beach B.L.	Harbor Ave.	50	2x50	550			Com.&L.B.
Greenleaf Dr.	Harbor Ave.	Long Beach B.L.	50	2x50	500			Co.& Com.
Greenleaf Dr.	Long Beach B.L.	Compton B.L.	60	2x50	200	3,500		Com.&L.B.
None	Compton B.L.	Atlantic Ave.		80		2,100		Co. & L.B.
Lincoln St.	Atlantic Ave.	Myrtle Ave.	80–70	80	650		600	L. Beach
Lincoln St.	Myrtle Ave.	Ocean Ave.	60–40	80	2,750	3,850		Co. & L.B.
Flower Ave.	Ocean Ave.	New York Ave.	60	80	2,550			Co. & L.B.
Flower Ave.	New York Ave.	Cornuta Ave.	70–80–60	80	2,000	1,350	6,300	County
Walnut Ave.	Cornuta Ave.	P.E. R/W	60	80	250	1,300		County
Railroad Ave.	P.E. R/W	Studebaker Rd.	40	80	1,700	2,825		County
Clearwater Rd.	Studebaker Rd.	Pine St.	40–60–50	80	6,900			County
Apple St.	Pine St.	S.P. R/W, E. Side	30–15–40	80	12,550	3,050		County
Tulare Ave.	S.P. R/W, E. Side	Central Ave.	30–15–80	80	2,950		1,300	County
None	Central Ave.	Orange Co. B.L.		80		2,650		Orange & L.A. Cos.
SECOND STREET (LONG BEACH).	**Total length 12,800 ft.**			**100**	**5,200**		**7,600**	
Livingston Dr.	Ocean Blvd.	Quincy Ave.	60	100	2,500			L. Beach
Second St.	Quincy Ave.	Orange Co. B.L.	80–100	100	2,700		7,600	L. Beach
SEPULVEDA BOULEVARD.	**Total length 30,200 ft.**			**100**	**29,400**	**800**		
El Camino Real	Rosecrans Ave.	Hermosa B.L.	40	100	8,900			Manhattan
El Camino Real	Hermosa B.L.	Keats St.	40	100	700			Her. & M.
None	Keats St.	Gould Lane		100		800		Manhattan
Camino Real	Gould Lane	First St.	80	100	6,650			Hermosa
Camino Real	First St.	Emerald St.	80	100	4,850			Redondo
Elena Ave.	Emerald St.	Knob Hill Ave	80	100	5,000			Redondo
Elena Ave.	Knob Hill Ave.	Avenue I	80	100	3,300			Co. & Red.
SEVENTH ST. (LONG BEACH).	**Total length 33,050 ft.**			**80-100**	**17,050**		**16,000**	
Seventh St.	Pico Ave.	Hathaway Ave.	80–60–70	80	13,550		11,900	L. Beach
Seventh St.	Hathaway Ave.	Colorado St. Con.	80	100			4,100	County
Seventh St.	Colorado St. Con.	Orange Co. B.L.	80	100	3,500			County
SEVENTH STREET (SAN PEDRO).	**Total length 10,600 ft.**			**80**	**8,850**	**800**	**950**	
Seventh St.	Ninth St.	Weymouth Ave.	80	80		800	950	L. A.
Seventh St.	Weymouth Ave.	Meyler St.	60	80	3,750			Co. & L.A.
Seventh St.	Meyler St.	Harbor Blvd.	60–70	80	5,100			L. A.
SHOEMAKER AVENUE.	**Total length 16,250 ft.**			**80**	**6,550**	**9,700**		
Shoemaker Ave.	1300' N. of Ctr. St.	S.Line Anthony Tr.	15–60	80	6,550	8,400		County
None	S.Line Anthony Tr.	Orange Co. B.L.		80		1,300		Orange & L.A. Cos.
SIGNAL STREET (SAN PEDRO).	**Total length 4,500 ft.**			**80**			**4,500**	
Viaduct and Ramp	Harbor Blvd.	22nd St.	80	80			2,000	L. A.
Signal St.	22nd St.	End of Wharf	80	80			2,500	L. A.
SOMERSET AVENUE.	**Total length 14,650 ft.**			**80**	**12,750**		**1,900**	
Somerset Ave.	Linden St.	Long Beach B.L.	80–60–70	80	6,150		1,900	County
Somerset Ave.	Across Shoestring Strip		60	80	100			L. Beach
Somerset Ave.	Long Beach B.L.	Los Angeles St.	60	80	6,500			County
SPRING STREET.	**Total length 42,900 ft.**			**80**	**32,900**	**10,000**		
Spring St.	Webster Ave.	Pico Ave.	25–40–20	80	3,950			L. Beach
Spring St.	Pico Ave.	Atlantic Ave.	30–50–60	80	5,950	700		L. Beach
Spring St.	Atlantic Ave.	California Ave.	60	80	1,200			Signal Hill
Spring St.	California Ave.	Lemon Ave.	60	80	650			S.H. & L.B.
Spring St.	Lemon Ave.	Orange Ave.	60	80	600			L. Beach
Spring St.	Orange Ave.	Junipero Ave.	60	80	4,000			S.H. & L.B.
Spring St.	Junipero Ave.	W. Line Lot 66	60	80	4,900			L. Beach
Spring St.	W. Line Lot 66	Long Beach B.L.	60	80	600			Co. & L.B.
Spring St.	Long Beach B.L.	Orange Co. B.L.	60	80	11,050	9,300		County
STATE STREET.	**Total length 94,200 ft.**			**100**	**50,750**	**37,550**	**5,900**	
Avenue I	Esplanade	Elena Ave.	80	100	1,350			Redondo
Avenue I	Elena Ave.	Torrance B.L.	80	100	3,600			Co.& Torr.
Ellis Ave.	Torrance B.L.	Neece Ave.	80–90–45	100	2,200	6,700		Torrance
Newton St.	Neece Ave.	Madison St.	82.5	100	1,300			Torrance
Red. & Wilm. Blvd.	Madison St.	Torrance B.L.	80	100	6,700			Torrance
Red. & Wilm. Blvd.	Torrance B.L.	Hillworth Ave.	80	100	200			Co.& Torr.
Red. & Wilm. Blvd.	Hillworth Ave.	Los Angeles B.L.	100	100			5,900	County
258th St.	Los Angeles B.L.	Frigate Ave.	50	100	2,700	6,750		L. A.
O Street	Frigate Ave.	Pioneer Ave.	50–60–35	100	4,950	3,800		L. A.

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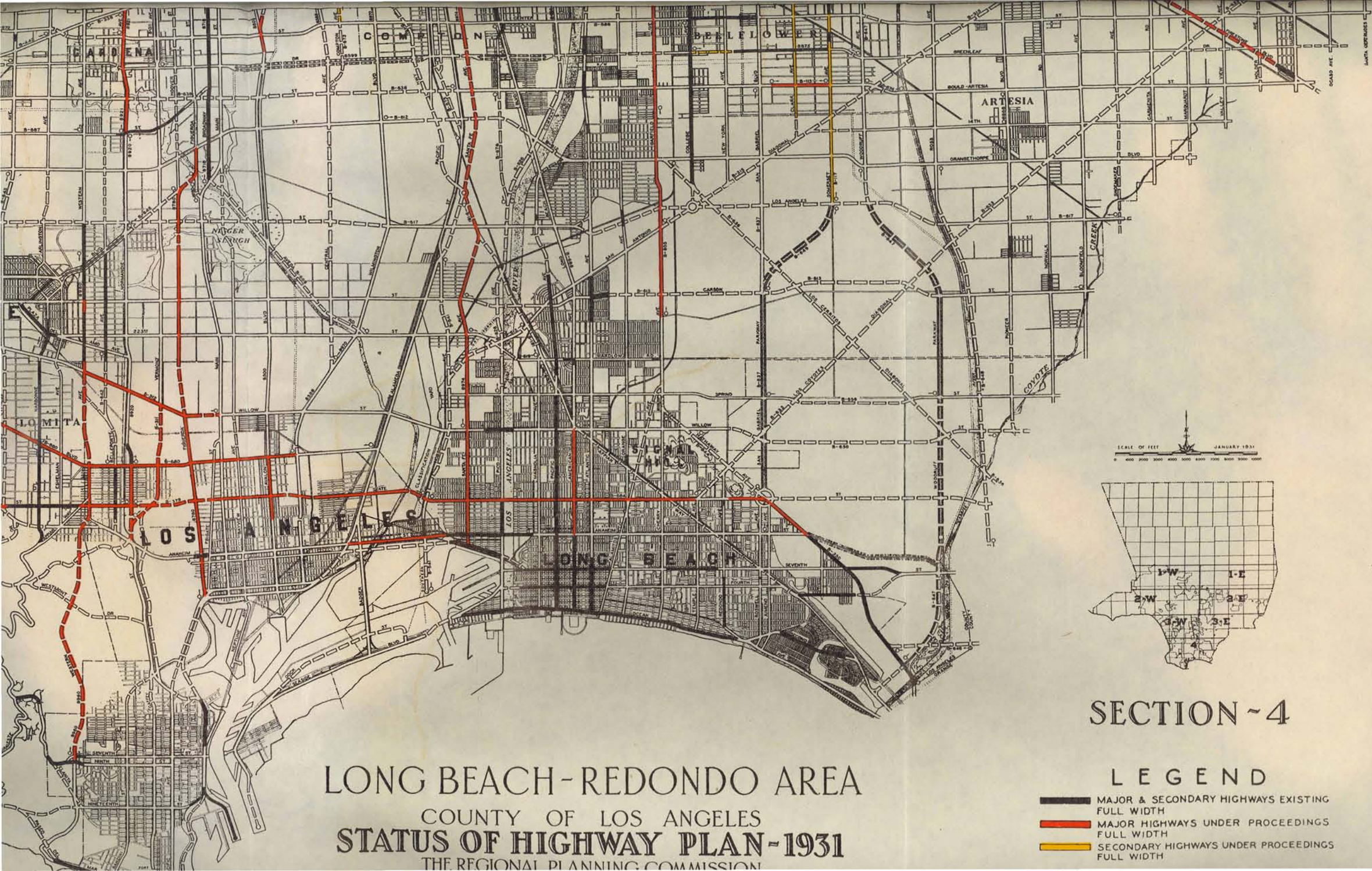
STATE STREET (Continued)								
N Street	Pioneer Ave.	W.Side Fl.Con.Ch.	60	100	3,850	1,750		L. A.
None	Across Flood Control Channel			100		300		County
None	E. Side Fl. Con. Ch.	Los Angeles B.L.		100		950		L. A.
None	Los Angeles B.L.	Long Beach B.L.		100		100		County
State St.	Long Beach B.L.	P.E. Ry. R/W	60–55–70	100	17,000	1,700		L. Beach
State St.	P.E. Ry. R/W	Loma Ave.	60	100	4,600			L.B. & S.H.
State St.	Loma Ave.	Hathaway Ave.	60	100	2,300	350		L. Beach
None	Hathaway Ave.	Orange Co. B.L.		100		15,150		County
TAMARIND STREET. Total length 11,700 ft.				**80**	**8,000**	**1,700**	**2,000**	
Tamarind St.	Oaks Ave.	Greenleaf St.	80–50–60	80	8,000		2,000	Compton
None	Greenleaf St.	Wilmington St.		80		1,700		County
TEMPLE AVENUE (LONG BEACH). Total length 9,900 ft.				**80**	**9,900**			
Temple Ave.	State St.	Ocean Blvd.	60–75	80	9,900			L. Beach
TEMPLE STREET (COMPTON). Total length 21,200 ft.				**80**	**11,600**	**8,100**	**1,500**	
Bullis Road	Orchard Ave.	McMillan St.	50	80	1,150			Compton
Temple St.	McMillan St.	Pixley St.	36.5–56.5	80	2,050			Compton
Temple St.	Pixley St.	Main St.	33–51.5	80	1,950			Compton
Temple St.	Main St.	Olive St.	46.5–70	80	2,600			Compton
Temple St.	Olive St.	Greenleaf St.	80–50–40	80	1,300		1,500	Compton
Harbor Ave.	Greenleaf St.	67th St.	41.5	80	1,350			L.B. & Co.
Harbor Ave.	67th St.	Cummings Ave.	50	80	550			L. Beach
Harbor Ave.	Cummings Ave.	Gardner Ave.	50	80	400			L.B. & Co.
Harbor Ave.	Gardner Ave.	Prop. Pico Ave.	33	80	250	8,100		County
TERMINAL WAY (TERMINAL ISL.). Total length 1,000 ft.				**80**		**1,000**		
None	South Seaside Ave.	Water Front		80		1,000		L. A.
THIRTY-SIXTH ST. (SAN PEDRO). Total length 2,000 ft.				**80**		**2,000**		
None	Pacific Ave.	Cabrillo Beach		80		2,000		L. A.
TORRANCE BOULEVARD. Total length 33,250 ft.				**80-100**	**15,950**	**5,200**	**12,100**	
Opal St.	Pacific Ave.	Elena Ave.	80	100	700			Redondo
Opal St.	Elena Ave.	Helberta Ave.	80	100	1000			Redondo
Jasper St.	Helberta Ave.	Susana St.	80	80			2,000	Redondo
Red./Torrance Rd.	Susana St.	Henrietta St.	50	80	950			County
Red./Torrance Rd.	Henrietta St.	Hawthorne Ave.	50	80	5,650			Co.& Torr.
Red./Torrance Rd.	Hawthorne Ave.	Madrona Ave.	50	80	2,650			Torrance
Redondo Blvd.	Madrona Ave.	Border Ave.	100–2x34	100	4,600		4,500	Torrance
Redondo Blvd.	Border Ave.	Llewellyn Ave.	40	100	400			Torrance
Torrance Blvd.	Llewellyn Ave.	Western Ave.	2x50	100			1,600	Torrance
Torrance Blvd.	Western Ave.	Normandie Ave.	2x50	100			4,000	L. A.
None	Normandie Ave.	Figueroa St.		100		5,200		County
223RD STREET-WARDLOW ROAD. Total length 45,000 ft.				**100-80**	**38,000**	**3,850**	**3,150**	
223rd St.	Andreo Ave.	Western Ave.	60	100	1,150	750		Torrance
223rd St.	Western Ave.	Normandie Ave.	60	100	3,000			L. A.
223rd St.	Normandie Ave.	Alameda St.	50–66	100	21,350			County
223rd St.	Alameda St.	Hesperian Ave.	66	100	1,100			L. A.
223rd St.	Hesperian Ave.	W. Line Tr. 1400	66	100	3,450			County
223rd St.	W. Line Tr. 1400	E. Line Lot 5	40	100	600			Co. & L.B
None	E. Line Lot 5	San Antonio Diag.		100		650		County
None	San Antonio Diag.	Golden Ave.		80		2,450		County
Wardlow Rd.	Golden Ave.	P.E. Ry. R/W	50	80	2,150			Co. & L.B.
Wardlow Rd.	P.E. Ry. R/W	California Ave.	80–60	80	2,600		1,800	L. Beach
Wardlow Rd.	California Ave.	Cherry Ave.	70–60–80	80	2,600		1,350	L. Beach
VALLEY VIEW AVENUE. Total length 9,150 ft.				**80**	**9,150**			
Westminster and Whittier Rd.	1300′ N. of Ctr. St. / Artesia Ave.	Artesia Ave. / Orange Co. B.L.	60 / 30	80 / 80	6,550 / 2,600			County / Orange & L.A. Cos.
VERMONT AVENUE. Total length 54,650 ft.				**100**	**36,250**	**18,400**		
Vermont Ave.	Gardena N. B.L.	Rosecrans Ave.	60 & 50	2x71	1,300			Gar.& L.A.
Vermont Ave.	Rosecrans Ave.	Amestoy Ave.	60 & 60	2x71	2,600			Gar.& L.A.
Vermont Ave.	Amestoy Ave.	Magnolia Ave.	70 & 40	2x71	2,100			Gar.& L.A.
Vermont Ave.	Magnolia Ave.	Olive St.	60 & 60	2x71	1,300			Gar.& L.A.
Vermont Ave.	161st St.	164th St.	60 & 30	2x71	1,000			Gar.& L.A.
Vermont Ave.	164th St.	165th St.	30 & 40	2x71	300			Gar.& L.A.
Vermont Ave.	165th St.	Carlyle St.	60–80	100	2,700			Gar.& L.A.
Vermont Ave.	Carlyle St.	Electric St.	80–90	100	2,800			Co. & L.A.
Vermont Ave.	Electric St.	190th St.	80–70–60	100	2,750			L. A.
Vermont Ave.	190th St.	Lomita Blvd.	80–50	100	17,450	4,400		County
Bixby Ave.	Lomita Blvd.	P.E. Ry. R/W	50	100	1,950	5,400		L. A.
None	P.E. Ry. R/W	Battery St.		90		8,600		L. A.
VERMONT-NORMANDIE CON. Total length 1,200 ft.				**100**		**1,200**		
None	Verm't Av. (prop.)	Nor'die Av. (prop.)		100		1,200		L. A.
VIA CAMPESINA. Total length 15,150 ft.				**80**	**2,350**		**12,800**	
Via Montemar	Granvia la Costa	Via Conejo	60	80	2,350			County
Via Del Monte	Via Conejo	Via Pinale	80	80			3,000	County
Via Campesina	Via Pinale	Granvia Valmonte	80–100	80			9,800	County
VIA CORONEL. Total length 14,200 ft.				**80**		**4,000**	**10,200**	
Via Coronel	Granvia La Costa	Granvia Altamira	80	80		4,000	10,200	County

(1) PROJECT Local Street Name	(2) From	(3) To	(4) Present R/W Width	(5) Proposed R/W Width	(6) LINEAR FEET To be Widened	(6) LINEAR FEET To be Opened	(6) LINEAR FEET Full R/W Existing	(7) Jurisdiction
VIA CORONEL-VIA ZUMAYA CON. Total length 1,700 ft.				**80**	**1,700**			
None	Via Coronel	Via Zumaya		80	1,700			County
VIA CORONEL-VIA ZURITA CON. Total length 650 ft.				**80**	**650**			
Via Zurita	Zurita Plaza	Via Coronel	60	80	650			County
VIA DEL MONTE. Total length 6,700 ft.				**80**			**6,700**	
Via del Monte	Via Conejo	Granvia Altamira	80	80			6,700	County
VIA LAS VEGAS. Total length 9,000 ft.				**100**		**8,000**	**1,000**	
Via Las Vegas	Granvia Valmonte	Torrance B.L.	100	100			1,000	County
None	Torrance B.L.	Inglewood Freeman		100		8,000		Torrance
VIA MIRLO. Total length 5,000 ft.				**80**	**5,000**			
Hawthorne Ave.	Granvia Valmonte	High St.	60	80	3,400			County
Hawthorne Ave.	High St.	California Ave.	60	80	1,600			Torrance
VIA ZUMAYA. Total length 16,800 ft.				**80**	**4,300**	**12,500**		
Via Zumaya	Granvia La Costa	Granvia Altamira	60	80	4,300	12,500		County
VIA ZURITA. Total length 9,400 ft.				**80**	**9,400**			
Via Zurita	Via Coronel	Zurita Plaza	50–60	80	4,000			County
Via Talmanantes	Zurita Plaza	La Cresta Place	60	80	3,200			County
Via Nogales	La Cresta Place	Via Balboa	50	80	700			County
Via Alamitos	Via Balboa	Montemalaga Plaza	50	80	1,500			County
VICTORIA ST.-ORANGETHORPE. Total length 103,575 ft.				**100**	**92,275**	**11,300**		
Dominguez St.	Anita St.	Torrance B.L.	30	100	1,200			Redondo
Dominguez St.	Torrance B.L.	Beryl St.	60	100	600			Red.& Tor.
190th St.	Beryl St.	Inglewood Ave.	80	100	3,700			Red.& Tor.
190th St.	Inglewood Ave.	Hawthorne Ave.	60	100	2,225			Co.& Torr.
190th St.	Hawthorne Ave.	Western Ave.	60	100	13,500			Torrance
190th St.	Western Ave.	Normandie Ave.	66	100	3,100			L. A.
190th St.	Normandie Ave.	Figueroa St.	96–66	100	5,750			Co. & L.A.
Victoria St.	Figueroa St.	Long Beach B.L.	66	100	17,200	7,900		County
None	Long Beach B.L.	Dairy Ave.		100		3,400		L. Beach
South St.	Dairy Ave.	Cherry Ave.	60–70	100	6,800			L. Beach
South St.	Cherry Ave.	Ocean Ave.	60	100	2,600			L.B. & Co.
South St.	Ocean Ave.	Woodruff Ave.	75–60	100	12,850			County
Orangethorpe Ave.	Woodruff Ave.	Carmenita Rd.	60–80	100	21,450			County
Orangethorpe Ave.	Carmenita Rd.	Orange Co. B.L.	25	100	1,300			Orange & L.A. Cos.
WATER STREET. Total length 4,000 ft.				**100**	**4,000**			
Water St.	Ocean Ave.	Pico Ave.	60–80	100	4,000			L. Beach
WESTERN AVENUE. Total length 68,275 ft.				**100**	**34,900**	**24,525**	**8,850**	
Western Ave.	Kendrick Ave.	Strawberry St.	80–90–65	100	9,400			Gardena
Western Ave.	Strawberry St.	182nd St.	70–80	100	2,550			Co.,G.& T.
Western Ave.	182nd St.	228th St.	60–80–100	100	7,950		8,850	L.A.& Tor.
Alley	228th St.	L.B. & Red. Rd.	10	100	750			L.A.& Tor.
None	L.B. & Red. Rd.	Cherry St.		100		2,600		Co. & L.A.
Governor Ave.	Cherry St.	261st St.	50	100	3,450	5,100		L. A.
Canyon Drive	261st St.	Los Angeles B.L.	60	100	1,100	11,225		County
None	Los Angeles B.L.	Los Angeles B.L.		100		2,700		Co. & L.A.
Dodson Ave.	Los Angeles B.L.	16th St.	50–80–60	100	3,400	2,900		L. A.
Western Ave.	16th St. (S. Pedro)	Pacific Ave.	80	100	6,300			County
WESTERN AVENUE (OLD). Total length 27,400 ft.				**100-120**	**20,700**		**6,700**	
Western Ave.	Narbonne Ave.	Granvia Miraleste	90	100	20,700			County
Western Ave.	Granvia Miraleste	Via Colonita	2x60	120			3,500	County
Western Ave.	Via Colonita	9th St. (San Pedro)	100	100			3,200	County
WESTERN AVE.-BELLEPORTE AVE. CON. To. lgth. 2,500 ft.				**80**		**2,500**		
None	Western Av.(prop.)	B'l'p'rte Av. (prop.)		80		2,500		L. A.
WESTMINSTER AVENUE. Total length 6,250 ft.				**100**		**6,250**		
None	Hathaway Ave.	Orange Co. B.L.		100		6,250		County
WESTMONT DRIVE. Total length 9,300 ft.				**80**		**9,300**		
None	Western Ave. (old)	Los Angeles B.L.		80		6,500		County
None	Los Angeles B.L.	Gaffey St.		80		2,800		L. A.
WILLOWBROOK AVENUE. Total length 1,750 ft.				**2x71**	**1,750**			
Mona & Stockton	Oaks Ave.	Orange St.	2x40	2x71	1,750			Compton
WILMINGTON-ALAMEDA CON. Total length 6,100 ft.				**80**		**6,100**		
None	Greenleaf Dr.	Alameda St.		80		6,100		County
WILMINGTON AND SAN PEDRO ROAD. To. lgth. 5,550 ft.				**80-90-100**	**2,150**	**1,600**	**1,800**	
Wilm.& S.Pedro Rd.	Pacific Ave. Extn.	Harbor Blvd.	80–60	80–90–100	2,150	1,600	1,800	L. A.
WILMINGTON BOULEVARD. Total length 49,950 ft.				**100**	**47,900**	**2,050**		
Compton Ave.	Rosecrans Ave.	Greenleaf Dr.	60	100	9,000			Compton
Wilmington Ave.	Greenleaf Dr.	Lomita Blvd.	66	100	29,750	1,300		County
LeCouvreur Ave.	Lomita Blvd.	K Street	33–60	100	4,450	750		L. A.
Barracks Ave.	K Street	J Street	50	100	700			L. A.
LeCouvreur Ave.	J Street	C Street	35–66	100	4,000			L. A.
WILMINGTON ST. (COMPTON). Total length 13,950 ft.				**100**	**10,900**	**1,000**	**2,050**	
Wilmington St.	Oaks Ave.	Orange St.	99	100			2,050	Compton
Wilmington St.	Orange St.	Olive St.	2x35	2x71	5,300			Compton
Wilmington St.	Olive St.	Greenleaf Dr.	2x30	2x71	2,700			Compton
Wilmington St.(W.)	Greenleaf Dr.	Pacific Hwy.	66	80	2,900	1,000		County
WOODRUFF AVENUE. Total length 14,600 ft.				**100**	**12,800**	**1,800**		
Woodruff Ave.	Linden St.	Long Beach B.L.	60–75	100	8,000			County
Woodruff Ave.	Across Shoestring Strip		60	100	100			L. Beach
Woodruff Ave.	Long Beach B.L.	Los Angeles St.	60	100	4,700	1,800		County
WOODRUFF PARKWAY. Total length 40,350 ft.				**225**	**7,850**	**32,500**		
Ross Ave.	Los Angeles St.	Long Beach B.L.	40	225	4,900	8,500		County
Ross Ave.	Across Shoestring Strip		40	225	100			L. Beach
Ross Ave.	Long Beach B.L.	Hathaway Ave.	40	225	2,850	21,000		County
None	Hathaway Ave.	Second St.		100		3,000		L. Beach
XIMENO AVENUE. Total length 10,800 ft.				**80**	**10,800**			
Ximeno Ave.	Los Alamitos Circle	Ocean Blvd.	60–40	80	10,800			L. Beach



LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

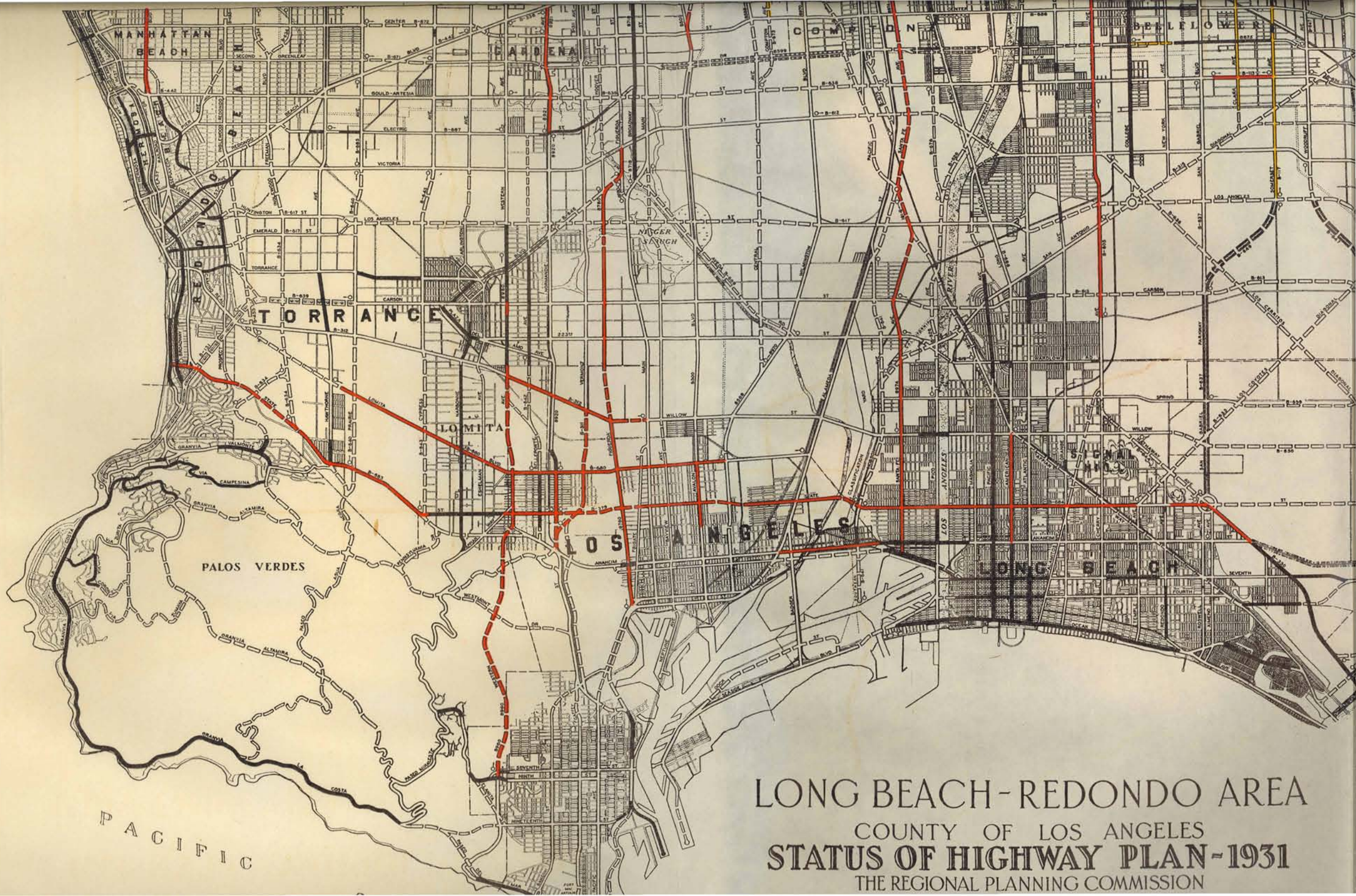
STATUS OF HIGHWAY PLAN - 1931

THE REGIONAL PLANNING COMMISSION

SECTION - 4

LEGEND

- MAJOR & SECONDARY HIGHWAYS EXISTING FULL WIDTH
- MAJOR HIGHWAYS UNDER PROCEEDINGS FULL WIDTH
- SECONDARY HIGHWAYS UNDER PROCEEDINGS FULL WIDTH



LONG BEACH - REDONDO AREA

COUNTY OF LOS ANGELES

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THE REGIONAL PLANNING COMMISSION