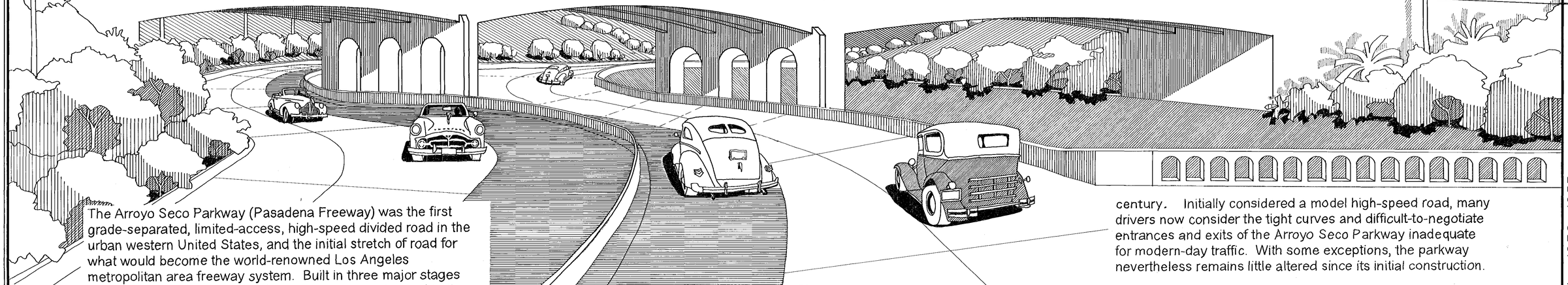
ARROYO SECO PARKWAY



The Arroyo Seco Parkway (Pasadena Freeway) was the first grade-separated, limited-access, high-speed divided road in the urban western United States, and the initial stretch of road for what would become the world-renowned Los Angeles metropolitan area freeway system. Built in three major stages from 1938 to 1953, the 8.2-mile parkway was envisioned both as a scenic pleasure road traversing the Arroyo and a vital traffic conduit linking the expanding cities of Pasadena and Los Angeles. Combining ideas reminiscent of an older parkway tradition and those more appropriate for modern freeway design, the Arroyo Seco Parkway marks an important transitional moment in the history of American engineering and transportation.

The roadway, as completed in 1953, extended from Glenarm Street in Pasadena to the Four-Level Interchange just northwest of downtown Los Angeles. The approximately eleven-million dollar roadway includes over thirty bridges and underpasses, four tunnels, numerous safety features, and a landscaping program that included a primarily native plant palette. Its construction was facilitated by the installation of the concrete Arroyo Seco Flood Control Channel, built as a Works Progress Administration relief project. The parkway's 1953 completion marked the final chapter in a series of plans and proposals for an automobile road connecting Los Angeles and Pasadena.

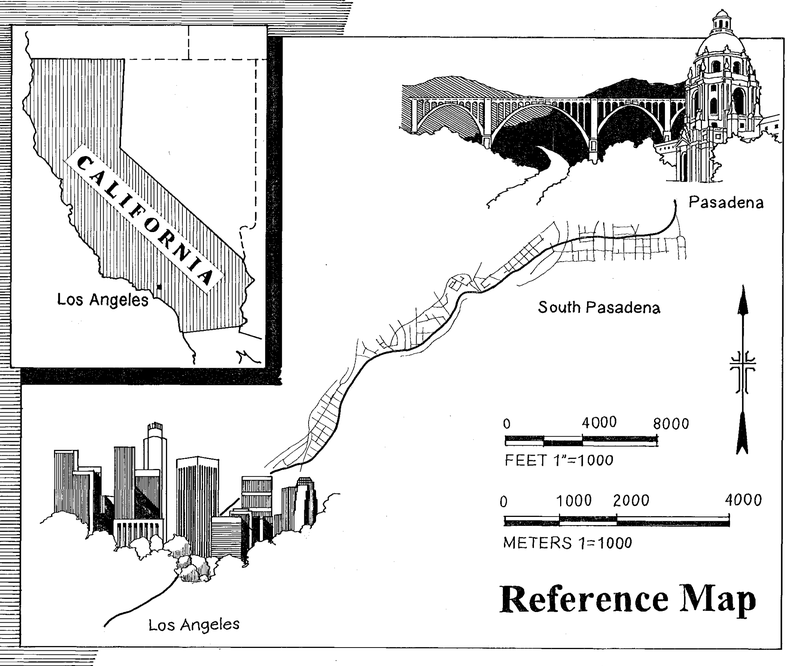
The first spade of earth was turned for the Arroyo Seco Parkway in March of 1938 under the aegis of the California State Division of Highways. Although a large and unwieldy coalition of state and local lawmakers and planners, as well as the cities of Pasadena, South Pasadena, and Los Angeles, the Automobile Club of Southern California, the Union Pacific and Santa Fe Railroads, and residents along the right-of-way agreed to the support the road's construction, its route selection did not entirely avoid controversy.

The parkway, built originally to handle 30,000 automobiles per day, carried more than 120,000 per day at the end of the 20th century. Initially considered a model high-speed road, many drivers now consider the tight curves and difficult-to-negotiate entrances and exits of the Arroyo Seco Parkway inadequate for modern-day traffic. With some exceptions, the parkway nevertheless remains little altered since its initial construction.

The Arroyo Seco Parkway Recording Project is part of the Historic American Engineering Record (HAER), a long-range program that documents historically significant engineering, industrial, and maritime sites in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Division of the National Park Service, U.S. Department of the Interior. This project was co-sponsored in the summer of 1999 by HABS/HAER under the general direction of E. Blaine Cliver, Chief; and by District VII of the California Department of Transportation, Bob Sassaman, Acting Director, Raja Mitwasi, Division Chief of Planning and Public Transportation, and Ron Kosinski, Environmental Planning Office Chief.

The interpretive drawings, historic report, and photographs were prepared under the direction of Eric N. DeLony, Chief of HAER. The recording team included Andrew Johnston, supervisory architect (U.C. Berkeley), and Christopher B. Brown, Christopher Dalbey (Santa Ana, California), Arabella González (U.S./ICOMOS, Guadalajara, Mexico), and Sydney Mainster (U.C. Berkeley), architects; J. Philip Gruen, project historian (U.C. Berkeley) and Portia Lee, historian (California Archives, Los Angeles); and Brian Grogan, photographer (El Portal, California). Landscape drawings by Peter Hao, landscape architect (Meléndrez-Babalas Associates, Los Angeles). Project assistance was provided by Diane Kane, architectural historian (California Department of Transportation, District VII), Charles J. O'Connell, engineer (California Department of Transportation, District VII), Lauren Meléndrez (Meléndrez-Babalas Associates, Los Angeles), Todd Croteau, manager (HAER Roads & Bridges Program, Washington, D.C.), and Tim Davis, historian (HAER, Washington, D.C.).

Pasadena CALIFORNIA 110 Freeway



Reference Map

HISTORIC AMERICAN ENGINEERING RECORD
CA-265

SHEET 1 OF 22

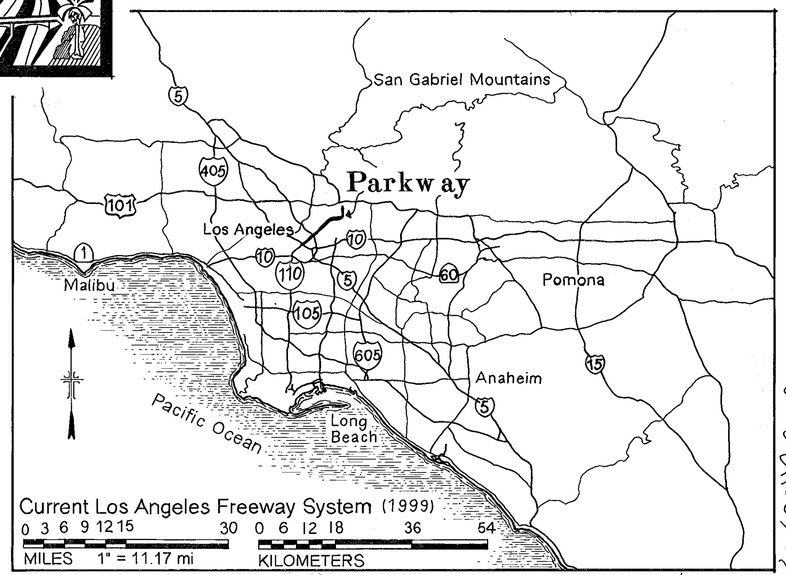
ARROYO SECO PARKWAY 1938-1953
LOS ANGELES COUNTY CALIFORNIA
LOS ANGELES
SOUTH PASADENA, PASADENA

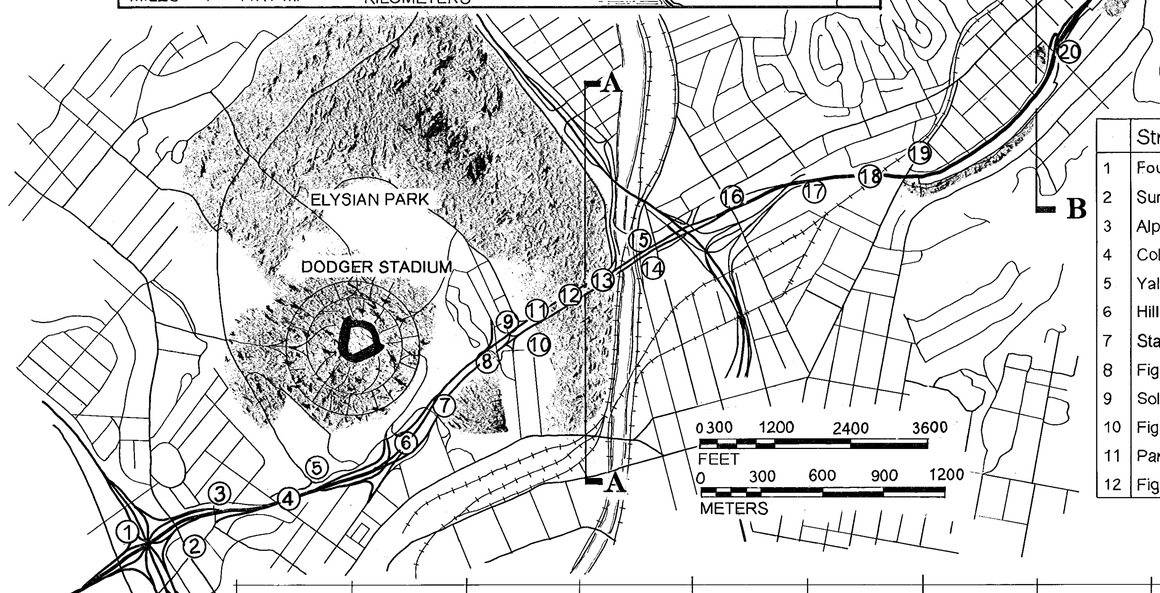
DELINEATED BY: ARABELLA GONZALEZ, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

REFERENCE MAP

Arroyo Seco Parkway





NOTE:
FOR SECTION CUTS
SEE PAGE 3 OF 22

	Structure	Postmile
1	Four Level Interchange	23.69
2	Sunset Blvd. Overcrossing	23.83
3	Alpine St. Overcrossing	23.96
4	College St. Overcrossing	24.16
5	Yale St. Pedestrian Overcrossing	24.37
6	Hill St. Overcrossing	24.53
7	Stadium Way Overcrossing	24.55
8	Figueroa St. Tunnel (#4)	24.90
9	Solano Avenue Undercrossing	25.09
10	Figueroa St. Tunnel (#1)	25.14
11	Park Row Overcrossing	25.20
12	Figueroa St. Tunnel (#2)	25.28

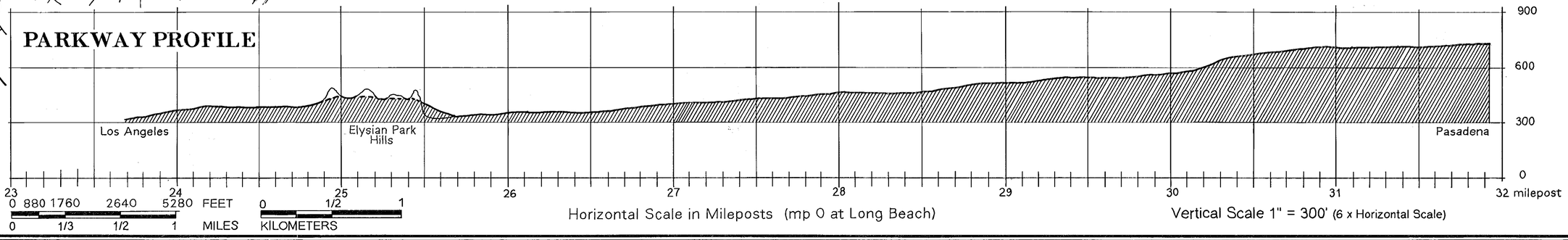
	Structure	Postmile
13	Figueroa St. Tunnel (#3)	25.37
14	Figueroa St. Viaduct (L.A. River Bridge)	25.48
15	Los Angeles River Bridge (Extension)	25.48
16	Avenue 26 Overcrossing	25.91
17	Cypress Avenue Pedestrian Br.	26.19
18	Avenue 35 Underpass	26.40
19	Pasadena Avenue Overcrossing	26.48
20	Avenue 43 Overcrossing	27.12
21	Sycamore Grove Pedestrian Br.	27.64
22	Avenue 52 Overcrossing	28.05
23	Via Marisol Overcrossing	28.38
24	Avenue 60 Overcrossing	28.76

	Structure	Postmile
25	A.T. & S.F. Railroad Bridge	29.03
26	Marmion Way Overcrossing	29.28
27	York St. Overcrossing	29.50
28	Arroyo Seco Bridge	30.10
29	Equestrian Undercrossing	30.25
30	Arroyo Dr. Overcrossing	30.30
31	Grand Ave. Overcrossing	30.43
32	Orange Grove Ave. Overcrossing	30.59
33	Prospect Ave. Overcrossing	30.70
34	Meridian Ave. Overcrossing	30.78
35	Fremont Ave. Overcrossing	31.01
36	Fair Oaks Ave. Overcrossing	31.17

Los Angeles

Drawings based on historical maps

PARKWAY PROFILE



Horizontal Scale in Mileposts (mp 0 at Long Beach)

Vertical Scale 1" = 300' (6 x Horizontal Scale)

DELINEATED BY SYDNEY A. MAINSTER, 1999

ARROYO SECO PARKWAY
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD CA - 265
SHEET 2 OF 22

99423

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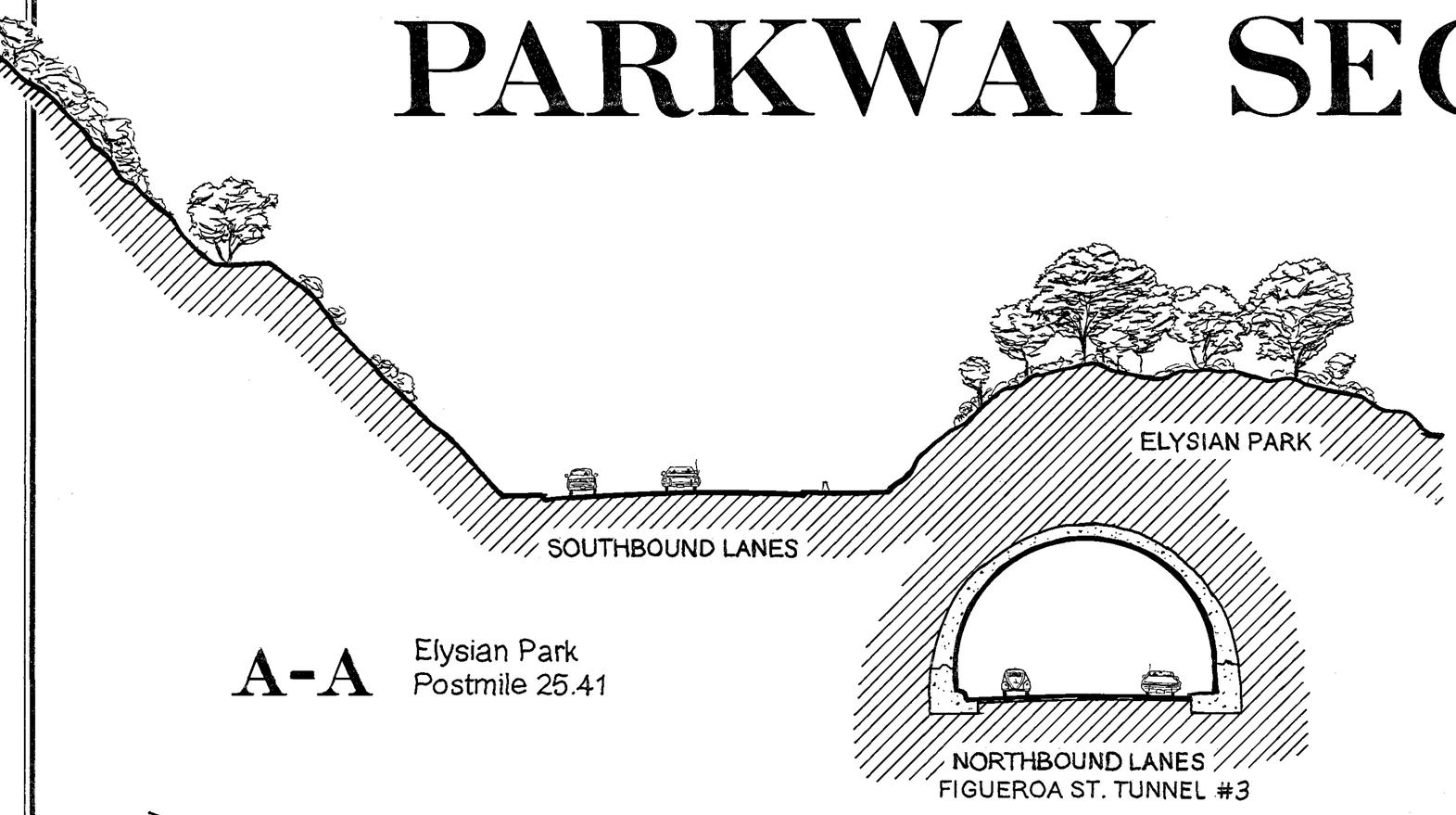
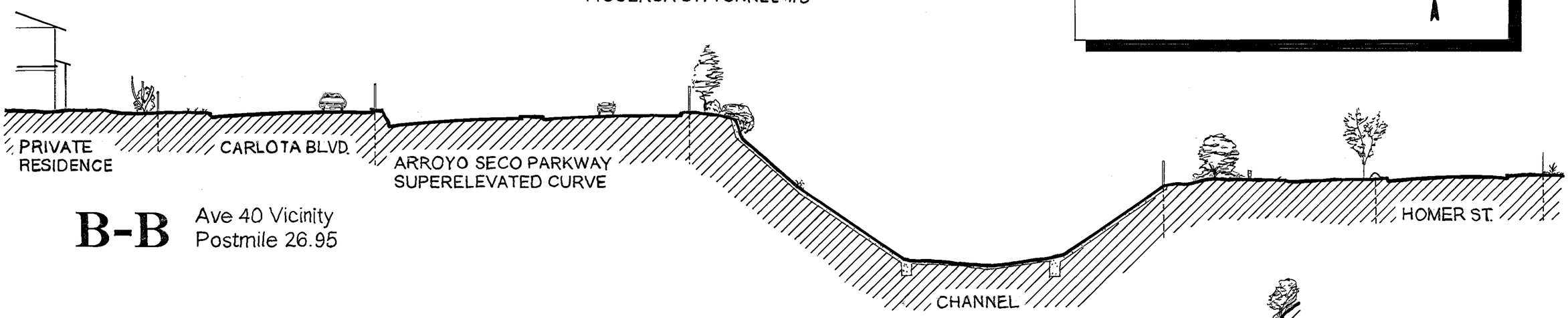
PARKWAY SECTIONS

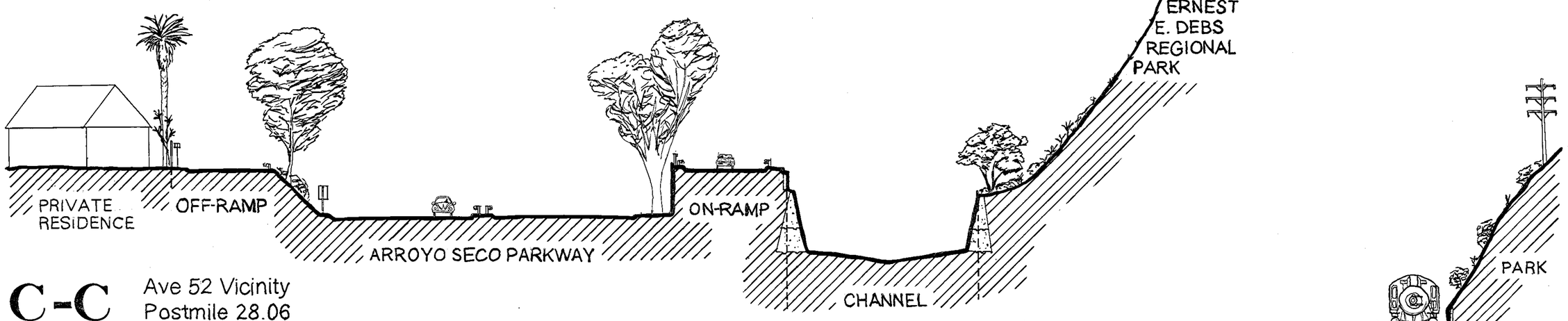
Arroyo Seco Parkway



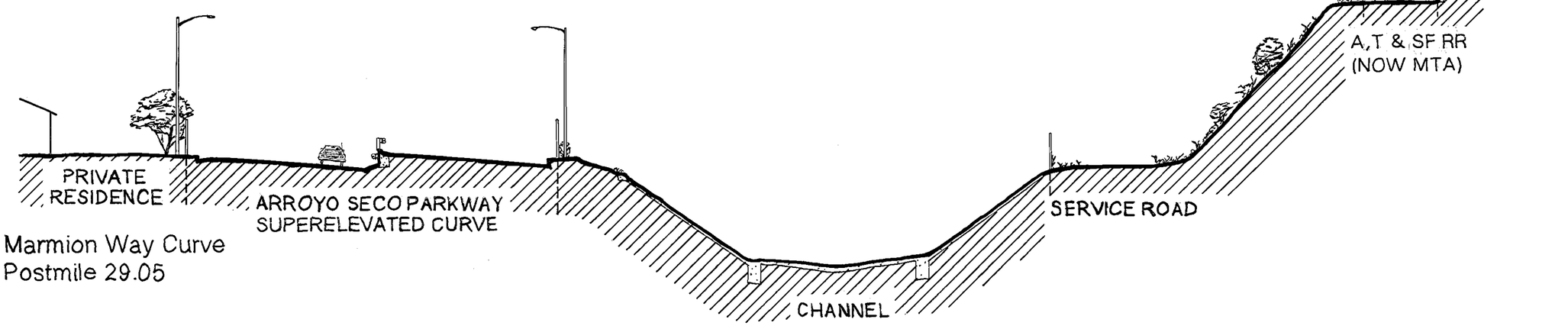
A-A Elysian Park
Postmile 25.41



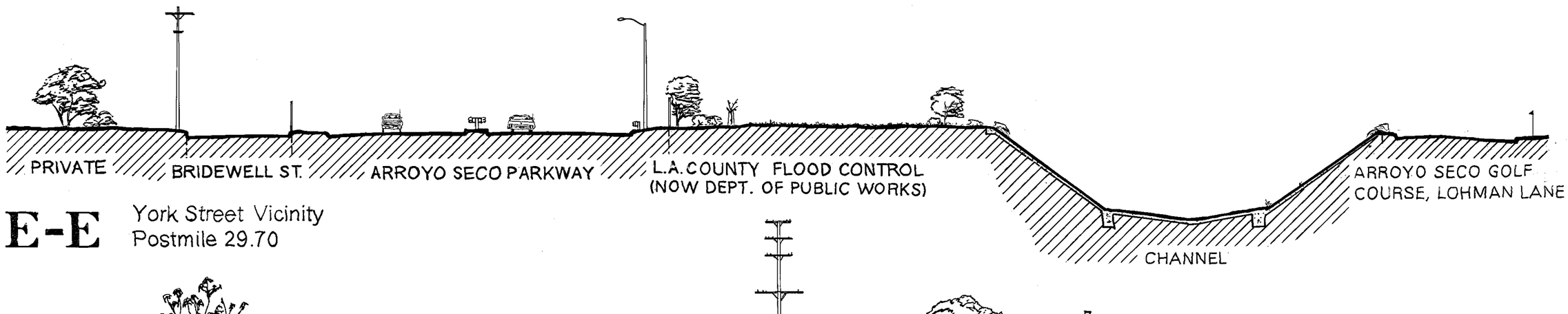
B-B Ave 40 Vicinity
Postmile 26.95



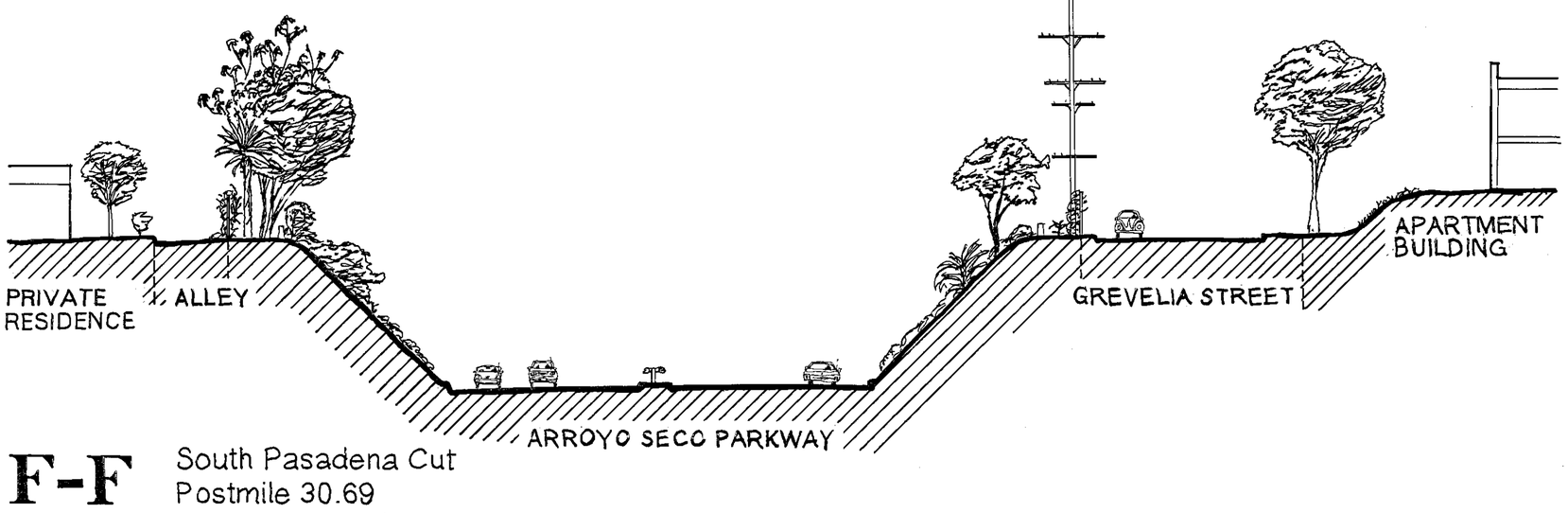
C-C Ave 52 Vicinity
Postmile 28.06



D-D Marmion Way Curve
Postmile 29.05

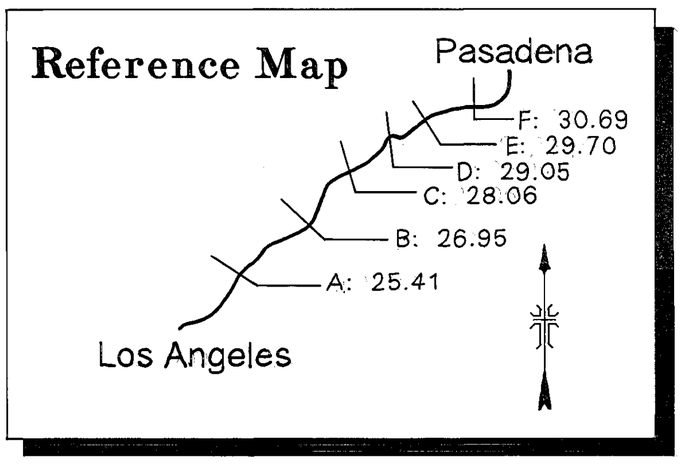


E-E York Street Vicinity
Postmile 29.70



F-F South Pasadena Cut
Postmile 30.69

Reference Map



SCALE: 1" = 20'

0 5 10 20 Feet 40 60

0 1 5 10 Meters 20

NOTE: ALL SECTIONS FACING NORTH
PLEASE SEE REFERENCE MAP, PAGE 2,
FOR DETAILED CUT LOCATIONS

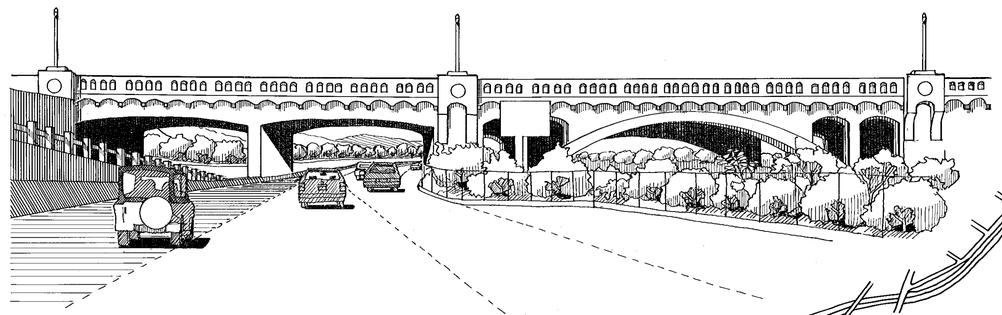
DELINEATED BY: CHRISTOPHER B. BROWN, 1999

ARROYO SECO PARKWAY RECORDING PROJECT NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR	ARROYO SECO PARKWAY 1938- 1953 LOS ANGELES, SOUTH PASADENA, PASADENA — LOS ANGELES COUNTY — CALIFORNIA	SHEET 3 OF 22	HISTORIC AMERICAN ENGINEERING RECORD CA-265

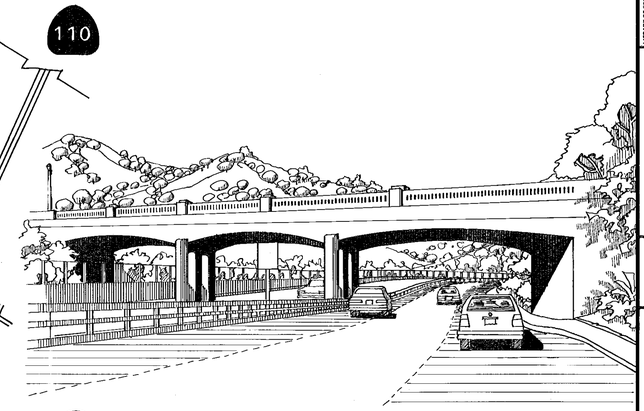
PARKWAY VIEWS

South End

Views along the south end of the Arroyo Seco Parkway include historic bridges, tunnels, skyscrapers, and cultural landmarks.
In the 1940s, motorists to Los Angeles descended from Elysian Park and encountered a dramatic view of City Hall (1). Today, the view of downtown Los Angeles seen from the Southerly Extension is dominated by high-rise office buildings (3). For motorists leaving Los Angeles, the Figueroa Street Tunnels are a symbolic and memorable transition to the parkway (2). Another transition for motorists occurs at the Avenue 26 Bridge, located just north of the Interstate 5 connector. From Avenue 26 north along the parkway there are no direct connections to other freeways.

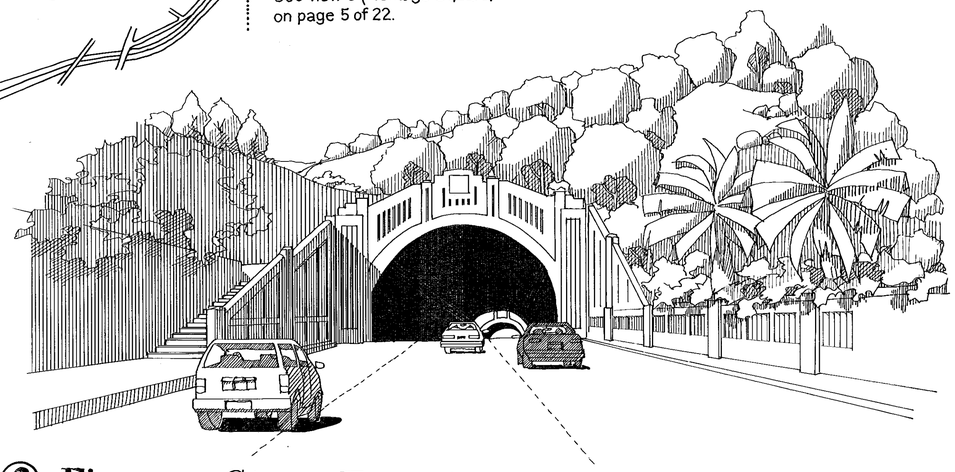


④ Avenue 26 Bridge



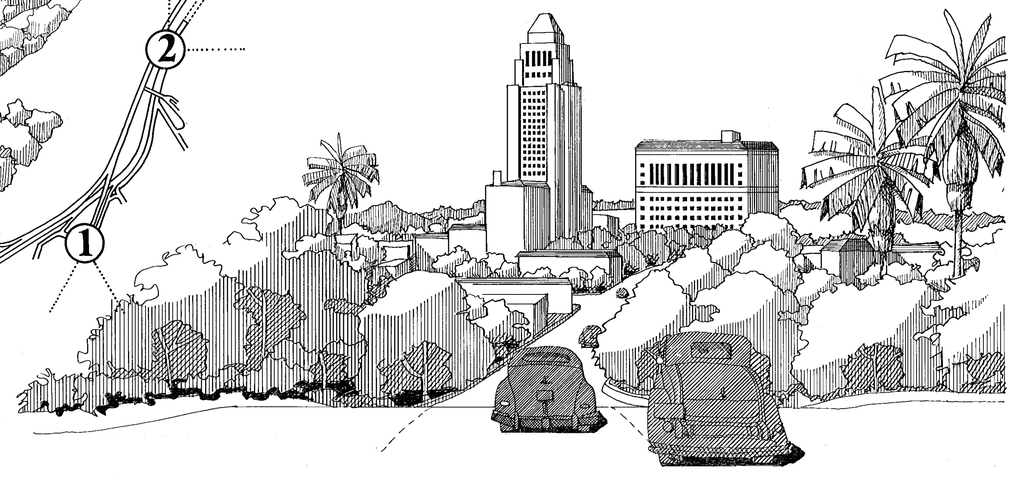
⑥ Avenue 43 Bridge

See view 5 (Heritage Square) on page 5 of 22.

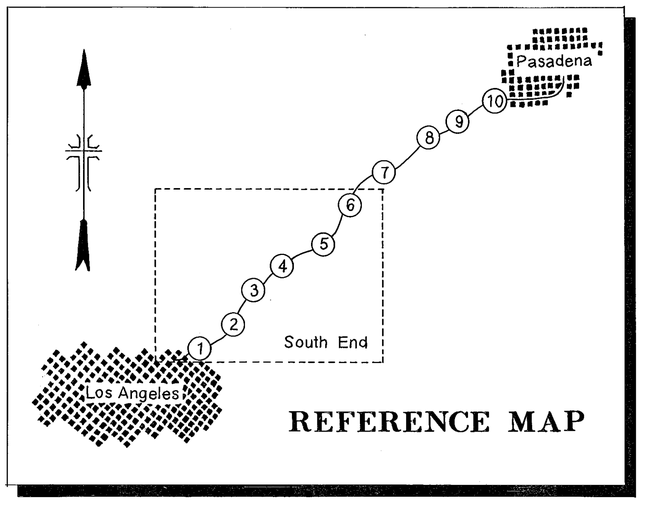


② Figueroa Street Tunnels

③ Downtown L.A.



① Los Angeles City Hall



REFERENCE MAP

DELINEATED BY: ARABELLA GONZALEZ, 1999

ARROYO SECO PARKWAY
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

LOS ANGELES
SOUTH PASADENA, PASADENA

ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES COUNTY CALIFORNIA

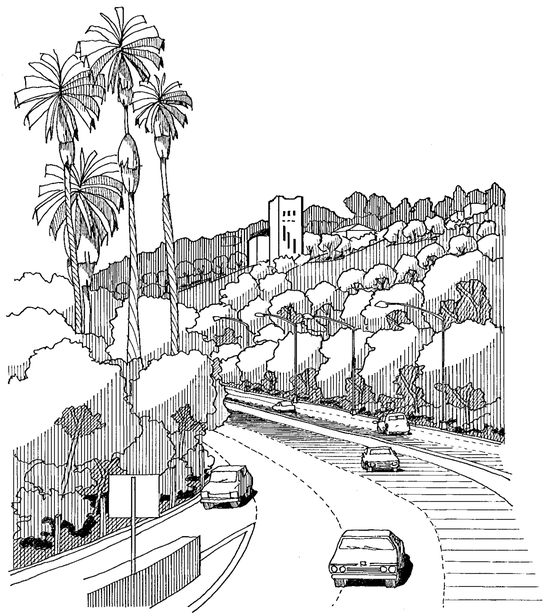
HISTORIC AMERICAN ENGINEERING RECORD CA - 265
SHEET 4 OF 22

PARKWAY VIEWS

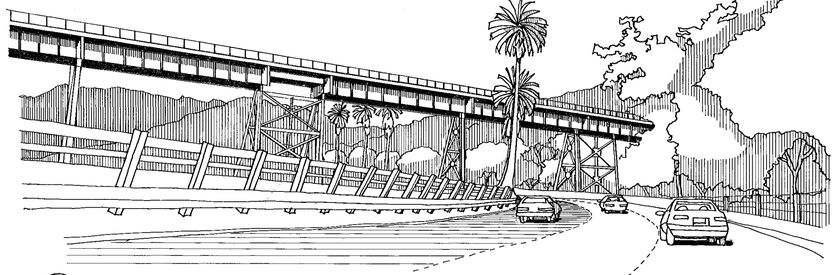
North End

Views along the north end of the Arroyo Seco Parkway include historic bridges, cultural landmarks, and the South Pasadena sign.

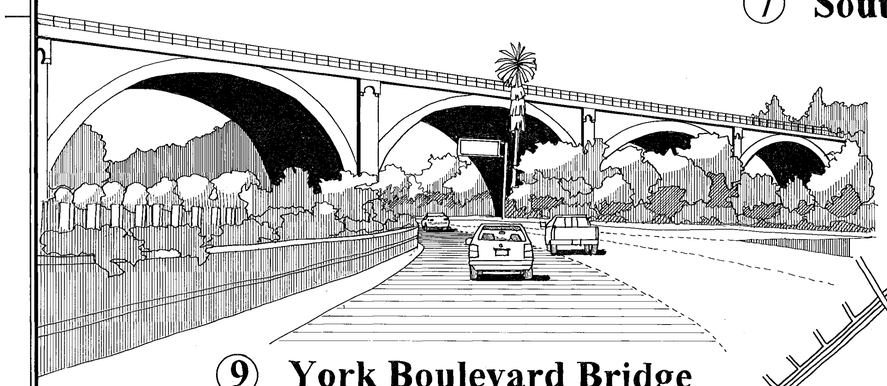
Motorists driving the Arroyo Seco Parkway experience aspects of both the road's parkway heritage and its freeway present. The parkway tradition, as developed on the east coast, emphasized the recreational and scenic aspects of the road. Today the Arroyo Seco Parkway winds past both Heritage Square and the Southwest Museum (5 and 7). But unlike the eastern pleasure parkways, the Arroyo Seco parkway was built principally to move people quickly between two cities, and was forced to accommodate existing infrastructure. Two such examples are the 1896 Atchison, Topeka & Santa Fe Railroad Bridge and the 1910 York Boulevard Bridge (8 and 9). The City of South Pasadena sign accompanied the parkway's construction and today continues to mark that community for passing motorists (10).



⑦ Southwest Museum

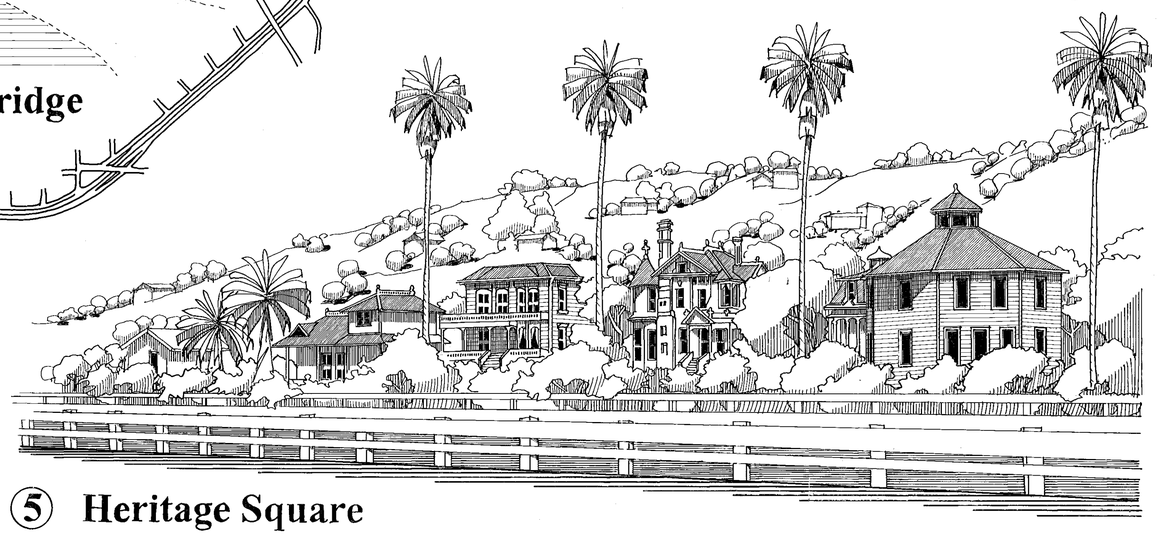


⑧ Santa Fe Railroad Bridge

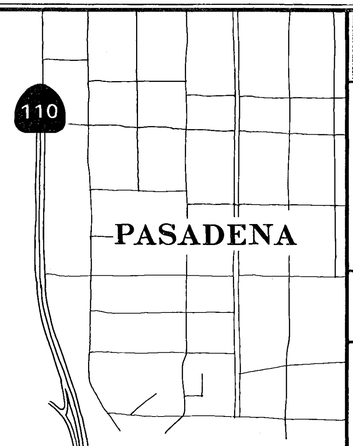


⑨ York Boulevard Bridge

⑩ Arroyo Drive Bridge and South Pasadena Sign, 1940s



⑤ Heritage Square



DELINEATED BY: ARABELLA GONZALEZ, 1999, LISA GARDNER, 2000

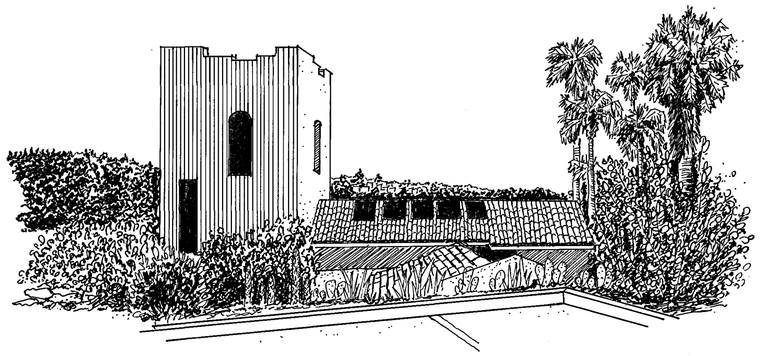
ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938-1953
LOS ANGELES COUNTY
LOS ANGELES
SOUTH PASADENA, PASADENA CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD
CA-265
SHEET 5 OF 22

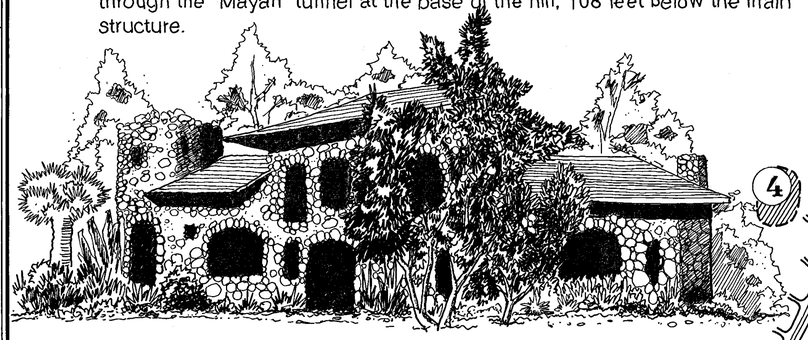
RECREATION AND CULTURE

Park enthusiasts celebrated the distinctively Californian landscape of the Arroyo Seco's rocky bed as "shimmering gravel sunflecked through the leaves of scattered sycamores." Visitors picnicked under the 300-year-old trees in Sycamore Grove, a lively site for merrymakers arriving by stagecoach. Arroyo Seco Park stretched from Avenue 35 to the South Pasadena city limits until the roadway opened. Pedestrians then crossed the Arroyo on the West's first pre-stressed concrete footbridge to reach the eastern side of the park remaining after the freeway route preempted a large section of South Pasadena parklands.



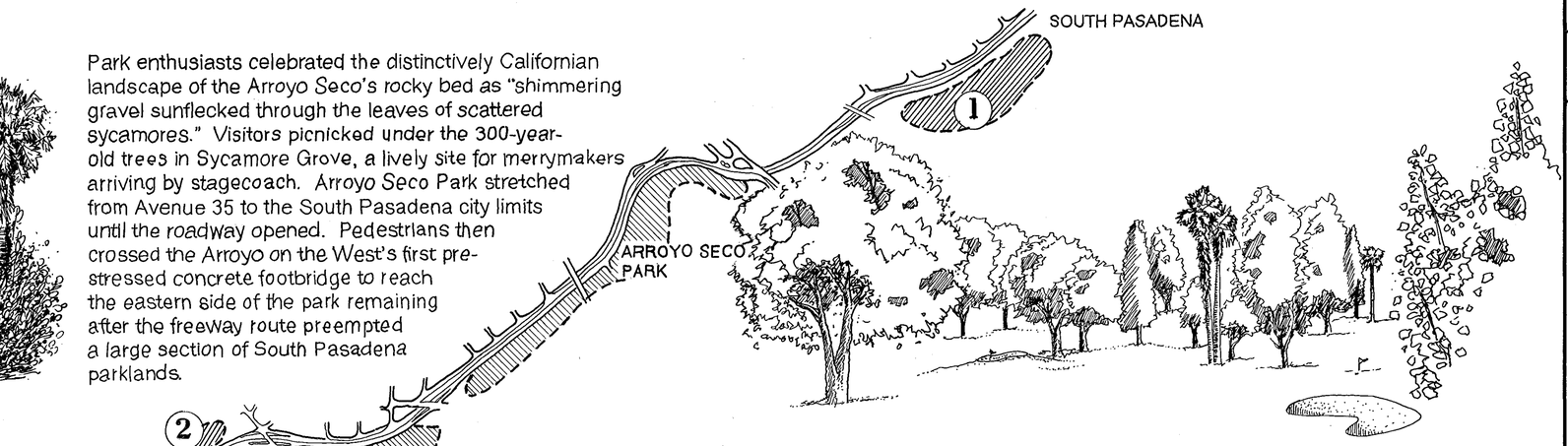
3. Southwest Museum

Set on a 38-acre hillside site overlooking the Arroyo Seco, the Southwest Museum was founded in 1907 through the leadership of Charles Fletcher Lummis. His collection became the nucleus of the museum's extensive collection of Native American art and artifacts. The original main entrance was through the "Mayan" tunnel at the base of the hill, 108 feet below the main structure.



4. The Lummis Home

Charles Fletcher Lummis built his home between 1896 and 1910 using concrete and wood beam construction faced with Arroyo Seco boulders. Lummis named it "El Alisal" for the sycamore tree in a grove of alders near the house. Lummis gathered together a circle of artists and craftsmen who worked to establish what has become known as the "Arroyo Culture."



1. Arroyo Seco Golf Course

Most of the Arroyo Seco within South Pasadena had become city property by 1927. After the completion of the Arroyo Seco Parkway, 96 acres of parkland remained on both sides of the roadway. An 18-hole golf course was created in 1955 using 48 acres of this green space.

5. Heritage Square Museum

Heritage Square, established in 1969 as an open-air museum, displays late nineteenth-century structures that have been restored and moved onto its site. Shown are the Perry House, "Mt. Pleasant," and the Hale House, built in 1876 and 1885 respectively.

2. Sycamore Grove Park

Sycamore Grove Park runs along the border of what once was Rancho San Rafael, part of an early Spanish land grant. After Highland Park's annexation to the city of Los Angeles in 1895, Los Angeles purchased a section of Sycamore Grove for use as a city park. A portion of the park was used for the construction of Arroyo Seco Parkway.

Arroyo Seco Parkway

HISTORIC AMERICAN ENGINEERING RECORD CA-265

SHEET 6 OF 22

ARROYO SECO PARKWAY 1938-1953

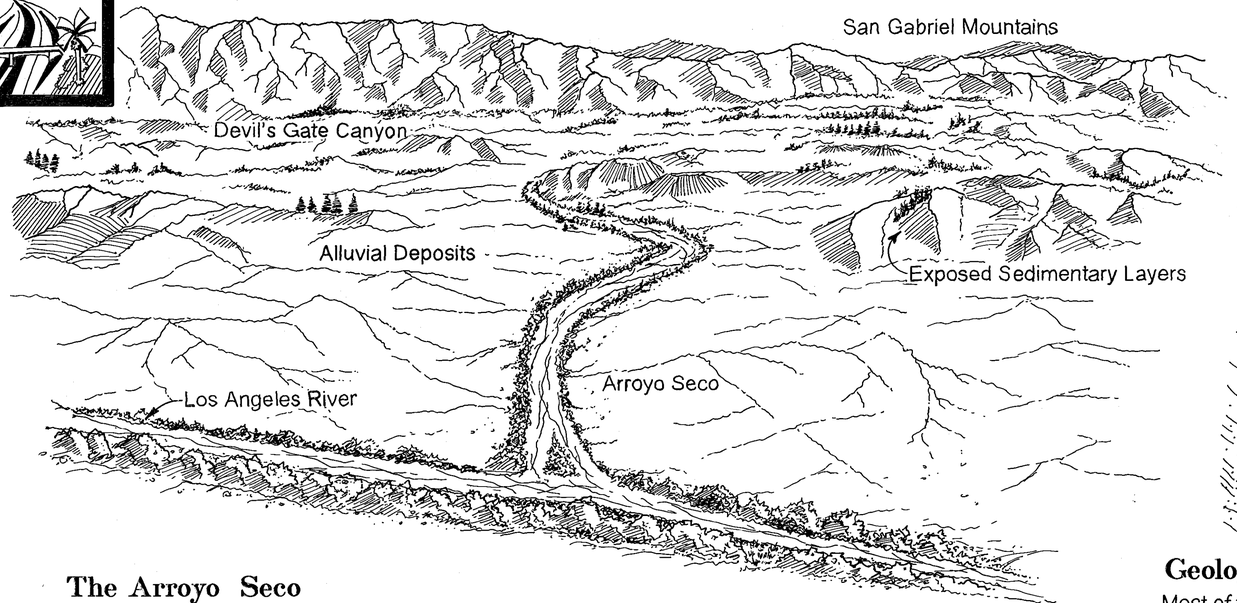
LOS ANGELES COUNTY CALIFORNIA

LOS ANGELES, SOUTH PASADENA, PASADENA LOS ANGELES COUNTY CALIFORNIA

DELINEATED BY: PETER W. HAO, 1999

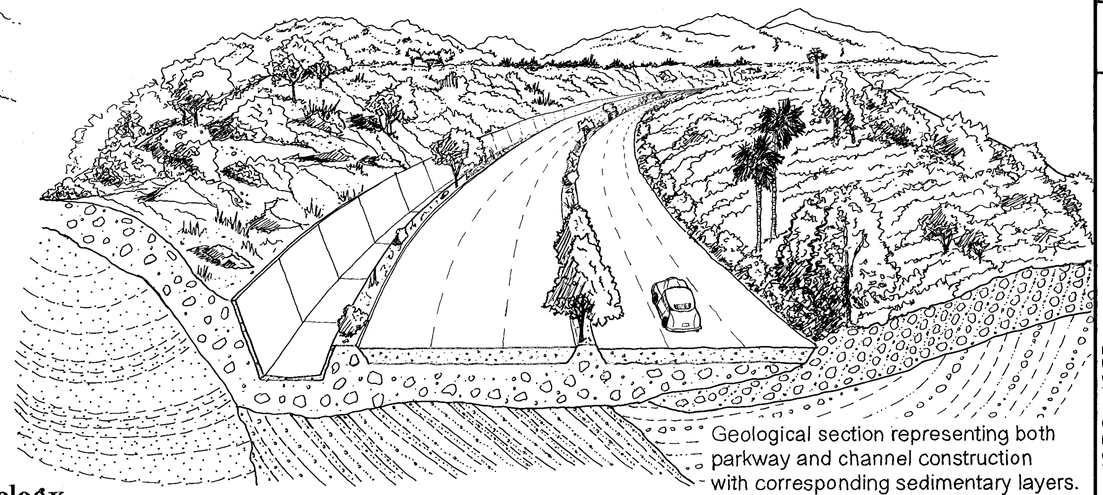
ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGY AND ECOLOGY



The Arroyo Seco

Translated as "dry creek," the Arroyo Seco is a prominent feature of the northeast Los Angeles landscape, heading from Devil's Gate Canyon in the San Gabriel Mountains north of Pasadena to the Los Angeles River near Elysian Park. Seasonal rains and largely impervious soils mean that the Arroyo, which is usually a dry stream bed with some vegetation, occasionally becomes a raging river in the wintertime.



Geological section representing both parkway and channel construction with corresponding sedimentary layers.

Geology

Most of the region through which the Arroyo Seco flows is covered by layers of Upper Tertiary sediments that may be as much as 14,800 feet thick. The recent and older alluvium dominating the top 2,900 feet of material consists mainly of sand, gravel, cobbles and boulders. These alluvial deposits out of which the Arroyo was scoured surround relatively small areas of exposed older layers of sedimentary stone. The soils within the immediate vicinity of the Arroyo Seco consist primarily of recent alluvium ranging from silt to large gravel. Fresh outcroppings of igneous and metamorphic rocks are present only in a few spots along the Arroyo Seco. In addition, a section of marine shale, siltstone and sandstone, known as the Upper Puente formation is found in the central and southern parts of the area.

LEGEND

- Qal- Fresh sand, gravel, cobbles and boulders.
- Qoal- Sand, gravel, cobbles and boulders.
- Tpy- Marine platy shales, siltstones and sandstones.
- Ttpu- Conglomerates, pebbly sandstones and fossil fragments.
- Ttpm- Marine fine to medium grained sandstones.

NATIVE SPECIES

Sambucus mexicana
Mexican Elderberry

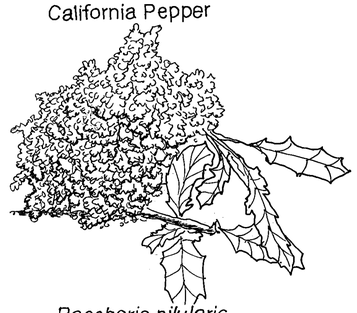
Cortaderia selloana
Pampas Grass

Schinus molle
California Pepper

Heteromeles arbutifolia
Toyon

Salvia leucophylla
Purple Sage

Arctostaphylos sp.
Manzanita



Baccharis pilularis
Dwarf Coyote Brush

Eucalyptus sp.
Eucalyptus Tree

The Arroyo Seco before construction of the parkway and flood control channel.

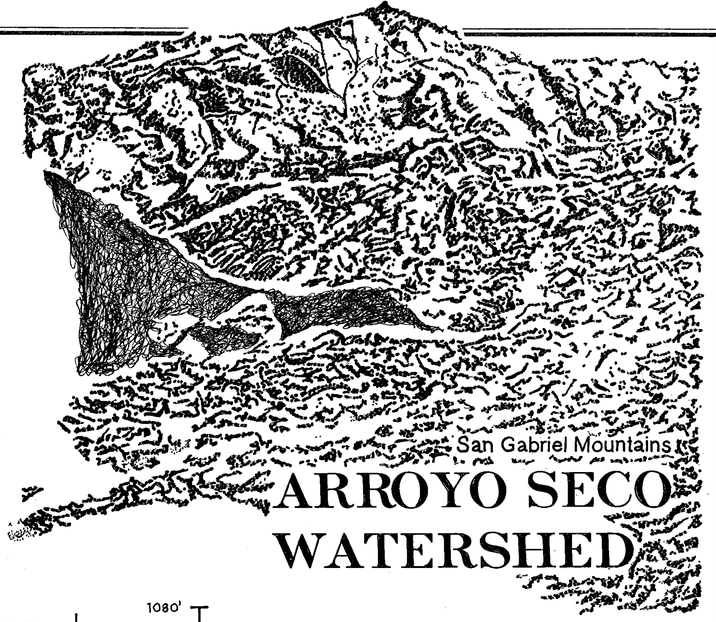
ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES COUNTY CALIFORNIA
LOS ANGELES, SOUTH PASADENA, PASADENA
ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
DELINEATED BY: PETER W. HAO, 1999
HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 7 OF 22

Arroyo Seco Parkway

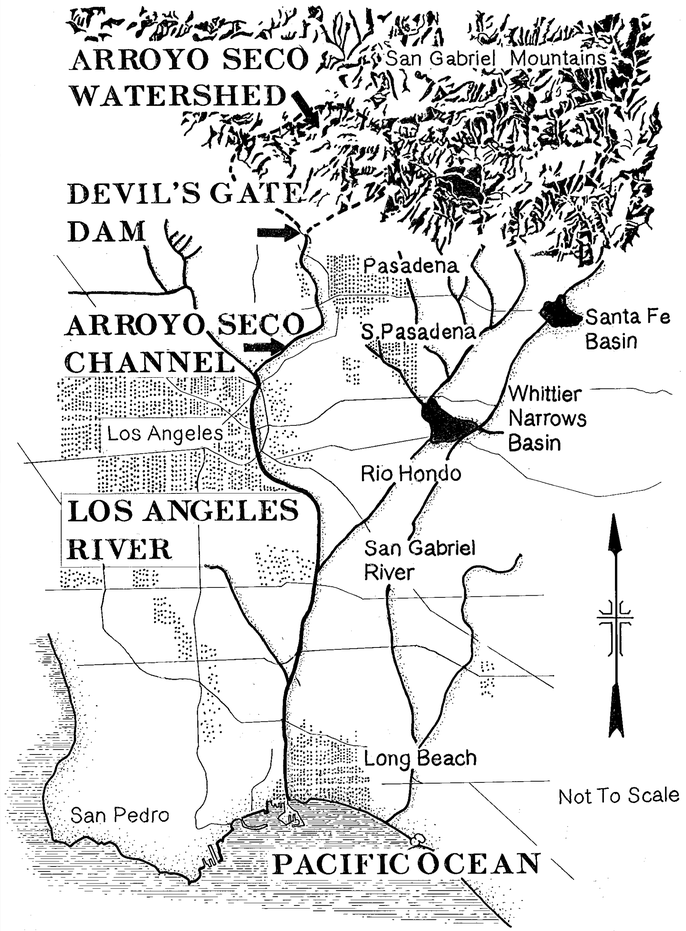
THE CONTROL OF WATER

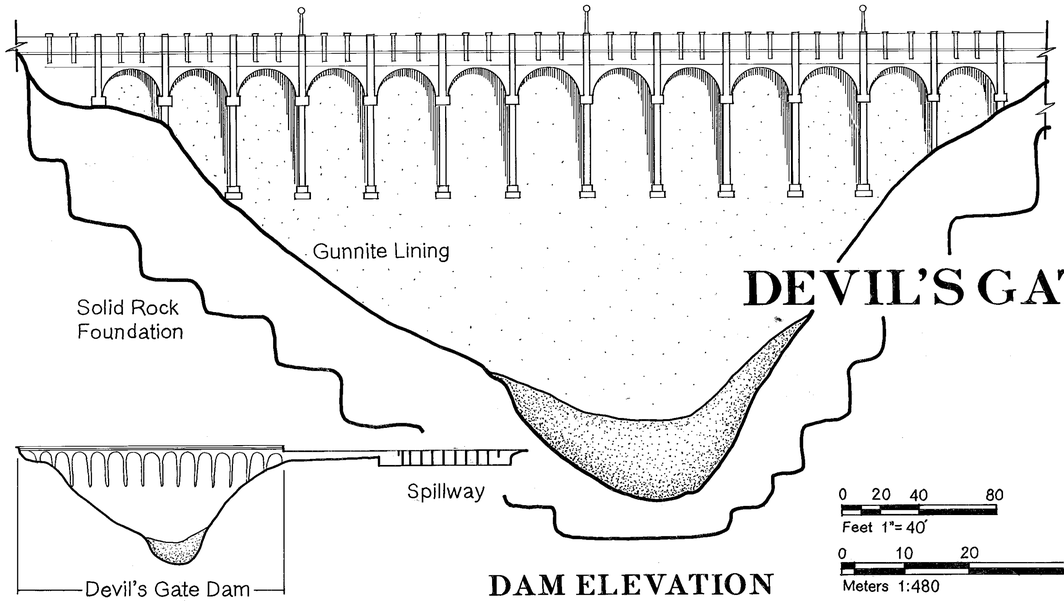
To build the Arroyo Seco Parkway for year-round use the water flow and periodic flooding in the arroyo had to be controlled. The water flow in the arroyo begins in a 13,700-acre watershed in the San Gabriel Mountains and flows to the Los Angeles River and on to the Pacific Ocean. To begin to control the periodic flooding of the arroyo, the Los Angeles County Flood Control District constructed the Devil's Gate Dam, a concrete gravity arch-type dam, at Devil's Gate Gorge from 1919 to 1920. By the 1930s, plans had been made to construct a concrete channel through the arroyo.

Once construction began on the Arroyo Seco Parkway it became necessary to coordinate parkway and channel improvement plans. The work on the channel involved excavation, lining the channel with Portland cement concrete, erecting bridge substructures, and rough-grading and roadbed construction for the parkway. The work was performed by Works Progress Administration (WPA) forces, under the plans and direction of the City of Los Angeles Engineering Department. The City of Los Angeles was the channel project sponsor, with the remaining cost absorbed by state highway funds.



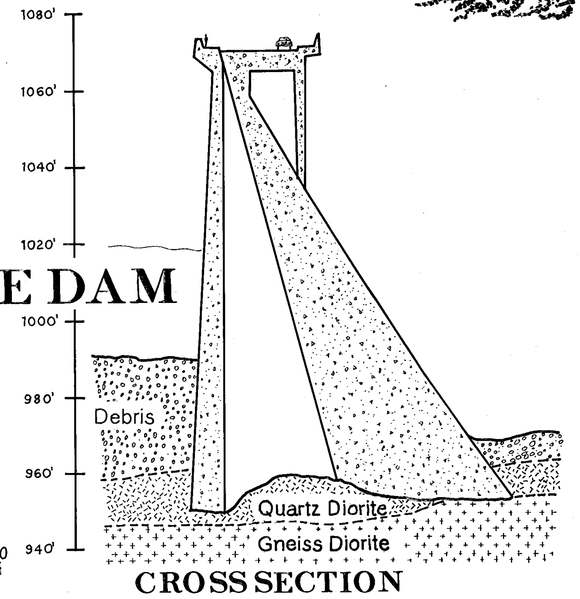
ARROYO SECO WATERSHED





DAM ELEVATION

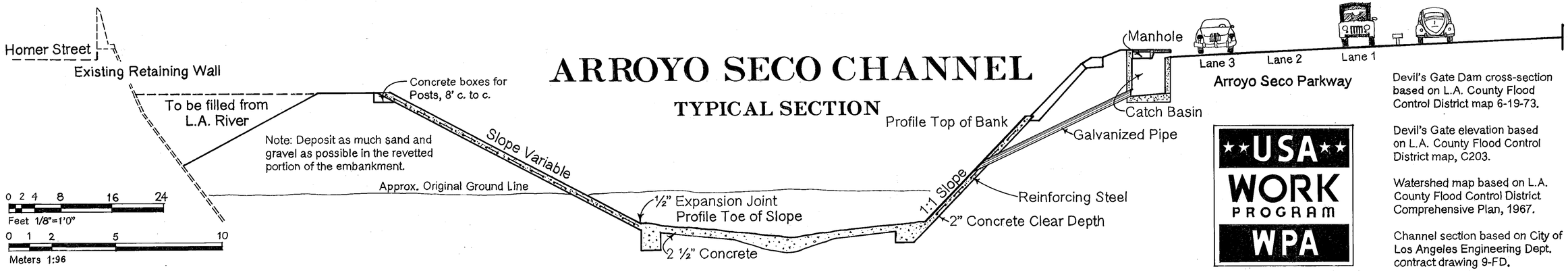
DEVIL'S GATE DAM



CROSS SECTION

ARROYO SECO CHANNEL

TYPICAL SECTION



USA WORK PROGRAM WPA

Devil's Gate Dam cross-section based on L.A. County Flood Control District map 6-19-73.

Devil's Gate elevation based on L.A. County Flood Control District map, C203.

Watershed map based on L.A. County Flood Control District Comprehensive Plan, 1967.

Channel section based on City of Los Angeles Engineering Dept. contract drawing 9-FD.

DELINEATED BY: ANDREW JOHNSTON, 1999, LISA GARDNER, 2000

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES COUNTY CALIFORNIA
LOS ANGELES, SOUTH PASADENA, PASADENA

HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 8 OF 22

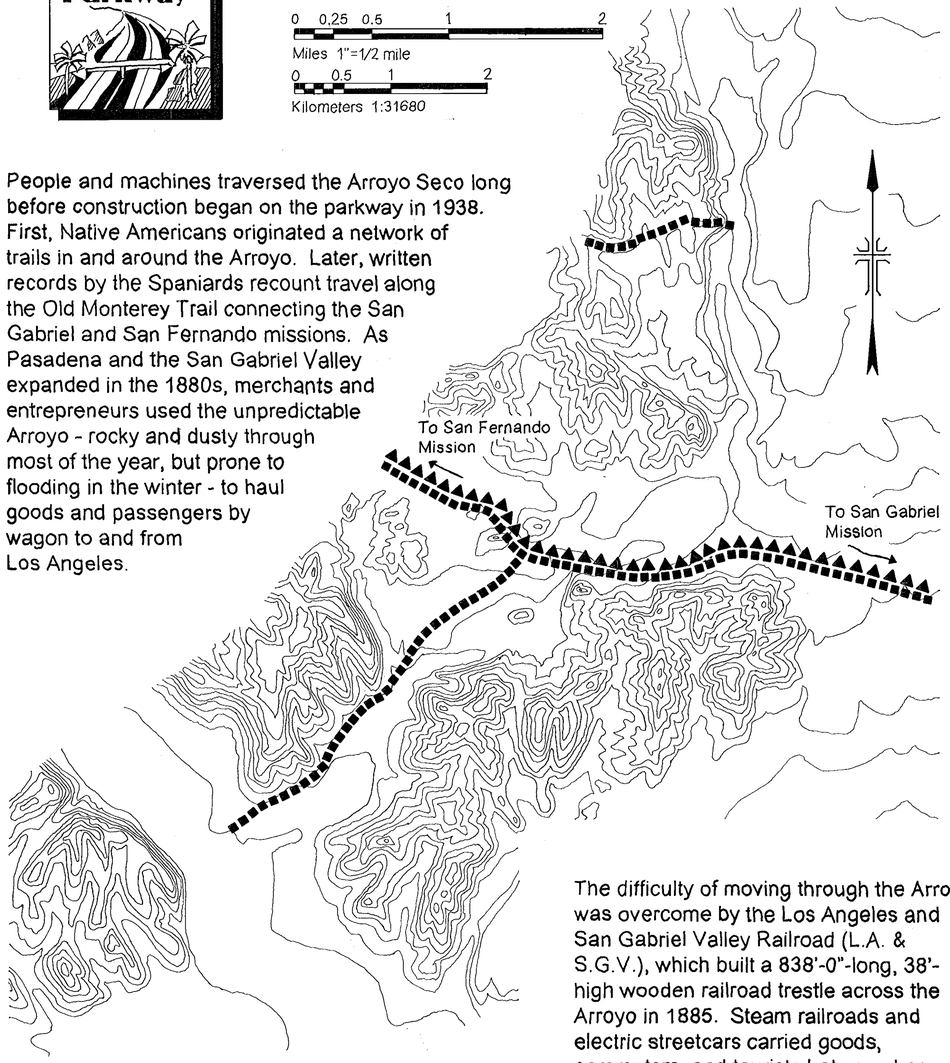
69423

EVOLUTION OF TRANSPORTATION

Arroyo Seco Parkway

0 0.25 0.5 1 2
Miles 1"=1/2 mile
0 0.5 1 2
Kilometers 1:31680

People and machines traversed the Arroyo Seco long before construction began on the parkway in 1938. First, Native Americans originated a network of trails in and around the Arroyo. Later, written records by the Spaniards recount travel along the Old Monterey Trail connecting the San Gabriel and San Fernando missions. As Pasadena and the San Gabriel Valley expanded in the 1880s, merchants and entrepreneurs used the unpredictable Arroyo - rocky and dusty through most of the year, but prone to flooding in the winter - to haul goods and passengers by wagon to and from Los Angeles.

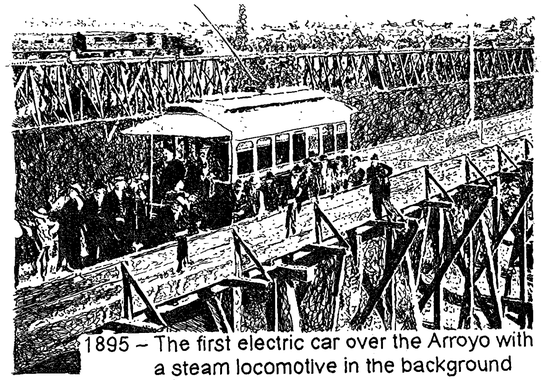


Early Transportation Through The Arroyo

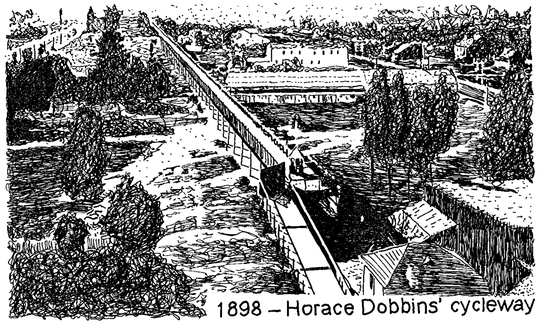
■■■■■ Native American Routes

▲▲▲ Monterey Trail

Map based on 1894 U.S.G.S. map and Highland Park News-Herald, May 17, 1959. Above-right drawings based on historic photographs.



1895 – The first electric car over the Arroyo with a steam locomotive in the background



1898 – Horace Dobbins' cycleway

1912 – Congestion on Broadway St., Downtown L.A.

The difficulty of moving through the Arroyo was overcome by the Los Angeles and San Gabriel Valley Railroad (L.A. & S.G.V.), which built a 838'-0"-long, 38'-high wooden railroad trestle across the Arroyo in 1885. Steam railroads and electric streetcars carried goods, commuters, and tourists between Los Angeles and Pasadena over the next thirty-five years. In 1895, the Pasadena & Los Angeles Railway Company ran the first electric coach between the two cities, adding another trestle over the Arroyo. This company, later purchased by Henry E. Huntington's Pacific Electric (P.E.) company, built additional lines linking the cities (see map at right).

None of these lines provided an efficient and congestion-free route through the Arroyo. T. D. Allen surveyed the Arroyo for a road in 1895. In 1897, entrepreneur Horace Dobbins proposed an elevated bicycle tollroad from downtown Pasadena to downtown Los Angeles, via the Arroyo. While 1 ¼ miles of the "cycleway" were actually built, neither of these proposals was fully implemented.

Urban Transportation Corridor

●●●●● Streetcar Lines

●●● A.T. & S.F. Railroad

– – – Primary Automobile Routes (Pre-Parkway)

▬▬ Arroyo Seco Parkway

Map based on 1894 U.S.G.S. map, 1946 Thomas Bros. Atlas, 1939 L.A. Railway Corp. Route Map, and 1923 P.E. Official Transportation Map.

The increasing popularity of the automobile and spontaneous "jitney" bus service posed a significant threat to rail transit by the mid 1910s. Automobiles and buses were soon battling streetcars, horses, wagons, pedestrians, traffic lights, and stop signs along the major routes leading into and out of downtown Pasadena and Los Angeles. The ensuing traffic problem spurred proposals for more high-speed transit routes between the cities. Meanwhile, concurrent proposals for a high-speed automobile route gained favor and soon all other proposals would be outdated.

TIMELINE

- 1700s – Monterey Trail
- 1883 – Incorporation of Los Angeles & San Gabriel Valley Railroad (L.A. & S.G.V.)
- 1885 – Construction of L.A. & S.G.V. wooden railroad trestle over Arroyo Seco
- 1887 – Atchison, Topeka & Sante Fe Railroad (A.T. & S.F.) buys L.A. & S.G.V.
- 1891 – Creation of Los Angeles Terminal Railroad
- 1894 – Founding of Pasadena and Los Angeles Electric Railway Co. (P. & L.A.)
- 1896 – Renovation of existing A.T. & S.F. Railroad Bridge
- 1897 – Construction begins on Horace Dobbins' "Cycleway"
- 1899 – Henry Huntington buys P. & L.A. Railway and makes it part of expanding L.A . railway system
- 1901 – L.A. Railway incorporated as Pacific Electric
- 1902 – Completion of Pacific Electric "Short Line" route
- 1914 – Jitney bus routes begin to threaten supremacy of rail transportation
- 1916 – Proposed monorail from Eagle Rock to downtown L.A. passing through Arroyo
- 1938 – Construction begins on Arroyo Seco Parkway

DELINEATED BY: CHRISTOPHER B DALBEY, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 9 OF 22

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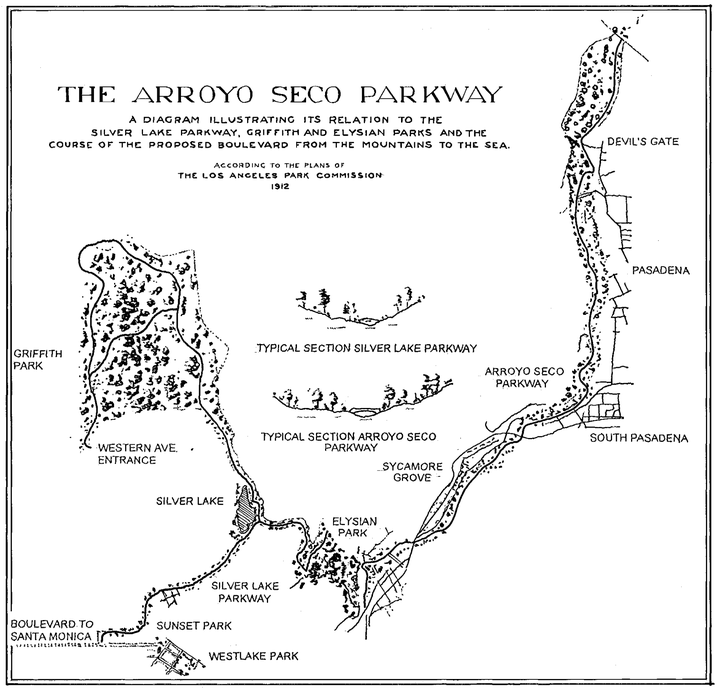
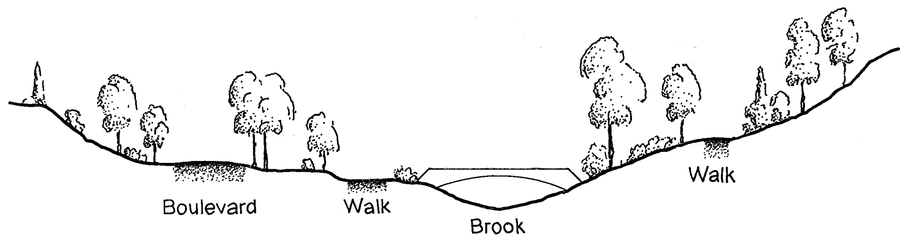
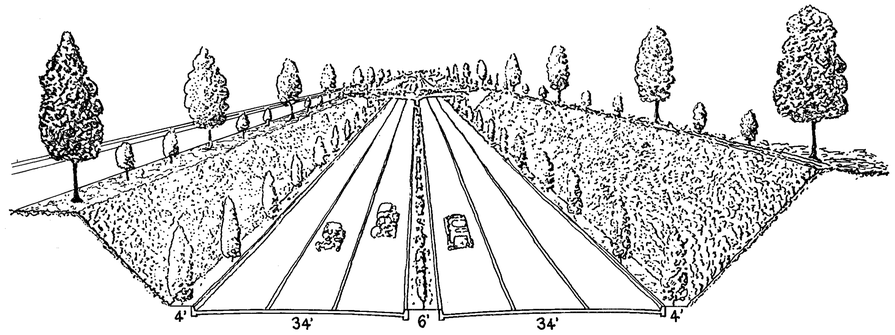
FROM PARKWAY TO FREEWAY



1912 Los Angeles Park Commission Proposal

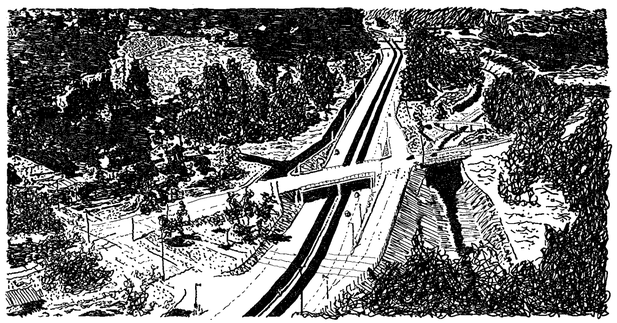


1912 Proposal - Typical Section

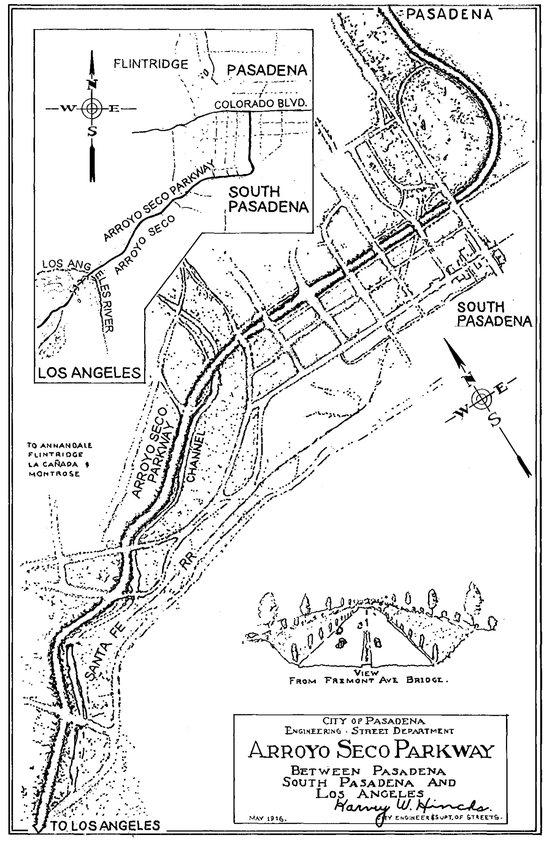


1916 Proposal - Section Looking West from Fremont Ave. Bridge

Note: Drawings not to scale



1940 - View of the Parkway Looking North Towards the Via Marisol Intersection



Drawings based on 1912 L.A. Park Commission Proposal, 1916 City of Pasadena Proposal, and historic photographs.

1916 City of Pasadena Proposal

The design of the Arroyo Seco Parkway – part recreational parkway, part commuter freeway – is rooted deep in the road's past. The earliest supporters for a road imagined it as a "parkway," part of a larger strip of scenic and publicly held land intended to link urban parks and improve the moral and physical health of the city. In 1912, the Los Angeles Park Commission and landscape architect Laurie Cox released the first official plan for a parkway through the Arroyo (above). The park commission's approach was reaffirmed in a 1930 report for Los Angeles parks compiled by Olmsted Brothers and Harlan Bartholomew and Associates.

"Freeway" supporters saw the Arroyo as little more than a landscape feature that could provide the least congested commuter route between Los Angeles and Pasadena – at least for part of the way. In 1916, the city of Pasadena proposed a route that turned east from the Arroyo to meet Broadway in Pasadena, providing a more direct connection between the business centers of the two cities (above, right). Many traffic plans presented in the 1920s and 1930s followed essentially the same alignment. A visionary section of the road drawn in 1916 appears strikingly modern, where even the landscaping elements contribute to the engineering precision necessary for high-speed road design (center, middle).

The initial stretch of road completed in 1940 formally recalled both sides of the early parkway-freeway dichotomy (center, bottom). Once engineers extended the road southward with the ultimate intention of linking it with a larger freeway network, this dichotomy faded and the parkway more closely resembled a freeway.

TIMELINE

- **1895** – T.D. Allen surveys Arroyo for a road
- **1897** – Henry Dockweiler includes Arroyo Seco in larger plan to link Los Angeles area parks with looping, recreational road
- **1907** – Progressive reformer Dana Bartlett calls for "charming" Arroyo Seco Drive
- **1911** – Los Angeles Park Commission calls for "winding driveway" through bed of Arroyo
- **1912** – Plan for Arroyo Seco Parkway drawn up by Laurie Davidson Cox as part of larger Los Angeles park and boulevard system
- **1916** – City of Pasadena proposes Arroyo Seco Parkway to run into heart of Pasadena
- **1924** – L.A. Traffic Commission recommends commuter thoroughfare via Arroyo as part of major traffic plan for L.A. region
- **1930** – Olmsted Brothers and Bartholomew and Associates recommend Arroyo Seco Parkway in the spirit of the early recreational proposals
- **1934** – L.A. Regional Planning Commission suggests "Arroyo Seco Freeway" to connect with Broadway in Pasadena
- **1937** – Extension of proposed Arroyo Seco Parkway to Devil's Gate Dam rejected by Pasadena voters
- **1938** – Construction begins on parkway

DELINEATED BY CHRISTOPHER B. DALBEY, 1999

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UNITED STATES DEPARTMENT OF THE INTERIOR
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HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 10 OF 22
CALIFORNIA
ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES COUNTY
LOS ANGELES, SOUTH PASADENA, PASADENA

669423

PARKWAY DEVELOPMENT

CONSTRUCTION STAGES

The 8.2-mile Arroyo Seco Parkway was completed in three major stages from 1938 to 1953. District engineers for the California State Division of Highways, led by Chief Engineer Spencer V. Courtelyou and Design Engineer A. D. Griffin, oversaw most of the road's design. There was also design input from individuals outside of the Division of Highways, most notably Los Angeles City Engineer Lloyd Aldrich, Pasadena City Engineer Harvey W. Hincks, Automobile Club of Southern California Chief Engineer Ernest E. East, and officials from the federal relief project.

Drawings based on CalTrans as-built contracts

Erecting Formwork for Park Row Bridge, 1941

STAGE 1 (1940)

The first major stage involved the construction of an approximately six-mile stretch of road extending from Glenarm Street in Pasadena to Avenue 22 in Los Angeles. Although the road's alignment had been surveyed by the mid-1930s, construction did not officially begin until March of 1938. Contractors offered bids for the different sections of roadway, the work for which required companies to provide varying combinations of grading, paving, and the erection of bridges and underpasses. This work proceeded roughly from northeast to southwest, with portions of the newly-completed contracts opened to traffic along the way. J. E. Haddock Ltd. of Pasadena was awarded many of the contracts, but at least nine other contractors also contributed. Although work along a section of road between Pasadena and South Pasadena still awaited completion, the first stage officially opened to traffic on December 30, 1940.

STAGE 2 (1943)

The second major stage of construction involved the 2.2-mile "Southerly Extension" from Avenue 22 to Adobe Street in Los Angeles. Plans for this section were well underway before the opening of the initial stage. In anticipation of heavy traffic, this section added four southbound lanes through Elysian Park and turned the existing Figueroa Street Tunnels and Viaduct into a four-lane northbound route. The extension opened on December 30, 1943, exactly three years after the initial stretch. These opening dates were not entirely coincidental: planners wanted the roads to be finished in time for Pasadena's New Year's Day Tournament of Roses Parade and college football game at the Rose Bowl.

STAGE 3 (1953)

The 1953 completion of the final stretch of road, connecting the Arroyo Seco Parkway to the Four-Level Interchange, linked the parkway with the growing Los Angeles regional freeway network.

Swinging Steel Girder for Ave. 35 Underpass, 1940

TIMELINE

- 1931 — First three Figueroa St. Tunnels completed
- 1935 — Fourth Figueroa St. Tunnel completed
- 1937 — Figueroa St. Viaduct completed
- 1938 — March 22nd - groundbreaking for parkway at Grand Ave.
- 1939 — January 4th - section completed from Glenarm St. to Fair Oaks
- 1940 — July 20th - section completed from Orange Grove to Ave. 40
- 1940 — October - construction begins for Southerly Extention
- 1941 — November 1st - section completed from Ave. 40 to Ave. 22
- 1943 — December 30th - ceremonial opening of parkway
- 1944 — January 31st - section completed from Fair Oaks to Grand Ave.
- 1949 — December 30th - opening of Southerly Extension
- 1953 — Second Los Angeles River Bridge (extension) fully completed
- 1953 — Four-Level Interchange completed
- 1953 — December 22 - final section completed, connecting the parkway to the Four-Level Interchange

HISTORIC AMERICAN ENGINEERING RECORD CA - 265

SHEET 11 OF 22

CALIFORNIA

ARROYO SECO PARKWAY 1938 - 1953

LOS ANGELES COUNTIES

LOS ANGELES, SOUTH PASADENA, PASADENA

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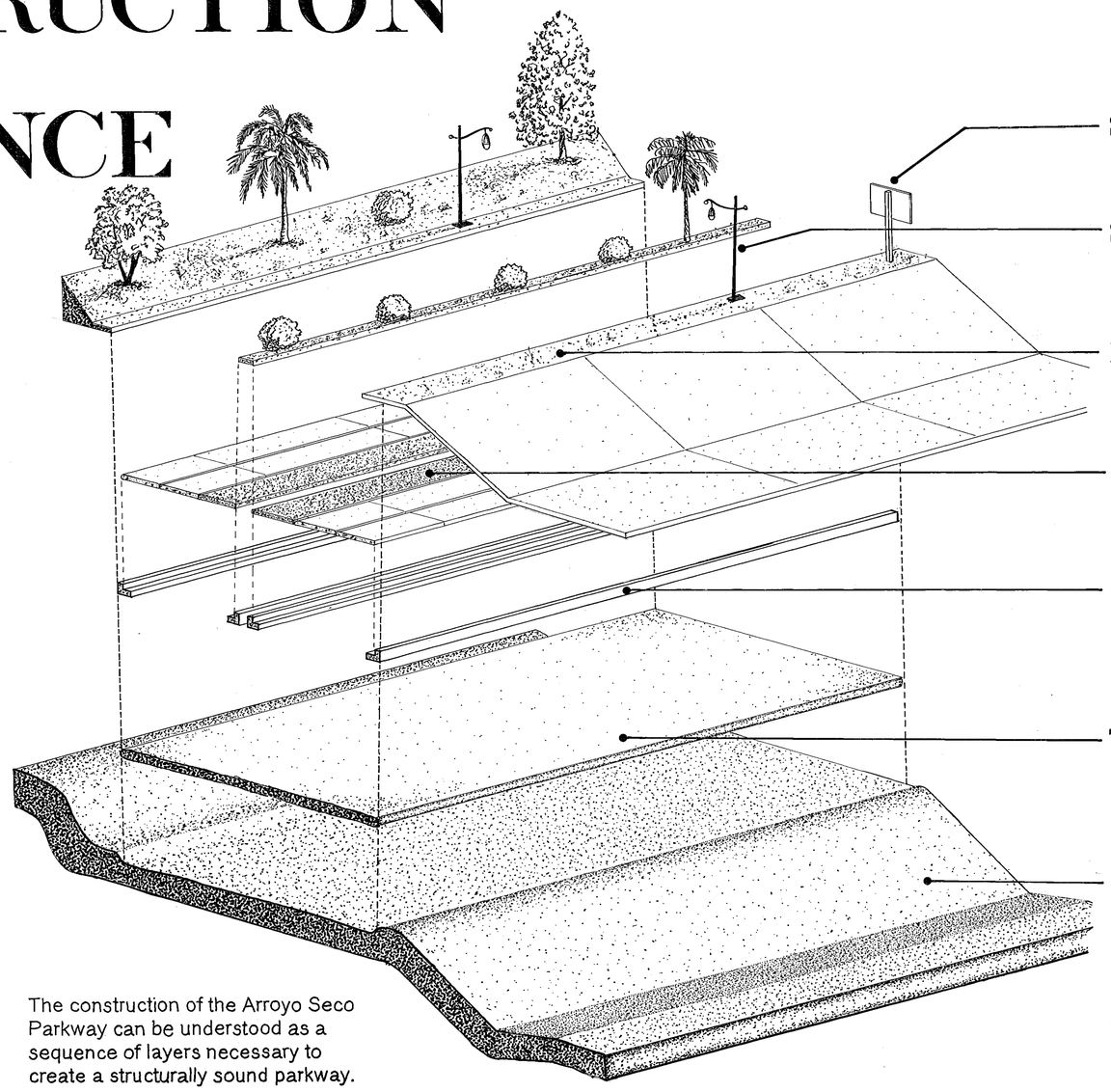
CONSTRUCTION SEQUENCE

Once the Arroyo Seco Parkway alignment was chosen, the California State Division of Highways let contracts to a number of different companies for the preparation of the roadbed. First, workers associated with the federally assisted Arroyo Seco Flood Control Channel project used excavated channel material to perform much of the rough grading for the parkway. Then private contractors shaped the existing landscape by cutting away high spots and filling depressions to provide a solid foundation for the laying of concrete. In addition to grading and paving, many contracts also required the installation of curbs, gutters, walls, storm drains, and service roads.

Contractors used a variety of machines to build the roadway. Tractors, bulldozers, and carryalls were used for the excavation and grading of the roadway, and sheepsfoot rollers for compacting fills. Trench machines and cranes were put into service for the excavation and construction of the storm drains. Some of the embankments included 170,000 cubic yards of material excavated from the nearby Los Angeles River Flood Control Project.



Signs were designed and installed by the Automobile Club of Southern California.

Street Lights were made by the Marbelite Company, model no. 485-26.

Landscaping featured a combination of native and exotic plants.

Pavement consisted of both asphalt concrete and portland cement concrete.

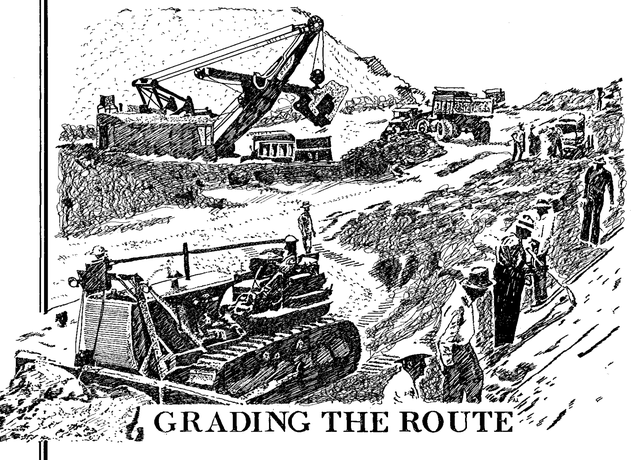
Curbs and Gutters were poured in-place and guardrails were installed at entrances and exits.

The Road Base was constructed of select material consisting of sand and ½" rocks.

The Rough Grade was shaped with sand and gravel from the Arroyo Seco Flood Control Channel excavation.

Storm Drains and Sewers were installed 5' to 10' beneath the parkway surface.

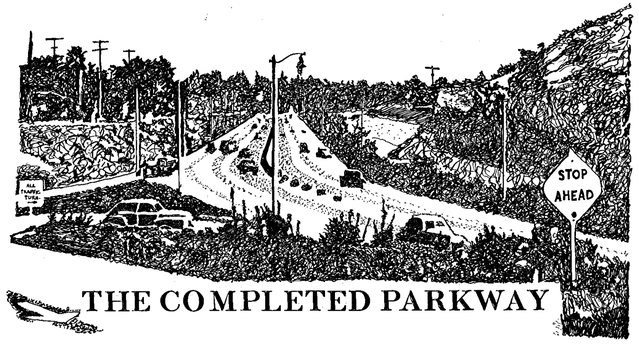
The construction of the Arroyo Seco Parkway can be understood as a sequence of layers necessary to create a structurally sound parkway.



GRADING THE ROUTE

PREPARING THE ROAD BASE

INSTALLING CURBS & GUTTERS



THE COMPLETED PARKWAY

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LOS ANGELES, SOUTH PASADENA, PASADENA

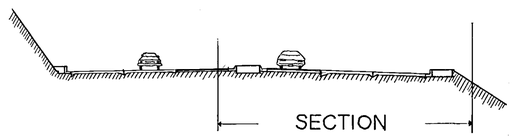
ARROYO SECO PARKWAY 1938-1953

LOS ANGELES COUNTY CALIFORNIA

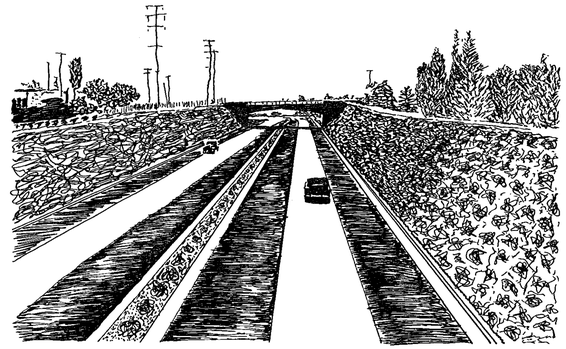
SHEET 12 OF 22

HISTORIC AMERICAN ENGINEERING RECORD CA-265

ROADWAY DESIGN

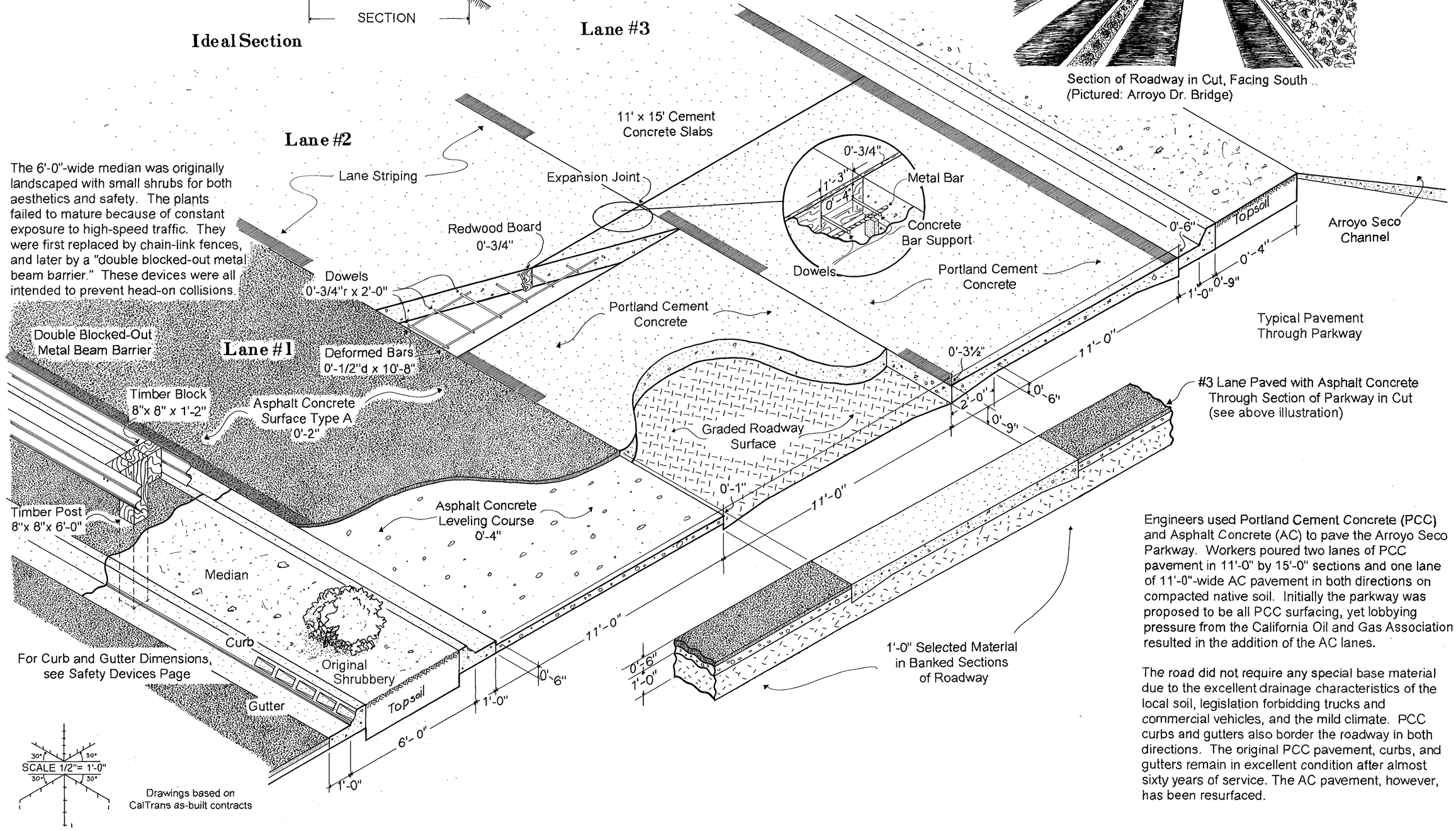


Ideal Section



Section of Roadway in Cut, Facing South
(Pictured: Arroyo Dr. Bridge)

The 6'-0"-wide median was originally landscaped with small shrubs for both aesthetics and safety. The plants failed to mature because of constant exposure to high-speed traffic. They were first replaced by chain-link fences, and later by a "double blocked-out metal beam barrier." These devices were all intended to prevent head-on collisions.



Engineers used Portland Cement Concrete (PCC) and Asphalt Concrete (AC) to pave the Arroyo Seco Parkway. Workers poured two lanes of PCC pavement in 11'-0" by 15'-0" sections and one lane of 11'-0"-wide AC pavement in both directions on compacted native soil. Initially the parkway was proposed to be all PCC surfacing, yet lobbying pressure from the California Oil and Gas Association resulted in the addition of the AC lanes.

The road did not require any special base material due to the excellent drainage characteristics of the local soil, legislation forbidding trucks and commercial vehicles, and the mild climate. PCC curbs and gutters also border the roadway in both directions. The original PCC pavement, curbs, and gutters remain in excellent condition after almost sixty years of service. The AC pavement, however, has been resurfaced.

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ARROYO SECO PARKWAY RECORDING PROJECT
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ARROYO SECO PARKWAY
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA
1938-1953

HISTORIC AMERICAN ENGINEERING RECORD
CA-265

SHEET 13 OF 22

609423

PARKWAY ACCESS

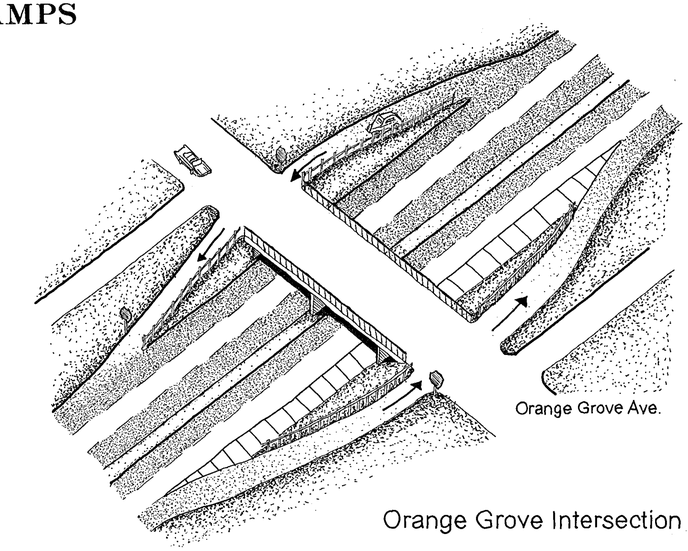
This new, limited-access high-speed road required specially designed entrances and exits to move motorists as quickly and safely as possible. Southern California drivers were not yet accustomed to such roads, so engineers incorporated various safety features into the design.

To warn drivers they were approaching an access lane, these features included flashing amber beacons both within the curb itself and on 4'-0"-tall posts (see detail in upper right corner). To control movement at points of access, engineers later installed triangular asphalt islands with small glass beads embedded into the alternately painted black and white curbs.

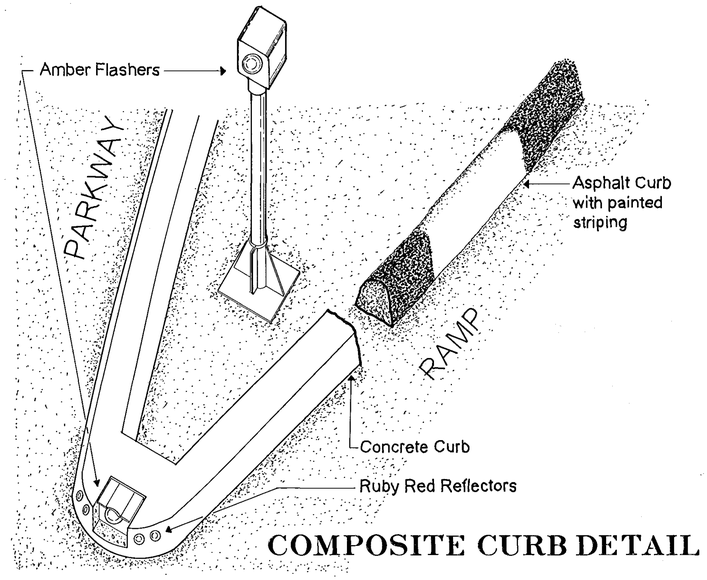
Faced with the problem of a narrow right-of-way and the unique geology of the Arroyo, engineers essentially designed two types of access systems, with the third type as a hybrid.

1. "Compressed cloverleaf" intersections. To enter, drivers stop nearly perpendicular to the flow of traffic and quickly accelerate. Exiting vehicles must maneuver into a tight curve under heavy braking.
2. Acceleration / Deceleration Ramps. These give drivers space to blend with or withdraw from faster moving traffic on the parkway.
3. Hybrid intersections. These combine the above two types.

2. ACCELERATION / DECELERATION RAMPS



Orange Grove Intersection

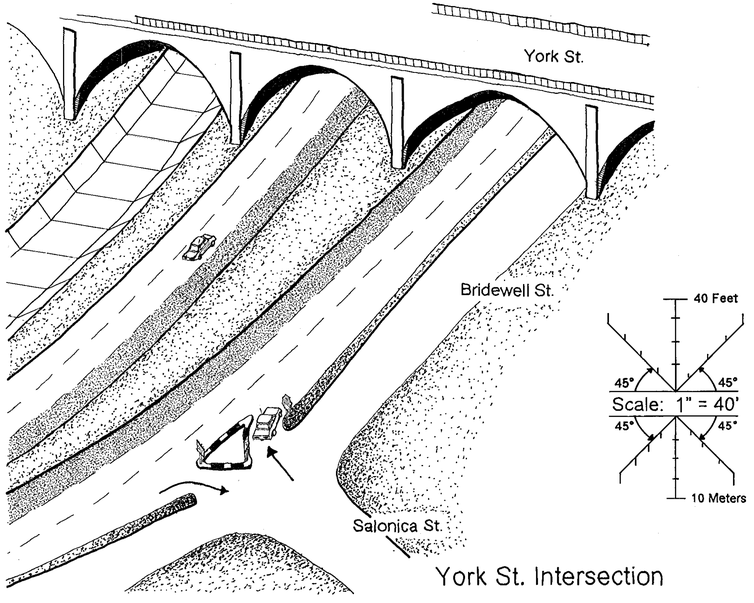


COMPOSITE CURB DETAIL

INFORMING THE MOTORIST

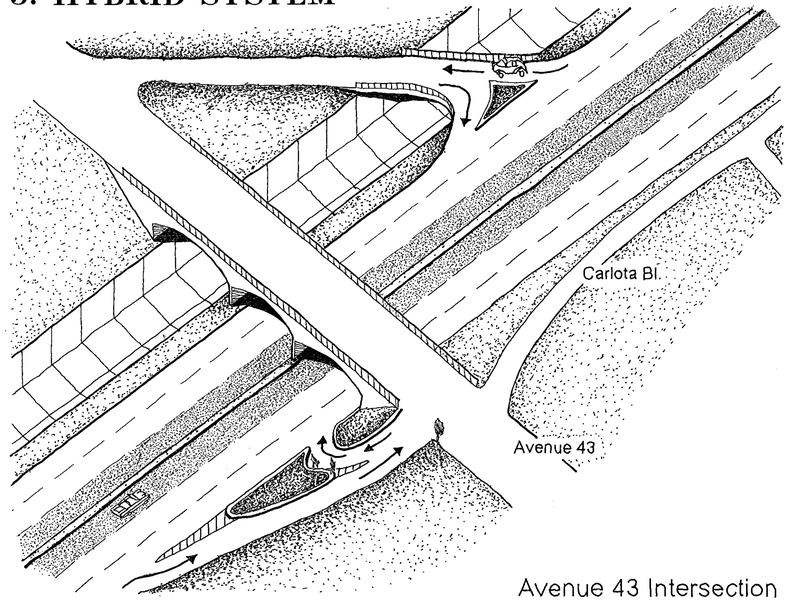
INTERSECTION TYPES

1. COMPRESSED CLOVERLEAF



York St. Intersection

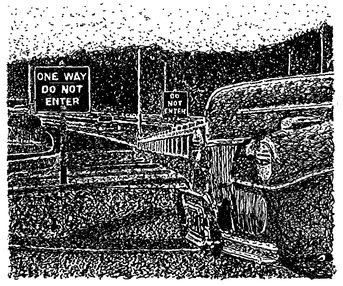
3. HYBRID SYSTEM

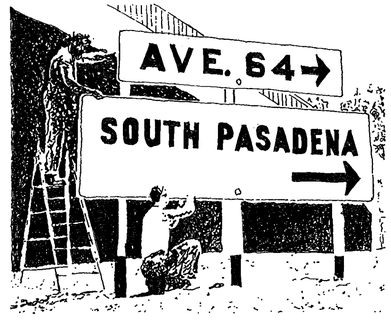


Avenue 43 Intersection

SIGNS

The public had to be educated as to how to navigate the intersections. These signs, designed by the Automobile Club of Southern California, informed drivers of upcoming exits and warned drivers not to turn into oncoming traffic.





Drawings based on various Caltrans as-built contracts, historical photographs, and field inspection.

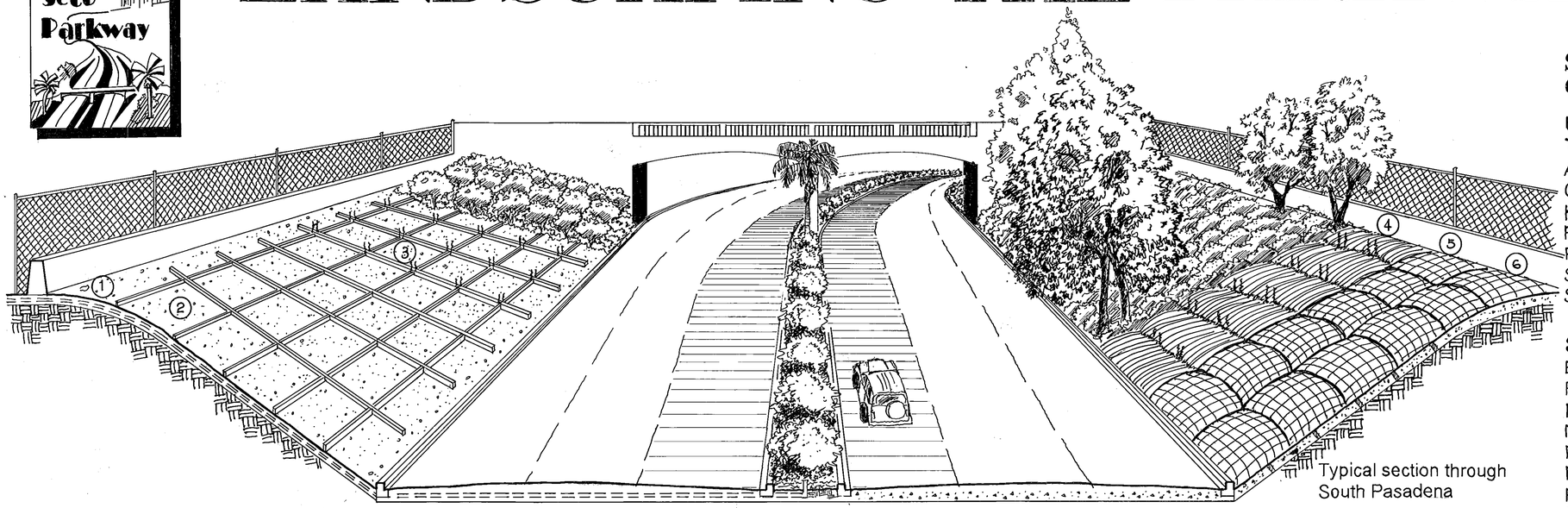
DELINEATED BY CHRISTOPHER B/LISA DALBEY, 1999 / GARDNER, 2000

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938-1953
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 14 OF 22

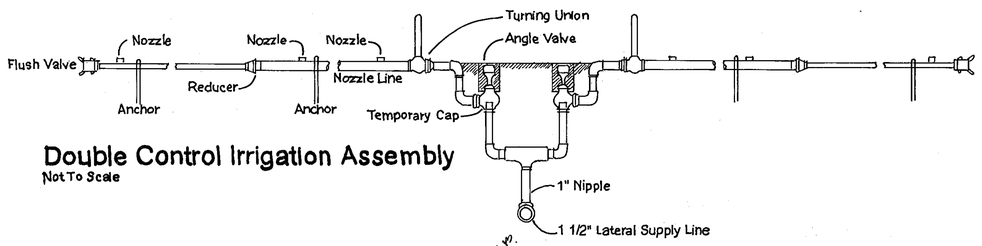
LANDSCAPING THE PARKWAY



Typical section through South Pasadena

SELECTIONS FROM ORIGINAL PLANTING PALETTE

BOTANICAL NAME	COMMON NAME
TREE	
Arcostaphylos sp.	Manzanita
Cercocarpus ledifolius	Mountain Mahogany
Heteromeles arbutifolia	Toyon
Platanus racemosa	California Sycamore
Prunus lyonii	Catalina Cherry
Sambucus sp.	Elderberry
Syagrus romanzoffiana	Coco Palm/Queen Palm
SHRUB	
Eriogonum sp.	Wild Buckwheat
Fremontodendron californicum	Common Flannel Bush
Myrtus compacta	Compact Myrtle
Nerium oleander	Oleander
Rhus integrifolia	Lemonade Berry
Rhus laurina	Laurel Sumac
Ribes sanguineum	Pink Flowering Currants
Romneya coulterl	Matilija Poppy
Salvia leucophylla	Purple Sage
Zauschneria californica	California Fuchsia
GROUNDCOVER	
Antirrhinum majus	Blue Snapdragon
Convolvulus mauritanicus	Morning Glory
Lampranthus sp.	Ice Plant
Lantana montevidensis	Trailing Lantana
VINE	
Ipomoea acuminata	Blue Dawn Flower
Lonicera sp.	Honeysuckle
Macfadyena unguis-cati	Catsclaw
Parthenocissus tricuspitada	Boston Ivy



Double Control Irrigation Assembly
Not To Scale

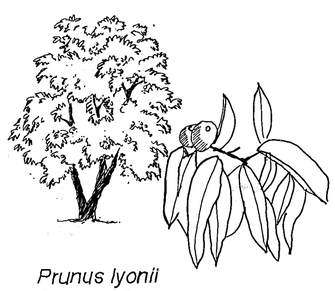
PROCEDURES

1. Wooden soil retaining frames are laid and embedded at approx. 1' at base of cut.
2. Backfill frames with topsoil and fertilizer mixture added until firmly compacted in the wooden frames.
3. Attach 14-gauge galvanized tie wires to secure wire mesh after application of straw.
4. Cover backfill uniformly with 6"+ clean barley, oat, or rice straw.
5. Cover straw with 14-gauge 4" mesh, secured tightly to frames with tie wires.
6. Anchor or secure wire mesh at top of slope with stakes or by fastening to any walls or curbs.

Syagrus romanzoffiana
Cocos Palm

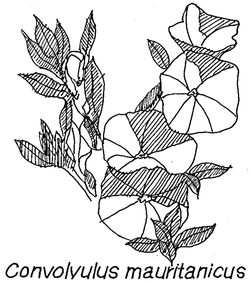
Platanus racemosa
California Sycamore

Rhus laurina
Laurel Sumac



Prunus lyonii
Catalina Cherry

Nerium oleander
Oleander



Convolvulus mauritanicus
Morning Glory

Lampranthus sp.
Ice Plant

Lantana montevidensis
Trailing Lantana

Landscaping the Parkway

Arroyo Seco Parkway landscape engineers considered soil stabilization, aesthetics and safety while planning the parkway. Evergreen Morning Glory and Wild Buckwheat were used to control erosion, along with a slope stabilization process that used wood frames, straw and wire mesh to hold topsoil for planting ground cover. An irrigation system was laid along the top of the slopes to provide plants adequate water for growth. Beautification efforts included the planting of Ceanothus in shades of blue and white, yellow Fremontia, and Toyon, in addition to Catalina and Holly-leaf Cherry offering heavy green foliage throughout the year. Overall, more than 10,000 plants were used in an attempt to create the effect of "hanging gardens" along the parkway slopes. Of the forty-seven species planted to improve the right-of-way on either side of the road, forty-two were California natives. The center divider initially featured shrubs of compact myrtle over ice plant intended to grow tall enough to shield motorist headlight glare.

DELINEATED BY: PETER W. HAO, 1999, LISA GARDNER, 2000
ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938 - 1953
LOS ANGELES, SOUTH PASADENA, PASADENA LOS ANGELES COUNTY CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD CA-265

SHEET 15 OF 22

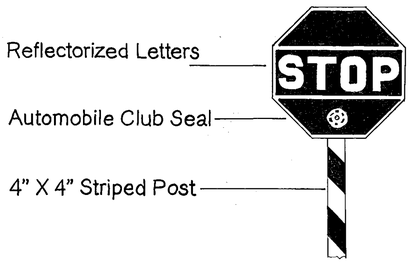
PARKWAY SAFETY DETAILS

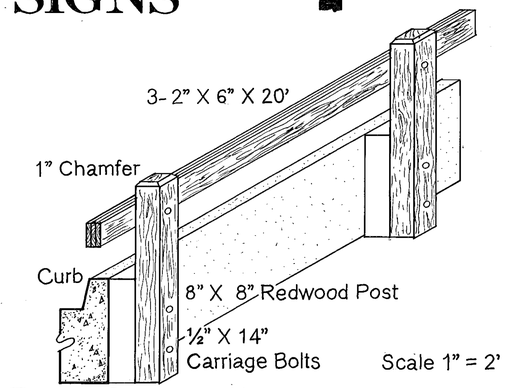
Parkway engineers worked to make the road as safe as possible, combining standard safety features in innovative ways to meet the needs of a high-speed freeway. Safety design features included signs, safety barriers, and curbs along the parkway, and changes in pavement color on the road surface to discourage lane changes. Special sodium vapor safety lights were installed along the parkway and at all entrances and exits.

Safety barriers included redwood guardrails at on- and off-ramps, and chain-link fences along both sides of the entire parkway. Concrete rubble walls, made of recycled sidewalks, were constructed as retaining walls.

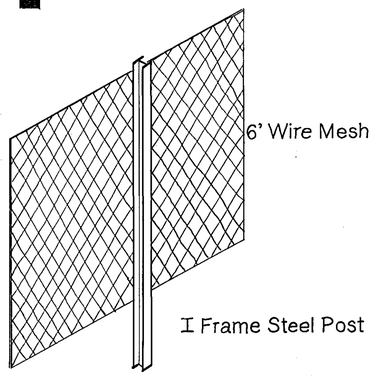
"High visibility" curbs were designed for the center dividing strip and the traffic islands at entrances and exits. These curbs had indentations and paint designed to reflect headlights, warning motorists about roadway edges.

SIGNS

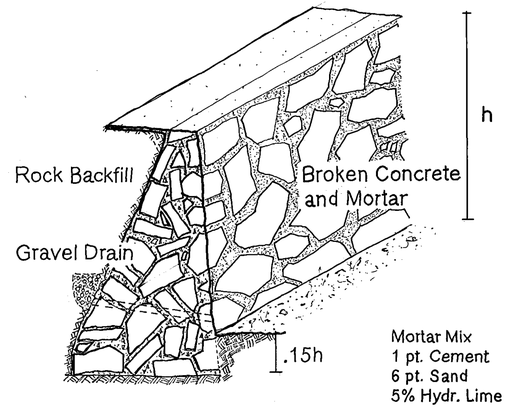




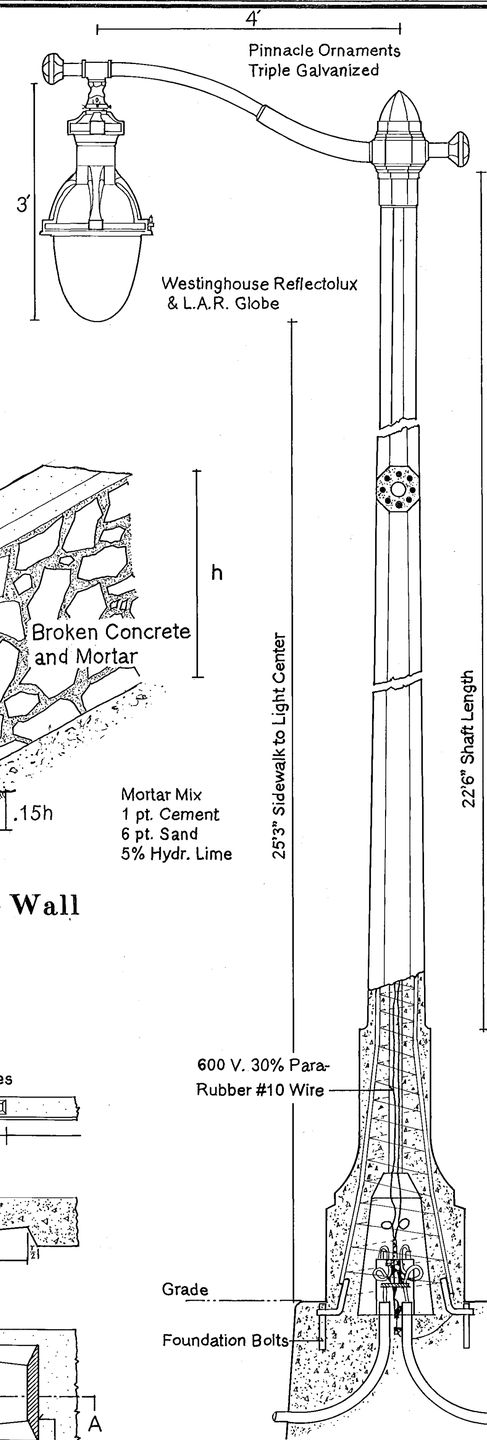
Ramp Guardrails



Chain Link Fence



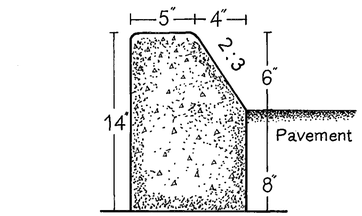
Recycled Concrete Wall



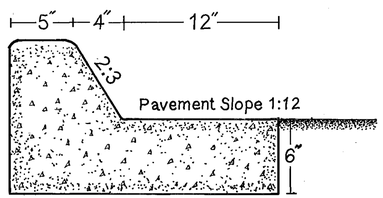
Marbelite No. 485-26
Lighting Post and Equipment

STREET LIGHTS

Scale 1" = 1'

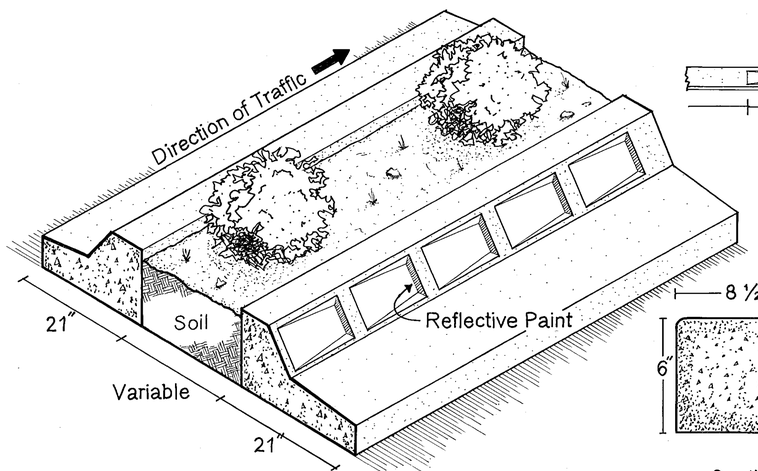


TYPICAL CURB

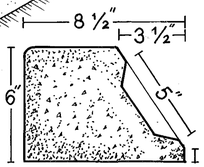


INTEGRAL CURB & GUTTER

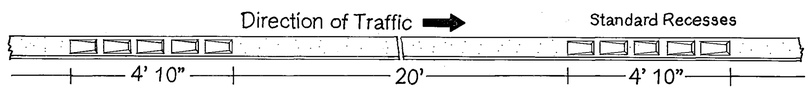
SAFETY BARRIERS

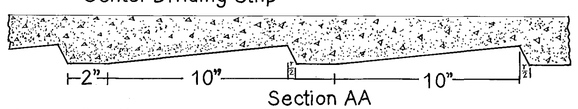


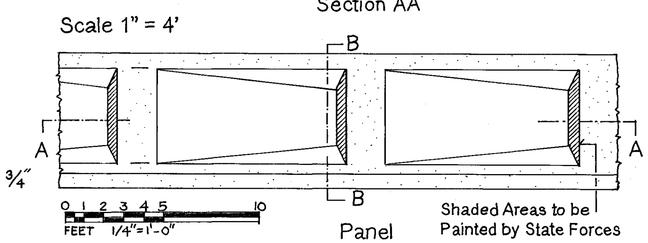
Center Dividing Strip



Section BB







HIGH VISIBILITY CURBS

Design of these details was accomplished jointly by the city engineering departments of Los Angeles, Pasadena, and South Pasadena, the district office of the State Division of Highways, and the Automobile Club of Southern California. Supervision of construction was handled by the state.

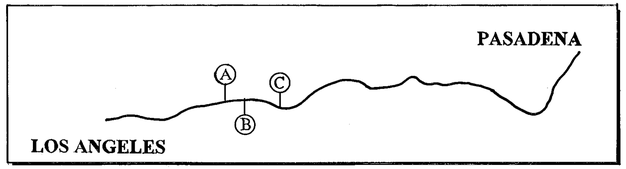
DELINEATED BY: ANDREW JOHNSTON, 1999, LISA GARDNER, 2000

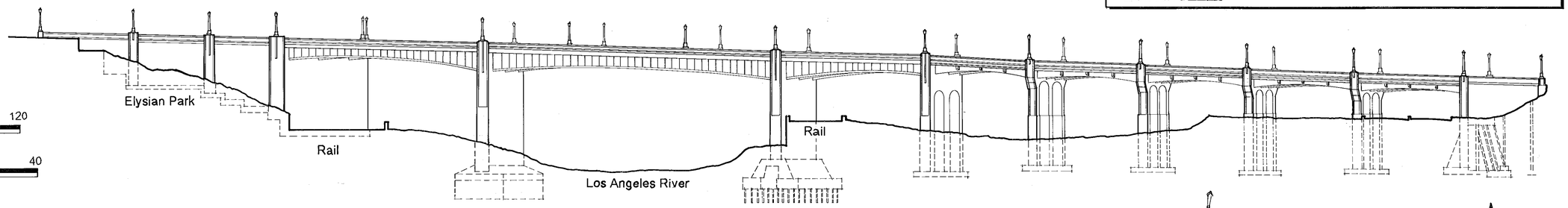
ARROYO SECO PARKWAY 1938- 1953
LOS ANGELES COUNTY CALIFORNIA
ARROYO SECO PARKWAY RECORDING PROJECT
LOS ANGELES, SOUTH PASADENA, PASADENA
UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 16 OF 22

PARKWAY BRIDGES

Arroyo Seco Parkway

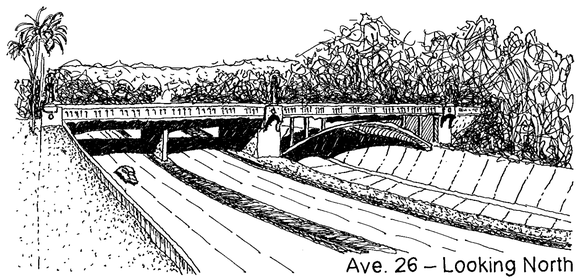




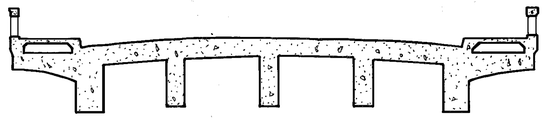
Elevation Scale
0 20 40 80 120
Feet 1"=40'
0 2 5 10 20 40
Meters 1: 480

(A) Figueroa Street Viaduct - 1936

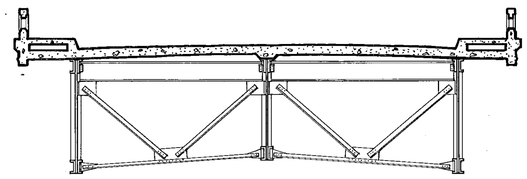
Scale: 1"=40'



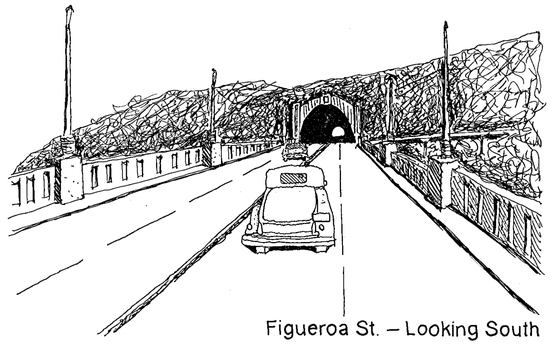
Ave. 26 – Looking North



Ave. 26 – Roadway Section

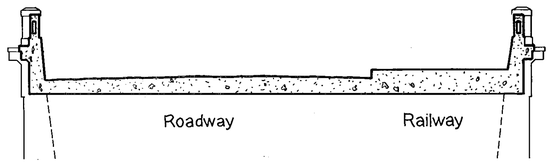


Figueroa St. – Roadway Section

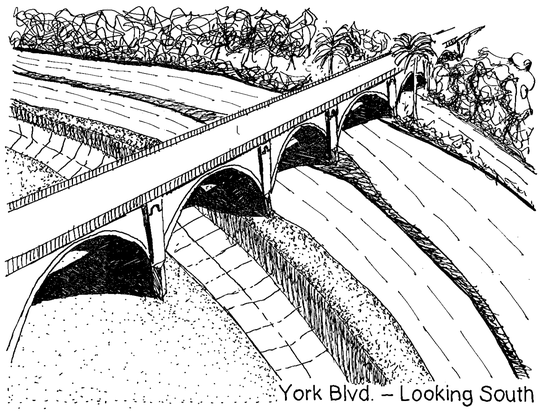


Figueroa St. – Looking South

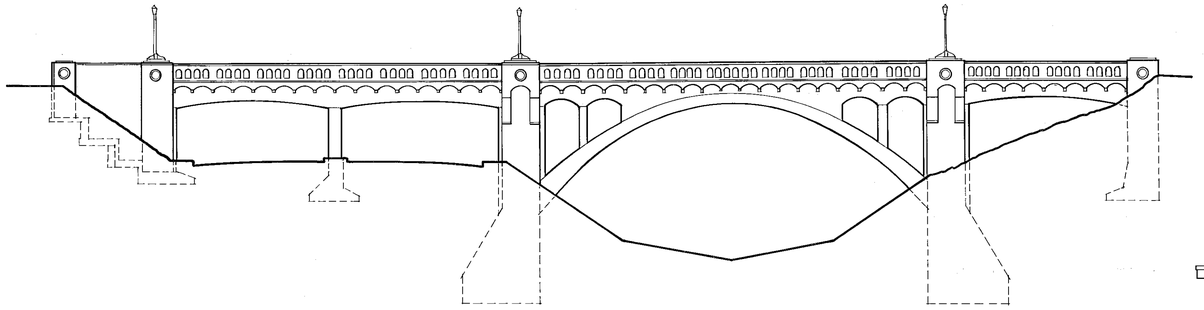
Section Scale
0 2 4 10 20 30
Feet 1 8"=1'0"
0 1 2 5 10
Meters 1:96



York Blvd. – Roadway Section

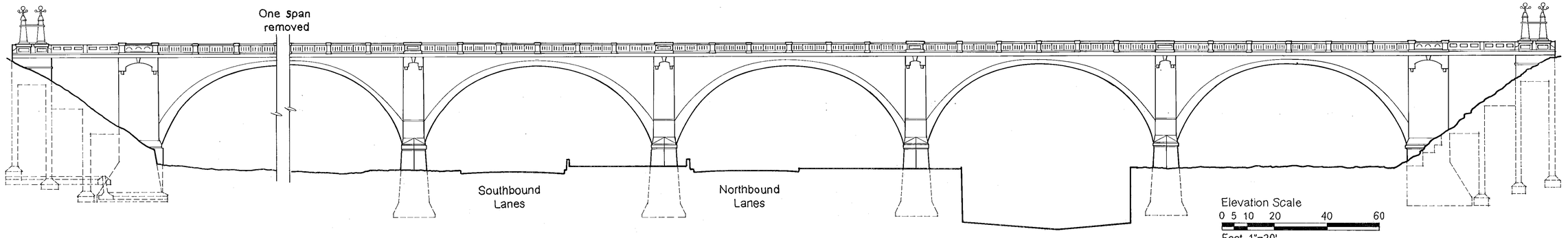


York Blvd. – Looking South



(B) Avenue 26 Overcrossing - 1925

Scale: 1"=20'



Elevation Scale
0 5 10 20 40 60
Feet 1"=20'
0 1 2 5 10 20
Meters 1:240

(C) York Boulevard Overcrossing - 1912

Scale: 1"=20'

Drawings based on Caltrans as-built contracts and field inspection.

DELINEATED BY: CHRISTOPHER B. DALBEY, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

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LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA

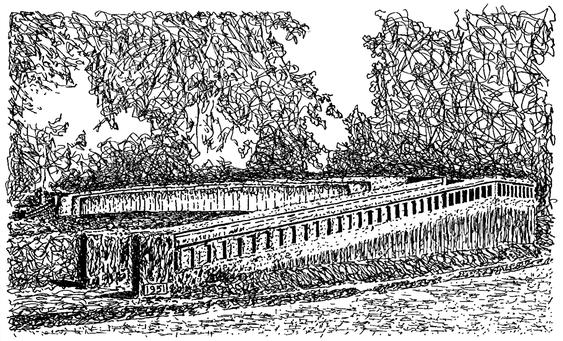
HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 17 OF 22

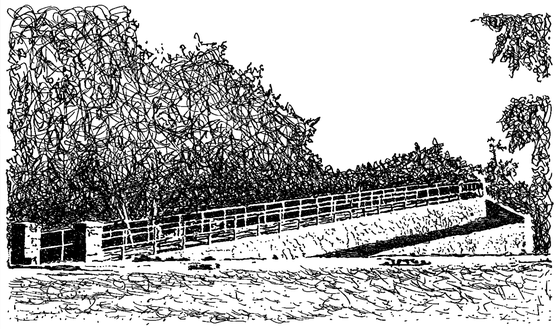
PARKWAY BRIDGES

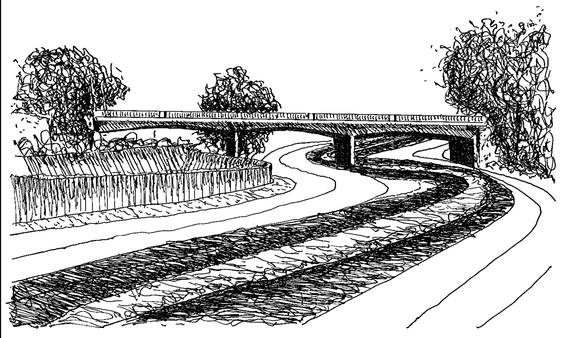
Arroyo Seco Parkway

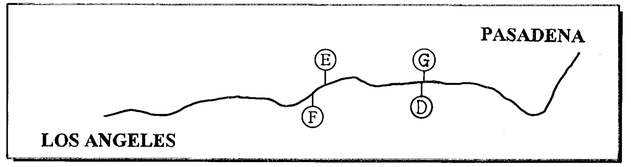
0 5 10 20 40 60
Feet 1"=20'

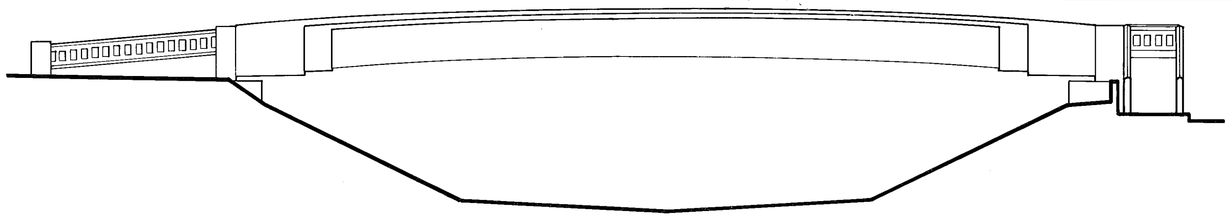
0 1 5 10 20
Meters 1:240

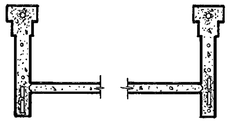








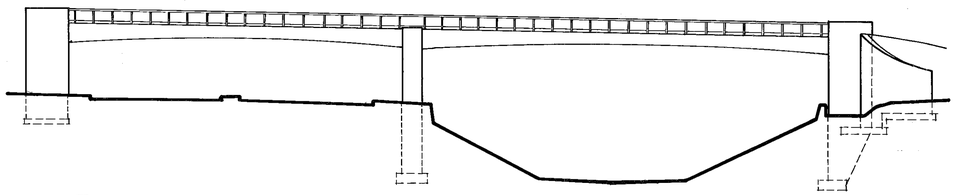


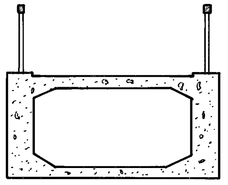


Scale: 1/4"=1'0"

(D) Arroyo Seco Channel Pedestrian Bridge - 1951

Scale: 1"=10'





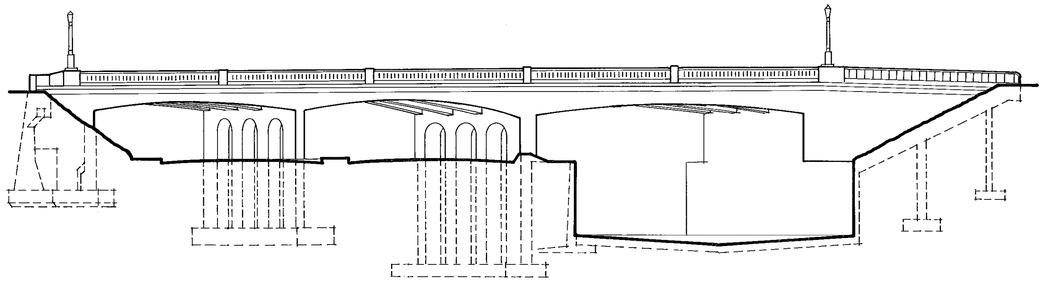
Scale: 1/4"=1'0"

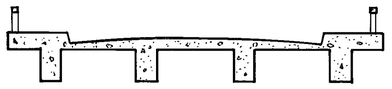
(E) Sycamore Grove Pedestrian Overcrossing - 1940

Scale: 1"=20'

0 2 4 10 20 30
Feet 1/8"=1'0"

0 1 2 5 10
Meters 1:96

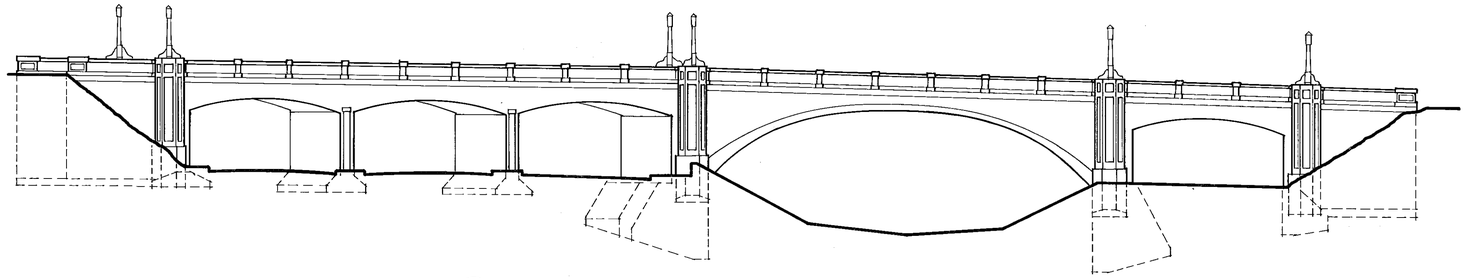


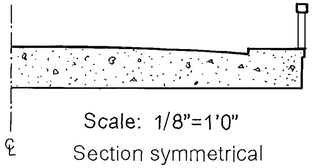


Scale: 1/8"=1'0"

(F) Avenue 43 Overcrossing - 1939

Scale: 1"=20'





Scale: 1/8"=1'0"

Section symmetrical around center line

(G) Avenue 60 Overcrossing - 1925

Scale: 1"=20'

Drawings based on various Caltrans as-built contracts, historical photos, and field inspection.

DELINEATED BY: CHRISTOPHER B DALBEY, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
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UNITED STATES DEPARTMENT OF THE INTERIOR

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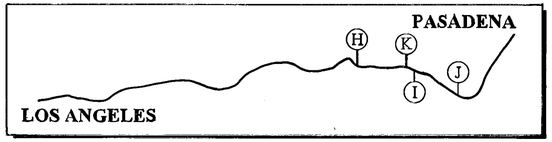
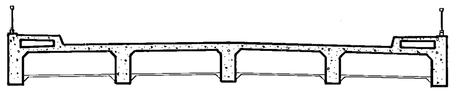
LOS ANGELES COUNTY CALIFORNIA

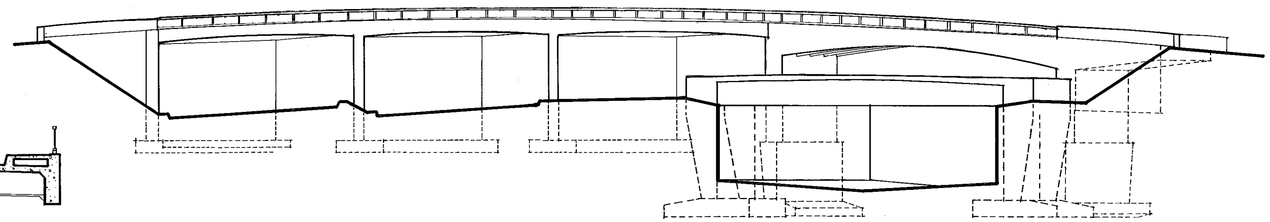
HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 18 OF 22

PARKWAY BRIDGES



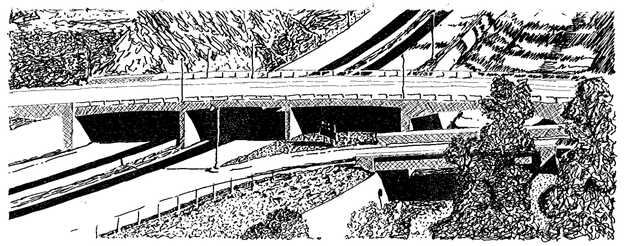


Roadway Section

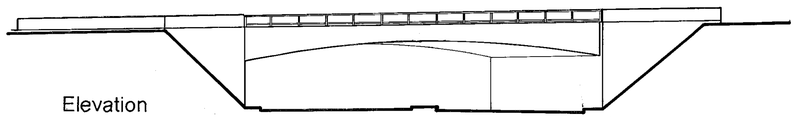


Elevation

Marmion Way Bridge - 1940

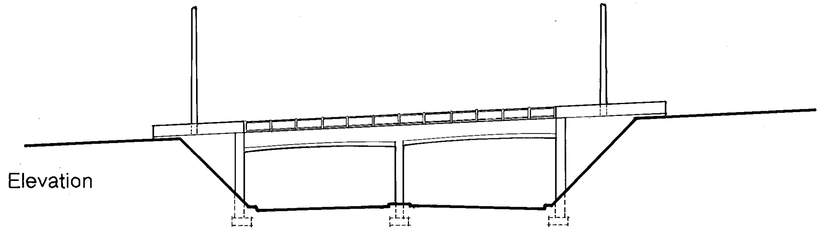


Marmion Way Bridge – Aerial View



Elevation

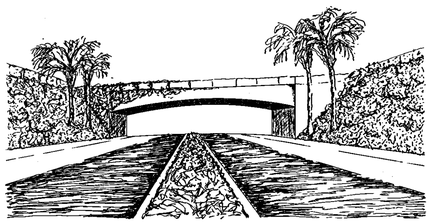
Arroyo Drive Bridge - 1938



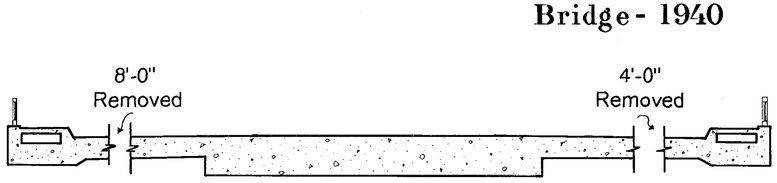
Elevation

Fair Oaks Avenue (& Pacific Electric Railroad) Bridge - 1940

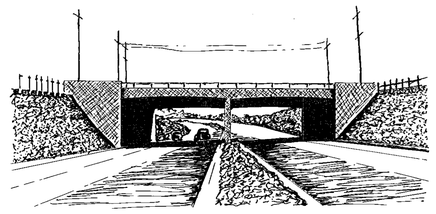
Roadway Section



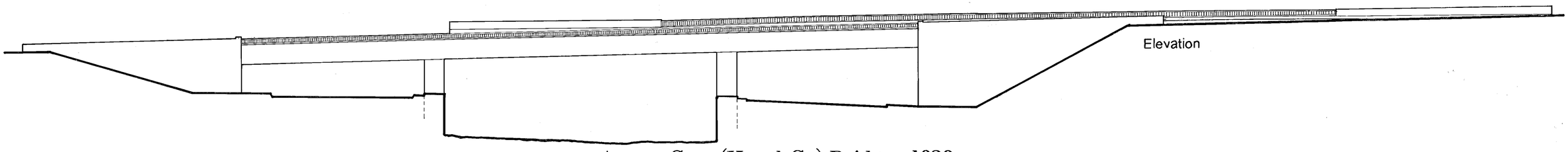
Arroyo Drive Bridge – Looking South



Roadway Section

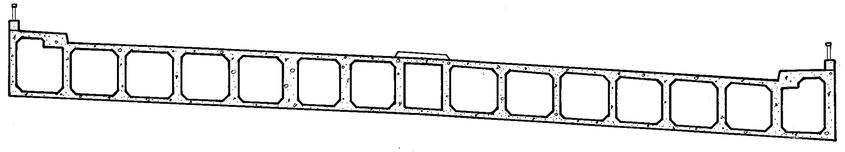


Fair Oaks Bridge – Looking North



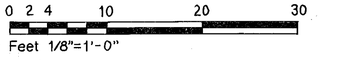
Elevation

Arroyo Seco (Hough St.) Bridge - 1939



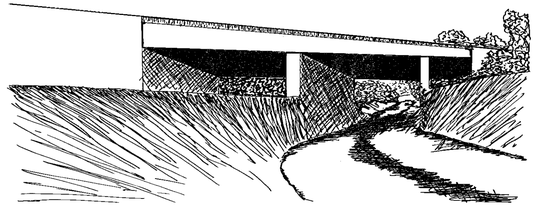
Roadway Section

Drawings based on
CalTrans as-built contracts



All Sections Drawn to this Scale

All Elevations Drawn to this Scale



Arroyo Seco Bridge – Looking South

DELINEATED BY: SYDNEY A. MAINSTER, 1999

ARROYO SECO PARKWAY
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY
1938 - 1953

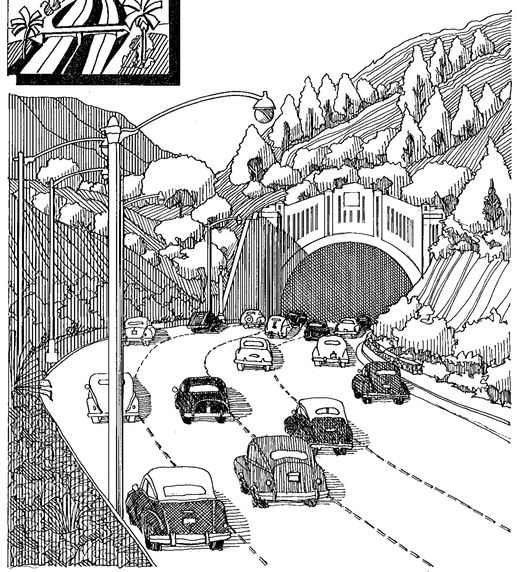
HISTORIC AMERICAN ENGINEERING RECORD
CA-265

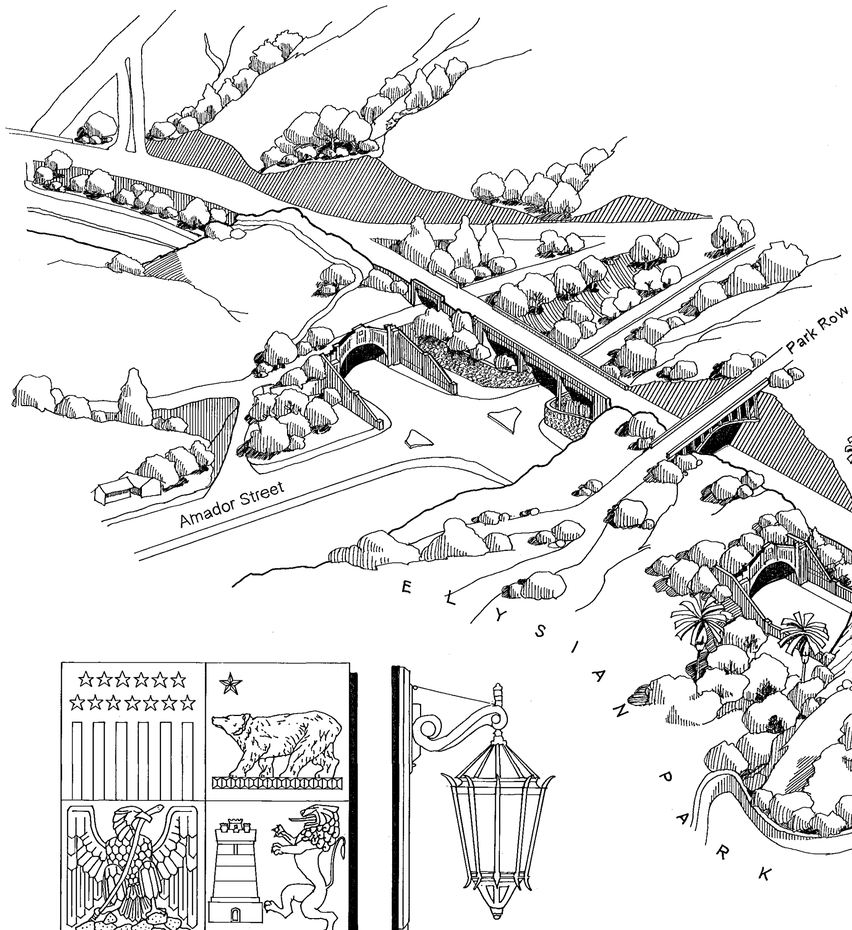
SHEET 19 OF 22

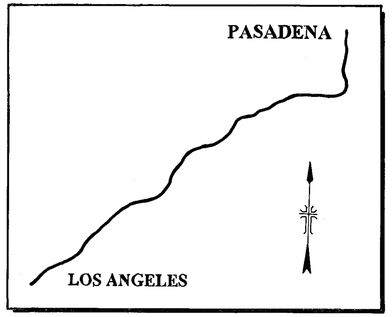
CALIFORNIA

FIGUEROA STREET TUNNELS (1931, 1935)

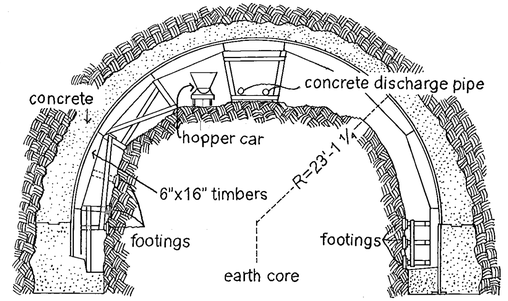
Arroyo Seco Parkway







REFERENCE MAP



TUNNEL CROSS SECTION

Construction involved partially excavating the tunnel as shown in the drawing above in order to place supports for pouring the concrete sidewalls and overhead. The hopper car was used for pouring concrete in the footings and sidewalls, while an air gun was used for placing concrete in the overhead areas. Following the curing period, when concrete gains its strength, the forms were removed and the tunnel excavation was completed.

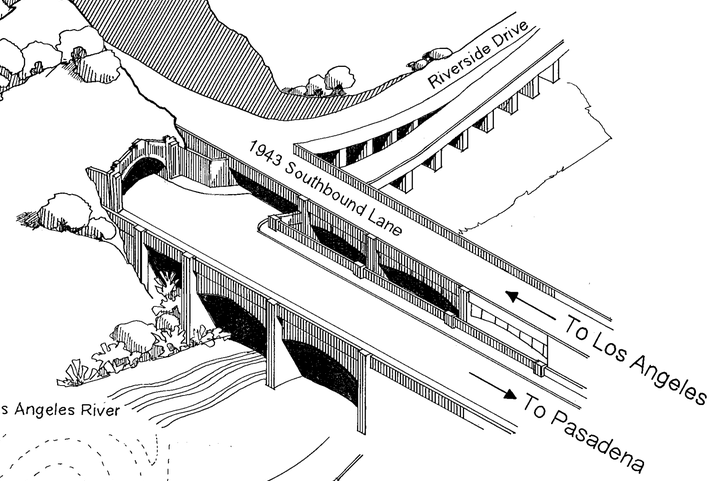
In the 1930s the City of Los Angeles built four extension tunnels to bring Figueroa Street from Second Street in downtown Los Angeles under Elysian Park and over the Los Angeles River. The tunnels relieved traffic congestion for vehicles traveling over the North Broadway Bridge and provided a more efficient link between Los Angeles and communities in the San Gabriel Valley. The tunnels officially became a part of the Arroyo Seco Parkway when adjacent lanes were opened for southbound traffic in 1943, permitting one-way northbound traffic through the tunnels.

Cored from beneath a shelf of rock, the tunnels preserved the continuity of Elysian Park as a recreational space. Two subterranean pedestrian tunnels gave visitors access to areas of the park on either side of the landscaped art deco tunnel portals. At the crown of the arches, the portals feature the City of Los Angeles emblem in a "sunburst" design.

City of Los Angeles Emblem

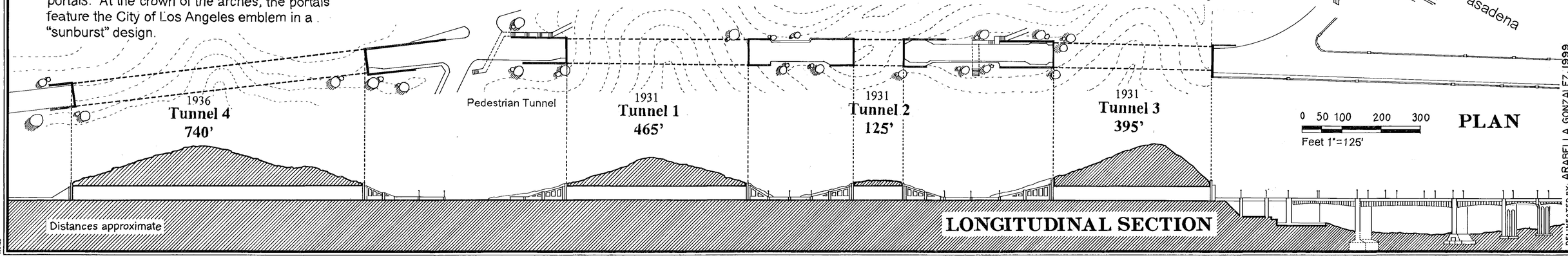
Original Lamp

DETAILS



GENERAL VIEW

Note: Drawings based on historical drawings and photographs.



PLAN

LONGITUDINAL SECTION

HISTORIC AMERICAN ENGINEERING RECORD CA-265

SHEET 20 OF 22

ARROYO SECO PARKWAY 1938 - 1953

LOS ANGELES COUNTY CALIFORNIA

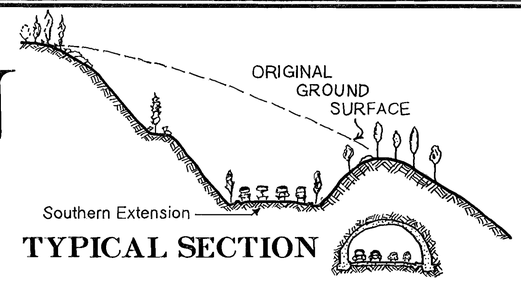
LOS ANGELES
SOUTH PASADENA, PASADENA

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

DELINEATED BY: ARABELLA GONZALEZ, 1999

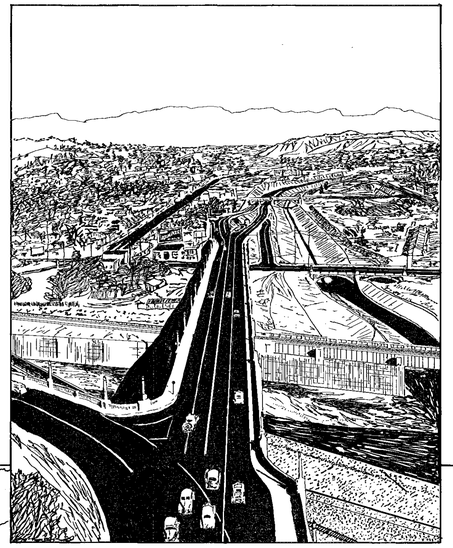
THE SOUTHERLY EXTENSION

1940-1943



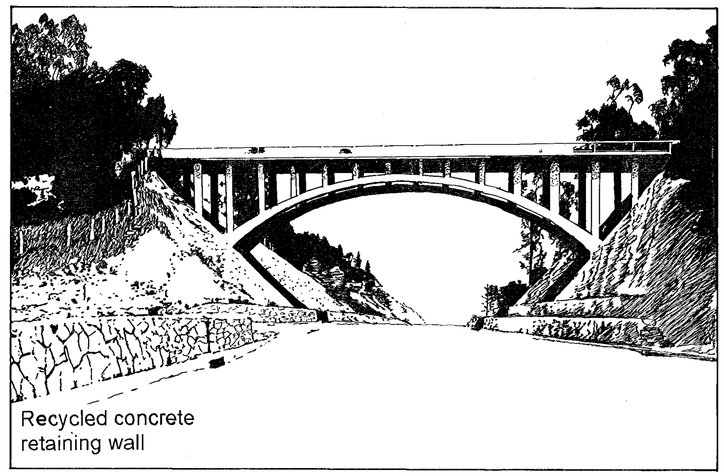
TYPICAL SECTION

Figueroa Street Tunnels



FIGUEROA VIADUCT, 1940

Planners had long anticipated that the first six miles of parkway alone would not solve the Los Angeles-Pasadena traffic problem. Three months before the first stretch was officially opened to the public, grading began for a "Southerly Extension" to bring the road approximately two miles closer to downtown Los Angeles. This extension was intended to alleviate the bottleneck occurring just east of the Figueroa Street Viaduct, where three-lane southbound parkway traffic met two-lane Figueroa Street. West of the viaduct, two-lane Figueroa Street traffic was slowed by at-grade intersections and a left turn, across southbound traffic, onto Riverside Drive (left). The southerly extension transformed a section of the four two-way lanes of Figueroa Street, with its existing tunnels and viaduct, into one-way northbound travel. Workers built four adjacent southbound lanes and another viaduct to bring the roadway as far south as Adobe Street.

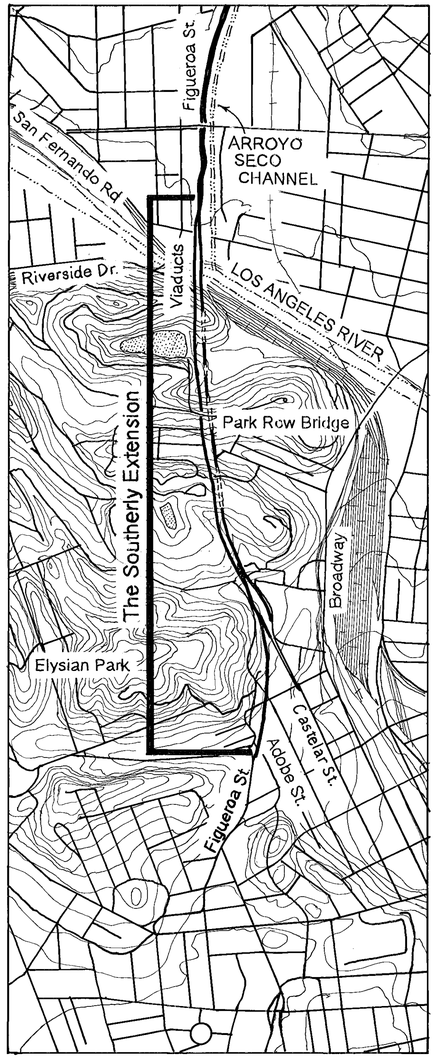


Recycled concrete retaining wall

PARK ROW BRIDGE

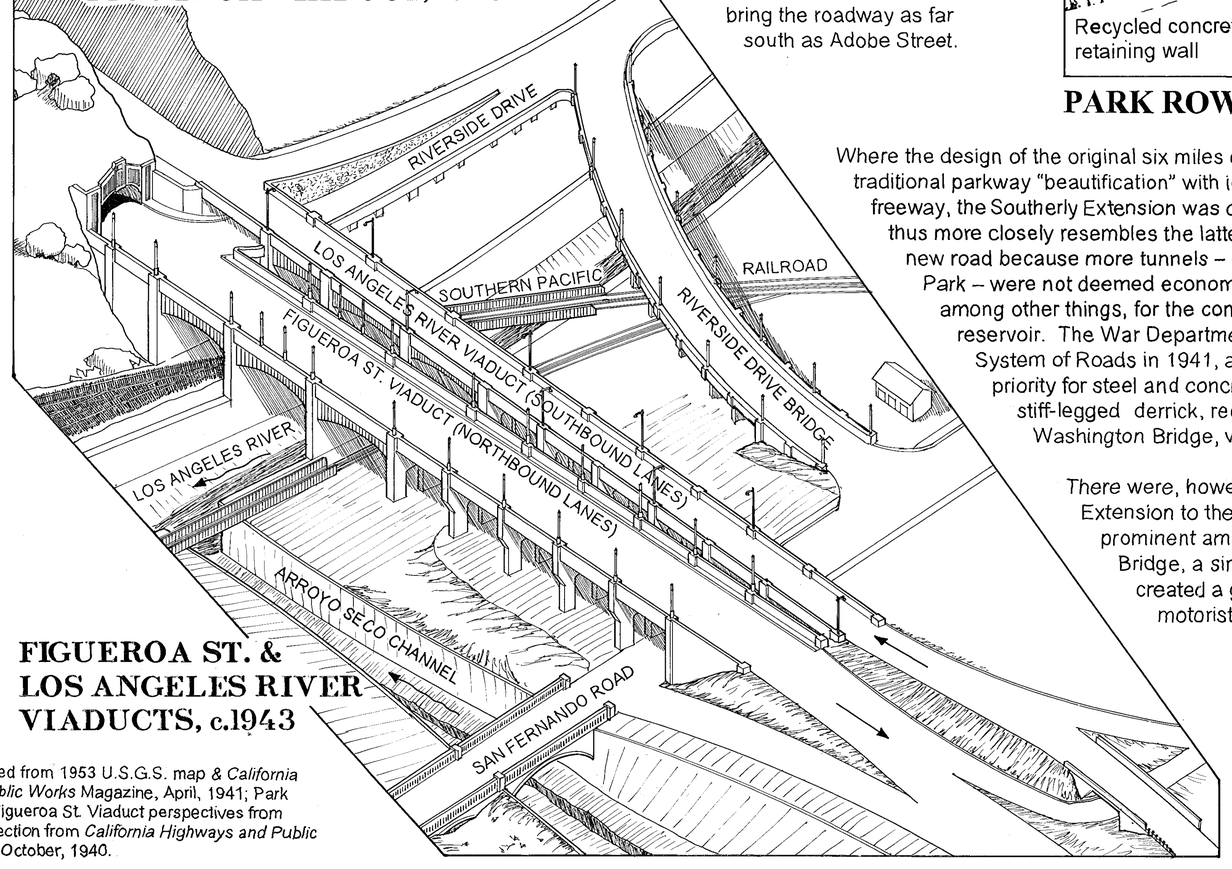
Where the design of the original six miles of the Arroyo Seco Parkway exhibited a balancing of traditional parkway "beautification" with ideas pertinent to the construction of a high-speed freeway, the Southerly Extension was conceived principally as a traffic artery, and thus more closely resembles the latter. Explosives ripped into a park hill to make way for the new road because more tunnels – which would have maintained the continuity of Elysian Park – were not deemed economical (upper right). Rock from the massive cut was used, among other things, for the construction of a dam to enlarge an existing city owned reservoir. The War Department declared the project part of the National Strategic System of Roads in 1941, allowing for federal dollars, WPA labor, and wartime priority for steel and concrete. To erect giant pieces of steel for the new viaduct, a stiff-legged derrick, recently used to build the New York-New Jersey George Washington Bridge, was rushed to Los Angeles.

There were, however, a few design features that linked the Southerly Extension to the "beautification" ideals of the original parkway. Most prominent among these was the construction of the graceful Park Row Bridge, a single-span, open-spandrel reinforced concrete design that created a gateway to downtown Los Angeles for southbound motorists (above).



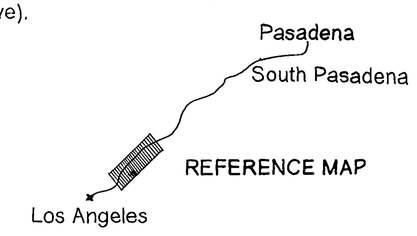
PLAN, 1943

0 FEET 1000 2000
0 METERS 500
SCALE: 1" = 1000'
N



FIGUEROA ST. & LOS ANGELES RIVER VIADUCTS, c.1943

Note: Plan adapted from 1953 U.S.G.S. map & *California Highways and Public Works* Magazine, April, 1941; Park Row Bridge and Figueroa St. Viaduct perspectives from historic photos; Section from *California Highways and Public Works* Magazine, October, 1940.



DELINEATED BY: CHRISTOPHER B. BROWN, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

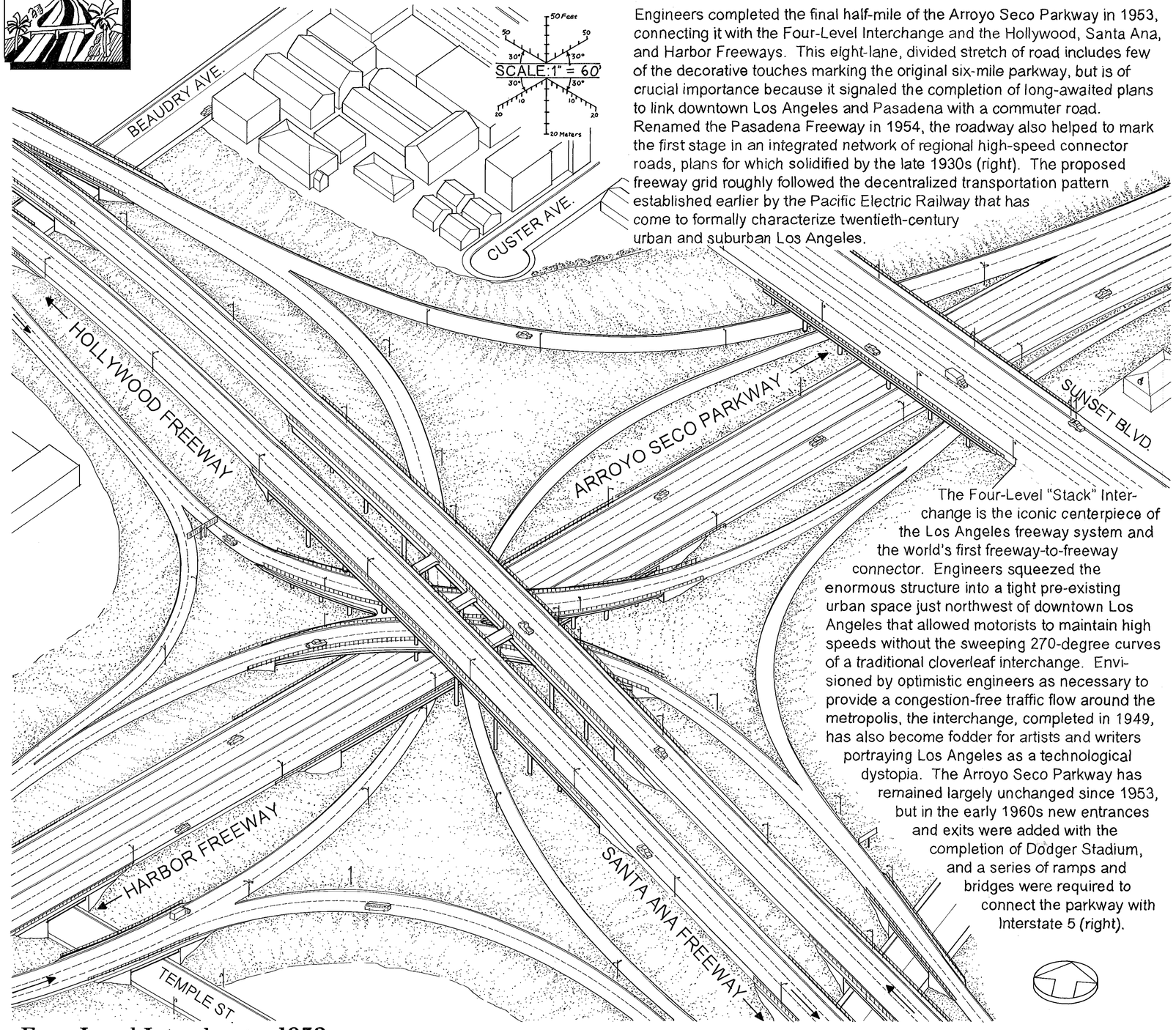
ARROYO SECO PARKWAY 1938- 1953
LOS ANGELES, SOUTH PASADENA, PASADENA
LOS ANGELES COUNTY CALIFORNIA

HISTORIC AMERICAN ENGINEERING RECORD CA-265
SHEET 21 OF 22

60423

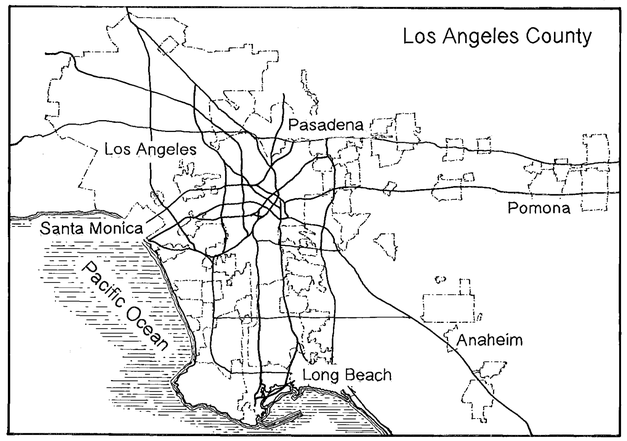
THE FREEWAY SYSTEM

Engineers completed the final half-mile of the Arroyo Seco Parkway in 1953, connecting it with the Four-Level Interchange and the Hollywood, Santa Ana, and Harbor Freeways. This eight-lane, divided stretch of road includes few of the decorative touches marking the original six-mile parkway, but is of crucial importance because it signaled the completion of long-awaited plans to link downtown Los Angeles and Pasadena with a commuter road. Renamed the Pasadena Freeway in 1954, the roadway also helped to mark the first stage in an integrated network of regional high-speed connector roads, plans for which solidified by the late 1930s (right). The proposed freeway grid roughly followed the decentralized transportation pattern established earlier by the Pacific Electric Railway that has come to formally characterize twentieth-century urban and suburban Los Angeles.

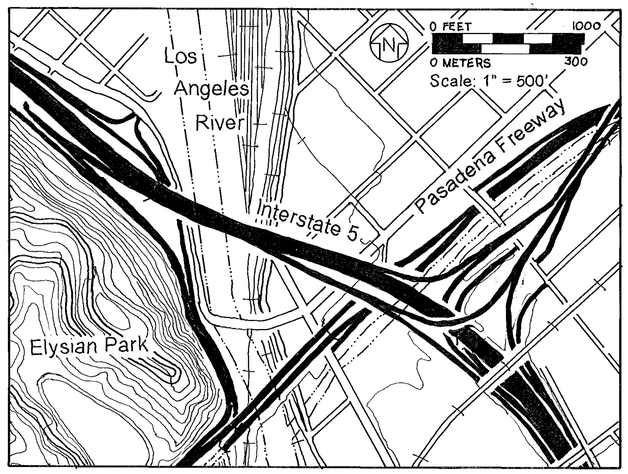


Four-Level Interchange, 1953

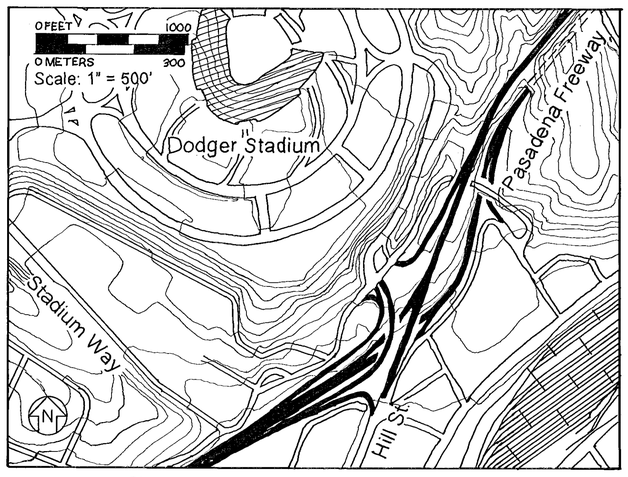
The Four-Level "Stack" Interchange is the iconic centerpiece of the Los Angeles freeway system and the world's first freeway-to-freeway connector. Engineers squeezed the enormous structure into a tight pre-existing urban space just northwest of downtown Los Angeles that allowed motorists to maintain high speeds without the sweeping 270-degree curves of a traditional cloverleaf interchange. Envisioned by optimistic engineers as necessary to provide a congestion-free traffic flow around the metropolis, the interchange, completed in 1949, has also become fodder for artists and writers portraying Los Angeles as a technological dystopia. The Arroyo Seco Parkway has remained largely unchanged since 1953, but in the early 1960s new entrances and exits were added with the completion of Dodger Stadium, and a series of ramps and bridges were required to connect the parkway with Interstate 5 (right).



Freeway Plan, 1939



Interstate 5 Interchange, 1962



Dodger Stadium and Interchange, 1962

Arroyo Seco Parkway

DELINEATED BY: CHRISTOPHER B. BROWN, 1999

ARROYO SECO PARKWAY RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

ARROYO SECO PARKWAY 1938-1953
LOS ANGELES COUNTY
LOS ANGELES
SOUTH PASADENA, PASADENA
CALIFORNIA

SHEET 22 OF 22

HISTORIC AMERICAN ENGINEERING RECORD CA-265

HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE. NAME OF DELINEATOR, DATE OF THE DRAWING IF REPRODUCED, PLEASE CREDIT.

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