

Sample
Sewer Area Study

ESTU#

PC #

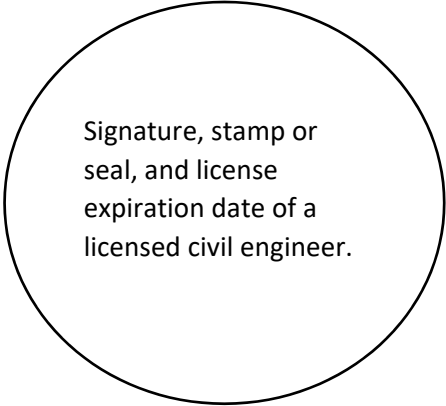
Project Site Address

TR #

PM #

Prepared by:

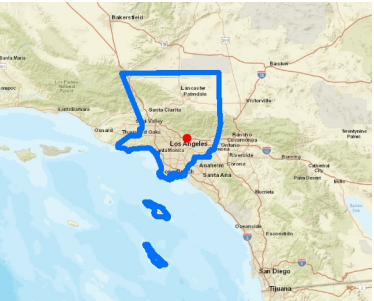
**County of Los Angeles
Department of Public Work
Land Development Division**



Signature, stamp or
seal, and license
expiration date of a
licensed civil engineer.

- I. Introduction
- II. Site description
- III. Project description
- IV. Description of existing sewer system
- V. Description of proposed sewer system
- VI. Methodology used and list of references
- VII. Sewer capacity analysis
- VIII. Proposed mitigation if necessary
- IX. Conclusion
- X. Appendix or Reference
 - a) . **Sewer Area Map**
 - b) . **Table of Sewer Capacity Analysis**
 - c) . **Will Serve Letter**
 - d) . **All Supporting Plans / Maps**
 - 1. **Tentative Map / Parcel Map / Site Plans**
 - 2. **SMD map**
 - 3. **As-built**

Sewer Area Map



Legend

- Parcel
- SMD Manholes
- Sanitary Sewer Pipe
- Other
- VCP

SEWER AREA MAP

SAMPLE ONLY

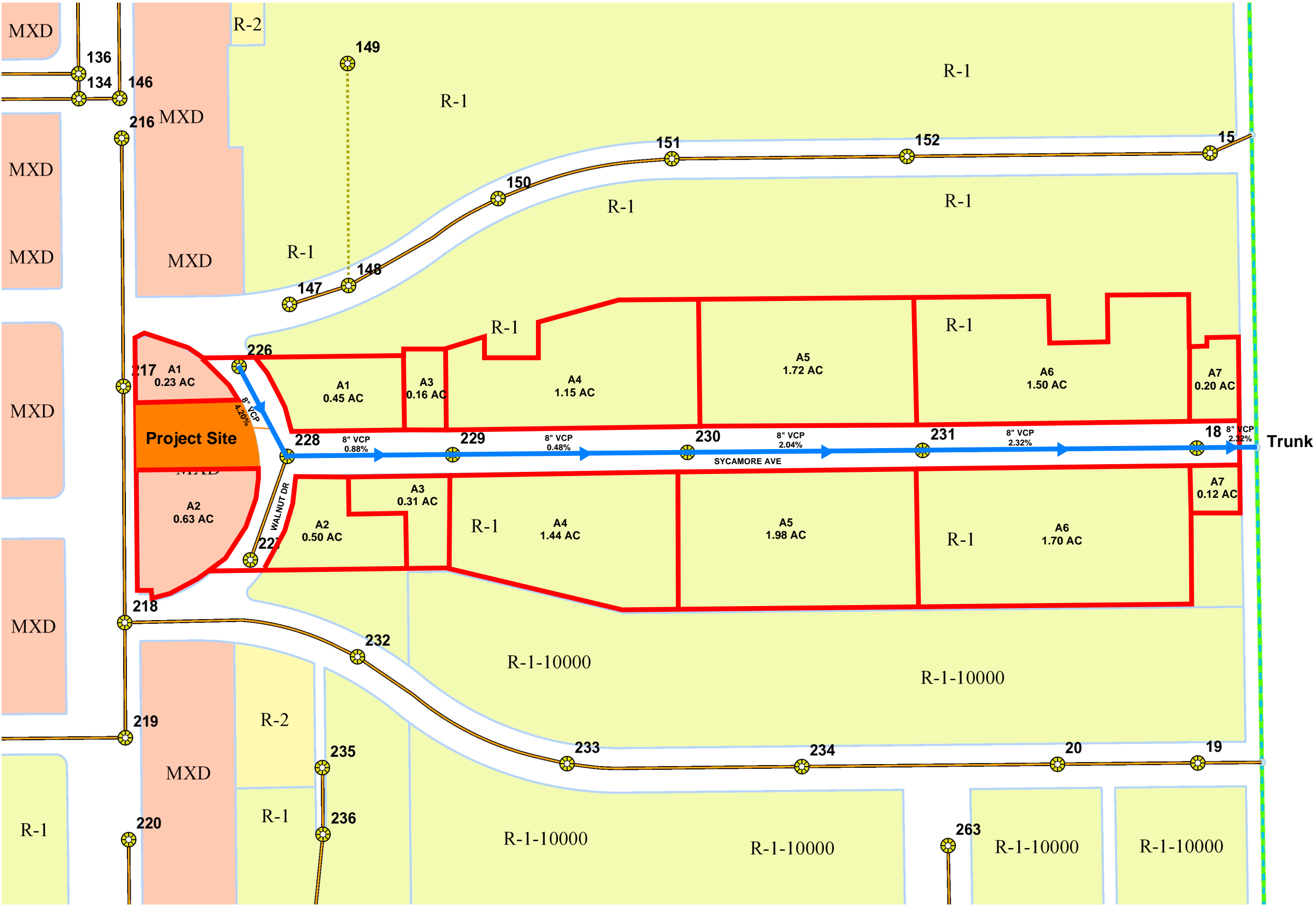
NOT FOR ANY USES

1:2,146



Notes

Data contained in this map was produced in whole or part from the Los Angeles County Department of Public Works' database.



0.07 Miles 0 0.03 0.07 Miles

Table of Sewer Capacity Analysis

Sewer Area Study Table

* Calculated using Kutter's Formula with n=0.013

** Design capacity keeps three decimal places at least

*** Based on current land use and coefficients per LA County, (Attach supporting calculations)

**** For pipes < 15", design capacity of the sewer mainline is defined as 1/2 full = 100% capacity (d/D)

***** For pipes ≥ 15", design capacity of the sewer mainline is defined as 3/4 full = 100% capacity (d/D)

Kutter's Formula

$$C = \frac{41.65 + \frac{0.00281}{s} + \frac{1.811}{n}}{1 + \frac{n}{\sqrt{R}} \left(41.65 + \frac{0.00281}{s} \right)}$$

$$V = C\sqrt{RS}$$

$$Q = CA\sqrt{RS}$$

Street Name	Segment		Pipe		* Design capacity		Area (Acres)	Zoning Coeff.	Calculated Flow (cfs)	***Cumulative Calculated Flow (cfs)	PC orCI Construction Plan #	%Full	Comment	Jurisdiction
	M.H. #	M.H. #	Size (in.)	Slope (%)	1/2 Full(<15")	3/4 Full(≥15")						Cumulative Flow / Capacity		
Walnut Dr. A1							0.23	0.015	0.003	0.003	CI 1374			LA County
Walnut Dr. A1							0.45	0.004	0.002	0.005	CI 1374			LA County
Project Site	226	228	8	4.2	1.137				0.010	0.015	CI 1374	1.34%	Under Capacity	LA County
Walnut Dr. A2							0.63	0.015	0.009	0.025	CI 1374			LA County
Walnut Dr. A2							0.5	0.004	0.002	0.027	CI 1374			LA County
Sycamore A3	228	229	8	0.88	0.519		0.47	0.004	0.002	0.029	CI 1374	5.50%	Under Capacity	LA County
Sycamore A4	229	230	8	0.48	0.383		2.59	0.004	0.010	0.039	CI 1374	10.17%	Under Capacity	LA County
Sycamore A5	230	231	8	2.04	0.792		3.7	0.004	0.015	0.054	CI 1374	6.79%	Under Capacity	LA County
Sycamore A6	231	18	8	2.32	0.845		3.2	0.004	0.013	0.067	CI 1374	7.88%	Under Capacity	LA County
Sycamore A7	18	Trunk	8	2.32	0.845		0.32	0.004	0.001	0.068	CI 1374	8.03%	Under Capacity	LA County

Project Site Flow = 10 Condominiums x 0.001 cfs/unit = 0.01 cfs

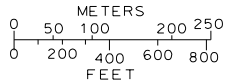
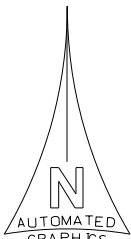
SMD Map

SEE SHT. NO. E-2015



THIS MAP IS INTENDED FOR
USE ONLY AS OPERATIONS
MAP BY LOS ANGELES
COUNTY SEWER
MAINTENANCE DISTRICTS.
LOS ANGELES COUNTY
EXPRESSLY DISCLAIMS ANY
LIABILITY FOR ANY
INACCURACIES WHICH MAY
BE PRESENT IN THIS MAP.

Project Site



LEGEND

- CLAY SEWERS, MAINTAINED BY SMD, 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- CLEANOUT
- LAMP HOLE
- PUMP STATION

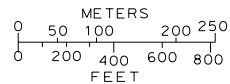
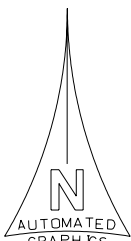
TOTAL MH'S THIS MAP: 506

MAP REV
10-15-15
DATA BASE REV
02-28-94

SEE SHT. NO. E-2017

SEE SHT. NO. E-2068

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LEGEND

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- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.D. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 31

LOS ANGELES COUNTY
SEE SHT. NO. E-2016
SEE SHT. NO. E-2070

1

2

3

1

2

3

As-Built

4-C

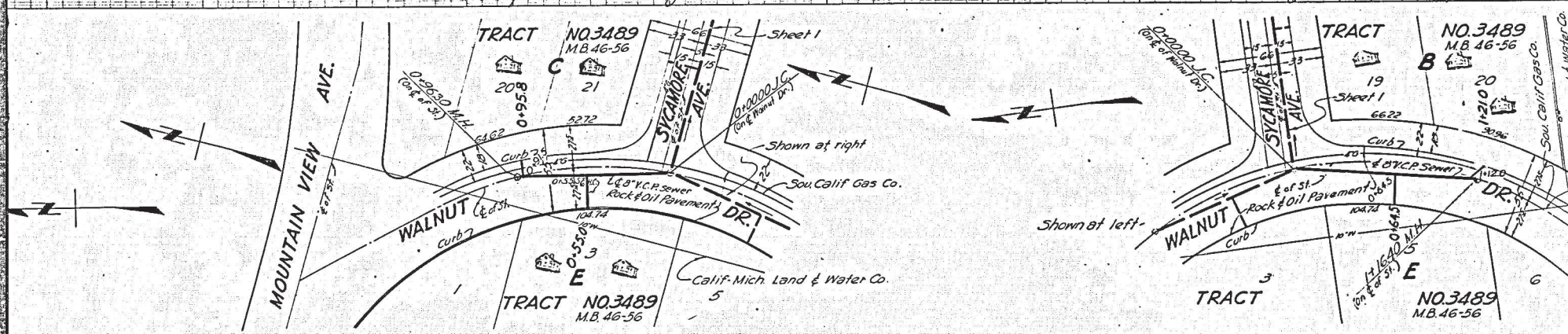
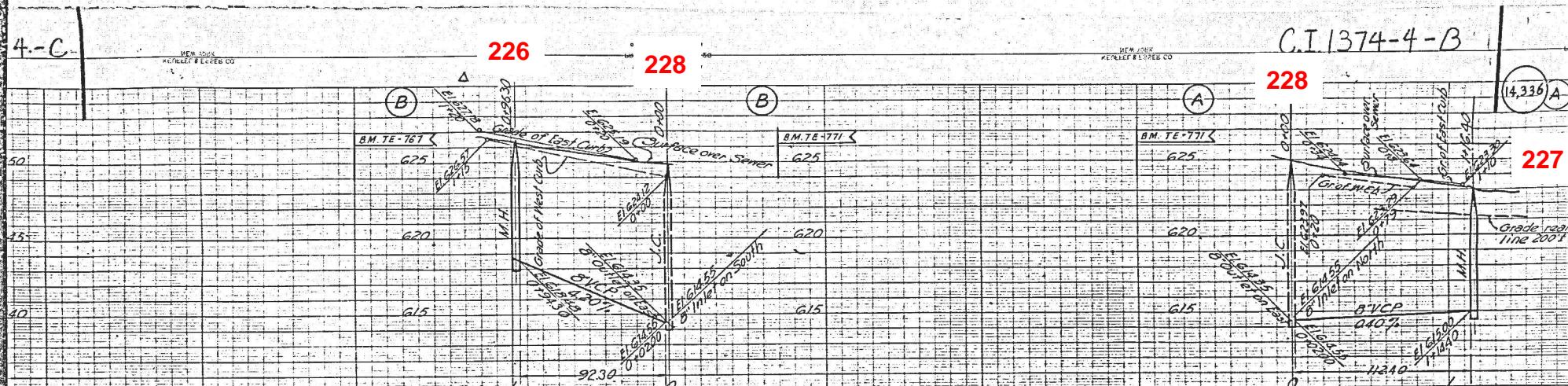
226

228

C.I. 1374-4-B

228

227



F.B. 1647-73-82

F.B. 1647-73-82

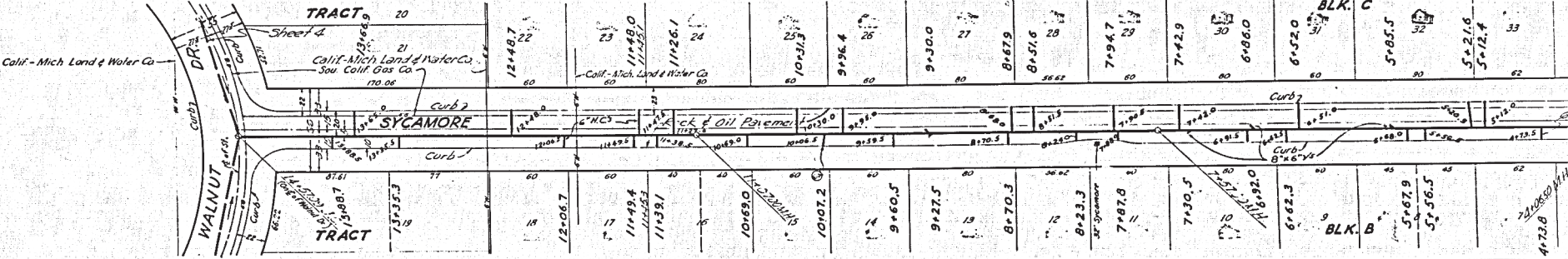
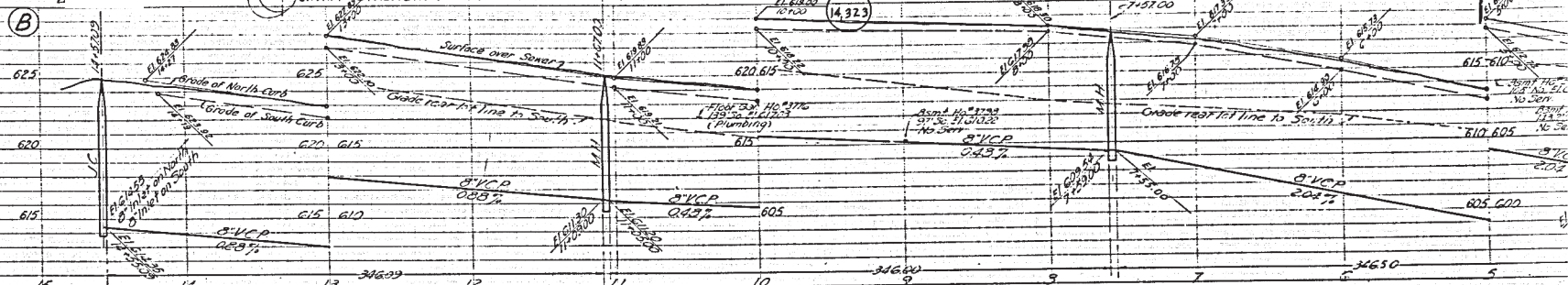
228

229

230

C.I. 1374-1-E

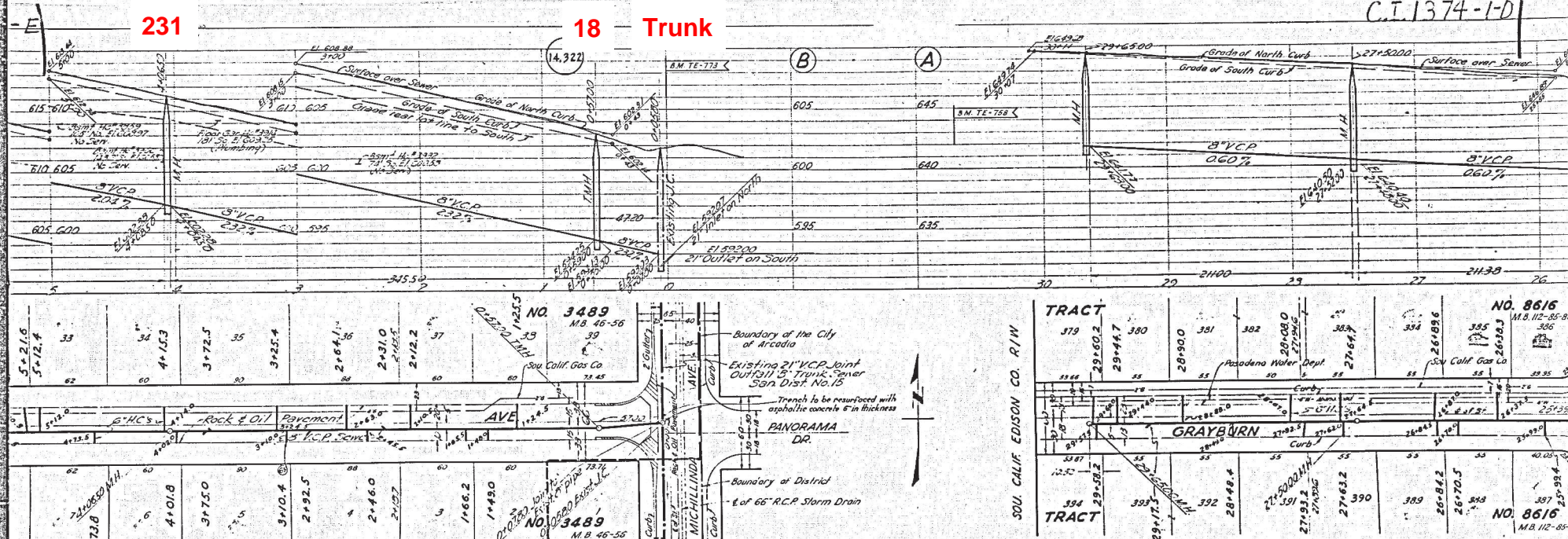
18-771 Elev. 623.50, P.B. 1568, pg. 138
WALNUT DR. & SYCAMORE AVE., S.E. cor.
8" sp. in curb, 4" at E. end of CA



P.B. 1047-23-44

18 Trunk

CI 1374-1-D



Owner 1st & 2nd had not
require service to
B.A. (FAM) 07/1/51