FOR CONTRACT NO.: 07-258934

INFORMATION HANDOUT

PERMITS

CITY OF PASADENA (SAMPLE PERMIT)

MATERIALS INFORMATION

HAZARDOUS WASTE SITE INVESTIGATION, DATED MAY 27, 2011

GEOTECHNICAL REVIEW AND RECOMMENDATION, DATED FEB 2, 2012

AS-BUILTS

AS-BUILT ELECTRICAL PLANS

ROUTE: 07-LA-210-R15.0/R36.0

DEPARTMENT OF PUBLIC WORKS

Orig. - Customer

CITY OF PASADENA

NO 49351 DL

Public Improvement Permit

CITY HALL
100 N. GARFIELD AVE., N140
(626) 744-4195

Date August 24, 2011

THIS CERTIFIES, that California Dept of Transportation (Sujaya Kalainesan)

Address 100 S Main St Phone 213 786 1684

City LA State CA Zip

is hereby granted permission to construct (5) drive approaches (4) on Maple St and (1) on Corson St per Cal Trans Standards Contractor to apply for permit prior to work Traffic control per Cal Trans standards this permit is temporary for bidding purposes official permit shall be issued after contract has been awarded to contractor for Cal Trans

at Various

per Chapter 12.24 of the Pasadena Municipal Code, as amended, and in accordance with the "Standard Specifications For Public Works Construction", latest edition, and any special provisions of the Department of Public Works.

Permit Expires on:

August 24, 2012

Inspection MUST BE requested ONE DAY in advance.

Daniel A. Rix, City Engineer

By: AS

VOID UNLESS VALIDATED BY CASHIER

FEES		
Processing	$	0.00
Inspection	$	0.00
Rent	$	0.00
Other	$	0.00
Penalty	$	0.00
Total Fees	$	0.00
DEPOSITS		
Paving	$	0.00
Street Tree	$	0.00
Other	$	0.00
Total Deposits	$	0.00
PAY CASHIER	**$**	**0.00**

A VALIDATED COPY OF THIS PERMIT MUST BE KEPT AT THE JOB SITE AT ALL TIMES.

Copy

Memorandum

To: Sujaya Kalainesan, P.E.
Project Engineer

Date: May 27, 2011
File: LA-210 PM 0.0/36.0
LA River TMDLs Unit
EA: 258931 (**0700000481**)

From: **DEPARTMENT OF TRANSPORTATION**
Office of Environmental Engineering & Corridor Studies (OEECS)
Hazardous Waste Branch, North Region

Subject: Preliminary Hazardous Waste Site Investigation for 21 Proposed BMP Locations

This is in response to your memorandum dated September 08, 2010 requesting to provide hazardous waste assessment for the LA River Metal TMDLs project to attain water quality standards for storm-water discharged from the State's drainage system to the Los Angeles River. The work on this project will include construction of media filters, infiltration basins/tranches and/or bio-filtration swales. There may be a need for reconstructing the existing drainage system at the project locations to install devices, and the devices are to be constructed outside the traveled way and within the State Right of Way. Twenty-one (21) locations for the placement of devices have been identified based on the recommendation of the Corridor Storm-water Management Study for Route 210. There are no base maps available for the proposed locations. Conceptual plans indicating the proposed locations of the devices are provided to our Branch.

Previous Hazardous Waste Assessment

A hazardous waste assessment for 10 locations (Site Nos. 83, 107, 115, 121, 129, 138, 142, 144, 147, and 150) was conducted in March 2010 by CH2M HILL. Site No. 107 has been removed from the proposed location per project engineer's request. The Environmental Prescreening Report prepared by CH2M HILL presented soil sample test data for California Code of Regulations (CCR) Title 22 heavy metals, soluble lead, total petroleum hydrocarbons (TPHs) as gasoline and diesel, pH, volatile organic volatile compounds (VOCs), and semi-volatile organic compounds (SVOCs). For each location, four (4) soil samples from each of the two (2) borings were collected at different depths (1 foot, 4 feet, 5 feet and 7 feet or 10 feet) for analysis. No surface samples were collected and analyzed. The data was not adequate to classify the soil appropriately, and other 12 locations did not have any soil analytical results. A Task Order (TO) to conduct hazardous waste site investigation for all 21 proposed locations (see attached Table 1 – Proposed BMP Sites) has been initiated by our branch for proper classification of the soils.

Hazardous Waste Site Assessment

The hazardous waste branch has initiated a TO to conduct Site Investigation (SI) for Aerially Deposited Lead (ADL), CCR Title 22 heavy metals, pH, TPHs, VOCs, and SVOCs. The SI is being performed by Geocon Consultants, Inc., and the final hazardous waste SI report is expected to be completed by June 03, 2011. Per your request, we are providing preliminary hazardous waste assessment based upon the Draft SI report. Two (2) copies of the final hazardous waste SI report will be provided to your office after it becomes available.

Aerially Deposited Lead (ADL)
Forty-two borings (two for each location) and three (3) to five (5) samples from each location were collected and analyzed. The summary of ADL test results for these 21 proposed locations is presented in Table 2. The following are detail information for each location.

Location Nos. 1, 3, 4, 5, 6, 8, 9, 11, 12, 15, 18, 19, and 21 (13 Locations)
None of the samples collected at these 13 locations exhibits total lead and soluble lead levels higher than 1,000 mg/kg and 5.0 mg/liter, respectively. All excavated soil from these locations would be classified as non-hazardous waste with respect to lead content.

Location Nos. 2, 10, 17, and 20 (4 locations)
Excavated soils from the surface to a depth of 0.5 foot would be considered as California hazardous waste (Caltrans Type Y-1 or Z-2 Soil). Underlying soils from 0.5 to 5.0 feet or deeper is classified as non-hazardous waste. Based on statistical analysis of combined soil layers, we have the following results:

- For location nos. 2 and 20, if soil excavated from surface to a depth of 5.0 feet or deeper are managed as a whole, then it could be classified as non-hazardous waste.
- For location nos. 10 and 17, if soil excavated from surface to a depth of 2.0 feet or deeper are managed as a whole, then it could be classified as non-hazardous waste.

Location Nos. 7, 13, 14, and 16 (4 locations)
Excavated soils from the surface to a depth of 2.0 foot would be considered as California hazardous waste (Caltrans Type Y-1 or Z-2 Soil). Underlying soils from 2.0 to 5.0 feet or deeper is classified as non-hazardous waste. Based on statistical analysis of combined soil layers, we have the following results:

- For location no. 7, if soil excavated from surface to a depth of 3.0 feet or deeper are managed as a whole, then it could be classified as non-hazardous waste.

If ADL contaminated soils need to be disposed to a landfill facility, please refer to the latest Contract Cost Database at http://t8web/design/contractcost/ for the most current estimate.

Title 22 Metals
Title 22 metals (other than lead) did not exceed their respective TTLCs. Cadmium was the only metal reported at a total concentration greater than 10 times STLC. The concentrations of all metals except lead were within the reported range of background concentrations.

pH
Soil pH ranged from 6.3 to 9.1 and the soil is suitable for reuse under the DTSC Variance based on pH. If soil is transported to offsite it would be considered as non-hazardous waste based on pH.

Total Petroleum Hydrocarbons (TPHs)
The total petroleum hydrocarbons in C28 to C40 range was reported for six (6) of 23 samples, and the concentration ranged from 15 to 140 mg/kg. The TPHs was reported in soil samples collected from location nos. 1 (depths from surface to 1 foot), 7 (depths from surface to 3 feet), 8

(depths from surface to 2 feet), and 20 (depths from 3 feet to 5 feet). The reported concentrations do NOT exceed the Environmental Screening Levels (ESLs) for industrial use land. However, since TPHs is present these soils can't be reused using Department of Toxic Substance Control (DTSC) Variance. These soils should be disposed of at a permitted landfill facility. Please refer to the latest Contract Cost Database at http://t8web/design/contractcost/ for the most current estimate.

Volatile Organic Compounds (VOCs) and Semi-Organic Organic Compounds (SVOCs)
There is only one (1) soil sample collected from location 20 was reported to contain 4-isopropyltoluene at a concentration of 7.3 mg/kg, however, there is no risk based screening levels for soil or MCL-based screening levels available for 4-isopropyltoluene. Excavated soils from these locations would be classified as non-hazardous waste with respect to VOCs and SVOCs content.

Please notify the hazardous waste branch if there is any change in the scope of work. If you have any questions or need any more information, please contact me at extension 7-0670 or Jack Liu of my staff at 7-1350.

Ayubur Rahman

Ayubur Rahman, P. E.
Senior Transportation Engineer
Hazardous Waste Coordinator, North Region

Table 1. Proposed BMP Sites

Location Number	Site No – From Corridor Study	PM	Type	Side (EB/WB) – Cross St	Proposed Depth of Device ft
1	-[a]	15.9	Austin or Delaware Sand Filter	EB – Honolulu Ave	16*
2	-[a]	19.75	Austin or Delaware Sand Filter	EB – Angeles Crest Hwy	16*
3	44[b]	27	Austin Vault Sand Filter	WB – Hill Ave	16*
4	49[b]	27.49	Austin Vault Sand Filter	WB – Allen Ave	16*
5	52[b]	27.73	Austin Vault Sand Filter	WB – Craig Ave	16*
6	53[b]	27.94	Austin Vault Sand Filter	WB – Martelo Ave	16
7	61[b]	28.53	Austin Vault Sand Filter	EB – San Gabriel Blvd	16*
8	65[b]	28.79	Austin Vault Sand Filter	EB - Sunny Slope Ave	16*
9	83[b]	29.69	Delaware Sand Filter	EB – Michillinda Ave	14*
10	115	32.48	Infiltration Trench	EB – 5th Ave	4.33
11	121[b]	32.83	Infiltration Basin	EB – Huntington Drive	5.3
12	129[b]	33.73	Delaware Sand Filter	EB – Magnolia Ave	14*
13	138[b]	34.37	Infiltration Trench	WB – Shamrock Ave	4.3
14	142[b]	34.66	Delaware Sand Filter	WB – Mountain Ave	14*
15	144[b]	34.84	Infiltration Trench	WB – Bradbury Ave	5.3
16	147[b]	35.05	Infiltration Trench	WB – Buena Vista Ave	4.33
17	150[b]	35.29	Delaware Sand Filter	WB - Brycedale Ave	14*
18	88	29.83	GSRD/Biofiltration Strip Combination	WB – Michillinda Ave	N/A
19	96	30.64	GSRD/Biofiltration Swale Combination	WB – Baldwin Ave	N/A
20	108A	31.94	GSRD/Biofiltration Strip Combination	WB – Santa Anita Ave	N/A
21	120	32.83	GSRD/Biofiltration Swale Combination	WB – Huntington Ave	N/A

[a] – Proposed BMPs Sites are not selected from Corridor Study
[b] - Proposed BMPs Sites are selected from Corridor Study
* - Device depth not finalized at this point, maximum allowable Design Height provided. (Allow an additional 1 ft for concrete footing for excavation depth).

Table 2. Summary of ADL Test Results

Location Number	Site No.	PM	Boring Nos.	ADL Test Results	Soil Type
1	-[a]	15.9	1134-101 & 102	No HW Concern	X
2	-[a]	19.75	1134-103 & 104	Surface to 0.5 feet (HW)	Y-1/Z-2
3	44[b]	27	1134-105 & 106	No HW Concern	X
4	49[b]	27.49	1134-107 & 108	No HW Concern	X
5	52[b]	27.73	1134-109 & 110	No HW Concern	X
6	53[b]	27.94	1134-111 & 112	No HW Concern	X
7	61[b]	28.53	1134-113 & 114	Surface to 2.0 feet (HW)	Y-1/Z-2
8	65[b]	28.79	1134-115 & 116	No HW Concern	X
9	83[b]	29.69	1134-117 & 118	No HW Concern	X
10	115	32.48	1134-119 & 120	Surface to 0.5 feet (HW)	Y-1/Z-2
11	121[b]	32.83	1134-121 & 122	No HW Concern	X
12	129[b]	33.73	1134-123 & 124	No HW Concern	X
13	138[b]	34.37	1134-125 & 126	Surface to 2.0 feet (HW)	Y-1/Z-2
14	142[b]	34.66	1134-127 & 128	Surface to 2.0 feet (HW)	Y-1/Z-2
15	144[b]	34.84	1134-129 & 130	No HW Concern	X
16	147[b]	35.05	1134-131 & 132	Surface to 2.0 feet (HW)	Y-1/Z-2
17	150[b]	35.29	1134-133 & 134	Surface to 0.5 feet (HW)	Y-1/Z-2
18	88	29.83	1134-135 & 136	No HW Concern	X
19	96	30.64	1134-137 & 138	No HW Concern	X
20	108A	31.94	1134-139 & 140	Surface to 0.5 feet (HW)	Y-1/Z-2
21	120	32.83	1134-141 & 142	No HW Concern	X

[a] – Proposed BMPs Sites are not selected from Corridor Study
[b] – Proposed BMPs Sites are selected from Corridor Study
* - Device depth not finalized at this point, maximum allowable Design Height provided. (Allow an additional 1 ft for concrete footing for excavation depth).

State of California

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: **MR. NADER GOBRAN**
Senior Transportation Engineer
District 7- Office of Design D

Date: February 2, 2012

File: 07- LA -210 PM R15.0/R36.0
07-258931 (0700000481)
Austin Vaults Sand Filters
Nos. 3, 4, 5, 6, 7, 8, 9, 14, 15, 17

Attention: Ms. Sujaya Kalainesan

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design - South 1

Subject: Plan Review Comments and Geotechnical Review Comments for Construction of Austin Vaults Sand Filters at Interstate 210, Near Pasadena, County of Los Angels

The Office of Geotechnical Design South 1 (OGDS1), Branch D has reviewed project plans dated January 27, 2012 provided by the Office of Design D. Based on the review and our verbal communications on the above project, OGDS1 has the following comments on the geotechnical issues at the subject Austin vault sand filters.

1. The plans indicate that some of the proposed vaults would be constructed on the lower portions of slopes that contain sound walls typically located at the top of the slope. It is our understanding that the nearest walls of the vault would be constructed at distances ranging from 5 to 7 feet from the sound walls. The slope below the sound walls would be regraded in the project to provide a slope ratio of 1:2 (vertical: horizontal).

2. Some of the sound walls are supported on pile foundations.

3. The Caltrans Standard Plans indicate that the descending slopes below sound walls should be no steeper than 1:2 (vertical: horizontal). They also indicate that the sound wall foundation should be located on flat grade at a distance no less than 1 foot from the hinge point of the slope. Our review of the plans indicates that at location Nos. 3, 4, and 6, the downward slope initiates from/near the faces of sound walls and therefore may not in compliance with the Standard Plans. We recommend that the District Design provide the design loads to OGDS1 for necessary analysis. Based on the loading provided, OGDS1 would evaluate the capacity of pile foundations at such locations to verify their adequacy.

Construction Recommendations

(a) All excavations for vaults should be performed with permanent shoring that could be either incorporated into the vaults or left in place as separate structures for the design life of the vaults.

(b) Shoring should consist of soldier pile-lagging system. The contractor should evaluate the lateral deflection of the shoring elements and monitor during the construction for compliance with

the design. The maximum deflection allowed in shoring is 1/2 inch; and this limit should not be exceeded anytime during the construction. Depending on the slope and excavation heights, tie-back systems may be needed.

(c) The shoring should be designed based on the procedures outlined in Caltrans Bridge Design Specifications. For the design, a friction angle of 32 degrees and zero cohesion should be assumed. The unit weight of 130 pcf should be assumed for the retained material. There is no groundwater at the site.

(d) The soldier pile/anchor system should be built using a top-down construction method.

(e) The lagging should consist of either timber, treated to last for the design life of the project, or appropriately designed concrete panels. The shoring should be provided with appropriate drainage features to mitigate a hydrostatic pressure build up behind the wall. The drainage system should be approved by the engineer.

(f) In the case that an anchored system is used, the anchors should be installed in between the sound wall piles at a downward angle of 15 degrees from the horizontal. The anchors should have a minimum unbonded length of 15 feet. However, the bonded zones of the anchors should be located a minimum distance of 10 feet behind the sound wall piles. The anchors should be installed and tested in accordance with applicable Caltrans procedures.

(g) The soldier pile/anchor wall systems can be incorporated into the proposed Austin vault structure or left in place as separate structures. If the anchored walls are incorporated into the vault, then appropriate measures should be provided to outlet the drainage from the retained soil.

Please call Gamini Weeratunga at (949) 440-3427 or Shiva Karimi at (213) 620-2146, with any questions you may have on the above comments.

Prepared by: Date: 2/2/2012

Gamini Weeratunga, C
Transportation Engineer
OGDS1, Branch D

REGISTERED PROFESSIONAL ENGINEER GAMINI C. WEERATUNGA No. 2403 Exp. 9/30/12 GEOTECHNICAL STATE OF CALIFORNIA

Reviewed by: Date: 2/2/2012

P Shiva Karimi

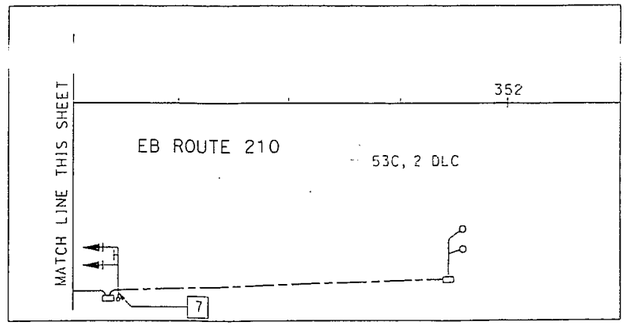
Shiva Karimi, Ph D
Senior Transportation
OGDS1, Branch D

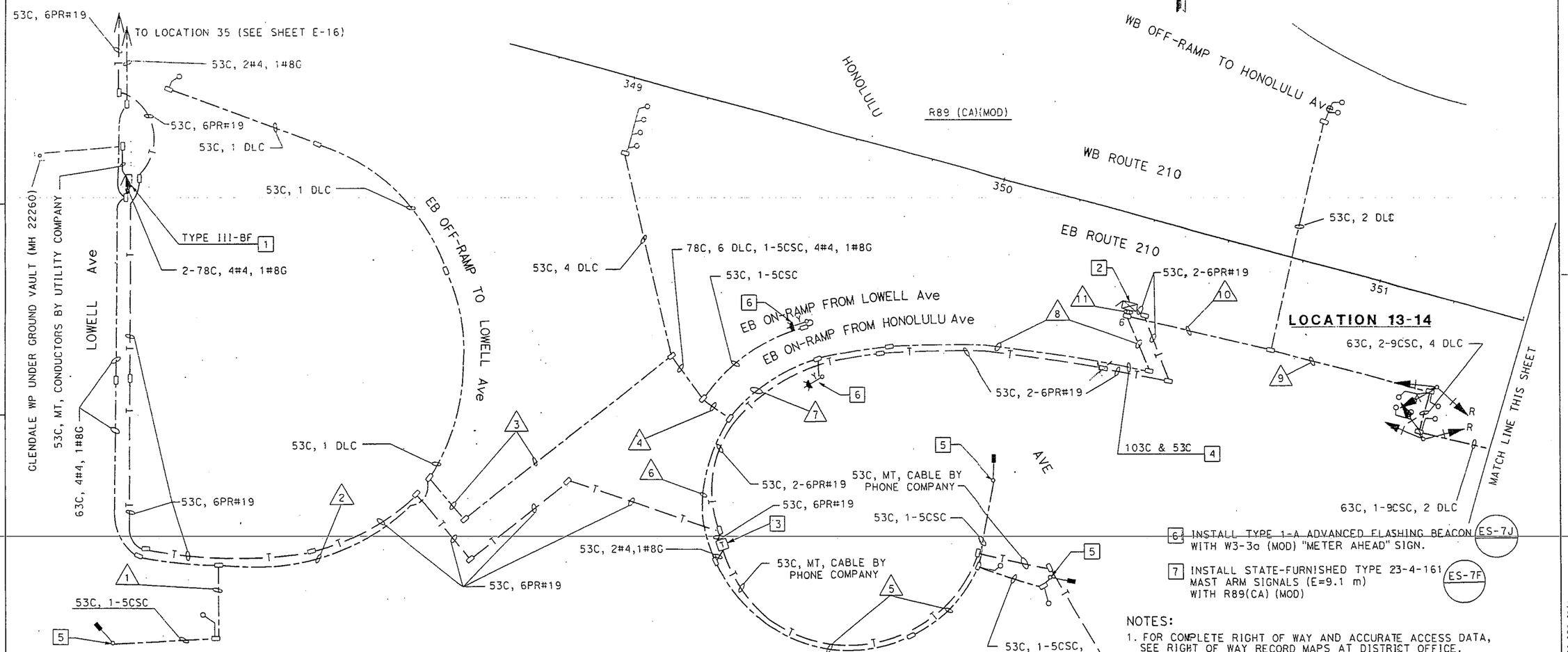
REGISTERED PROFESSIONAL ENGINEER SHIVA KARIMI No. GE2651 Exp. 6/30/12 GEOTECHNICAL STATE OF CALIFORNIA

cc.

District Project Manager	Ojas Sheth	Ojas_Sheth@dot.ca.gov
GS Corporate	Shira Rajendra	Shira Rajendra@dot.ca.gov
District Materials Engineer	Kirsten Stahl	Kirsten_Stahl@dot.ca.gov

	CONDUIT AND CONDUCTOR SCHEDULE											
		PIN										
		/1\	/2\	/3\	/4\	/5\	/6\	/7\	/8\	/9\	/10\	/11\
DLC	QUEUE DETECTOR	1	1	1	1	2	2	2	3			3
	DEMAND DETECTOR									2	2	2
	PASSAGE DETECTOR									2	2	2
	SURVEILLANCE DETECTOR				4				4			4
	COUNT DETECTOR			1	1				1	2	4	5
9CSC	RAMP METERING SIGNAL									3	3	3
5CSC	"METER-ON" SIGN, FLASHING BEACON	1	1	1	2	2	2	4	5			5
#4	RAMP METERING SERVICE / TDC		4	4	4		2	2	2			2
#8	GROUND		1	1	1		1	1	1	1	1	1
CONDUIT SIZE (mm)		63	63	63	78	53	63	63	103	78	78	2-78





6 INSTALL TYPE 1-A ADVANCED FLASHING BEACON WITH W3-3a (MOD) "METER AHEAD" SIGN. ES-7J

7 INSTALL STATE-FURNISHED TYPE 23-4-161 MAST ARM SIGNALS (E=9.1 m) WITH R89(CA) (MOD) ES-7F

NOTES:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. FOR RAMP METERING SYSTEM INSTALLATION DETAILS SEE SHEET E-29.
3. FOR LEGEND AND ABBREVIATIONS SEE SHEET E-1.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PROJECT NOTES: (FOR THIS SHEET)

1 INSTALL 120/240 V, TYPE III-BF, METERED SERVICE EQUIPMENT ENCLOSURE WITH:
100 A, 240 V, 2P, CB- MAIN BREAKER
30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 13-14)
30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 35)
20 A, 120 V, 1P, CB- TELEPHONE DEMARCATION CABINET
ID No. 07-53-210-0-015.640
(CITY OF GLENDALE WATER & POWER)
SERVICE ADDRESS: 3928¼ LOWELL Ave

2 INSTALL STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY ON A NEW FOUNDATION. CABINET TO INCLUDE STATE-FURNISHED MODEL 400 MODEM. INSTALL TELEPHONE BRIDGE WITH A 12-PAIR TERMINAL BLOCK.

3 INSTALL TDC TYPE C PER STANDARD PLAN ES-3F.

4 ATTACH CONDUIT TO STRUCTURE BARRIER PER DETAIL ON SHEET E-30.

5 INSTALL "METER-ON" SIGN ON TYPE 1-A STANDARD PER DETAIL B ON SHEET E-29.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

RAMP METERING SYSTEM (LOCATION 13 AND 14)

SCALE 1:500

E-17

DIST	COUNTY	ROUTE	PM/KM	SHEET NO.	TOTAL SHEETS
07	LA	210	R1.0/R4.4	177	286

12-18-06

ACT CONSULTING ENGINEERS
5 CORPORATE PARK
SUITE 260
IRVINE, CA 92606

HON WAI YOW No. 43276 Exp. 3/31/08 CIVIL

DESIGNED
CHECKED
CECILIO BURCIAGA

Caltrans

RELATIVE BORDER SCALE

CU 07383 | EA 258001

00-00-00 | LAST REVISION | DATE PLOTTED = 26-DEC-2006 | TIME PLOTTED = 12:03

DIST	CNTY	ROUTE	PROJECT TOTAL PROJECT	SHEET	TOTAL SHEETS
07	LA	210	R1.0/R40.4	183	286

REGISTERED PROFESSIONAL ENGINEER
12-18-06
PLANS APPROVAL DATE

HON WAI YOW
No. 43276
Exp. 3/31/08
CIVIL

ACT CONSULTING ENGINEERS
5 CORPORATE PARK
SUITE 260
IRVINE, CA 92606

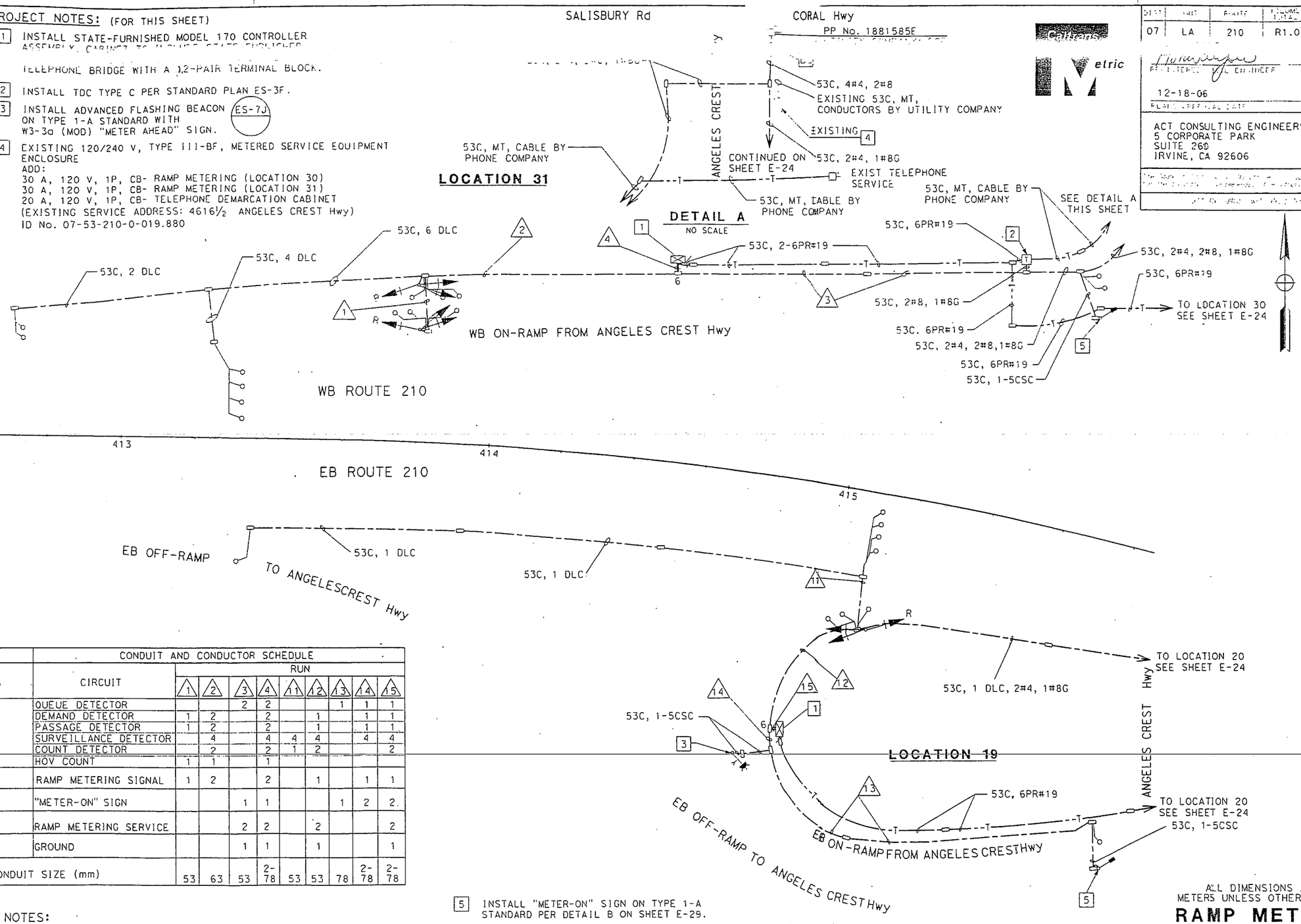
DATE REVISED BY	DATE REVISED BY
10/06	10/06

CALCULATED/DESIGNED BY J. SHIAO
CHECKED BY S. YEH
DESIGN OVERSIGHT CECILIO BURCIAGA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT NOTES: (FOR THIS SHEET)

1. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY, CABINET TO HOUSE STATE FURNISHED TELEPHONE BRIDGE WITH A 12-PAIR TERMINAL BLOCK.
2. INSTALL TDC TYPE C PER STANDARD PLAN ES-3F.
3. INSTALL ADVANCED FLASHING BEACON (ES-7J) ON TYPE 1-A STANDARD WITH W3-3a (MOD) "METER AHEAD" SIGN.
4. EXISTING 120/240 V, TYPE III-BF, METERED SERVICE EQUIPMENT ENCLOSURE
   ADD:
   30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 30)
   30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 31)
   20 A, 120 V, 1P, CB- TELEPHONE DEMARCATION CABINET
   (EXISTING SERVICE ADDRESS: 4616½ ANGELES CREST Hwy)
   ID No. 07-53-210-0-019.880



	CONDUIT AND CONDUCTOR SCHEDULE									
AWG	CIRCUIT	RUN 1	2	3	4	11	12	13	14	15
DLC	QUEUE DETECTOR			2	2			1	1	1
	DEMAND DETECTOR	1	2		2		1		1	1
	PASSAGE DETECTOR	1	2		2		1		1	1
	SURVEILLANCE DETECTOR		4		4	4	4		4	4
	COUNT DETECTOR		2		2	1	2			2
	HOV COUNT	1	1		1					
9CSC	RAMP METERING SIGNAL	1	2		2		1		1	1
5CSC	"METER-ON" SIGN			1	1			1	2	2
#4	RAMP METERING SERVICE			2	2		2			2
#8	GROUND			1	1		1			1
CONDUIT SIZE (mm)		53	63	53	2-78	53	53	78	2-78	2-78

NOTES:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. FOR RAMP METERING SYSTEM INSTALLATION DETAILS SEE SHEET E-29.
3. FOR LEGEND AND ABBREVIATIONS SEE SHEET E-1.

5 INSTALL "METER-ON" SIGN ON TYPE 1-A STANDARD PER DETAIL B ON SHEET E-29.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

RAMP METERING SYSTEM (LOCATIONS 19 AND 31)

SCALE 1:500

E-23

LAST REVISION 00-00-00
DATE PLOTTED = 26-DEC-2006
TIME PLOTTED = 12:04

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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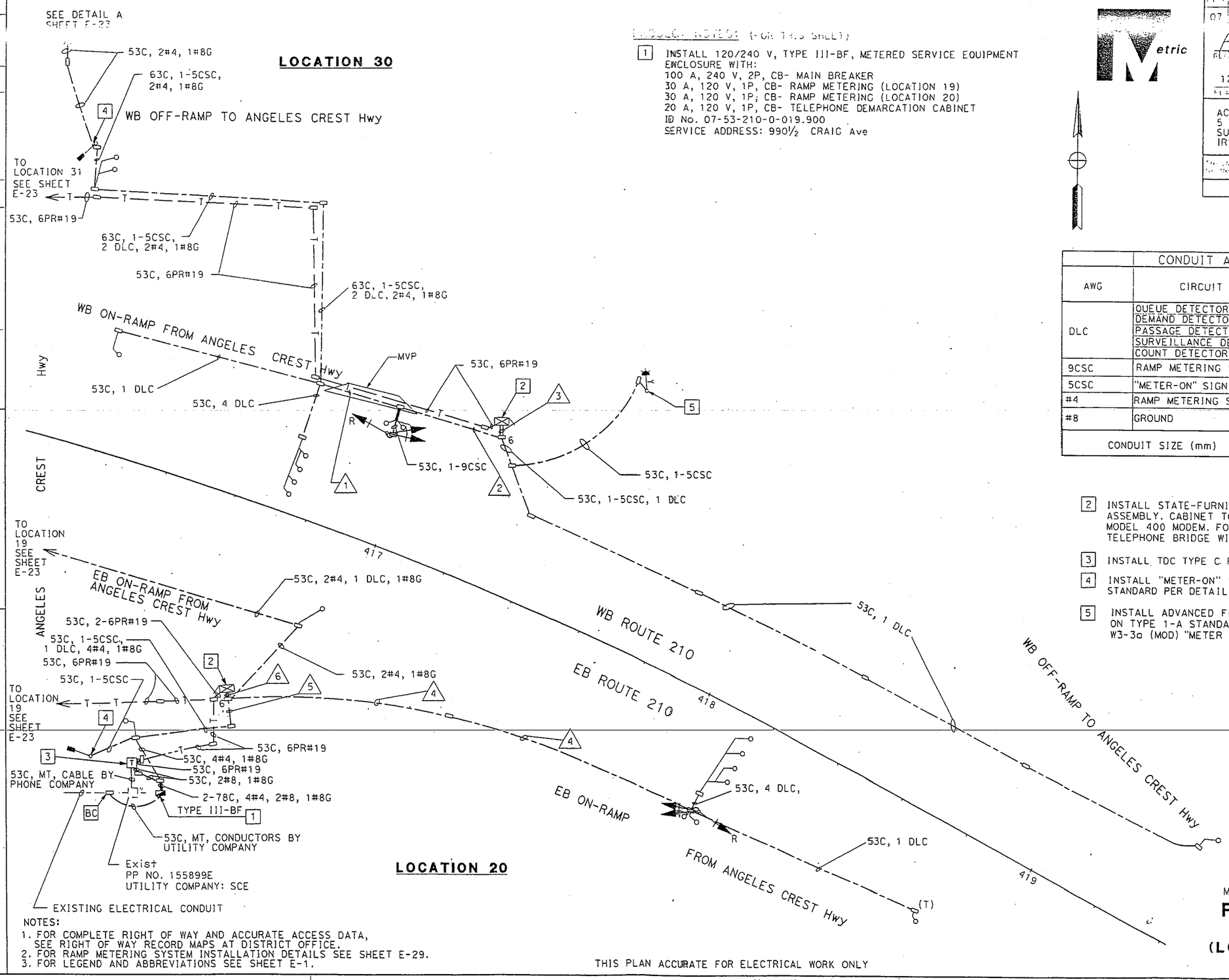
DGN FILE = 0258000001E23.dgn

CU 07383 | EA 258001



NOTES:
1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. FOR RAMP METERING SYSTEM INSTALLATION DETAILS SEE SHEET E-29.
3. FOR LEGEND AND ABBREVIATIONS SEE SHEET E-1.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LEGEND: (FOR THIS SHEET)

1. INSTALL 120/240 V, TYPE III-BF, METERED SERVICE EQUIPMENT ENCLOSURE WITH:
   100 A, 240 V, 2P, CB- MAIN BREAKER
   30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 19)
   30 A, 120 V, 1P, CB- RAMP METERING (LOCATION 20)
   20 A, 120 V, 1P, CB- TELEPHONE DEMARCATION CABINET
   ID No. 07-53-210-0-019.900
   SERVICE ADDRESS: 990½ CRAIG Ave

CONDUIT AND CONDUCTOR SCHEDULE							
AWG	CIRCUIT	RUN 1	RUN 2	RUN 3	RUN 4	RUN 5	RUN 6
DLC	QUEUE DETECTOR	2	2	2		1	1
	DEMAND DETECTOR		1	1	1		1
	PASSAGE DETECTOR		1	1	1		1
	SURVEILLANCE DETECTOR	4	4	4	4		4
	COUNT DETECTOR	1	1	2	1		2
9CSC	RAMP METERING SIGNAL		1	1	1		1
5CSC	"METER-ON" SIGN	1	1	2		1	1
#4	RAMP METERING SERVICE	2	2	2		4	2
#8	GROUND	1	1	1		1	1
CONDUIT SIZE (mm)		63	53	2-78	63	63	2-78

2. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY. CABINET TO INCLUDE STATE-FURNISHED MODEL 400 MODEM. FOR LOCATION 20, INSTALL TELEPHONE BRIDGE WITH A 12-PAIR TERMINAL BLOCK.
3. INSTALL TDC TYPE C PER STANDARD PLAN ES-3F.
4. INSTALL "METER-ON" SIGN ON TYPE 1-A STANDARD PER DETAIL B ON SHEET E-29.
5. INSTALL ADVANCED FLASHING BEACON ON TYPE 1-A STANDARD WITH W3-3a (MOD) "METER AHEAD" SIGN. (ES-7J)

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

RAMP METERING SYSTEM (LOCATIONS 20 AND 30)

SCALE 1:500

E-2

DISTRICT	COUNTY	ROUTE	PROJECT ID	PROJECT SHEET	TOTAL SHEETS
07	LA	210	R1.0/R40.4		

REGISTERED ENGINEER
12-18-06
PLAN APPROVAL DATE

HON WAI YO
No. 43276
Exp. 3/31/08
CIVIL

ACT CONSULTING ENGINEERS
5 CORPORATE PARK
SUITE 260
IRVINE, CA 92606

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: CECILIO BURCIAGA
CALCULATED/DESIGNED BY: J. SHIAO
CHECKED BY: S. YEH
DATE REVISED: 10/06
REVISED BY: 10/06
DATE REVISED

RELATIVE BORDER SCALE 0 20 40 60 80
USERNAME = tmilesl

NOTES (This Sheet)

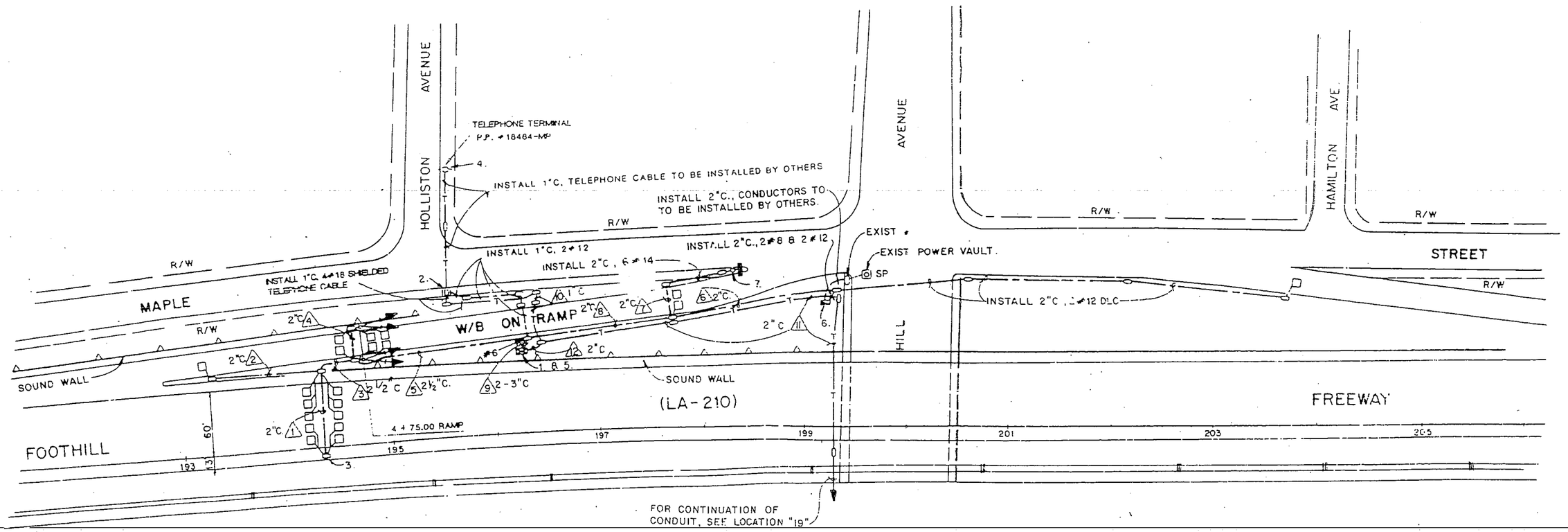
1. INSTALL MODEL 170 CONTROLLER ASSEMBLY.(STATE FURNISHED)
2. [illegible]
3. INSTALL NO.5 PULL BOX WITH STEEL "RAMP METER" COVER.
4. INSTALL TYPE - TELEPHONE SERVICE.
5. INSTALL TELEPHONE [illegible].
6. INSTALL 120/240V. TYPE III-BF UNMETERED SERVICE WITH 40 AMP.(RAMP METER) AND 20 AMP.(DEMARCATION BOX) CIRCUIT BREAKERS.

   07-53-210-R-026.941 (CITY OF PASADENA)
7. INSTALL TYPE 1-A, 7' STANDARD WITH TP-1 MOUNTING BRACKET AND ONE SIGNAL HOUSING MOUNTED ON TOP OF ANOTHER. TOP MESSAGE SHALL READ "10 MIN. DELAY". BOTTOM MESSAGE SHALL READ "METER ON".

CONDUCTOR SCHEDULE

AWG	CIRCUIT	RUN 1	2	3	4	5	6	7	8	9	10	11	12
	[illegible]				[illegible]	[illegible]				[illegible]			
	[illegible]				[illegible]	[illegible]		3	3	6			
	[illegible] MESSAGE SIGN							3	3	3			
#10	SIGNAL COMMON				1	1				1			
#8	SERVICE						2		2	2			
* 4#18 CABLE	TELEPHONE SER.										1	2	3
2#12 DLC	COUNT DETECTOR	4	1	11		11	1		1	12			
	DEMAND DETECTOR				1	2				2			
	PASSAGE DETECTOR				1	2				2			
	QUEUE DETECTOR							1	2	2			
#12	DEMARCATION SERV.						2						

(X) - SHIELDED CABLE



LOCATION "18"
1308

AS BUILT PLANS
Contract No. 07-443504
Date Completed 08/15/88
Document No

AS BUILT
CONTRACT NO. 443504
RESIDENT ENGR.
DATE Completed 8-15-88

LOCATION "18"
RAMP METERING PLAN
FOOTHILL FREEWAY
W/B ON RAMP
AT
HILL AVENUE

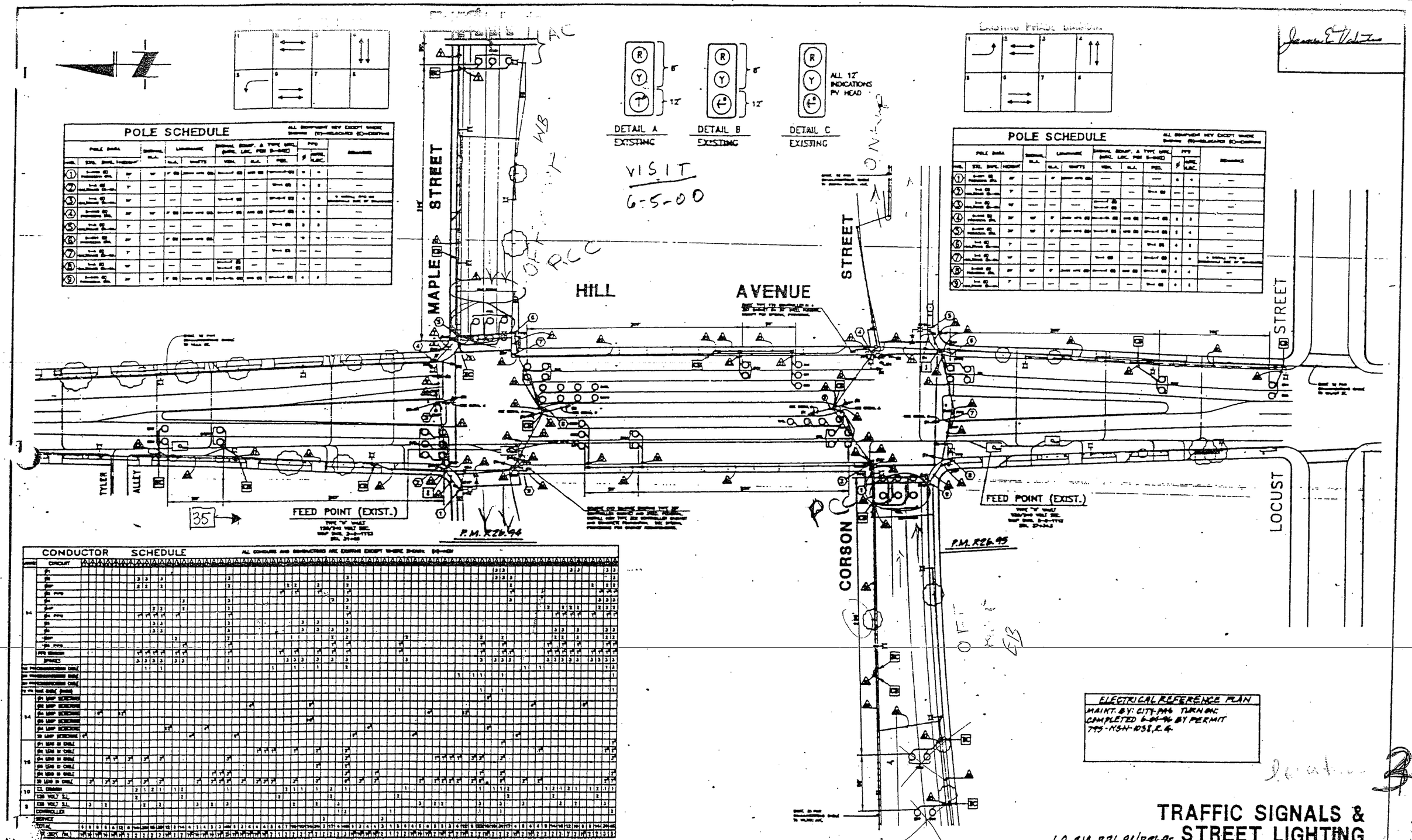
FEET 0 50 100 200

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 3

L. Q. NGUYEN | B. TAKENOUCHI | B. F. CUTTER

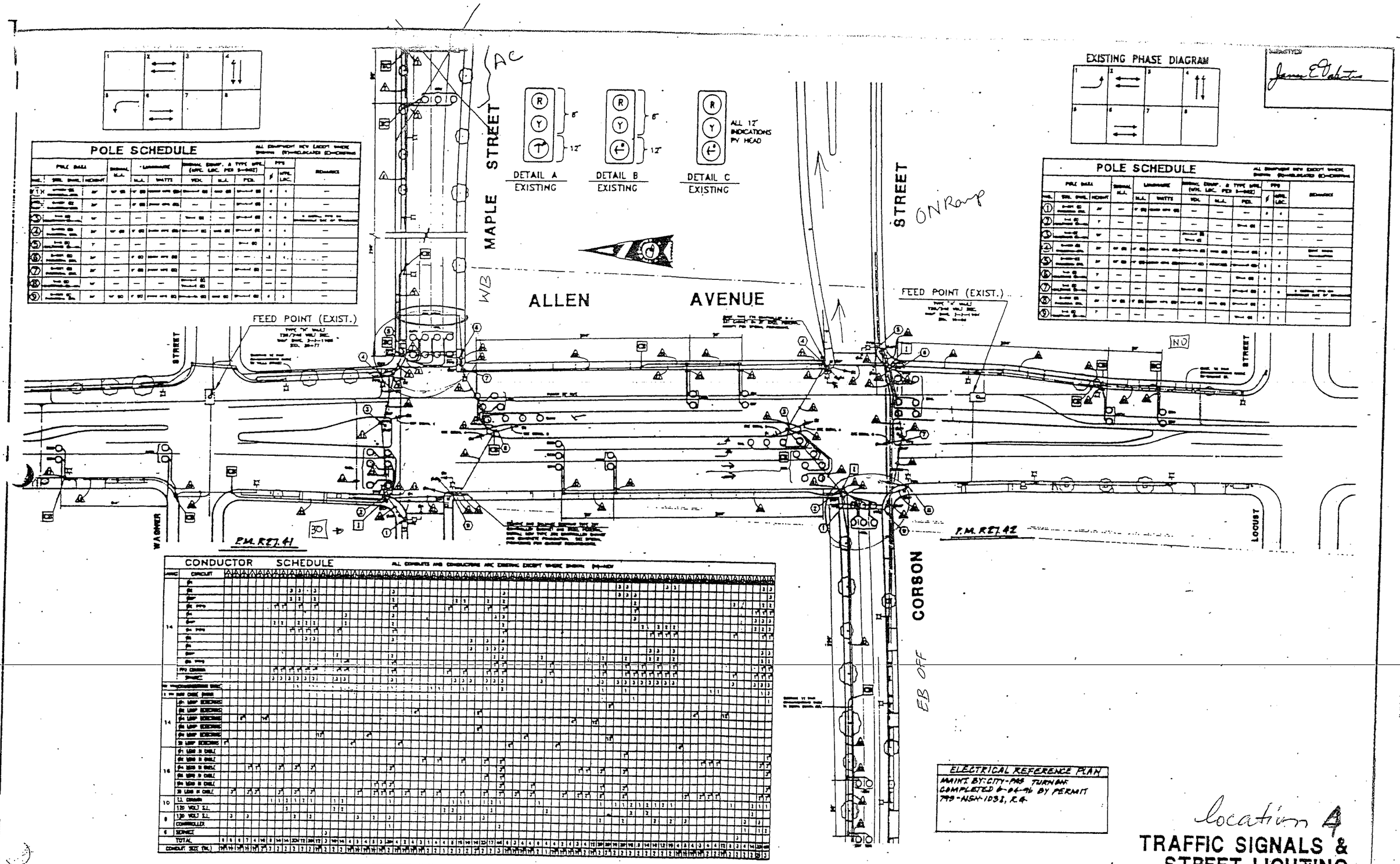
Location 3



TRAFFIC SIGNALS & STREET LIGHTING

LA-210-R26.94/R26.95

CALTRANS – PERMIT			WATER & POWER DEPARTMENT	PROJECT ENGINEER	DRAWN BY BANG CHAU TONY FROSSARD	REVISIONS	CITY OF PASADENA–PUBLIC WORKS AND TRANSPORTATION DEPARTMENT
REVIEWED BY	REVIEWED BY	DATE	DATE	DATE 5/15/95	CHECKED BY	MARK / DATE / DESCRIPTION / BY / CHKD. / APPROVED	PROJECT ARTERIAL STREET SIGNAL IMPROVEMENTS SMART CORRIDOR PHASE 1A — SHEET 9 OF 27



POLE SCHEDULE
EXISTING PHASE DIAGRAM
DETAIL A
EXISTING
DETAIL B
EXISTING
DETAIL C
EXISTING
ALL 12" INDICATIONS PV HEAD
MAPLE STREET
ALLEN AVENUE
CORSON STREET
FEED POINT (EXIST.)
WAGNER STREET
LOCUST STREET
P.M. R27.41
P.M. R27.42
AC
WB
ON Ramp
EB OFF
CONDUCTOR SCHEDULE
ELECTRICAL REFERENCE PLAN
MAINT. BY: CITY-PAS TURNON
COMPLETED 6-04-96 BY PERMIT
795-NSH-1032, R.G.
location 4
TRAFFIC SIGNALS &
STREET LIGHTING
LA-210-R27.41/R27.42
CALTRANS - PERMIT
WATER & POWER DEPARTMENT
PROJECT ENGINEER
DRAWN BY
BANG CHAU
TONY FROSSARD
REVISIONS
CITY OF PASADENA—PUBLIC WORKS AND TRANSPORTATION DEPARTMENT

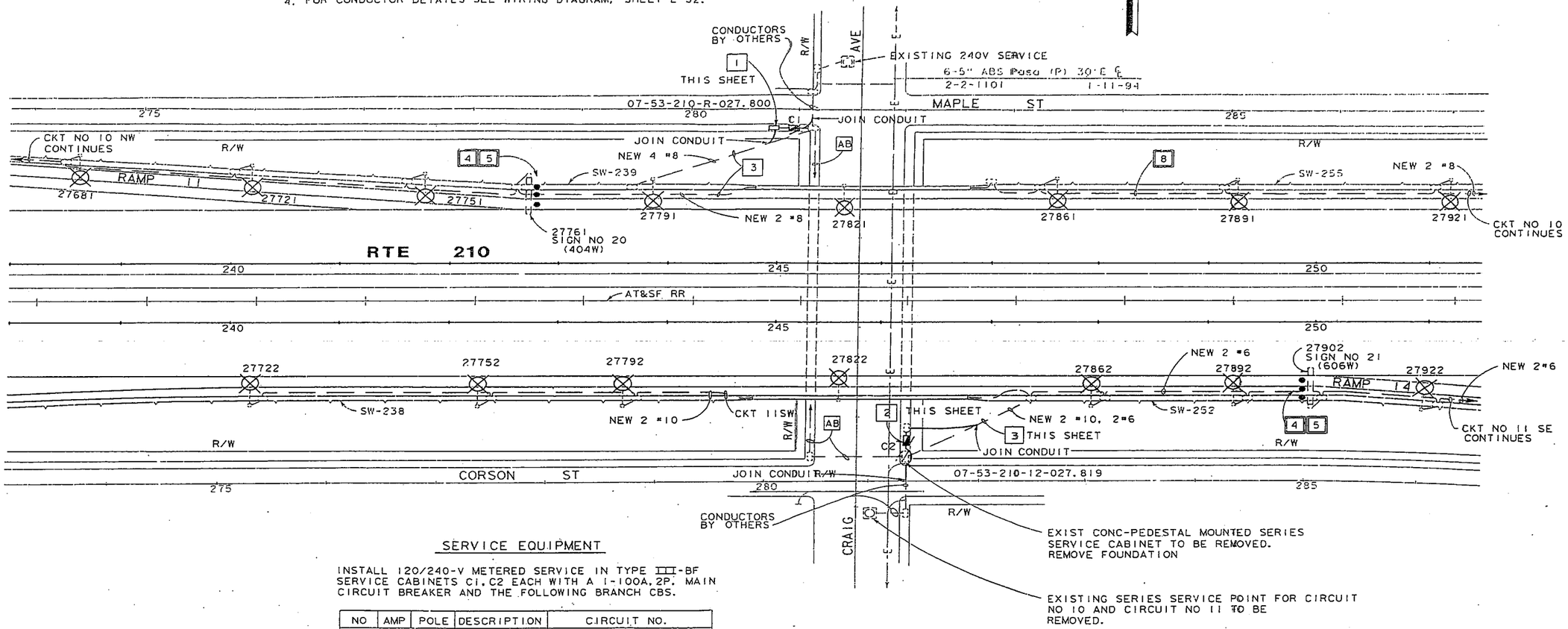
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	12	42

REGISTERED CIVIL ENGINEER
3-21-94
PLANS APPROVAL DATE

PAT SULLIVAN C30912 Exp. 3-31-96 CIVIL STATE OF CALIFORNIA

NOTES (THIS SHEET)

1. [illegible]
2. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 2.
3. REMOVE EXISTING NO. 8 5KV CABLE FROM SERIES CIRCUITS.
4. FOR CONDUCTOR DETAILS SEE WIRING DIAGRAM, SHEET E-32.



SERVICE EQUIPMENT

INSTALL 120/240-V METERED SERVICE IN TYPE III-BF SERVICE CABINETS C1, C2 EACH WITH A 1-100A, 2P. MAIN CIRCUIT BREAKER AND THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO.
CABINET 1				
1-2	30	2	LIGHTING	10 NW
3-4	30	2	LIGHTING	10 NE
5	15	1	PEC/ TYPE 5	
CABINET 2				
1-2	30	2	LIGHTING	11 SW
3-4	30	2	LIGHTING	11 SE
5	15	1	PEC/ TYPE 5	

WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

LIGHTING AND SIGN ILLUMINATION
MODIFY

SCALE: 1"=50'

E-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN
PROJECT ENGINEER R. PETERS

CALCULATED/ DESIGNED BY	RP	DATE 9/93	REVISED BY
CHECKED BY	FE	10/93	DATE REVISED

LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 09:55

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => richard
DGN FILE => /usr/richard/P0/711804u06.d
CU 07374
EA 118041

location 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	13	42

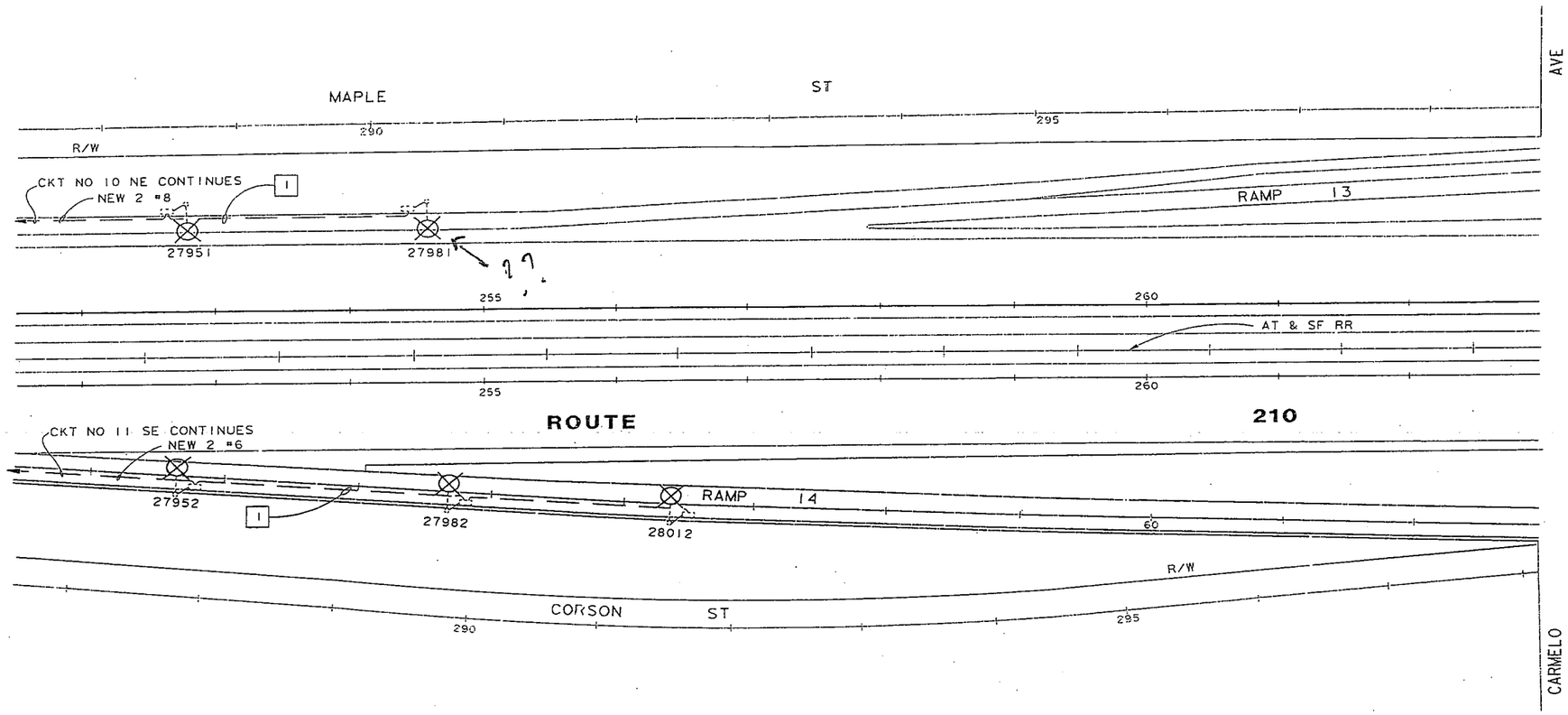
REGISTERED CIVIL ENGINEER
3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
PAT SULLIVAN
No. C30912
Exp. 3-31-96
CIVIL
STATE OF CALIFORNIA

NOTES (THIS SHEET)

1 REMOVE EXISTING NO 8 5KV CABLE.

2 FOR CONDUCTOR DETAILS SEE WIRING DIAGRAMS, SHEET E-32.



AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

LIGHTING AND SIGN ILLUMINATION

MODIFY

SCALE: 1"=50'

E-7

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

PROJECT ENGINEER: R. PETERS
CALCULATED/DESIGNED BY: RP
CHECKED BY: FE
DATE: 9/93
REVISED BY:
DATE REVISED:

LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 09:55

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => richard
DGN FILE => /usr/richard/PO/711804u07.d

CU 07374

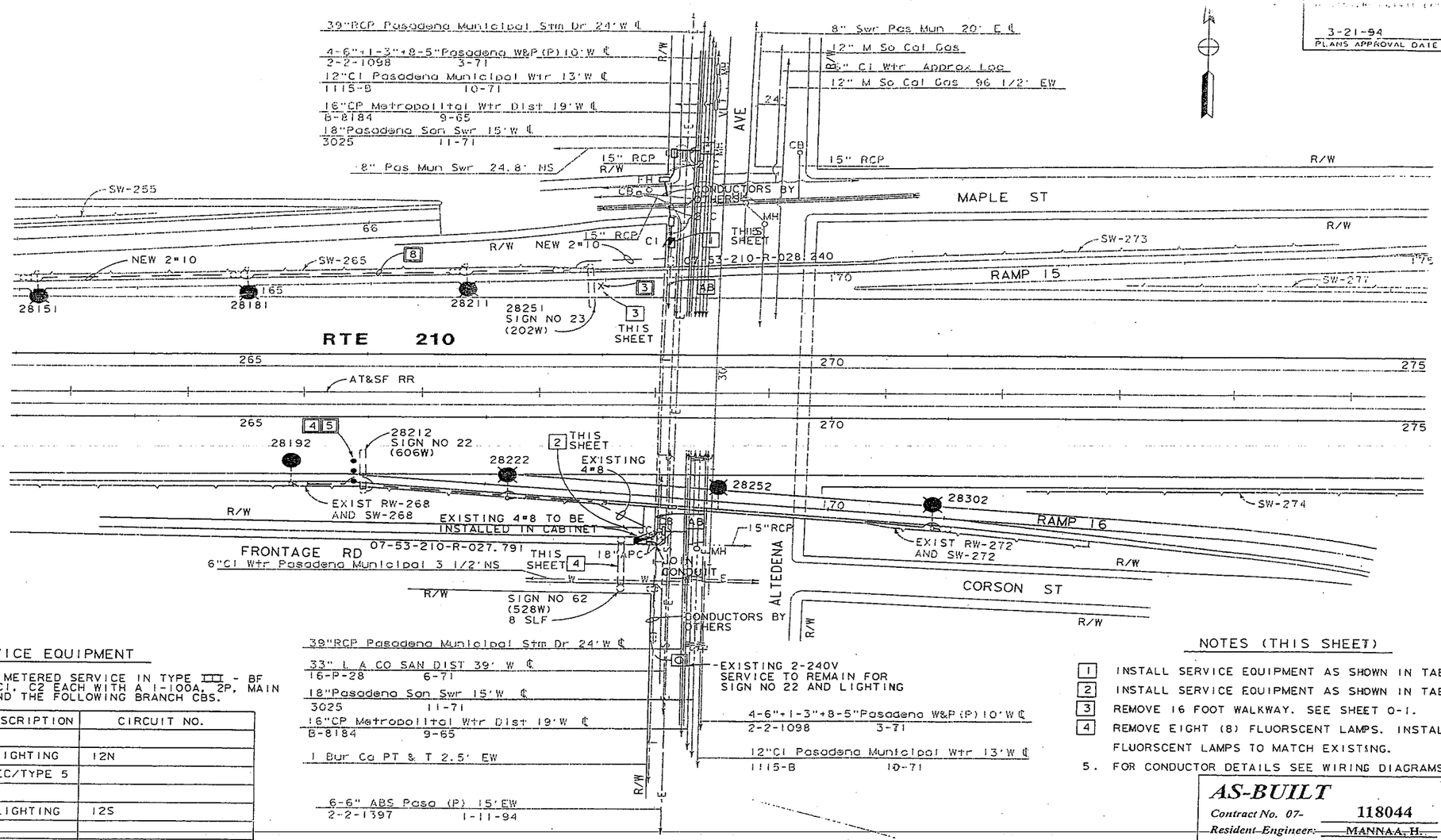
EA 118041

location 6

DIST	COUNTY	ROUTE	POST MILES — TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	14	42

3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PAT SULLIVAN No. C30912 Exp. 3-31-96 CIVIL — STATE OF CALIFORNIA



SERVICE EQUIPMENT

INSTALL 120/240-V METERED SERVICE IN TYPE III - BF SERVICE CABINETS C1, C2 EACH WITH A 1-100A, 2P, MAIN CIRCUIT BREAKER AND THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO.
CABINET 1				
1-2	30	2	LIGHTING	12N
3	15	1	PEC/TYPE 5	
CABINET 2				
1-2	30	2	LIGHTING	12S

NOTES (THIS SHEET)

1. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 1.
2. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 2.
3. REMOVE 16 FOOT WALKWAY. SEE SHEET 0-1.
4. REMOVE EIGHT (8) FLUORSCENT LAMPS. INSTALL NEW 8-36". FLUORSCENT LAMPS TO MATCH EXISTING.
5. FOR CONDUCTOR DETAILS SEE WIRING DIAGRAMS, SHEET E-32.

AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LIGHTING AND SIGN ILLUMINATION
MODIFY

SCALE: 1"=50'

E-8

DATE	REVISED BY	DATE REVISED
9/93	RP	10/93

CALCULATED/DESIGNED BY: RP
CHECKED BY: FE

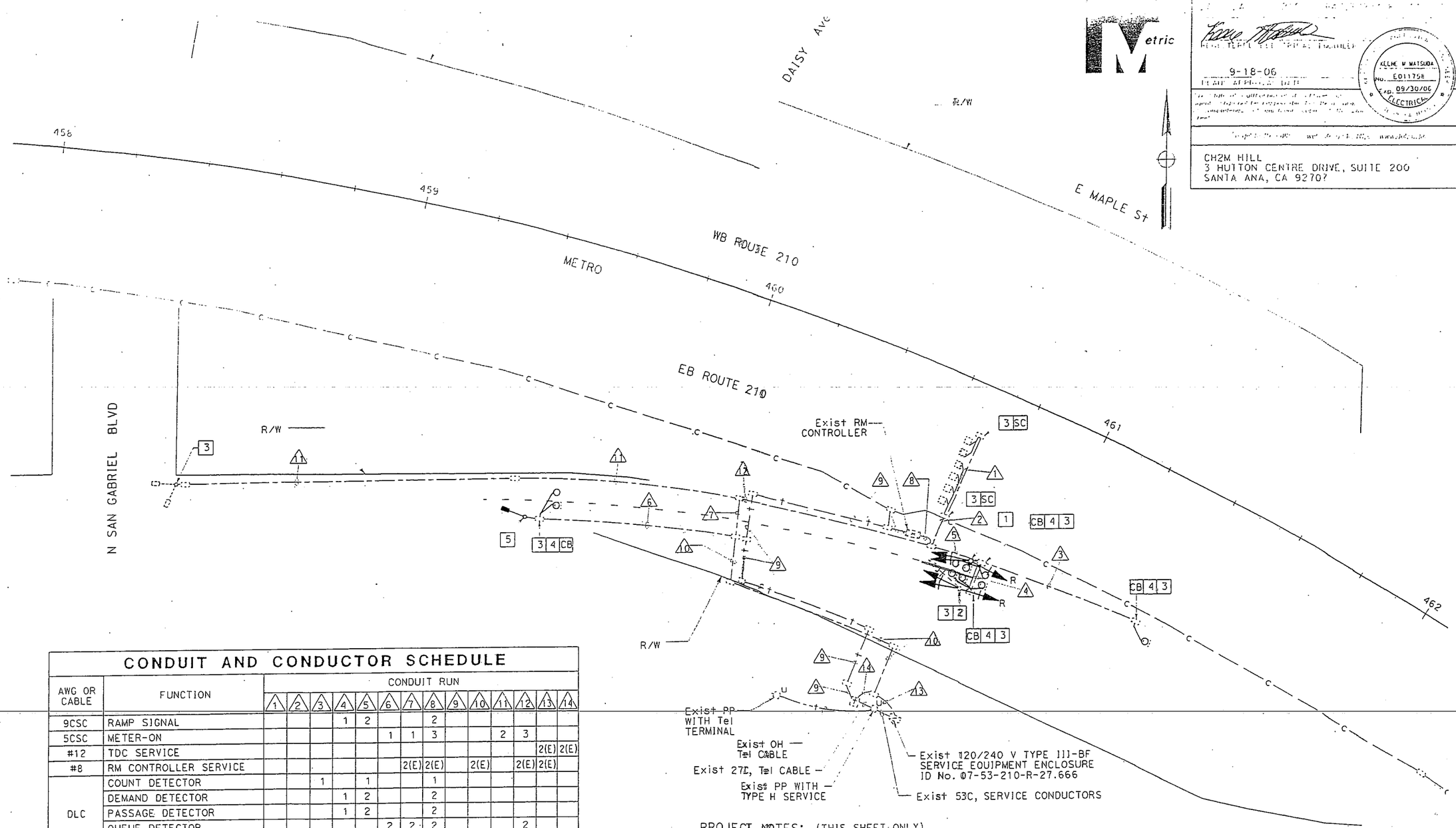
PROJECT ENGINEER: R. PETERS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 09:55

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => richard
DGN FILE => /usr/richard/P0/711804u08.d
CU 07374
EA 118041

location 6



CONDUIT AND CONDUCTOR SCHEDULE															
AWG OR CABLE	FUNCTION	CONDUIT RUN													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
9CSC	RAMP SIGNAL				1	2			2						
5CSC	METER-ON						1	1	3			2	3		
#12	TDC SERVICE													2(E)	2(E)
#8	RM CONTROLLER SERVICE							2(E)	2(E)		2(E)		2(E)	2(E)	
DLC	COUNT DETECTOR			1		1			1						
	DEMAND DETECTOR				1	2			2						
	PASSAGE DETECTOR				1	2			2						
	QUEUE DETECTOR						2	2	2				2		
	SURVEILLANCE DETECTOR	2	6						6						
4#18	TELEPHONE CABLE									1(E)					
CONDUIT SIZE		53 (E)	53 (E)	53 (E)	53 (E)	53 (E)	53 (E)	53 (E)	2-78 (E)	27 (E)	53 (E)	53 (E)	53 (E)	53 (E)	27 (E)

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL TYPE 1-A SIGNAL STANDARD PER DETAIL A ON SHEET E-41.
2. RS EXISTING SIGNAL HEADS AND MOUNTINGS. INSTALL NEW SIGNAL HEADS AND MOUNTINGS ON EXISTING SIGNAL STANDARD PER DETAIL A ON SHEET E-41.
3. RC EXISTING LOOP LEAD-IN CABLES, RAMP METER CABLES, AND METER-ON CABLES TO CONTROLLER CABINET. INSTALL NEW DLC AND CSC PER CONDUIT AND CONDUCTOR SCHEDULE.
4. INSTALL NEW 53C TERMINATION CONDUIT.
5. INSTALL "METER-ON" SIGNAL STANDARD PER DETAIL B ON SHEET E-41.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

LOCATION: 7

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY RAMP METERING SYSTEM (LOCATION 3)

SCALE 1:500

E-5

Metric

9-18-06

KEENE M MATSUDA
No. E011758
Exp. 09/30/06
ELECTRICAL

CH2M HILL
3 HUTTON CENTRE DRIVE, SUITE 200
SANTA ANA, CA 92707

	DATE	REVISED BY
CALCULATED/DESIGNED BY	ALEX ZUPANSKI	5/06
CHECKED BY	KEENE M MATSUDA	5/06
		DATE REVISED

DESIGN OVERSIGHT
CECILIO BURCIAGA

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED = 19-SEP-2006
TIME PLOTTED = 11:38

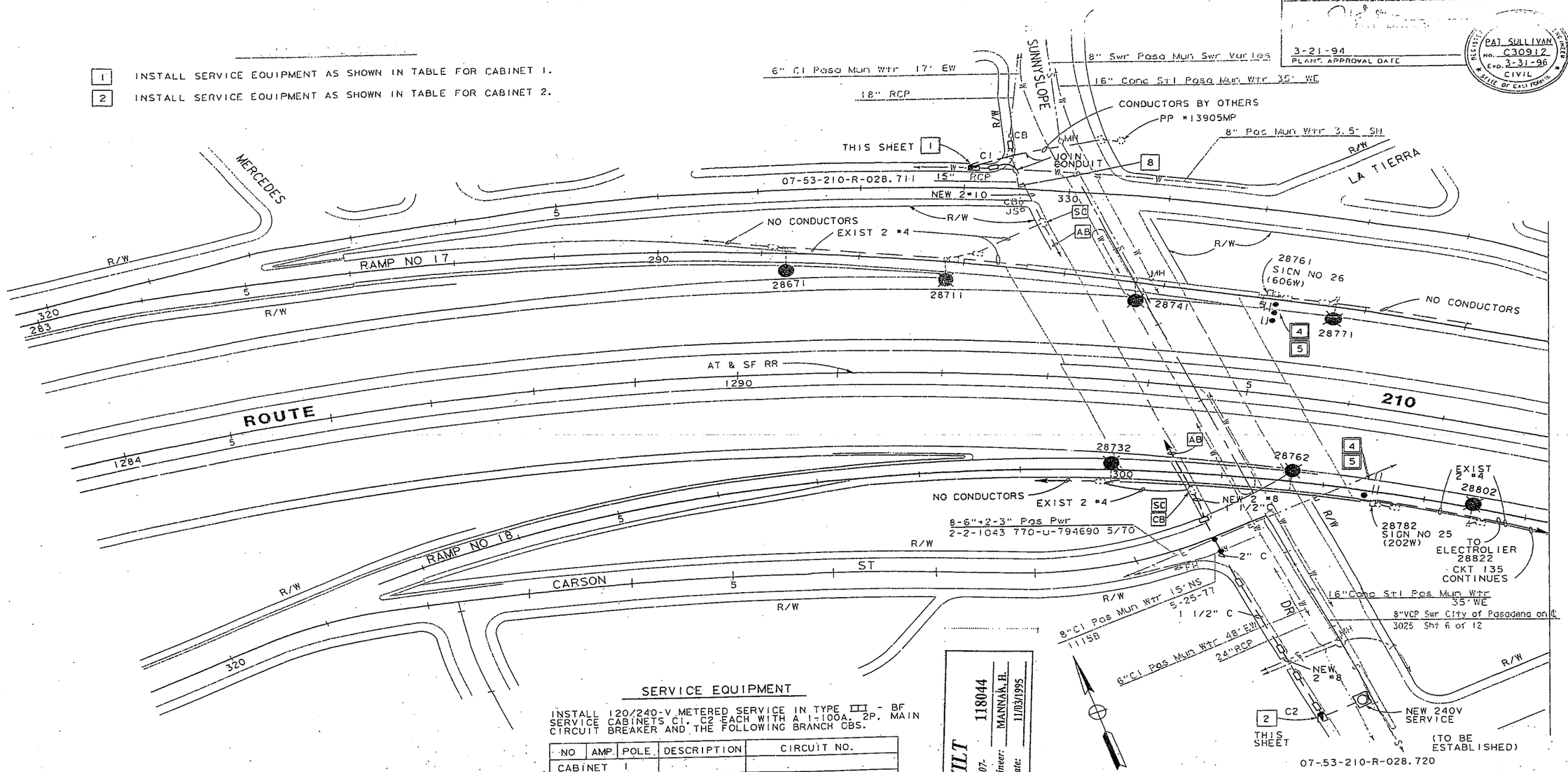
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	16	42

3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER PAJ SULLIVAN No. C30912 Exp. 3-31-96 CIVIL STATE OF CALIFORNIA

1 INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 1.

2 INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 2.



SERVICE EQUIPMENT

INSTALL 120/240-V METERED SERVICE IN TYPE III - BF SERVICE CABINETS C1, C2 EACH WITH A 1-100A, 2P, MAIN CIRCUIT BREAKER AND THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO.
CABINET	1			
1-2	30	2	LIGHTING	13 N
3	15	1	PEC/TYPE 5	
CABINET	2			
1-2	30	2	LIGHTING	13 S
3	15	1	PEC/TYPE 5	

AS-BUILT
Contract No. 07-118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

LIGHTING AND SIGN ILLUMINATION
MODIFY

SCALE: 1"=50'

E-10

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => lenard
DGN FILE => /usr/lenard/PO/71#804u10.dg

CU 07374 | EA 118041

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

PROJECT ENGINEER R. PETERS

CALCULATED/DESIGNED BY RP DATE 9/93 REVISED BY
CHECKED BY FE 10/93 DATE REVISED

LAST REVISION 1-3-94

TIME PLOTTED => 23-MAR-1994 14:57

FORM DC-OE-92-PF (REV. 3/88)

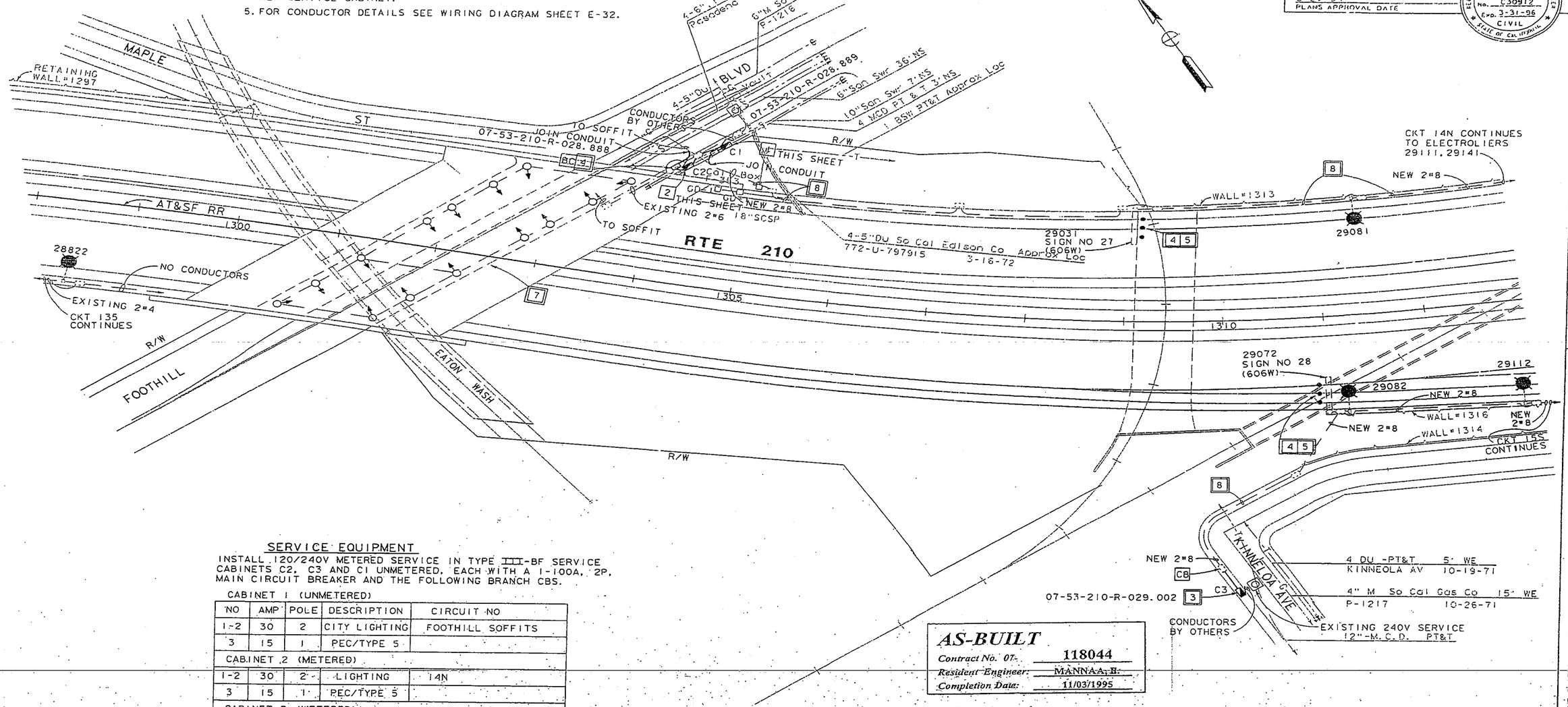
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	17	42

3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PAT SULLIVAN No. C30912 Exp. 3-31-96 CIVIL — STATE OF CALIFORNIA

NOTES (THIS SHEET)

1. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 1.
2. [illegible]
3. [illegible] SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 3.
4. REUSE SOFFIT CONDUCTORS THROUGHOUT AND INSTALL INTO NEW SERVICE CABINET.
5. FOR CONDUCTOR DETAILS SEE WIRING DIAGRAM SHEET E-32.



SERVICE EQUIPMENT

INSTALL 120/240V METERED SERVICE IN TYPE III-BF SERVICE CABINETS C2, C3 AND C1 UNMETERED, EACH WITH A 1-100A, 2P, MAIN CIRCUIT BREAKER AND THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO
CABINET 1 (UNMETERED)				
1-2	30	2	CITY LIGHTING	FOOTHILL SOFFITS
3	15	1	PEC/TYPE 5	
CABINET 2 (METERED)				
1-2	30	2	LIGHTING	14N
3	15	1	PEC/TYPE 5	
CABINET 3 (METERED)				
1-2	30	2	LIGHTING	15S
3	15	1	PEC/TYPE 5	

AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, B.
Completion Date: 11/03/1995

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LIGHTING AND SIGN ILLUMINATION
MODIFY

SCALE: 1"=50'

E-11

CALCULATED/ DESIGNED BY	RP	DATE 9/93	REVISED BY	DATE REVISED
CHECKED BY	FE	10/93		

PROJECT ENGINEER: R. PETERS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => lenard
DGN FILE => /usr/lenard/PO/711804u11.dg

CU 07374 | EA 118041

LAST REVISION 00-00-00 | TIME PLOTTED => 23-MAR-1994 14:57

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	21	42

3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
PAT SULLIVAN
No. C30912
Exp. 3-31-96
CIVIL
STATE OF CALIFORNIA

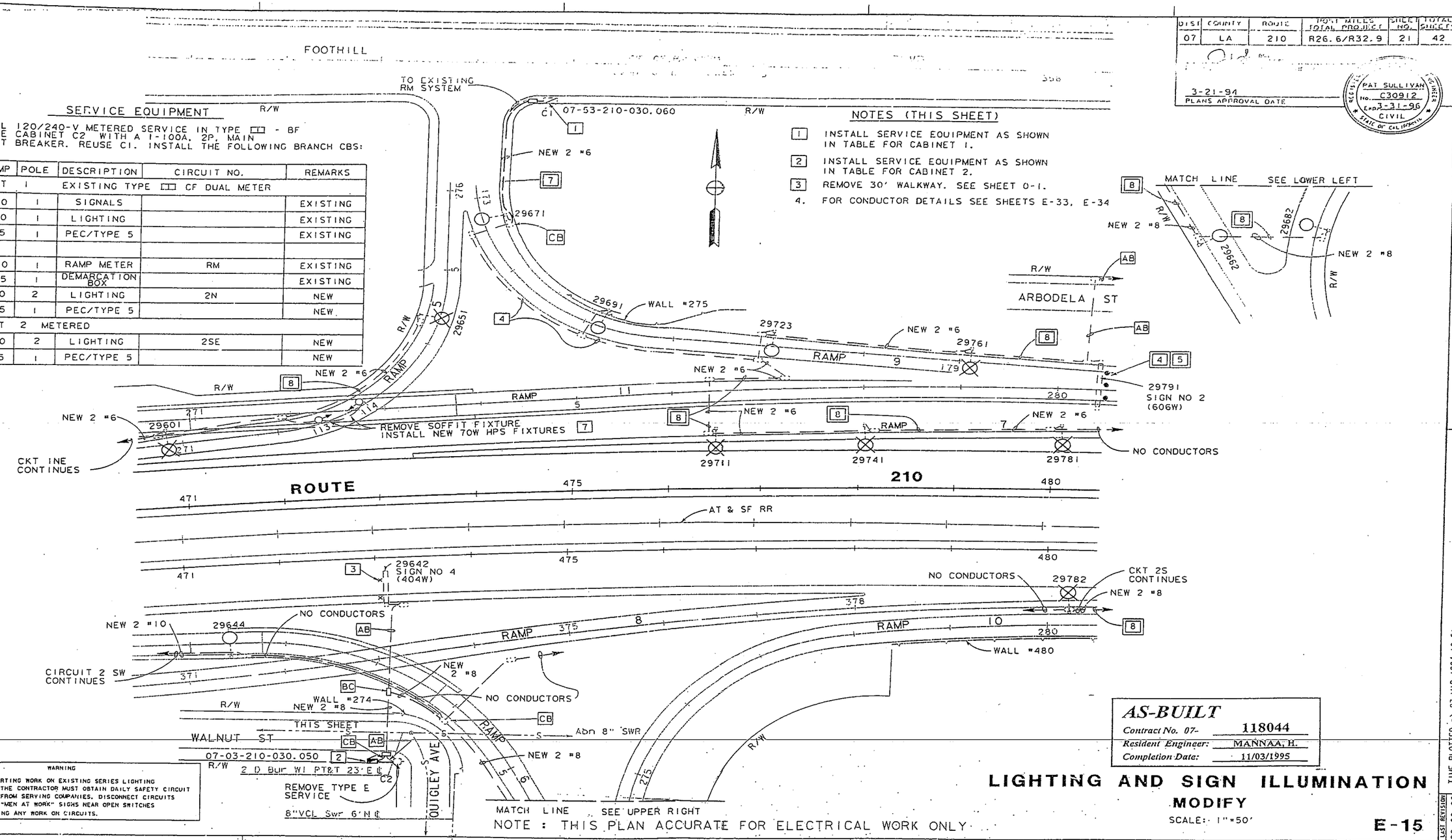
SERVICE EQUIPMENT

INSTALL 120/240-V METERED SERVICE IN TYPE ☐ - BF SERVICE CABINET C2 WITH A 1-100A, 2P, MAIN CIRCUIT BREAKER. REUSE C1. INSTALL THE FOLLOWING BRANCH CBS:

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO.	REMARKS
CABINET 1			EXISTING TYPE ☐ CF DUAL METER		
1	40	1	SIGNALS		EXISTING
2	30	1	LIGHTING		EXISTING
3	15	1	PEC/TYPE 5		EXISTING
1	40	1	RAMP METER	RM	EXISTING
2	15	1	DEMARCATION BOX		EXISTING
3-4	30	2	LIGHTING	2N	NEW
5	15	1	PEC/TYPE 5		NEW
CABINET 2 METERED					
1-2	30	2	LIGHTING	2SE	NEW
3	15	1	PEC/TYPE 5		NEW

NOTES (THIS SHEET)

1. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 1.
2. INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 2.
3. REMOVE 30' WALKWAY. SEE SHEET 0-1.
4. FOR CONDUCTOR DETAILS SEE SHEETS E-33, E-34



NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

LIGHTING AND SIGN ILLUMINATION
MODIFY

SCALE: 1"=50'

E-15

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
PROJECT ENGINEER R. PETERS
CALCULATED/DESIGNED BY RP DATE 9/93 REVISED BY
CHECKED BY FE 10/93 DATE REVISED
LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 10:51

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => tomd
DGN FILE => /usr/tomd/P0/711804u15.dgn
CU 07374
EA 118041

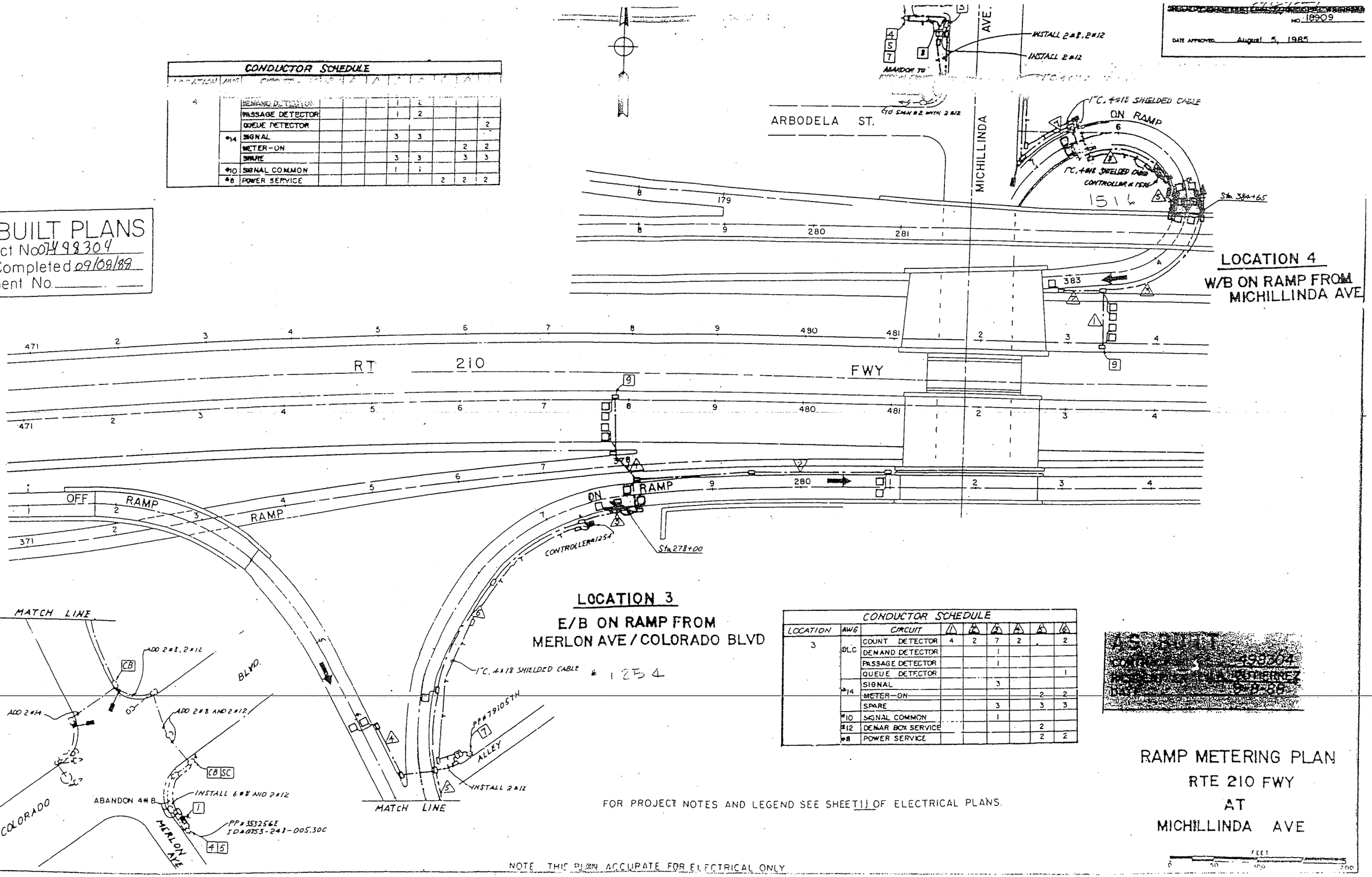
location 9

NO. 18909

DATE APPROVED August 5, 1985

CONDUCTOR SCHEDULE										
LOCATION	AWG	CIRCUIT	1	2	3	4	5	6	7	8
4		DEMAND DETECTOR			1	2				
		PASSAGE DETECTOR			1	2				
		QUEUE DETECTOR								2
	#14	SIGNAL			3	3				
		METER-ON							2	2
		SPARE			3	3			3	3
	#10	SIGNAL COMMON			1	1				
	#8	POWER SERVICE					2	2	2	2

AS BUILT PLANS
Contract No 07-498304
Date Completed 09/08/89
Document No. _____



CONDUCTOR SCHEDULE								
LOCATION	AWG	CIRCUIT	1	2	3	4	5	6
3	DLC	COUNT DETECTOR	4	2	7	2		2
		DEMAND DETECTOR			1			
		PASSAGE DETECTOR			1			
		QUEUE DETECTOR						1
	#14	SIGNAL			3			
		METER-ON					2	2
		SPARE			3		3	3
	#10	SIGNAL COMMON			1			
	#12	DEMAR BOX SERVICE					2	
	#8	POWER SERVICE					2	2

AS BUILT
CONTRACT 07-498304
REVIEWED BY J. A. JIMENEZ
DATE 9-8-89

FOR PROJECT NOTES AND LEGEND SEE SHEET 11 OF ELECTRICAL PLANS.

RAMP METERING PLAN
RTE 210 FWY
AT
MICHILLINDA AVE

FEET 0 50 100 200

NOTE THIS PLAN ACCURATE FOR ELECTRICAL ONLY

07351-498301

3P-19

location 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	22	42

REGISTERED CIVIL ENGINEER
3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
PAT SULLIVAN
No. C30912
Exp. 3-31-96
CIVIL
STATE OF CALIFORNIA

NOTES (THIS SHEET)

2 INSTALL SERVICE EQUIPMENT AS SHOWN IN TABLE FOR CABINET 2.

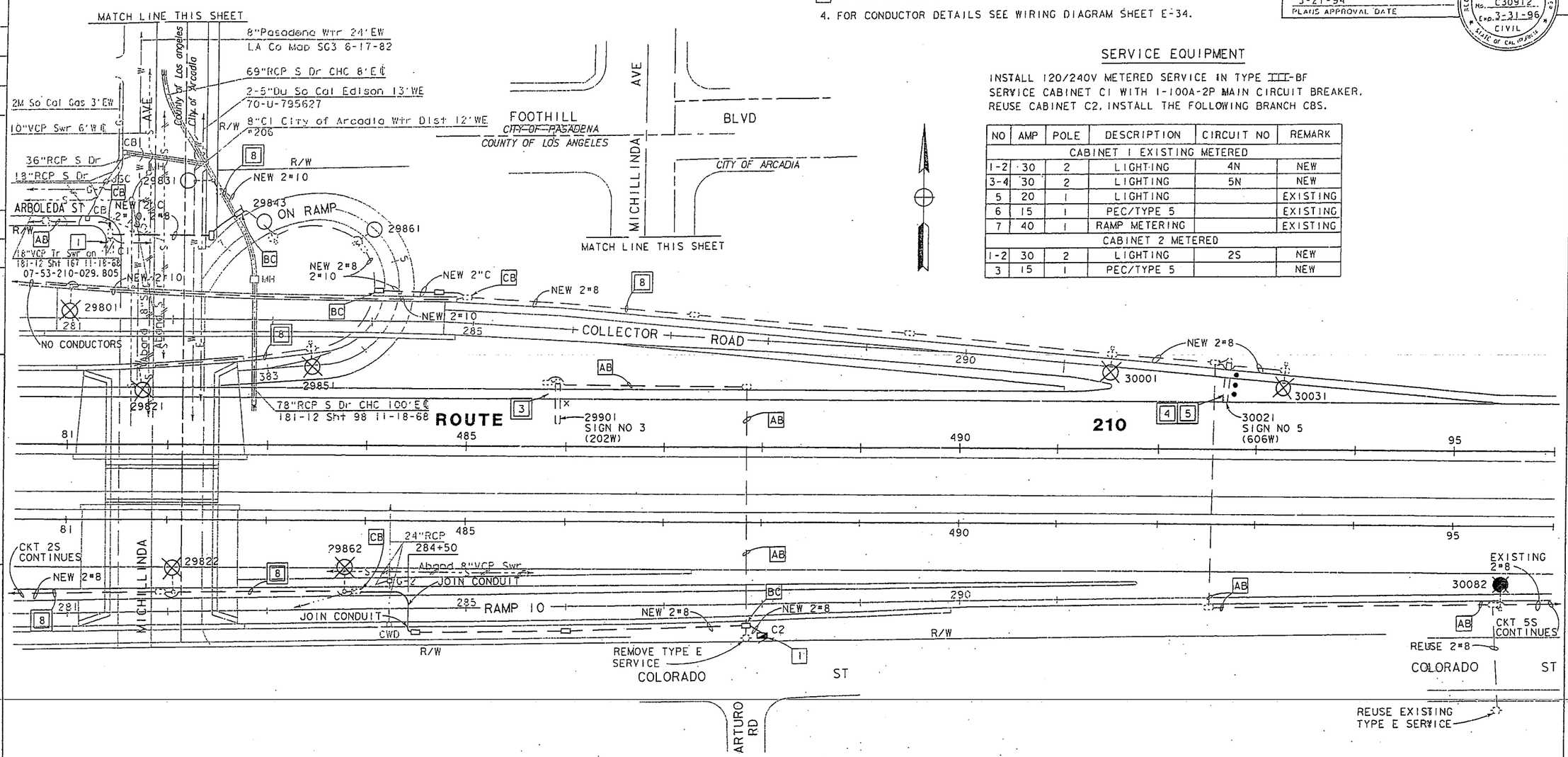
3 REMOVE 24' WALKWAY, SEE SHEET O-1.

4. FOR CONDUCTOR DETAILS SEE WIRING DIAGRAM SHEET E-34.

SERVICE EQUIPMENT

INSTALL 120/240V METERED SERVICE IN TYPE III-BF SERVICE CABINET C1 WITH 1-100A-2P MAIN CIRCUIT BREAKER. REUSE CABINET C2, INSTALL THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO	REMARK
CABINET 1 EXISTING METERED					
1-2	30	2	LIGHTING	4N	NEW
3-4	30	2	LIGHTING	5N	NEW
5	20	1	LIGHTING		EXISTING
6	15	1	PEC/TYPE 5		EXISTING
7	40	1	RAMP METERING		EXISTING
CABINET 2 METERED					
1-2	30	2	LIGHTING	2S	NEW
3	15	1	PEC/TYPE 5		NEW



AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LIGHTING AND SIGN ILLUMINATION
MODIFY
SCALE: 1"=50'

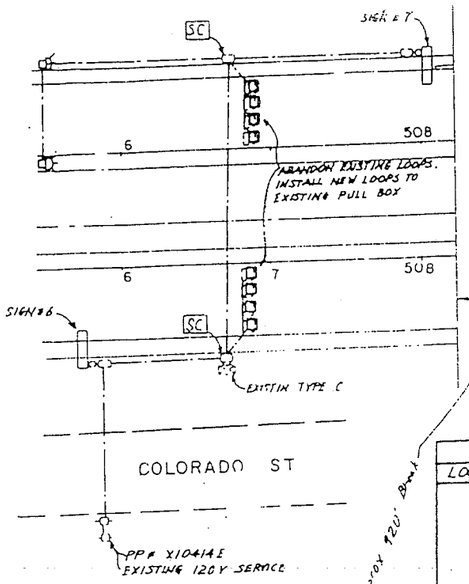
E-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
PROJECT ENGINEER R. PETERS
CALCULATED/DESIGNED BY RP DATE 9/93 REVISED BY
CHECKED BY FE 10/93 DATE REVISED

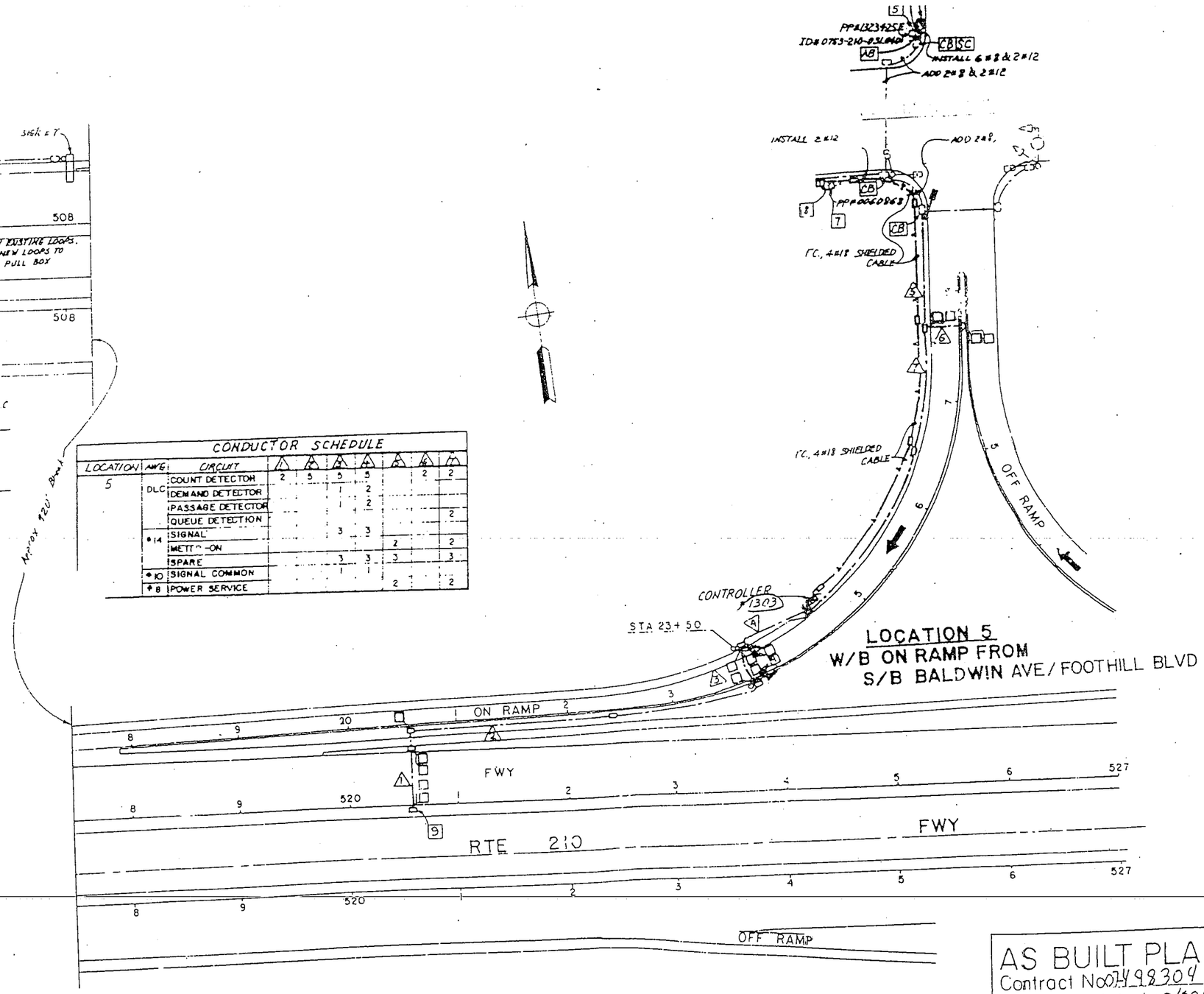
TIME PLOTTED => 23-MAR-1994 0:51
LAST REVISION 00-00-00

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => tomd
DGN FILE => /usr/tomd/P0/711804u16.dgn
CU 07374
EA 118041

10



CONDUCTOR SCHEDULE									
LOCATION	AWG	CIRCUIT	1	2	3	4	5	6	7
5	DLC	COUNT DETECTOR	2	5	5	5		2	2
		DEMAND DETECTOR			1	2			
		PASSAGE DETECTOR			1	2			
		QUEUE DETECTION							2
	#14	SIGNAL			3	3			
		METER-ON					2		2
		SPARE			3	3	3		3
	#10	SIGNAL COMMON			1	1			
	#8	POWER SERVICE					2		2



LOCATION 5
W/B ON RAMP FROM
S/B BALDWIN AVE/FOOTHILL BLVD

AS BUILT
CONTRACT NO. 498304
RESIDENT ENGR. J.A. GUTIERREZ
DATE 9-8-88

AS BUILT PLANS
Contract No. 07498304
Date Completed 09/08/88
Document No.

RAMP METERING PLAN
RTE 210 FWY
AT
BALDWIN AVE/FOOTHILL BL

FOR PROJECT NOTES AND LEGEND SEE SHEET 11 OF ELECTRICAL PLANS

NOTE THIS PLAN ACCURATE FOR ELECTRICAL ONLY

FEET
0 50 100

07351-498301

location 10

200

H KISHINEFF 4/85 H KISHINEFF 4/84 BP CUTTER 4/85

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	24	42

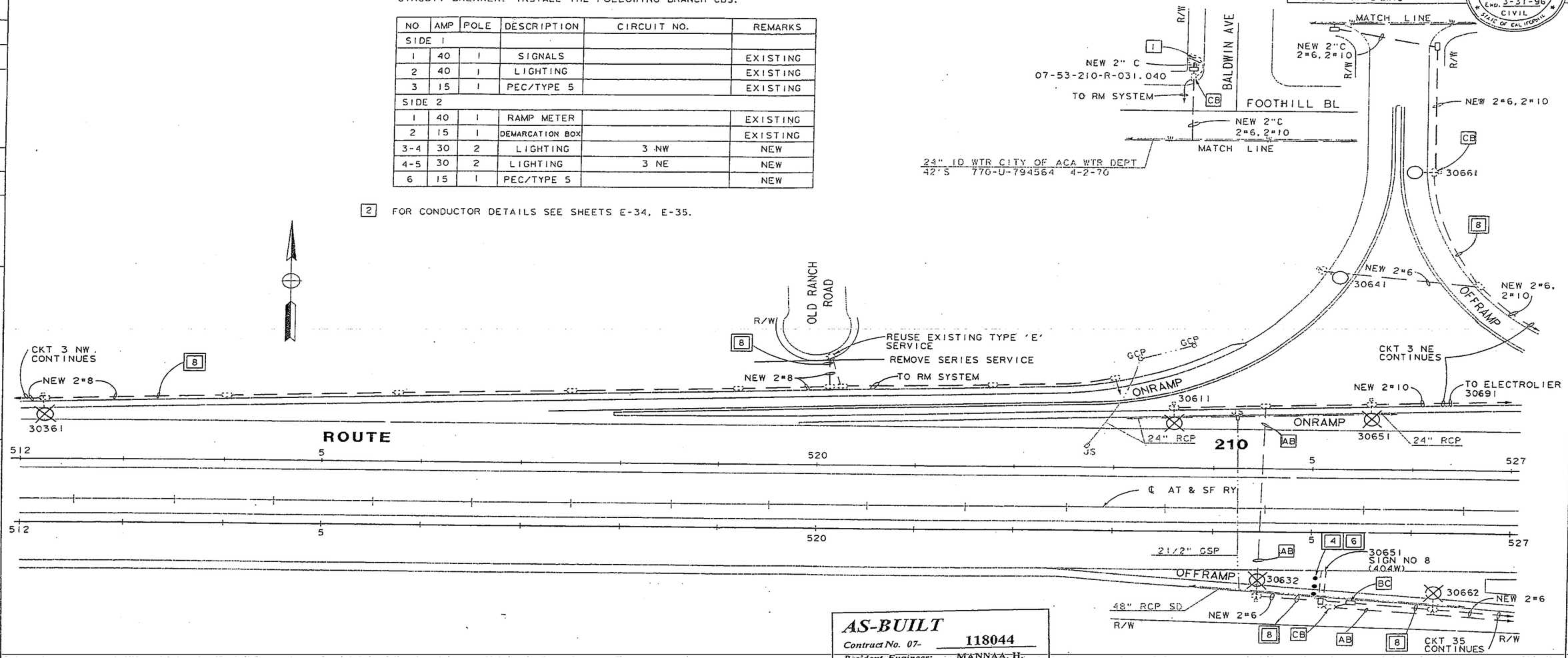
3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
PAT SULLIVAN
No. C30912
Exp. 3-31-96
CIVIL
STATE OF CALIFORNIA

[1] EXISTING 120/240-V DUAL METER SERVICE IN TYPE [ ] - CF SERVICE CABINET WITH 2-100A, 2P, MAIN CIRCUIT BREAKER. INSTALL THE FOLLOWING BRANCH CBS.

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO.	REMARKS
SIDE 1					
1	40	1	SIGNALS		EXISTING
2	40	1	LIGHTING		EXISTING
3	15	1	PEC/TYPE 5		EXISTING
SIDE 2					
1	40	1	RAMP METER		EXISTING
2	15	1	DEMARCATION BOX		EXISTING
3-4	30	2	LIGHTING	3 NW	NEW
4-5	30	2	LIGHTING	3 NE	NEW
6	15	1	PEC/TYPE 5		NEW

[2] FOR CONDUCTOR DETAILS SEE SHEETS E-34, E-35.



AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVICING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LIGHTING AND SIGN ILLUMINATION
MODIFY
SCALE: 1"=50'

E-18

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN
PROJECT ENGINEER R. PETERS
CALCULATED/DESIGNED BY RP DATE 9/93 REVISED BY
CHECKED BY FE 10/93 DATE REVISED

LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 12:24

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => onnda
DGN FILE => /usr/onnda/PO/711804u18.dgn
CU 118041
EA 118041

location 11

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R43.7/R74.8	116	163

9-18-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KEENE M MATSUDA — No. E011758 — Exp. 09/30/06 — ELECTRICAL — STATE OF CALIFORNIA

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To get to the Caltrans web site, go to http: www.dot.ca.gov

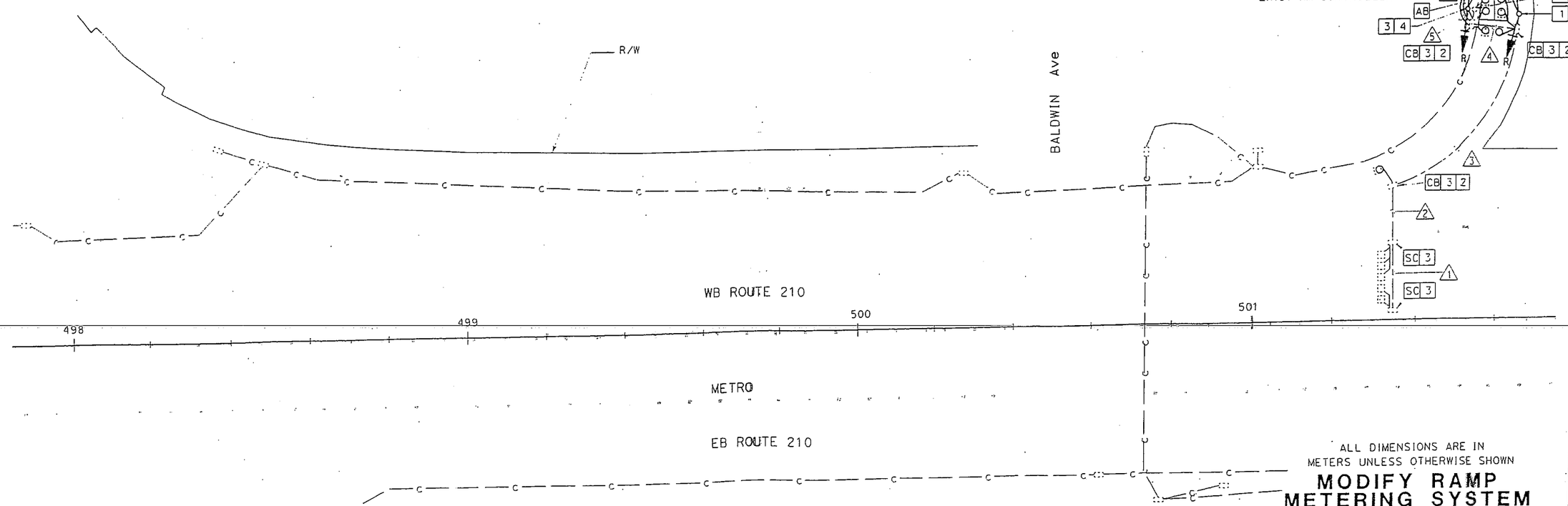
CH2M HILL
3 HUTTON CENTRE DRIVE, SUITE 200
SANTA ANA, CA 92707

CONDUIT AND CONDUCTOR SCHEDULE

AWG OR	FUNCTION	CONDUIT RUN										
9CSC	RAMP SIGNAL				1	2				2		
5CSC	METER-ON						1		1	1		
#8	RM CONTROLLER SERVICE						2(E)		2(E)	2(E)		2(E)
DLC	COUNT DETECTOR			1	1	1				1		
	DEMAND DETECTOR				1	2				2		
	PASSAGE DETECTOR				1	2				2		
	QUEUE DETECTOR						2	2		2		
	SURVEILLANCE DETECTOR	2	5	5	5	5				5		
4#18	TELEPHONE CABLE										1(E)	
CONDUIT SIZE		53 (E)	53 (E)	53 (E)	53 (E)	78	53 (E)	53	53 (E)	2-78 (E)	27 (E)	53 (E)

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL TYPE 1-A SIGNAL STANDARD PER DETAIL A ON SHEET E-41. LOCATE 1.2 m FROM ES.
2. INSTALL NEW 53C TERMINATION CONDUIT.
3. RC EXISTING LOOP LEAD-IN CABLES, RAMP METER CABLES, AND METER-ON CABLES TO CONTROLLER CABINET. INSTALL NEW DLC AND CSC PER CONDUIT AND CONDUCTOR SCHEDULE.
4. RS EXISTING SIGNAL HEADS AND MOUNTINGS. INSTALL NEW SIGNAL HEADS AND MOUNTINGS ON EXISTING SIGNAL STANDARD PER DETAIL A ON SHEET E-41.



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY RAMP METERING SYSTEM (LOCATION 33)

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

RELATIVE BORDER SCALE IS IN MILLIMETERS

CU 07383 EA 257401

Location 11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

DESIGN OVERSIGHT: CECILIO BURCIAGA

CALCULATED/DESIGNED BY: ALEX ZUPANSKI — CHECKED BY: KEENE M MATSUDA

DATE REVISED BY	DATE REVISED
5/06	5/06

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210	R26.6/R32.9	25	42

3-21-94
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PAT SULLIVAN, No. C30912, Exp. 3-31-96, CIVIL, STATE OF CALIFORNIA

NOTES (THIS SHEET)

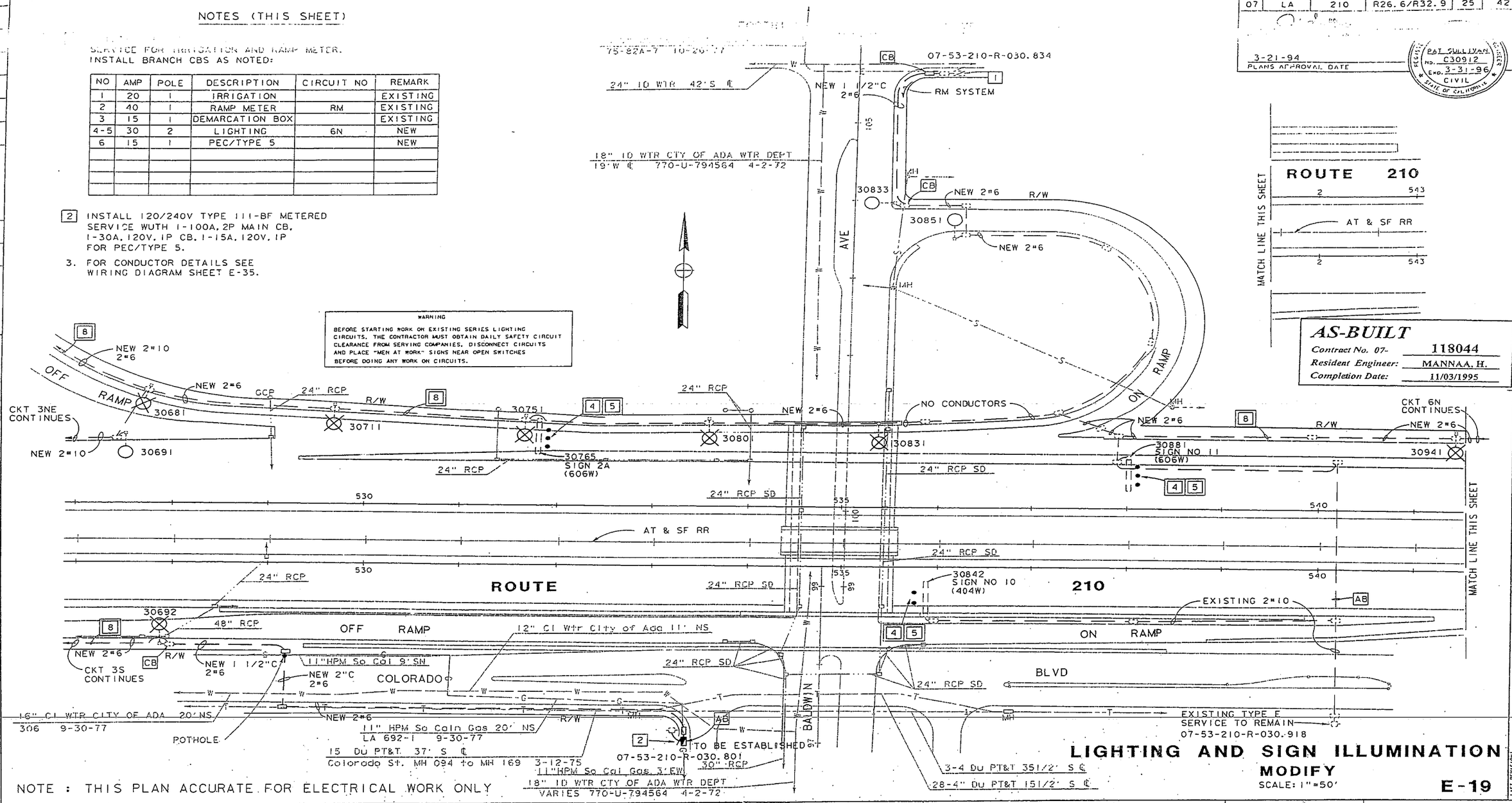
SERVICE FOR IRRIGATION AND RAMP METER.
INSTALL BRANCH CBS AS NOTED:

NO	AMP	POLE	DESCRIPTION	CIRCUIT NO	REMARK
1	20	1	IRRIGATION		EXISTING
2	40	1	RAMP METER	RM	EXISTING
3	15	1	DEMARCATION BOX		EXISTING
4-5	30	2	LIGHTING	6N	NEW
6	15	1	PEC/TYPE 5		NEW

2 INSTALL 120/240V TYPE III-BF METERED SERVICE WUTH 1-100A, 2P MAIN CB, 1-30A, 120V, 1P CB, 1-15A, 120V, 1P FOR PEC/TYPE 5.

3. FOR CONDUCTOR DETAILS SEE WIRING DIAGRAM SHEET E-35.

WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.



AS-BUILT
Contract No. 07- 118044
Resident Engineer: MANNAA, H.
Completion Date: 11/03/1995

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

LIGHTING AND SIGN ILLUMINATION
MODIFY
SCALE: 1"=50'

E-19

DATE	REVISED BY	DATE REVISED
9/93	RP	10/93 FE

CALCULATED/DESIGNED BY: RP
CHECKED BY: FE

PROJECT ENGINEER: R. PETERS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 00-00-00
TIME PLOTTED => 23-MAR-1994 12:24

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => anndo
DGN FILE => /usr/anndo/PO/711804u19.dgn

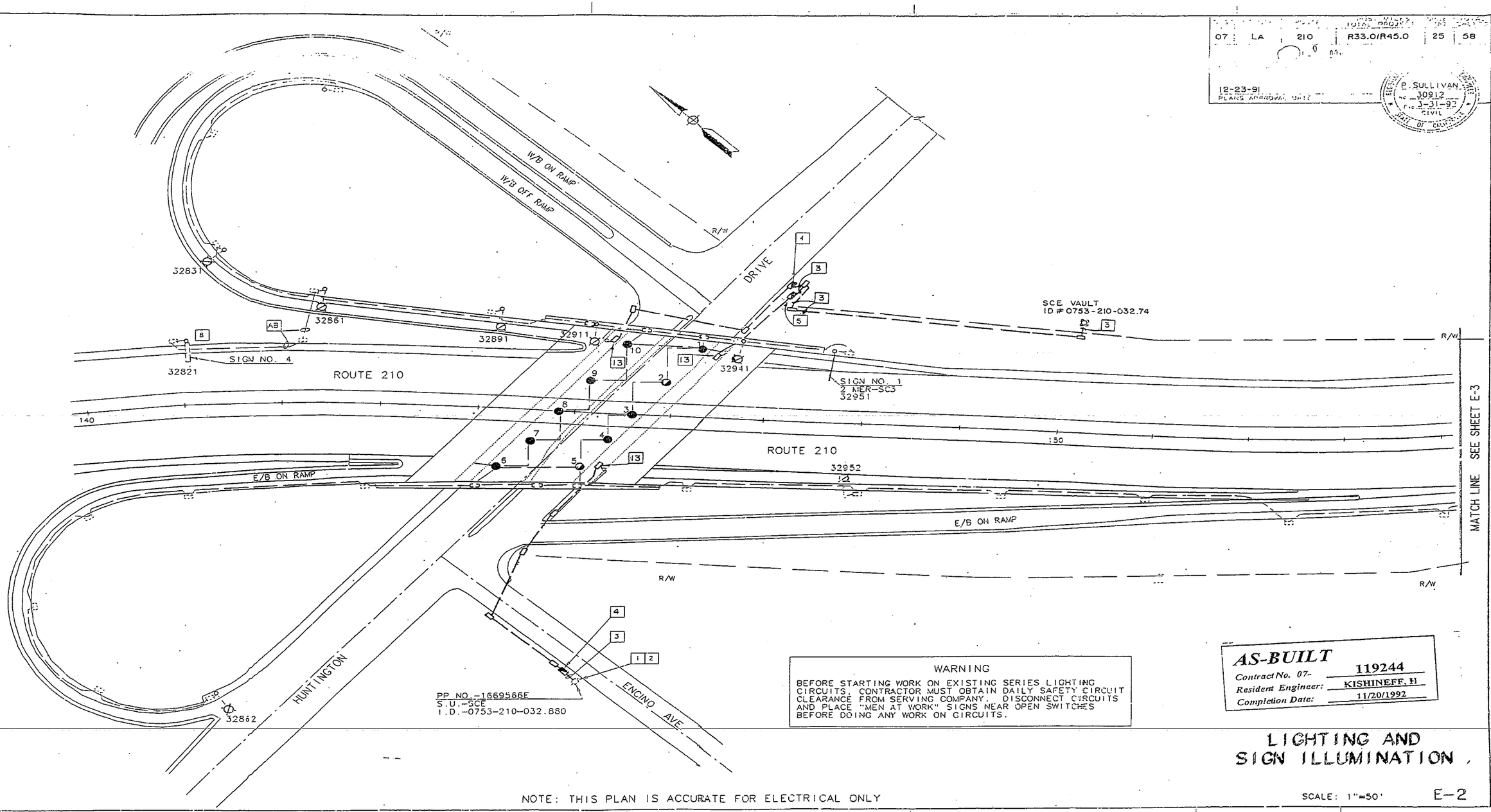
CU 07374 | EA 118041

location 11

07	LA	210	R33.0/R45.0	25	58

12-23-91
PLANS APPROVAL DATE

P. SULLIVAN
30912
3-31-92
CIVIL
STATE OF CALIFORNIA



WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

AS-BUILT
Contract No. 07- 119244
Resident Engineer: KISHINEFF, H
Completion Date: 11/20/1992

LIGHTING AND SIGN ILLUMINATION

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

SCALE: 1"=50'

E-2

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 07375 EA 119241

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
PROJECT ENGINEER E. WOO
PROJECT MANAGER F. B. ERBE
CALCULATED/DESIGNED BY CK DATE REVISED BY
CHECKED BY AC DATE REVISED

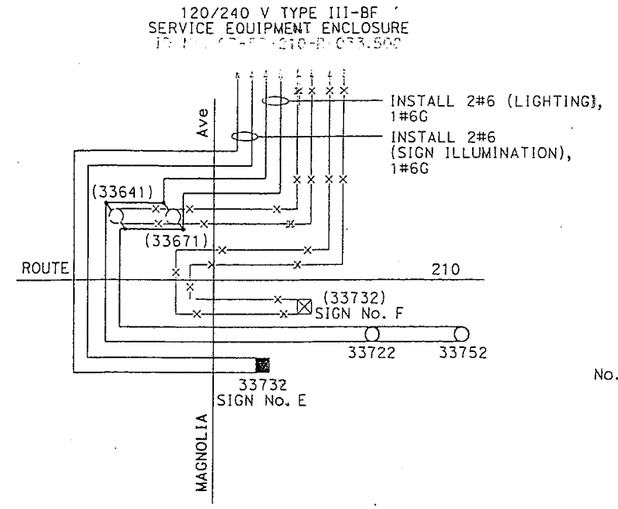
Location 12
1.3

NOTE:
FOR COMPLETE RIGGHT OF WAY AND ACCURATE ACCESS DATA,
SEE RIGHT OF WAYY RECORD MAPS AT DISTRICT OFFICE

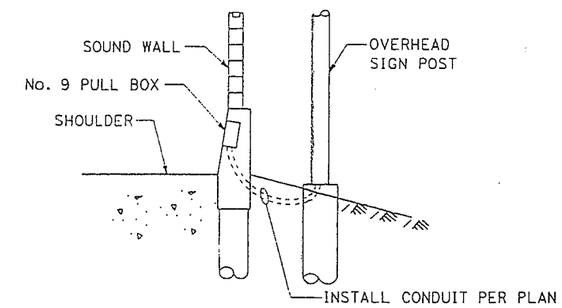
CONDUIT AND CONDUCTOR SCHEDULE

AWG	FUNCTION	1	2	3	4	5	6
#6	LIGHTING	2	2	2		2	
	SIGN ILLUMINATION	2	2	2	2		
	GROUNDD	1	1	1	1	1	1
#10	IRRIGATION						2
3CSC		1	1	1		1	
CONDUIT SIZE		1½"(E)	3"	2"	2"	2"	2"

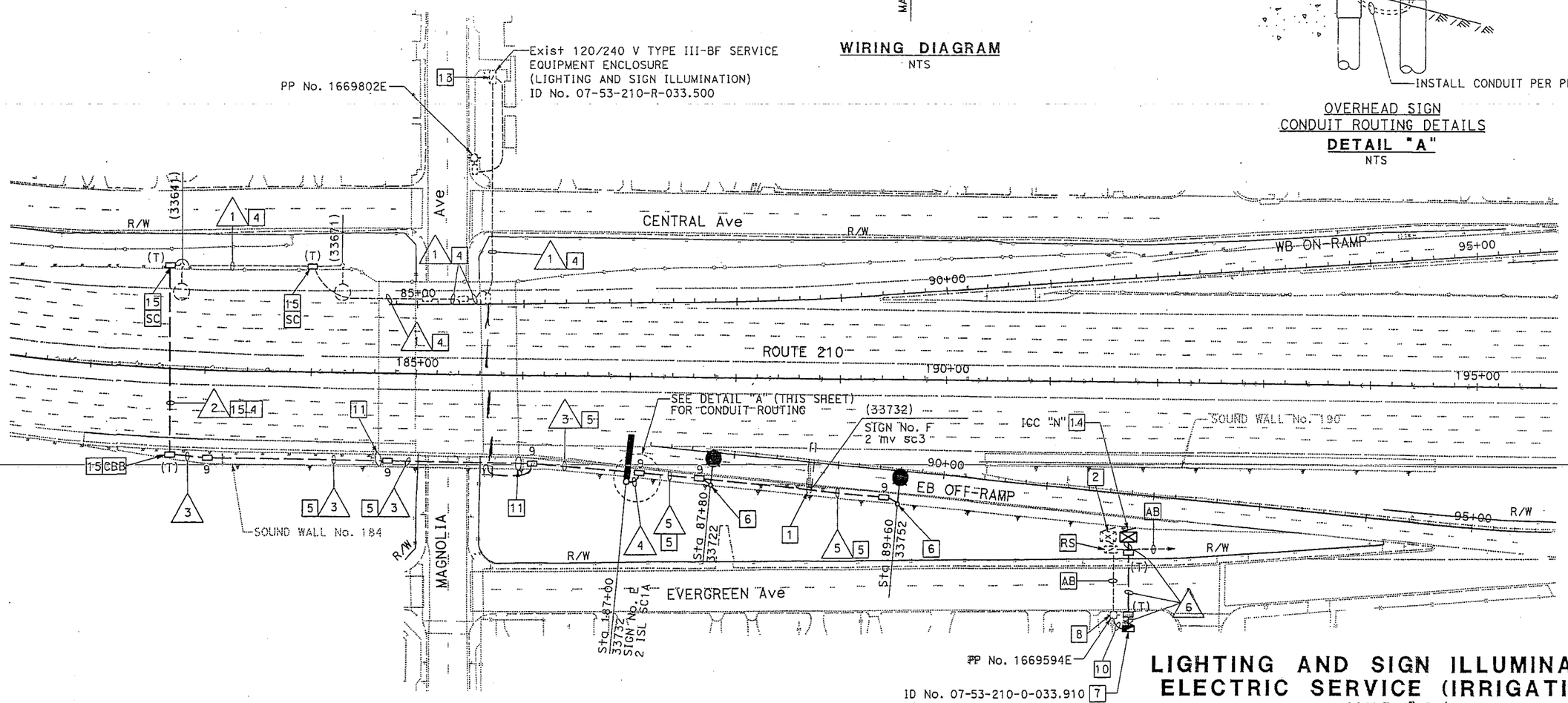
(E) = EXISTING



WIRING DIAGRAM
NTS



OVERHEAD SIGN
CONDUIT ROUTING DETAILS
DETAIL "A"
NTS



LIGHTING AND SIGN ILLUMINATION, ELECTRIC SERVICE (IRRIGATION)
SCALE 1"=50'

FOR NOTES AND LEGEND, SEE SHEET E-9.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	210	R31.8/R34.2		

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

DANIEL TIAN No. 12842 Exp. 09/30/08 ELECTRICAL STATE OF CALIFORNIA

FPL AND ASSOCIATES, INC.
10 CORPORATE PARK, SUITE 310
IRVINE, CA 92606

PARSONS
100 W WALNUT STREET
PASADENA, CA 91124

REVISED BY | DATE REVISED
HENRY TRINH | ALEXANDER ZUPANSKI
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: ALEXANDER ZUPANSKI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

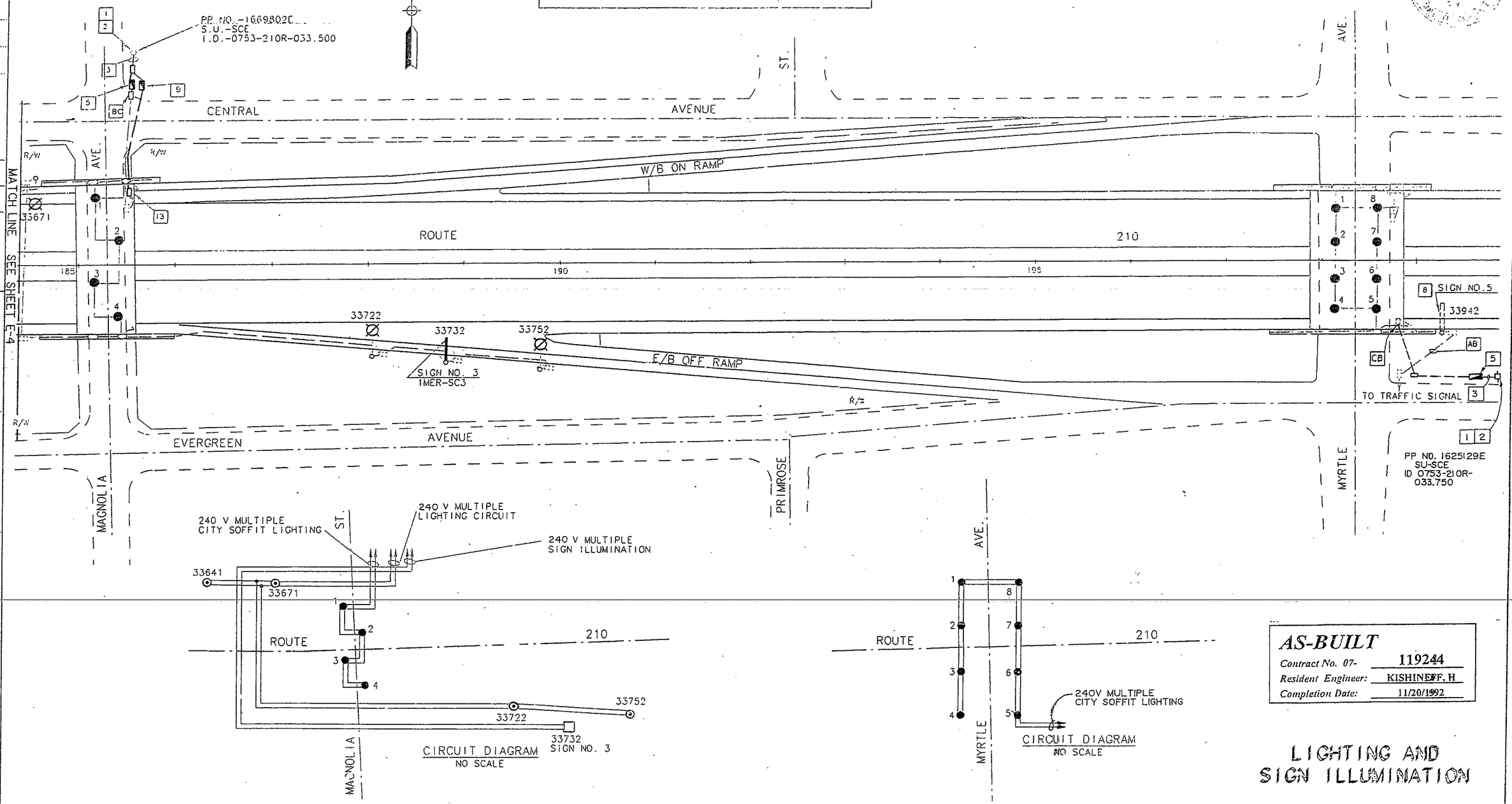
LAST REVISION 06-27-08 | DATE PLOTTED => 05-JAN-2010 | TIME PLOTTED => 13:24

07	LA	210	R33.0/R45.0	28	38

12-23-91

P. SULLIVAN 30912 3-31-92

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.



MATCH LINE SEE SHEET E-4

AS-BUILT
Contract No. 07- 119244
Resident Engineer: KISHINEFF, H
Completion Date: 11/20/1992

LIGHTING AND SIGN ILLUMINATION

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

SCALE: 1"=50'

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

PROJECT ENGINEER: E. WOO
PROJECT MANAGER: F. B. ERBE
CALCULATED/DESIGNED BY
CHECKED BY
CK
DATE
REVISED BY
DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 07375 E 119241

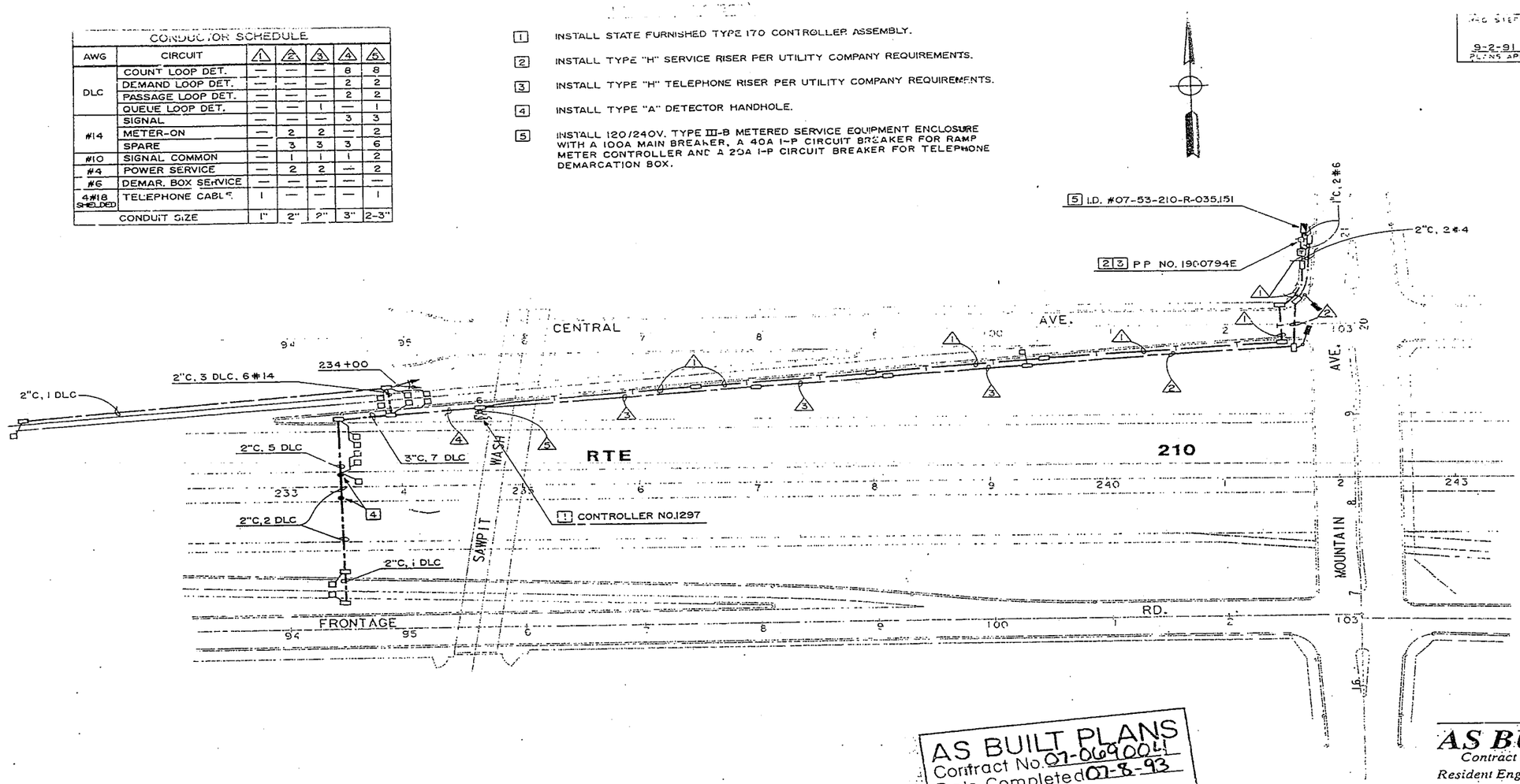
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210,30	R25.0/R43.8	129	158

REGISTERED CIVIL ENGINEER
9-2-91
PLANS APPROVAL DATE

PAT SULLIVAN
No. 30912
Exp. 3/31/92
CIVIL
STATE OF CALIFORNIA

CONDUCTOR SCHEDULE						
AWG	CIRCUIT	1	2	3	4	5
DLC	COUNT LOOP DET.	—	—	—	8	8
	DEMAND LOOP DET.	—	—	—	2	2
	PASSAGE LOOP DET.	—	—	—	2	2
	QUEUE LOOP DET.	—	—	1	—	1
#14	SIGNAL	—	—	—	3	3
	METER-ON	—	2	2	—	2
	SPARE	—	3	3	3	6
#10	SIGNAL COMMON	—	1	1	1	2
#4	POWER SERVICE	—	2	2	—	2
#6	DEMAR. BOX SERVICE	—	—	—	—	—
4#18 SHELDED	TELEPHONE CABLE	1	—	—	—	1
CONDUIT SIZE		1"	2"	2"	3"	2-3"

1. INSTALL STATE FURNISHED TYPE 170 CONTROLLER ASSEMBLY.
2. INSTALL TYPE "H" SERVICE RISER PER UTILITY COMPANY REQUIREMENTS.
3. INSTALL TYPE "H" TELEPHONE RISER PER UTILITY COMPANY REQUIREMENTS.
4. INSTALL TYPE "A" DETECTOR HANDHOLE.
5. INSTALL 120/240V, TYPE III-B METERED SERVICE EQUIPMENT ENCLOSURE WITH A 100A MAIN BREAKER, A 40A 1-P CIRCUIT BREAKER FOR RAMP METER CONTROLLER AND A 20A 1-P CIRCUIT BREAKER FOR TELEPHONE DEMARCATION BOX.



AS BUILT PLANS
Contract No. 07-069004
Date Completed 07-8-93
Document No.

AS BUILT
Contract No. 07- 069004
Resident Engineer: Wayne V. Peirce
Completion Date: July 8, 1993

RAMP METERING SYSTEM
(LOCATION 1)

FOR PROJECT NOTES AND LEGEND SEE SHEET E-18.
NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

SCALE 1" = 50'

E-1

PROJECT ENGINEER A. PEREZ	CALCULATED/DESIGNED BY AE	DATE 12/90
SENIOR ENGINEER T.B. ERBE	CHECKED BY AP	DATE 12/90
	REVISED BY DK	DATE REVISED 2/91

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
Caltrans

LAST REVISION 00-00-00

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 07375 | EA 069001

FORM: DC-OE-95-PP (REV. 3/98)

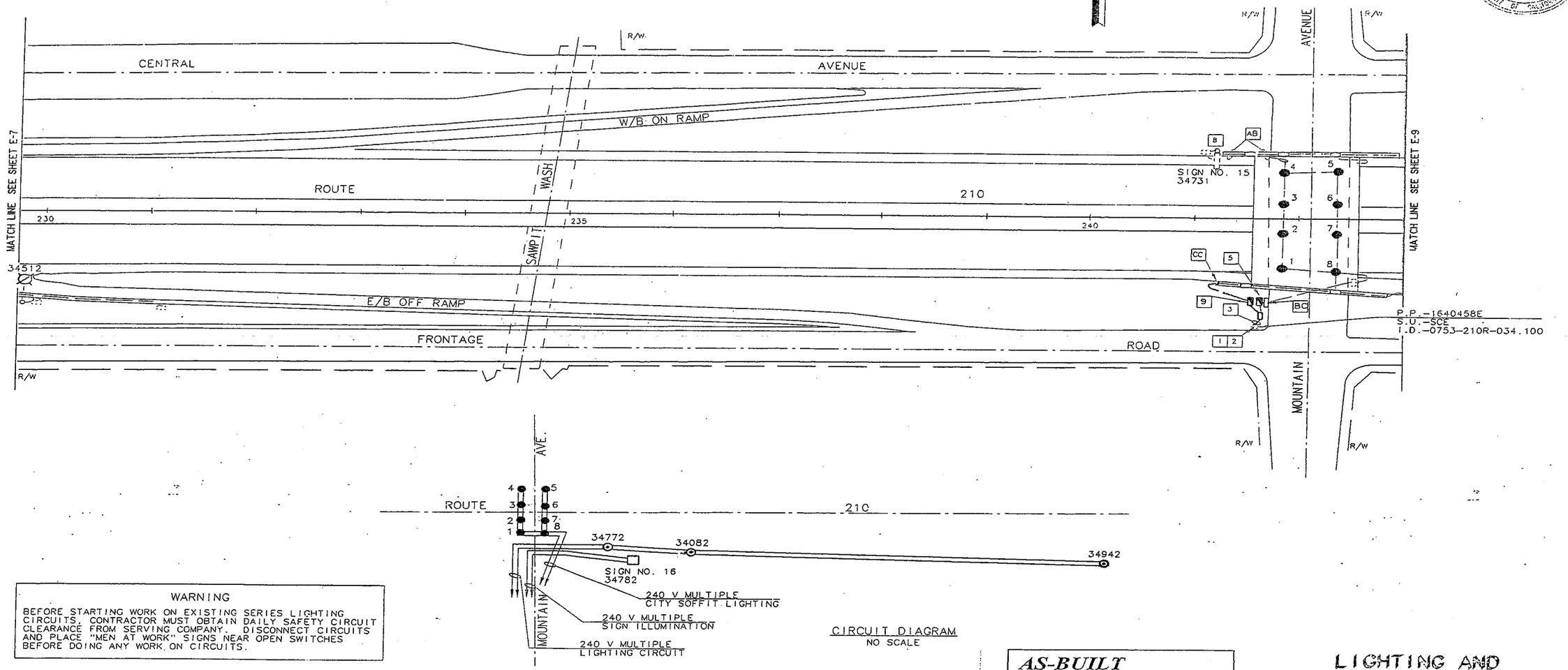
2C3:1330,20311759\E1.DGN,1 2-NOV-1990 14:47 COOK

Locate - 15

DIST	COUNTY	ROUTE			
07	LA	210	R33.0/R45.0	31	58

12-23-91
PLANS APPROVAL DATE

P. SULLIVAN
30912
3-31-92
CIVIL
STATE OF CALIFORNIA



CIRCUIT DIAGRAM
NO SCALE

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

AS-BUILT

Contract No. 07-	119244
Resident Engineer:	KISHINEFF, H
Completion Date:	11/20/1992

LIGHTING AND SIGN ILLUMINATION

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

SCALE: 1"=50'

E-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	PROJECT MANAGER	CALCULATED/DESIGNED BY	CK	DATE	REVISED BY	DATE REVISED
Caltrans TRAFFIC DESIGN	E. WOO	F. B. ERBE	CHECKED BY	AC			

FORM DC-OE-52-0F (REV 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 07375 EA 119241

Location 15

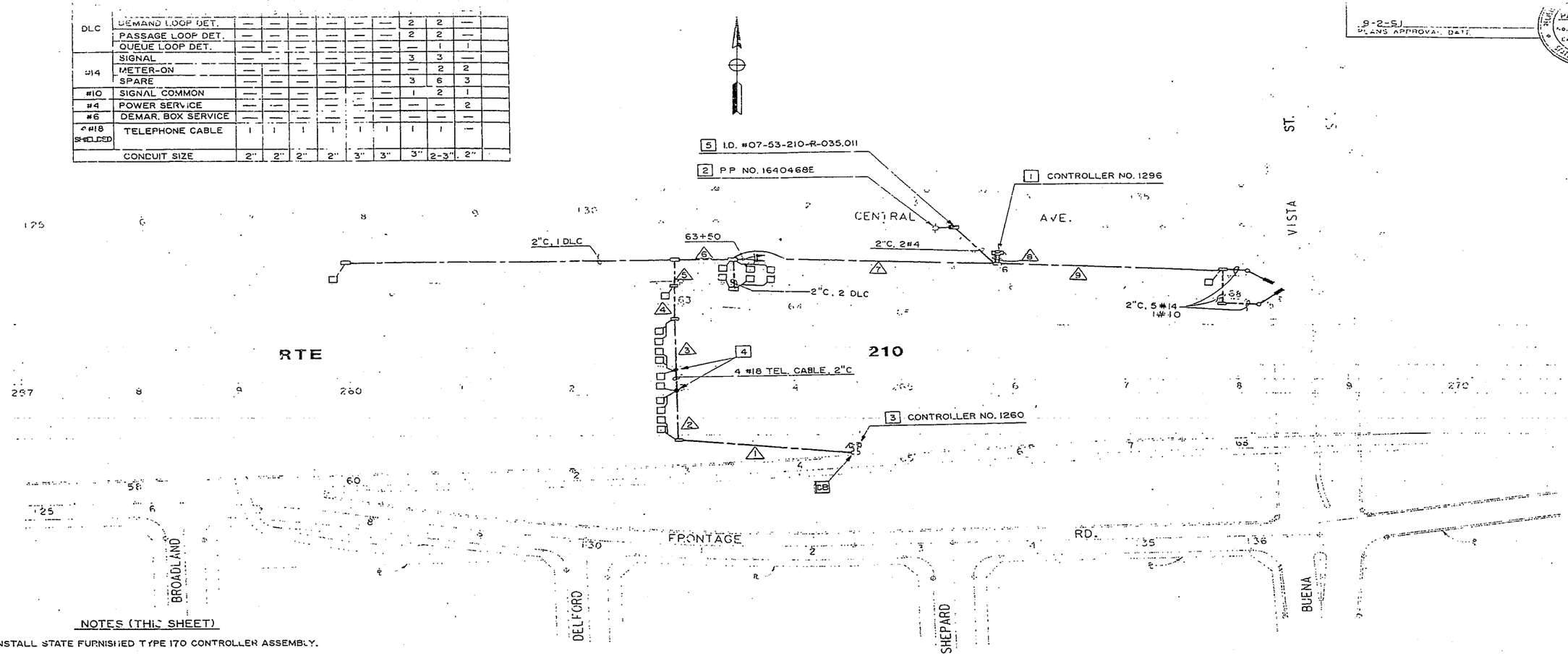
DIST	COUNTY	ROUTE	POST MILLS TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	210,30	R25.0/R43.8, RO.3	130	158

9-2-91
PLANS APPROVAL DATE

PAT SULLIVAN
No. 30912
Exp. 3-31-92
CIVIL
STATE OF CALIFORNIA

CONDUCTOR SCHEDULE

AWG	CIRCUIT									
DLC	DEMAND LOOP DET.	—	—	—	—	—	—	2	2	—
	PASSAGE LOOP DET.	—	—	—	—	—	—	2	2	—
	QUEUE LOOP DET.	—	—	—	—	—	—	—	1	1
#14	SIGNAL	—	—	—	—	—	—	3	3	—
	METER-ON	—	—	—	—	—	—	—	2	2
	SPARE	—	—	—	—	—	—	3	6	3
#10	SIGNAL COMMON	—	—	—	—	—	—	1	2	1
#4	POWER SERVICE	—	—	—	—	—	—	—	—	2
#6	DEMAR. BOX SERVICE	—	—	—	—	—	—	—	—	—
#18 SHIELDED	TELEPHONE CABLE	1	1	1	1	1	1	1	1	—
	CONDUIT SIZE	2"	2"	2"	2"	3"	3"	3"	2-3"	2"



NOTES (THIS SHEET)

1. INSTALL STATE FURNISHED TYPE 170 CONTROLLER ASSEMBLY.
2. INSTALL TYPE "H" SERVICE RISER PER UTILITY COMPANY REQUIREMENTS.
3. INSTALL TELEPHONE BRIDGE IN EXISTING CONTROLLER CABINET.
4. INSTALL TYPE "A" DETECTOR HANDHOLE.
5. INSTALL 120/240V. TYPE III-B METERED SERVICE EQUIPMENT ENCLOSURE WITH A 100A MAIN BREAKER AND A 40A 1-P CIRCUIT BREAKER FOR RAMP METER CONTROLLER.

AS BUILT PLANS
Contract No. 07-069004
Date Completed 07-8-93
Document No.

AS BUILT
Contract No. 07-069004
Resident Engineer: Wayne V. Peirce
Completion Date: July 8, 1993

RAMP METERING SYSTEM (LOCATION 2)

SCALE 1"=50'

E-2

FOR PROJECT NOTES AND LEGEND SEE SHEET E-18.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

PROJECT ENGINEER A. PEREZ
SENIOR ENGINEER F.B. ERBE
CALCULATED/DESIGNED BY AS DATE 12/90
CHECKED BY AP DATE 12/90
REVISED BY DF
DATE REVISED 2/91

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

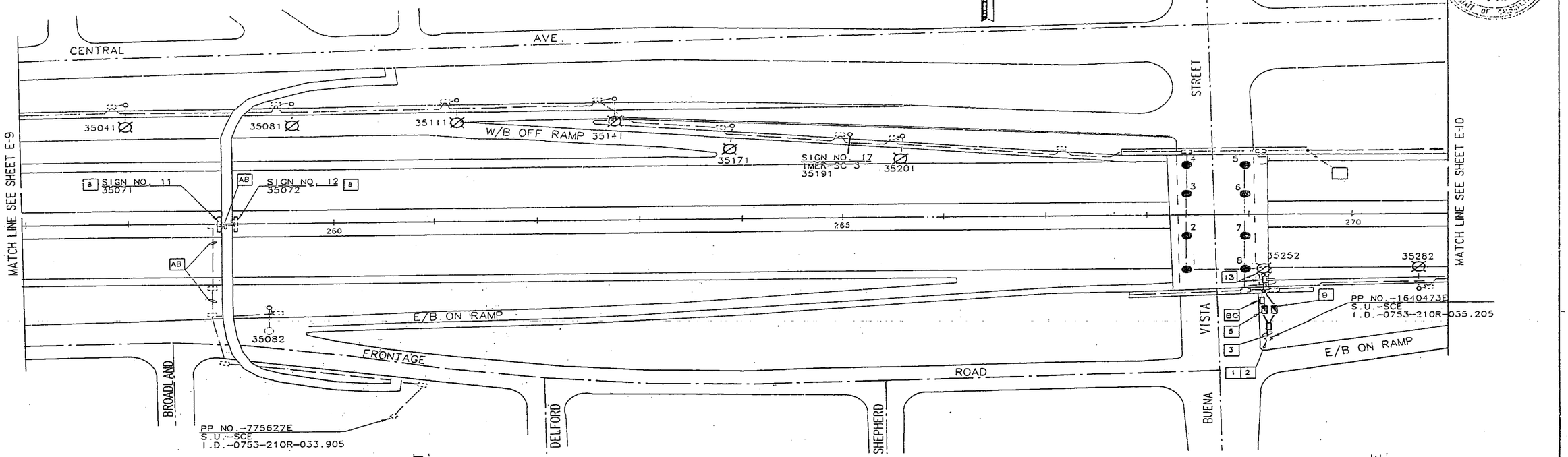
CU 07375 EA 069001

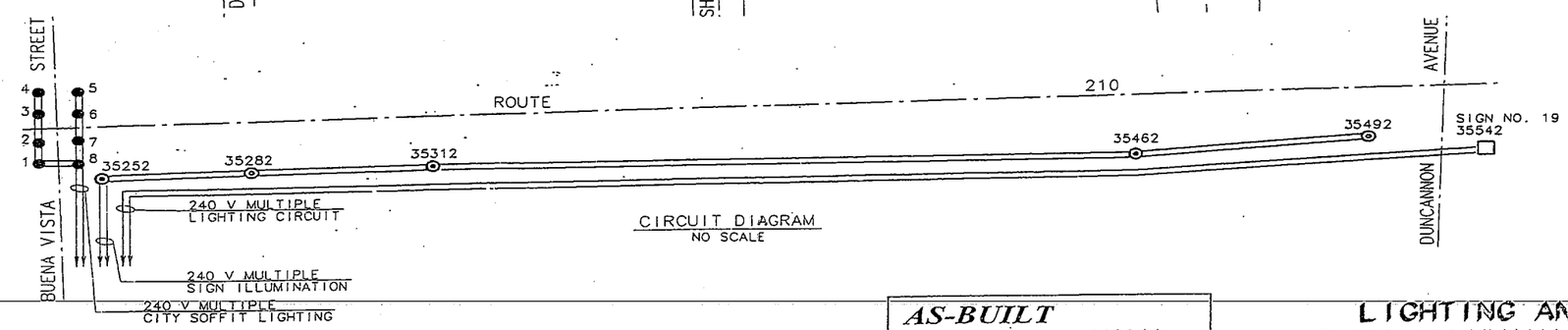
LAST REVISION 00-00-00

07	LA	210	R33.0/R45.0	33	58

12-23-91
PLANS APPROVAL DATE

P. SULLIVAN
30912
3-31-92
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA





CIRCUIT DIAGRAM
NO SCALE

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

AS-BUILT
Contract No. 07- 119244
Resident Engineer: KISHINEFF, H
Completion Date: 11/20/1992

LIGHTING AND SIGN ILLUMINATION

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

SCALE: 1"=50'

E-10

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

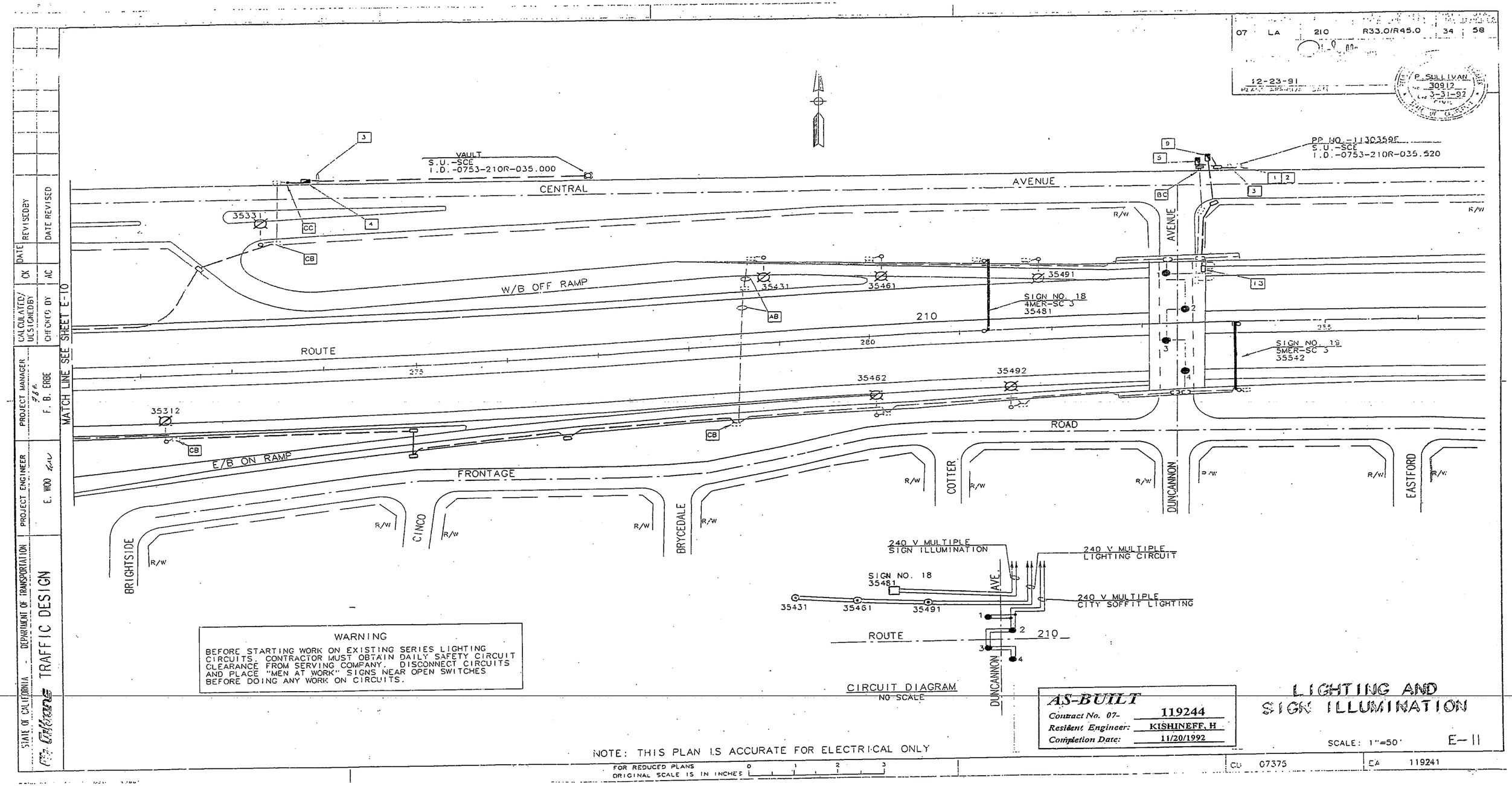
CU 07375 | EA 119421

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

PROJECT ENGINEER: E. WOO
PROJECT MANAGER: F. B. ERBE
CALCULATED/DESIGNED BY
CHECKED BY: AC
CK
DATE
REVISED BY
DATE REVISED

FORM DC-OE-92-PE (REV. 3/88)

L-40-16


07 LA 210 R33.0/R45.0 34 58
12-23-91
P. SULLIVAN 30912 3-31-92
VAULT
S.U.-SCE
I.D.-0753-210R-035.000
PP NO.-1130359F
S.U.-SCE
I.D.-0753-210R-035.520
CENTRAL AVENUE
W/B OFF RAMP
ROUTE 210
E/B ON RAMP
FRONTAGE ROAD
SIGN NO. 18
4MER-SC 3
35481
SIGN NO. 19
5MER-SC 3
35542
35331
35431
35461
35491
35312
35462
35492
MATCH LINE SEE SHEET E-10
BRIGHTSIDE
CINCO
BRYCEDALE
COTTER
DUNCANNON
EASTFORD
R/W
240 V MULTIPLE SIGN ILLUMINATION
240 V MULTIPLE LIGHTING CIRCUIT
240 V MULTIPLE CITY SOFFIT LIGHTING
SIGN NO. 18
35481
35431
35461
35491
ROUTE 210
DUNCANNON AVE.
CIRCUIT DIAGRAM
NO SCALE
WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.
AS-BUILT
Contract No. 07- 119244
Resident Engineer: KISHINEFF, H
Completion Date: 11/20/1992
LIGHTING AND SIGN ILLUMINATION
SCALE: 1"=50'
E-11
NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
CU 07375
EA 119241
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
PROJECT ENGINEER E. WOO
PROJECT MANAGER F. B. ERBE
CALCULATED/DESIGNED BY
CHECKED BY
CK
DATE
REVISED BY
DATE REVISED

Page 1 of 1