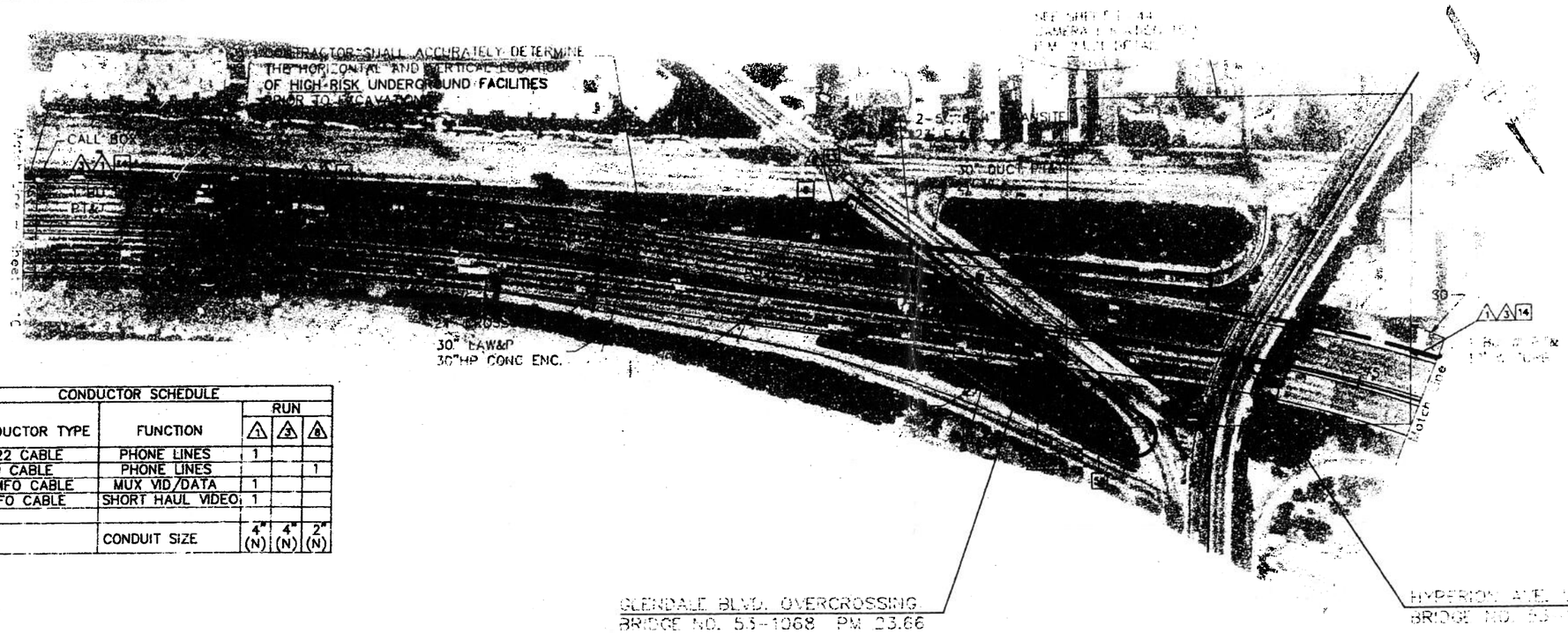
INFORMATION HANDOUT

For Contract No. 07-305504
At 07-LA-5-13.7/26.7

Identified by
Project ID 0714000101

MATERIALS INFORMATION

Fiber Optic Cable System As-built Drawings



CONDUCTOR SCHEDULE				
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 3	RUN 8
50P22 CABLE	PHONE LINES	1		
6P19 CABLE	PHONE LINES			1
48SMFO CABLE	MUX VID/DATA	1		
8MMFO CABLE	SHORT HAUL VIDEO	1		
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)

AS BUILT 116634
Contract No. 07-
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN OVERSIGHT
GLORIA GWYNNE
CHECKED BY JK 3/23

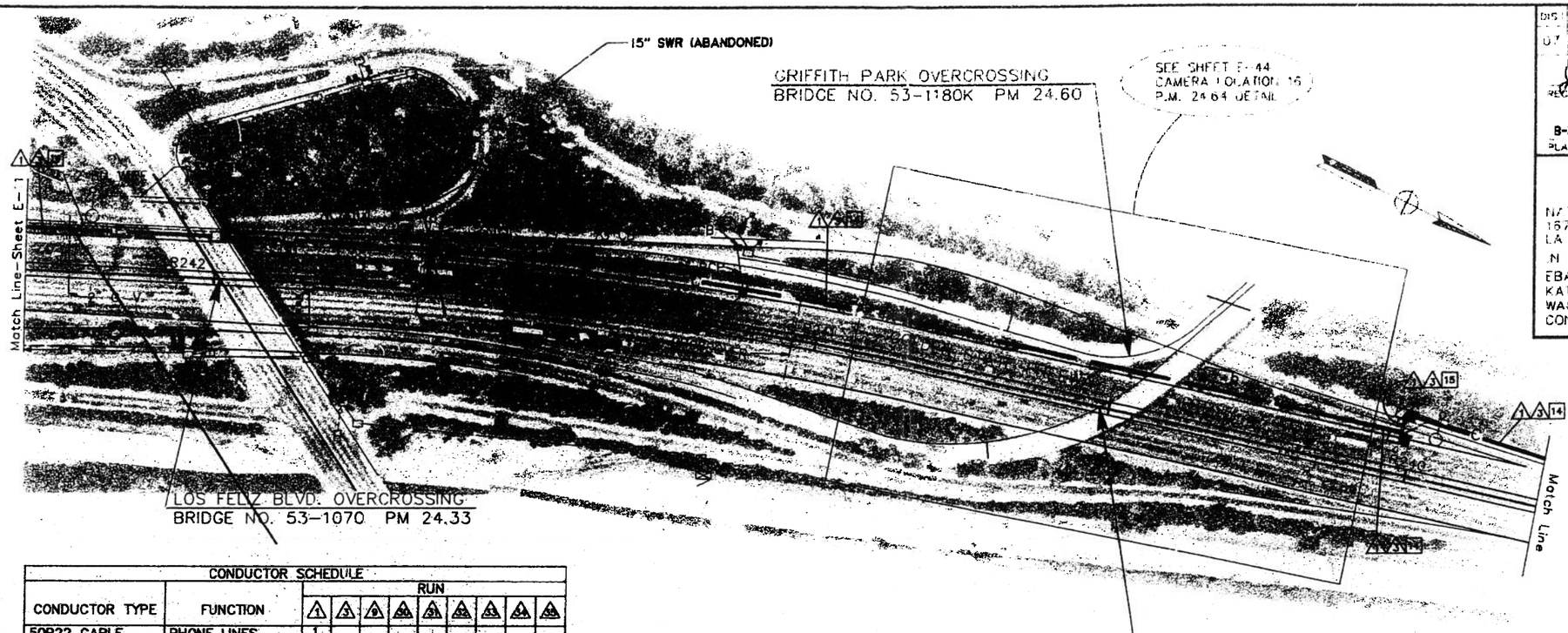
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	510	16.9/46.2,SOJ	34	153

Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

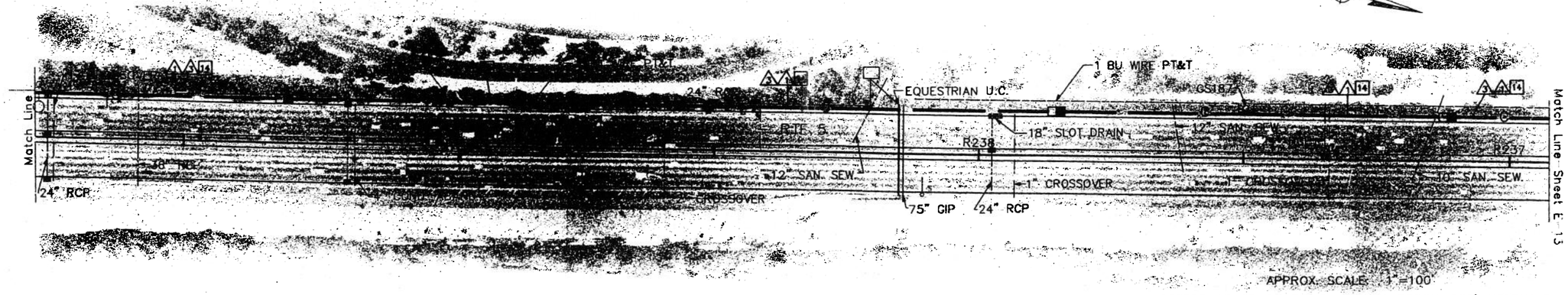
PROFESSIONAL ENGINEER — JOSEPH A. KWAK — No. 0491 — Exp. 6/30/95 — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS



CONDUCTOR SCHEDULE											
CONDUCTOR TYPE	FUNCTION	RUN ①	②	③	④	⑤	⑥	⑦	⑧	⑨
50P22 CABLE	PHONE LINES	1								
12P22 CABLE	PHONE LINES			1	1(N)	1(N)	1(N)	1(N)	1(N)	
48SMFO CABLE	MUX VID/DATA	1								
8MMFO CABLE	SHORT HAUL VIDEO	1								
#14 EXIST.	RAMP SIGNAL									3
#14 EXIST.	METER ON									1
#14 EXIST.	SPARES									4
2#12 EXIST.	COUNT DETECTOR				5	6	8	9	9	
2#12 EXIST.	RAMP DETECTOR								3	
#10 EXIST.	COMMON									2
#8 EXIST.	SERVICE									2
4#18 EXIST.	SHIELDED TEL. CABLE				2	3	3	3	3	
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2"	2"	2"	2"	2"	2"

~~ALL CONDUITS AND CONDUCTORS ARE EXISTING UNLESS OTHERWISE NOTED.~~



APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE
RELATIVE DISTANCE IN THOUSANDS OF FEET.

AS BUILT 116634
Contract No. 07-
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-12

DATE	REVISED BY
3/23	DATE REVISED

CALCULATED/DESIGNED BY: JK
CHECKED BY:

DESIGN OVERSIGHT: GLORIA GWYNNE

CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

03/19/92

STAT.

116634E12.DWG

FOR REDUCED PLANS 0 1 2 3

DU 07238 LEA 116634

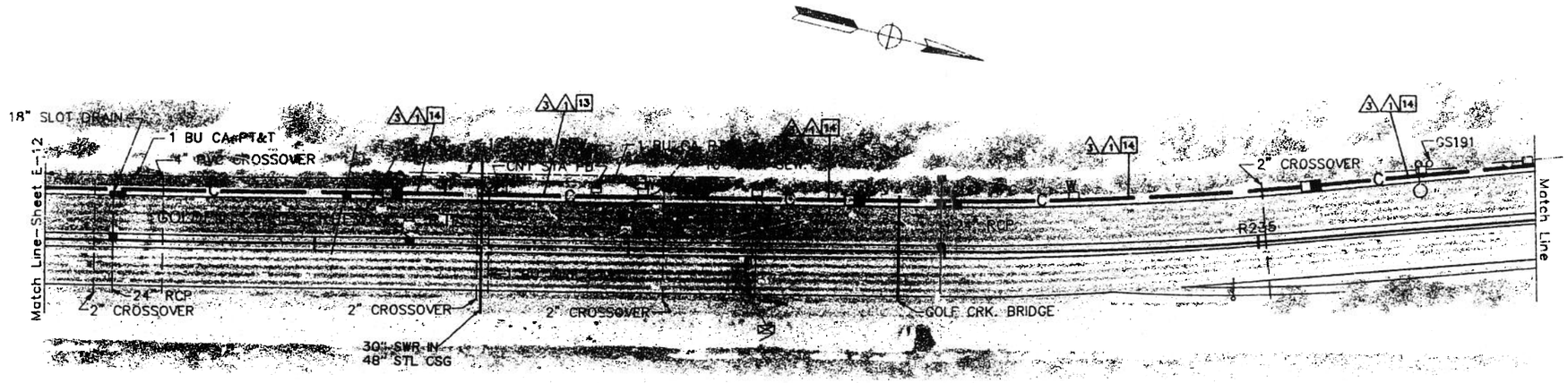
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	16.9/46.2,50.1	35	153

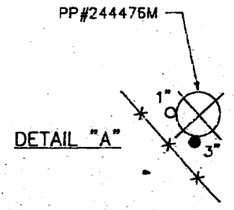
Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JOSEPH A. KWAK — No. 13997 — Exp. 6/30/95 — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS



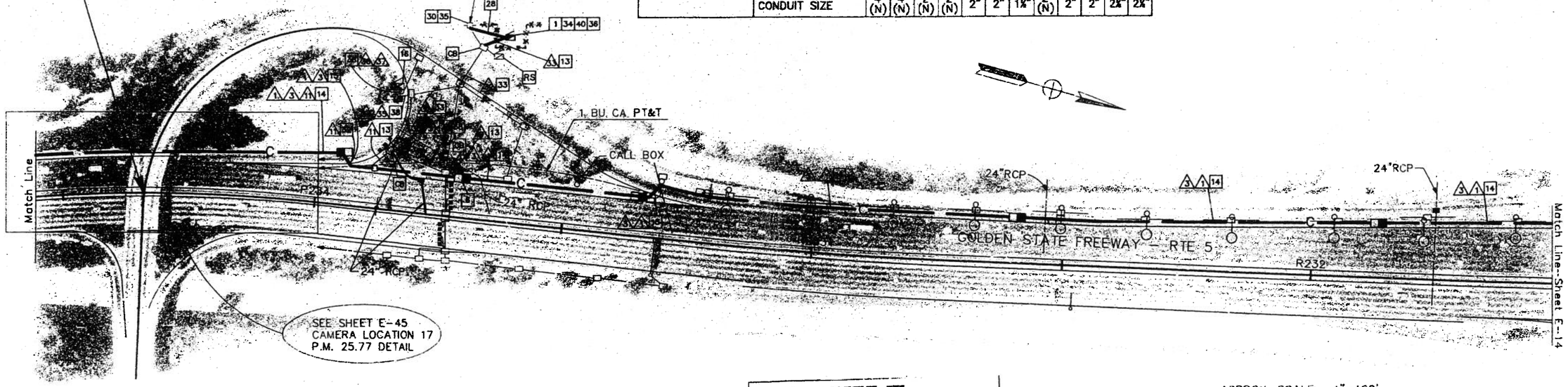


DETAIL "A"

COLORADO BL. ON/OFF RAMPS
BRIDGE NO. 53-1073E PM 25.77

PP #244476M
SEE DETAIL "A"

CONDUCTOR TYPE	FUNCTION	CONDUCTOR SCHEDULE RUN ①	③	⑧	⑪	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑
50P22 CABLE	PHONE LINES	1											
12P22 CABLE	PHONE LINES			1		1(N)					1(N)		1(N)
48SMFO CABLE	MUX VID/DATA	1											
8MMFO CABLE	SHORT HAUL VIDEO	1											
#4	POWER				2		2(N)	2(N)	2				
#8	GROUND				1								
DLC EXIST.	DETECTOR LOOP CAB.					5	2			2	5		7
4#18 EXIST.	SHIELD TELEPHONE CABLE					1					1		1
#14 EXIST.	RAMP METER						3			3		3	
#14 EXIST.	SPARES						3			4		4	
#10 EXIST.	SIGNAL COMMON						1			1		1	
#14 EXIST.	METER ON IND.									1		1	
#12 EXIST.	FLASH BEACON									2		2	
#8 EXIST.	SERVICE RMS							2	2	2		2	
#12 EXIST.	SERVICE TDC							2	2	2		2	
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2" (N)	2"	2"	1¼"	2" (N)	2"	2"	2½"	2½"



AS BUILT
Contract No. 07-116634
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE
RELATIVE DISTANCE IN THOUSANDS OF FEET.

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-13

DATE	REVISED BY	DATE REVISED
	JK	3/23

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVER.. HT
GLORIA GWYNNE

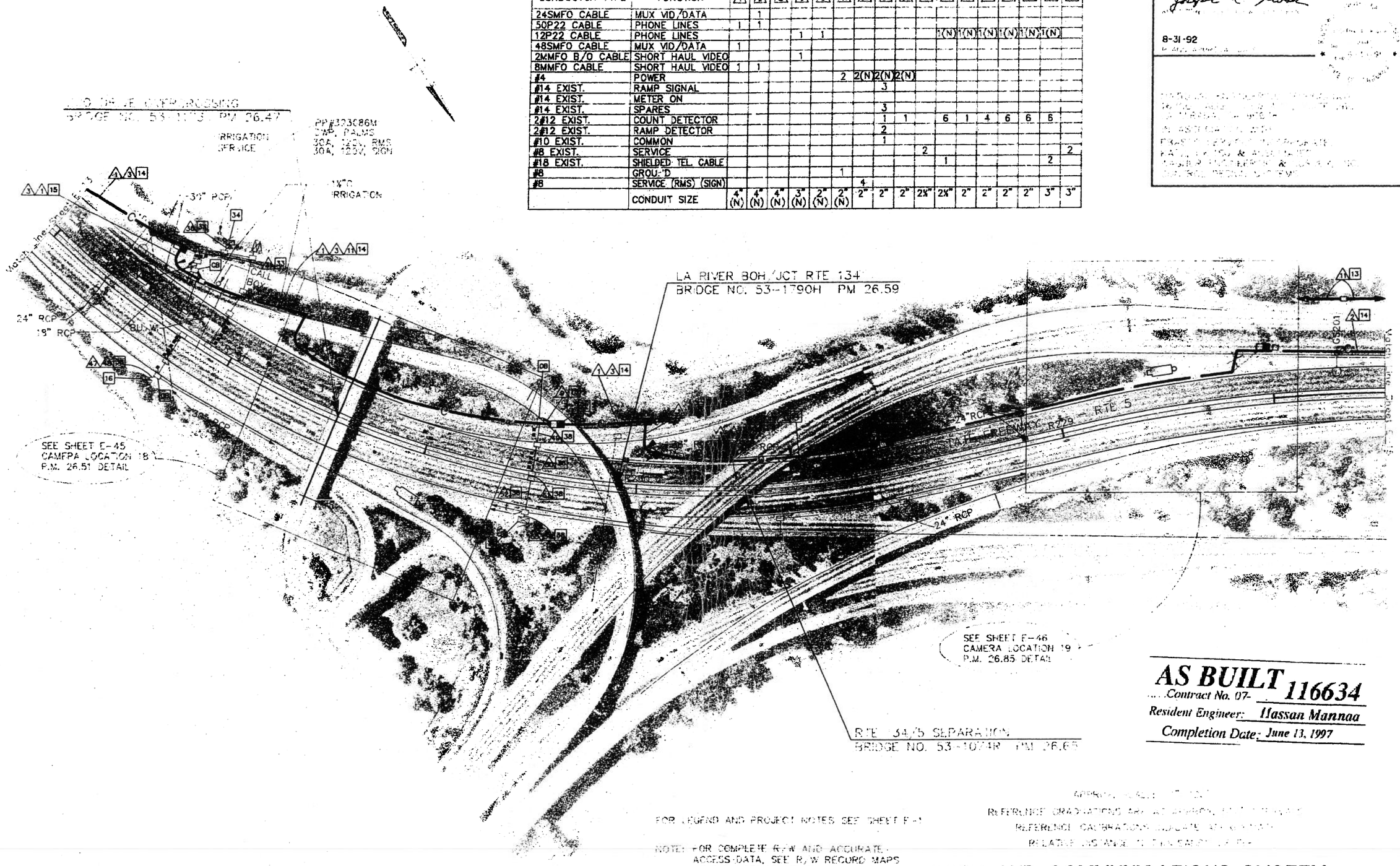
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

03/16/92

116634C13.DWG

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	9	9	11	30	31	32	47	48	49	50	51	52	53	54
24SMFO CABLE	MUX VID/DATA		1															
50P22 CABLE	PHONE LINES	1	1															
12P22 CABLE	PHONE LINES				1	1						1(N)	1(N)	1(N)	1(N)	1(N)	1(N)	
48SMFO CABLE	MUX VID/DATA	1																
2MMFO B/O CABLE	SHORT HAUL VIDEO				1													
8MMFO CABLE	SHORT HAUL VIDEO	1	1															
#4	POWER						2	2(N)	2(N)	2(N)								
#14 EXIST.	RAMP SIGNAL								3									
#14 EXIST.	METER ON																	
#14 EXIST.	SPARES								3									
2#12 EXIST.	COUNT DETECTOR								1	1		6	1	4	6	6	6	
2#12 EXIST.	RAMP DETECTOR								2									
#10 EXIST.	COMMON								1									
#8 EXIST.	SERVICE										2							2
#18 EXIST.	SHIELDED TEL. CABLE											1					2	
#8	GROUND						1											
#8	SERVICE (RMS) (SIGN)							4										
	CONDUIT SIZE	4" (N)	4" (N)	4" (N)	3" (N)	2" (N)	2" (N)	2"	2"	2"	2½"	2½"	2"	2"	2"	2"	3"	3"



5.10 16.9/46.2,50.1 36 53

Joseph A. Kwak

8-31-92

AS BUILT 116634

Contract No. 07-

Resident Engineer: Hassan Mannaa

Completion Date: June 13, 1997

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

APPROX. SCALE: 1" = 100'

REFERENCE GRADUATIONS ARE AS APPROX. [illegible]

REFERENCE CALIBRATIONS INDICATE [illegible]

RELATIVE DISTANCE [illegible]

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN OVERSIGHT: GLORIA GWYNNE

CALCULATED BY / DESIGNED BY / CHECKED BY: JK 3/23 DATE REVISED

05/15/92

11663E14.DWG

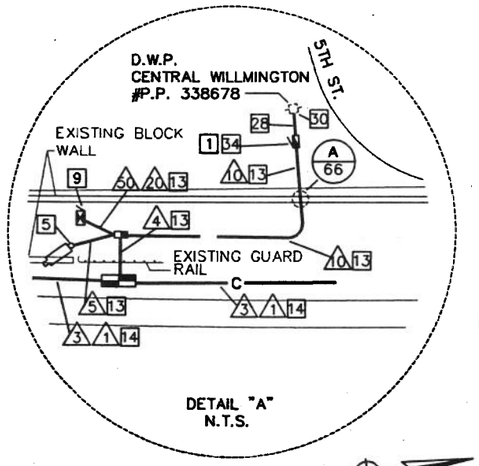
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5/10	16.3/46.2,30.1	59	153

Joseph A. Kwak 3/23/92
REGISTERED ELECTRICAL ENGINEER (Date)

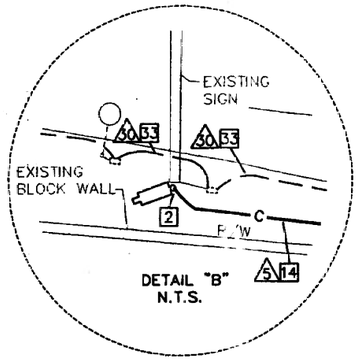
8-31-92
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JOSEPH A. KWAK — No. 10991 — Exp. 5/30/95 — ELECTRICAL — STATE OF CALIFORNIA

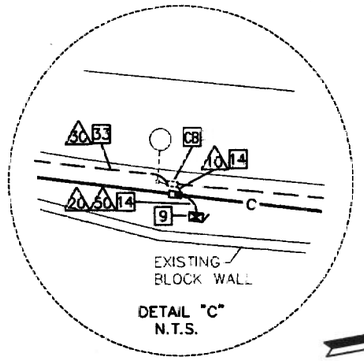
NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA. 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS



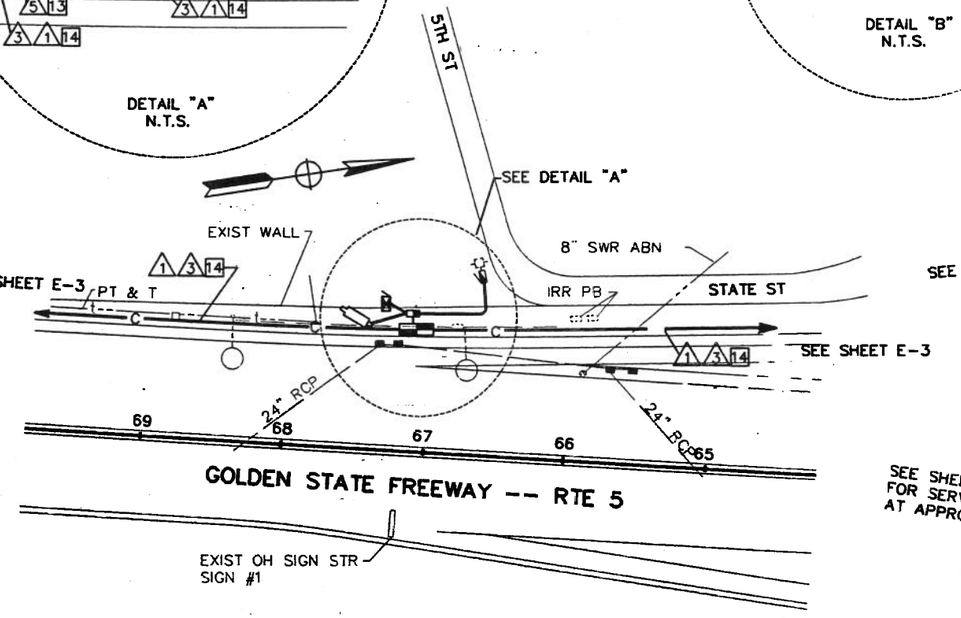
DETAIL "A"
N.T.S.



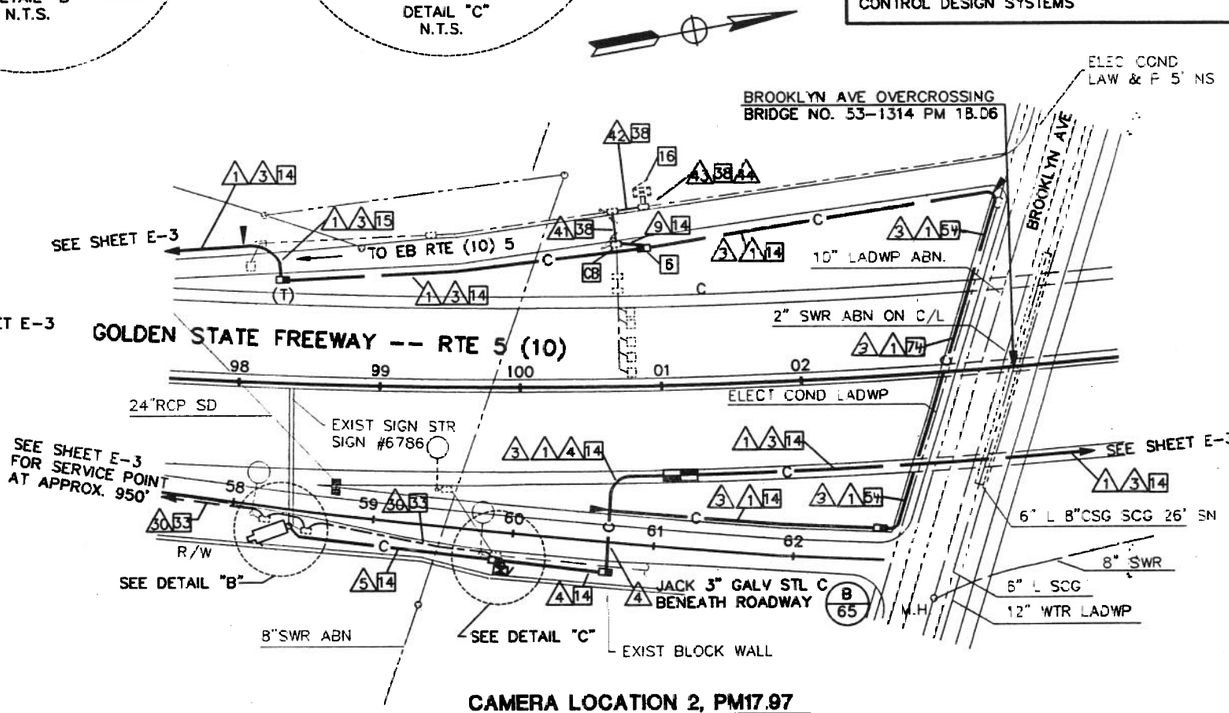
DETAIL "B"
N.T.S.



DETAIL "C"
N.T.S.



CAMERA LOCATION 1, PM17.22



CAMERA LOCATION 2, PM17.97

CONDUCTOR SCHEDULE CAMERA LOCATION 1

CONDUCTOR TYPE	FUNCTION	1	3	4	5	10	20	50
50P22 CABLE	PHONE LINES	1						
6P19 CABLE	PHONE LINES			1			1	
48SMFO CABLE	MUX VID/DATA	1						
8MMFO CABLE	SHORT HAUL VIDEO	1						
2MMFO B/O CABLE	SHORT HAUL VIDEO			1			1	
RG-6A/U COAX	BASEBAND VIDEO				1		1	
27C18 CABLE	CONTROL				1		1	
#8	POWER					2		2
#8	GROUND				1	1		2
CONDUIT	SIZE	4" (N)	4" (N)	3" (N)	3" (N)	2" (N)	3" (N)	3" (N)

CONDUCTOR SCHEDULE CAMERA LOCATION 2

CONDUCTOR TYPE	FUNCTION	1	3	4	5	9	11	17	20	30	41	42	43	44	50
50P22 CABLE	PHONE LINES	1						1							
6P19 CABLE	PHONE LINES			1					1						
12P22 CABLE	PHONE LINES					1		1			1(N)	1(N)	1(N)		
48SMFO CABLE	MUX VID/DATA	1						1							
8MMFO CABLE	SHORT HAUL VIDEO	1						1							
2MMFO B/O CABLE	SHORT HAUL VIDEO			1					1						
RG-6A/U COAX	BASEBAND VIDEO				1				1						
27C18 CABLE	CONTROL				1				1						
#4	POWER						2			2(N)					2
#6 EXIST										4					
2#14 DLC (EXIST)	COUNT DETECTOR										5	6	6		
2#14 DLC (EXIST)	DEMAND DETECTOR										1	2	2		
2#14 DLC (EXIST)	PASSAGE DETECTOR										1	2	2		
#14 (EXIST)	SIGNAL										3	6		6	
#14 (EXIST)	SPARES										3	6		6	
#10 (EXIST)	SIGNAL COMMON											1		1	
#8 (EXIST)	SIGNAL SERVICE													2	
2#14 (EXIST)	QUEUE DETECTOR												2		
#8	GROUND				1		1		1						2
CONDUIT	SIZE	4" (N)	4" (N)	3" (N)	3" (N)	2" (N)	2" (N)	4" (N)	3" (N)	1 1/2"	2"	2"	2-2 1/2"	2 1/2"	3" (N)

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY.
SEE SHEET E-1 FOR LEGEND AND GENERAL NOTES

CCTV AND COMMUNICATIONS SYSTEM LOCATIONS 1 AND 2

SCALE: 1"= 50'

E-37

REVISED BY	DATE REVISED
X	5/22

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

11663E37.DWG WES 05/15/92

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

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

CU 07387 EA 116634

AS-BUILT FOR EA

PROJECT NOTES

1. INSTALL TYPE III-BF SERVICE EQUIPMENT ENCLOSURE ON NEW FOUNDATION
2. INSTALL CAMERA POLE (TYPE 15) ON EXISTING SIGN STRUCTURE POLE SEE STRUCTURES SHEETS FOR DETAILS INSTALL CAMERA ON POLE SEE SHEET E-75 FOR CAMERA INSTALLATION DETAILS
3. INSTALL CAMERA POLE (TYPE 30) AND FOUNDATION SEE STRUCTURES SHEETS FOR DETAILS INSTALL CAMERA ON POLE SEE SHEET E-75 FOR CAMERA INSTALLATION DETAILS
4. INSTALL CAMERA POLE (TYPE 40) AND FOUNDATION SEE STRUCTURES SHEETS FOR DETAILS INSTALL CAMERA ON POLE SEE SHEET E-75 FOR CAMERA INSTALLATION DETAILS
5. INSTALL CAMERA POLE (TYPE 45) AND FOUNDATION SEE STRUCTURES SHEETS FOR DETAILS INSTALL CAMERA ON POLE SEE SHEET E-75 FOR CAMERA INSTALLATION DETAILS
6. INSTALL NO 6(T) PB (MODIFIED) WITH TWISTED PAIR SPLICE CLOSURE SEE DETAIL B, SHEET E-69
7. INSTALL TYPE 334-TV CABINETS (2) ON NEW FOUNDATION CABINETS TO INCLUDE CAMERA CONTROL RECEIVER, EQUIPMENT AT DATA NODE AND EQUIPMENT AT VIDEO NODE SEE DETAIL B, SHEET E-74.
8. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION; CABINET TO INCLUDE CAMERA CONTROL RECEIVER, VIDEO TRANSMITTER AND VIDEO REPEATER. SEE DETAIL A, SHEET E-74.
9. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION; CABINET TO INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER SEE DETAIL A, SHEET E-73.
10. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION; CABINET TO INCLUDE CAMERA CONTPOL PECEIVER, VIDEO TRANSMITTER AND EQUIPMENT AT DATA NODE SEE DETAIL C, SHEET E-73.
11. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION, CABINETS TO INCLUDE CAMERA CONTROL RECEIVER AND EQUIPMENT AT VIDEO NODE. SEE DETAIL B, SHEET E-73.
12. JACK 4" GALVANIZED STEEL CONDUIT BENEATH ROADWAY SEE DETAIL B, SHEET E-65.
13. INSTALL CONDUIT(S) IN 6" WIDE TRENCH IN DIRT OFF SHOULDER, WITHIN 10' OF EDGE OF SHOULDER SEE SHEETS E-61 AND E-64 FOR DETAILS.
14. INSTALL CONDUIT(S) IN 6" WIDE TRENCH IN ASPHALT SHOULDER, MAINTAINING 4' MINIMUM DISTANCE FROM EDGE OF TRAVELWAY SEE SHEETS E-62 AND E-64 FOR DETAILS.
15. JACK TWO 4" GALVANIZED STEEL CONDUITS BENEATH ROADWAY. SEE DETAIL C, SHEET E-65.
16. INSTALL COMMUNICATIONS TERMINAL BLOCK AND TELEPHONE BRIDGE IN EXISTING CONTROLLER CABINET. SEE SHEET E-71 FOR DETAILS.
17. PRUNE PLANTS AFTER CAMERA IS INSTALLED AND OPERATING ENGINEER TO VERIFY THAT FINAL VIEW IS UNOBSCURED.
18. INSTALL BD-3 PEDESTAL FOR COMMUNICATIONS SEE SHEET E-72 FOR DETAILS.
19. INSTALL CONDUIT(S) IN 6" WIDE SAWCUT TRENCH IN CONCRETE SIDEWALK. MAINTAINING 4' MINIMUM DISTANCE FROM EDGE OF TRAVELWAY. SEE SHEETS E-63 AND E-64 FOR DETAILS.
28. INSTALL 3" STL CONDUIT ELECTRIC UTILITY COMPANY TO INSTALL 3 #2 CONDUCTORS
29. ELECTRIC UTILITY COMPANY TO INSTALL METER.
30. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE
31. INSTALL 240V/120V STEP DOWN TRANSFORMER IN PULL BOX.
32. JACK 2" GALVANIZED STEEL CONDUIT BENEATH ROADWAY. SEE DETAIL A, SHEET E-65
33. ADD SERVICE (AND COMMUNICATIONS) CONDUCTORS IN EXISTING CONDUIT.
34. INSTALL 15A, 120V CIRCUIT BREAKER FOR CAMERA AND TYPE 334-TV CABINET.
35. REMOVE EXISTING SERVICE RISER FROM POWER POLE
36. INSTALL 20A, 120V CIRCUIT BREAKER FOR CONTROLLER CABINET.
37. INSTALL 2 15A, 120V CIRCUIT BREAKERS FOR CAMERAS AND TYPE 334-TV CABINETS.
38. ADD COMMUNICATIONS CABLE(S) TO EXISTING CONDUIT
39. INSTALL 15A, 240V CIRCUIT BREAKER FOR CAMERA AND TYPE 334-TV CABINET
40. INSTALL 40A, 120V CIRCUIT BREAKER FOR CONTROLLER CABINET
41. INSTALL 20A, 120V CIRCUIT BREAKER FOR CONTROLLER CABINET
42. INSTALL 40A, 240V CIRCUIT BREAKER FOR FREEWAY LIGHTING.
43. INSTALL 40A, 240V CIRCUIT BREAKER FOR FREEWAY SIGN(S).
51. ATTACH RISER CONDUIT TO FACE OF ABUTMENT WALL WITH TWO-HOLE PIPE STRAPS. LOCATE IN LINE WITH CONDUIT LOCATION ON STRUCTURE SEE DETAIL A, SHEET E-87.
52. ATTACH RISER CONDUIT TO FACE OF COLUMN OR PIER WALL WITH TWO-HOLE PIPE STRAPS LOCATE RISER IN LINE WITH CONDUIT LOCATION ON STRUCTURE SEE DETAIL B, SHEET E-88
53. ATTACH RISER CONDUIT TO FACE OF WING WALL AND/OR ABUTMENT WALL WITH TWO-HOLE PIPE STRAPS. LOCATE IN LINE WITH CONDUIT LOCATION ON STRUCTURE. SEE DETAIL C, SHEET E-88.
54. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL R, SHEET E-91.
55. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL J, SHEET E-91.
56. CORE HOLE IN CONCRETE WALL AT LOCATION REQUIRED BY PLACEMENT OF CONDUIT ON STRUCTURE DIAMETER OF CORED HOLE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT PLUS 1/2 INCH. SEE DETAIL D, SHEET E-89
57. INSTALL CONDUIT(S) IN NEW CONCRETE RAIL AT FACE OF TYPE 9 RAIL ON WING WALL. TRANSITION CONDUIT(S) FROM NEW CONCRETE SECTION TO TRENCH IN BACKFILL NEAR END OF WING WALL. SEE RAIL MODIFICATIONS SAN FERNANDO ROAD OVERHEAD BARRIER DETAILS.
58. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL E, SHEET E-90.
59. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL P, SHEET E-90.
60. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL L, SHEET E-90.
61. ATTACH CONDUIT WITH PIPE HANGER STRAPS TO BOTTOM SOFFIT OF BRIDGE DECK SLAB IN INTERIOR BAY. LOCATE CONDUIT TO CLEAR BRACING SEE DETAIL I, SHEET E-92.
66. ATTACH CONDUIT TO OUTSIDE OF BRIDGE RAIL. INSTALL COVER OVER CONDUIT. SEE DETAIL O, SHEET E-93.
68. DRILL AND BOND REINFORCING STEEL IN HORIZONTAL SURFACE BEHIND TYPE 27 RAIL. PLACE CONDUIT(S) ON HORIZONTAL OR VERTICAL POSITION TO CLEAR EXISTING FACILITIES. ENCASE CONDUITS IN CONCRETE. SEE DETAIL N, SHEET E-92.
70. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE SEE DETAIL F, SHEET E-90.
71. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN UTILITY VOID AND REPLACE CONCRETE. SEE DETAIL G, SHEET E-90.
72. ATTACH CONDUIT WITH ONE-HOLE PIPE STRAPS TO OUTSIDE OF RAIL POST LOCATE CONDUIT AT SAME ELEVATION AS BOTTOM CHANNEL OF RAIL. SEE DETAIL H, SHEET E-90.
73. CONSTRUCT TYPE 25M-9 BARRIER AT FACE OF EXISTING TYPE 9 BARRIER RAIL. INSTALL CONDUIT IN NEWLY CONSTRUCTED RAIL. SEE MODIFICATIONS SAN FERNANDO ROAD OVERHEAD BARRIER DETAILS
74. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL M, SHEET E-91.
75. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL K, SHEET E-89.
76. SAW CUT AND TRENCH IN CONCRETE SIDEWALK. INSTALL CONDUIT(S) IN TRENCH AND REPLACE CONCRETE. SEE DETAIL S, SHEET E-89
79. CONNECT NEWLY INSTALLED CONDUIT TO EXISTING CONDUIT.

GENERAL NOTES:

1. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON PLAN WERE OBTAINED FROM OWNER'S RECORDS AND/OR OWNERS PLANS.
2. THE LOCATION OF UNDERGROUND FACILITIES SHOWN ON PLAN ARE APPROXIMATE.
3. BLANK
4. THE LOCATIONS OF EXISTING CONTROLLER CABINETS, EXISTING SERVICE ENCLOSURES, POWER POLES AND EXISTING DEMARCATION BOXES ARE APPROXIMATE.
5. THE LOCATIONS OF PROPOSED CCTV POLES AND TOWERS SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.
6. THE LOCATIONS OF PROPOSED CABINETS, PULL BOXES, SPLICE VAULTS AND DEMARCATION BOXES ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
7. TYPE 334-TV CABINET DOOR SWING SHOWN ON NEW CABINETS INDICATES FRONT DOOR.
8. EXISTING DETECTOR LOOPS AND CONDUITS ARE SHOWN IN THE VICINITY OF PROPOSED CONDUIT TRENCHES. CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO EXISTING CONDUITS. TRENCHING WITH HAND TOOLS MAY BE REQUIRED.
9. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL FACILITIES, THE CONTRACTOR SHALL PROVIDE 72 HOUR ADVANCED WRITTEN NOTICE TO ALL AGENCIES CONCERNED.
10. FOR SUPPLEMENTAL LEGEND, SEE STANDARD PLANS ES-1A AND ES-1B
11. UNLESS OTHERWISE NOTED, ALL CONDUIT BENDS SHALL BE 4 FOOT RADIUS FACTORY BENDS.
12. ALL CONDUITS IN CONDUCTOR SCHEDULE TABLES ARE EXISTING UNLESS MARKED (N) INDICATING PROPOSED NEW CONDUIT. ALL CONDUCTORS IN PROPOSED NEW CONDUITS ARE NEW. ALL CONDUCTORS IN EXISTING CONDUITS ARE EXISTING UNLESS MARKED (N).
13. PVC, WHERE CALLED OUT IN THESE PLANS, SHALL MEAN RIGID NON-METALLIC CONDUIT AS DEFINED IN THE STANDARD SPECIFICATIONS.
14. ALL NO. 5 AND NO. 6 PULLBOXES ARE THE TRAFFIC TYPE WHETHER OR NOT THE PULLBOX IS IDENTIFIED WITH A (T) MODIFIER.

LEGEND

- PROPOSED CCTV CAMERA SEE SHEET E-75 & STRUCTURES SHEETS FOR DETAILS
- PROPOSED SPLICE VAULT SEE SHEET E-70 FOR DETAILS
- (T) PROPOSED NO. 6(T) PULLBOX (MODIFIED) SEE SHEETS E-65 THROUGH E-69 FOR DETAILS
- PROPOSED COMMUNICATIONS CONDUIT(S)
- PROPOSED SERVICE CONDUIT
- CONDUIT LINE DELIMITER FOR CONSTRUCTION NOTES
- EXISTING DETECTOR LOOP (SEE SHEETS E-2 THROUGH E-36
- DETAIL CALLOUT FOR DETAIL B ON SHEET E-75
- EXISTING SIGN SUPPORT STRUCTURE
- PROPOSED NO. 5(T) PULLBOX ON TRUNK LINE SEE DETAIL A, SHEET E-65, AND DETAIL C, SHEET E-69
- PROPOSED TYPE 334-TV CABINET

AS BUILT
Contract No. 07-116634
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

DIST	COUNTY	ROUTE	POST MILE / KILOMETER PREFIX	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10		16.9/46.2,50.J	23	53

Joseph A. Kaak 3/23/92
REGISTERED CIVIL ENGINEER Date

8-31-92
PLANS APPROVAL DATE

JOSEPH A. KAAK No. 10997 Exp. 6-30-93 CIVIL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
18700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC
CONTROL DESIGN SYSTEMS

PM 16.9/26.7

AS-Built FOR EA 30550

LEGEND AND NOTES

E-1

DESIGN OFFICE
GLORIA GANNE

CALCULATED/DESIGNED BY
CHECKED BY

DATE REVISED | BY | DATE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

E1.DWG 11:31:52 3/23/92

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

DIST 07 | EA 116634

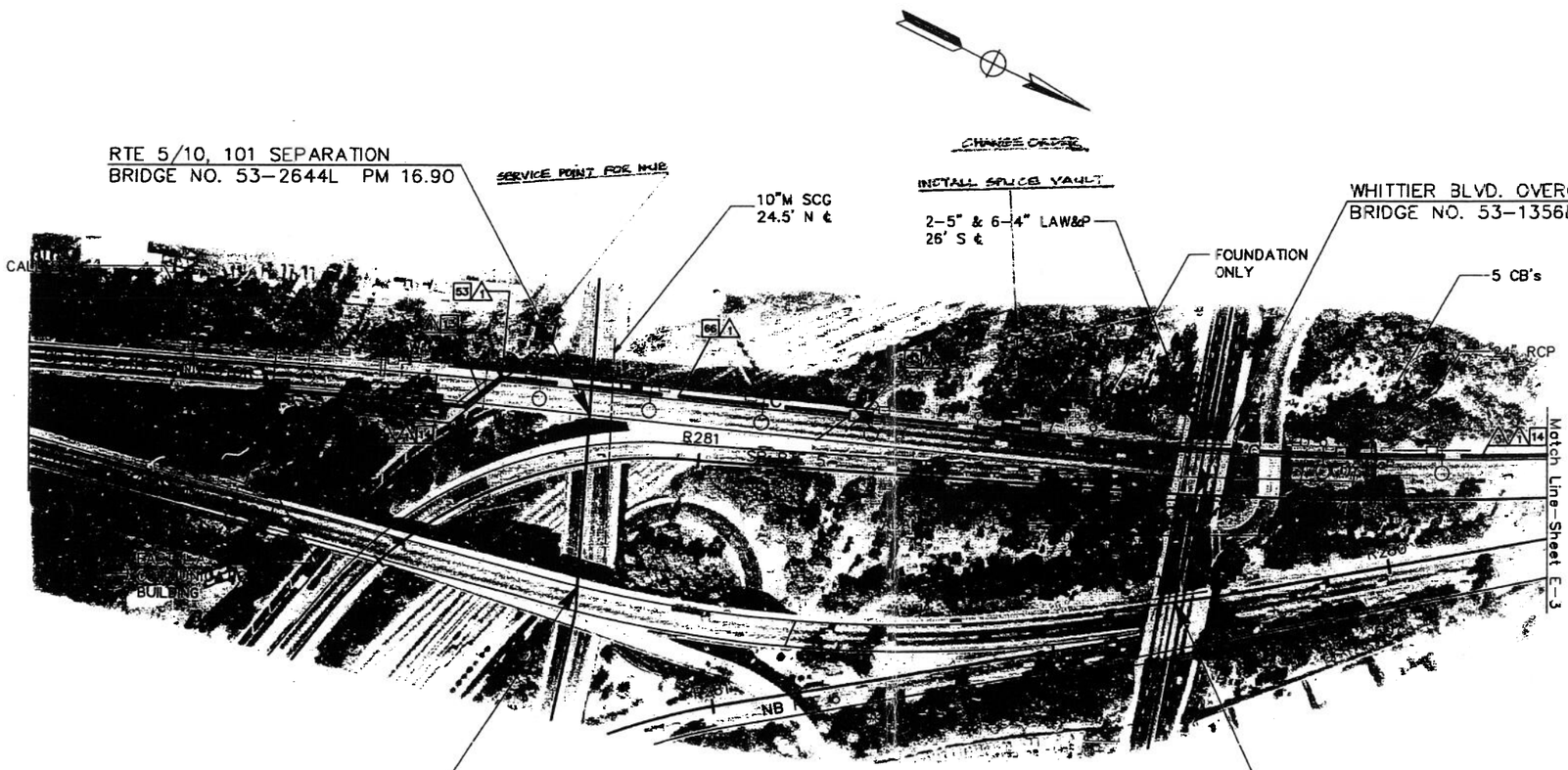
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	16.9/46.2,50.1	24	153

Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOSEPH A. KWAK
No. 10991
Exp. 6/30/95
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 250
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS



CONDUCTOR SCHEDULE			
CONDUCTOR TYPE	FUNCTION	RUN △1	RUN △3
50P22 CABLE	PHONE LINES	1	
48SMFO CABLE	MUX VID/DATA	1	
8MMFO CABLE	SHORT HAUL VIDEO	1	
	CONDUIT SIZE	4" (N)	4" (N)

AS BUILT
Contract No. 07- 116634
Resident Engineer: Hassan Mannaa
Completion Date June 13, 1997

APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE
RELATIVE DISTANCE IN THOUSANDS OF FEET.

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-2

CALCULATED/DESIGNED BY	DATE	REVISED BY	
CHECKED BY JK	3/23	DATE REVISED	5/22

DESIGN OFFICE: GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

1:663E02.DWG N 05/15/92

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

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

CU 07387 EA 116634

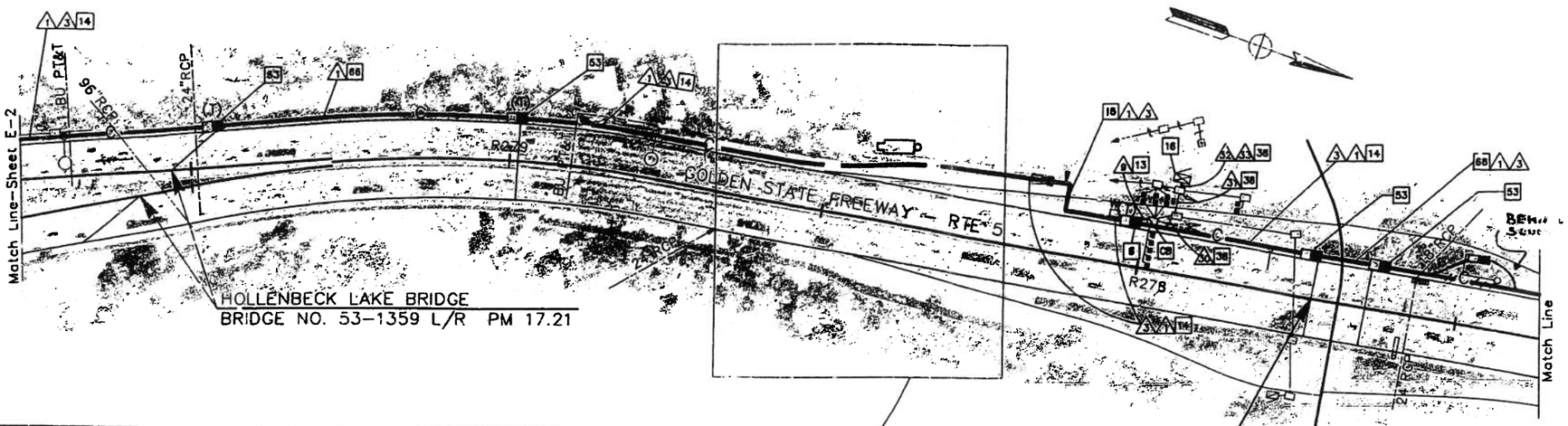
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	16.9/46.2,SO.I	25	153

Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

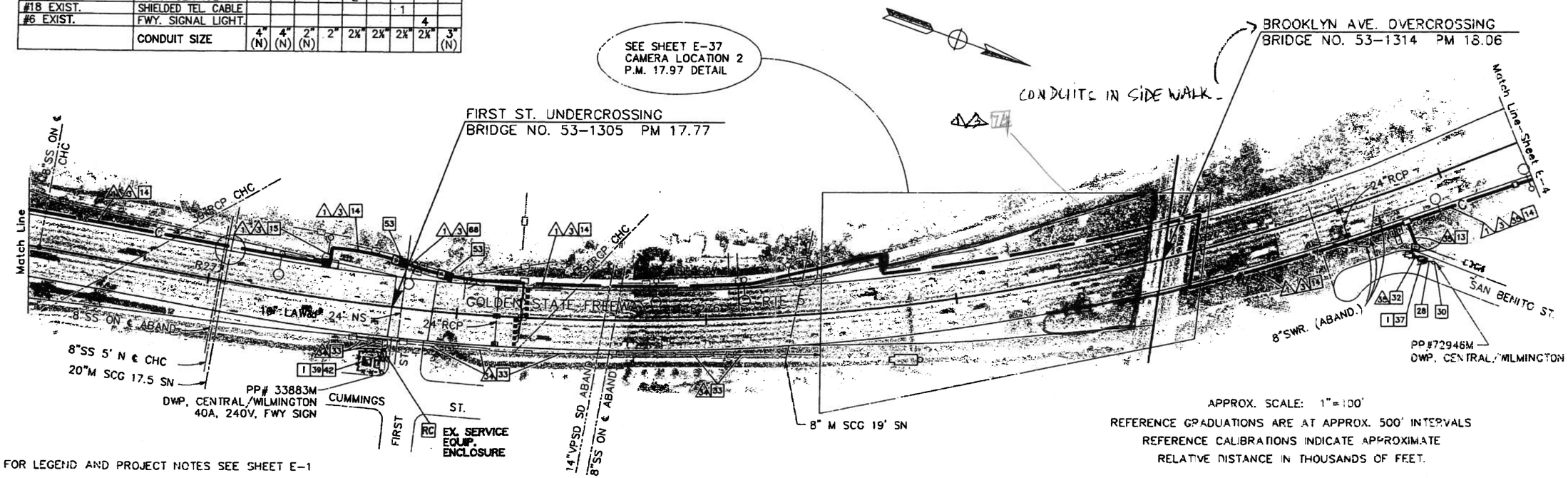
REGISTERED PROFESSIONAL ENGINEER
JOSEPH A. KWAK
No. 10991
Exp. 6/30/95
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
18700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS



CONDUCTOR SCHEDULE										
CONDUCTOR TYPE	FUNCTION	RUN 1	3	9	30	31	32	33	34	35
50P22 CABLE	PHONE LINES	1								
12P22 CABLE	PHONE LINES			1	1(N)	1(N)		1(N)		
48SMFO CABLE	MUX VID/DATA	1								
8MMFO CABLE	SHORT HAUL VIDEO	1								
#4	POWER								2(N)	2
#2	POWER									2
#8	GROUND									1
#8 EXIST.	RMS SERVICE					2	2			
2#12 EXIST.	DLC				7	7		12		
#14 EXIST.	RAMP METER				6	6	12			
#10 EXIST.	COMMON				1	1	1			
#12 EXIST.	T.D.C. SERVICE					2				
#18 EXIST.	SHIELDED TEL. CABLE							1		
#6 EXIST.	FWY. SIGNAL LIGHT.								4	
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2"	2½"	2½"	2½"	2½"	3" (N)

AS BUILT
Contract No. 07- 116634
Resident Engineer: Hassan Mannaa
Completion Date June 13, 1997



APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE
RELATIVE DISTANCE IN THOUSANDS OF FEET.

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

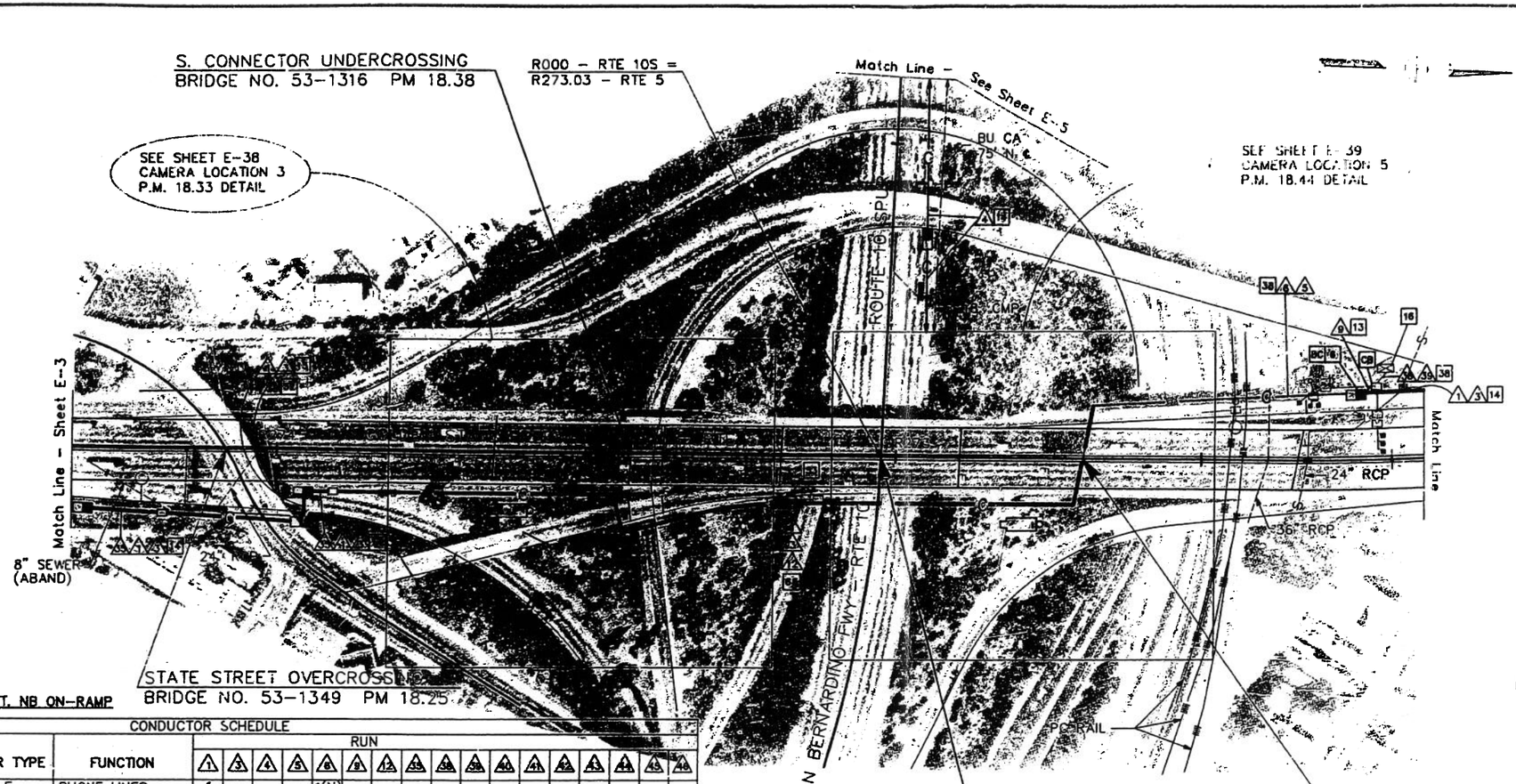
NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN OFFICE
GLORIA GWYNNE
CALCULATED/DESIGNED BY
CHECKED BY JK
DATE 3/23
REVISED BY JK
DATE REVISED 5/22

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
CU 07387
EA 116634



CONDUCTOR SCHEDULE

CONDUCTOR TYPE	FUNCTION	RUN 1	3	4	5	6	9	12	35	38	39	40	41	42	43	44	45	46
50P22 CABLE	PHONE LINES	1				1(N)												
6P19 CABLE	PHONE LINES			1														
12P22 CABLE	PHONE LINES						1				1(N)	1(N)	1(N)	1(N)	1(N)	1(N)	1(N)	
48SMFO CABLE	MUX VID/DATA	1				1(N)												
8MMFO CABLE	SHORT HAUL VIDEO	1				1(N)												
2MMFO B/O CABLE	SHORT HAUL VIDEO			1														
#4	POWER								2									
#2	POWER							2	2									
#8	GROUND							1	1									
#14 EXIST.	METER ON									6								6
#12 EXIST.	DLC										6	4	7	5	5	5	14	
#10 EXIST.	COMMON									1								1
#6 EXIST.	SERVICE RMS									2								2
#18 EXIST.	SHIELDED TEL. CABLE										1						1	
	CONDUCTOR SIZE	4" (N)	4" (N)	3" (N)	4"	4"	2" (N)	2" (N)	2" (N)	3"	3"	2"	2"	2"	2"	2"	3"	3"

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-4

16.9/46.2,SO.I	26	153	

Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOSEPH A. KWAK
No. 10991
Exp. 6/30/95
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
WAGNER ENGINEERING & SURVEY, INC.
CONTROL DESIGN SYSTEMS

AS BUILT
Contract No. 07- 116634
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

CALCULATED/ DESIGNED BY	DATE	REVISED BY	JK
CHECKED BY	JK 3/23	DATE REVISED	5/22

DESIGN OVERSIGHT
GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

11663E04.DWG 05/15/92

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

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

CU 07387 EA 116634

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	16.9/46.2.SOJ	27	153

Joseph A. Kwak
REGISTERED ELECTRICAL ENGINEER

8-31-92
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JOSEPH A. KWAK — No. 10991 — Exp. 5/30/95 — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
16700 VALLEY VIEW AVE., SUITE 260
LA MIRADA, CA 90638
IN ASSOCIATION WITH:
EBASCO SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
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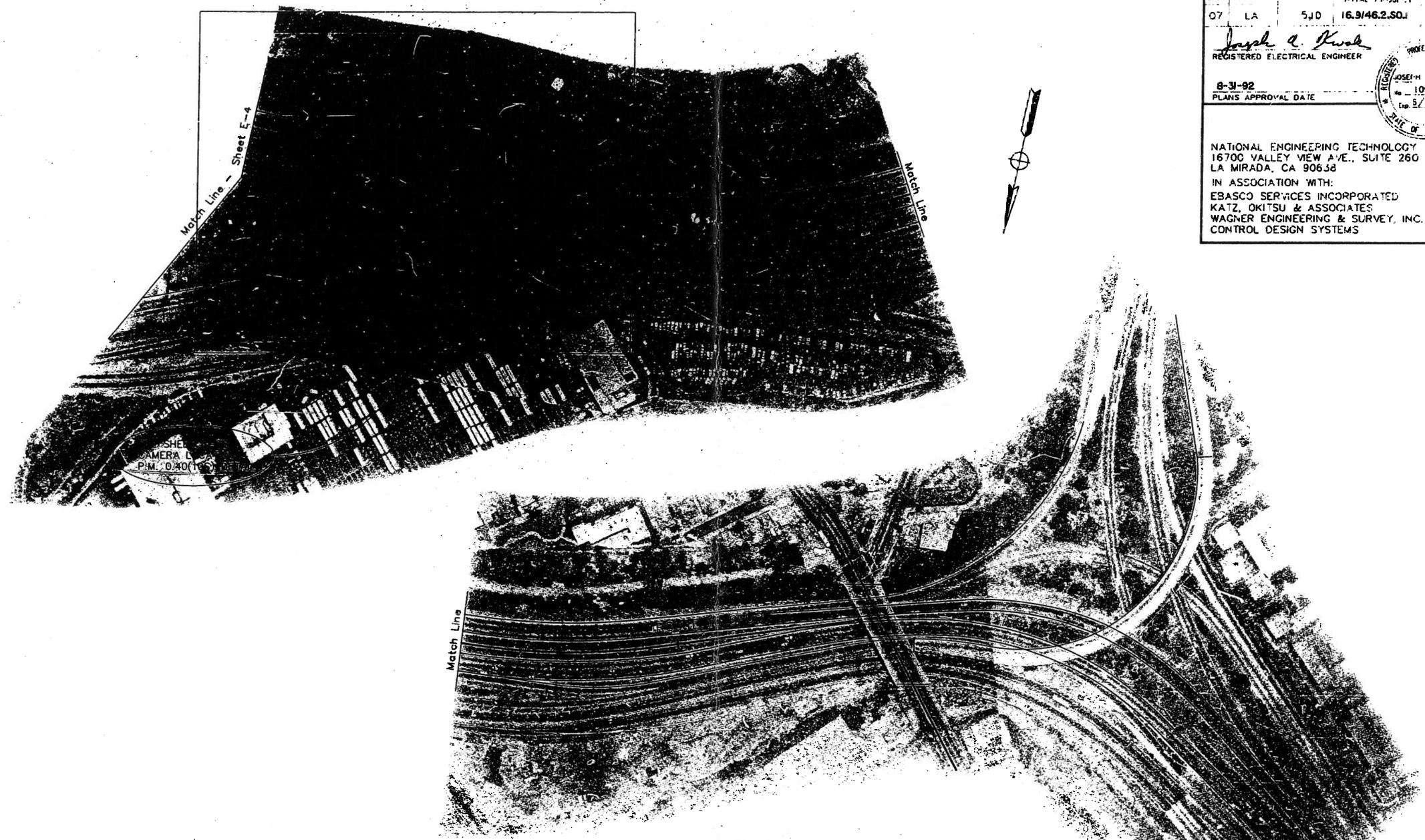
CONTROL DESIGN SYSTEMS



AS BUILT
Contract No. 07- 116634
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

APPROX. SCALE
REFERENCE GRADUATIONS ARE APPROXIMATE 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE
RELATIVE DISTANCE IN THOUSANDS OF FEET.

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-5

DESIGN OVERSIGHT	CALCULATED/DESIGNED BY	DATE	REVISED BY
GLORIA GWYNNE	CHECKED BY JK	3/23	DATE REVISED

CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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FORM DC-OE-92-PF (REV. 3/88)

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

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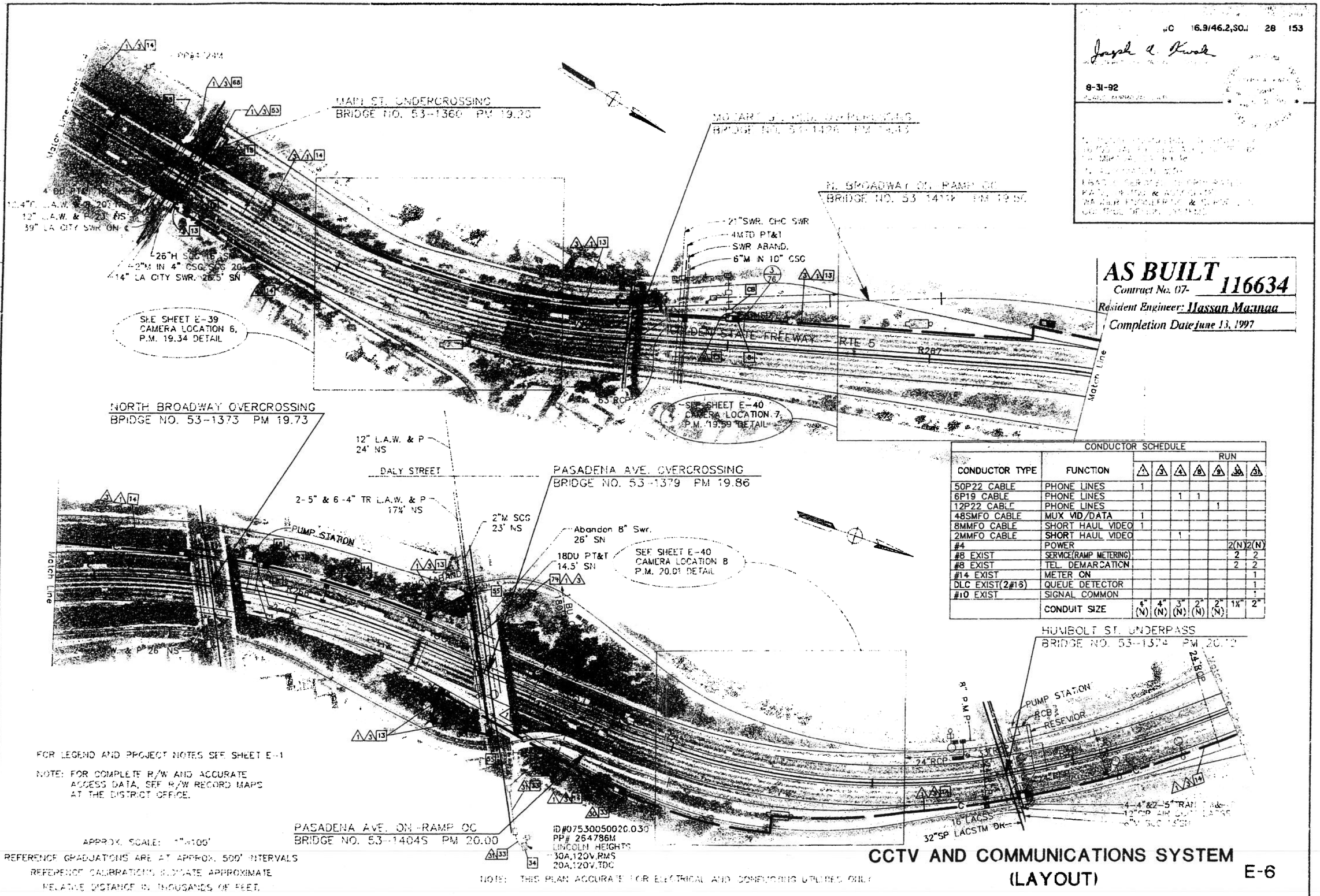


CONDUCTOR SCHEDULE								
		RUN						
CONDUCTOR TYPE	FUNCTION	1	3	4	8	9	30	31
50P22 CABLE	PHONE LINES	1						
6P19 CABLE	PHONE LINES			1	1			
12P22 CABLE	PHONE LINES					1		
48SMFO CABLE	MUX VID/DATA	1						
8MMFO CABLE	SHORT HAUL VIDEO	1						
2MMFO CABLE	SHORT HAUL VIDEO			1				
#4	POWER						2(N)	2(N)
#8 EXIST	SERVICE(RAMP METERING)						2	2
#8 EXIST	TEL. DEMARCATION						2	2
#14 EXIST	METER ON							1
DLC EXIST(2#16)	QUEUE DETECTOR							1
#10 EXIST	SIGNAL COMMON							1
	CONDUIT SIZE	4" (N)	4" (N)	3" (N)	2" (N)	2" (N)	1½"	2"

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

APPROX. SCALE: 1"=100'

REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS

REFERENCE CALIBRATIONS INDICATE APPROXIMATE RELATIVE DISTANCE IN THOUSANDS OF FEET.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-6

AS BUILT
Contract No. 07- 116634
Resident Engineer: Hassan Maanaa
Completion Date June 13, 1997

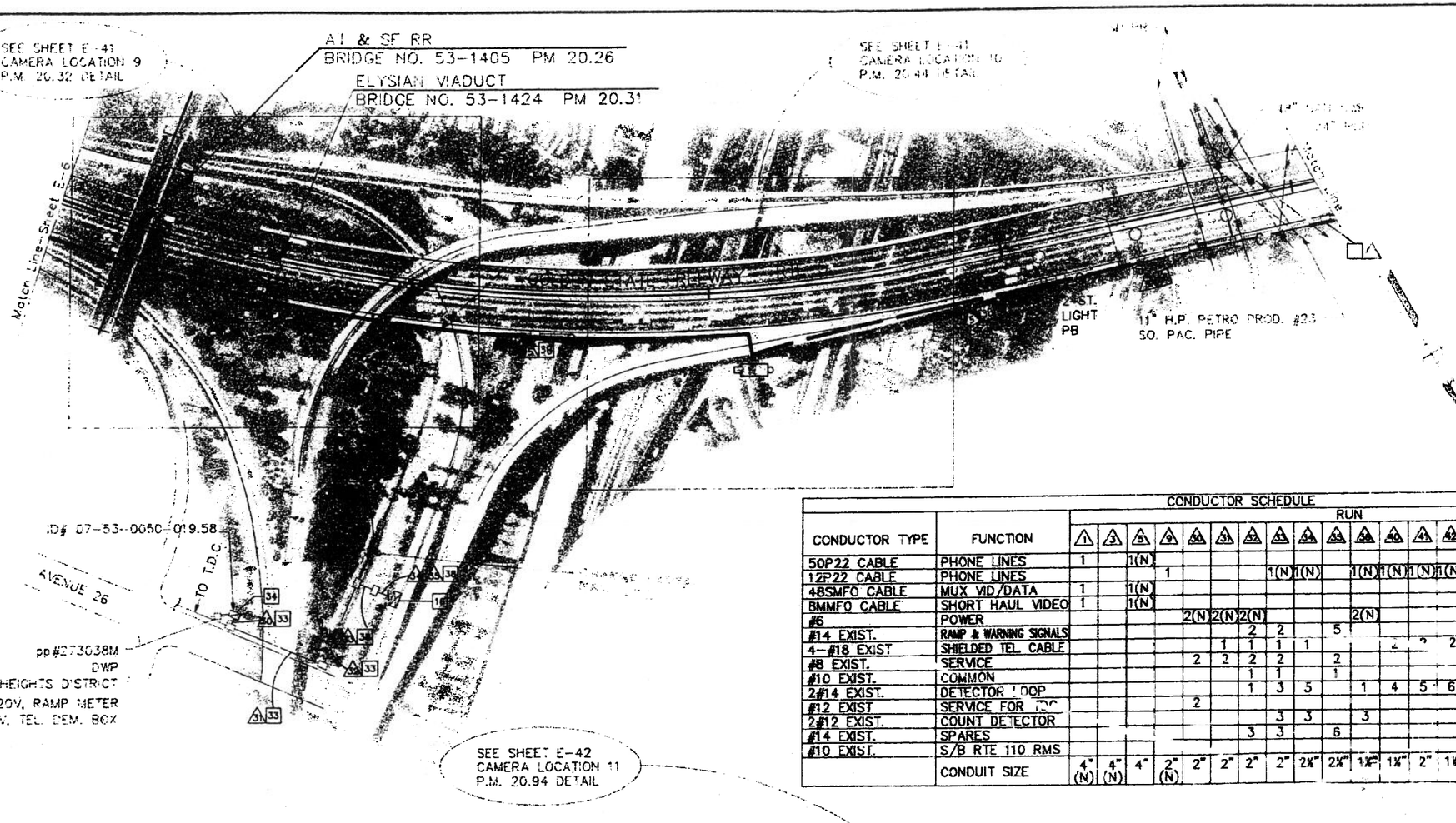
CALCULATED DESIGNED BY
CHECKED BY JK
DATE REVISED BY
3/23 DATE REVISED

DESIGN OVERSIGHT
GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

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



CONDUCTOR TYPE	FUNCTION	RUN																				
		1	3	5	6	6A	3	3A	3B	3C	3D	3E	4C	4	4A	4B	4D	4E	4F	4G	4H
50P22 CABLE	PHONE LINES	1		1(N)																		
12P22 CABLE	PHONE LINES				1				1(N)	1(N)		1(N)	1(N)	1(N)	1(N)	1(N)	1(N)		1(N)	1(N)	1(N)	1(N)	1(N)
48SMFO CABLE	MUX VID/DATA	1		1(N)																		
8MMFO CABLE	SHORT HAUL VIDEO	1		1(N)																		
#6	POWER					2(N)	2(N)	2(N)				2(N)										
#14 EXIST.	RAMP & WARNING SIGNALS							2	2		5							4			3	4
4-#18 EXIST	SHIELDED TEL. CABLE						1	1	1	1					2		2		2	2	2	2
#8 EXIST.	SERVICE					2	2	2	2		2											2
#10 EXIST.	COMMON							1	1		1							2				
2#14 EXIST.	DETECTOR LOOP							1	3	5		1	4	5	6	12		2		2	4	12
#12 EXIST	SERVICE FOR TDC					2																
2#12 EXIST.	COUNT DETECTOR								3	3		3										
#14 EXIST.	SPARES							3	3		6							4				1
#10 EXIST.	S/B RTE 110 RMS																					2
	CONDUIT SIZE	4" (N)	4" (N)	4"	2" (N)	2"	2"	2"	2"	2"	2½"	1½"	1½"	2"	1½"	3"	3"	2"	2"	2"	2"	2"

AS BUILT 116634
Contract No. 07-
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

8-31-92

APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

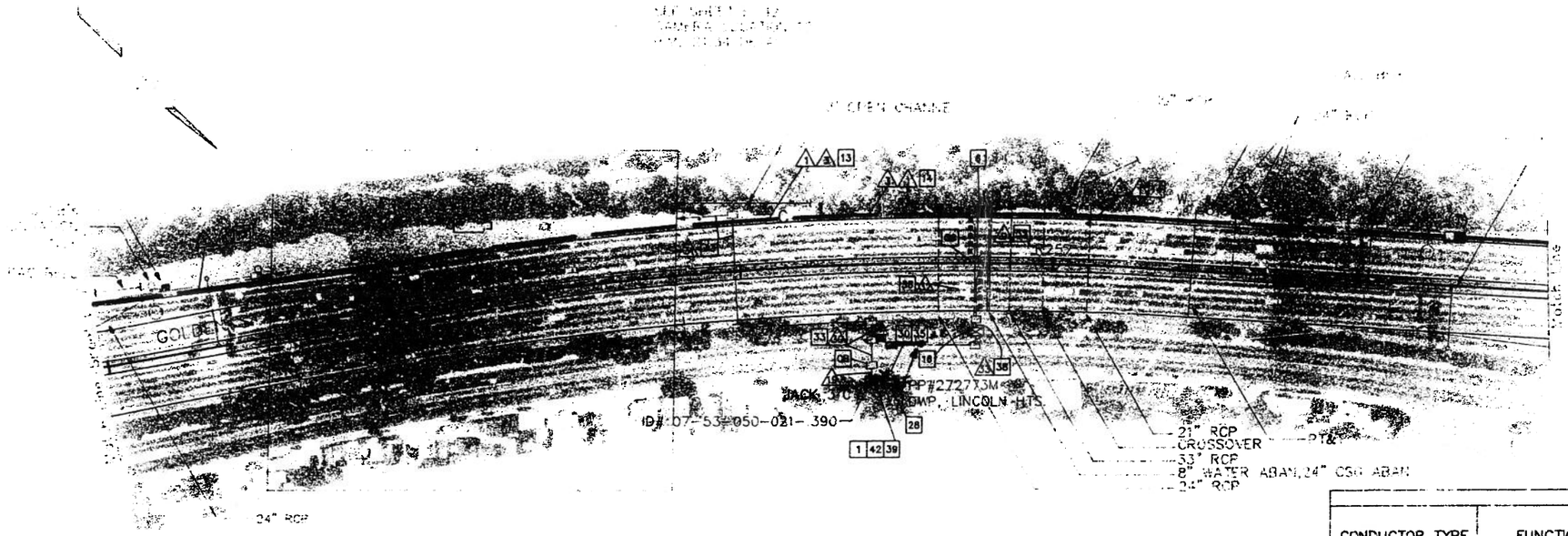
NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONDUCTING UTILITIES ONLY

DESIGN OVERSIGHT GLORIA GWYNNE
CALCULATED BY
DESIGNED BY
CHECKED BY JK 3/23 DATE REVISED BY DATE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-7



,10 16.9/46.2,SOJ 30 153

Joseph L Kwak

9-31-92

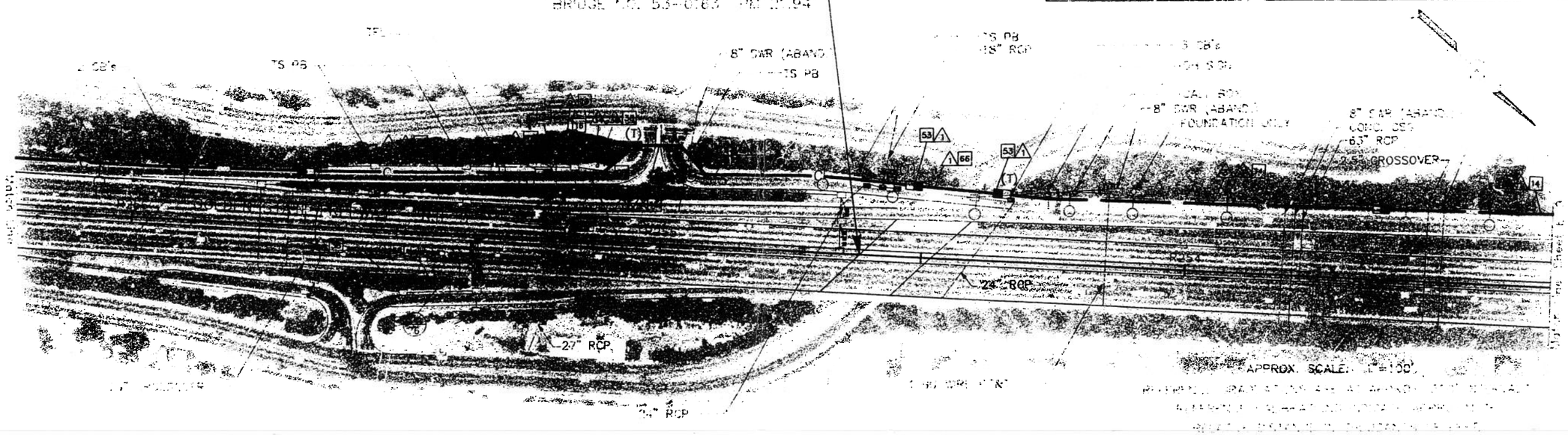
AS BUILT 116634

Contract No. 07-

Resident Engineer: Hassan Mansour

Completion Date: June 13, 1997

CONDUCTOR SCHEDULE														
		RUN												
CONDUCTOR TYPE	FUNCTION	1	3	9	18	18	30	31	32	33	34	35	36	37
50P22 CABLE	PHONE LINES													
12P22 CABLE	PHONE LINES			1	2				1(N)	1(N)	1(N)		1(N)	1(N)
48SMFO CABLE	MUX VID/DATA	1												
8MMFO CABLE	SHORT HAUL VIDEO	1												
#8	POWER					2	2(N)	2(N)						
#8	GROUND					1								
#6 EXIST.	FWY LIGHTING					2	2	2						
DLC EXIST.	DETECTOR LOOP								5	10	10			
#8 EXIST.	RMS SERVICE									2		2		
#14 EXIST.	RAMP METER											6		
#10 EXIST.	COMMON											1		
4#18 EXIST.	SHIELDED TEL. CABLE										1		1	1
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2" (N)	3" (N)	2"	2"	2"	2½"	3"	3"	2"	3"

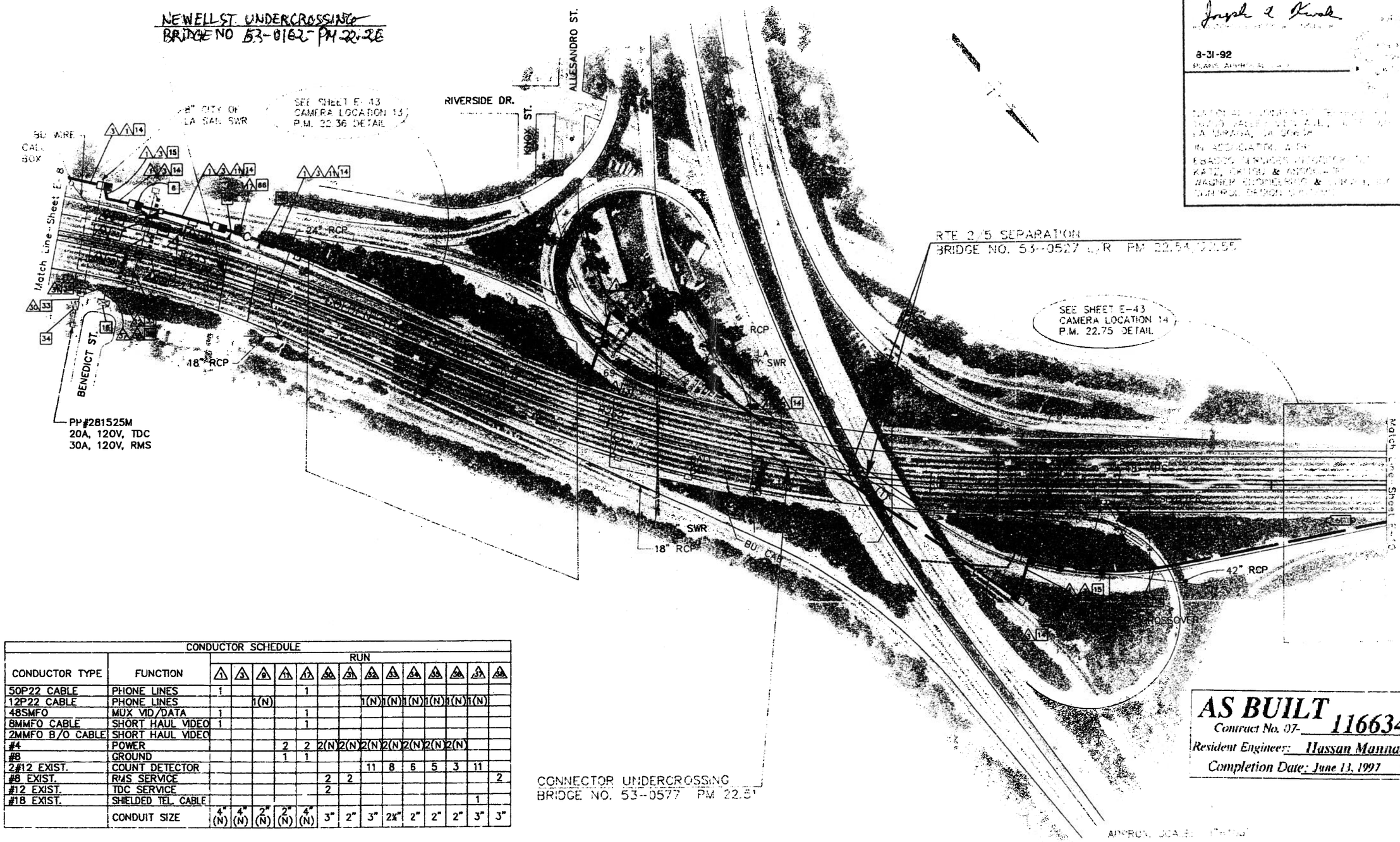


DESIGN OVERSIGHT
GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-8



CONDUCTOR SCHEDULE															
		RUN													
CONDUCTOR TYPE	FUNCTION	1	3	9	11	17	30	31	32	33	34	35	36	37	38
50P22 CABLE	PHONE LINES	1				1									
12P22 CABLE	PHONE LINES			1(N)					1(N)	1(N)	1(N)	1(N)	1(N)	1(N)	
48SMFO	MUX VID/DATA	1				1									
8MMFO CABLE	SHORT HAUL VIDEO	1				1									
2MMFO B/O CABLE	SHORT HAUL VIDEO														
#4	POWER				2	2	2(N)	2(N)	2(N)	2(N)	2(N)	2(N)	2(N)		
#8	GROUND				1	1									
2#12 EXIST.	COUNT DETECTOR								11	8	6	5	3	11	
#8 EXIST.	RMS SERVICE						2	2							2
#12 EXIST.	TDC SERVICE						2								
#18 EXIST.	SHIELDED TEL. CABLE													1	
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2" (N)	4" (N)	3"	2"	3"	2½"	2"	2"	2"	3"	3"

AS BUILT
Contract No. 07-116634
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

APPROX. SCALE: 1"=100'
REFERENCE GRADUATIONS ARE AT APPROX. 500' INTERVALS
REFERENCE CALIBRATIONS INDICATE APPROXIMATE RELATIVE DISTANCE IN THOUSANDS OF FEET.

FOR LEGEND AND PROJECT NOTES SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

CCTV AND COMMUNICATIONS SYSTEM (LAYOUT)

E-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN OVER: GLORIA GWYNNE
CALCULATED/DESIGNED BY: | DATE: | REVISED BY: | JK
CHECKED BY: JK 3/23 | DATE REVISED: 5/3/92

JD 16.9/46.2,SO.I 31 153
8-31-92

CONDUCTOR SCHEDULE										
CONDUCTOR TYPE	FUNCTION	RUN								
		①	③	⑨	⑭A	⑭B	⑭C	⑭D	⑭E	⑭F
50P22 CABLE	PHONE LINES	1								
12P22 CABLE	PHONE LINES			1			1(N)	1(N)	1(N)	
48SMFO CABLE	MUX VID/DATA	1								
8MMFO CABLE	SHORT HAUL VIDEO	1								
#4	POWER				2(N)	2(N)				
#8 EXIST.	TDC SERVICE						2			
#8 EXIST.	SERVICE RMS				2	2	2	2		2
#12 EXIST.	SERVICE TDC				2					
#14 EXIST.	RAMP METER						1	1		4
#10 EXIST.	COMMON						1	1		2
2#14 EXIST.	DLC						2	4	13	
#14 EXIST.	SPARES						1			4
	CONDUIT SIZE	4" (N)	4" (N)	2" (N)	2"	2"	2"	2"	3"	3"

JD 16.9/46.2,SO.I 32 53

Joseph A. Kwok

8-31-92

PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
2020 VALLEY VIEW CT., SUITE 240
LA MIRADA, CA 90638
(714) 523-1515
COMMUNICATION, MTS
ENGINEERING SERVICES INCORPORATED
KATZ, OKITSU & ASSOCIATES
MASTER ENGINEERING & SURVEYING
CONTROL SYSTEMS

FLETCHER DRIVE UNDERCROSSING
BRIDGE NO. 53-1084 PM 22.97

PP# UNKNOWN
PWP, LINCOLN HEIGHTS
20A, 120V, RMS
20A, 120V, TDC
0#07-53-005-R022.800
2600# RIVERSIDE DR.

14"DU. PT&T
7-6"EW
6" S.C.G.
36'W ℄
8"LA CITY SEWER
22'W ℄
66" R.C.P.
8"LA CITY SEWER
22'E ℄
6-5"F&2-3"F W&P
6'WE
3 BI WIRE
2¼"C CROSSOVER
CALL BOX
8" LA CITY SEWER
DOUBLE 7'x2.5' RC BOX
18" LA CITY SWR
2 ST. LIGHT PB
R250
R249
R248
GOLDEN STATE FREEWAY — RTE 5
24" RCP
24" RCP
24" RCP
2" CROSSOVER
2" CROSSOVER
2" CROSSOVER
2¼" CROSSOVER
DOUBLE RC BOX
2-4" WATER PIPES W/ VALVES
8-BL CA PT&T
8-5" & 2-3" W&P
59" L.A.W. & P.
PT&T
PP
(T)
Match Line-Sheet E-9
Match Line-Sheet E-11

SEE SHEET E-43
CAMERA LOCATION 14
P.M. 22.75 DETAIL

CHERRY ST. UNDERCROSSING
BRIDGE NO. 53-0164 PM 20.18

AS BUILT 116634
Contract No. 07-
Resident Engineer: Hassan Mannaa
Completion Date: June 13, 1997

APPROVAL OF AS-BUILT PLANS
REPRESENTS ONLY THAT ALL APPROVED CHANGES AND
REVISIONS HAVE BEEN INCORPORATED INTO THE PLANS
AND DOES NOT IMPLY ACCEPTANCE OF THE WORK.

CCTV AND COMMUNICATIONS SYSTEM
(LAYOUT)

E-10

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL AND CONFLICTING UTILITIES ONLY

NOTE: FOR GRADING AND PAVEMENT DATA, SEE SHEET E-1

NOTE: FOR COMPLETE R/W AND ACCURATE SURVEY DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

CALCULATED/DESIGNED BY JK 3/23 DATE REVISED 5/24
CHECKED BY DATE REVISED

DESIGN OVE HT
GLORIA GWYNNE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

05-RIV-91
1663010.DWG

AS-Built FOR EA

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ABBREVIATIONS

72SMFO	72 SINGLEMODE FIBER OPTIC CABLE
12SMFO	12 SINGLEMODE FIBER OPTIC CABLE
2SMFO B/O	2 SINGLEMODE FIBER OPTIC BREAKOUT CABLE
36SMFO	36 SINGLEMODE FIBER OPTIC CABLE
50P22	50 PAIR 22 AWG TWISTED PAIR CABLE
12P22	12 PAIR 22 AWG TWISTED PAIR CABLE
6P22	6 PAIR 22 AWG TWISTED PAIR CABLE
ø	DIAMETER
AVC	AUTOMATIC VEHICLE CLASSIFICATION
BB	BASE BAND
B/O	BREAKOUT CABLE
CCR	CAMERA CONTROL RECEIVER
CCT	CAMERA CONTROL TRANSMITTER
CCTV	CLOSED CIRCUIT TELEVISION
CHAN *	CHANNEL NUMBER
CMS	CHANGEABLE MESSAGE SIGN
DCS	DIGITAL CROSS-CONNECT SWITCH
DEMARC	DEMARCATION
DEMUX	DEMULTIPLEXER
DIST	DISTRIBUTION
DLC	DETECTOR LOOP CABLE
DWP	DEPARTMENT OF WATER & POWER
FDF	FIBER DISTRIBUTION FRAME
FDU	FIBER DISTRIBUTION UNIT
FLEX	FLEXIBLE
F/O OR FO	FIBER OPTIC
FRE	FIBERGLASS REINFORCED EPOXY CONDUIT
HAR	HIGHWAY ADVISORY RADIO
INTRFCE	INTERFACE
IRR	IRRIGATION
J-BOX	JUNCTION BOX
MUX	MULTIPLEXER
NOM	NOMINAL
PDA	POWER DISTRIBUTION ASSEMBLY
PR	PAIR
PTZ	PAN, TILT AND ZOOM
REQ'D	REQUIRED
RMS	RAMP METERING SYSTEM OR STATION
RX	RECEIVER
SCE	SOUTHERN CALIFORNIA EDISON
SCHED	SCHEDULE
SH	SHORT HAUL
SM	SINGLEMODE
STC	SCREENED TRANSMISSION CABLE
STL	STEEL
TDM	TIME DIVISON MULTIPLEXER
TELCO	TELEPHONE COMPANY
TMC	TRANSPORTATION MANAGEMENT CENTER
TMS	TRAFFIC MONITORING STATION
TP	TWISTED PAIR
TX	TRANSMITTER
VDX	VIDEO DEMULTIPLEXER
VMX	VIDEO MULTIPLEXER
VR	SINGLE VIDEO RECEIVER
VX	SINGLE VIDEO TRANSMITTER
*X	X AWG CONDUCTOR, Ie *10 MEANS 10 AWG CONDUCTOR
YP	Y PAIRS OF CONDUCTORS, Ie 2P MEANS 2 PAIRS

LEGEND

	CCTV CAMERA
	HIGHWAY ADVISORY RADIO
	SPLICE VAULT
	EXISTING SPLICE VAULT
	FIBER OPTIC PATCH CORD
	COMMUNICATION PULL BOX
—C—	COMMUNICATION CONDUIT(S)
—E—	SERVICE CONDUIT(S)
1 1 / 1 2	CONDUIT LINE DELIMITER FOR CONSTRUCTION NOTES
	TYPE 334-TV CABINET
	EXISTING TELEPHONE BRIDGE
	TELEPHONE BRIDGE
	FIBER OPTIC CABLE
	COAXIAL CABLE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	16.9/18.5, S0.0/31.1	67	159

Teri Parola 9/18/95
REGISTERED ELECTRICAL ENGINEER (Date)

12-30-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TERI J. PAROLA — No. 14898 — Exp. 6/30/99 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

KAWES AND ASSOCIATES, INC.

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.

RTES. 16.9/18.5
AS-Built For EA 30550

TABLE 1-CCTV WIRING

CONDUCTOR TYPE	FUNCTION	QTY
RG-6A/U	CAMERA VIDEO INTERFACE CABLE	1
9*18 CABLE	PAN/TILT CONTROL CABLE	1
12*8 CABLE	LENS CONTROL CABLE	1

AS-BUILT
Contract No. 07- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/18/2000

CCTV AND COMMUNICATION SYSTEM (LEGEND AND NOTES)

E-1

DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	CHECKED BY	DATE REVISED
PAT SULLIVAN	TP	JZ	9/95
	DATE	REVISED BY	9/95

XXXXXXXXXXXXXXXXXXXXXXXXXX
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DATE PLOTTED => 10-Jun-1997
TIME PLOTTED => 10:44
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 => trtome
DGN FILE => [ESC-OE]712073s01.dgf
CU 0739
EA 120731

GENERAL NOTES:

1. THE LOCATION OF ELECTRICAL HIGHWAY LIGHTING CONDUITS AND PULL BOXES ARE APPROXIMATE AND WERE OBTAINED FROM LIMITED LIGHTING RECORDS. CONTRACTOR SHALL AVOID DAMAGING EXISTING LIGHTING CONDUITS.

2. THE LOCATIONS OF EXISTING DETECTOR LOOPS, EXISTING CONTROLLER CABINETS, EXISTING SERVICE ENCLOSURES, POWER POLES AND EXISTING DEMARCATION BOXES ARE APPROXIMATE.

3. THE CONTRACTOR SHALL VERIFY PROPOSED CCTV POLE LOCATIONS WITH THE ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.

4. THE LOCATIONS OF PROPOSED ELEMENTS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED OR APPROVED BY THE ENGINEER. SEE L-SHEETS FOR EXACT LOCATION OF CCTV CAMERAS.

6. WHEN EXISTING DETECTOR LOOPS AND CONDUITS ARE SHOWN IN THE VICINITY OF PROPOSED CONDUIT TRENCHES THE CONTRACTOR SHALL AVOID DAMAGING THE EXISTING CONDUIT. TRENCHING WITH HAND TOOLS MAY BE REQUIRED.

7. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL OR TELCO FACILITIES, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE 72 HOURS PRIOR TO COMMENCING WORK TO THE ENGINEER AND ALL CONCERNED AGENCIES.

8. A PULL ROPE SHALL BE INSTALLED IN ALL EMPTY CONDUITS.

9. UNLESS OTHERWISE NOTED, ALL COMMUNICATION CONDUIT BENDS SHALL BE 4 FT RADIUS FACTORY BENDS. ALL OTHER CONDUITS SHALL HAVE A MINIMUM BEND RADIUS OF NO LESS THAN 6 TIMES THE CONDUIT DIAMETER.

10. CONDUITS AND CONDUCTORS IN CONDUIT AND CONDUCTOR SCHEDULE TABLES ARE NEW UNLESS MARKED (E) INDICATING EXISTING.

11. PVC, WHERE CALLED OUT IN THESE PLANS, SHALL MEAN RIGID NON-METALLIC CONDUIT AS DEFINED IN THE STANDARD SPECIFICATIONS.

12. CONDUIT(S) SHALL BE INSTALLED WHERE SHOWN ON THE PLANS RELATIVE TO THE EXISTING SHOULDER.

13. IDENTIFICATION FORMAT OF TRAFFIC OPERATION SYSTEM (TOS) ELEMENTS:

FYXXX
- POST MILE (TO NEAREST 10TH)
- FREEWAY NAME SHORT FORM

14. MODEM NUMBERS FOR SOME CONTROLLERS HAVE NOT YET BEEN ASSIGNED, AND THEREFORE SUCH LOCATIONS HAVE BEEN ASSIGNED TO MODEM AC. VERIFY MODEM NUMBERS BEFORE CONSTRUCTION.

15. FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

16. ALL DOUBLE LOOPS PLACED IN BUSWAY LANES SHALL BE 20 FEET APART FROM CENTER TO CENTER.

PROJECT NOTES: (MASTER LIST)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-56 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-55 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED PAIR SPLICE CLOSURE. SEE SHEETS E-62 AND E-63 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-57 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-1 TO C-7 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-58 AND C-9 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND PAN/TILT UNIT ON POLE.
8. INSTALL CCTV CAMERA ASSEMBLY AND PAN/TILT UNIT ON EXISTING SIGN STRUCTURE. SEE SHEETS E-58 AND C-10 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEET E-65 AND DETAIL 1, SHEET E-67.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
12. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-68 AND DETAIL 3, SHEET E-67.
13. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO NODE. SEE SHEETS E-68 AND E-69 FOR DETAILS.
14. RC EXIST DLC. INSTALL NEW DLC IN THE EXISTING CONDUIT.
15. TRANSITION CONDUIT UNDER SOUNDWALL. DIG WITH HAND TOOLS AS REQUIRED. SEE SHEET C-8 FOR DETAILS.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-65 AND DETAIL 4, SHEET E-67.
17. INSTALL 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.
18. INSTALL COMMUNICATION PULL BOX 15 FEET FROM EDGE OF STRUCTURE.
19. INSTALL ON NEW FOUNDATION TYPE III-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-55 AND E-56 FOR DETAILS.
23. THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
24. ADD CABLES TO EXISTING CONDUIT.
25. IDENTIFY AND RC DLC CONNECTING TO ABANDONED LOOPS. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
26. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT DATA NODE. SEE SHEETS E-68 AND E-69 FOR DETAILS.
27. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN 6 PULL BOX FOR PUMP STATION. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
28. COIL 50 FEET OF 6P22 TWISTED PAIR CABLE IN 6 PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
29. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN 6 PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
30. INSTALL 25 PR & 50 PR TERMINAL BLOCKS IN EXISTING DATA NODE CABINET, SEE SHEET E-69 AND E-78 FOR DETAILS.
31. INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-67 AND SHEET E-66 FOR DETAILS.
32. INSTALL TYPE 334 CABINET ON NEW FOUNDATION, CABINET SHALL INCLUDE FDU SEE DETAIL 5, SHEET E-67 FOR DETAILS.
33. REWIRE EXIST TELEPHONE BRIDGE, CONNECT EXISTING CABLE FROM CONTROLLER _____ TO BRIDGE INPUT. CONNECT CONTROLLER _____ TO BRIDGE OUTPUT.
34. INSTALL SPLICE VAULT 15 FEET FROM EDGE OF STRUCTURE, WITHOUT TWISTED PAIR AND FIBER OPTIC SPLICE CLOSURES. FIGURE 8 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
35. INSTALL ONE 30A CIRCUIT BREAKER IN POWER DISTRIBUTION PANEL IN EXISTING HUB BUILDING.
36. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELWAY AS POSSIBLE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 10	16.9/18.5, SD.0/31.1	68	159

Teri Parola 9/18/95
REGISTERED ELECTRICAL ENGINEER (Date)

PROFESSIONAL ENGINEER — REGISTERED — TERI J. PAROLA — No. 14898 — Exp. 6/30/99 — ELECTRICAL — STATE OF CALIFORNIA

12-30-96
PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

KAWES AND ASSOCIATES, INC.

The State of California ... and its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

AS-BUILT
Contract No. 07- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/18/2000

DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
PAT SULLIVAN	TP	JZ	9/95		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CCTV AND COMMUNICATION SYSTEM (NOTES)

NO SCALE

E-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 10	16.9/18.5, SO.0/31.1	69	159

Teri Parola 9/18/95
REGISTERED ELECTRICAL ENGINEER (Date)

12-30-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER TERI J. PAROLA No. 14898 Exp. 6/30/99 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

KAWES AND ASSOCIATES, INC.

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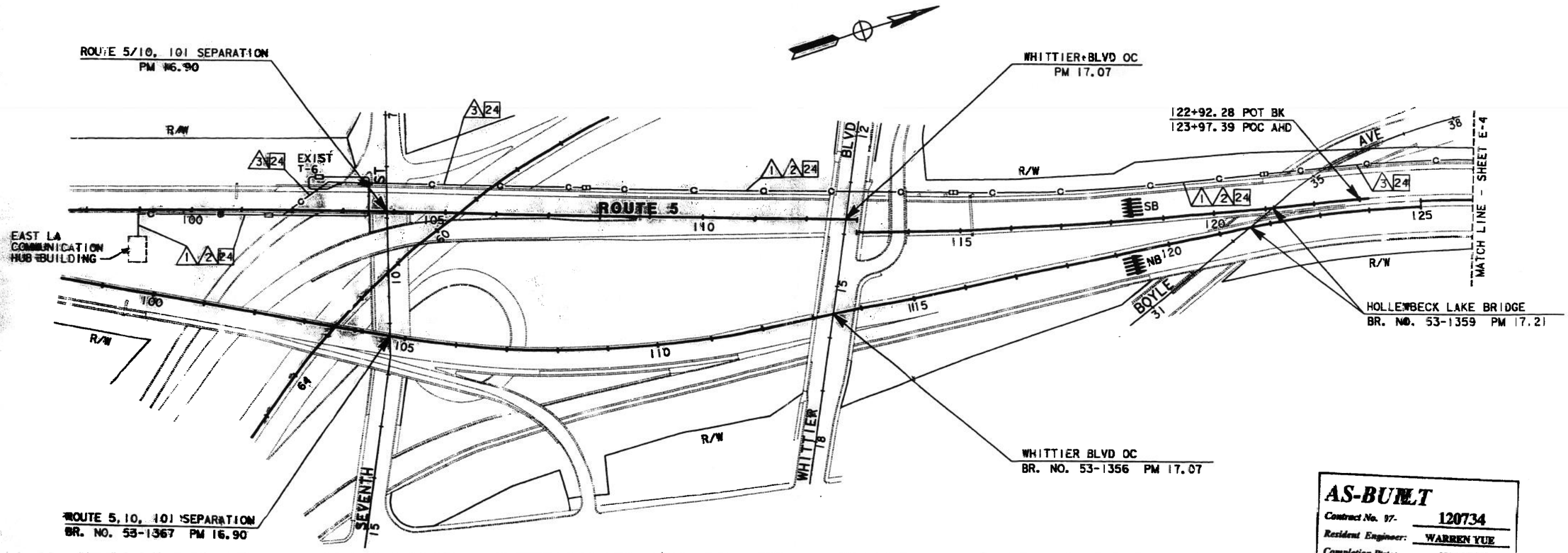
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)										
CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2			RUN 3		
72SM50 CABLE	VIDEO /DATA				1			1		
48SM50 CABLE	VIDEO /DATA			1 (E)					1 (E)	
8MM50 CABLE	SHORT HAUL VIDEO		1 (E)							1 (E)
50P22 CABLE	DATA /PHONE	1 (E)						1 (E)		
	INNERDUCT		1¼" (E)	1¼" (E)	1¼"	1¼"	1¼"		1¼" (E)	1¼" (E)
	CONDUIT SIZE		4" (E)			4" (E)			4" (E)	

(E) - EXISTING CONDUIT OR CONDUCTOR

PROJECT NOTES: (THIS SHEET ONLY)
24 ADD CABLES TO EXISTING CONDUIT.



AS-BUILT
Contract No. 97- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/18/2000

COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

E-3

DESIGNED BY IP 9/95 REVISED BY
CHECKED BY JZ 9/95 DATE REVISED
PAT SULLIVAN

LAST REVISION 00-00-00 DATE PLOTTED => 26-Mar-2001 TIME PLOTTED => 10:54

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

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

USERNAME => HHuynh

CU 07396 EA 120731

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 10	16. 9/18. 5, 50. 0/31. 1	70	159

Teri Parola 9/18/95
REGISTERED ELECTRICAL ENGINEER (Date)

12-30-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TERI J. PAROLA — No. 14898 — Exp. 6/30/99 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

KAWES AND ASSOCIATES, INC.

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.

DESIGNED BY	PAT SULLIVAN	9/95	REVISED BY
CHECKED BY	JZ	9/95	DATE REVISED

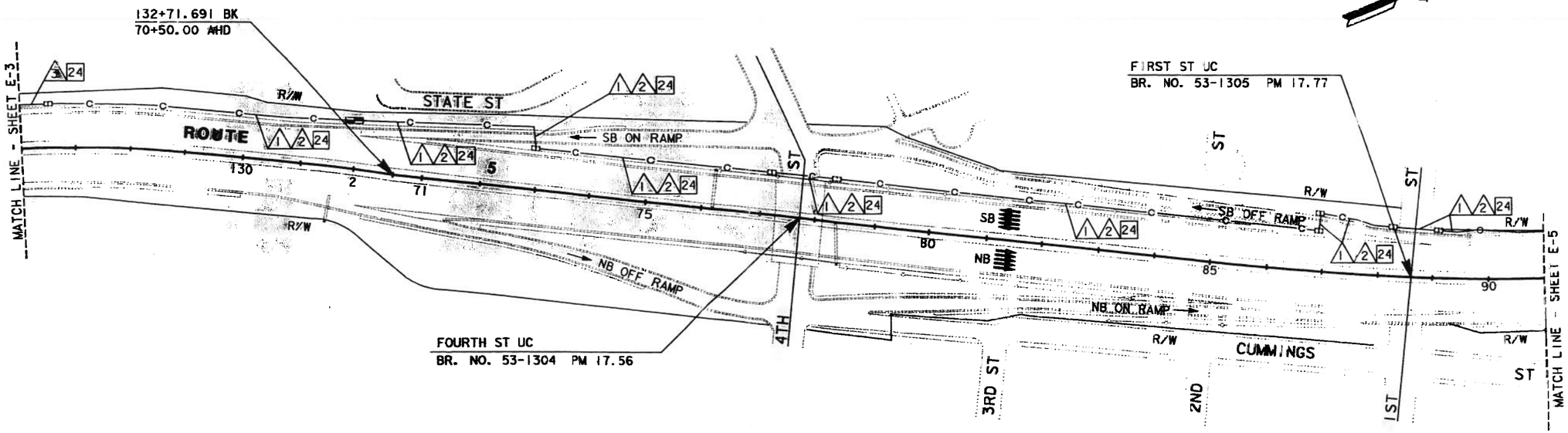
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3
72SMFO CABLE	VIDEO/DATA	1 (E)		1 (E)
48SMFO CABLE	VIDEO/DATA	1 (E)		1 (E)
8MMFO CABLE	SHORT HAUL VIDEO	1 (E)		1 (E)
50P22 CABLE	DATA/PHONE	1 (E)		1 (E)
	INNERDUCT	1½" (E), 1½" (E)	1¼", 1¼", 1¼"	1½" (E), 1½" (E)
	CONDUIT SIZE	4" (E)	4" (E)	4" (E)

(E) - EXISTING CONDUIT OR CONDUCTOR

PROJECT NOTES: (THIS SHEET ONLY)

24 ADD CABLES TO EXISTING CONDUIT.



AS-BUILT
Contract No. 07- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/18/2000

COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

E-4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 10	16.9/18.5, SD.0/31.1	71	159

Teri Parola 9/18/95
REGISTERED ELECTRICAL ENGINEER (Date)

12-30-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TERI J. PAROLA — No. 14898 — Exp. 6/30/99 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

KAWES AND ASSOCIATES, INC.

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.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 1	RUN 2	RUN 2	RUN 2	RUN 4
72SMFO CABLE	VIDEO/DATA		1 (E)	1			
48SMFO CABLE	VIDEO/DATA		1 (E)				
8MMFO CABLE	SHORT HAUL VIDEO	1 (E)					
50P22 CABLE	DATA/PHONE	1 (E)					
2MMFO B/O CABLE	SHORT HAUL VIDEO						1 (E)
6P19 CABLE	DATA/PHONE						1 (E)
	INNERDUCT	1¼" (E)	1¼" (E)	1¼"	1¼"	1¼"	
	CONDUIT SIZE	4" (E)		4" (E)			3" (E)

(E) - EXISTING CONDUIT OR CONDUCTOR

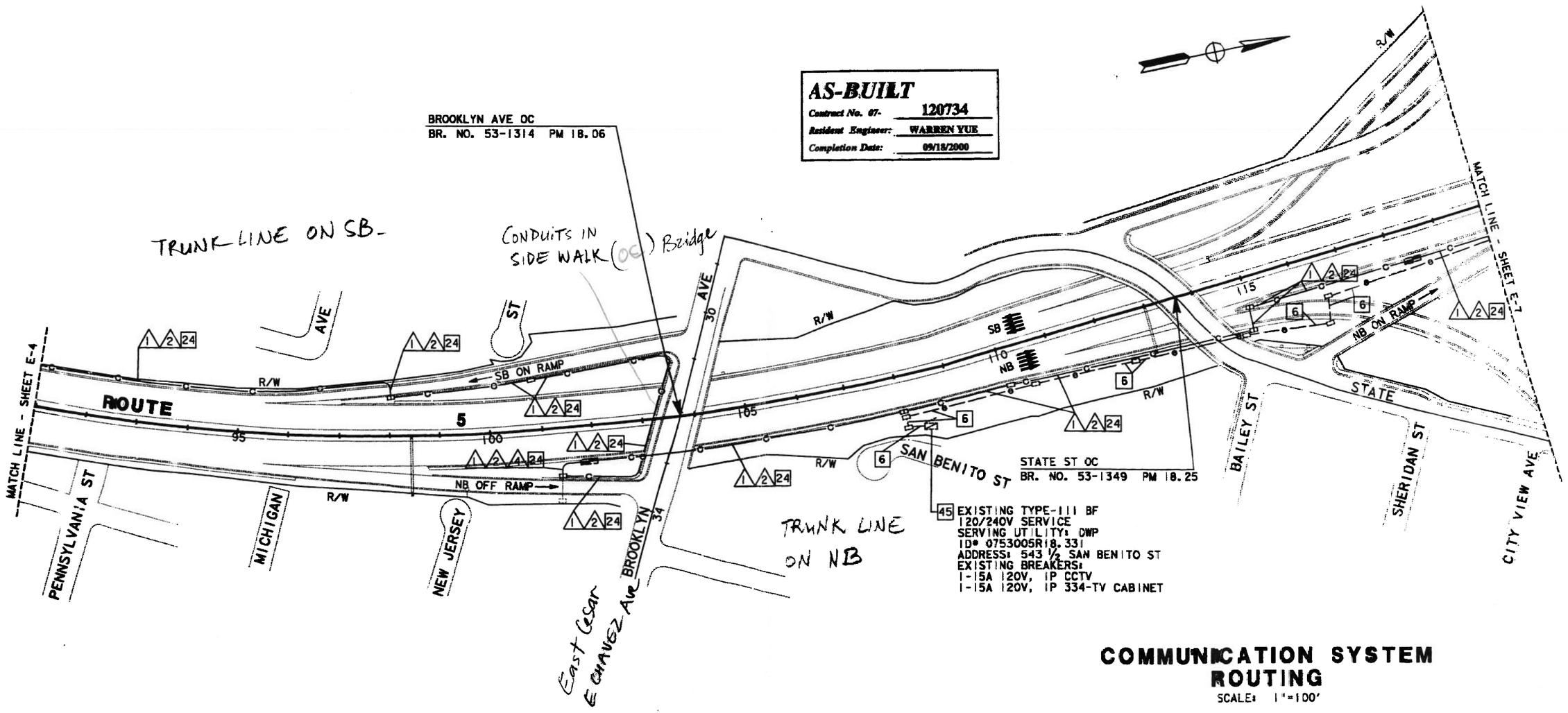
PROJECT NOTES: (THIS SHEET ONLY)

6 ~~ADD~~ 2#2 POWER CONDUCTORS TO EXISTING CONDUIT. EXIST

24 ADD CABLES TO EXISTING CONDUIT.

45 INSTALL 1-40A, 120V SINGLE POLE CIRCUIT BREAKER FOR VIDEO NODE.

AS-BUILT
Contract No. 07- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/15/2000



COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

E-5

DESIGNED BY	IP	9/95	REVISED BY
CHECKED BY	JZ	9/95	DATE REVISED

PAT SULLIVAN

Caltrans

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

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

USERNAME => HHuynh
OGN FILE => 712073u0526105956

CU 07396 EA 120731

LAST REVISION 00-00-00 PLOTTED => 26 MAR 2001 11:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,10	6.9/18.5, 0.0/31.1	73	159

Tini Parola 9/ 8/95
REGISTERED ELECTRICAL ENGINEER (Date)

12-30-96
PLANS APPROVAL DATE

TERI J. PAROLA No. 14898 Exp. 6/30/99 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
4320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

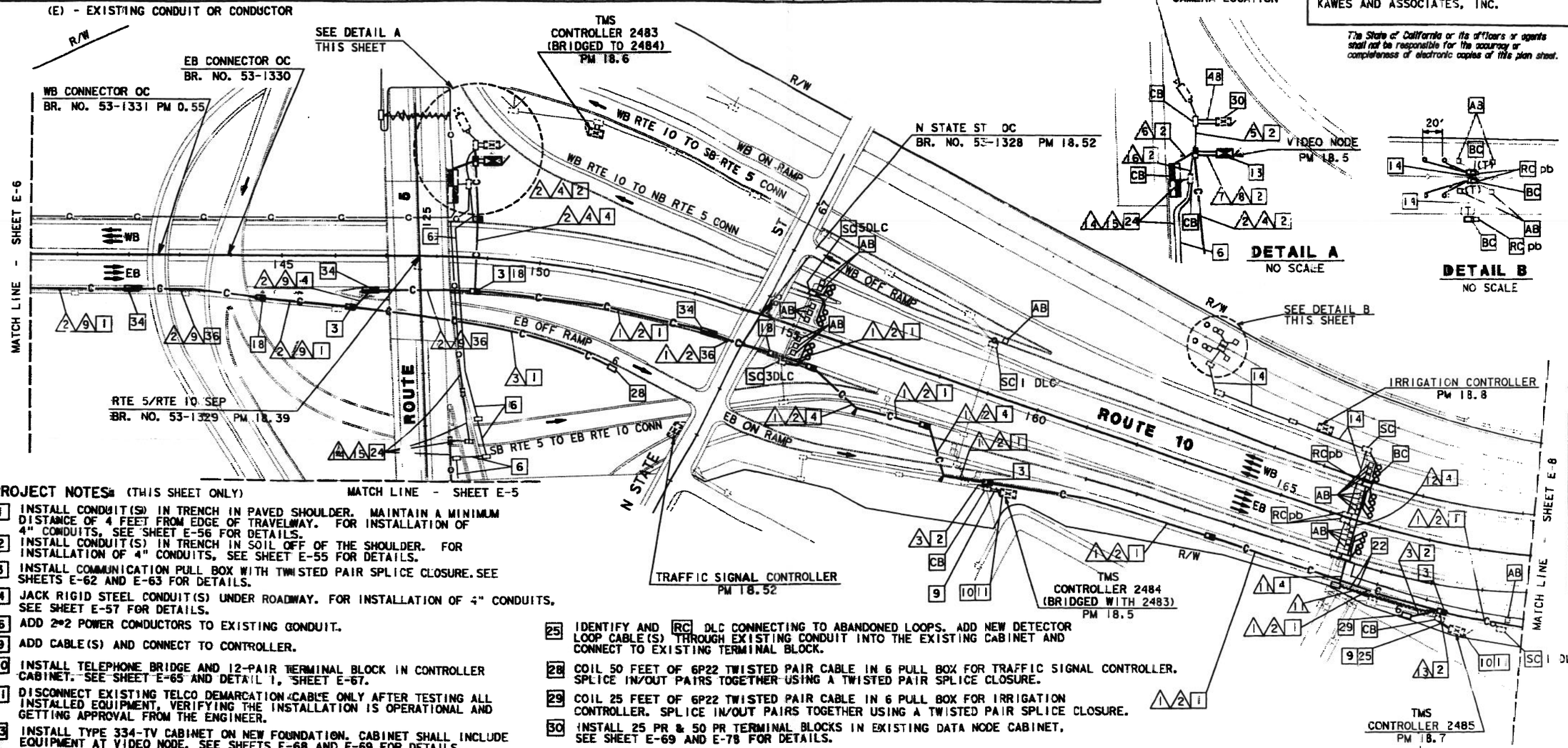
KAWES AND ASSOCIATES, INC.

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.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	4	5	6	7	8	9	11	12	13	14	15	16
50P22 CABLE	DATA /PHONE	1			1	1							1 (E)			
6P22 CABLE	DATA /PHONE			1									1			
72SMFO CABLE	DATA / VIDEO	1			1		1								1	
12SMFO CABLE	SH VIDEO		1			1		1								
2SMFO CABLE	VIDEO / DATA						1	1								
25P22 CABLE	DATA / PHONE			1		1				1						
8MMFO	SH VIDEO													1 (E)		
48SMFO	VIDEO / DATA													1 (E)		
2#2	POWER								2							2
DLC	RAMP/COUNT										15	11	15			
	INNERDUCT	1¼" 1¼"			1¼" 1¼"					1¼" 1¼"				1¼" (E) 1¼" (E)	1¼" 1¼" 1¼"	
	CONDUIT SIZE	4"	4"	2"	4"	3"	3"	3"	3"	4"	3"	2"	2"	4" (E)	4" (E)	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



DETAIL A
NO SCALE

DETAIL B
NO SCALE

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-56 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-55 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED PAIR SPLICE CLOSURE. SEE SHEETS E-62 AND E-63 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-57 FOR DETAILS.
6. ADD 2#2 POWER CONDUCTORS TO EXISTING CONDUIT.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEET E-65 AND DETAIL 1, SHEET E-67.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
13. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO NODE. SEE SHEETS E-68 AND E-69 FOR DETAILS.
14. RC EXIST DLC. INSTALL NEW DLC IN THE EXISTING CONDUIT.
18. INSTALL COMMUNICATION PULL BOX 15 FEET FROM EDGE OF STRUCTURE.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-55 AND E-56 FOR DETAILS.
24. ADD CABLES TO EXISTING CONDUIT.
25. IDENTIFY AND RC DLC CONNECTING TO ABANDONED LOOPS. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. COIL 50 FEET OF 6P22 TWISTED PAIR CABLE IN 6 PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
29. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN 6 PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
30. INSTALL 25 PR & 50 PR TERMINAL BLOCKS IN EXISTING DATA NODE CABINET. SEE SHEET E-69 AND E-78 FOR DETAILS.
34. INSTALL SPLICE VAULT 15 FEET FROM EDGE OF STRUCTURE, WITHOUT TWISTED PAIR AND FIBER OPTIC SPLICE CLOSURES. FIGURE 8 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
36. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELWAY AS POSSIBLE.
48. INSTALL 50P22 AND 25P22 TWISTED PAIR CABLES IN THE EXISTING CONDUIT.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

LOOP DETECTOR VIDEO NODE AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-7

AS-BUILT
Contract No. 07- 120734
Resident Engineer: WARREN YUE
Completion Date: 09/18/2000

DESIGNED BY PAT SULLIVAN — PROJECT ENGINEER
CALCULATED/DESIGNED BY
CHECKED BY JZ 9/95 DATE REVISED
TP 9/95 REVISED BY

DATE PLOTTED => 26-Mar-2001
TIME PLOTTED => 14:01
00-00-00

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

USERNAME => HHuynh
DGN FILE => 712073u0726140118

CU 07396 EA 12073

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 101	6.8/16.9, 0.0/1.8	31	133

REGISTERED CIVIL ENGINEER — 5/29/92

PLANS APPROVAL DATE — 3-15-93

DeLeuw, Cather and Company
100 N. Walnut Street
Pasadena, CA 91 24

REGISTERED PROFESSIONAL ENGINEER — T. M. WILSON — No. 43560 — Exp. 5/30/96 — CIVIL — STATE OF CALIFORNIA

AS-BUILT FOR EA 30550
PM 13.57 - 16.76

GENERAL NOTES:

1. CCTV LOCATION PLANS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE AND GENERAL ARRANGEMENT OF EQUIPMENT AND CONDUIT. THE LOCATION OF ITEMS NOT DIMENSIONED ARE APPROXIMATIONS ONLY. THE OPTIMUM LOCATIONS SHALL BE DETERMINED AT THE PROJECT SITE AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED.

2. CONDUITS BEING PLACED TO EXISTING RAMP METER CONTROLLERS, CMS CONTROLLERS, AND TELEPHONE COMPANY/CALTRANS DEMARCATION BOXES TERMINATE IN EXISTING ADJACENT PULL BOX. IF NONE EXIST, PLACE CALTRANS PULL BOX 5 OR 5(T), AS LOCATION WARRANTS AND AS DIRECTED BY THE ENGINEER.

3. ALL 2'' AND 4'' POLYVINYL CHLORIDE CONDUIT SHALL BE CONSIDERED RIGID NON-METALLIC CONDUIT.

LEGEND (SHEETS E-1 THROUGH E-74)

- NX — NO CROSSCONNECT
- 2W — 2-WIRE CIRCUIT
- 4W — 4-WIRE CIRCUIT (4WTO)
- FXS — FOREIGN EXCHANGE SUBSCRIBER
- FXO — FOREIGN EXCHANGE OFFICE
- CCTV CAMERA LOCATION (100 SCALE)
- CCTV CAMERA AND POLE
- SPLICE BOX SEE E-48 AND E-49
- 2½' x 4' x 3' PULL BOX SEE E-48 AND E-49
- XXX — EXISTING CONTROLLER CABINET WITH CIRCUIT IDENTIFICATION (FOR INFORMATION ONLY)
- CCTV 334 CABINET
- —C— COMMUNICATION CONDUIT
- ——— POWER SERVICE CONDUIT
- XXX T — EXISTING TELEPHONE DEMARCATION CABINET WITH CIRCUIT IDENTIFICATION (FOR INFORMATION ONLY)
- XXX — EXISTING 4-INPUT 4-WIRE AUDIO BRIDGE (TELLABS 4445) LOCATED IN CONTROLLER CABINET (XXX INDICATES CABINET NUMBER)
- TELEPHONE BRIDGE DUAL 5-WAY ACTIVE BRIDGE (X INDICATES SHELF NUMBER)
- SURGE PROTECTOR
- EQUIPMENT GROUND
- CIRCUIT BREAKER
- R — DUPLEX RECEPTACLE
- EXISTING DETECTOR LOOPS
- VSK — VIDEO SWITCH KEYPAD
- CCK — CAMERA CONTROL KEYPAD
- MR — MONITOR RACK
- EQ RACK — EQUIPMENT RACK
- O/E — OPTICAL TO ELECTRICAL
- E/O — ELECTRICAL TO OPTICAL
- M/M — MULTIMODE FIBER
- SA 869 — CCTV IDENTIFICATION NUMBER: PLACE ON STRUCTURE WITH RAISED OR RECESSED FIGURES OR ON POLE ABOVE 10', IN 3'' CHARACTERS
  - SA 869 (SANTA ANA, PM)
  - SA 588 (SANTA ANA, SPUR, PM)
  - HO 812 (HOLLYWOOD, PM)

CONDUIT AND CONDUCTOR SCHEDULE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
CAMERA VIDEO INTERFACE CABLE												1							1
PAN/TILT CONTROL CABLE																			1
LENS CONTROL CABLE												1							
CAMERA POWER CABLE																			
CAMERA GROUND CABLE												1							
SINGLE MODE FIBERS		2	2	72	72	72	12	6	12								2	6	2
MULTI MODE FIBERS						6	18		6	6	2								
COPPER TRUNK CABLE TWISTED PAIR						25	100		50	50									
2 PAIR COMMUNICATION DISTRIBUTION CABLE															1	2	2	1	1
INNER DUCT				2		2	2		2	2									
CONDUIT DIAMETER (INCHES)	(MT) 4	4	4	4	2	4	4	2	4	4	2	2	2	2	2	2	2	2	2

AS BUILT
Contract No. 07- 118604
Resident Engineer: [illegible]
Completion Date: September 17, 1997

CCTV COMMUNICATION SYSTEM CONDUIT AND CONDUCTOR SCHEDULE AND LEGEND

NO SCALE

E-1

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

CU 07387 | EA 118601

	CALCULATED/ DESIGNED BY	CBF	DATE 4/92	REVISED BY	CF	10/92
	CHECKED BY	IO	4/92	DATE REVISED		

DESIGN OVERSIGHT — GREGORY B DAMICO

DEPARTMENT OF TRANSPORTATION — TRAFFIC DESIGN

STATE OF CALIFORNIA

FOR EXISTING UTILITIES SEE SHEET U 5

PROJECT NOTES:
1. INSTALL CONDUIT IN SLOPED EMBANKMENT.
2. INSTALL CONDUIT IN SLOPED EMBANKMENT.
3. JACK CONDUIT UNDER FREEWAY

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

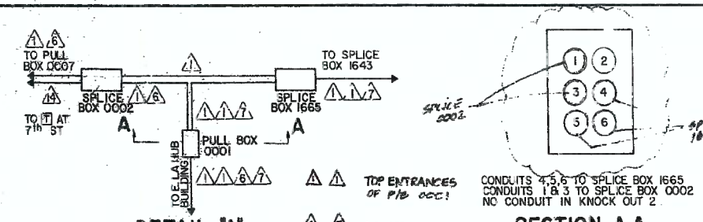
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,101	6.8/16.9, 0.0/1.8	36	133

REGISTERED CIVIL ENGINEER 4/17/96

PLANS APPROVAL DATE 5-93

Deleuw, Cather and Company
100 W. Walnut Street
Pasadena, CA 91124

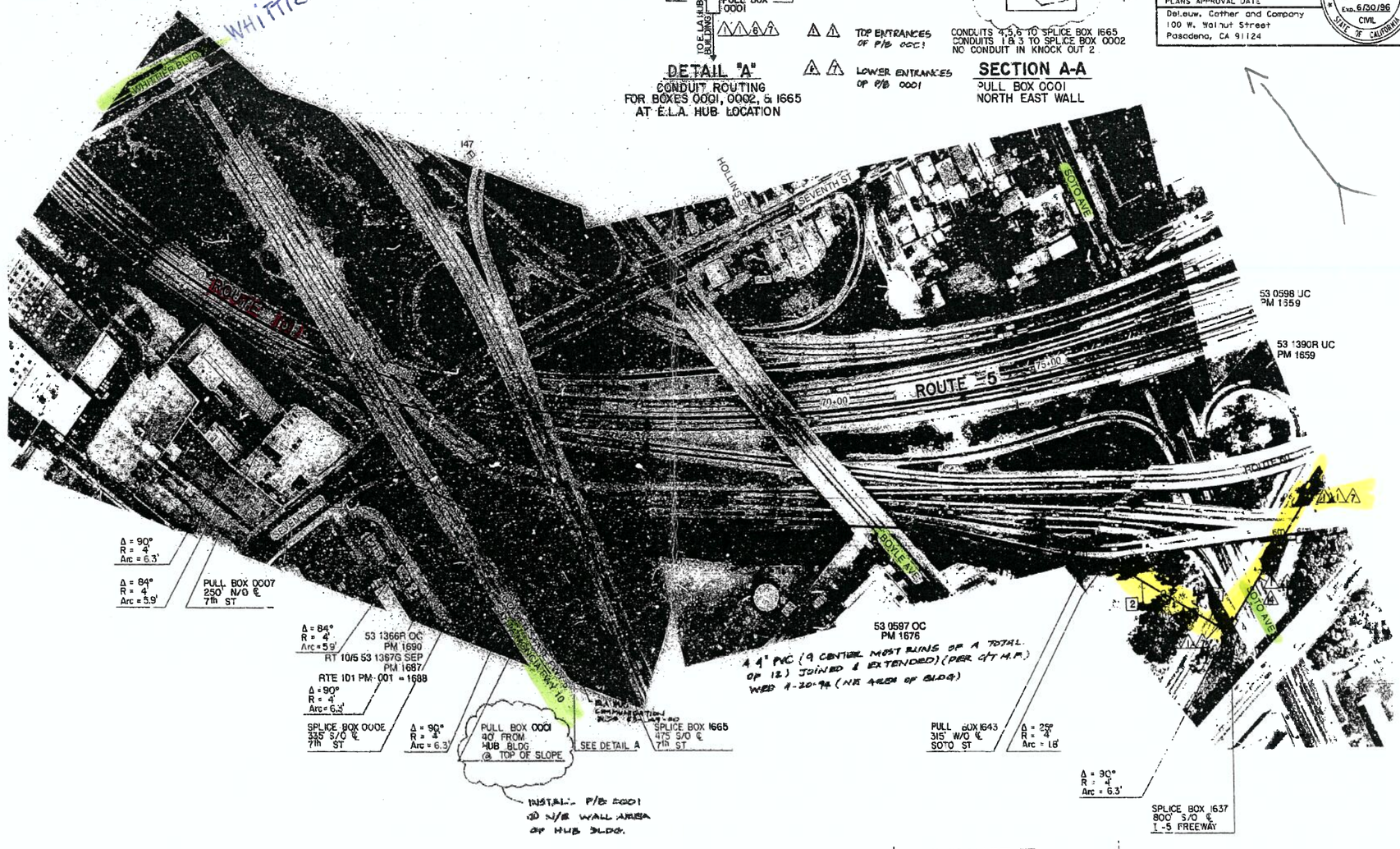
REGISTERED PROFESSIONAL ENGINEER T.M. WILSON No. 43560 Exp. 6/30/96 CIVIL STATE OF CALIFORNIA



DETAIL "A"
CONDUIT ROUTING
FOR BOXES 0001, 0002, & 1665
AT E.L.A. HUB LOCATION

CONDUITS 4,5,6 TO SPLICE BOX 1665
CONDUITS 1 & 3 TO SPLICE BOX 0002
NO CONDUIT IN KNOCK OUT 2

SECTION A-A
PULL BOX 0001
NORTH EAST WALL



AS BUILT 118604
Contract No. 07-
Resident Engineer: Luke Nguyen
Completion Date: September 17, 1997

COMMUNICATION ROUTING PLAN

SCALE 1" = 100'

E-6

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

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

CU 07387 EA 118601

DESIGN OVERSIGHT GLORIA GWYNNE

CALCULATED/DESIGNED BY D.R. DATE REVISED BY
CHECKED BY E.C. DATE REVISED

DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

< 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 101	6.8/16.3,0.0/1.8	37	133

REGISTERED CIVIL ENGINEER

3-15-93
PLANS APPROVAL DATE

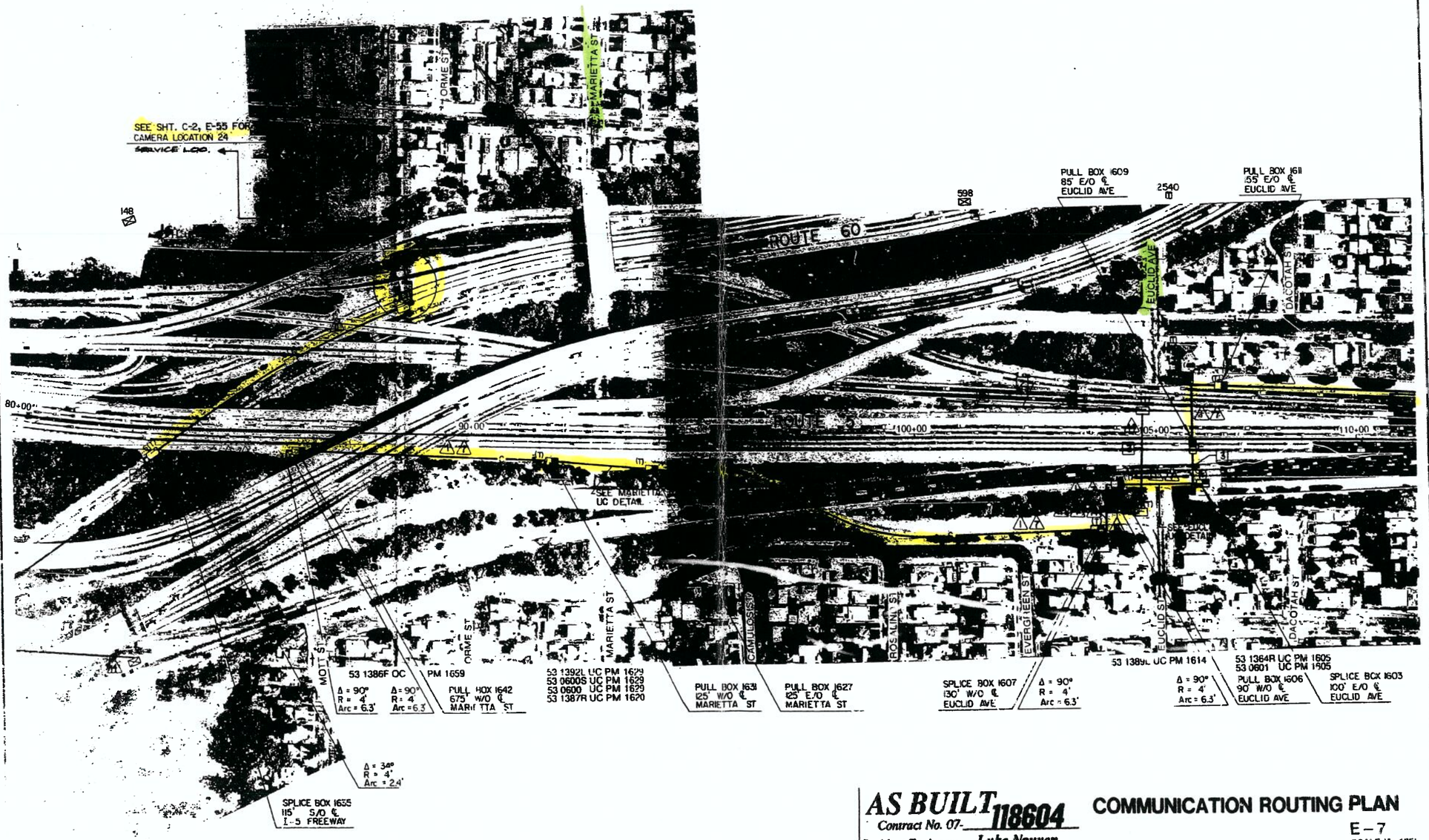
T. M. WILSON
No. 43560
Exp. 6/30/96
CIVIL
STATE OF CALIFORNIA

DeLeuw, Cather and Company
100 W. Walnut Street
Pasadena, CA 91124

FOR EXISTING UTILITIES
SEE SHEET U 6

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

PROJECT NOTES:
1. INSTALL CONDUIT IN SLOPED EMBANKMENT.
2. INSTALL CONDUIT IN NON PAVED AREA.
3. INSTALL CONDUIT IN SLOPED EMBANKMENT UNDER EUCLID ST. UC STRUCTURE.
4. JACK CONDUIT UNDER FREEWAY.
5. SEE DRAWING FOR CAMERA LOCATION 24 FOR POWER WIRING TO BE PROVIDED IN 16



AS BUILT 118604
Contract No. 07-
Resident Engineer: Luke Nguyen
Completion Date: September 17, 1997

COMMUNICATION ROUTING PLAN

E-7
SCALE 1"= 100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

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

CU 07387 EA 118601

DESIGN OVERSIGHT
GLORIA GWYNNE

CALCULATED/ DESIGNED BY
CHECKED BY
D.R. DATE REVISED BY
E.C. DATE REVISED

DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

FOR EXISTING UTILITIES
SEE SHEET U 7

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

PROJECT NOTES:
1. INSTALL CONDUIT IN NON PAVED AREA
2. INSTALL CONDUIT OUTSIDE CURB IN NON PAVED AREA
3. INSTALL CONDUIT IN SLOPED EMBANKMENT UNDER INDIANA ST. UC STRUCTURE.
4. JACK CONDUIT UNDER FREEWAY.
5. SEE DRAWINGS FOR CAMERA LOCATIONS 22 & 23 FOR POWER WIRING TO BE PROVIDED IN (A)

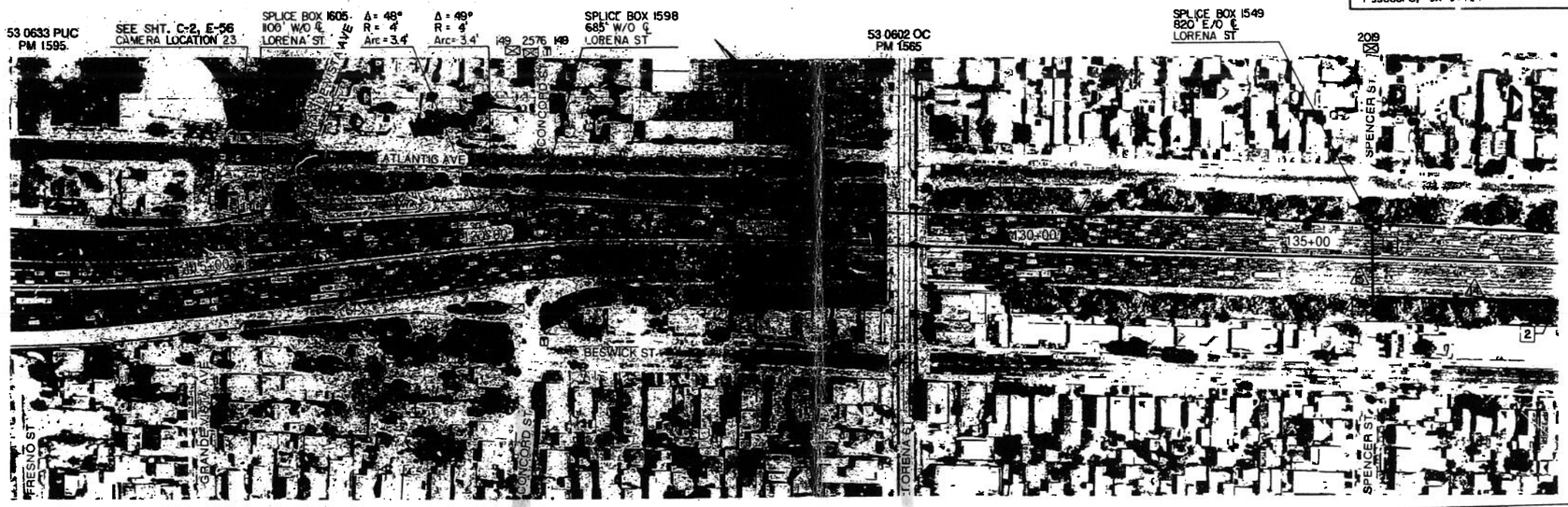
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 101	6.8/16.9,0.0/1.8	38	133

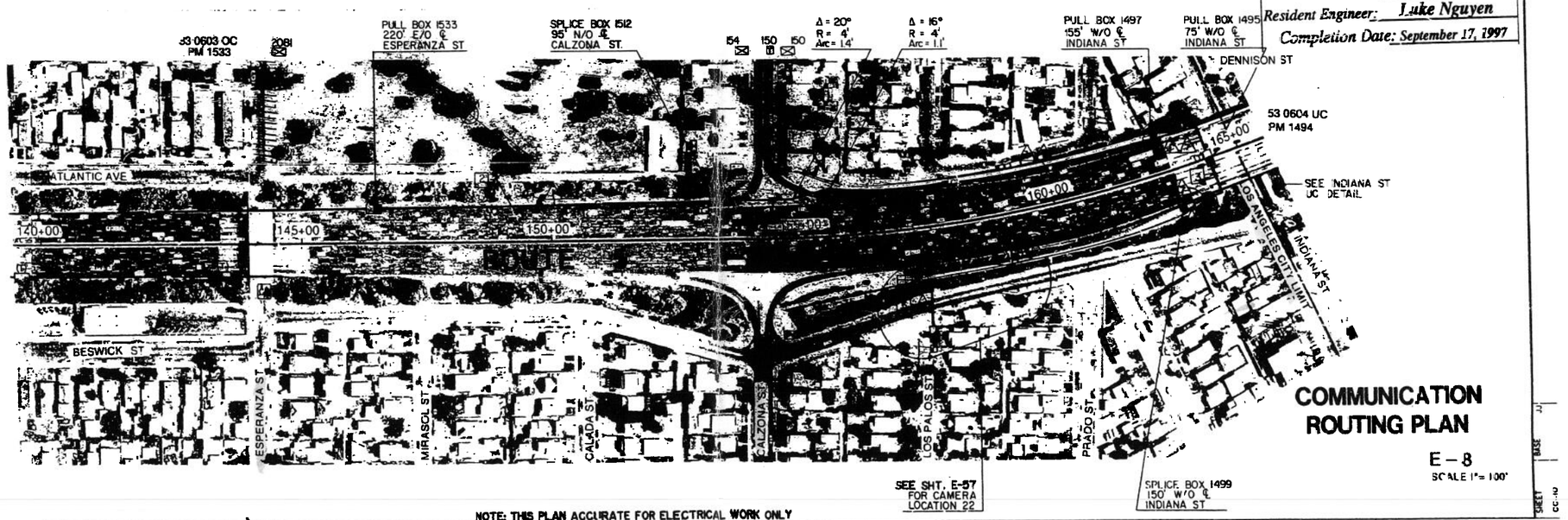
REGISTERED CIVIL ENGINEER — 4/12/92

PROFESSIONAL ENGINEER — REGISTERED — T.M. WILSON — No. 43560 — Exp. 6/30/96 — CIVIL — STATE OF CALIFORNIA

3-15-93
PLANS APPROVAL DATE

DeLeuw, Cather and Company
100 N. Walnut Street
Pasadena, CA 91124





AS BUILT 118604
Contract No. 07-
Resident Engineer: Luke Nguyen
Completion Date: September 17, 1997

COMMUNICATION ROUTING PLAN

E – 8
SCALE 1" = 100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

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

CU 07387 EA 18601

DESIGN OVERSIGHT
GLORIA GWYNNE

CALCULATED/DESIGNED BY
CHECKED BY
D.R.
E.C.
DATE
REVISED BY
DATE REVISED

DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

< 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 101	6.8/16.9,0.0/1.8	39	133

REGISTERED CIVIL ENGINEER — 4/17/96

3-15-93
PLANS APPROVAL DATE

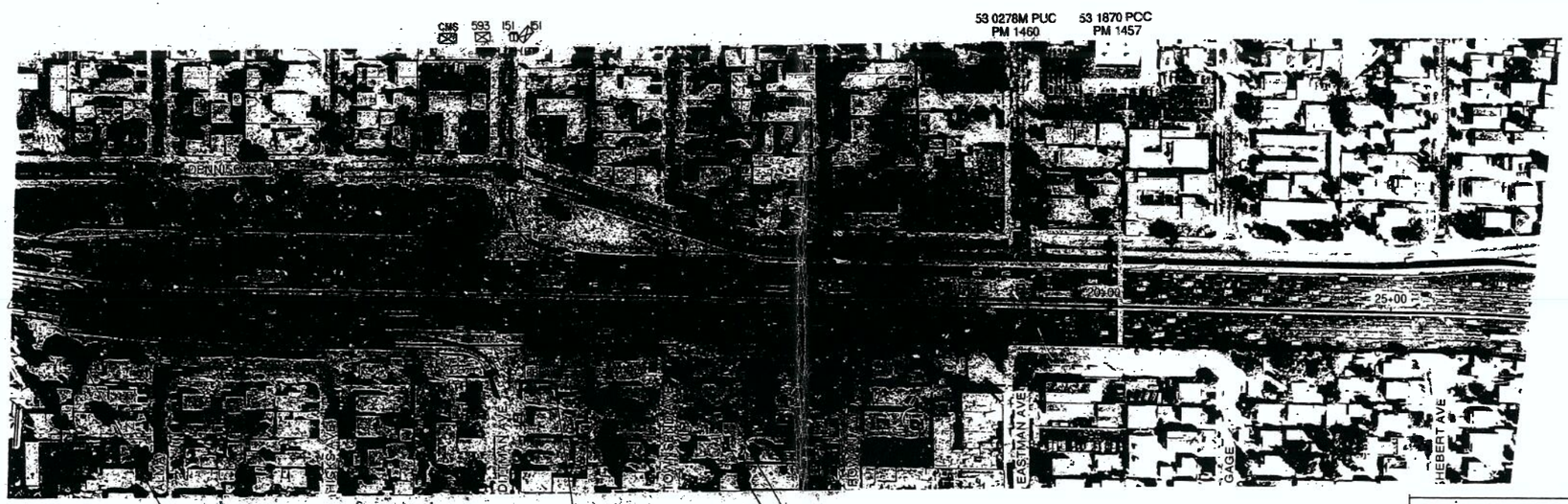
REGISTERED PROFESSIONAL ENGINEER — J. M. WILSON — No. 43560 — Exp. 6/30/96 — CIVIL — STATE OF CALIFORNIA

DeLeuw, Cather and Company
100 W. Walnut Street
Pasadena, CA 91124

FOR EXISTING UTILITIES
SEE SHEET U 8.

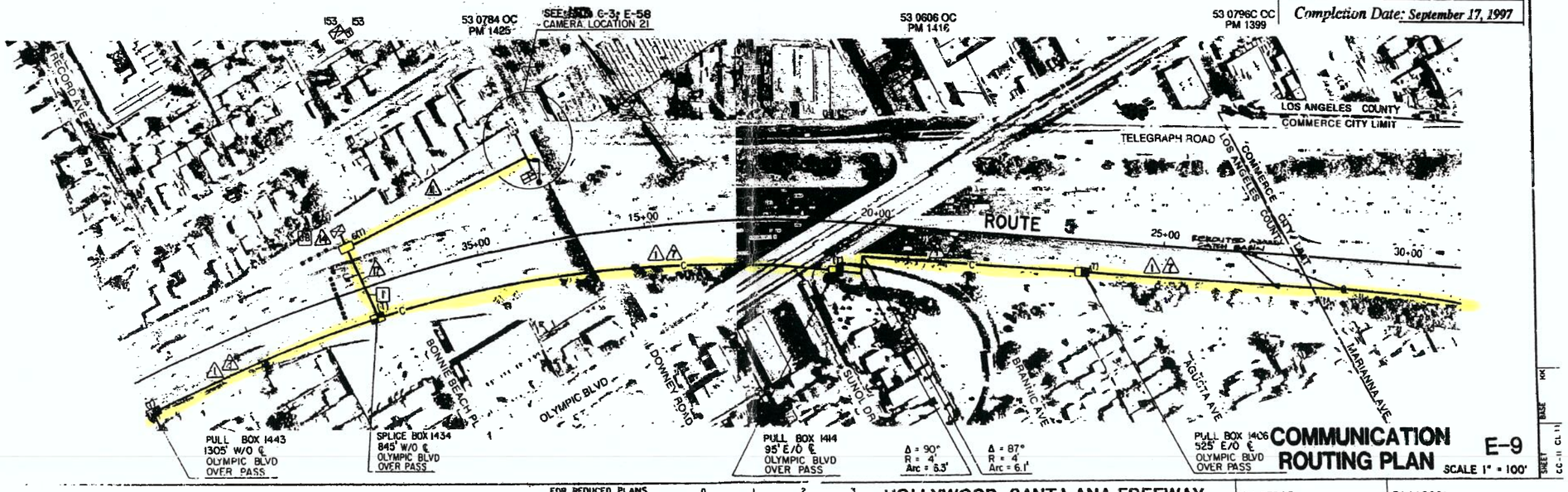
PROJECT NOTES: 1 JACK CONDUIT UNDER FREEWAY.
2 INSTALL COMMUNICATION DISTRIBUTION CABLE IN EXISTING CONDUIT.

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



NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

AS BUILT 118604
Contract No. 07-
Resident Engineer: Luke Nguyen
Completion Date: September 17, 1997



COMMUNICATION ROUTING PLAN

E-9

SCALE 1" = 100'

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

HOLLYWOOD, SANTA ANA FREEWAY | CU 07387 | EA 118601

DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

DESIGN OVERSIGHT
GLORIA GWYNNE

CALCULATED/ DESIGNED BY
CHECKED BY
D.R.
E.C.
DATE
REVISED BY
DATE REVISED

FOR EXISTING UTILITIES
SEE SHEET U 9

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

PROJECT NOTES: 1 INSTALL CONDUIT IN PAVEMENT
2 ADD ONE (1) COMMUNICATION DISTRIBUTION CABLE IN EXISTING CONDUIT

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5,101	6.8/16.9, 0.0/1.8	40	133

REGISTERED CIVIL ENGINEER 4/17/92

3-15-93
PLANS APPROVAL DATE

DeLeuw, Cather and Company
100 W. Walnut Street
Pasadena, CA 91124

REGISTERED PROFESSIONAL ENGINEER T.M. WILSON No. 43560 Exp. 6/30/96 CIVIL STATE OF CALIFORNIA

AS BUILT
Contract No. 07-118604
Resident Engineer: Luke Nguyen
Completion Date: September 17, 1997

COMMUNICATION ROUTING PLAN

E-10
SCALE 1" = 100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

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

CU 07387 | EA 118601

SHEET CC-12 CL12 | BASE LL

DESIGN OVERSIGHT GLORIA GWYNNE

CALCULATED/DESIGNED BY D.R. | DATE | REVISED BY
CHECKED BY E.C. | DATE REVISED

DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN