INFORMATION HANDOUT

For Contract No. 07-3P7204
At 07-LA-60-0.5

Identified by
Project ID 0712000426

MATERIALS INFORMATION

CCTV AND COMMUNICATION SYSTEM AS-BUILTS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN OVERSIGHT	CALCULATED/DESIGNED BY	DATE	REVISED BY
PAT SULLIVAN	CHECKED BY		DATE REVISED

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	60	0.1/11.7	87	183

Alebachew Bekele
REGISTERED ELECTRICAL ENGINEER

5-18-98
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER ALEBACHEW BEKELE No. E 15331 Exp. 06/30/01 ELECTRICAL STATE OF CALIFORNIA

ABBREVIATIONS

IP	I-POLE
2SMFO	FIBER OPTIC CABLE, 2 SINGLE-MODE FIBERS
2SMFO B/O	FIBER OPTIC BREAKOUT CABLE, 2 SINGLE-MODE FIBERS
12SMFO	FIBER OPTIC CABLE, 12 SINGLE-MODE FIBERS
48SMFO	FIBER OPTIC CABLE, 48 SINGLE-MODE FIBERS
50PR22	TWISTED PAIR CABLE, 50 PAIR 22AWG CONDUCTORS
6PR22	TWISTED PAIR CABLE, 6 PAIR 22AWG CONDUCTORS
B/O	BREAKOUT
AVC	AUTOMATIC VEHICLE CLASSIFICATION STATION
CB	CIRCUIT BREAKER
CCR	CAMERA CONTROL RECEIVER
CCTV	CLOSED CIRCUIT TELEVISION
CIA	CONTROLLER INTERFACE ASSEMBLY
CMS	CHANGEABLE MESSAGE SIGN
COMM	COMMUNICATION
DACCS	DIGITAL ACCESS AND CROSS CONNECTION SYSTEM
DEMUX	DEMULTIPLEX
(E)	EXISTING
EXIST	EXISTING
FDF	FIBER DISTRIBUTION FRAME
FDU	FIBER DISTRIBUTION UNIT
F/O	FIBER OPTIC
GRS	GALVANIZED RIGID STEEL
ELA	EAST LOS ANGELES
JKFD	JACKFIELD
MUX	MULTIPLEX
OHS	OVERHEAD SIGN
OW	ORDER WIRE (MULTIPLE VOICE CIRCUIT)
PDA	POWER DISTRIBUTION ASSEMBLY
RCVR	RECEIVER
RMS	RAMP METERING SYSTEM OR STATION
RX	RECEIVE
SCE	SOUTHERN CALIFORNIA EDISON
SMFO	SINGLEMODE FIBER OPTIC
SO CAL EDISON	SOUTHERN CALIFORNIA EDISON
TMS	TRAFFIC MONITORING STATION
TWP	TWISTED WIRE PAIR
TX	TRSNSMIT
VMX	VIDEO MULTIPLEXER
XMTR	TRANSMITTER

GENERAL NOTES

1. THE LOCATIONS OF EXISTING CONTROLLER CABINETS, EXISTING SERVICE ENCLOSURES, POWER POLES AND EXISTING DEMARCATION BOXES ARE APPROXIMATE. THE LOCATIONS OF PROPOSED PULL BOXES AND SPLICE VAULTS CABINETS AND POSITIONING OF DETECTORS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
2. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL FACILITIES, THE CONTRACTOR SHALL PROVIDE 72 HOUR ADVANCE WRITTEN NOTICE TO ALL AGENCIES CONCERNED.
3. UNLESS OTHERWISE NOTED, ALL CONDUIT BENDS SHALL BE 4 FOOT RADIUS FACTORY BENDS.
4. COMMUNICATION CONDUIT SHALL BE CENTERED IN THE PAVED SHOULDER OR AS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER.
5. TWISTED PAIR CABLES SHALL BE SPLICED IN A COMMUNICATION PULL BOX, SPLICE VAULT OR CABINET.
6. TRENCHING IN PAVEMENT ALLOWED ONLY WHERE SHOWN ON PLANS.
7. FOR NOTES PERTAINING TO UTILITIES, SEE SHEET U-1.
8. ALL PULL BOXES AND SPLICE VAULTS SHALL BE INSTALLED IN UNPAVED AREA UNLESS NOTED OTHERWISE.
9. ALL IRRIGATION CONTROLLERS ARE EXISTING UNLESS OTHERWISE NOTED ON THE PLANS.
10. PULL BOXES SHALL NOT BE USED TO CHANGE THE ALIGNMENT OF CONDUIT.
11. ALL NEW SERVICE EQUIPMENT ENCLOSURES SHALL ALSO HAVE:
    (1) 1P, 20 A BREAKER (SPARE)
    (1) 1P, 30 A BREAKER (SPARE)
    (1) 2P, (SPACE FOR FUTURE)
12. SIZE 4" CONDUITS TO BE INSTALLED IN PAVEMENT SHALL MAINTAIN 4 FEET MINIMUM DISTANCE FROM EDGE OF TRAVELED WAY UNLESS OTHERWISE NOTED.
13. SERVICE EQUIPMENT ENCLOSURE SHALL BE LOCATED 10 FEET MINIMUM FROM THE POWER POLE OR VAULT.
14. ELECTRICAL SERVICE INSTALLATION SHALL MEET THE REQUIREMENTS OF EITHER SOUTHERN CALIFORNIA EDISON (SCE) OR LOS ANGELES DEPARTMENT OF WATER AND POWER (DWP).
15. CONDUCTOR FROM POWER (OR VAULT) TO SERVICE ENCLOSURE WILL BE INSTALLED BY UTILITY COMPANY.
16. TRENCH FOR CONDUIT INSTALLATION BETWEEN POWER POLE (OR VAULT) AND SERVICE ENCLOSURE SHALL BE LEFT OPEN FOR INSPECTION AND APPROVAL BY SCE OR DWP INSPECTOR BEFORE IT IS BACKFILLED.

LEGEND

T	BUCK-BOOST TRANSFORMER
	LOCATION OF PROPOSED CCTV CAMERA AND POLE
	CMS
	SPLICE VAULT
	COMMUNICATION PULL BOX
	COMMUNICATION TRUNKLINE
	TYPE 334-TV CABINET
	EXISTING CCTV CAMERA AND POLE

EQUIPMENT IDENTIFICATION

P0123
- POST MILE ACCURATE TO 1/10 MILE (WITHOUT DECIMAL)
- FREEWAY ROUTE

AS-BUILT
Contract No. 07- 1209C4
Resident Engineer: Paul Wang
Completion Date: 01/28/02

CCTV AND COMMUNICATION SYSTEM
(LEGEND AND NOTES)

NO SCALE

E-1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	60	0.1/11.7	88	183

Alebachew Bekele
REGISTERED ELECTRICAL ENGINEER

5-18-98
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER · ALEBACHEW BEKELE · No. E 15331 · Exp. 06/30/01 · ELECTRICAL · STATE OF CALIFORNIA

CONSTRUCTION NOTES (SHEETS E-3 TO E-24)

1. ADD 6PR22 CABLE IN EXISTING CONDUIT.
2. ADD (2) 6PR22 CABLES IN EXISTING CONDUIT.
3. TERMINATE 6PR22 CABLE IN CABINET AND INSTALL TELEPHONE BRIDGE AND 12 PAIR TERMINAL BLOCK PER SHEET E-67. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
4. COIL 25' (UNLESS OTHERWISE INDICATED ON PLAN) OF 6PR22 CABLE FOR FUTURE CONNECTION TO TRAFFIC SIGNAL CONTROLLER.
5. COIL 25' OF 6PR22 CABLE FOR FUTURE CONNECTION TO IRRIGATION CONTROLLER.
6. INSTALL SPARE 4" C. SHARE TRENCH WITH COMMUNICATION CONDUIT.
7. JACK SPARE 4" C ADJACENT TO COMMUNICATION CONDUIT.
8. TRENCH AND INSTALL CONDUIT IN SOIL.
9. TRENCH AND INSTALL CONDUIT IN ASPHALT.
10. JACK CONDUIT BENEATH ROADWAY.
11. ATTACH CONDUIT TO STRUCTURE. SEE SHEET C-6 TO C-9 FOR BRIDGE ATTACHMENT TYPE AND DETAIL.
12. INSTALL CONDUITS IN SAME TRENCH.
13. SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO ELECTRICAL SITE DESIGN ON SHEET E-25 THRU E-49.

TABLE 1 -CCTV WIRING

CONDUCTOR TYPE	FUNCTION	QUANTITY
RG-6A/U	CAMERA VIDEO INTERFACE CABLE	1
9 PR #18 CABLE	PAN/TILT CONTROL CABLE	1
12 PR #18 CABLE	LENS CONTROL CABLE	1

AS-BUILT
Contract No. 07- 1209C4
Resident Engineer: Paul Wang
Completion Date: 01/28/02

CCTV AND COMMUNICATION SYSTEM
(NOTES)
NO SCALE

E-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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CU 07396 | EA 1209C1

LAST REVISION | DATE PLOTTED => 13-JUL-2007 | TIME PLOTTED => 11:05

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	60	0.1/11.7	89	183

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5-18-98
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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 10			RUN 20
50PR22 CABLE	COMMUNICATION DATA/VOICE	1			
48SMFO	MULTIPLEXED DATA/VIDEO		1		
12SMFO	CCTV CAMERA TO VIDEO DISTRIBUTION			1	
6PR22 CABLE	DISTRIBUTION DATA/VOICE				1
	INNERDUCT		1¼"	1¼"	
	CONDUIT SIZE	4"			2"

CONSTRUCTION NOTES THIS SHEET:

23 INSTALL 4" SPARE CONDUIT(FIBERGLASS).

24 TERMINATE 50PR22 AND 48SMFO CABLES INTO EAST LOS ANGELES HUB BUILDING. SEE SHEETS E-89 AND E-90 FOR DETAILS.

30 RC EXISTING PULL BOX. INSTALL NEW PULL BOX.

AS-BUILT
Contract No. 07- 1209C4
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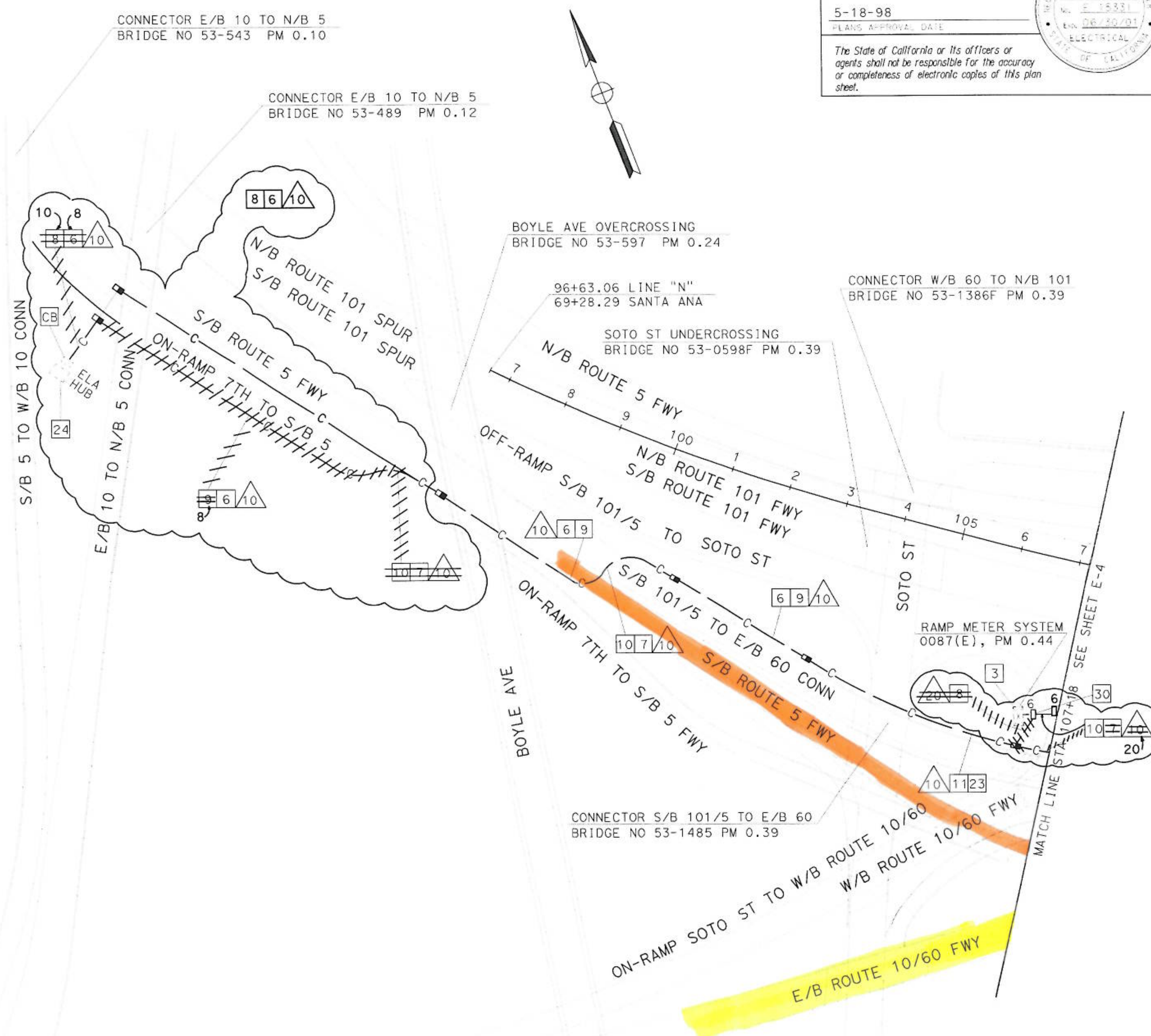

COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-3

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

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07	LA	60	0.1/11.7	90	183

Alebachew Bekele
REGISTERED ELECTRICAL ENGINEER

ALEBACHEW BEKELE No. E 15331 Exp. 06/30/01 ELECTRICAL STATE OF CALIFORNIA

5-18-98
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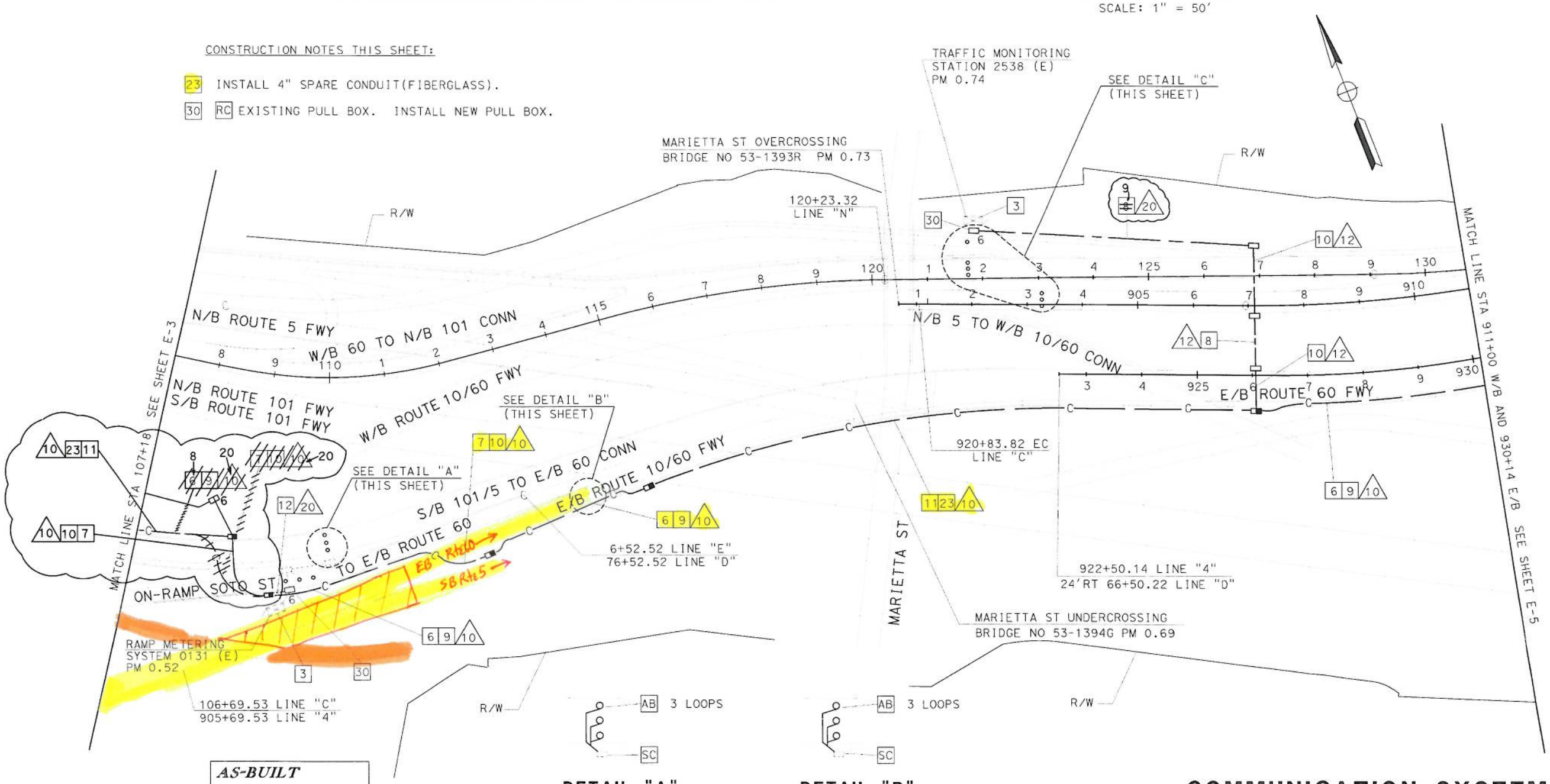
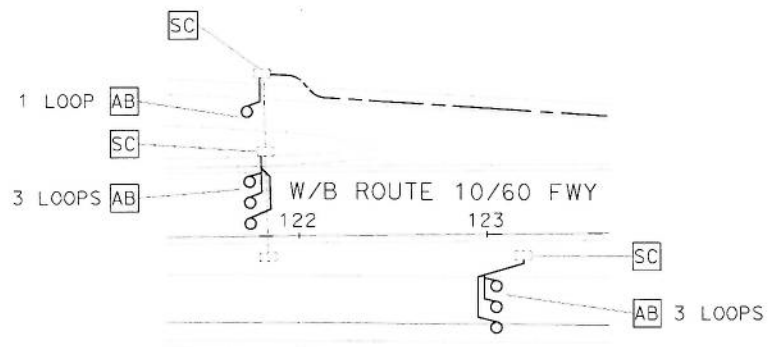
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)				
CONDUCTOR TYPE	FUNCTION	RUN 10	RUN 12	RUN 20
50PR22 CABLE	COMMUNICATION DATA/VOICE	1		
48SMFO	MULTIPLAXED DATA/VIDEO	1		
12SMFO	CCTV CAMREA TO VIDEO DISTRIBUTION	1		
6PR22 CABLE	DISTRIBUTION DATA/VOICE		1	1
	INNERDUCT	1¼" 1¼"		
	CONDUIT SIZE	4"	3"	2"

CONSTRUCTION NOTES THIS SHEET:

23 INSTALL 4" SPARE CONDUIT(FIBERGLASS).

30 RC EXISTING PULL BOX. INSTALL NEW PULL BOX.





DETAIL "C"
SCALE: 1" = 50'

DETAIL "A"
SCALE: 1" = 50'

DETAIL "B"
SCALE: 1" = 50'

AS-BUILT
Contract No. 07- 1209C4
Resident Engineer: Paul Wang
Completion Date: 01/28/02

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

COMMUNICATION SYSTEM ROUTING AND LOOP DETECTOR

SCALE: 1" = 100'

E-4

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DGN
07396
EA 1209C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	60	0.1/11.7	139	183

Alebachew Bekele
REGISTERED ELECTRICAL ENGINEER
5-18-98
PLANS APPROVAL DATE

ALEBACHEW BEKELE No. E 15331 Exp. 6-30-01 ELECTRICAL

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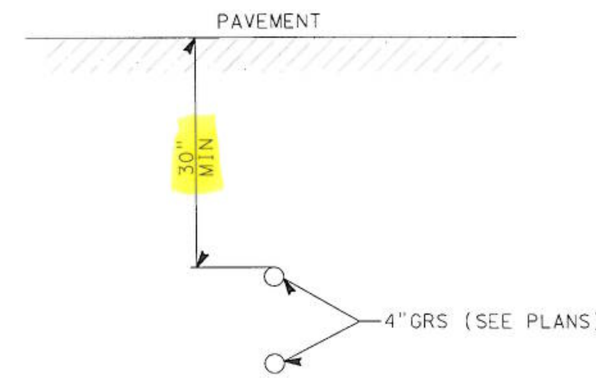
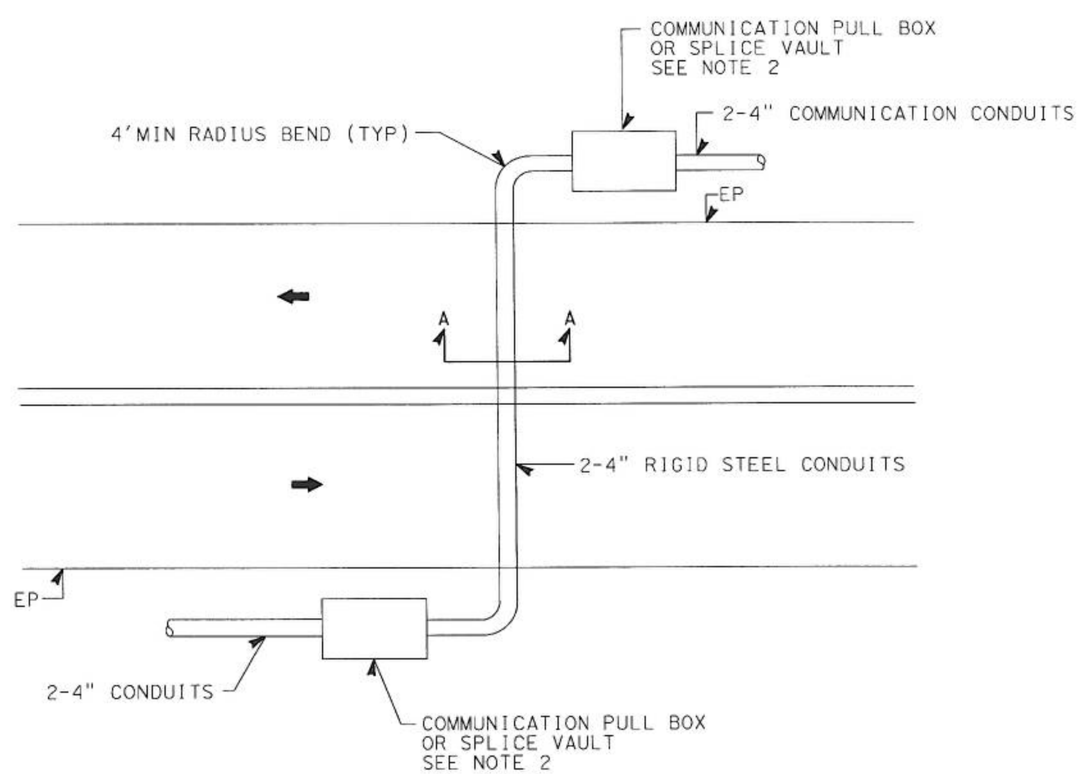
NOTES: (THIS SHEET ONLY)

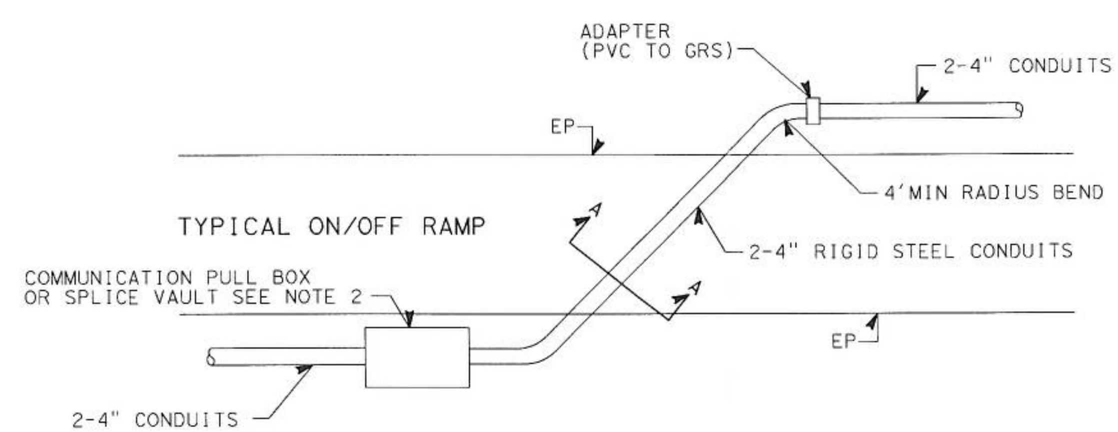
1. ALL JACKED CONDUITS SHALL BE 30 INCHES MINIMUM BELOW FINISHED GRADE.
2. PLACE PULL BOXES AND SPLICE VAULTS AS SHOWN PER PLANS.
3. ALL BENDS SHALL BE FACTORY BENDS.
4. BEND ANGLES AND CONDUIT DIRECTION VARY AS SHOWN PER PLANS.



SECTION A-A



TYPICAL MAINLINE CROSSING (4 OR MORE LANES)



TYPICAL ON/OFF RAMP CROSSING

AS-BUILT
Contract No. 07- 1209C4
Resident Engineer: Paul Wang
Completion Date: 01/28/02

JACKING DETAILS

NO SCALE

E-53

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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PAT SULLIVAN	CHECKED BY		DATE REVISED

LAST REVISION 11-22-95

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

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