

DEPARTMENT OF TRANSPORTATION
DIST 03 CONSTRUCTION FIELD OFFICE
379 Colusa Highway, Yuba City CA, 95991
FAX (530) 822-4307
(530) 822-4309



July 26, 2010

03-Sut-99-26.6/37.4
03-1A4614
Highway Widening (Tudor Bypass)

DESILVA GATES CONSTRUCTION
2600 Palm Street
Nicolaus, CA 95659

Attn: Mr. Paul Hand

Enclosed for your records is/are the following:

1. Weekly Statement of Working Days, Report No. _____.
2. Progress Payment Voucher No. _____.
3. Approved Contract Change Order No. _____.
4. Proposed Contract Change Order No. 38 for your review and signature.
5. Daily Extra Work Reports [CCO Rept/#]: _____.
6. Other.

Sincerely,

Ron

Ron Tollison,
Resident Engineer

CONTRACT CHANGE ORDER

CCO No. 38	Suppl. No. 0	Contract No. 03-1A4614	Road Sut-99,113-26.6/37.4,25.7/R26.6 (KP)	Federal Number(s) No Fed-Aid
---------------	-----------------	---------------------------	--	---------------------------------

Change Requested by: Engineer Contractor

To DeSilva Gates Construction, Contractor

You are directed

to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate

In accordance with Section 4-1.03, "Changes" and 86 "Signals, Lighting and Electrical Systems of the Standard Specifications and this project's Special Provisions, perform the following work:

- 1) Replace the contract plan sheets No. 294 (E-1) and No. 296 (E-3) with sheets 4 and 5 of this contract change order.
- 2) Perform the electrical work as indicated on sheets 4 and 5 of this contract change order.
- 3) Add attached Revised Standard Plan sheet RSP ES-7H.
- 4) Perform the following work:

Adjustment in Compensation at Lump Sum:

In accordance with Section 86-1.03 "Cost Break-Down" of the Standard Specifications, an adjustment in compensation will be made to contract item no. 82 "Signal and Lighting (Location 1)" using the approved "Cost Break-Down"

Increases:

- 1) Add 142.3 meters of 53C type 3 conduit @ \$34.53 per meter for a total of.....\$4,913.62
- 2) Add 718.9 meters of 78C type 3 conduit @ \$69.06 per meter for a total of.....\$49,647.23
- 3) Add 41.5 meters of 103C type 3 conduit @ \$69.06 per meter for a total of.....\$2,865.99
- 4) Add 2 each 1B poles @ \$517.96 each for a total of.....\$1,035.92
- 5) Add 2 each 1B pole foundations @ \$517.96 each for a total of.....\$1,035.92
- 6) Add 33 each type A detector loops @ \$414.36 each for a total of.....\$13,673.88
- 7) Add 3 each DHs @ \$138.12 each for a total of.....\$414.36
- 8) Add 2 each #5 (T) pull boxes @ \$310.77 each for a total of.....\$621.54
- 9) Add 5 each #6 (E) PCC pull boxes @ \$69.06 each for a total of.....\$345.30
- 10) Add 2 each SP-1-T ped signal mounts @ \$51.80 each for a total of.....\$103.60
- 11) Add 1 each 1B pole foundation on the SWC @ \$517.96 each for a total of.....\$517.96
- 12) Add 1 each Type B TDC foundation on the SEC @ \$690.61 each for a total of.....\$690.61

Total increases at Adjustment in Compensation at Lump Sum..... + \$75,865.93

Decreases:

- 1) Delete 31.4 meters of 41C type 3 conduit @ \$34.53 per meter for a total of.....(-)\$1,084.24
- 2) Delete 385.8 meters of 53C type 3 conduit @ \$34.53 per meter for a total of.....(-)\$13,321.67
- 3) Delete 2.6 meters of 63C type 3 conduit @ \$69.06 per meter for a total of.....(-)\$179.56
- 4) Delete 2 each type 15 pole foundations @ \$1,035.91 each for a total of.....(-)\$2,071.82
- 5) Delete 2 each type 19A-4-161 pole foundations @ \$2,071.82 each for a total of.....(-)\$4,143.64
- 6) Delete 22 each type C detector loops @ \$414.36 each for a total of.....(-)\$9,116.02
- 7) Delete 2 each type A detector loops @ \$414.36 each for a total of.....(-)\$828.72
- 8) Delete 1 each #6 PCC pull box @ \$241.71 each for a total of.....(-)\$241.71
- 9) Credit not to install two type 15 poles with 4.6 LMA and 200W HPS fixtures.....(-)\$500.00

CONTRACT CHANGE ORDER

CCO No.	Suppl. No.	Contract No.	Road	Federal Number(s)
38	0	03-1A4614	Sut-99,113-26.6/37.4,25.7/R26.6 (KP)	No Fed-Aid

10) Credit not to install two type 19A-4-161 traffic signal poles with 9.1 SMAs.....(-)\$1,000.00
Total decreases at Adjustment in Compensation at Lump Sum.....(-) \$32,487.38 Credit to State

For this work paid for at Adjustment in Compensation at Lump Sum the contractor shall receive a total sum of.....\$43,378.55

This sum constitutes full and complete compensation for providing all labor, material, equipment, tools and incidentals, including all markups by reason of this change.

“Extra Work at Force Account”(EW@FA):

In accordance with Section 4-1.03D “Extra Work”, as shown on sheets 4 through 6 of this contract change order, and as directed by the Engineer perform the following work:

Increases:

- 1) Move salvaged miscellaneous traffic and pedestrian signal equipment, luminaires, poles and mast arms from Contractor’s storage area(s) to the Caltrans yard. Estimated cost \$500.00
- 2) Abandon the newly installed conduits, as shown on the contract plan sheet 294 (E-1).
Estimated cost \$1,000.00
- 3) Add 4 each PPB Posts. Estimated cost \$940.00
- 4) Add 2 each Type 61A-4-161 poles with 19.8 meter Signal Mast Arms (SMA).
Estimated cost \$22,256.20
- 5) Add 4 each PPB Post foundations. Estimated cost\$1,000.00
- 6) Add 2 each Type 61A-4-161 pole foundations. Estimated cost\$5,775.00
- 7) As directed by the attached plans, add 2 each 15.2 meter SMAs for Type 29A-5-161 poles
Estimated cost\$18,402.50
- 8) Add 11 each type D detector loops. Estimated cost \$4,557.96
- 9) Add 2 each TV-2-T TS mounts with 5 section TS heads with visors, back plates, 3 ball and 2 arrow indications. Estimated cost \$600.00
- 10) Modify 2 each SV-3-T traffic signal mounts to 2 each SV-1-T traffic signal mounts and salvage what is left. Estimated cost \$200.00
- 11) Modify 2 each SP-2-T ped signal mounts to 2 each SP-1-T ped signal mounts and salvage what is left. Estimated cost \$200.00
- 12) The Electrical Sub Contractor Project Manager’s time to estimate this CCO and order the material for this CCO. Estimated cost \$3,500.00
- 13) Add 1 tenon each on the two 19.8 meter SMA. Estimated cost \$400.00
- 14) Freight and re-stocking fee for the cages for the two type 19A-4-161 traffic signal pole foundations. Estimated cost..... \$200.00

Estimated Extra Work at Force Account.....\$59,531.66

Total.....\$102,910.21

There will be no time adjustment due to this change order since the work involved will not affect the controlling operation.

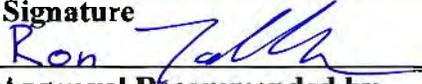
CONTRACT CHANGE ORDER

CCO No. 38	Suppl. No. 0	Contract No. 03-1A4614	Road Sut-99,113-26.6/37.4,25.7/R26.6 (KP)	Federal Number(s) No Fed-Aid
---------------	-----------------	---------------------------	--	---------------------------------

Estimated Cost:**Increase \$102,910.21**

By reason of this order the time of completion will be None
adjusted as follows:

Submitted by

Signature 	(Print name & title) Ron Tollison, Resident Engineer	Date 07-26-10
--	---	------------------

Approval Recommended by

Signature	(Print name & title) Fernando Rivera, A.C.E.	Date
-----------	---	------

Engineer Approval by

Signature	(Print name & title) Bijan Parhizgar, A.C.M.	Date
-----------	---	------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above. **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**

Contractor Acceptance by

Signature	(Print name & title)	Date
-----------	----------------------	------

CEM-4900

DATE REVISIONS BY MARK BLANCHARD
 DATE REVISIONS BY STEVE S LEE
 CALCULATED/DESIGNED BY RAJUL LERMA
 PROJECT ENGINEER
 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 OFFICE OF ELECTRICAL DESIGN
 SACRAMENTO

PROJECT NOTES (THIS SHEET ONLY)

- 1 TYPE III AF SERVICE EQUIPMENT ENCLOSURE CTID No. 0318099R017730, FOR SERVICE WIRING DIAGRAM SEE SHEET E 2A.
- 2 STATE-FURNISHED TYPE 332 CABINET AND MODEL 2070 CONTROL FR ASSEMBLY.
- 3 53C, 5 OLC, 2#6 (FB)
- 4 53C, 8 OLC, 2#6 (FB)
- 5 78C, 9 OLC, 2#6 (FB)
- 6 78C, 10 OLC, 2#6 (FB)
- 7 78C, 11 OLC, 2#6 (FB)
- 8 78C, 12 OLC, 2#6 (FB)
- 9 78C, 13 OLC, 2#6 (FB)

03-1A4614
CCO #38
Contract Change Order
SHEET 4 OF 5

STEVE S LEE
 REGISTERED ELECTRICAL ENGINEER
 03-22-10
 PLANS APPROVAL DATE



GENERAL NOTES (THIS SHEET ONLY)

- 1. FOR SIGNS TO BE MOUNTED ON SIGNAL MAST ARMS, SEE PROJECT DELINEATION AND SIGN PLANS.
- 2. ALL PULL BOXES SHALL NOT BE SPACED MORE THAN 40 M APART. ALL PULL BOXES SHALL BE TRAFFIC TYPE WHEN PLACED 1.2 M FROM EDGE WITHIN THE CLEAR RECOVERY ZONE, UNLESS OTHERWISE DENOTED.

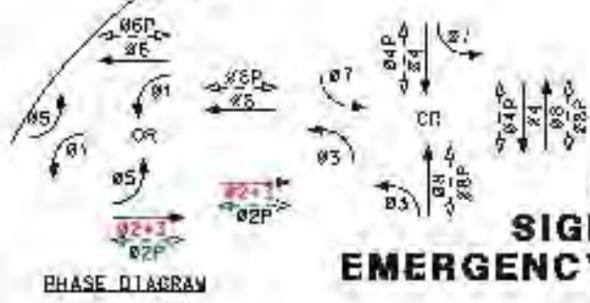
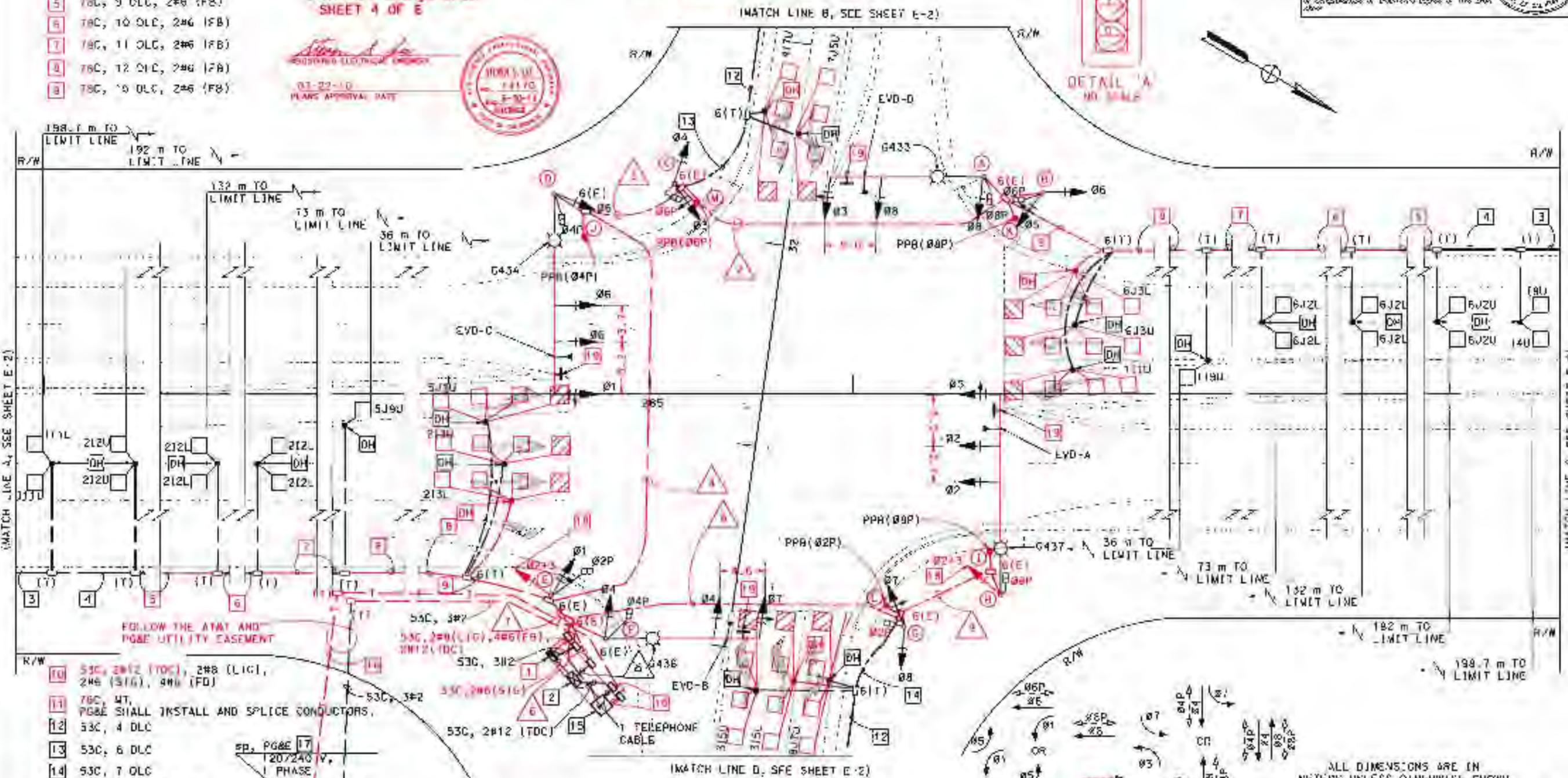


DATE	SO. NO.	POINT	ALLOWED TO TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	SUT	99,113	26.6/37.4 25.7/26.4	294	333

STEVEN S. LEE
 REGISTERED ELECTRICAL ENGINEER
 11-19-00

12-3-07
 PLANS APPROVAL DATE

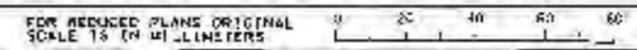
STEVEN S. LEE
 19110
 5-20-09
 ELECT



- 10 53C, 2#12 (TDC), 2#8 (LIG), 2#6 (SIG), 4#6 (FD)
- 11 78C, 4T, PG&E SHALL INSTALL AND SPLICE CONDUCTORS.
- 12 53C, 4 OLC
- 13 53C, 6 OLC
- 14 53C, 7 OLC
- 15 INSTALL TYPE B TDC
- 16 53C, 4T, TELEPHONE CABLE SHALL BE INSTALLED BY AT&I
- 17 INSTALL TYPE PG&E RISER
- 18 INSTALL 3-SECTION VERTICAL STACKED SIGNAL HEAD, SEE DETAIL 'A' THIS SHEET.
- 19 INSTALL SIGN ON SIGNAL MAST ARM, SEE PAVEMENT DELINEATION AND SIGN PLANS.

**SIGNAL AND LIGHTING
 EMERGENCY VEHICLE DETECTOR
 SYSTEM**
 (LOCATION 1)
 (WILSON Rd/Rte 99) E-1A
 SCALE 1:200

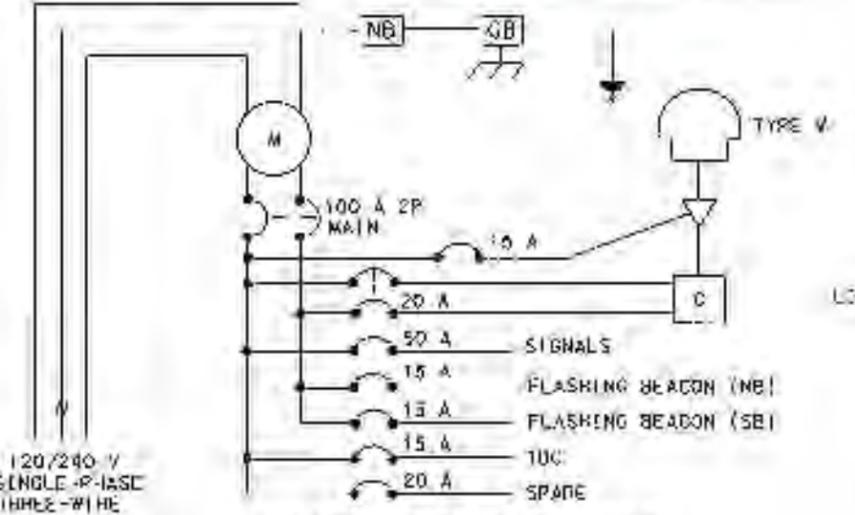
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY



DATE REVISIONS BY: 07/07/07
 CHECKED BY: STEVE S LEE
 PROJECT ENGINEER: RAWJ LERNA
 OFFICE OF ELECTRICAL DESIGN: SACRAMENTO
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 OFFICE OF ELECTRICAL DESIGN: SACRAMENTO

CONDUIT AND CONDUCTOR SCHEDULE

CONDUCTOR DESIGNATION		CONDUIT ROD NUMBER AND SIZE													
CABLE TYPE	PHASE	1	2	3	4	5	6	7	8	9	10	11	12		
VFH-PFD 12CSC	1	1	1	1	1	1	1	1	1	1	1	1	1		
	2	1	1	1	1	1	1	1	1	1	1	1	1		
	3	1	1	1	1	1	1	1	1	1	1	1	1		
	4	1	1	1	1	1	1	1	1	1	1	1	1		
	5	1	1	1	1	1	1	1	1	1	1	1	1		
	6	1	1	1	1	1	1	1	1	1	1	1	1		
	7	1	1	1	1	1	1	1	1	1	1	1	1		
	8	1	1	1	1	1	1	1	1	1	1	1	1		
	9	1	1	1	1	1	1	1	1	1	1	1	1		
	10	1	1	1	1	1	1	1	1	1	1	1	1		
30SC	1	1	1	1	1	1	1	1	1	1	1	1			
PPB	1	1	1	1	1	1	1	1	1	1	1	1			
TOTAL CABLES		2	2	2	2	2	2	2	2	2	2	2	2		
CIRCUIT															
FLASHING BEACON															
LIGHTING															
EVD-A															
EVD-B															
EVD-C															
EVD-D															
DETECTORS															
PHASE															
01															
02															
03															
04															
05															
06															
07															
08															
COUNT (02)															
COUNT (06)															
TOTAL DGC		15	21	21	23	23	23	23	23	23	23	23	23		



SERVICE WIRING DIAGRAM
 LOAD: 3000 W Signals
 1500 W Lighting
 1000 W Flashing Beacons
 500 W TDC
 UT13 No. 0316099R017730

03-144614
 CDD #38
 Contract Change Order
 SHEET 5 OF 6



CITY	COUNTY	POPULATION	CUMULATIVE COST	PROJECT	DATE	NO. OF SHEETS	TOTAL SHEETS
03	SU	99,113	26,837,425.71/R26.8	296	333		

REGISTERED ELECTRICAL ENGINEER
 B-1-07
 12-3-07
 PLANS APPROVAL DATE:
 2-20-08
 (L207)

POLE AND EQUIPMENT SCHEDULE

NO.	STANDARDS		VEH SIG MFG		PEO SIGNAL MFG	PPB		QPS ILLUMINARE	COMMENTS
	TYPE	SWA (m)	LVA (m)	MAST ARM		POLE	B		
(A)	29A-5-161	15.2	4.5	MAT MAS	SV-1-T SP-1-T	6	-	310 W	T-4.1
(B)	1-B				TV-2-T SP-1-T				
(C)	1-B				TV-2-T SP-1-T				
(D)	29A-5-161	15.2	4.5	MAT MAS MAS	SV-1-T SP-1-T			310 W	T-4.2
(E)	1-B				TV-2-T SP-1-T	4	→		
(F)	29A-5-161	15.2	4.5	MAT MAS	SV-1-T SP-1-T	2	←	310 W	T-4.1
(G)	1-B				TV-2-T SP-1-T				
(H)	29A-5-161	15.2	4.5	MAT MAS MAS	SV-1-T SP-1-T			310 W	T-4.1
(I)	PPB POST					8	-		
(J)	PPB POST					4	←		
(K)	PPB POST					8	→		
(L)	PPB POST					2	→		
(M)	PPB POST					6	-		

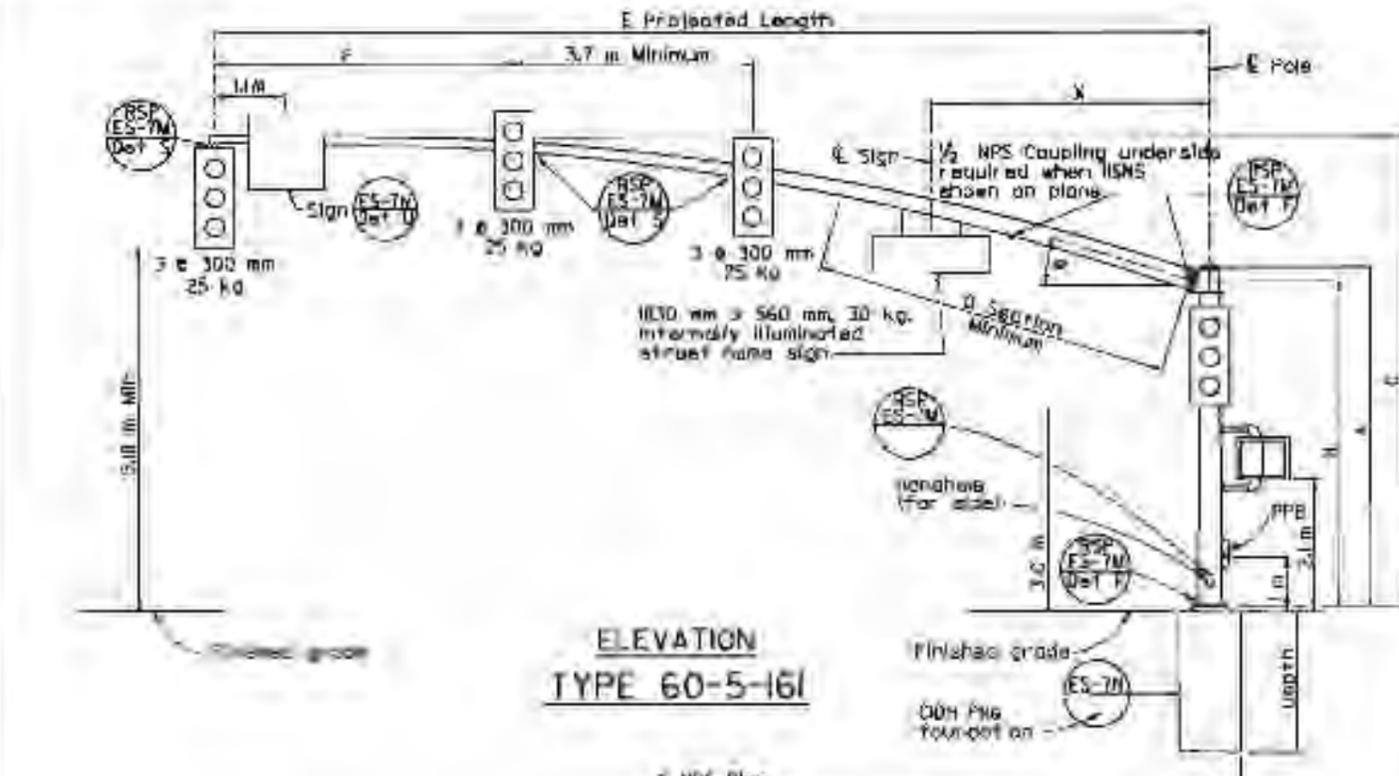
- LEGENDS**
- (M) METER SOCKET AND SUPPORT
 - (C) CONTACTOR
 - (SN) SOLID NEUTRAL BUS
 - ▽ AUTO TEST SWITCH
 - ☉ PHOTOELECTRIC UNIT

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

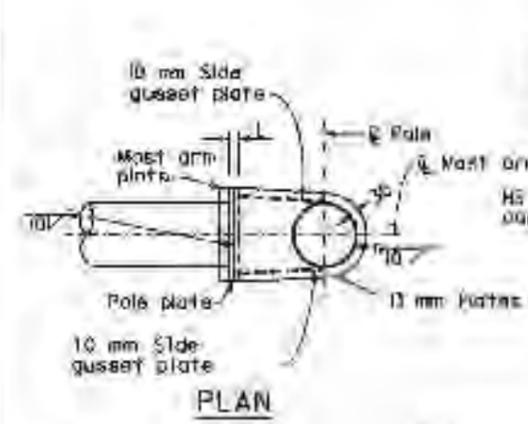
**CONDUCTOR, POLE AND EQUIPMENT SCHEDULES
 SIGNAL AND LIGHTING
 EMERGENCY VEHICLE DETECTOR SYSTEM
 (LOCATION 1)
 (WILSON Rd/Rte 99)
 NO SCALE**



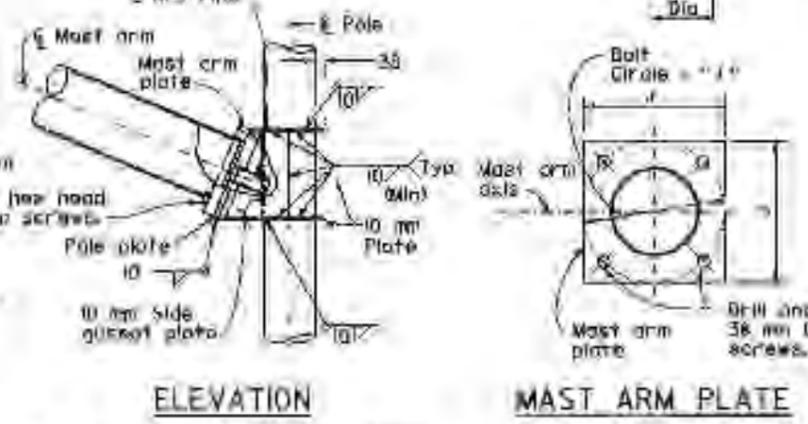
DATE: 07/07/07
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]



ELEVATION
TYPE 60-5-161



PLAN



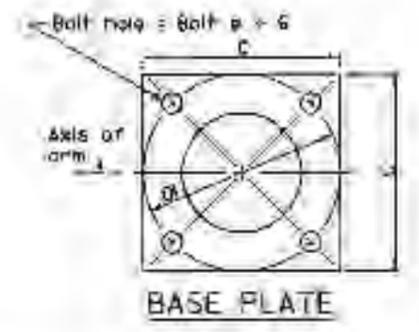
ELEVATION
MAST ARM PLATE

NOTE
The radial separation between the face of the pole and the adjacent insides of the top and bottom gusset plates shall not exceed 5 mm. Fillet weld size to be increased by amount of gap.

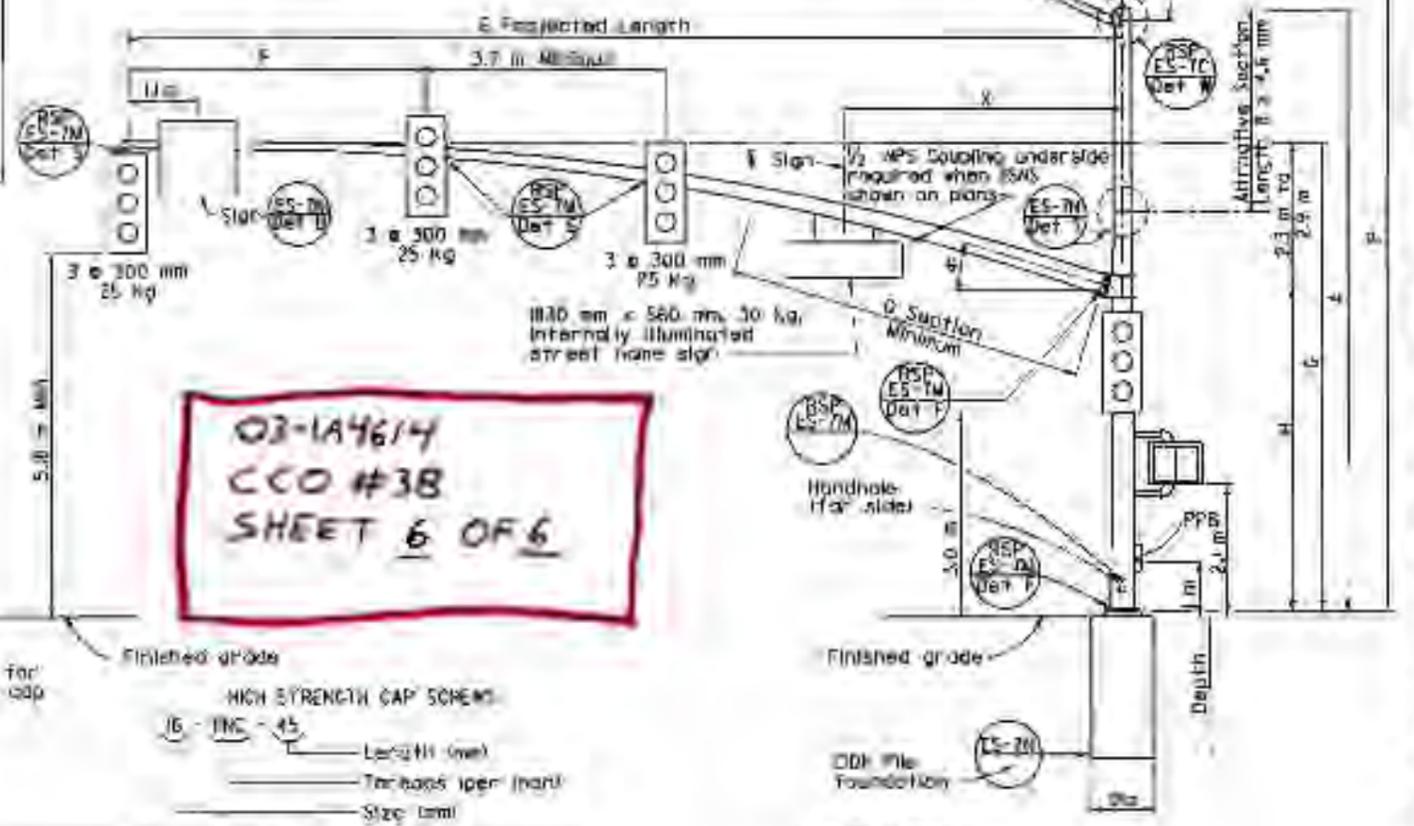
E	F	C	H	Min. OD at Pole	Thickness	I	HS Cap Screws	J	K	L	O SECTION	X	
Projected Length	Min Spacing	Mounting Height				Bolt Circle		Plate Size	Arm Thickness	Pole Thickness	Length	Thickness	Max
m	m	m		mm	mm	mm		mm	mm	mm	m	mm	m
18.2	4.6	7.2 to 7.8	9.3	347	4.8	508	38-6MC-102	508	51	51	7.3	6.1	4.3
19.8				343	6.1						8.8	7.9	

Pole Type	Load Case	Wind Velocity km/h	POLE DATA				BASE PLATE DATA				Luminaire Arm	Signal Arm	CIDR PILE FOUNDATION			
			Height	Min. OD		Thickness	Ø Bolt Circle	Thickness	Anchor Bolts				Diameter	Depth	Reinforced	
				Base	Top				Size							
60-5-161			5.2		347											
61-5-161	5	81	6.1	406	301	7.94	584	584	51	57" x 1524 x 152"	1.8-4.6	18.2, 19.8	94	4.5	Yes	
61A-5-161			10.7		282											

□ halogen arm length to be used unless otherwise noted on plans.



BASE PLATE



ELEVATION
TYPE 61-5-161
61A-5-161

03-1A4614
 CCO #38
 SHEET 6 OF 6

M	N	Min OD at Pole	Thickness	Mounting Height	
Projected Length	Rise			3.7 Pole	15.7 Pole
m	m	mm	mm	m	m
1.8	60 ±	83	3.04	8.5 ±	11.1 ±
2.4	760 ±	89		9.7 ±	11.3 ±
3.1	990 ±	98		9.9 ±	11.6 ±
3.7	1290 ±			10.2 ±	11.8 ±
4.6	1450 ±	108		10.4 ±	12.0 ±

ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD
CASE 5 ARM LOADING
WIND VELOCITY=161 km/h
ARM LENGTHS 18.2 m TO 19.8 m)

NO SCALE
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
 RSP ES-7H DATED OCTOBER 5, 2007 SUPERSEDES RSP ES-7H DATED JANUARY 24, 2005 AND STANDARD PLAN ES-7H DATED JULY 1, 2004 PAGE 458 OF THE STANDARD PLANS BOOK DATED JULY 2004.

REVISED STANDARD PLAN RSP ES-7H