

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-5	CONSTRUCTION DETAILS
6	CONSTRUCTION AREA SIGNS
7-9	PAVEMENT DELINEATION DETAILS AND QUANTITIES
10	SUMMARY OF QUANTITIES
11-17	ELECTRICAL PLANS
18,19	TRAFFIC CONTROL SYSTEMS
20-23	REVISED STANDARD PLANS

STRUCTURE PLANS
24-26 SPECIAL DESIGN BRANCH

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

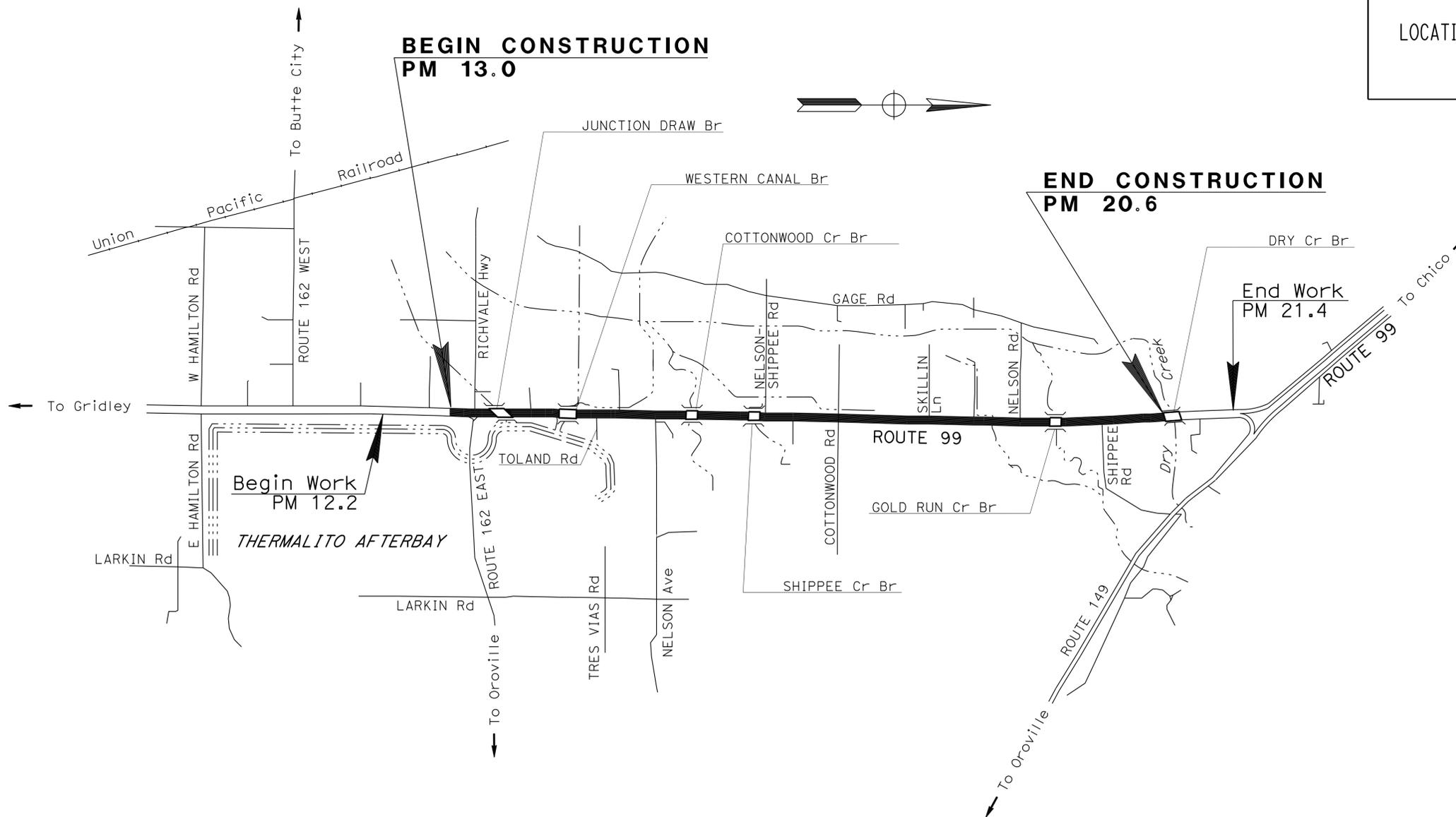
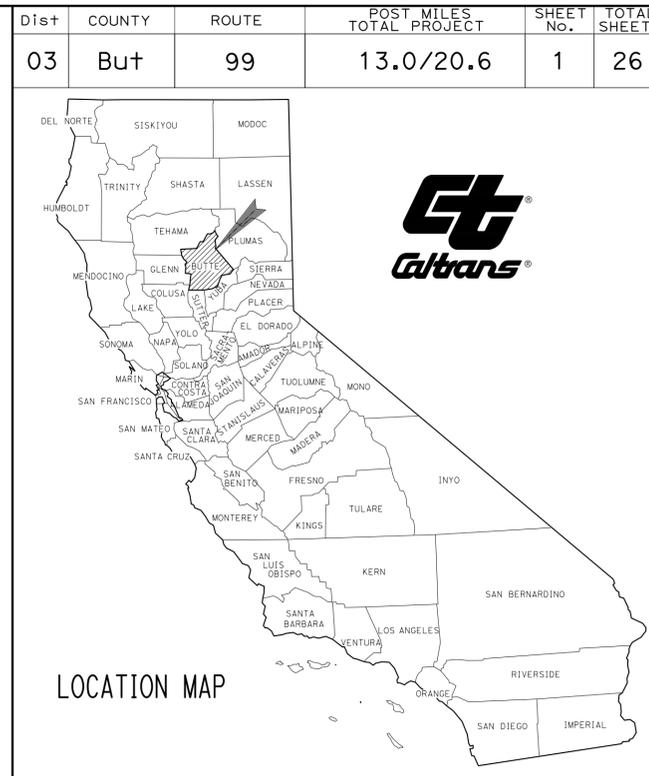
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ACSTP-P099(566)E

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN BUTTE COUNTY
ABOUT 10 MILES NORTH OF GRIDLEY
FROM 0.2 MILE SOUTH OF NORTH JUNCTION ROUTE 162
TO DRY CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

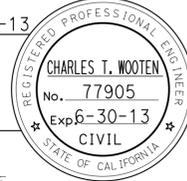


PROJECT MANAGER	RONALD S. SYKES
DESIGN ENGINEER	RONALD S. SYKES

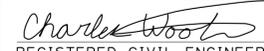
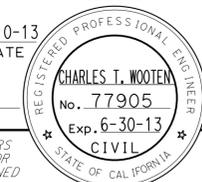
THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NO SCALE


 PROJECT ENGINEER DATE 1-10-13
 REGISTERED CIVIL ENGINEER
 January 28, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No.	03-4M5304
PROJECT ID	0312000108

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	2	26
 REGISTERED CIVIL ENGINEER			1-10-13	DATE	
1-28-13 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

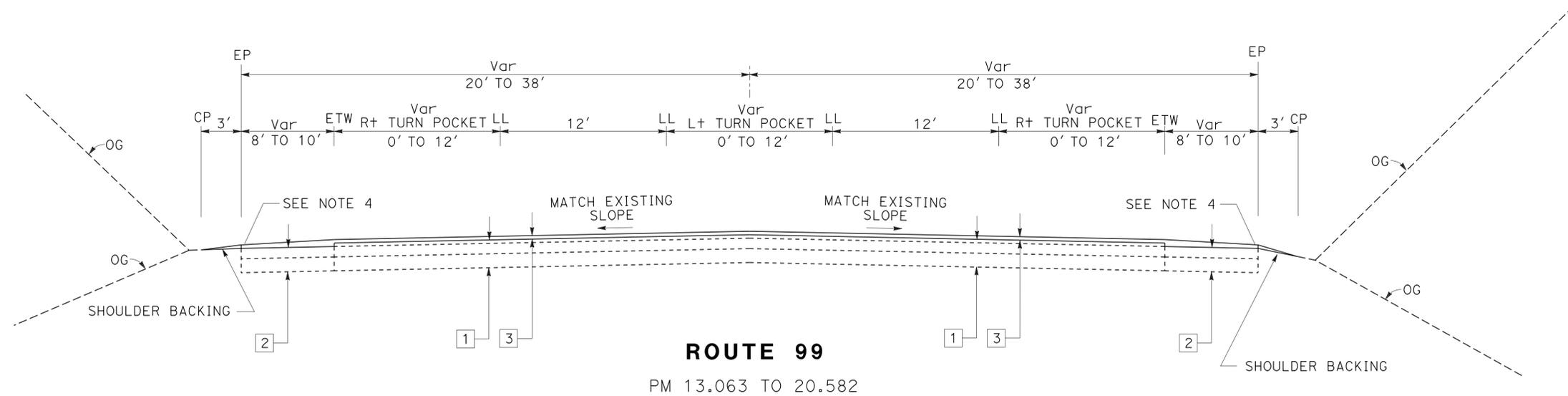
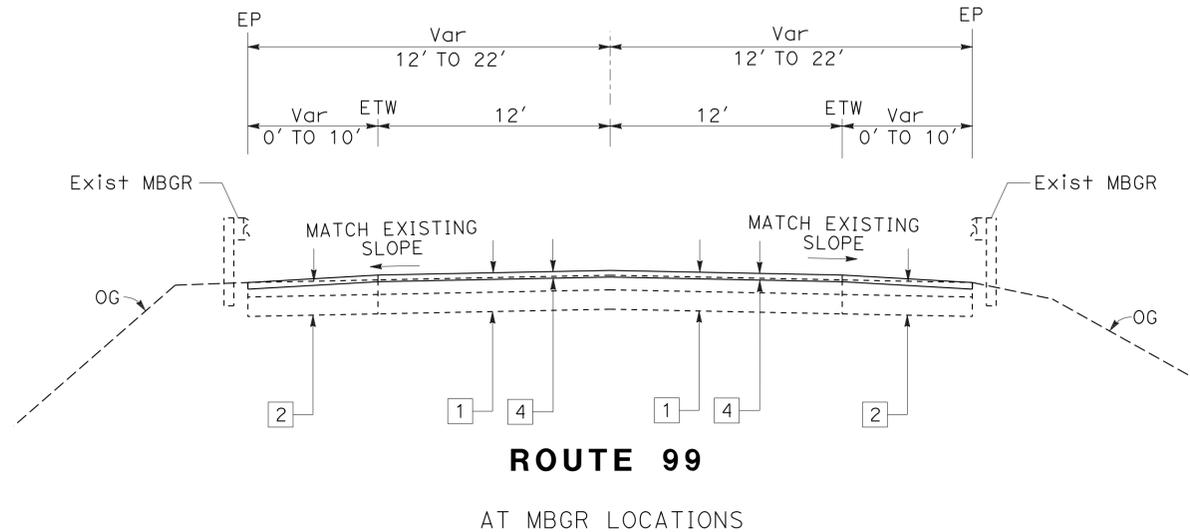
NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. THE LIMITS OF OVERLAY AND COLD PLANE ARE EP TO EP.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. SEE CONSTRUCTION DETAILS FOR RHMA-O TAPER AT DIKE LOCATIONS.
5. SEE SUMMARY OF QUANTITIES SHEET FOR LOCATIONS OF REPLACE AC SURFACING.
6. SEE SHEETS C-3, PDD-1, AND Q-1 FOR RUMBLE STRIP DETAILS, LOCATIONS, AND QUANTITIES.

ABBREVIATIONS:

LL = LANE LINE
 RHMA-O = RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)
 URB = UNTREATED ROCK BASE

- 1 = Exist
 0.08' OGAC
 0.35'-0.66' AC
 0.67' CTB
- 2 = Exist
 0.35'-0.66' AC
 0.67' URB
- 3 = 0.10' RHMA-O
- 4 = 0.10' COLD PLANE AC PAVEMENT
 0.10' RHMA-O

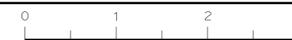


TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR: RONALD S. SYKES
 CALCULATED/DESIGNED BY: CHARLES WOOTEN
 CHECKED BY: RONALD S. SYKES
 REVISED BY: CHARLES WOOTEN
 DATE REVISED:



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	3	26

1-10-13 DATE
 1-28-13 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

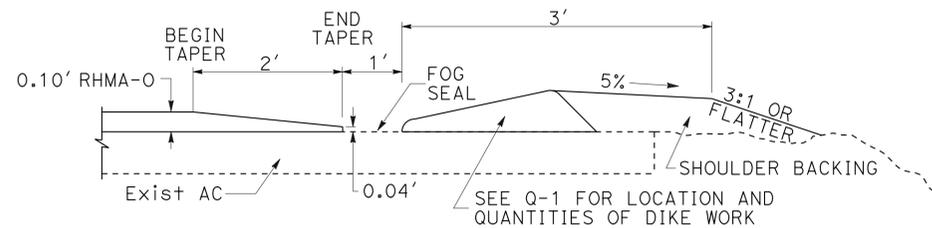
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- AT LOCATIONS WHERE AC IS CONTINUOUS THROUGHOUT MBGR SECTION; COLD PLANE, OVERLAY, AND RUMBLE STRIP IS TO BE CONTINUOUS AS WELL.
- SKEW OF BRIDGES VARY.
- DO NOT PLACE RUMBLE STRIP ON PCC BRIDGE DECK.

LEGEND:

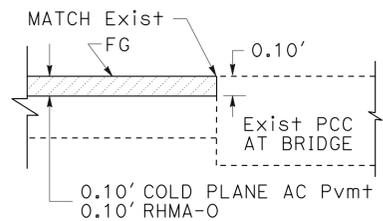
- 0.10' COLD PLANE AC PAVEMENT
0.10' RHMA-O
- REPLACE ASPHALT CONCRETE SURFACING
- CONFORM AT CROSS STREETS AND DRIVEWAYS

ABBREVIATIONS:

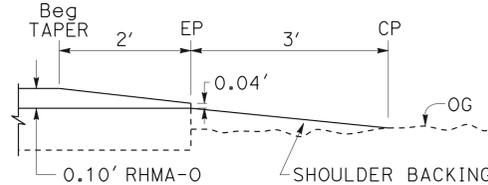
RHMA-O = RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)



TAPER AT DIKE LOCATIONS WITHOUT MBGR



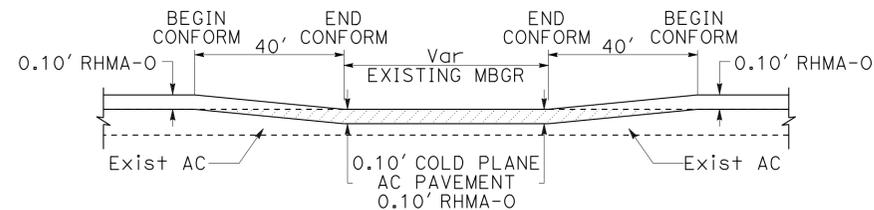
PAVING CONFORM AT PCC BRIDGES



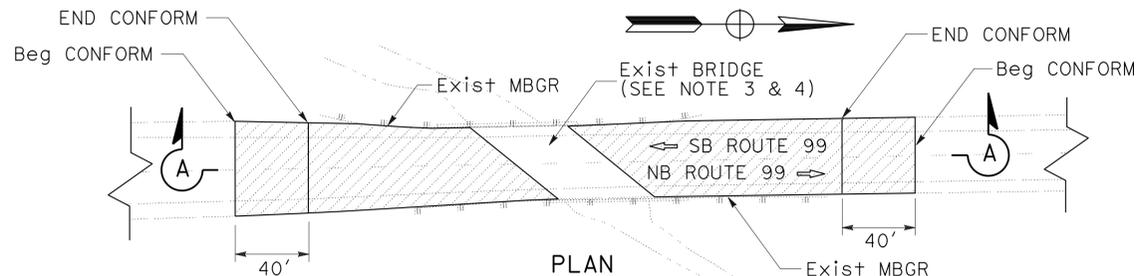
PAVEMENT EDGE AND SHOULDER BACKING DETAIL



SECTION A - A

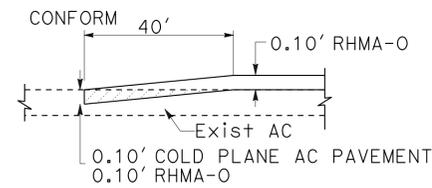


SECTION B - B

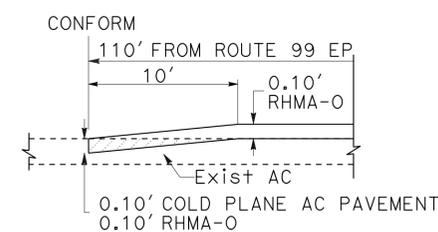


COLD PLANE AND CONFORM DETAIL AT Exist MBGR LOCATIONS

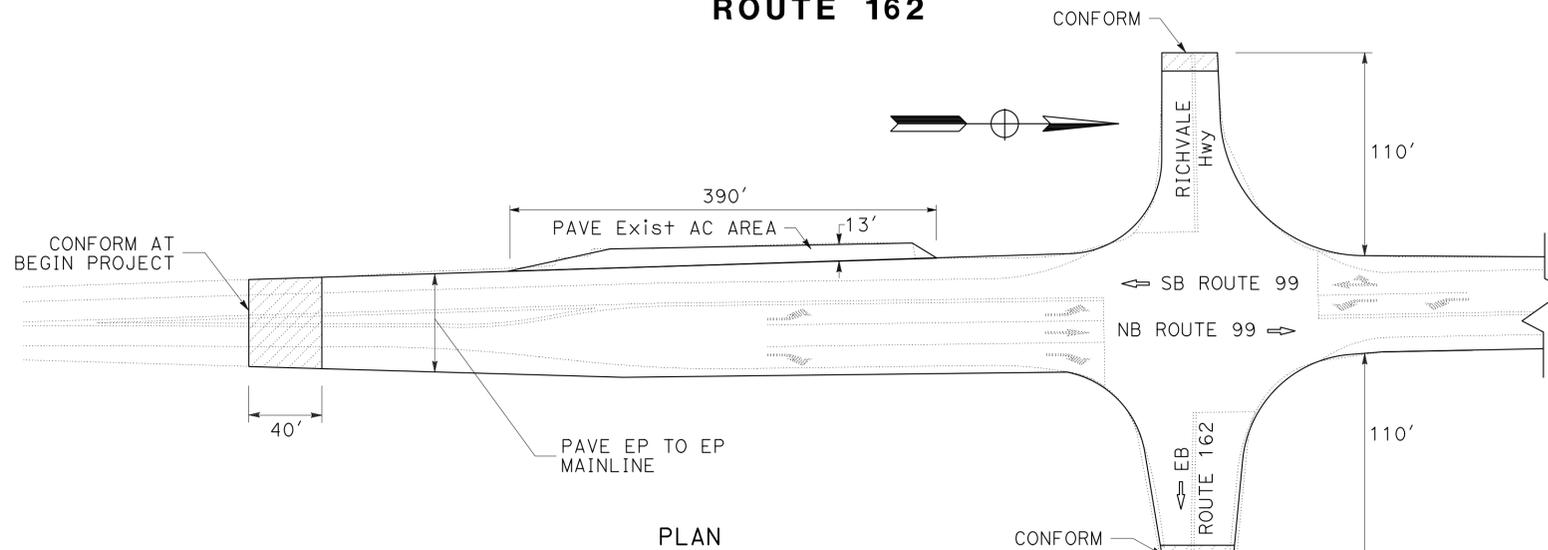
- PM 13.249-JUNCTION DRAW Br
- PM 14.028-WESTERN CANAL Br
- PM 15.405-COTTONWOOD Cr Br
- PM 16.093-SHIPPEE Cr Br
- PM 19.509-GOLD RUN Cr Br
- PM 20.598-DRY Cr Br



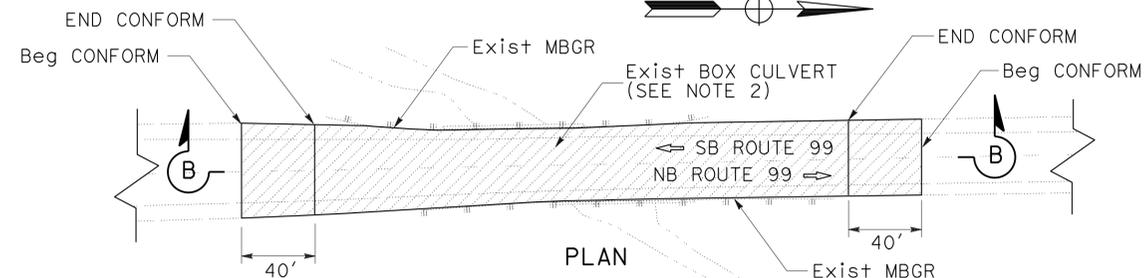
CONFORM AT Beg PROJECT



CONFORM AT ROUTE 162



PAVING LIMITS AT Beg PROJECT (PM 13.063) AND AT ROUTE 162 EAST INTERSECTION (PM 13.161)



COLD PLANE AND CONFORM DETAIL AT Exist MBGR LOCATIONS

- PM 16.398
- PM 17.681
- PM 19.725

CONSTRUCTION DETAILS

NO SCALE

C-1

REVISIONS:
 REVISION NO. DATE BY
 1 CHARLES WOOTEN
 2 RONALD S. SYKES
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000

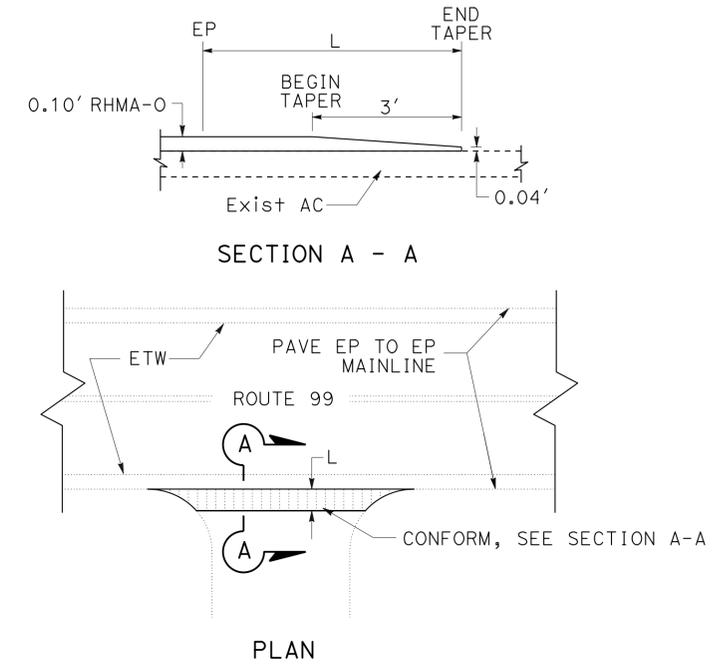
NOTES:

- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- DIMENSION "L" IS AS SHOWN IN TABLE OR AS DIRECTED BY ENGINEER.
- SEE SUMMARY OF QUANTITIES SHEET FOR EXACT LOCATIONS AND DIMENSIONS OF REPLACE AC SURFACING.
- SKEW OF BRIDGES VARY.

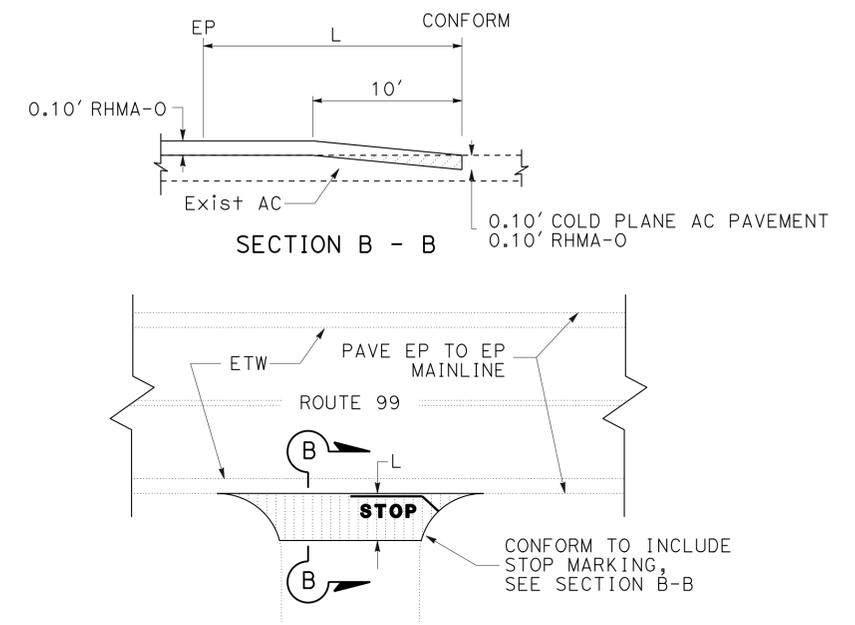
ROAD CONNECTIONS

POST MILE	SIDE	L	DETAIL	STREET NAME
13.161	R+	110	B	ROUTE 162
13.294	R+	25	A	UTILITY ACCESS
14.170	R+	32	B	TOLAND Rd
15.170	R+	26	B	NELSON Ave
16.190	R+	20	B	NELSON-SHIPPEE Rd
16.691	R+	5	A	Dwy
17.180	R+	30	B	COTTONWOOD Rd
18.675	R+	6	A	Dwy
19.685	R+	30	B	SHIPPEE Rd
13.113	L+	10	A	MAINTENANCE PULLOUT
13.161	L+	110	B	RICHVALE Hwy
13.659	L+	5	B	*Dwy
14.662	L+	5	B	*Dwy
15.170	L+	10	A	Dwy
16.190	L+	32	B	NELSON-SHIPPEE Rd
18.175	L+	10	A	Dwy
19.180	L+	32	B	NELSON Rd

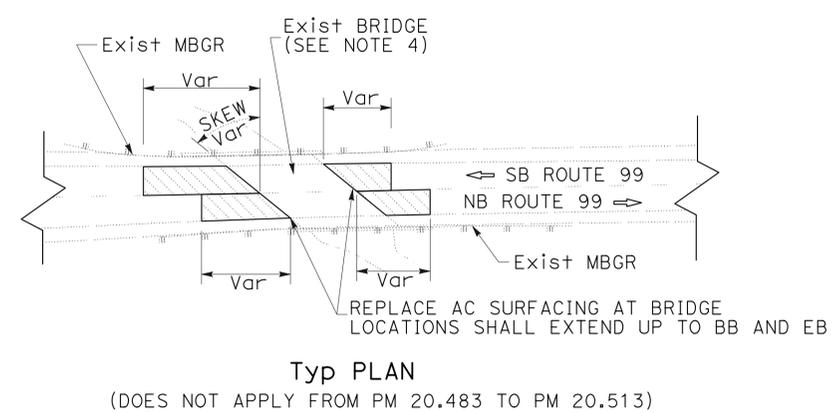
* USE DETAIL B AT THESE DRIVEWAY LOCATIONS WITH A 5' TAPER LENGTH.



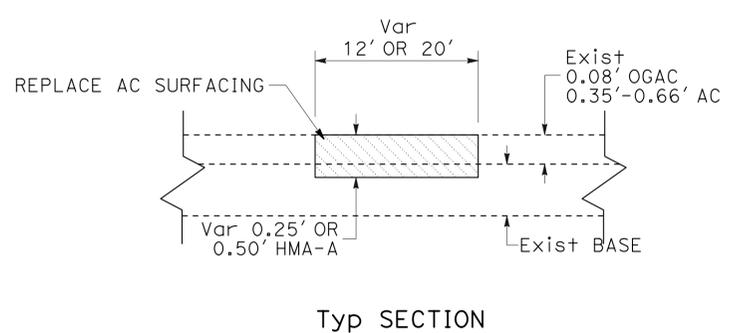
AC PAVEMENT DETAIL
PRIVATE ROADS AND DRIVEWAYS
DETAIL A



AC PAVEMENT DETAIL
PUBLIC ROAD CONNECTIONS
DETAIL B

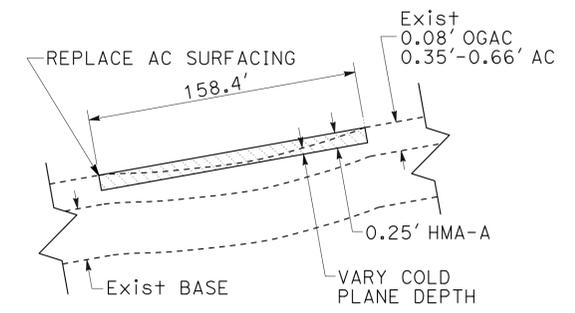


Typ PLAN
(DOES NOT APPLY FROM PM 20.483 TO PM 20.513)



Typ SECTION

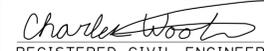
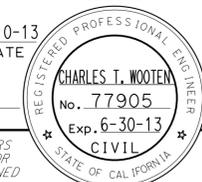
REPLACE ASPHALT CONCRETE SURFACING
Typ



PROFILE VIEW
FROM PM 20.483 TO PM 20.513

CONSTRUCTION DETAILS
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Maintenance DESIGN
 FUNCTIONAL SUPERVISOR: RONALD S. SYKES
 CALCULATED/DESIGNED BY: CHARLES WOOTEN
 CHECKED BY: RONALD S. SYKES
 REVISED BY: CHARLES WOOTEN
 DATE REVISED:

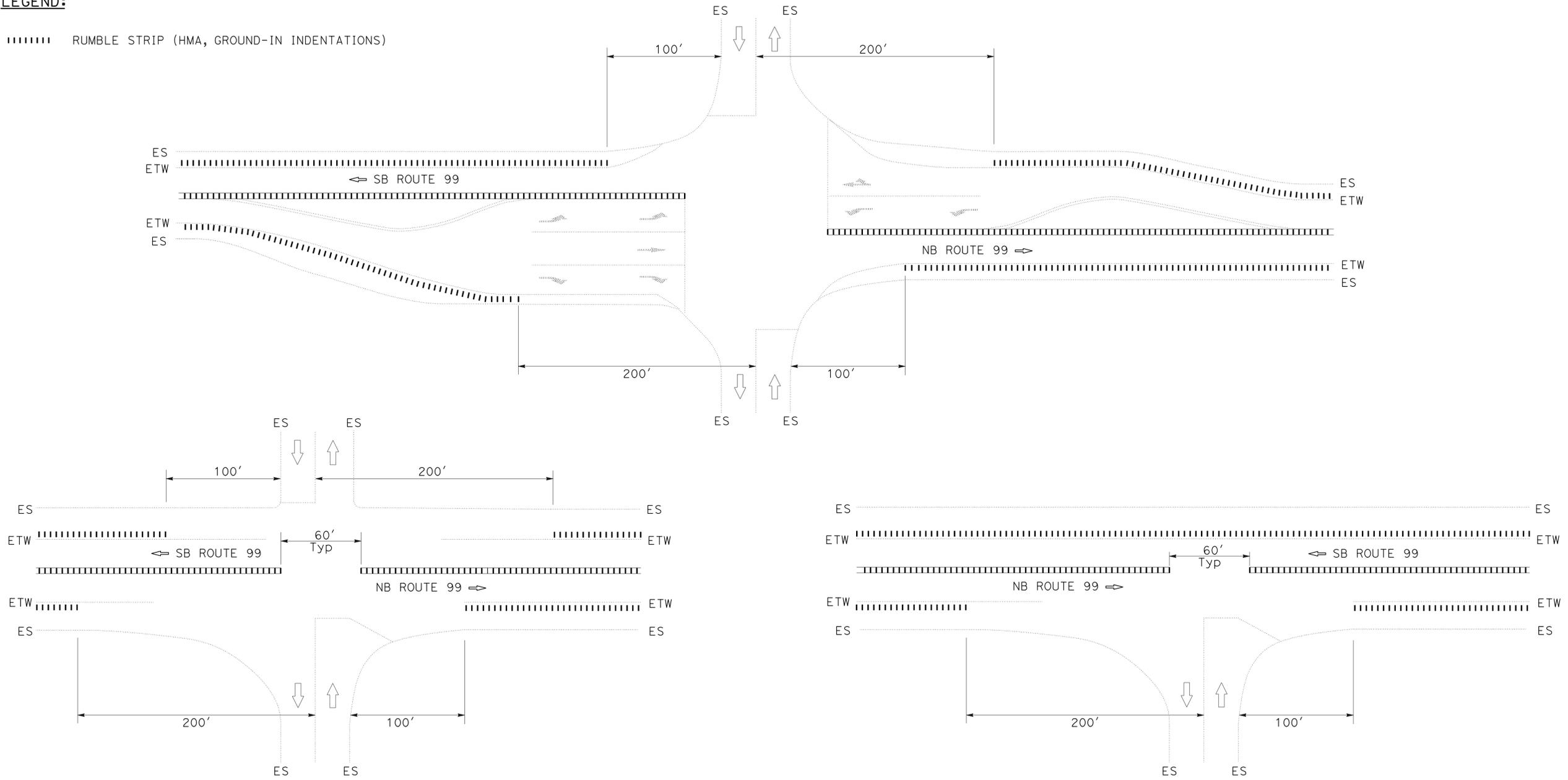
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	5	26
 REGISTERED CIVIL ENGINEER			1-10-13 DATE		
1-28-13 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- CENTERLINE RUMBLE STRIP MUST BE CONSTRUCTED PRIOR TO INSTALLING FINAL TRAFFIC STRIPE.
- SEE PAVEMENT DELINEATION DETAILS SHEETS FOR ADDITIONAL RUMBLE STRIP DETAILS.

LEGEND:

|||||| RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)



**RUMBLE STRIPS
AT INTERSECTIONS**

Typ

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR: RONALD S. SYKES
 CHECKED BY: RONALD S. SYKES
 DESIGNED BY: CHARLES WOOTEN
 REVISIONS: CHARLES WOOTEN, RONALD S. SYKES
 REVISED BY: DATE

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
A	G20-1 [Spec] (8)		60" x 30"	ROAD WORK NEXT 8 MILES	2 - 4" x 4"	2
B		C40(Mod)	72" x 42"	TRAFFIC FINES DOUBLED IN WORK ZONES	2 - 4" x 6"	2
C	W20-1	C23	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	7
D	G20-2	C14	36" x 18"	END ROAD WORK	1 - 4" x 4"	6
E	G20-2	C14	48" x 24"	END ROAD WORK	1 - 4" x 6"	3

LEGEND

- (X) CONSTRUCTION AREA SIGN LETTER
- <CA> CALIFORNIA SIGN CODE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	6	26

Kris M. Albers
 REGISTERED CIVIL ENGINEER 1-15-13 DATE
 1-28-13 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 KRIS M. ALBERS
 No. 49986
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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

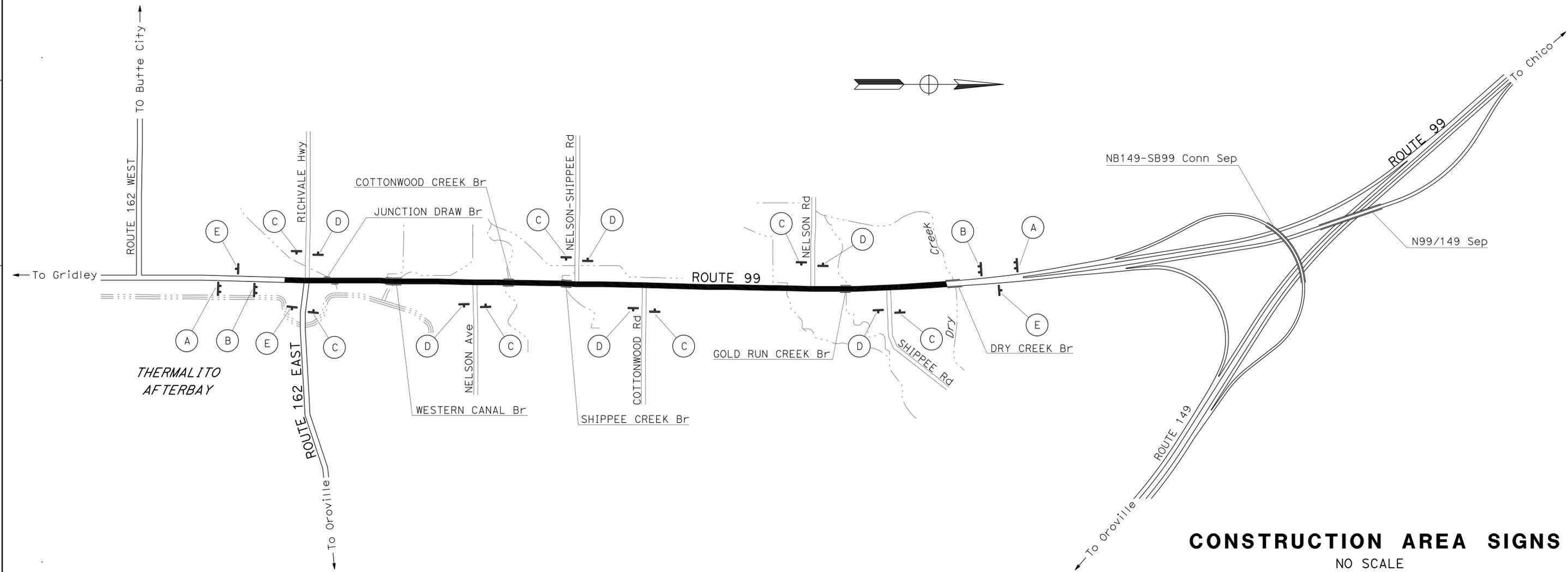
NOTE:

- EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER.

SIGN DETAILS

(A) G20-1 [Spec] (8)
 ROAD WORK NEXT 8 MILES
 60"X30"
 6" C SERIES LETTERS
 ORANGE BACKGROUND WITH BLACK LEGEND AND BORDERS.

(B) C40(Mod) <CA>
 TRAFFIC FINES DOUBLED IN WORK ZONES
 72"X42"
 6" D SERIES LETTERS
 RETROREFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND AND BORDERS.



CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 TRAFFIC
 FUNCTIONAL SUPERVISOR ARSHAD IOBAL
 CALCULATED/DESIGNED BY CHECKED BY
 JACK KEMMERLY KRIS ALBERS
 REVISED BY DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	7	26

<i>Kris M. Albers</i>	1-15-13
REGISTERED CIVIL ENGINEER	DATE
1-28-13	
PLANS APPROVAL DATE	

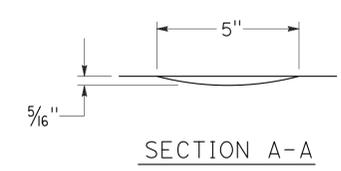
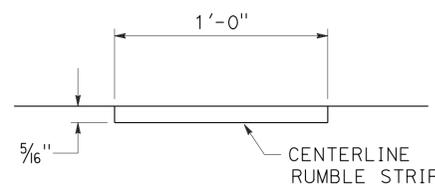
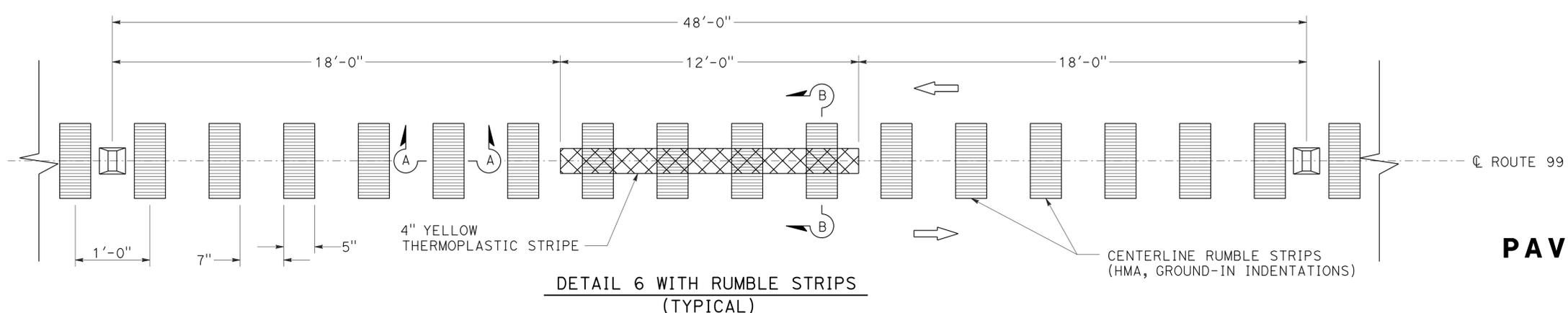
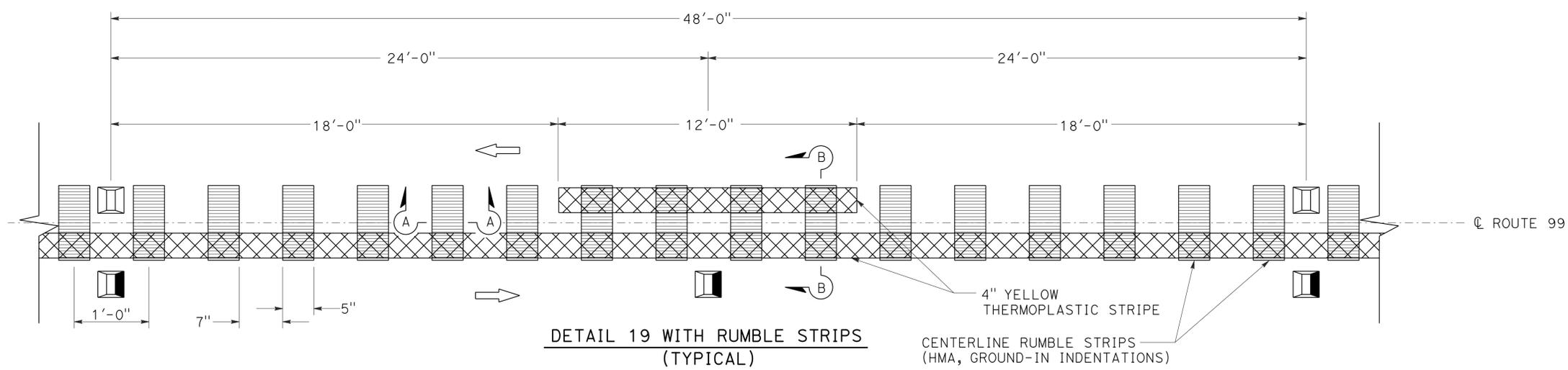
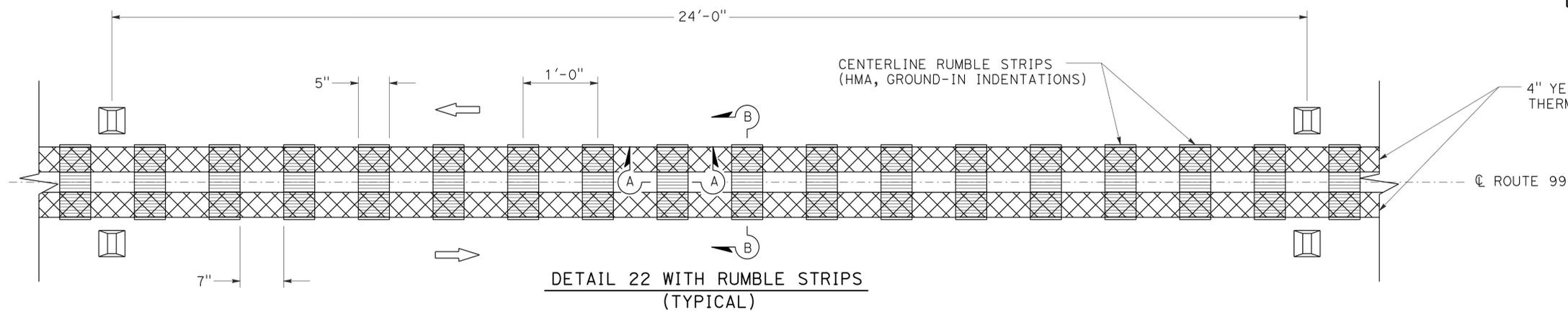
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

- CENTERLINE RUMBLE STRIP SHALL BE CONSTRUCTED PRIOR TO INSTALLING FINAL TRAFFIC STRIPES.
- FOR ADDITIONAL RUMBLE STRIP INFORMATION, SEE CONSTRUCTION DETAILS SHEETS.
- THIS PLAN ACCURATE FOR CENTERLINE RUMBLE STRIP AND PAVEMENT DELINEATION DETAILS ONLY.

LEGEND

-  TYPE D TWO-WAY YELLOW PAVEMENT MARKER (RETROREFLECTIVE)
-  TYPE H ONE-WAY YELLOW PAVEMENT MARKER (RETROREFLECTIVE)



PAVEMENT DELINEATION DETAILS
NO SCALE

PDD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC

FUNCTIONAL SUPERVISOR: ARSHAD IOBAL

DESIGNED BY: JACK KEMMERLY

CHECKED BY: KRIS ALBERS

REVISOR: JACK KEMMERLY

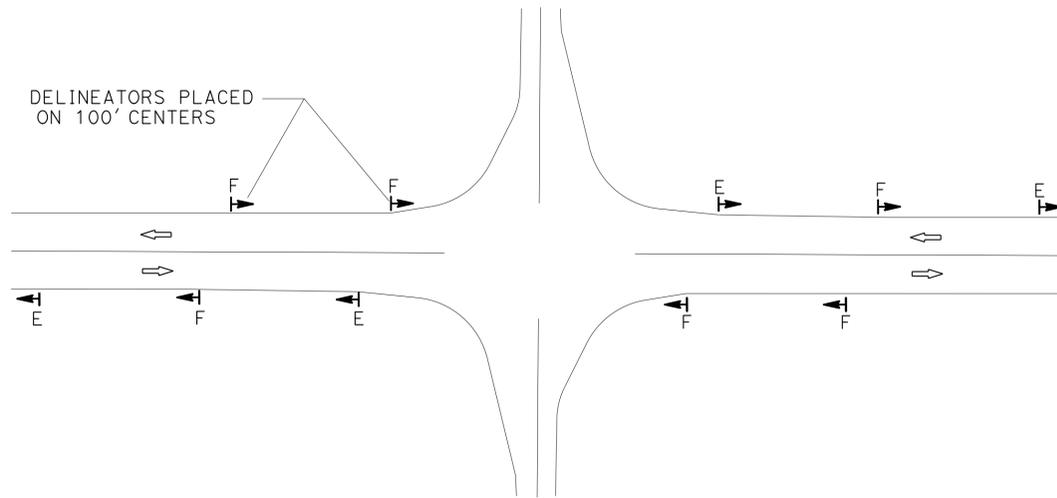
DATE: KRIS ALBERS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	99	13.0/20.6	8	26

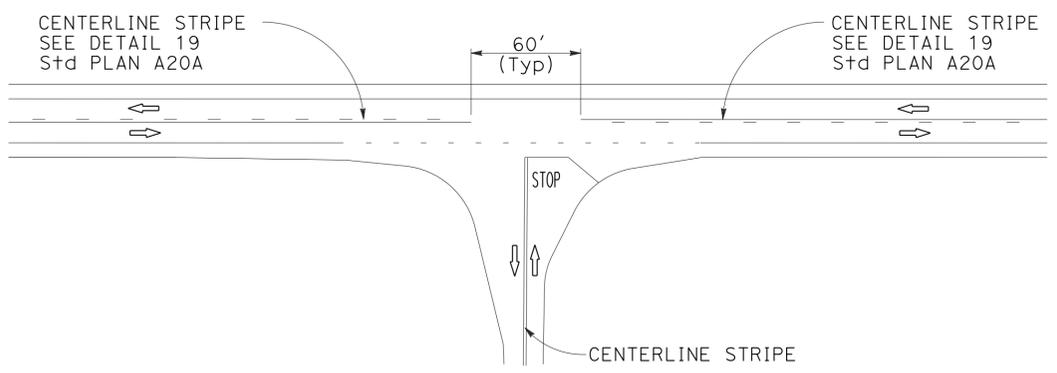
<i>Kris M. Albers</i>	1-15-13
REGISTERED CIVIL ENGINEER	DATE
1-28-13	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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



TYPICAL DELINEATOR PLACEMENT AT INTERSECTIONS



TYPICAL CENTERLINE GAP AT COUNTY ROAD INTERSECTIONS

- NELSON AVENUE
- NELSON-SHIPPEE ROAD
- COTTONWOOD ROAD
- NELSON ROAD
- SHIPPEE ROAD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 TRAFFIC

REVISOR	REVISION
JACK KEMMERLY	
KRIS ALBERS	
CALCULATED, DESIGNED BY	CHECKED BY
ARSHAD IOBAL	
FUNCTIONAL SUPERVISOR	
REVISOR	REVISION

REMOVE PAVEMENT DELINEATION QUANTITIES

HIGHWAY POST LIMITS/LOCATION	REMOVE THERMOPLASTIC TRAFFIC STRIPE		REMOVE THERMOPLASTIC PAVEMENT MARKING					
	DETAIL 38		TYPE I(24') ARROW	TYPE II ARROW	TYPE III ARROW	SIGNAL	AHEAD	LIMIT LINE
	LF	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT
13.00 TO 13.16	740	31			168	32	31	49
Rte 162 EAST/RICHVALE Hwy								70
13.16 TO 14.16	170		45	84		32	31	37
SUBTOTAL		31	45	252	64	62	156	
TOTAL	910				610			

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	9	26

Kris M. Albers
 REGISTERED CIVIL ENGINEER 1-15-13 DATE
 1-28-13 PLANS APPROVAL DATE

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

PAVEMENT DELINEATION QUANTITIES

HIGHWAY POST LIMITS/LOCATION	4" THERMOPLASTIC TRAFFIC STRIPE (EWNV)										8" THERMOPLASTIC TRAFFIC STRIPE (EWNV)			4" THERMOPLASTIC TRAFFIC STRIPE (EWNV) (BROKEN 12-3)			4" THERMOPLASTIC TRAFFIC STRIPE (EWNV) (BROKEN 17-7)			4" THERMOPLASTIC TRAFFIC STRIPE (EWNV) (BROKEN 36-12)			PAVEMENT MARKER (RETROREFLECTIVE)					THERMOPLASTIC PAVEMENT MARKING (EWNV)					DELINEATOR (CLASS 1)	
	DETAIL 15		DETAIL 19		DETAIL 21		DETAIL 22		DETAIL 27B		DETAIL 38		DETAIL 27C		DETAIL 15		DETAIL 6		DETAIL 19		TYPE D	TYPE G	TYPE H	TYPE I(24') ARROW	TYPE II ARROW	TYPE III ARROW	STOP	SIGNAL	AHEAD	LIMIT LINE	TYPE E	TYPE F		
	LF	SQFT	LF	SQFT	LF	SQFT	LF	SQFT	LF	SQFT	LF	SQFT	LF	SQFT	EA	EA	EA	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	EA	EA		
13.00 TO 13.16		206			1,712	1,638		370						206	85	16	10				31			168			32	31	49					
Rte 162 EAST/RICHVALE Hwy					260	260								14															70	4	6			
13.16 TO 14.16		444			1,520	10,383		85	201				4,378	444	174	5	20					45	84			32	31	37						
TOLAND ROAD			64																						22			39	2	3				
14.16 TO 15.17		586				10,339			105				4,594	586	111		27																	
NELSON AVENUE			52																						22				40	2	3			
15.17 TO 16.19		1,055				10,527			253				4,298	1,055	118		50																	
NELSON-SHIPPEE ROAD			64																						22				40	2	3			
16.19 TO 17.18		1,653				12,113			127				4,435	1,653	130		72												44	2	3			
COTTONWOOD ROAD	30									30															22				44	2	3			
17.18 TO 19.18		1,252				20,831			301				9,314	1,252	225		56																	
NELSON ROAD				64											6										22				45	2	3			
19.18 TO 19.68		893				5,064			206				1,705	893	60		41																	
SHIPPEE ROAD			60																						22				42	2	3			
19.68 TO 20.60		1,394				9,505			211				3,427	1,394	104		61																	
SUBTOTAL	30	7,483	240	3,556	80,660								32,151	7,483	1,027	21	337				31	45	252	132	64	62	406	16	24					
TOTAL			91,969				455	1,404	30				39,634				1,385													40				

- NOTES:**
- EWNV = ENHANCED WET NIGHT VISIBILITY.
 - EXACT LOCATION OF DELINEATORS (CLASS 1) TO BE DETERMINED BY THE ENGINEER.
 - FOR ADDITIONAL DELINEATORS (CLASS 1) INFORMATION, SEE PAVEMENT DELINEATION DETAILS.

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: ARSHAD IOBAL
 CALCULATED/DESIGNED BY: JACK KEMMERLY
 CHECKED BY: KRIS ALBERS
 REVISOR: REVISED BY: DATE
 DATE REVISOR: REVISED BY: DATE

LAST REVISION: DATE PLOTTED => 24-JAN-2013
 TIME PLOTTED => 16:21

FUNCTIONAL SUPERVISOR
 RONALD S. SYKES

CALCULATED/DESIGNED BY
 CHECKED BY

CHARLES WOOTEN
 RONALD S. SYKES

REVISED BY
 DATE REVISED

ROADWAY QUANTITIES

POST MILE	RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)	TACK COAT	COLD PLANE ASPHALT CONCRETE PAVEMENT	ASPHALTIC EMULSION (FOG SEAL COAT)	REMOVE ASPHALT CONCRETE DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE C)	MINOR HOT MIX ASPHALT	SHOULDER BACKING	COMMENTS	
BEGIN	END	TON	TON	SQYD	TON	LF	LF	LF	TON	TON	
13.063	13.102	97.9	0.47	222.2					23.2	CONFORM AT Beg Const AND SR 162 EAST	
13.102	13.170	252.3	1.22	83.3					40.4		
13.170	13.215	99.5	0.48						26.7		
13.215	13.244	49.5	0.24	748.6						JUNCTION DRAW BRIDGE APPROACH	
13.254	13.286	52.2	0.25	788.5						JUNCTION DRAW BRIDGE DEPARTURE	
13.286	13.973	1230.4	5.96	27.8					408.1	CONFORM AT UTILITY ACCESS ROAD	
13.973	14.015	68.5	0.33	1034.9						WESTERN CANAL APPROACH	
14.041	14.081	62.1	0.30	938.7						WESTERN CANAL DEPARTURE	
14.081	15.365	2141.0	10.36	135.0					762.7	CONFORM AT TOLAND Rd, NELSON Ave, AND Dwys	
15.365	15.390	34.0	0.16	513.3						COTTONWOOD Cr APPROACH	
15.420	15.446	35.3	0.17	533.9						COTTONWOOD Cr DEPARTURE	
15.446	16.069	1015.5	4.91						370.1		
16.069	16.090	33.4	0.16	505.1						SHIPPEE Cr APPROACH	
16.096	16.122	40.4	0.20	610.1						SHIPPEE Cr DEPARTURE	
16.122	16.376	457.6	2.21	136.7					150.9	CONFORM AT NELSON SHIPPEE Rd	
16.376	16.420	71.7	0.35	1084.2						Exist MBGR	
16.420	17.663	2056.3	9.95	55.6					738.3	CONFORM AT Dwy AND COTTONWOOD Rd	
17.663	17.699	58.7	0.28	887.0						Exist MBGR	
17.699	19.487	2949.3	14.27	53.3					1062.1	CONFORM AT Dwys AND NELSON Rd	
19.487	19.506	31.0	0.15	468.2						GOLD RUN Cr APPROACH	
19.512	19.531	31.0	0.15	468.2						GOLD RUN Cr DEPARTURE	
19.531	19.703	308.3	1.49	50.0					102.2	CONFORM AT SHIPPEE Rd	
19.703	19.747	71.7	0.35	1084.2						Exist MBGR	
19.747	20.397	1059.5	5.13						386.1		
20.397	20.415	14.0	0.07		0.01	95.0	95.0	2.5	8.5	TYPE E DIKE ON Rt	
20.415	20.559	223.5	1.08		0.07	1520.6	1520.6	40.0	104.4	TYPE E DIKE ON Rt/Lt	
20.559	20.582	35.7	0.17	539.7	0.01	242.9		242.9	1.9	DRY Cr Approach AND TYPE C DIKE ON Rt/Lt	
TOTAL		12580.3	60.85	10968.5	0.09	1858.5	1615.6	242.9	44.4	4183.7	

PREPAVING GRINDING DAY

LOCATION/ DESCRIPTION	PREPAVING GRINDING DAY
PM	EA
13.0 - 20.6	2
TOTAL	2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	10	26

Charles Wooten
 REGISTERED CIVIL ENGINEER 1-10-13 DATE
 1-28-13 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REPLACE ASPHALT CONCRETE SURFACING

LOCATION/ DESCRIPTION POST MILE	LENGTH	WIDTH	DEPTH	REPLACE ASPHALT CONCRETE SURFACING	NOTES		
				CY			
NB	14.003	14.016	68.6	12	0.25	7.6	WESTERN CANAL BB
	14.035	14.044	47.5	12	0.50	10.6	WESTERN CANAL EB
	14.044	14.051	37.0	12	0.25	4.1	
	15.387	15.392	26.4	12	0.50	5.9	COTTONWOOD Cr BB
	15.416	15.420	21.1	12	0.50	4.7	COTTONWOOD Cr EB
	16.096	16.103	37.0	12	0.50	8.2	SHIPPEE Cr EB
	16.103	16.109	31.7	12	0.25	3.5	
	19.502	19.506	21.1	12	0.50	4.7	GOLD RUN Cr BB
	19.512	19.516	21.1	12	0.50	4.7	GOLD RUN Cr EB
	20.483	20.513	158.4	20	0.25	29.3	INCLUDES SHOULDER
SB	14.009	14.014	26.4	12	0.25	2.9	
	14.014	14.021	37.0	12	0.50	8.2	WESTERN CANAL BB
	14.040	14.049	47.5	12	0.50	10.6	WESTERN CANAL EB
	14.049	14.053	21.1	12	0.25	2.3	
	15.390	15.394	21.1	12	0.50	4.7	COTTONWOOD Cr BB
	15.418	15.422	21.1	12	0.50	4.7	COTTONWOOD Cr EB
	16.094	16.097	15.8	12	0.50	3.5	SHIPPEE Cr EB
	19.502	19.506	21.1	12	0.50	4.7	GOLD RUN Cr BB
	20.483	20.513	158.4	20	0.25	29.3	INCLUDES SHOULDER
	TOTAL						154.2

RUMBLE STRIP

LOCATION/ DESCRIPTION	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)		CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
	STA	STA	STA
PM	Lt Shld	Rt Shld	CL
13.0 - 20.6	388.12	378.76	392.68
TOTAL	766.88		392.68

SUMMARY OF QUANTITIES

Q-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Bu+	99	13.0/20.6	11	26

1-16-13 DATE
 REGISTERED ELECTRICAL ENGINEER
 MARY ANN HUDSPETH
 No. 17245
 Exp. 06-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

1-28-13
 PLANS APPROVAL DATE

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

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- MESSENGER WIRE AND OVERHEAD CABLES/CONDUCTORS SHALL HAVE A 17' MIN VERTICAL CLEARANCE.

PROJECT NOTES (THIS SHEET ONLY):

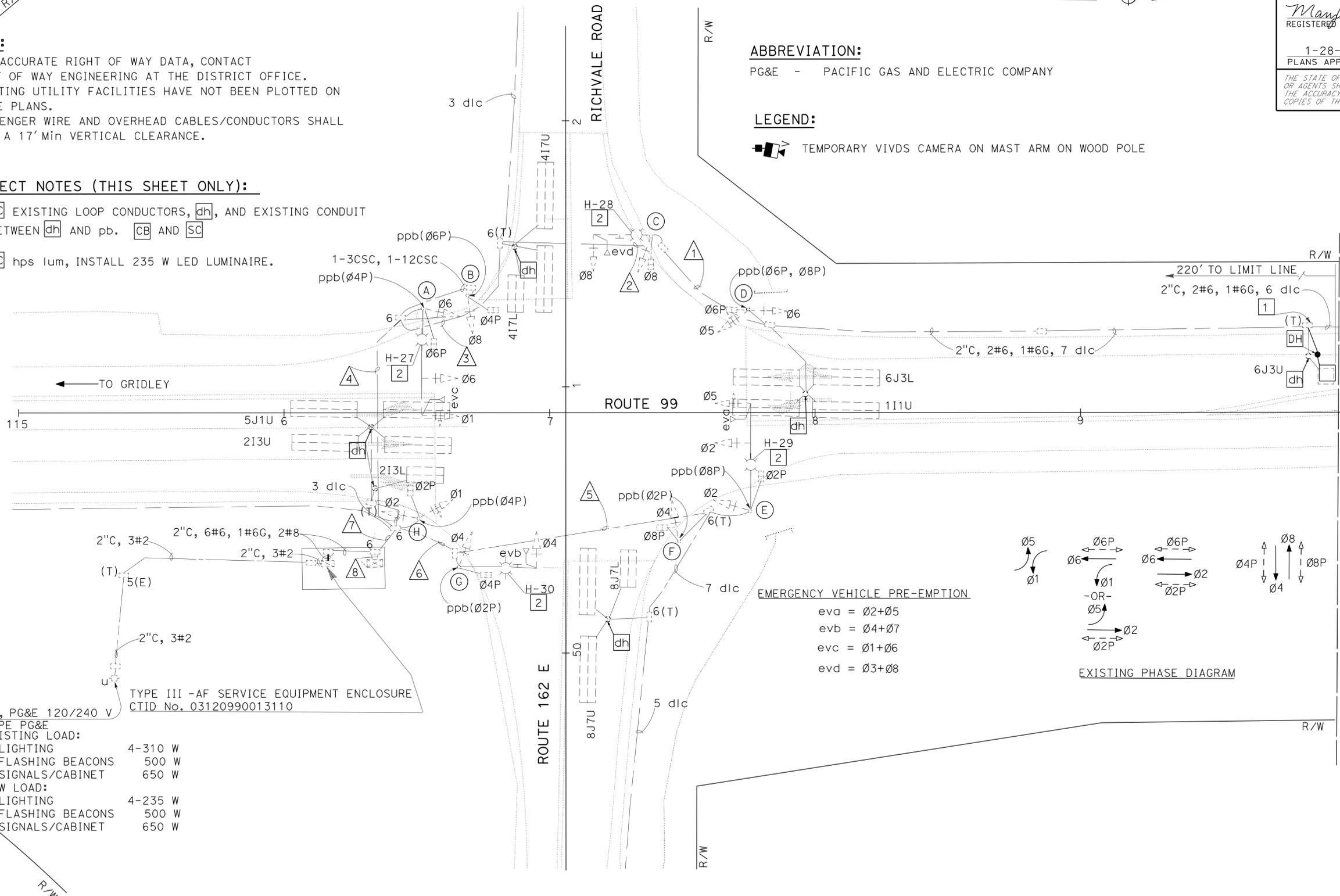
- RC EXISTING LOOP CONDUCTORS, dh, AND EXISTING CONDUIT BETWEEN dh AND pb. CB AND SC
- RC hps lum, INSTALL 235 W LED LUMINAIRE.

ABBREVIATION:

PG&E - PACIFIC GAS AND ELECTRIC COMPANY

LEGEND:

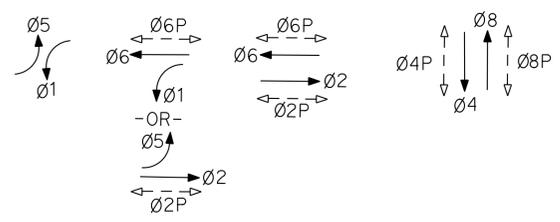
TEMPORARY VIVDS CAMERA ON MAST ARM ON WOOD POLE



EMERGENCY VEHICLE PRE-EMPTION

- eva = Ø2+Ø5
- evb = Ø4+Ø7
- evc = Ø1+Ø6
- evd = Ø3+Ø8

EXISTING PHASE DIAGRAM



sp, PG&E 120/240 V
 TYPE PG&E
 EXISTING LOAD:

LIGHTING	4-310 W
FLASHING BEACONS	500 W
SIGNALS/CABINET	650 W

NEW LOAD:

LIGHTING	4-235 W
FLASHING BEACONS	500 W
SIGNALS/CABINET	650 W

**MODIFY SIGNAL AND LIGHTING
 (Route 99 AND Route 162 E/RICHVALE Road)**

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR STEVEN BLOCK
 CALCULATED/DESIGNED BY CHECKED BY
 ZAHRA NIKNAFS MARY ANN HUDSPETH
 REVISED BY DATE REVISION
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

LAST REVISION DATE PLOTTED => 24-JAN-2013
 01-03-13 TIME PLOTTED => 16:21

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 STEVEN BLOCK

CALCULATED/DESIGNED BY
 CHECKED BY

ZAHRA NIKNAFS
 MARY ANN HUDSPETH

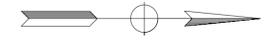
REVISED BY
 DATE REVISED

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

PROJECT NOTES (THIS SHEET ONLY):

- 1 RC EXISTING LOOP CONDUCTORS, dh, AND EXISTING CONDUIT
 BETWEEN dh AND pb. CB AND SC
- 2 SEE SHEET E-5 FOR PULL BOX.

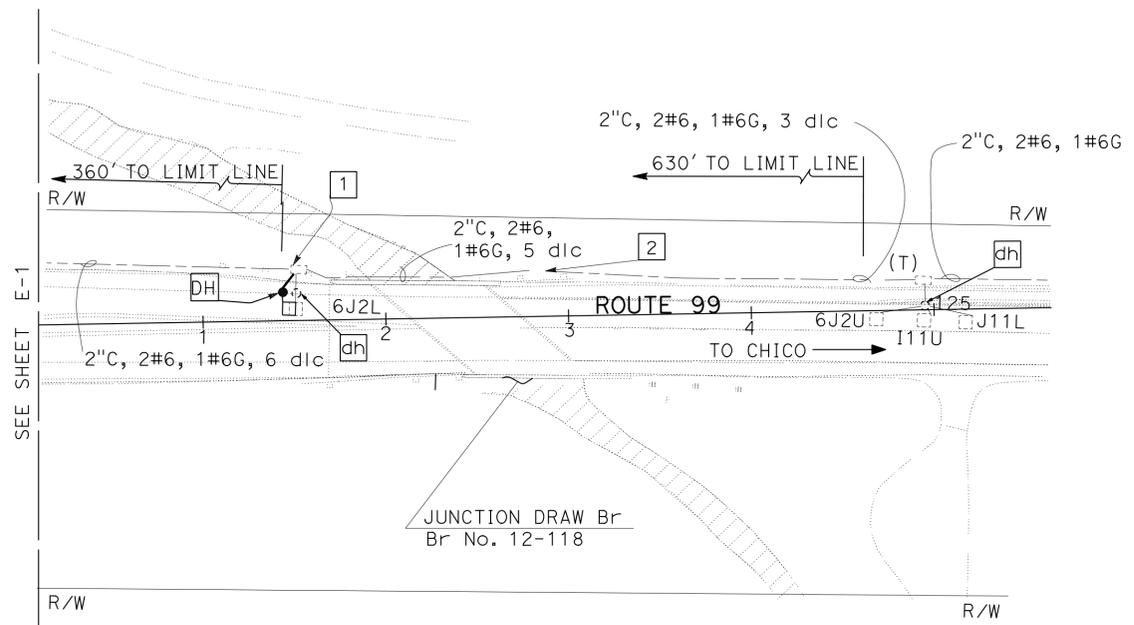


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	12	26

Mary Ann Hudspeth
 REGISTERED ELECTRICAL ENGINEER 1-16-13 DATE
 1-28-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MARY ANN HUDSPETH
 No. 17245
 Exp. 06-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

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



MODIFY SIGNAL AND LIGHTING
(Route 99 AND Route 162 E/RICHVALE Road)

SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

E-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: STEVEN BLOCK
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 REVISIONS: [blank]

REVISOR: ZAHRA NIKNAFS, MARY ANN HUDSPETH
 DATE: [blank]

REVISIONS: [blank]

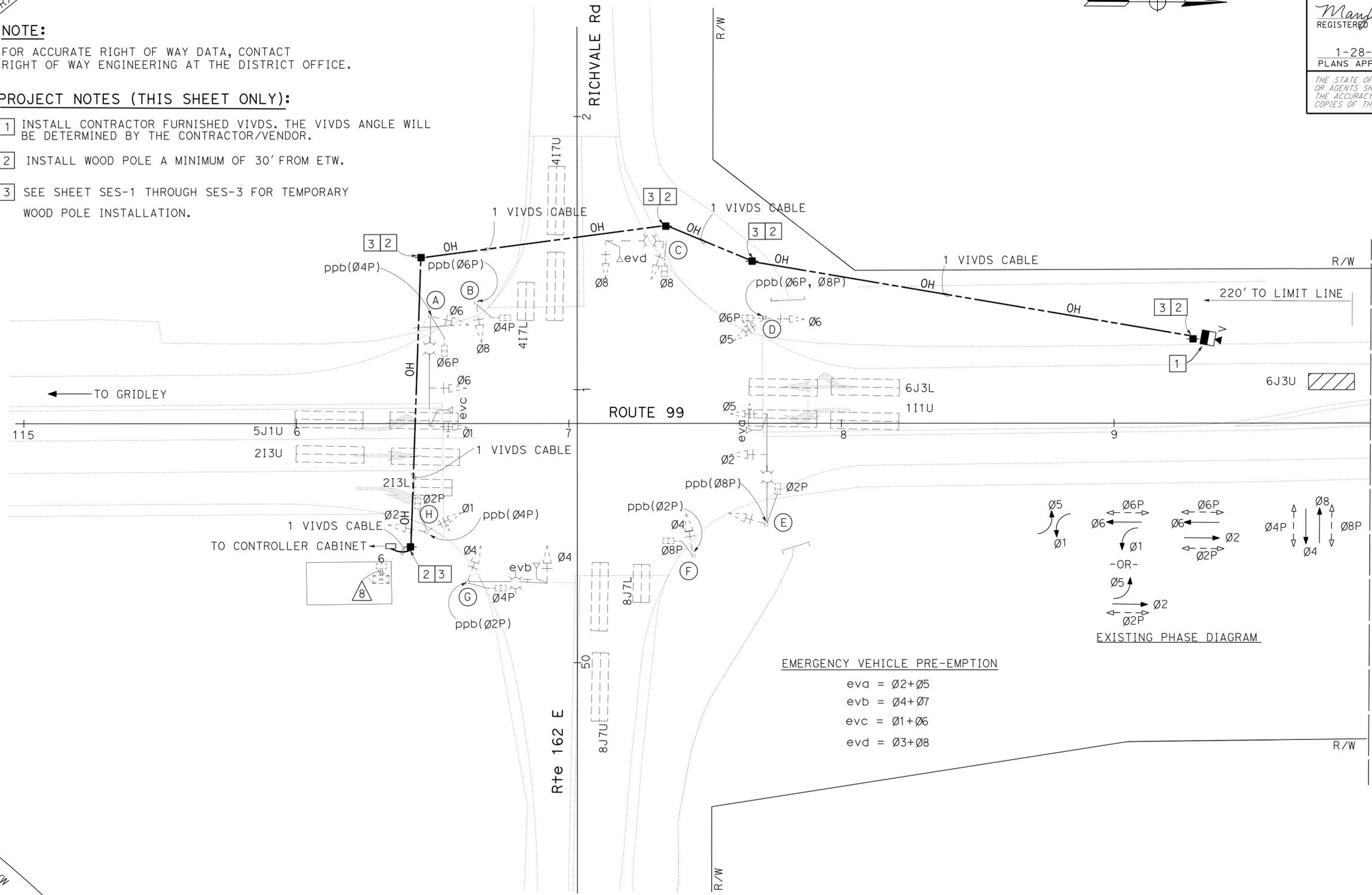
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	13	26

Mary Ann Hudspeth 1-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 1-28-13
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

PROJECT NOTES (THIS SHEET ONLY):

- 1 INSTALL CONTRACTOR FURNISHED VIVDS. THE VIVDS ANGLE WILL BE DETERMINED BY THE CONTRACTOR/VENDOR.
- 2 INSTALL WOOD POLE A MINIMUM OF 30' FROM ETW.
- 3 SEE SHEET SES-1 THROUGH SES-3 FOR TEMPORARY WOOD POLE INSTALLATION.



EMERGENCY VEHICLE PRE-EMPTION
 eva = 02+05
 evb = 04+07
 evc = 01+06
 evd = 03+08

TEMPORARY SIGNAL SYSTEM
 (Route 99 AND Route 162 E/RICHVALE Road)

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

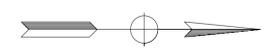
FUNCTIONAL SUPERVISOR
 STEVEN BLOCK

CALCULATED/DESIGNED BY
 CHECKED BY

ZAHRA NIKNAFS
 MARY ANN HUDSPETH

REVISED BY
 DATE REVISED

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



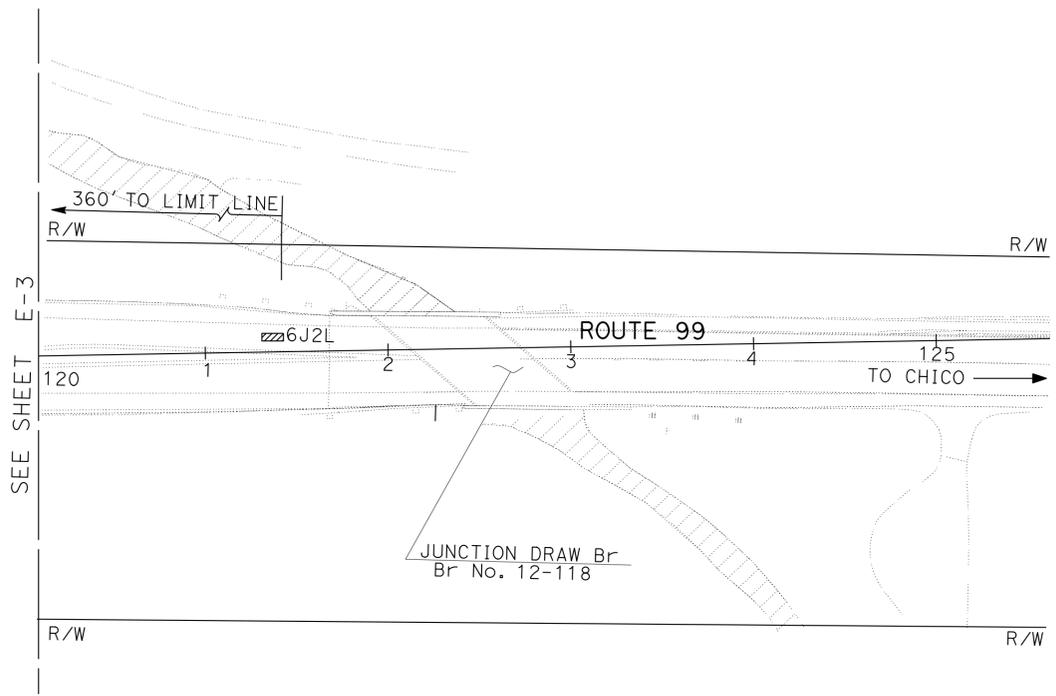
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	14	26

Mary Ann Hudspeth 1-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

1-28-13
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
 MARY ANN HUDSPETH
 No. 17245
 Exp. 06-30-14
 ELECTRICAL
 STATE OF CALIFORNIA



TEMPORARY SIGNAL SYSTEM
 (Route 99 AND Route 162 E/RICHVALE Road)

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

E-4

EXISTING CONDUCTOR SCHEDULE (FOR INFORMATION ONLY)

CABLE SCHEDULE			CONDUCTOR RUN NUMBER AND SIZE							
CABLE TYPE	STD	PHASE	1	2	3	4	5	6	7	8
VEH-PED 12CSC	(A)	1,6,6P 4PPB				1	1		1	1
	(B)	8,4P 6PPB				1	1		1	1
	(C)	8,8P		1	1	1			1	1
	(D)	5,6,6P 6,8PPB	1	2	1	2	1	2	1	2
	(E)	2,5,2P 8PPB					1	1	1	1
	(F)	4,8P 2PPB					1	1	1	1
	(G)	4,4P 2PPB						1	1	1
	(H)	1,2,2P 4PPB							1	1
TOTAL CABLES 12/3 CONDUCTORS			1	2	2	2	2	3	3	8
AWG	CIRCUIT									
#6	CONTROLLER POWER									2
#8	STREET LIGHTING			2	2	2	2	2	2	
#6	FLASHING BEACON		2	2	2	2			4	
#6G	FLASHING BEACON		1	1	1	1			1	1
	LOOP DLC									
TYPE B DLC	Ø1		1	1	1	1			1	1
	Ø2								5	5
	Ø4				5	5			5	5
	Ø5								1	1
	Ø6		4	4	4	4			4	4
	Ø8						5	5	5	5
	Ø10	COUNT	2	2	2	2	2	2	6	6
ØI AND ØJ	SPEED SENSING	2	2	2	2			4	4	
TOTAL DLC			9	9	14	14	7	7	31	31
EVD CABLE				1	1	2	1	2	4	4
CONDUIT SIZE			3"	3 1/2"	4"	2-3 1/2"	3 1/2"	4"	3-4"	3-3"

MODIFIED POLE SCHEDULE

No.	STANDARD		veh sig mtg		ped SIGNAL		ppb		hps LUMINAIRE	SPECIAL REQUIREMENTS			
	Type	sma	lma		POLE	Ø	mtg	Ø			ARROW		
(A)	26A-4-100	40	15	1 6	mas mas	6	SV-1-T	6	SP-1-T	4	←	310 W	RC 310 W hps lum, INSTALL 235 W LED LUM
(B)	1-B					8	TV-1-T	4	SP-1-T	6	→		
(C)	17A-2-100	20	8	8	mas	8	SV-1-T	8				310 W	RC 310 W hps lum, INSTALL 235 W LED LUM
(D)	1-B					5 6	TV-2-T	6	SP-2-T	6 8	← →		
(E)	26A-4-100	40	15	5 2	mas mas	2	SV-1-T	2	SP-1-T	8	←	310 W	RC 310 W hps lum, INSTALL 235 W LED LUM
(F)	1-B					4	TV-1-T	8	SP-1-T	2	→		
(G)	24A-3-100	35	15	4	mas	4	SV-1-T	4	SP-1-T	2	←	310 W	RC 310 W hps lum, INSTALL 235 W LED LUM
(H)	1-B					1 2	TV-2-T	2	SP-1-T	4	→		

**MODIFY SIGNAL AND LIGHTING
(Route 99 AND Route 162 E/RICHVALE Road)**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Zahra Niknafs
 Mary Ann Hudspeth
 Steven Block
 Electrical Design

LAST REVISION DATE PLOTTED => 24-JAN-2013
 01-03-13 TIME PLOTTED => 16:21

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® **ELECTRICAL DESIGN**

FUNCTIONAL SUPERVISOR
 STEVEN BLOCK

CALCULATED/DESIGNED BY
 CHECKED BY

ZAHRA NIKNAFS
 MARY ANN HUDSPETH

REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	17	26

Mary Ann Hudspeth 1-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

1-28-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MARY ANN HUDSPETH
 No. 17245
 Exp. 06-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

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

TEMPORARY SIGNAL SYSTEM

SHEET No.	(N)	(N)	(N)	(N)
	WOOD POLE	VIVDS CAMERA	VIVDS CABLE	No. 5 PB
	EA	EA	FT	EA
E-3	5	1	420	1

MODIFY TRAFFIC MONITORING STATION (COUNT)

SHEET No.	(N)	(N)
	TYPE A LOOP	DETECTOR HANDHOLE
	EA	EA
E-5	2	1

MODIFY SIGNAL AND LIGHTING

SHEET No.	(N)	(N)	(N)
	TYPE A LOOP	DETECTOR HANDHOLE	LED LUMINAIRES
	EA	EA	EA
E-1	1	1	4
E-2	1	1	

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

APPROVED FOR ELECTRICAL WORK ONLY

ELECTRICAL QUANTITIES

E-7

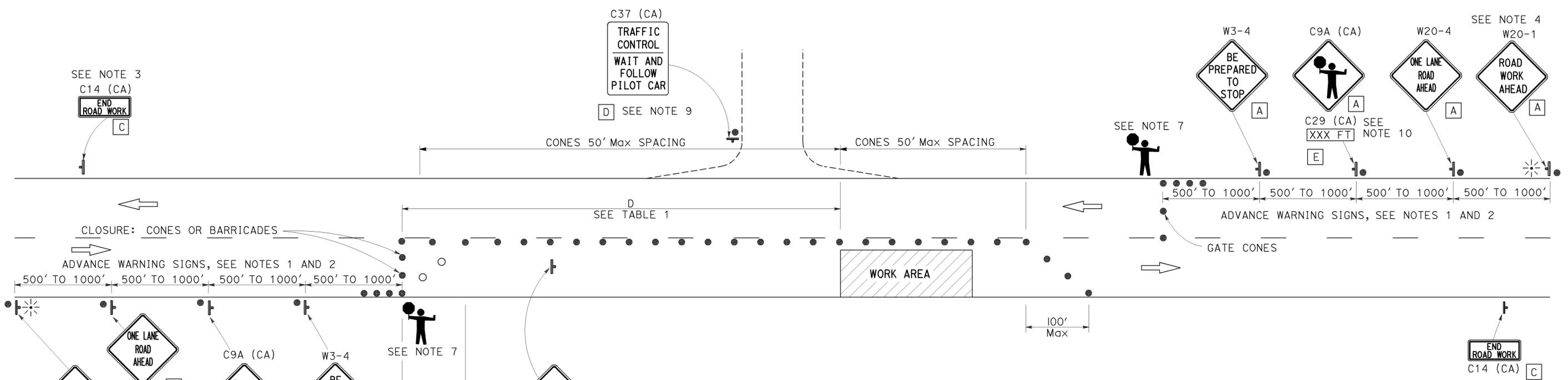


NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 48" x 48" - SPEED OF 45 mph OR MORE
- 36" x 36" - SPEED LESS THAN 45 mph
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 36" x 9"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊢ TEMPORARY SIGN
- ☁ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

TABLE 1

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

- Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30 (CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
- An optional C29 (CA) sign may be placed below the C9A (CA) sign.
- Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-1

REVISIONS: x, x, x, x, x
 REVISOR: _____
 DATE: _____
 CHECKED BY: _____
 DESIGNED BY: _____
 CALCULATED BY: _____
 FUNCTIONAL SUPERVISOR: _____
 DEPARTMENT OF TRANSPORTATION
 STATE OF CALIFORNIA
Caltrans

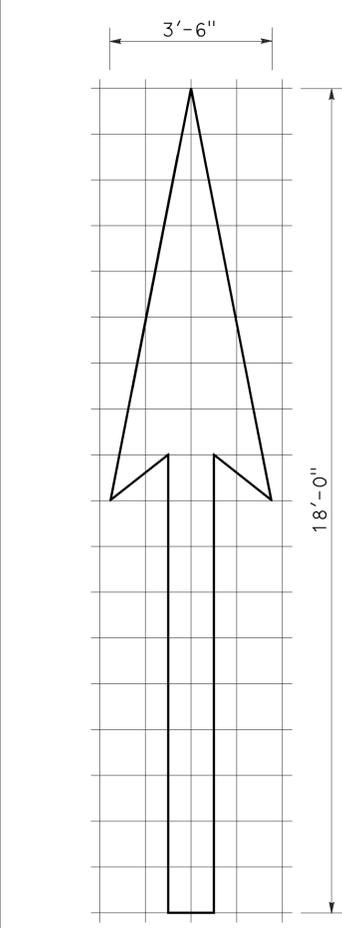
LAST REVISION: _____
 DATE PLOTTED => 10-DEC-2012
 TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	20	26

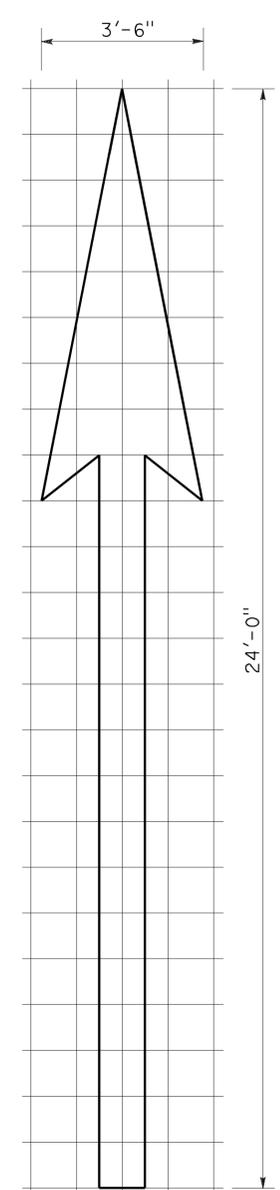
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

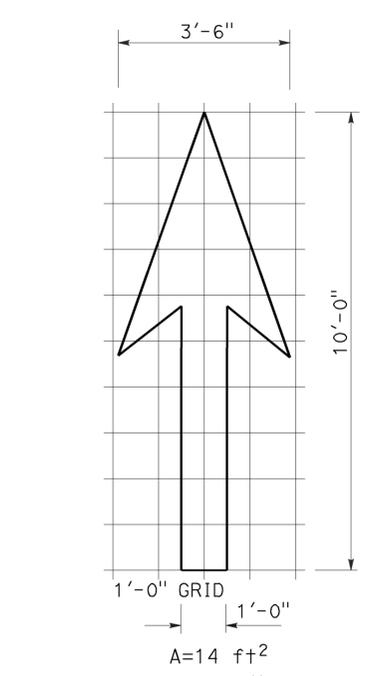
TO ACCOMPANY PLANS DATED 1-28-13



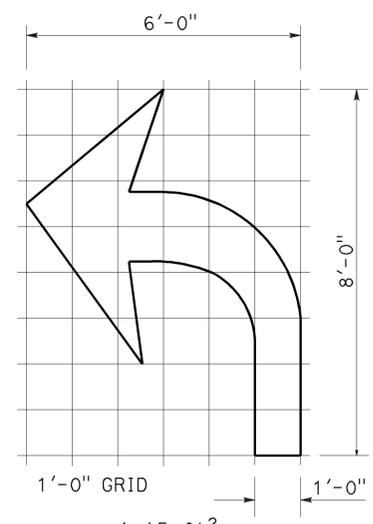
TYPE I 18'-0" ARROW
A=25 ft²



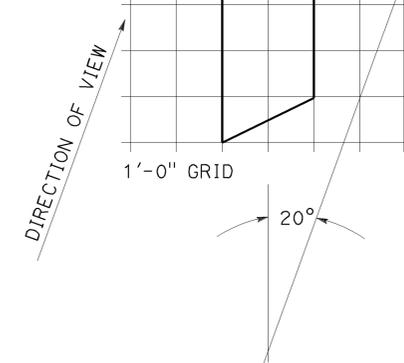
TYPE I 24'-0" ARROW
A=31 ft²



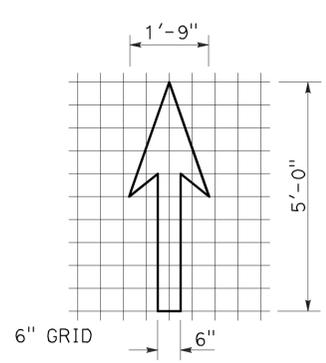
TYPE I 10'-0" ARROW
A=14 ft²



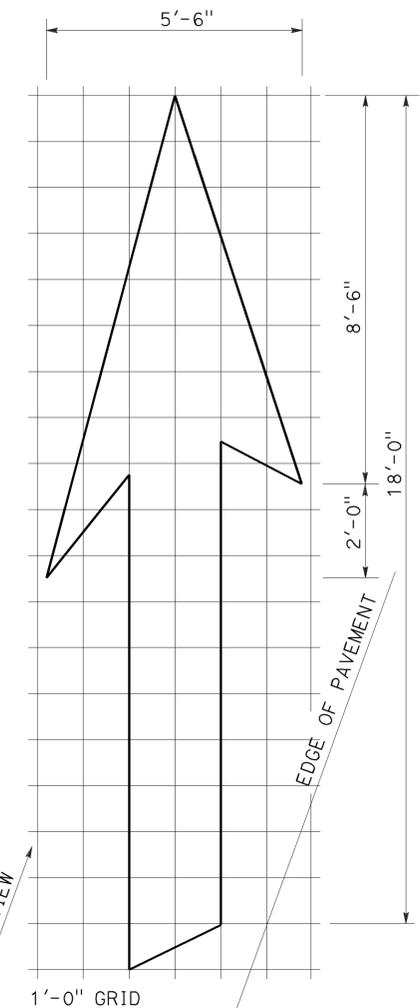
TYPE IV (L) ARROW
A=15 ft²
(For Type IV (R) arrow, use mirror image)



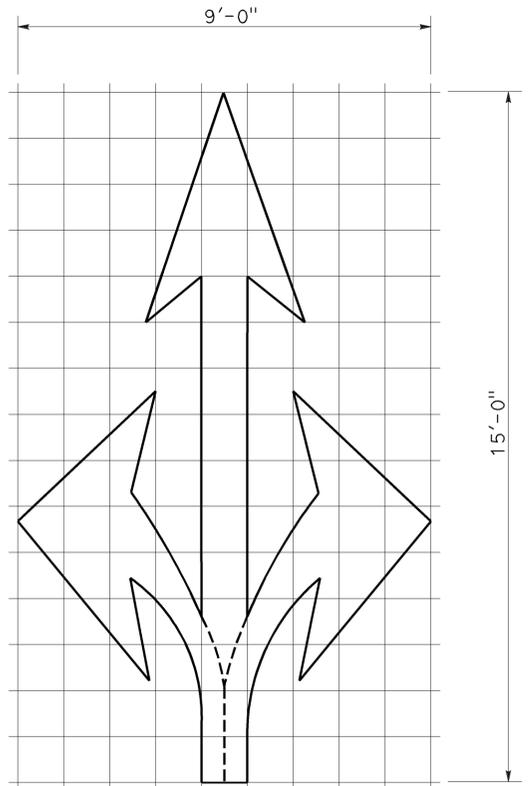
TYPE VI ARROW
A=42 ft²
Right lane drop arrow
(For left lane, use mirror image)



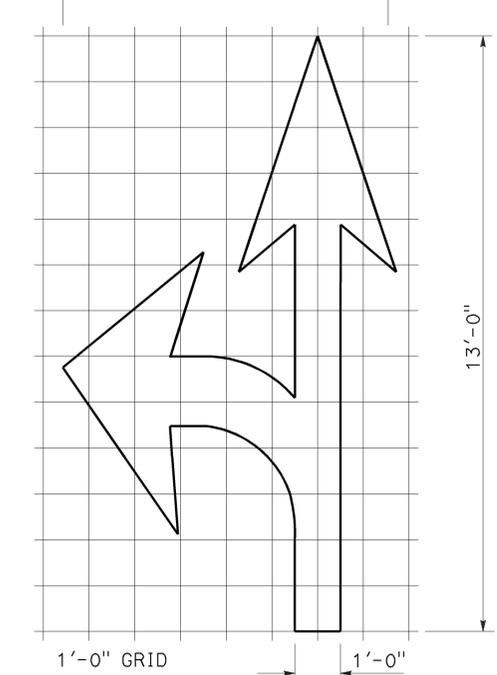
BIKE LANE ARROW
A=3.5 ft²



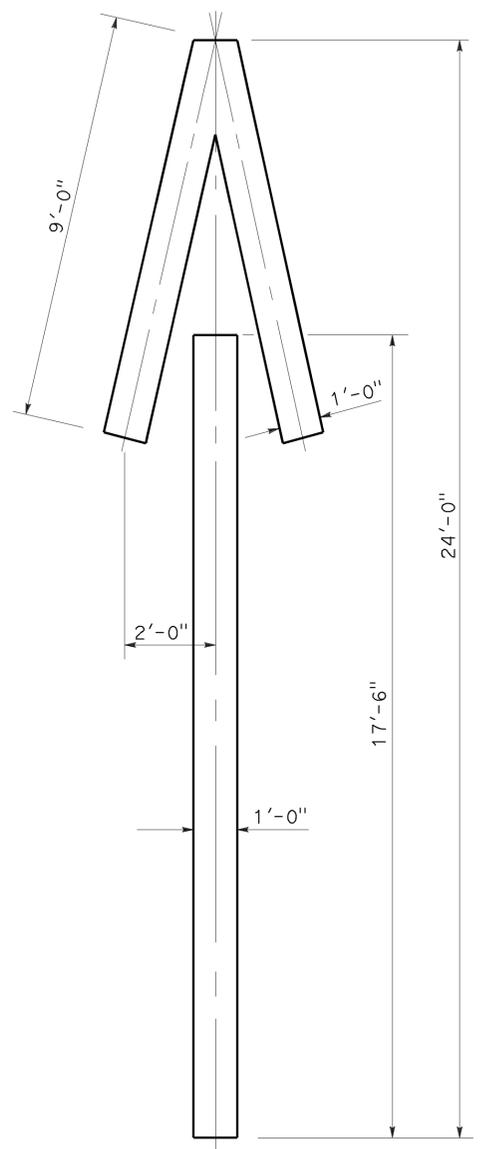
TYPE VIII ARROW
A=36 ft²



TYPE VIII ARROW
A=36 ft²



TYPE VII (L) ARROW
A=27 ft²
(For Type VII (R) arrow, use mirror image)



TYPE V ARROW
A=33 ft²

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

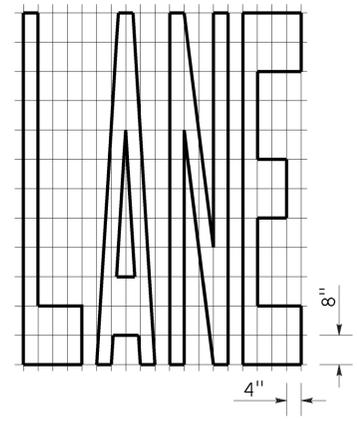
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

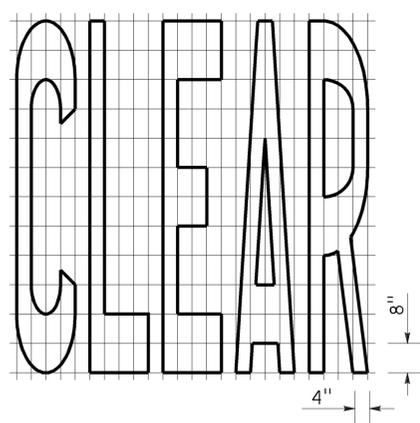
REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

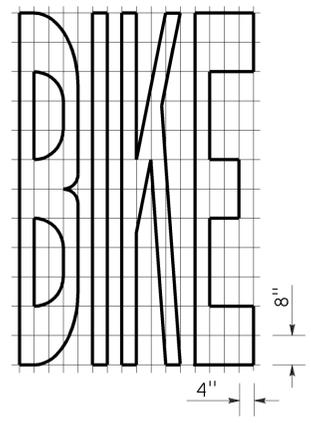
TO ACCOMPANY PLANS DATED 1-28-13



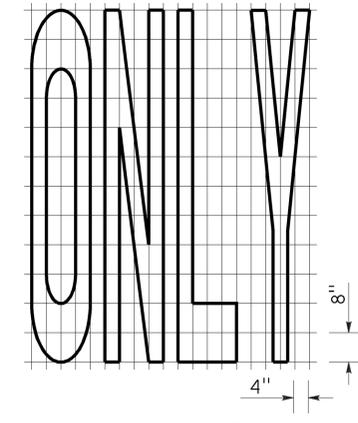
A=24 ft²



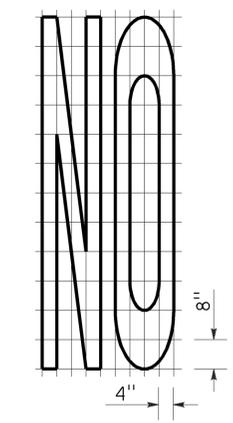
A=27 ft²



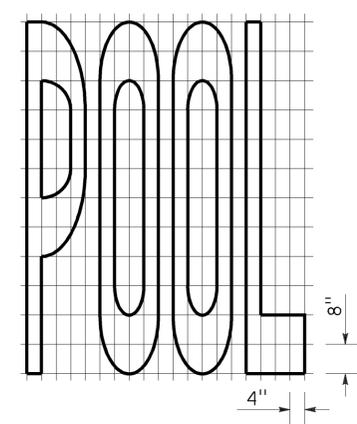
A=21 ft²



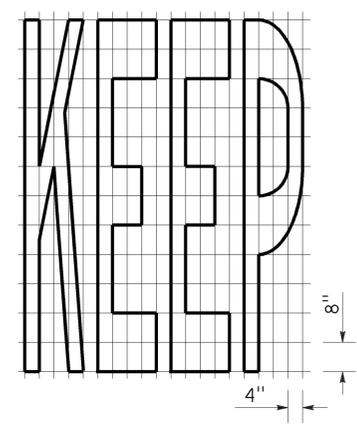
A=22 ft²



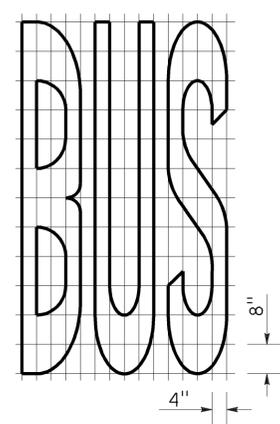
A=14 ft²



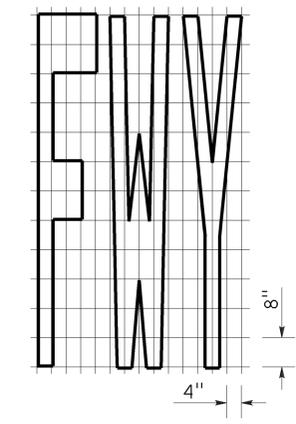
A=23 ft²



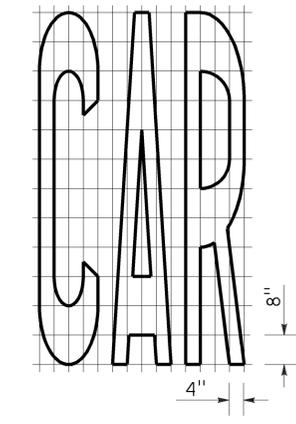
A=24 ft²



A=20 ft²

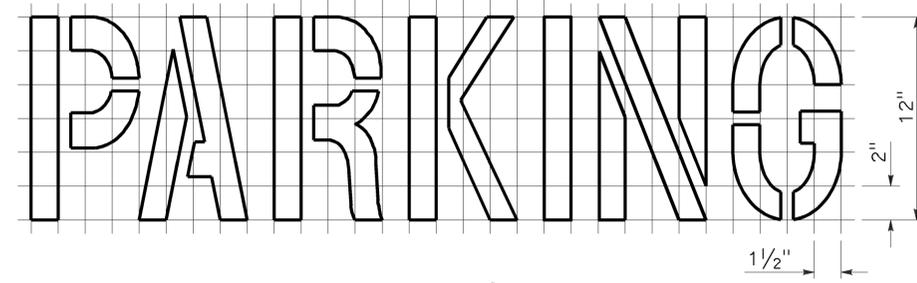
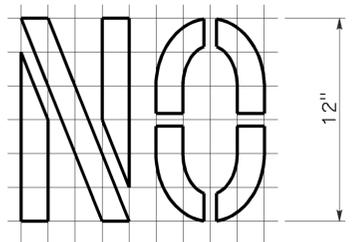


A=16 ft²

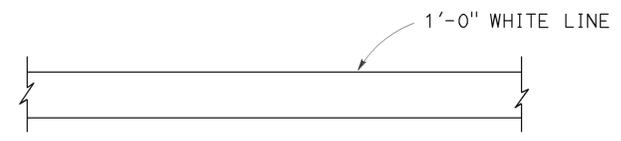


A=17 ft²

WORD MARKINGS			
ITEM	ft²	ITEM	ft²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



DIRECTION OF TRAVEL
YIELD LINE

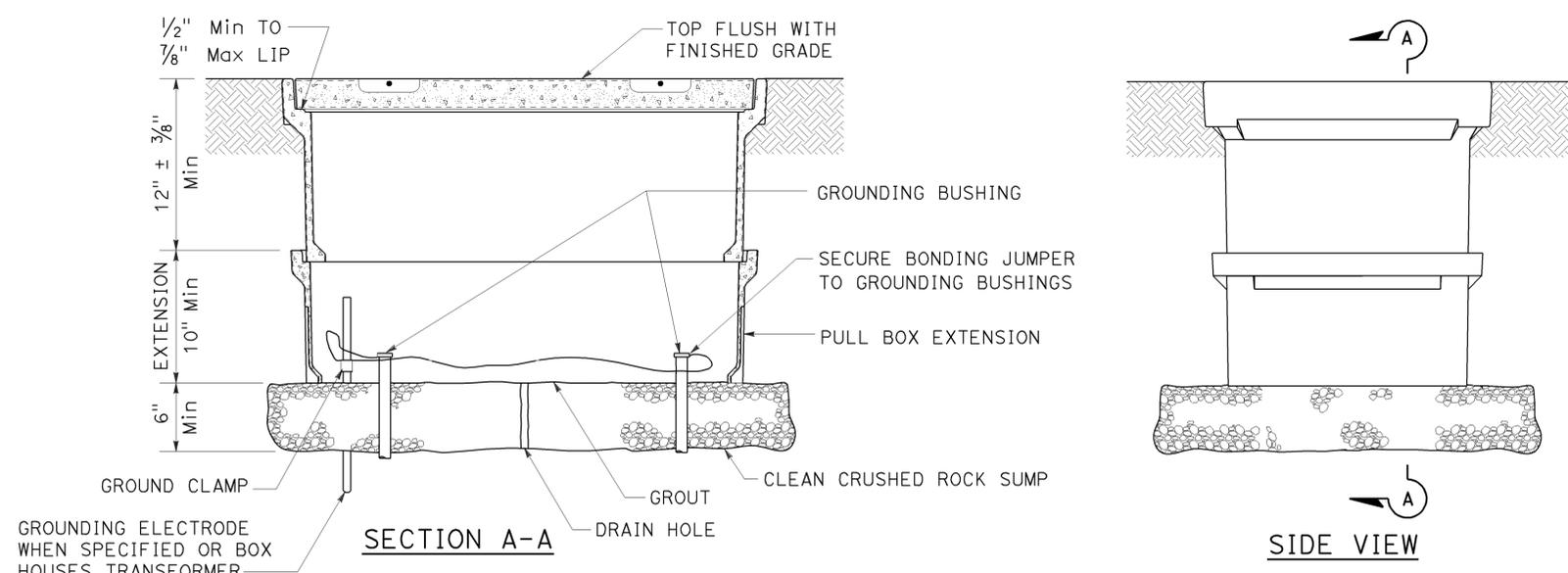
NOTES:

- If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
- The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
- Minor variations in dimensions may be accepted by the Engineer.
- Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
- The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
- The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

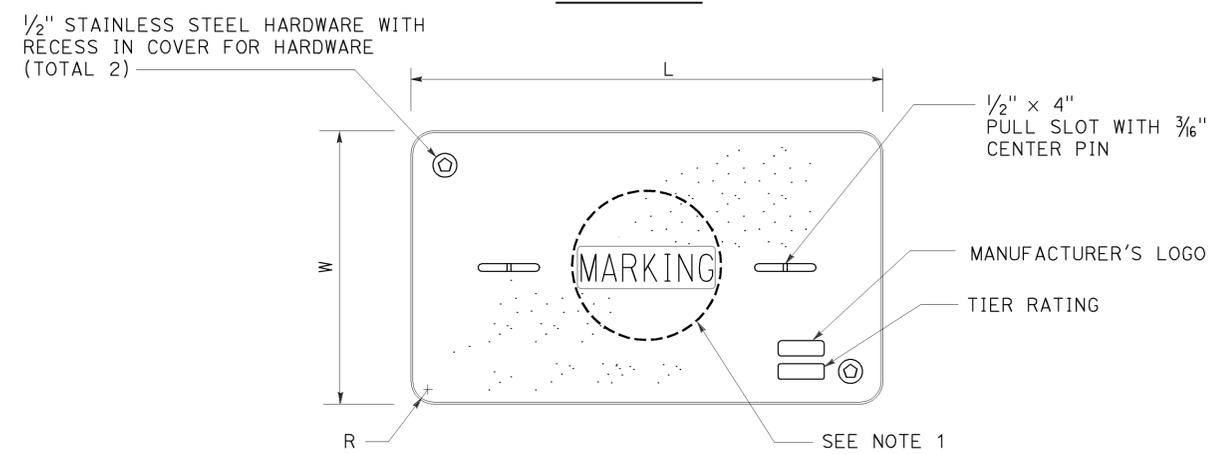
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

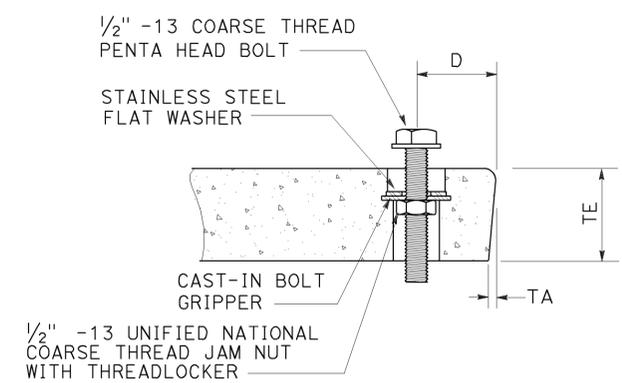
2010 REVISED STANDARD PLAN RSP ES-8A



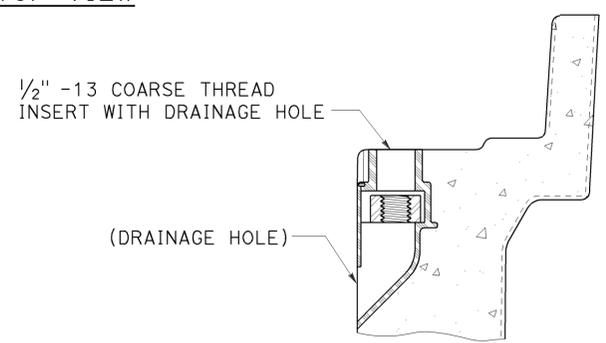
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES ON PULL BOXES:

1. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - A) No. 3/2 pull box.
 - 1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - B) No. 5, 6, 9 or 9A pull box.
 - 1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - 3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - 4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - 5) "RAMP METER" - Ramp meter circuits.
 - 6) "COUNT STATION" - Count or speed monitor circuits.
 - 7) "COMMUNICATIONS" - Communication circuits.
 - 8) "TOS COMMUNICATIONS" - TOS communication line.
 - 9) "TOS POWER" - TOS power.
 - 10) "TDC POWER" - Telephone demarcation cabinet power.
 - 11) "CCTV" - Closed circuit television circuits.
 - 12) "TMS" - Traffic monitoring station circuits.
 - 13) "CMS" - Changeable message sign circuits.
 - 14) "HAR" - Highway advisory radio circuits.
2. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus 1/8" or greater.
3. Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within 1/8". Top outside radius of covers and pull boxes must have a 1/8" radius.
4. Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.

TO ACCOMPANY PLANS DATED 1-28-13

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(PULL BOX)
NO SCALE

RSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

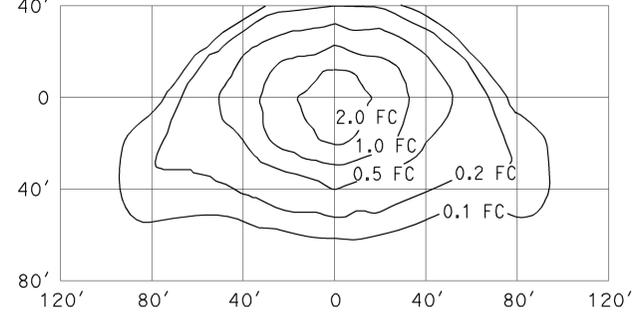
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	23	26

Jeffrey B. McRae
 REGISTERED ELECTRICAL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

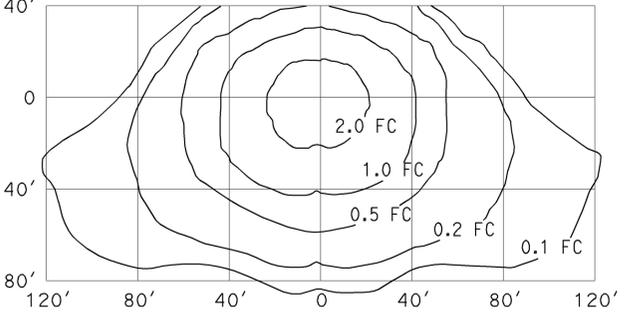
TO ACCOMPANY PLANS DATED 1-28-13

ISOFOOTCANDLE CURVE - MINIMUM



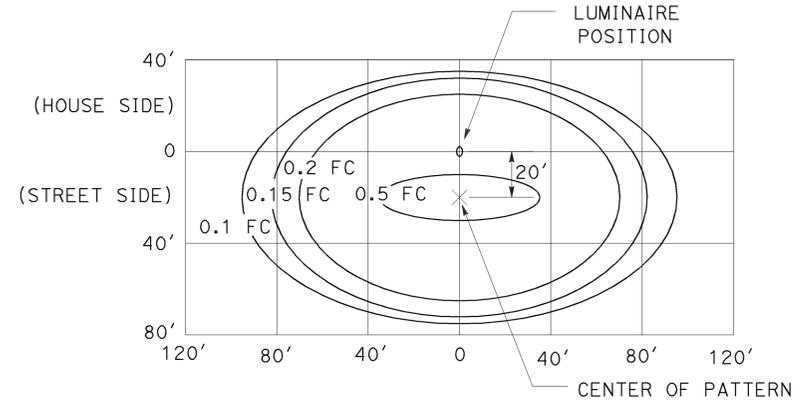
TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 34' Mounting Height
 Lamp operated at 22,000 lm
 200-W high pressure sodium lamp
 ANSI Designation S66

ISOFOOTCANDLE CURVE - MINIMUM



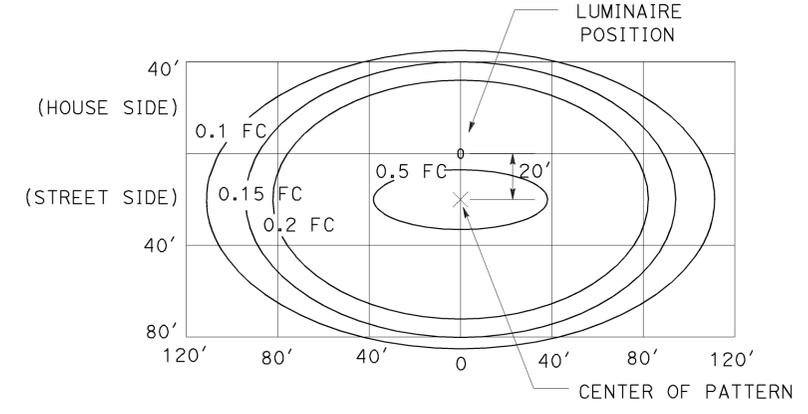
TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 40' Mounting Height
 Lamp operated at 37,000 lm
 310-W high pressure sodium lamp
 ANSI Designation S67

ISOFOOTCANDLE CURVE - MINIMUM



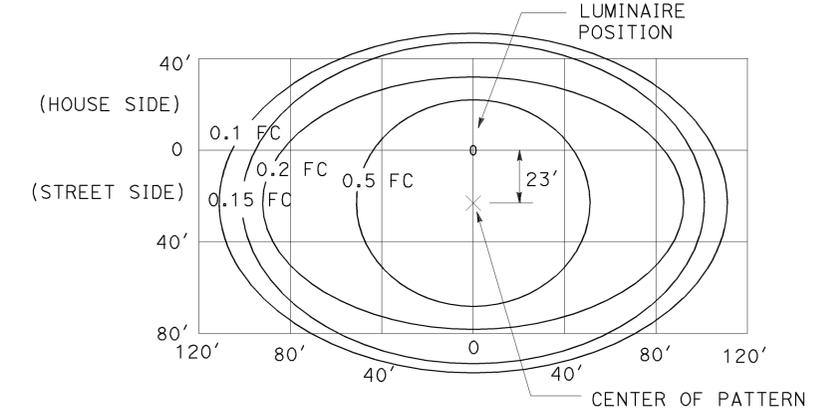
LED LUMINAIRE ROADWAY 1
 200-W HPS Equivalent at 34' Mounting Height

ISOFOOTCANDLE CURVE - MINIMUM



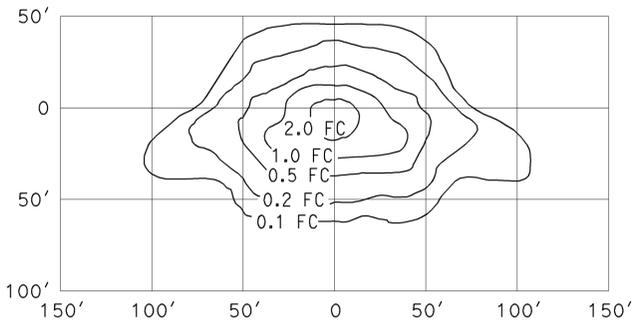
LED LUMINAIRE ROADWAY 2
 310-W HPS Equivalent at 40' Mounting Height

ISOFOOTCANDLE CURVE - MINIMUM



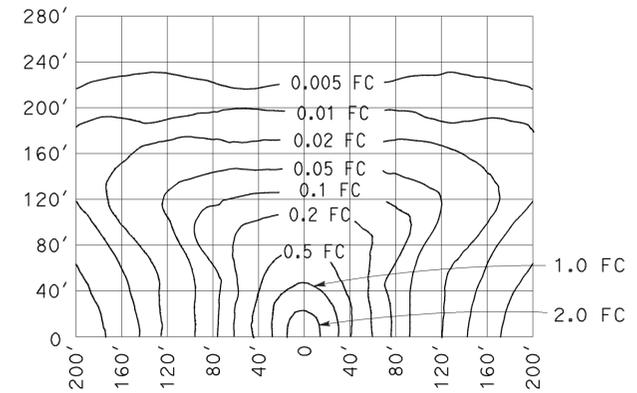
LED LUMINAIRE ROADWAY 4
 400-W HPS Equivalent at 40' Mounting Height

ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 30' Mounting Height
 Lamp operated at 16,000 lm
 150-W high pressure sodium lamp
 ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



LOW PRESSURE SODIUM LUMINAIRE
 40' Mounting Height
 Lamp operated at 33,000 lm
 180-W low pressure sodium lamp

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-10A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	24	26
			12/3/12		
REGISTERED CIVIL ENGINEER			DATE		
			1-28-13		
			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER TAMARA S. MARCHENKO No. C76837 Exp. 12/31/12 CIVIL STATE OF CALIFORNIA					
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.					

LUMINAIRE ARM DATA			
Projected Length	N Rise	Min OD At Pole	Thickness
15'-0"	4'-9"	4/4"	0.1196"

Refer to ES-6A for Luminaire arm details

GENERAL NOTES:

SPECIFICATIONS

Design: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals dated 2009 and 2010 Interim Revisions.

LOADING

Wind Loadings: 85 MPH

UNIT STRESSES

Timber Poles: Tapered treated round pole ASTM D2899 Standard

Fb = 1850 psi

Fv = 110 psi

E = 1500 x 10³ psi

TREATMENT

To conform with Section 86 2010 Standard Specifications

SPECIFICATIONS

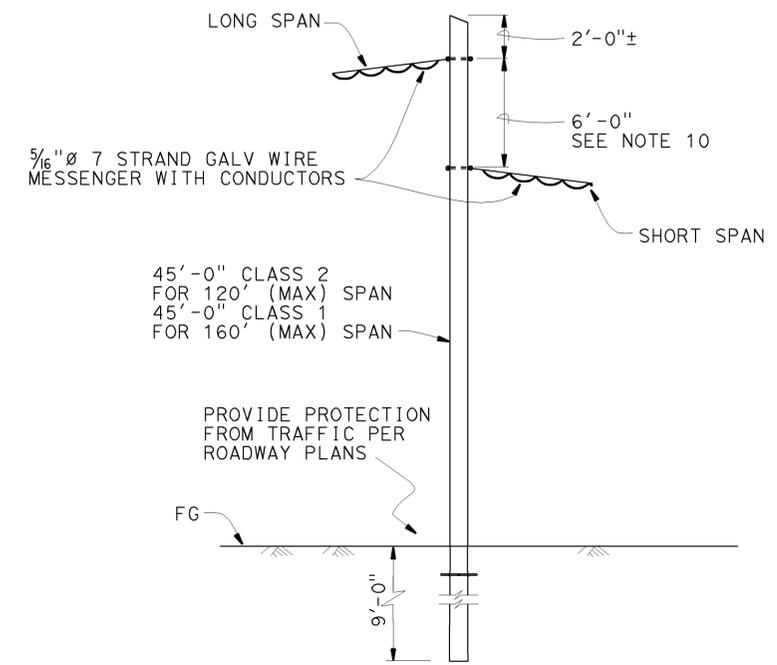
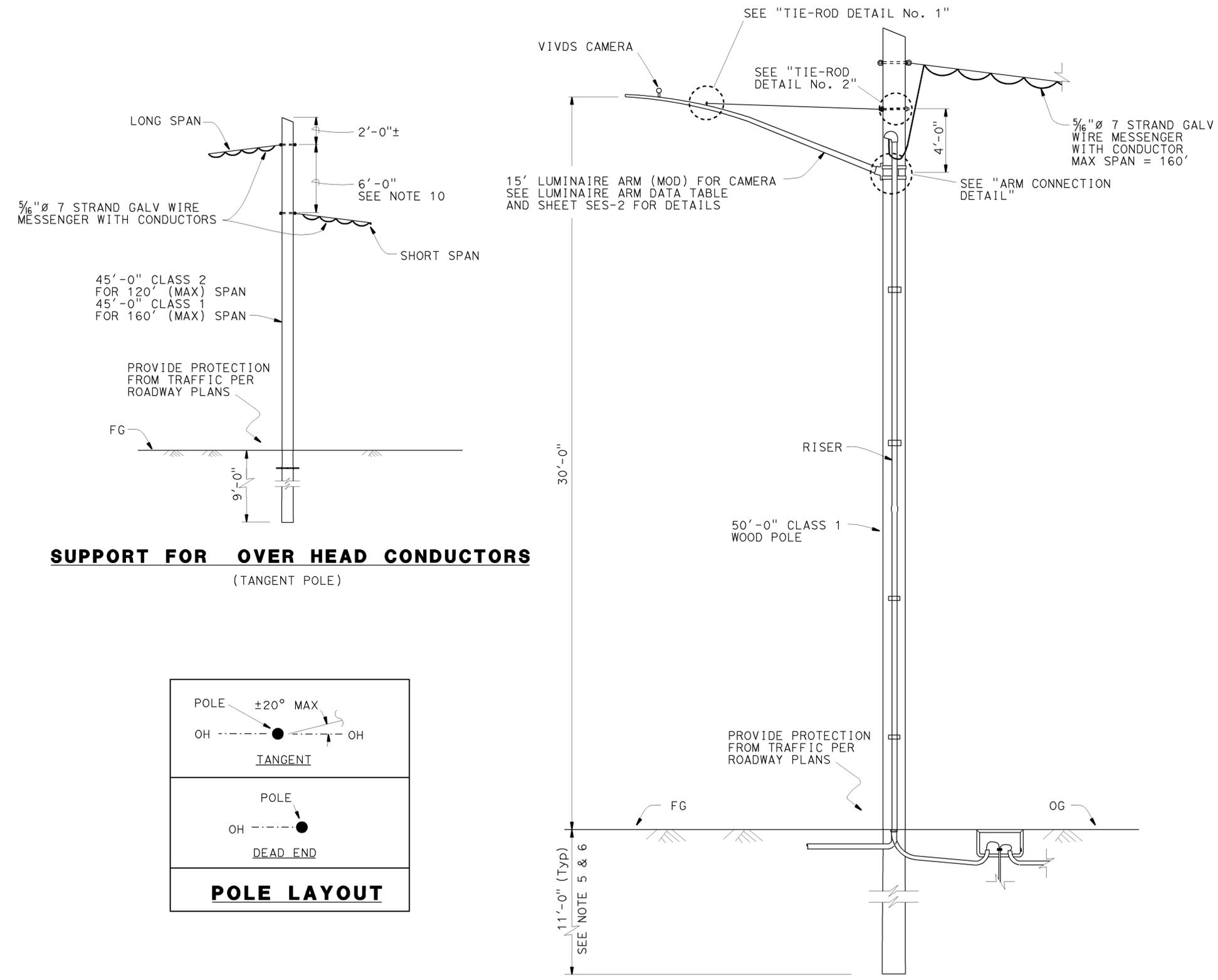
Caltrans Standard Specifications 2010

ANSI 05 Wood Poles

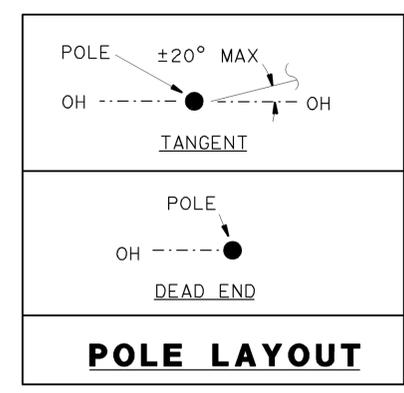
ASTM A475 Utility Grade Wires

NOTES:

- All overhead conductors shall be lashed with 25'-0" minimum overhead clearance.
- Conductors shall be suspended from span-wire as follows:
A) Main run as shown span-wire with 5%± sag.
No spare conductors allowed except as noted.
- Overhead line construction not specifically covered here shall conform with the provisions of General Order No. 95 of Public Utilities Commission.
- All attachments shall be mounted with stainless steel straps or other manufacturers methods without drilling holes in pole, except as shown. Drilling through pole will require the Engineer's approval.
- Foundation design is based on AASHTO 2009 and 2010 interim revisions article 13.6 Broms' approximate procedure assuming a cohesionless material. The angle of internal friction used is 30° and unit weight of soil used is 120 lb/ft³. The Contractor to verify actual soil condition.
- If pole is located on a steep slope from 4H:1V up to 2H:1V add 2 feet extra for embedment.
- See Sheets SES-2 & SES-3 for details.
- For details not shown, see "2010 STANDARD PLANS" sheets ES-6A, ES-7M and ES-7R.
- Temporary poles support OH Conductors as noted. Attach luminaire arm as specified at locations where indicated on Electrical Sheets.
- Use 6'-0" where short span is less than 50% of adjacent span. Otherwise, use bolt thru connection.



SUPPORT FOR OVER HEAD CONDUCTORS
(TANGENT POLE)



POLE LAYOUT

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NO SCALE

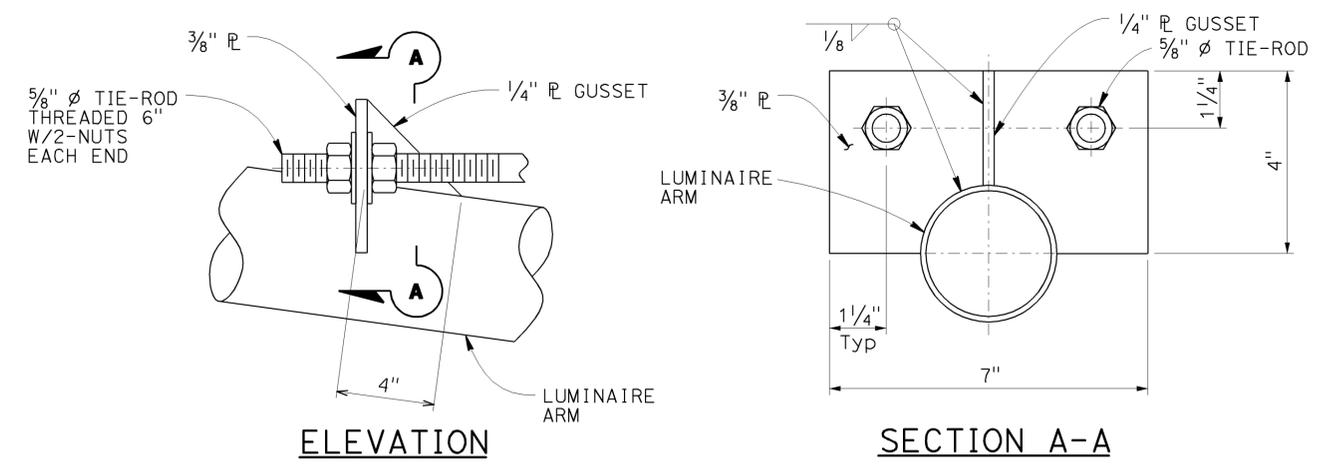
BRANCH CHIEF JAMES SAGAR	DESIGN	BY T MARCHENKO	CHECKED V LOPEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH	BRIDGE NO.	TEMPORARY SIGNAL SYSTEM TEMPORARY WOOD POLES	SES-1
	DETAILS	BY H NGUYEN	CHECKED L WARREN			N/A		
	QUANTITIES	BY	CHECKED X			POST MILE 13.0/20.6		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	99	13.0/20.6	25	26
			12/3/12		
REGISTERED CIVIL ENGINEER			DATE		
			1-28-13		
			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

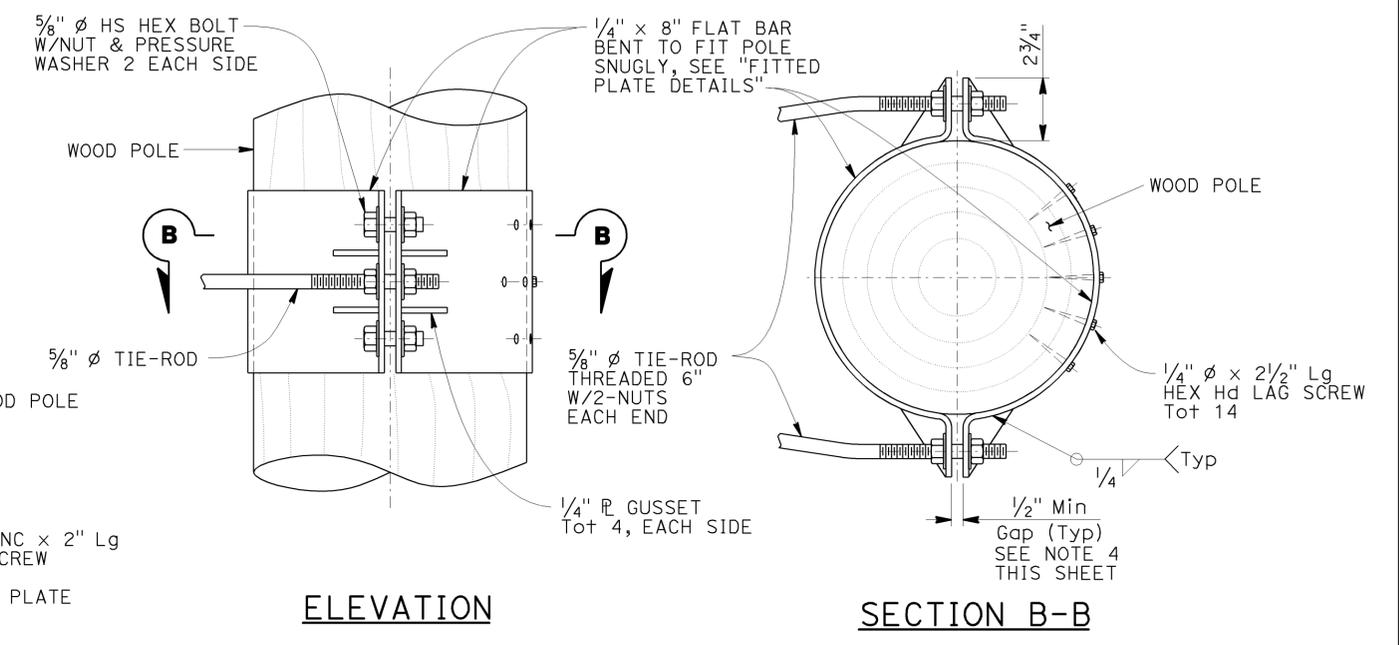


NOTES:

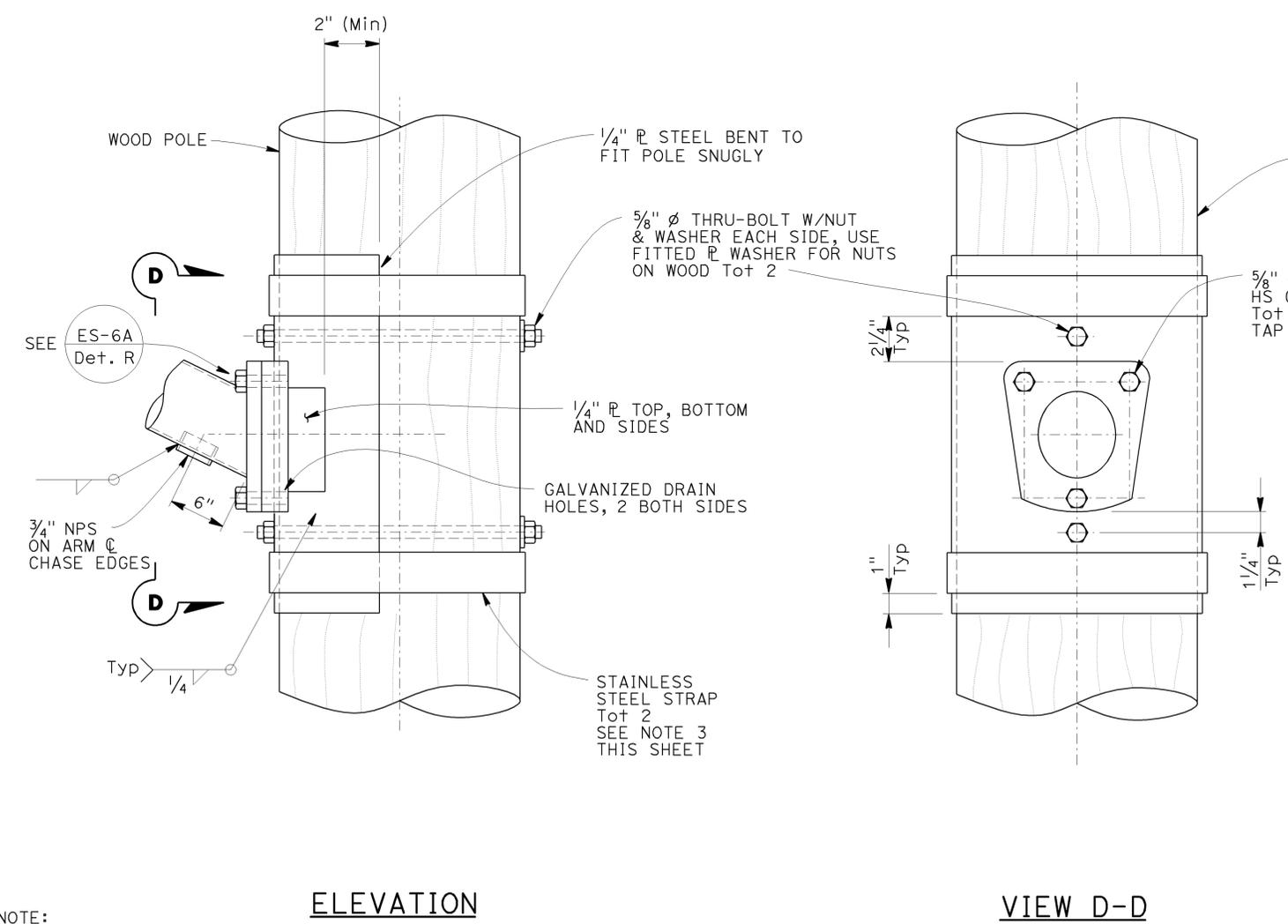
1. All hardware and steel shall be galvanized after fabrication.
2. Arm Base connection details shall be in compliance with Standard Plans Detail Sheet ES-6A with noted modifications.
3. 3500 lb Min capacity strap system shall be used for top and bottom of plate.
4. The Contractor to verify pole dimensions at Tie-Rod attachment height. Fabricate 8" flat bar with "L" Dimension to maintain an open gap between encasement in finished installation.



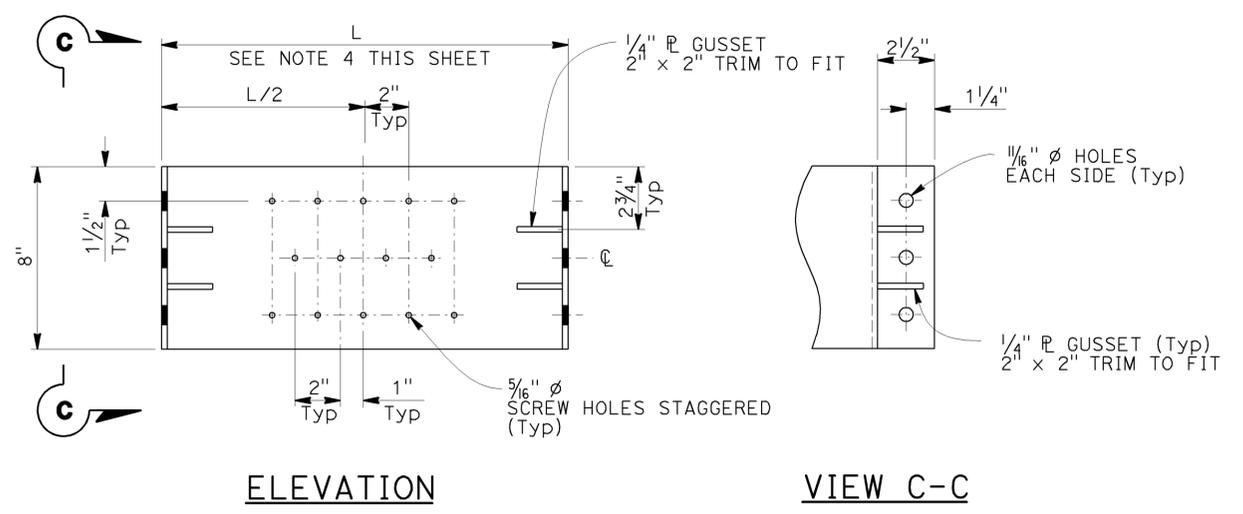
TIE-ROD DETAIL No. 1



TIE-ROD DETAIL No. 2



ARM CONNECTION DETAILS



FITTED PLATE DETAILS

Note: 2 Required (1 w/screw holes, 1 without)

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

BRANCH CHIEF	JAMES SAGAR
--------------	-------------

DESIGN	BY T MARCHENKO	CHECKED N KANEPATHIPILLAI
DETAILS	BY H NGUYEN	CHECKED N KANEPATHIPILLAI
QUANTITIES	BY	CHECKED X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
DESIGN AND TECHNICAL SERVICES
SPECIAL DESIGNS BRANCH

BRIDGE NO.	N/A
POST MILE	13.0/20.6

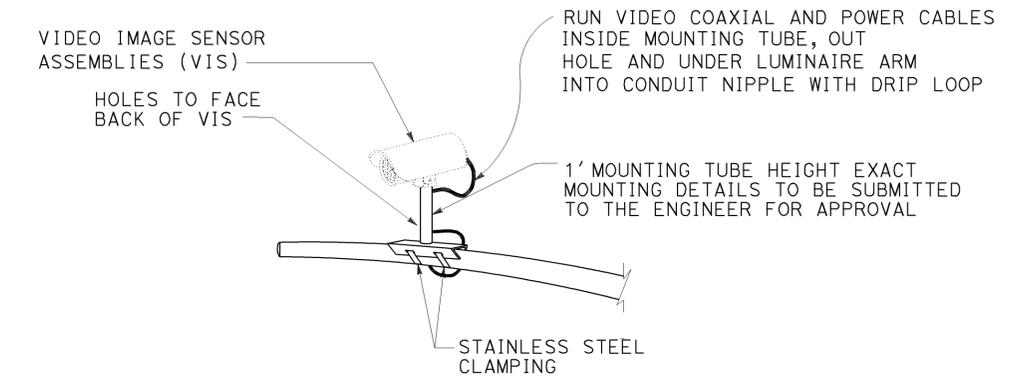
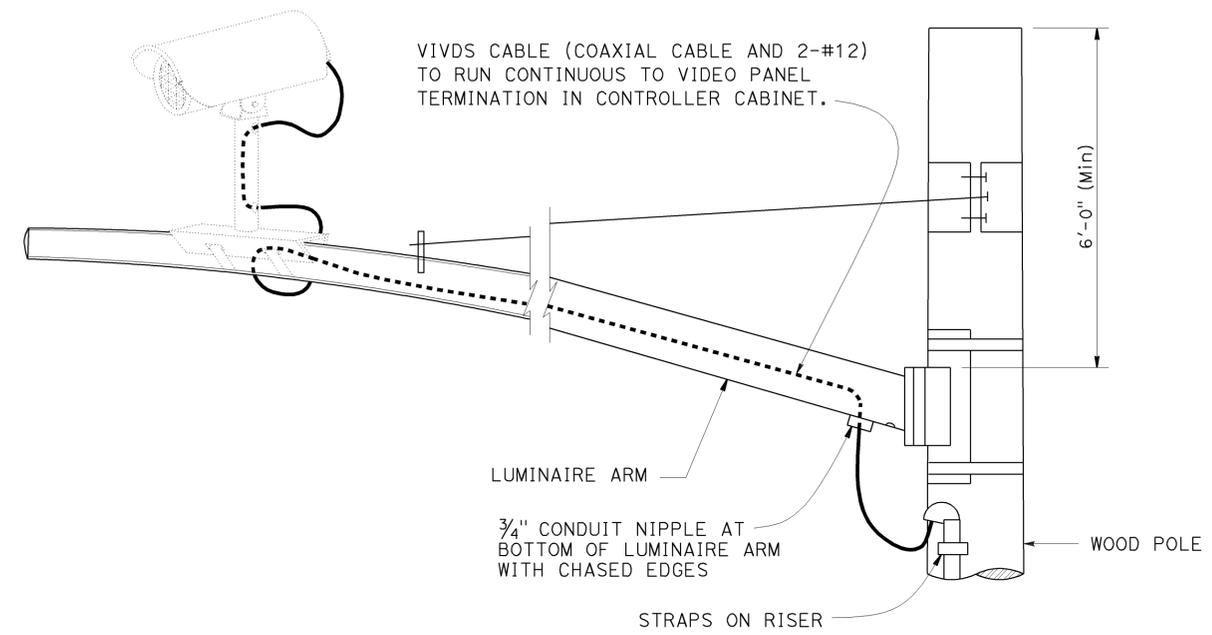
TEMPORARY SIGNAL SYSTEM
ARM MOUNTING DETAILS

SES-2

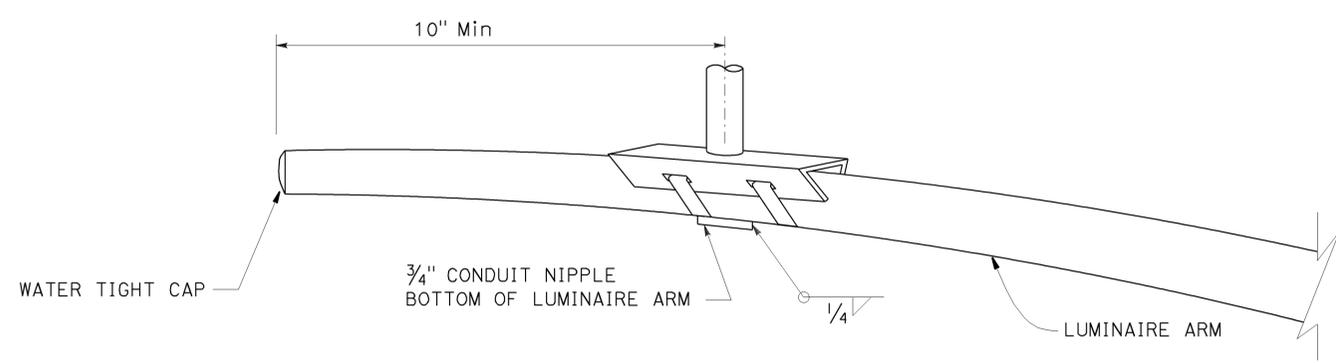
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	BUT	99	13.0/20.6	26	26
			12/3/12		
REGISTERED CIVIL ENGINEER			DATE		
			1-28-13		
			PLANS APPROVAL DATE		
					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

NOTES:

1. All metallic conduits, bolts straps and misc hardware shall be galvanized.
2. Elements (total VIVDS assembly) shall have a maximum weight of 10 lbs and a maximum effective pressure area of 1 square foot.
3. Maximum of 1 VIVDS element per luminaire arm.
4. This detail applies only for steel luminaire arm newly installed on wood pole.



CAMERA MOUNTING DETAILS
NO SCALE



DETAIL A
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NO SCALE

BRANCH CHIEF <u>JAMES SAGAR</u>	DESIGN	BY T MARCHENKO	CHECKED L WARREN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH	BRIDGE NO.	TEMPORARY SIGNAL SYSTEM CAMERA MOUNTING DETAILS	SES-3
	DETAILS	BY H NGUYEN	CHECKED L WARREN			N/A		
	QUANTITIES	BY	CHECKED X			POST MILE 13.0/20.6		