Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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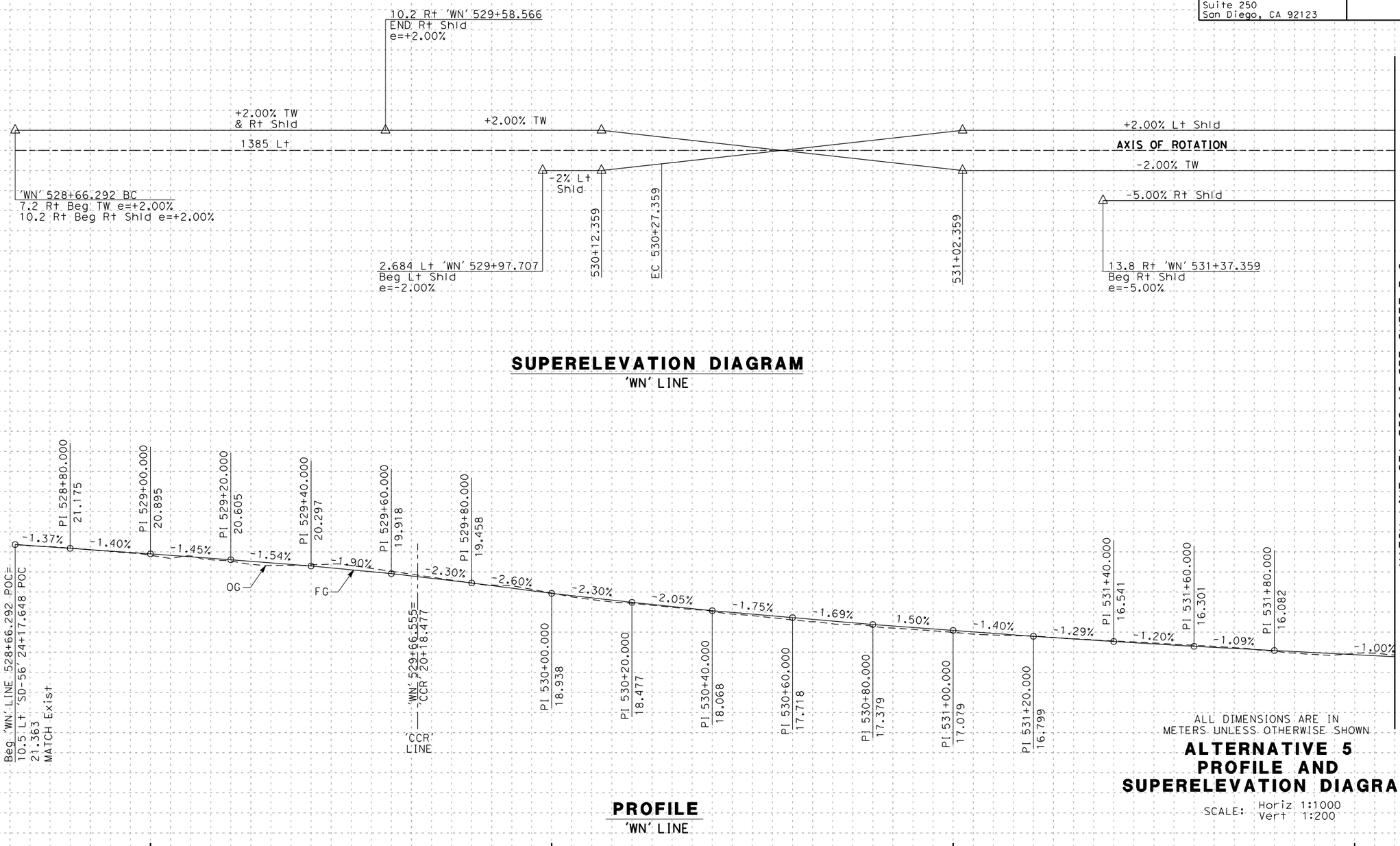

SUPERELEVATION DIAGRAM

'WN' LINE

PROFILE

'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-1

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:06 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb001_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10%
0%
-10%
25
20
15
10

MATCH LINE STA 532+10 SEE SHEET P-1

MATCH LINE STA 535+65 SEE SHEET P-3

+2.00% Lt Shld

AXIS OF ROTATION

-2.00% TW

-5.00% Rt Shld

16.835 Rt 'WN' 534+77.903
END Rt Shld
e=-5.00%

10.2 Rt 'WN' 535+59.903
Beg Rt Shld
e=-5.00%

SUPERELEVATION DIAGRAM
'WN' LINE

-0.75% -0.75% -0.60% -0.30% +0.30% +0.70% +1.00% +1.19% +1.25% +1.30% +1.35%

PI 532+40.000 15.482
PI 533+00.000 15.032
PI 533+20.000 14.912
PI 533+40.000 14.852
PI 533+60.000 14.912
PI 533+80.000 15.052
PI 534+00.000 15.252
PI 534+20.000 15.490
OG
PI 534+80.000 16.240
FG
PI 535+40.000 17.020

PROFILE
'WN' LINE

Station: 533+00 534+00 535+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-2

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:07 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb002_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

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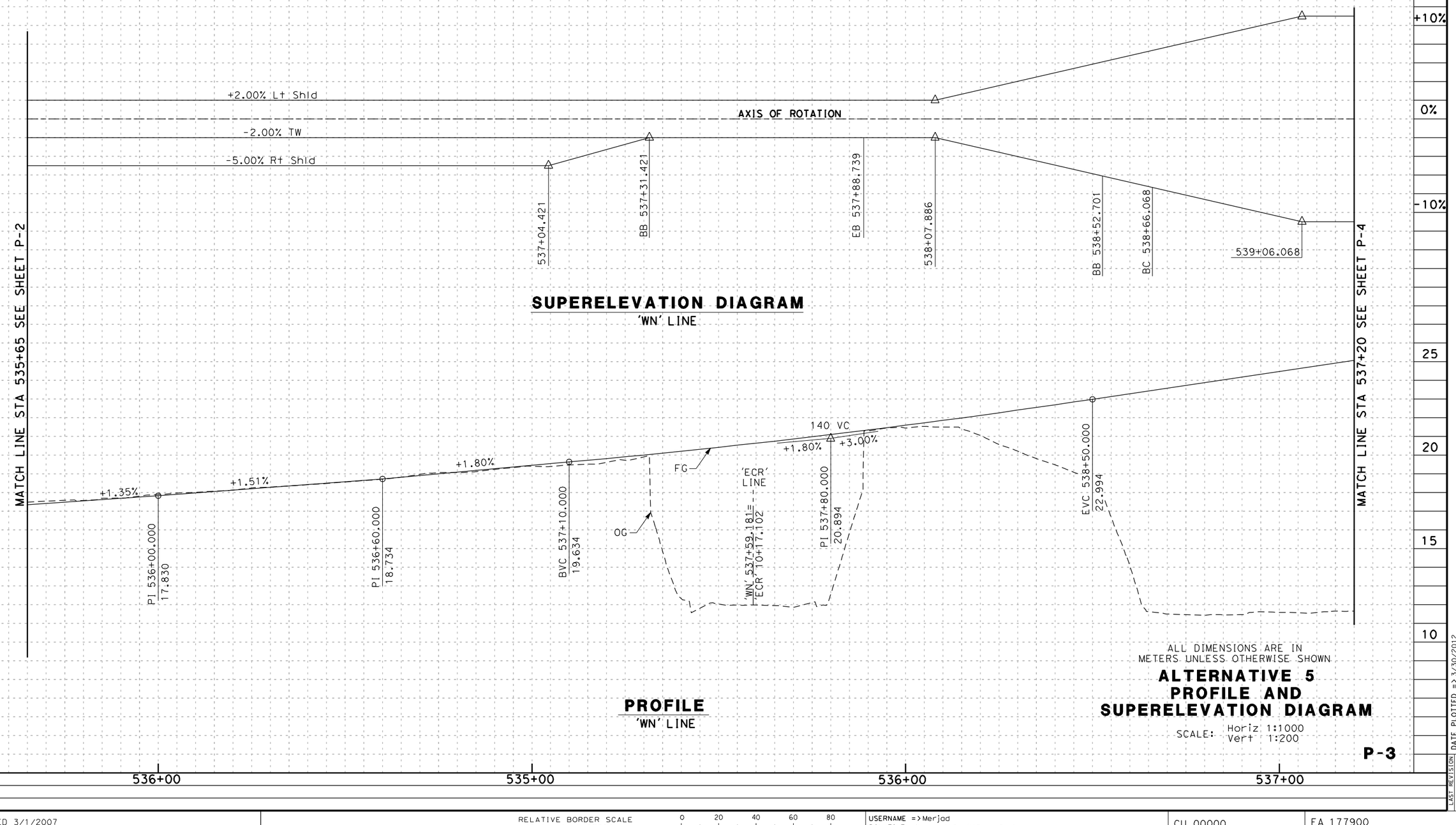

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-3

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:08 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb003_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10%

0%

-10%

+11.00% Lt Shld

210 Rt

AXIS OF ROTATION

-11.00% TW & Rt Shld

MATCH LINE STA 537+20 SEE SHEET P-3

MATCH LINE STA 542+75 SEE SHEET P-5

542+33.081

EC 542+73.081

PI 541+86.00
33.074

+3.00%

-2.40%

228 VC

FG

OG

+3.00%

BVC 540+72.000
29.654

541+98.667
31.554

'NT' LINE

'WN' 542+13.512=
'NT' 542+13.790

'CV-1' LINE

'WN' 541+67.245=
'CV1' 541+70.800

'CVR' LINE

'WN' 539+37.925=
'CVR' 542+06.761

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-4

30 25 20 15 10

Station: 540+00 | 541+00 | 542+00

m³ Exc / Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:09 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb004_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10% 0% -10%

+2.00% Lt Shld
AXIS OF ROTATION
-2.00% TW
-5.00% Rt Shld

EB 542+94.648
543+31.263
543+58.263
6.873 Rt 'WN' 544+39.396
END Rt Shld
e=-5.00%
544+70.849
BC 545+45.849
545+60.849

MATCH LINE STA 542+75 SEE SHEET P-4

SUPERELEVATION DIAGRAM
'WN' LINE

PRVC 543+00.000
30.338
543+71.579
29.479
FG
170 VC
-2.40%
+3.30%
OG
+3.30%
EVC 544+70.000
31.103
PI 543+85.000
28.298
PI 545+59.000
34.040
+3.10%
PI 546+01.350
35.352
+2.90%

MATCH LINE STA 546+30 SEE SHEET P-6

40 35 30 25 10

Station: 543+00 544+00 545+00 546+00

m³ Exc / Emb

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-5

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:10 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb005_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

MATCH LINE STA 546+30 SEE SHEET P-5

+2.00% TW & Rt Shld
3080.406 Lt
-2.00% Lt Shld

548+26.278
EC 548+41.278
549+16.278
549+83.778

MATCH LINE STA 549+85 SEE SHEET P-7

SUPERELEVATION DIAGRAM
'WN' LINE

'WN' 546+42.080 POT
MATCH Exist
36.534

PI 546+60.000
37.123

PI 546+80.000
37.827

PI 547+00.000
38.266

PI 547+20.000
38.908

PI 547+40.000
39.580

PI 547+60.000
40.257

PI 547+80.000
40.780

PI 548+00.000
41.351

PI 548+20.000
41.876

PI 548+40.000
42.422

PI 548+60.000
42.854

PI 548+80.000
43.286

PI 549+00.000
43.807

PI 549+20.000
44.294

PI 549+40.000
44.897

PI 549+60.000
45.431

PI 549+80.000
45.859

+3.29% +3.52% +2.19% +3.21% +3.36% +3.38% +2.62% +2.86% +2.62% +2.73% +2.16% +2.16% +2.60% +2.44% +3.01% +2.67% +2.14%

PROFILE
'WN' LINE

50 45 40 35 30

Station: 547+00 548+00 549+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-6

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:11 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb006_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

MATCH LINE STA 549+85 SEE SHEET P-6

+2.00% Lt Shld
-2.00% TW
-5.00% Rt Shld

MATCH LINE STA 553+40 SEE SHEET P-8

PI 550+00.000 46.372 | +2.56% | +3.09% | PI 550+20.000 46.991 | +2.83% | +3.23% | PI 550+40.000 47.557 | +3.59% | PI 550+60.000 48.202 | +2.60% | PI 550+80.000 48.919 | +2.88% | PI 551+00.000 49.439 | +3.03% | PI 551+20.000 50.016 | +2.95% | PI 551+40.000 50.622 | +2.84% | PI 551+60.000 51.212 | +2.88% | PI 551+80.000 51.780 | +3.38% | PI 552+00.000 52.355 | +3.23% | PI 552+20.000 53.031 | +2.58% | PI 552+40.000 53.676 | +3.12% | PI 552+60.000 54.192 | +3.08% | PI 552+80.000 54.815 | +3.03% | PI 553+00.000 55.430 | +2.74% | PI 553+20.000 56.036 | PI 553+40.000 56.584

60 55 50 45 40

Station: 550+00 | 551+00 | 552+00 | 553+00

m^3 Exc / Emb

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-7

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:12 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb007_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

MATCH LINE STA 553+40 SEE SHEET P-7

MATCH LINE STA 556+95 SEE SHEET P-9

554+95.402

18.026 Rt 'WN' 555+42.607
END Rt Shld
e=-2.46%

555+52.902

10.8 Rt 'WN' 556+24.927
Beg Rt Shld
e=+1.19%

BC 556+27.904

556+42.902

+2.00% TW
& Rt Shld

3000 Lt

3.0 Lt 'WN' 556+27.902
END Lt Shld
e=-1.33%

SUPERELEVATION DIAGRAM

'WN' LINE

+3.52% +2.71% +2.56% +2.67% +3.04% +3.36% +3.43% +2.64% +2.64% +3.18% +2.98% +3.02% +2.85% +3.23% +3.39% +2.72% +3.14% +3.09%

PI 553+60.000 57.287
PI 553+80.000 57.830
PI 554+00.000 58.342
PI 554+20.000 58.875
PI 554+40.000 59.484
PI 554+60.000 60.157
PI 554+80.000 60.843
PI 555+00.000 61.371
PI 555+20.000 61.899
PI 555+40.000 62.534
PI 555+60.000 63.130
PI 555+80.000 63.734
PI 556+00.000 64.305
PI 556+20.000 64.952
PI 556+40.000 65.629
PI 556+60.000 66.174
PI 556+80.000 66.801

PROFILE

'WN' LINE

70 65 60 55 50

Station: 554+00 555+00 556+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-8

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:22:13 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb008_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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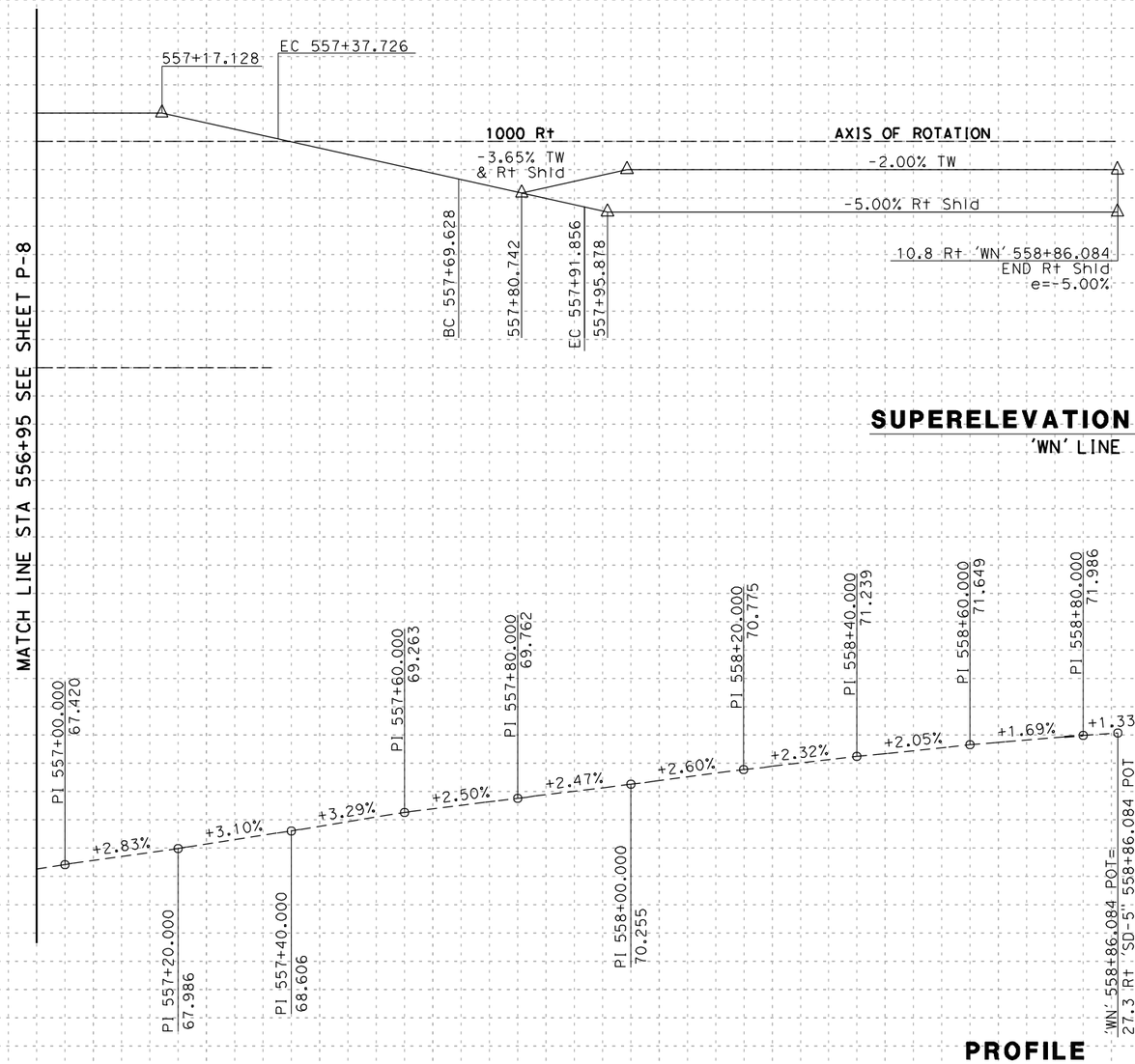

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-9

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:14 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb009_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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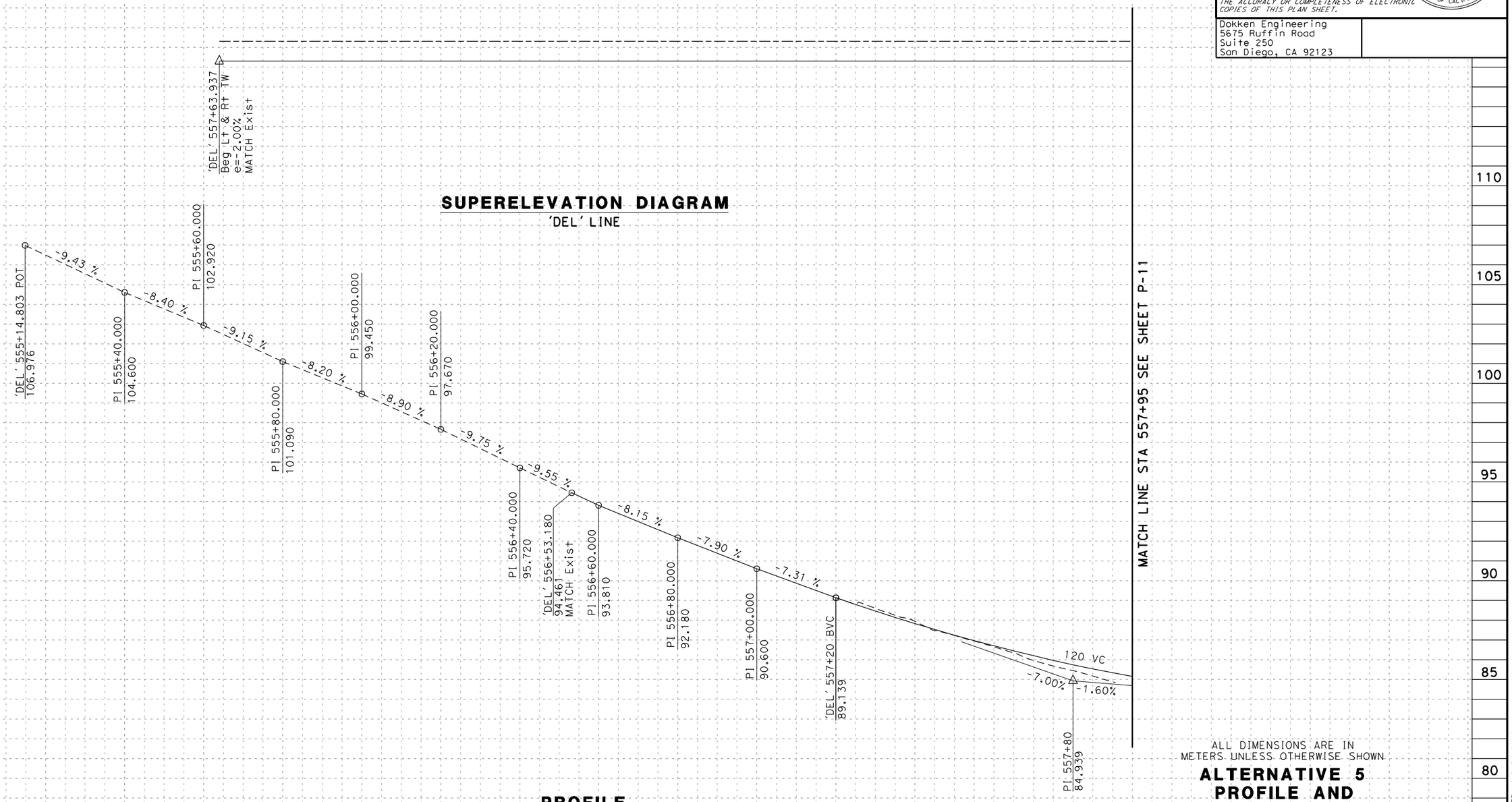
SUPERELEVATION DIAGRAM
'DEL' LINE



PROFILE
'DEL' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-10

Station

m^3 Exc

Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:16 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb010_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

MATCH LINE STA 557+95 SEE SHEET P-10

AXIS OF ROTATION CENTER LINE 'DEL' LINE

-2% Lt & Rt TW

557+96.170 BB

559+46.222 EB

SUPERELEVATION DIAGRAM

'DEL' LINE

+10% 0% -10%

90 85 80 75

FG

EVC 558+40 83.979

BVC 558+95 83.099

PI 559+55 82.139

PRVC 560+15 80.579

LO 561+01.667 79.452

PI 560+75.00 79.019

EVC 561+35.00 79.619

'DEL' 561+55 POT 79.819 MATCH Exist

OG

-1.60%

-1.60% -2.60%

120 VC

-2.60% +1.00%

120 VC

+1.00% +1.00%

1:1.5 SLOPE PAVING

'SD-5' LINE

1:1.5 SLOPE PAVING

PROFILE

'DEL' LINE

Station: 558+00 559+00 560+00 561+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-11

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:22:17 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad DGN FILE => ...\1643fb011_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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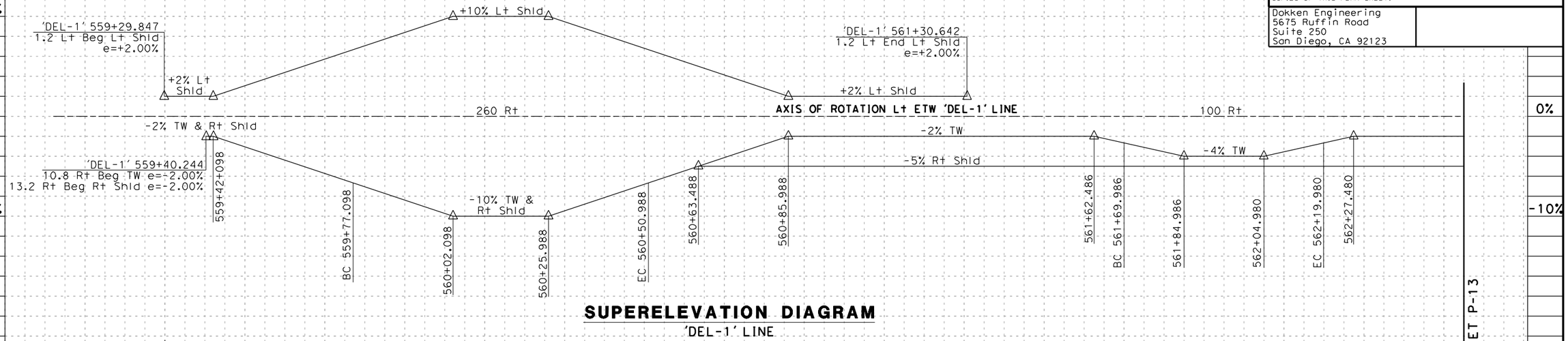
Caltrans

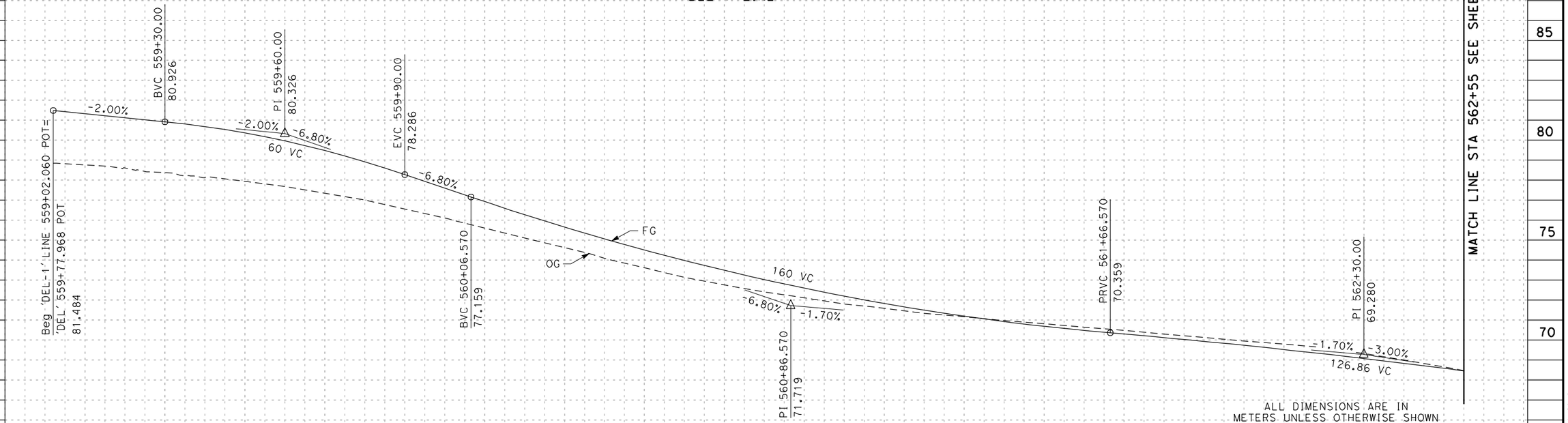
SUPERELEVATION DIAGRAM

'DEL-1' LINE



PROFILE

'DEL-1' LINE



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-12

Station	559+00	560+00	561+00	562+00
m^3 Exc				
m^3 Emb				

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:18 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb012_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

80
75
70
65

AXIS OF ROTATION Lt ETW 'DEL-1' LINE
-2% TW
-5% Rt Shld
'DEL-1' 563+20
3.6 Rt END TW e=-2.00%
6.6 Rt END Rt Shld e=-5.00%

MATCH LINE STA 562+55 SEE SHEET P-12

EVC 562+93.430
67.378
-3.00%
FG
OG
END 'DEL-1' 563+20 POT=
38.1 Rt 'SD-5' 563+20 POT
66.580
MATCH Exist

SUPERELEVATION DIAGRAM
'DEL-1' LINE

PROFILE
'DEL-1' LINE

Station 559+00 563+00

m^3 Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-13

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:22:19 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb013_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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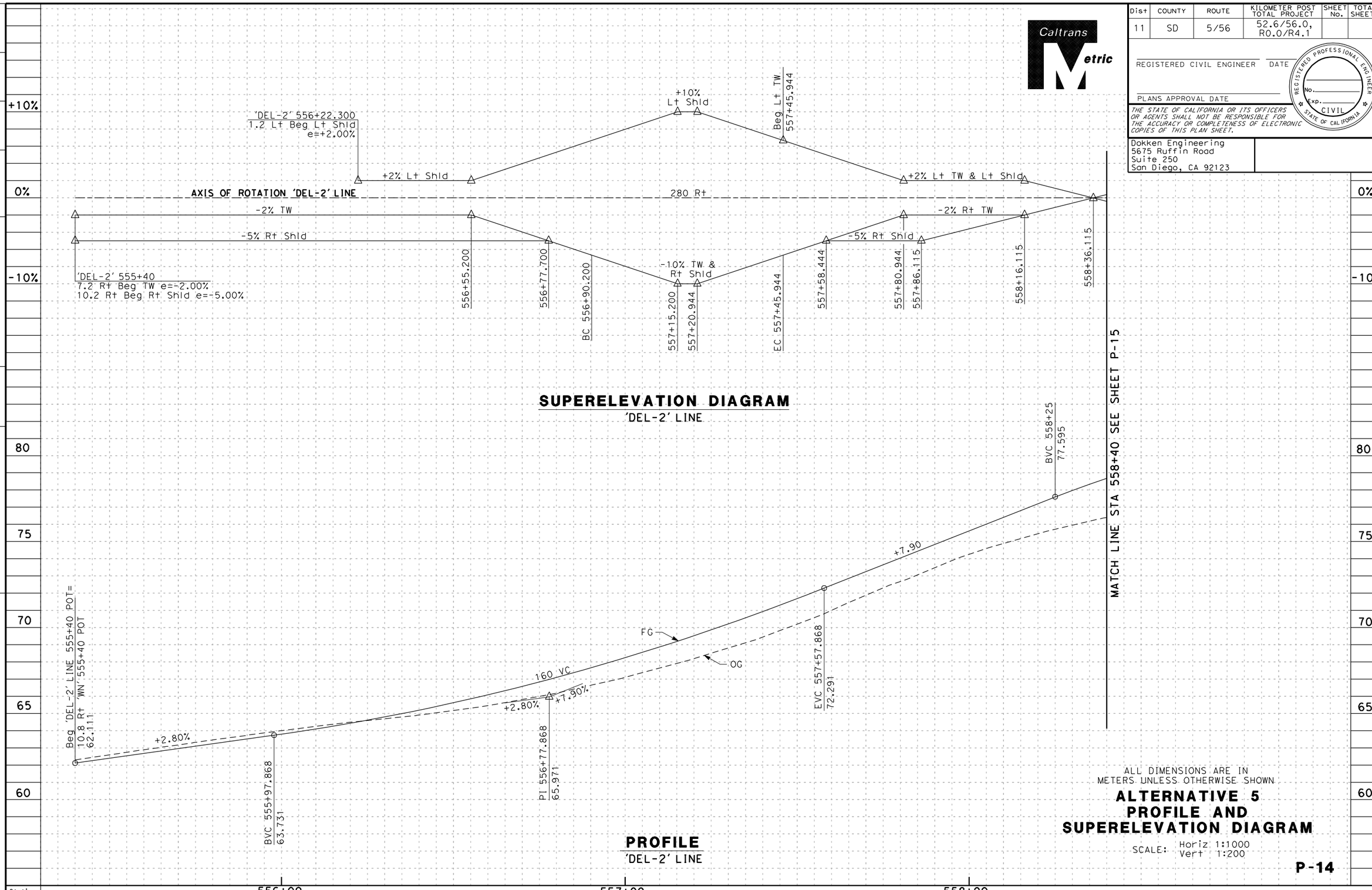

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND
SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-14

Station	
m^3	Exc
	Emb

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USERNAME => Merjad
DGN FILE => ...\1643fb014_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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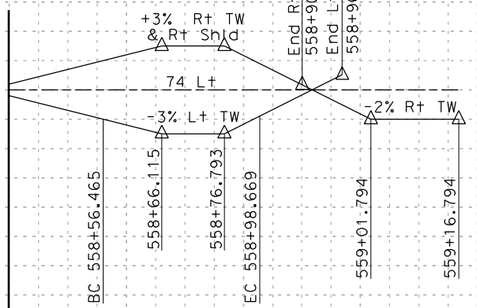
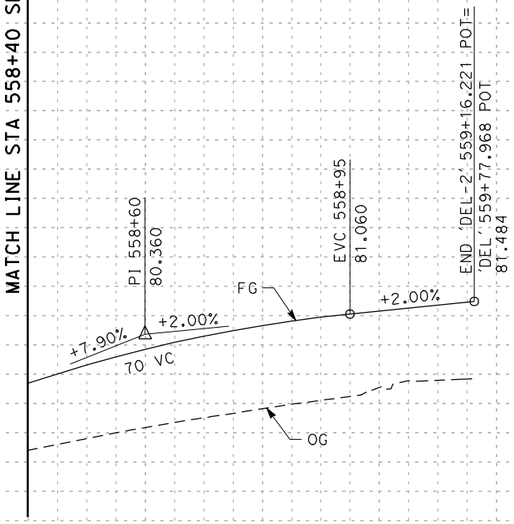
Caltrans

+10% 0% -10%



SUPERELEVATION DIAGRAM
'DEL-2' LINE

MATCH LINE STA 558+40 SEE SHEET P-14



PROFILE
'DEL-2' LINE

85 80 75 70

Station 559+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-15

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1122:21 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad DGN FILE => ...\1643fb015_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Caltrans

+10% 0% -10%

1.2 Rt 'DEL-3' 554+99.358
Beg Rt Shld
e=+2.00%

+2% Rt Shld

AXIS OF ROTATION 100 Lt AXIS OF ROTATION

-2% TW -4% TW -2% TW -5% Lt Shld

6.6 Lt 'DEL-3' 553+10
Beg Lt Shld
e=-5.00%

554+02.520 | BC 554+10.021 | 554+25.020 | 554+45.014 | EC 554+60.015 | 554+67.514 | 556+39.600 | 556+62.100

SUPERELEVATION DIAGRAM
'DEL-3' LINE

MATCH LINE STA 556+65 SEE SHEET P-17

75 70 65 60 55

Beg 'DEL-3' LINE 553+10 POT=
33 Lt 'SD-5' 553+10 POT
55.770

+2.80%

BVC 554+60
59.970

OG

190 VC
+2.80%
+9.00%

PI 555+55
62.630

FG

EVC 556+50
71.180

PROFILE
'DEL-3' LINE

Station: 554+00 555+00 556+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-16

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:22 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb016_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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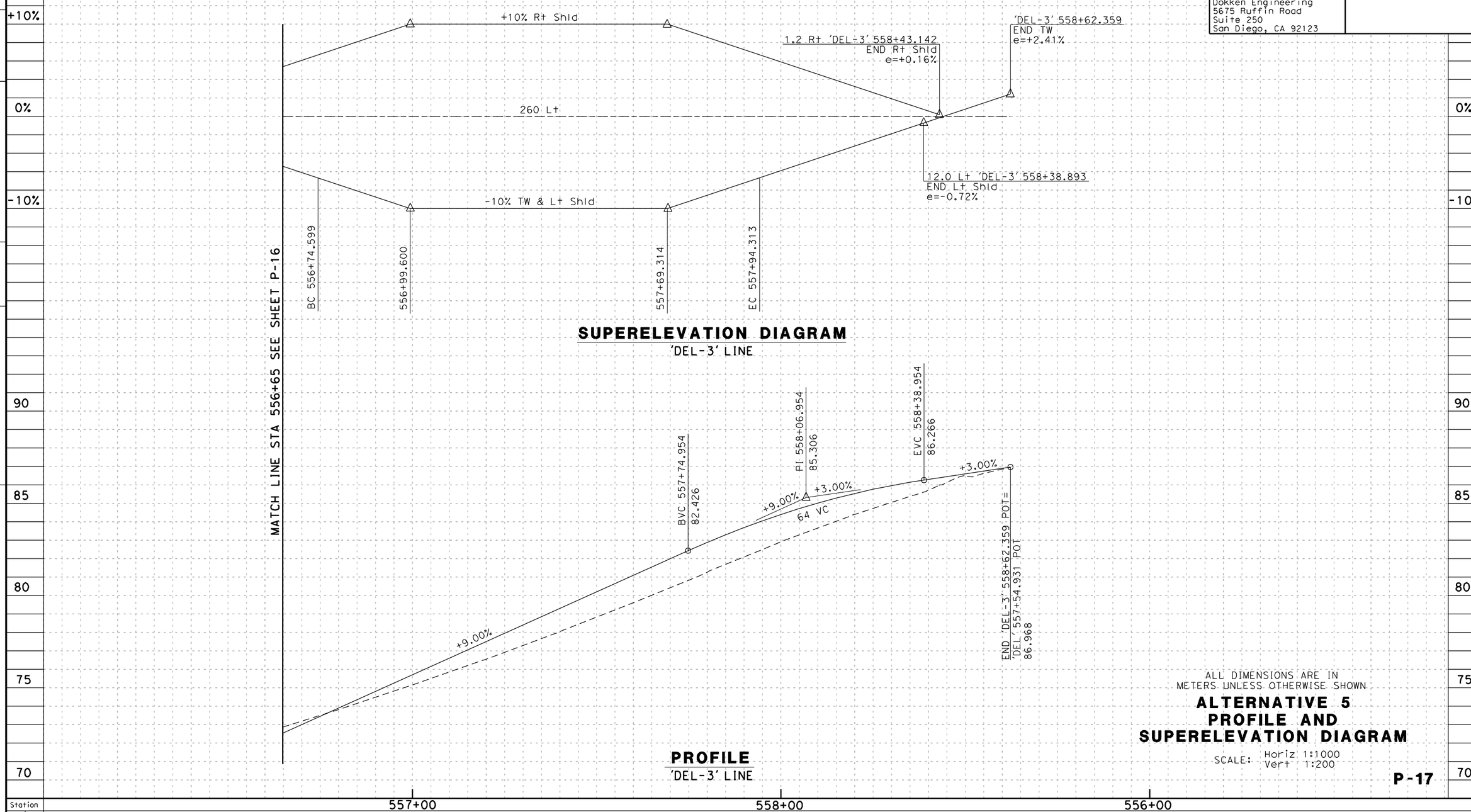

SUPERELEVATION DIAGRAM
'DEL-3' LINE

PROFILE
'DEL-3' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-17

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USERNAME => Merjad
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CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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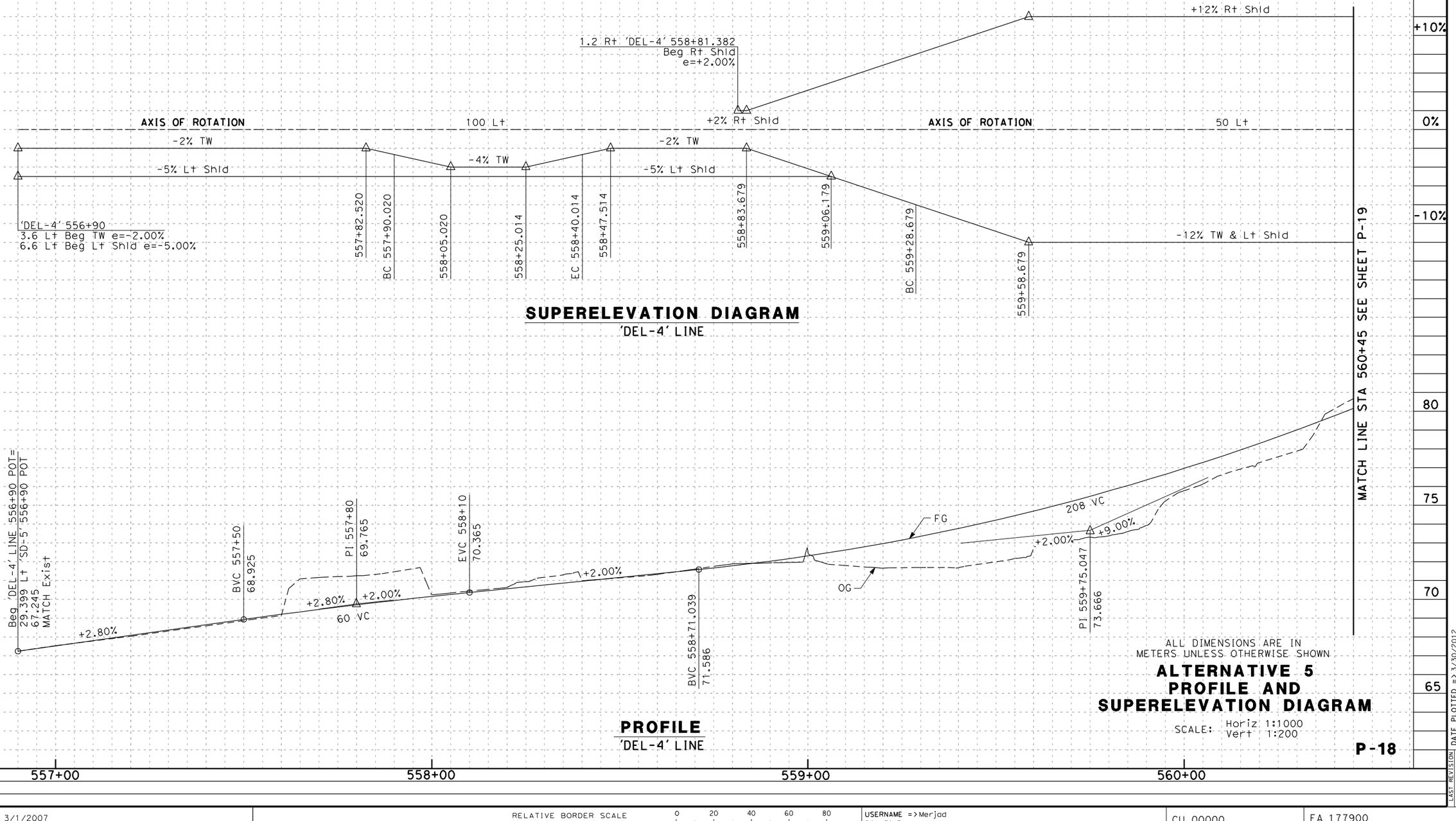

SUPERELEVATION DIAGRAM
'DEL-4' LINE

PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-18

Station

m^3 Exc | Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:24 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb018_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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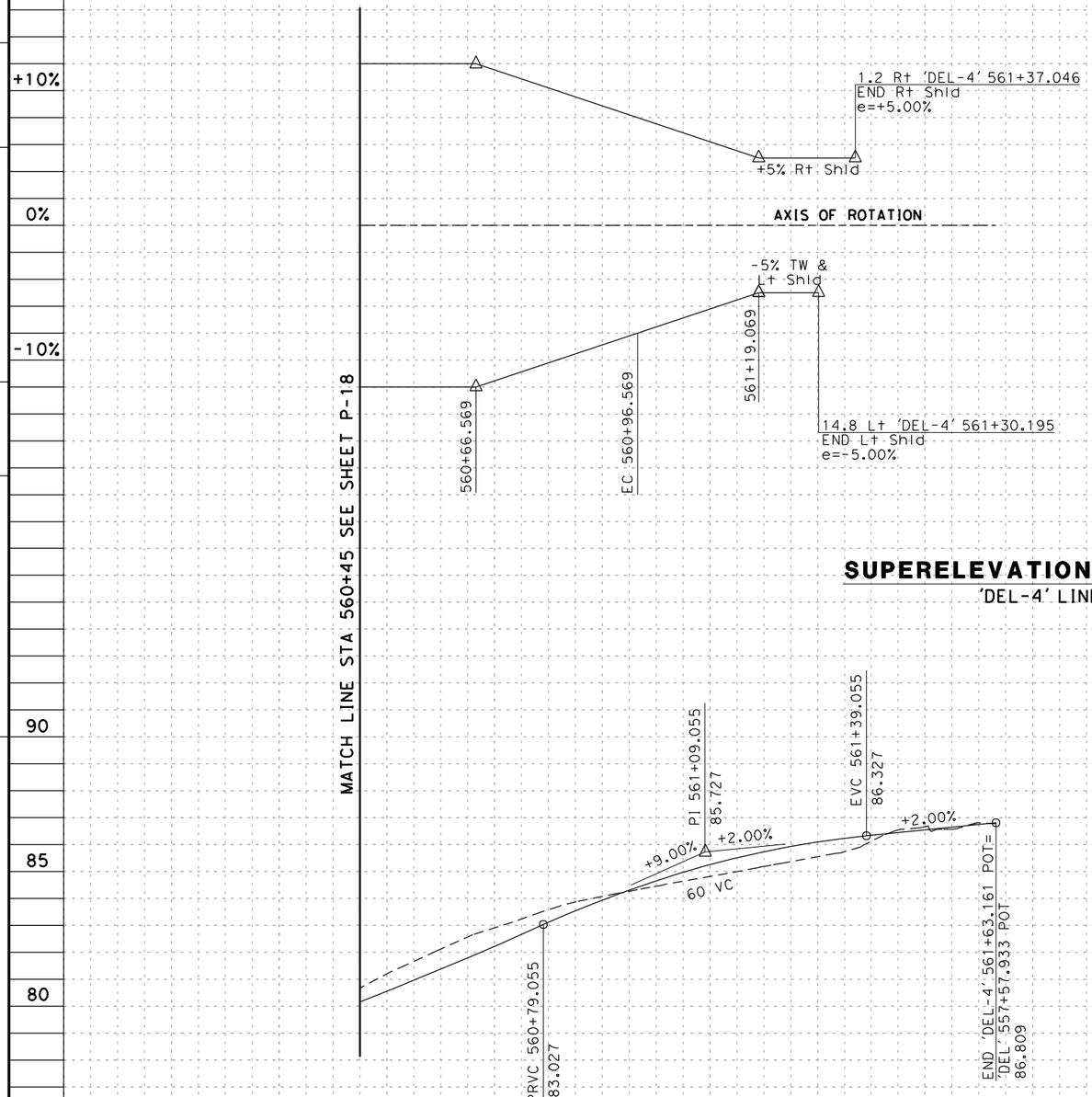

SUPERELEVATION DIAGRAM
'DEL-4' LINE

PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-19

Station	
m^3	Exc
	Emb

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DATE REVISED

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:22:25 PM

LAST REVISION 00-00-00

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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Caltrans

+10% 0% -10%

'CV-1' 539+89.749
1.2 Lt Beg Lt Shld
e=+2.00%
MATCH Exist

+6% Lt Shld

541+20.283

+2% Lt Shld

580 Rt

AXIS OF ROTATION Lt ETW 'CV-1' LINE

-2% TW

-5% Rt Shld

-6% TW & Rt Shld

'CV-1' 540+04.756
7.2 Rt Beg TW
10.2 Rt Beg Rt Shld
e=-2.98%
MATCH Exist

BC 540+16.172

540+31.172

540+80.283

540+90.783

EC 541+05.283

541+99.870

MATCH LINE STA 542+35 SEE SHEET P-21

SUPERELEVATION DIAGRAM
'CV-1' LINE

25 20 15 10 5

Beg 'CV-1' LINE 539+60.741 POT=
'CVR' 540+09.568 POT
8.746
MATCH Exist

PI 539+80.741
8.657

PI 540+00.741
8.906

PI 540+20.741
9.590

'CV-1' 540+40.741 PI
10.762
MATCH Exist

BVC 540+59.524
11.889

PI 541+37.524
16.569

EVC 542+15.524
19.533

-0.45 % +1.25 % +3.42 % +5.86 % +6.00 % +6.00 % +3.80 %

156 VC

OG

FG

PROFILE
'CV-1' LINE

Station: 540+00 541+00 542+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-20

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:22:27 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb020_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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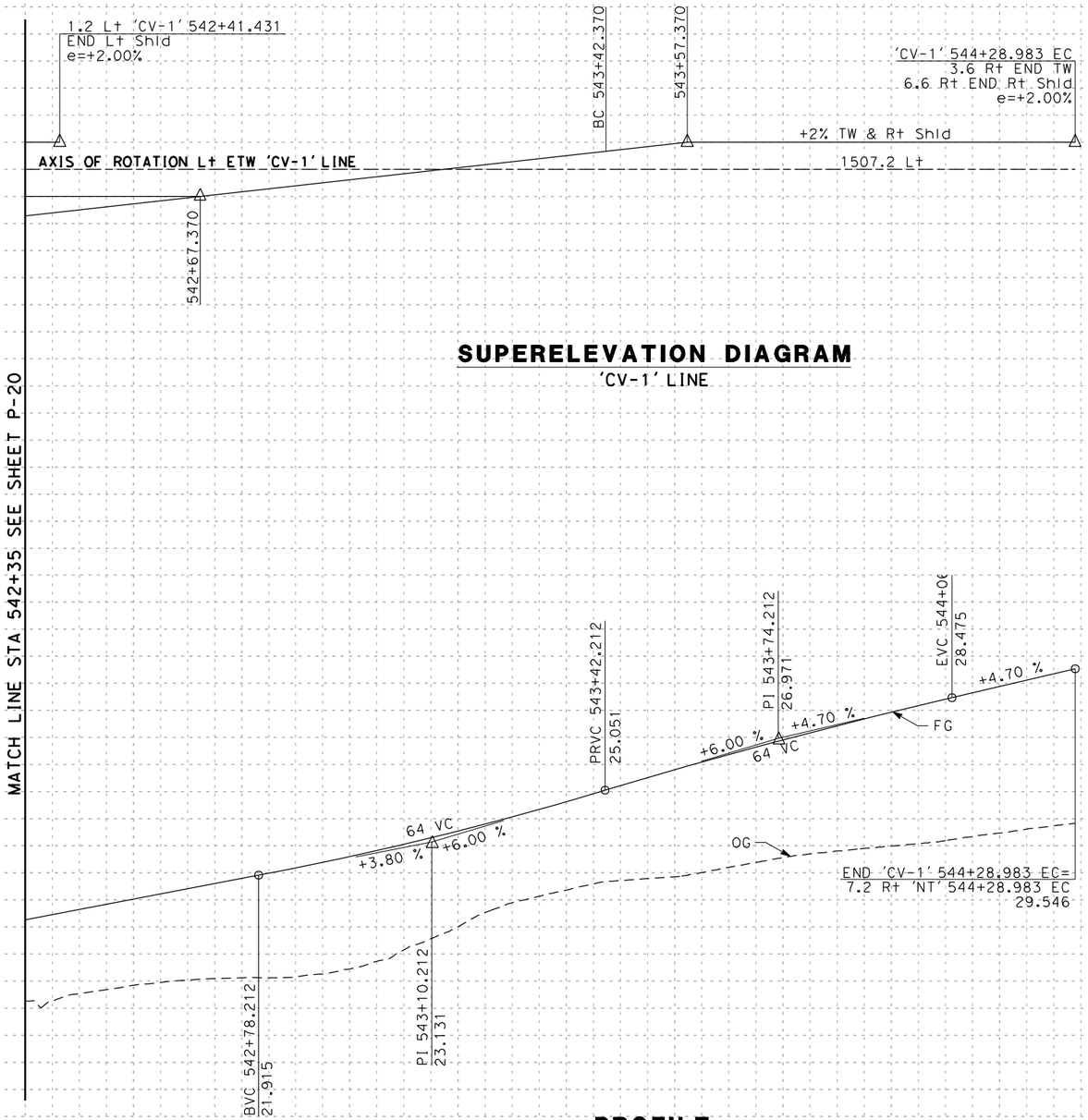
Caltrans

+10% 0% -10%



SUPERELEVATION DIAGRAM
'CV-1' LINE

PROFILE
'CV-1' LINE

30 25 20 15 10

Station
m^3 Exc
Emb

543+00 544+00

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-21

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:28 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb021_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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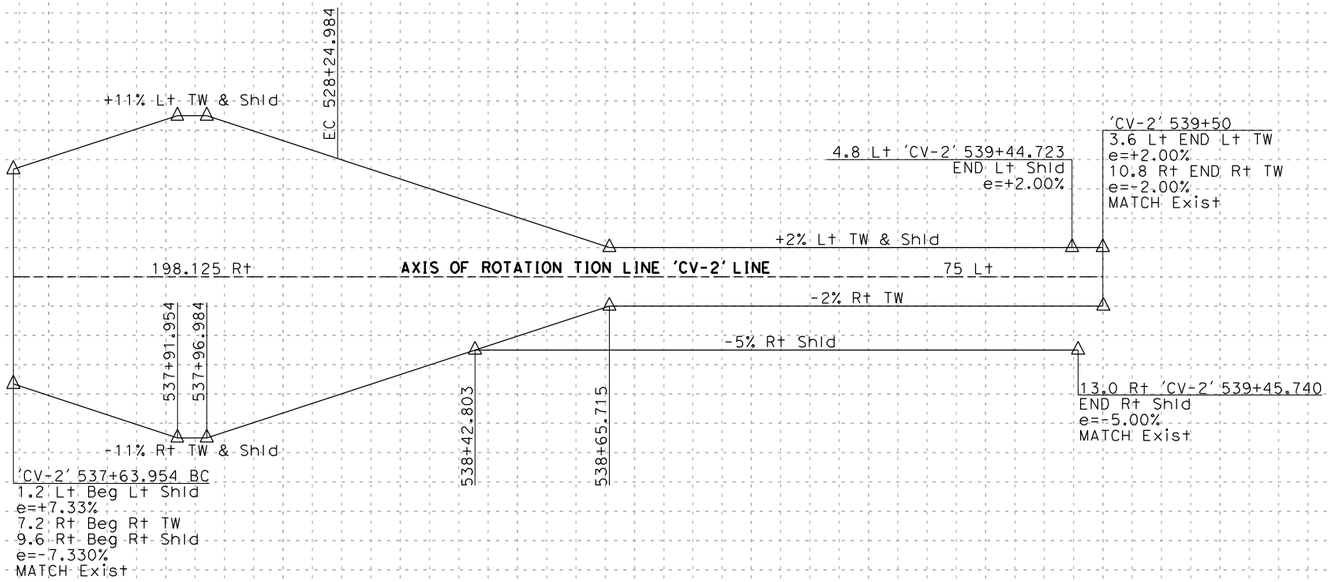
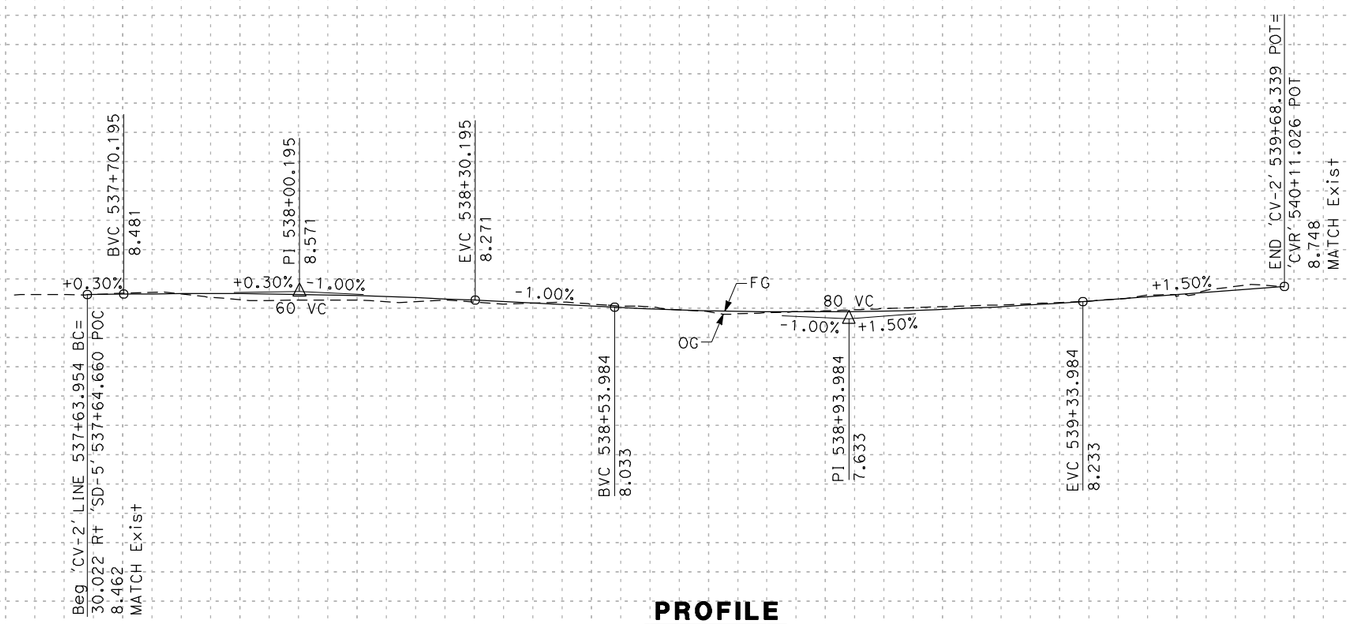


SUPERELEVATION DIAGRAM
'CV-2' LINE



PROFILE
'CV-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-22

Station 538+00 539+00 540+00

m³ Exc Emb

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb022_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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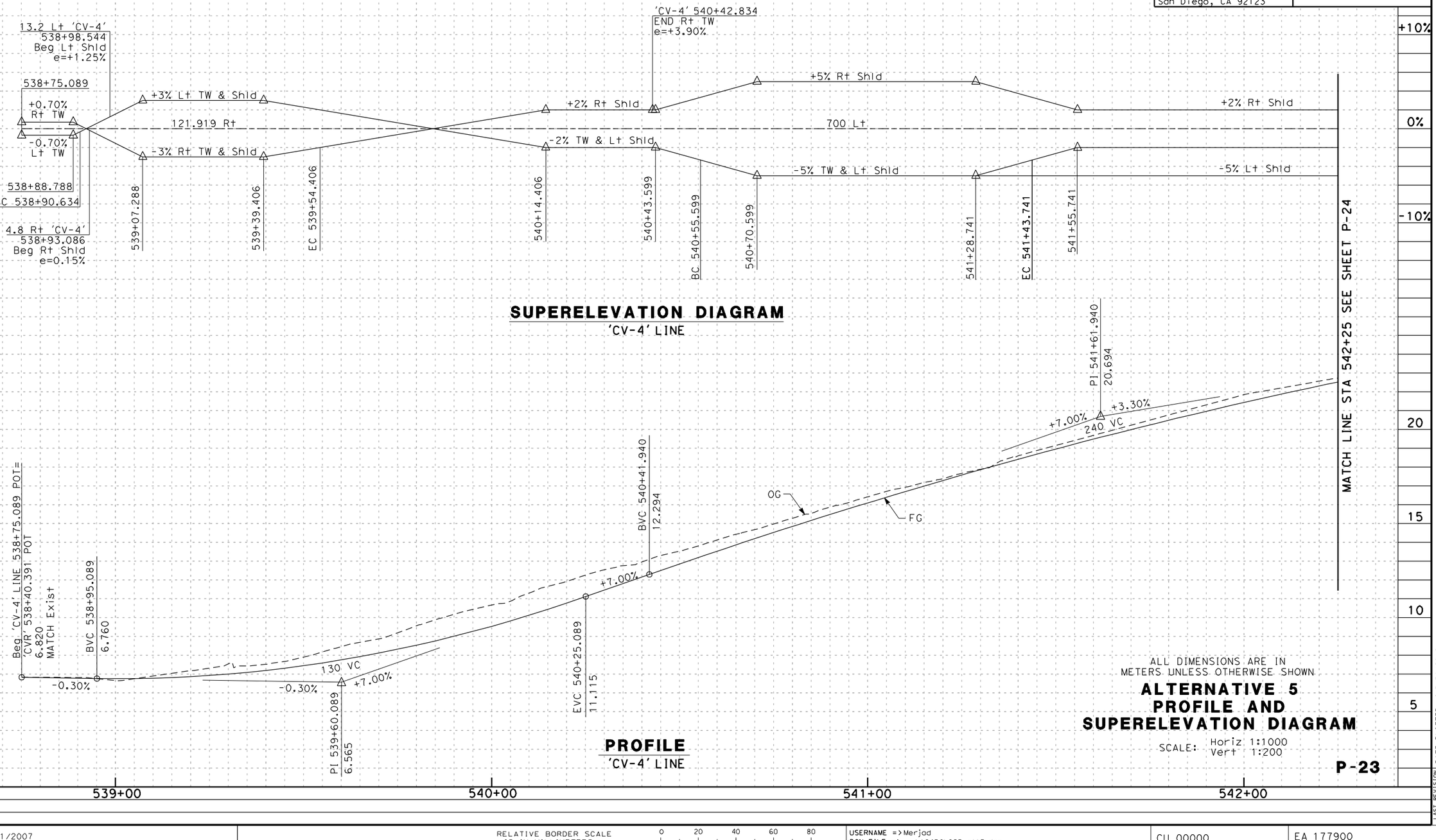

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-23

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:30 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb023_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%

0%

-10%

1.2 Rt 'CV-4' 542+50.797
END Rt Shld
e=+2.00%

+2% Rt Shld

AXIS OF ROTATION

-2% TW

-5% Lt Shld

'CV-4' 543+33.095
7.2 Lt END TW
e=-2.00%
10.2 Lt END Lt Shld
e=-5.00%

MATCH LINE STA 542+25 SEE SHEET P-23

SUPERELEVATION DIAGRAM

'CV-4' LINE

EVC 542+81.940
24.654

END 'CV-4' LINE
543+33.095 POT=
30.579 Lt 'SD-5'
543+33.116 POT
26.343

PROFILE

'CV-4' LINE

35 30 25 20

Station

543+00 544+00

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-24

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:31 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb024_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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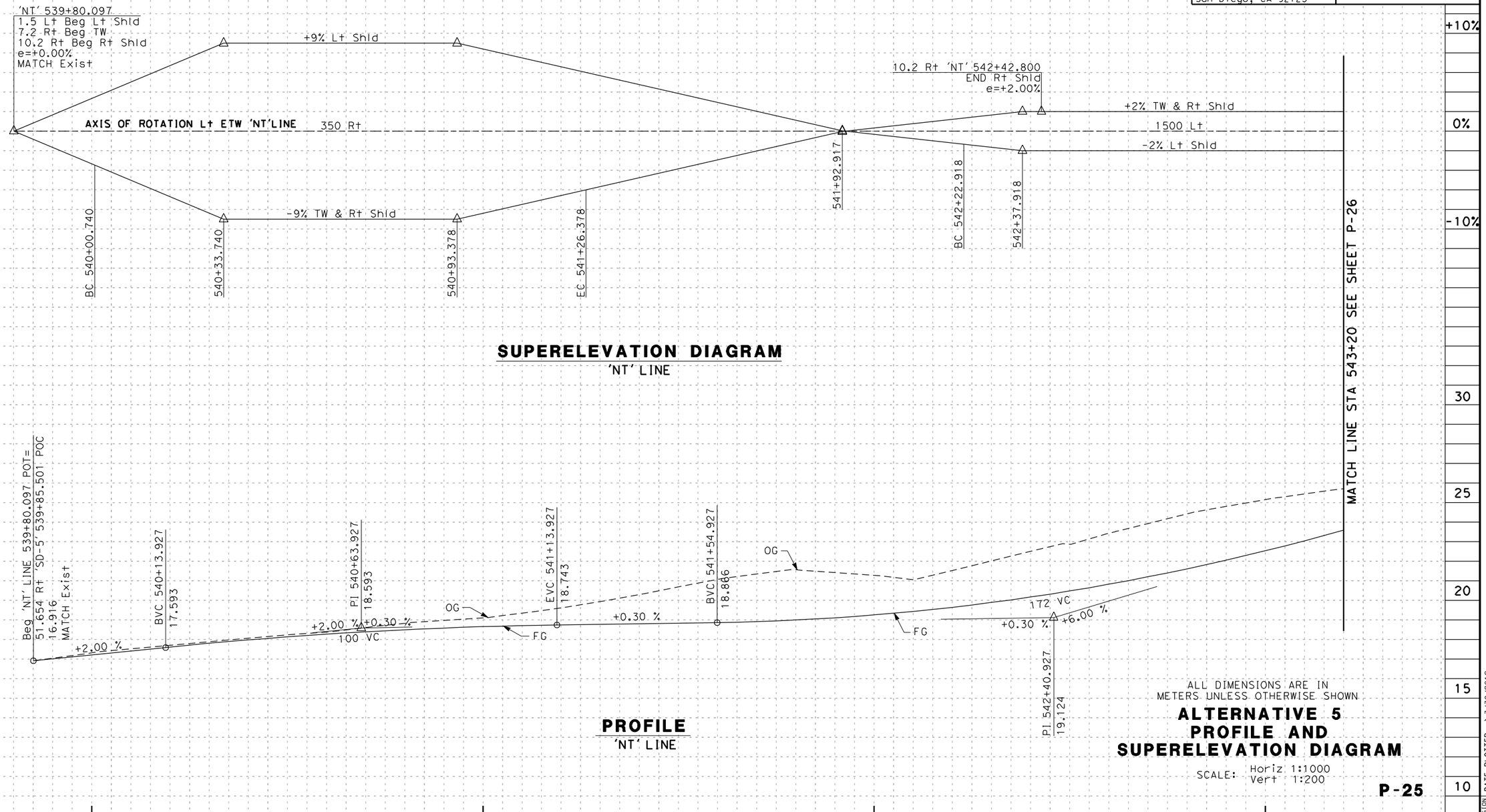
Caltrans

SUPERELEVATION DIAGRAM
'NT' LINE



PROFILE
'NT' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-25

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:32 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb025_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

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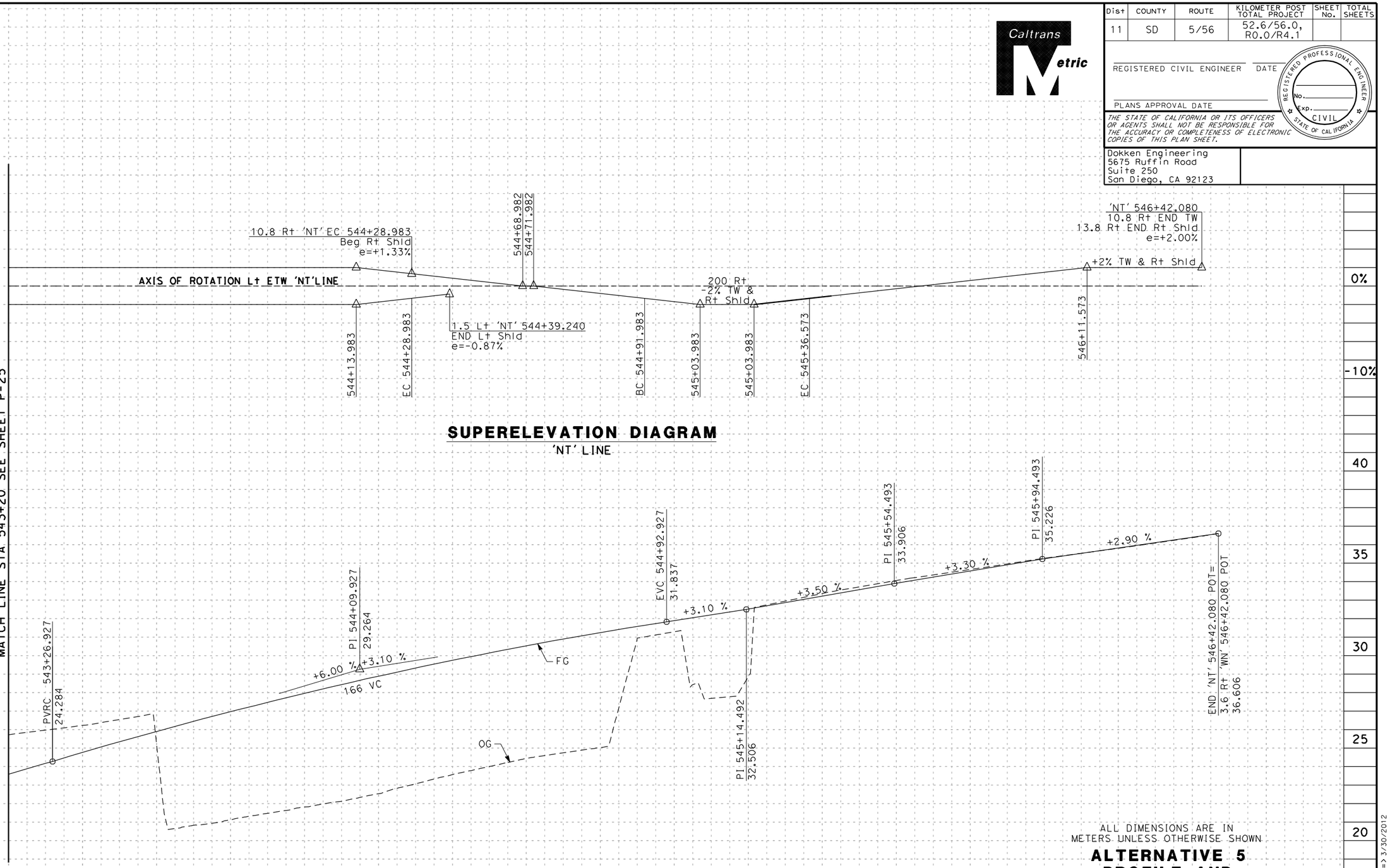
Caltrans



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-26

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:33 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb026_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10% 0% -10%

+12% Rt Shld

1.2 Rt 'CC-4' 39+49.464
Beg Rt Shld
e=+10.56%

AXIS OF ROTATION Rt ETW 'CC-4' LINE

1150 Lt 44.196 Lt

-2% TW

-5% Lt Shld

'CC-4' 37+76.104
3.6 Lt Beg TW
e=-2.00%
6.6 Lt Beg Lt Shld
e=-5.00%

BC 38+80.198

39+04.419

PCC 39+60.933

-12% TW & Lt Shld

40+67.219

'CC-4' 40+83.185
10.973 Lt END Lt Shld
8.534 Lt END TW
e=-10.00%
1.219 Rt END Rt Shld
e=+10.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CC-4' LINE

PROFILE
'CC-4' LINE

Beg 'CC-4' LINE 37+76.104 POT=
17.7 Lt 'SD-56' 37+76.104 POT
29.204

+1.00%

BVC 38+81.140
30.255

OG

FG

198 VC

+1.00%

+7.74%

PI 39+80.140
31.245

EVC 40+79.140
38.907

'CC-4' 40+83.185
39.220
MATCH Exist

+7.74%

+6.11 %

PI 41+03.185
40.442

+3.29 %

PI 41+23.185
41.101

+1.13 %

PI 41+43.185
41.326

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-27

45 40 35 30 25

Station 38+00 39+00 40+00 41+00

m^3 Exc

Emb

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:22:35 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb027_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

'CC-3' 35+56.291 BC
7.2 Rt Beg TW
9.6 Rt Beg Rt Shld
e=+6.00%

+6% TW & Rt Shld

AXIS OF ROTATION Lt ETW 'CC-3' LINE

'CC-3' 36+39.051
1.2 Lt
Beg Lt Shld
e=-6.00%

-6% Lt Shld

36+50.360

EC 36+65.360

36+95.360

+2% Lt Shld

-2% TW

37+10.360

-5% Rt Shld

37+32.860

'CC-3' 37+70.621
1.2 Lt END Lt Shld
e=+2.00%
10.8 Rt END TW
e=-2.00%
12.0 Rt END Rt Shld
e=-5.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CC-3' LINE

40
35
30
25

Beg 'CC-3' LINE 35+56.291 BC=
19.202 Rt 'SD-56' 35+56.292 POC
29.721
MATCH Exist

+0.80 %

OG

FG

BVC 36+67.061
30.607

60 VC

+0.80% +1.50%

PI 36+97.061
30.847

+1.50 %

EVC 37+27.061
31.297

'CC-3' 37+70.621
31.950
MATCH Exist

+1.71 %

PI 37+90.621
32.293

+1.89 %

PI 38+10.621
32.671

+1.78 %

PI 38+30.621
33.027

+1.98 %

PI 38+50.621
33.422

+2.11 %

PI 38+70.621
33.845

+2.24 %

PI 38+90.621
34.293

+1.63 %

END 'CC-3' 39+16.361 POT=
'CCO' 19+25.394 POC
34.713

PROFILE
'CC-3' LINE

Station: 36+00 | 37+00 | 38+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-28

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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb028_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10% | 0% | -10%

'CC-2' 39+40
1.2 Lt Beg Lt Shld e=+3.5%
7.2 Rt Beg TW e=-3.5%
9.9 Rt Beg Rt Shld e=-3.5%
MATCH Exist

+2.0% Lt Shld | +10% Lt Shld

1.2 Lt 'CC-2' 41+41.982
END Lt Shld
e=+10.0%

AXIS OF ROTATION Lt ETW 'CC-2' LINE

300 Rt | 100 Rt

-2.0% TW | -5% Rt Shld | -10% TW & Rt Shld

39+59.286 | 40+08.717 | 40+31.217 | BC 40+43.717 | 40+68.717 | PCC 41+66.926 | 42+01.982 | EC 42+16.982 | 42+21.533

SUPERELEVATION DIAGRAM
'CC-2' LINE

MATCH LINE STA 42+40 SHEET P-30

Station: 40+00 | 41+00 | 42+00

m³ Exc / Emb

39+63.264
35.650
+2.02 %
74 VC
PI 39+72.574
36.315
-4.80 %
PVRC 40+09.574
34.539
FG
166 VC
-4.80 %
+0.90 %
PI 40+92.626
30.552
41+49.451
31.182
EVC 41+75.678
31.300
+2.87 %
Beg 'CC-2' LINE 39+16.763 POT=
'CCO' 19+25.394 POC
34.713
'CC-2' 39+35.574
35.253
MATCH Exist

PROFILE
'CC-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-29

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USERNAME => Merjad
DGN FILE => ...\1643fb029_alt5.dgn

CU 00000 | EA 177900

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Caltrans

+10%
0%
-10%

AXIS OF ROTATION Lt ETW 'CC-2' LINE

-2% TW

-5% Rt Shld

'CC-2' 43+17.003
6.0 Rt END Rt Shld
e=-5.00%
3.6 Rt END TW
e=-2.00%

MATCH LINE STA 42+40 SHEET P-29

+0.90 %

FG

END 'CC-2' 43+17.003 POT=
19.145 Rt 'SD-56' 43+17.003 POT
32.572

40
35
30
25

Station
m^3 Exc
Emb

43+00

SUPERELEVATION DIAGRAM
'CC-2' LINE

PROFILE
'CC-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-30

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb030_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

'C-1' 23+11.080
13.2 Lt Beg Lt Shld
10.8 Lt Beg TW
e=+0.3%
MATCH Exist

+8% TW & Lt Shld

24+42.312

+10% Rt Shld

+2% Rt Shld

100 Rt

AXIS OF ROTATION Rt ETW 'C-1' LINE

300 Lt

-2% TW

-5% Lt Shld

'C-1' 23+11.769
1.2 Rt Beg Rt Shld
e=-0.4%
MATCH Exist

-8% Rt Shld

-10% TW & Lt Shld

BC 23+41.722
23+58.354
23+82.312
EC 24+02.312
24+57.312
24+79.812
24+94.613
25+17.113
BC 25+29.613
25+54.613

MATCH LINE STA 26+00 SHEET P-32

SUPERELEVATION DIAGRAM
'C-1' LINE

30
25
20

'C-1' 23+11.769
26.508
MATCH Exist

-2.00 %

FG

OG

160 VC

-2.00%

+0.50%

BVC 24+95.977
22.824

PI 25+75.977
21.224

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-31

PROFILE
'C-1' LINE

Station: 23+00 | 24+00 | 25+00 | 26+00

m³ Exc
Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:39 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb031_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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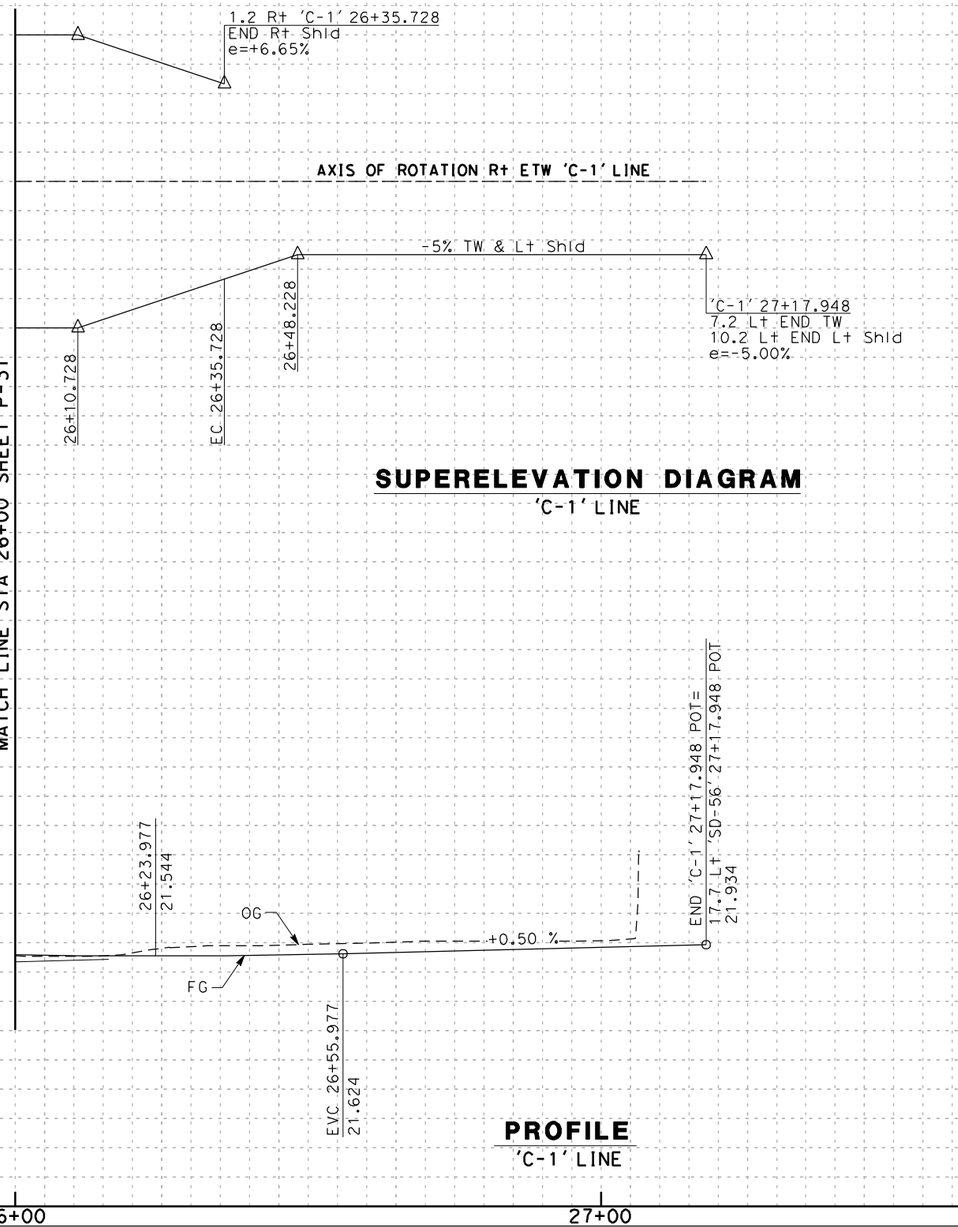
Caltrans



SUPERELEVATION DIAGRAM
'C-1' LINE

PROFILE
'C-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-32

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:40 PM

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USERNAME => Merjad
DGN FILE => ...\1643fb032_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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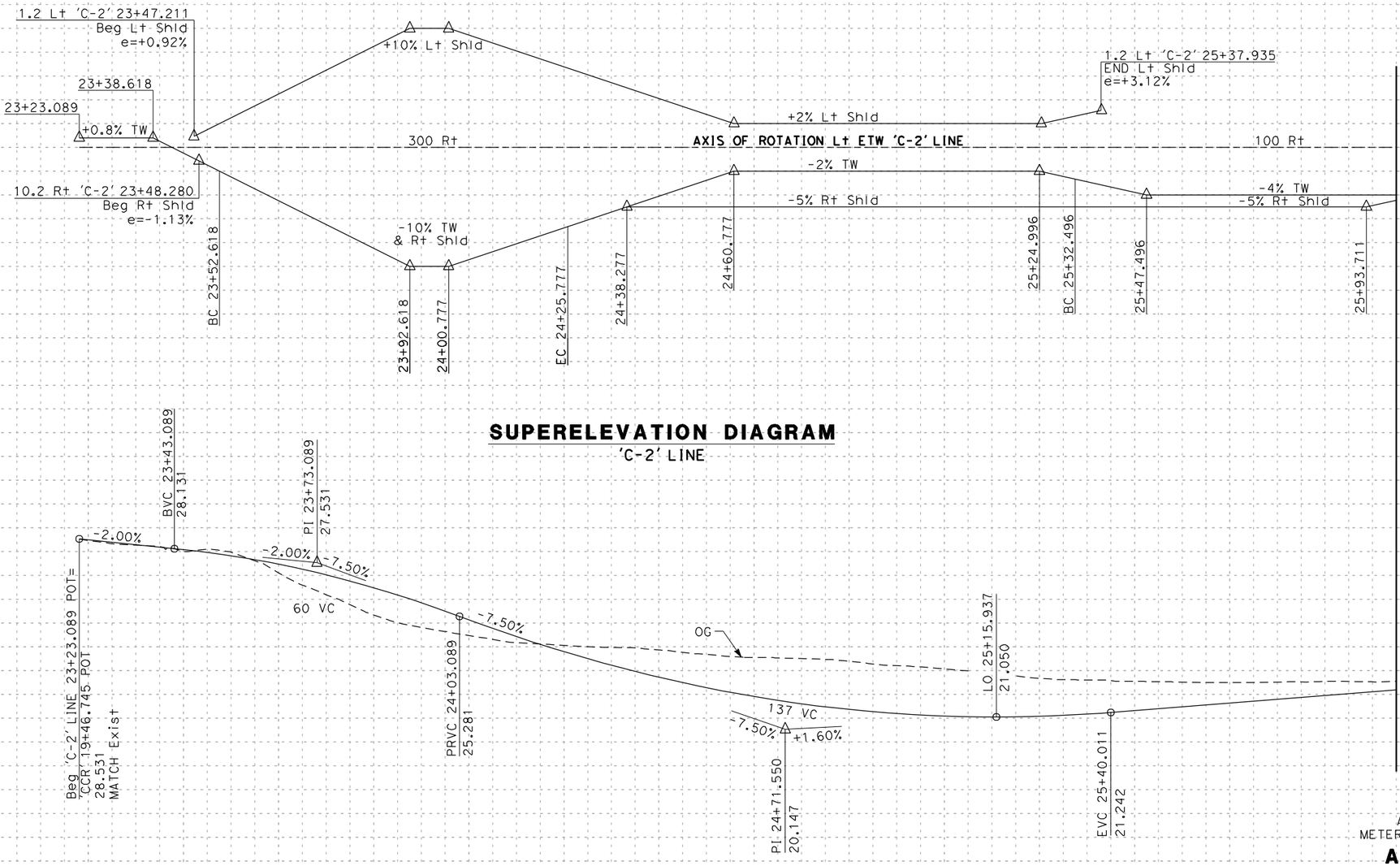
Caltrans



SUPERELEVATION DIAGRAM
'C-2' LINE

PROFILE
'C-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-33

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:41 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb033_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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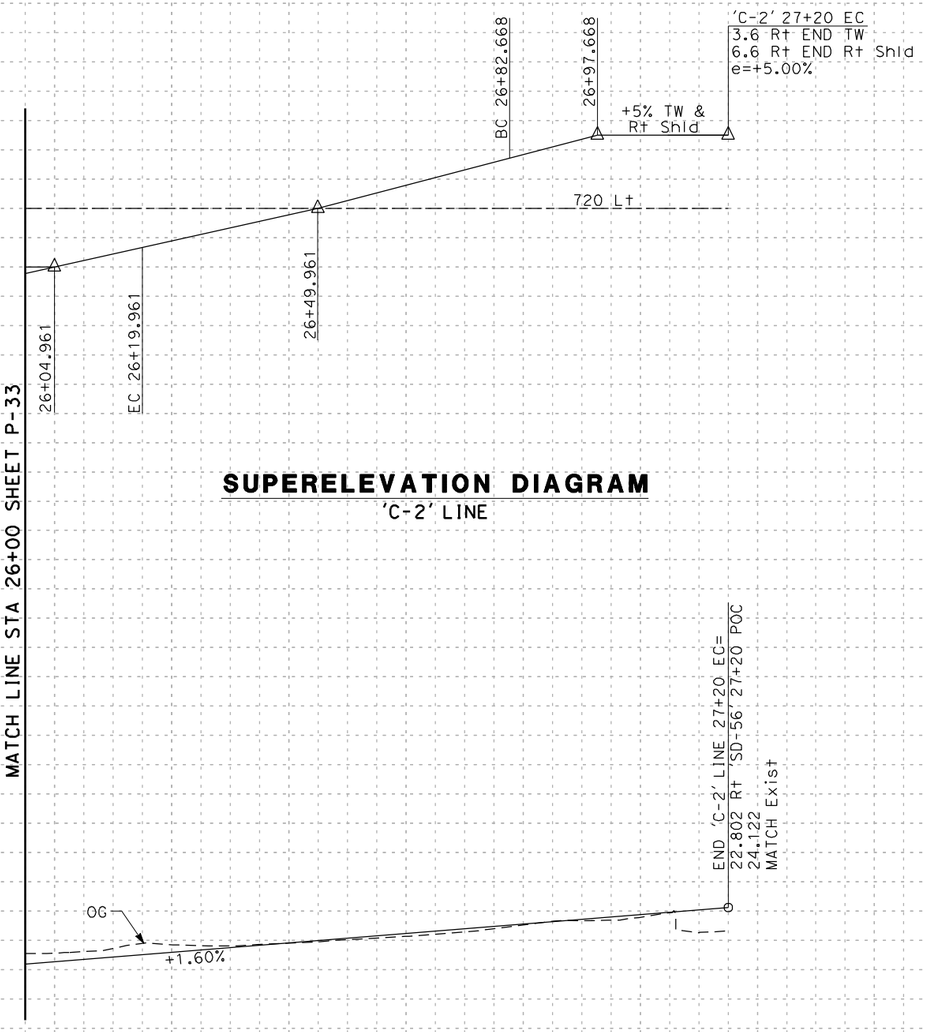

SUPERELEVATION DIAGRAM
'C-2' LINE

PROFILE
'C-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-34

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:42 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb034_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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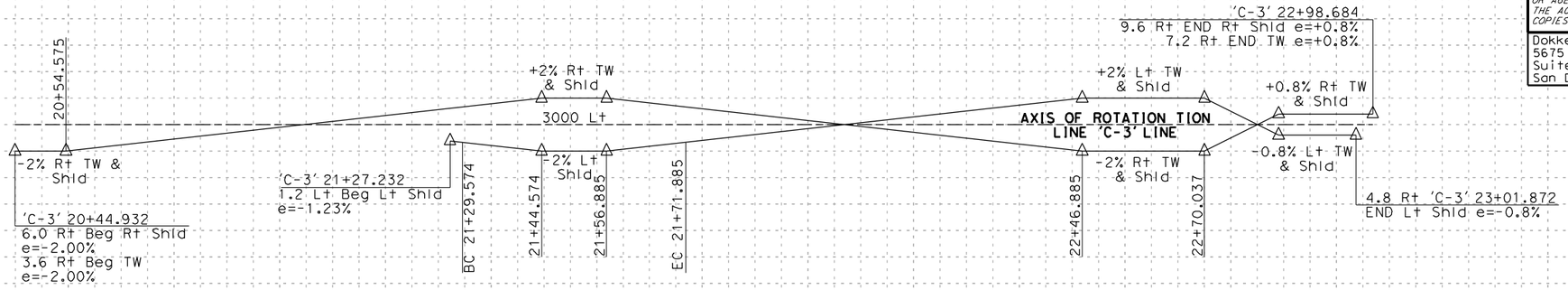
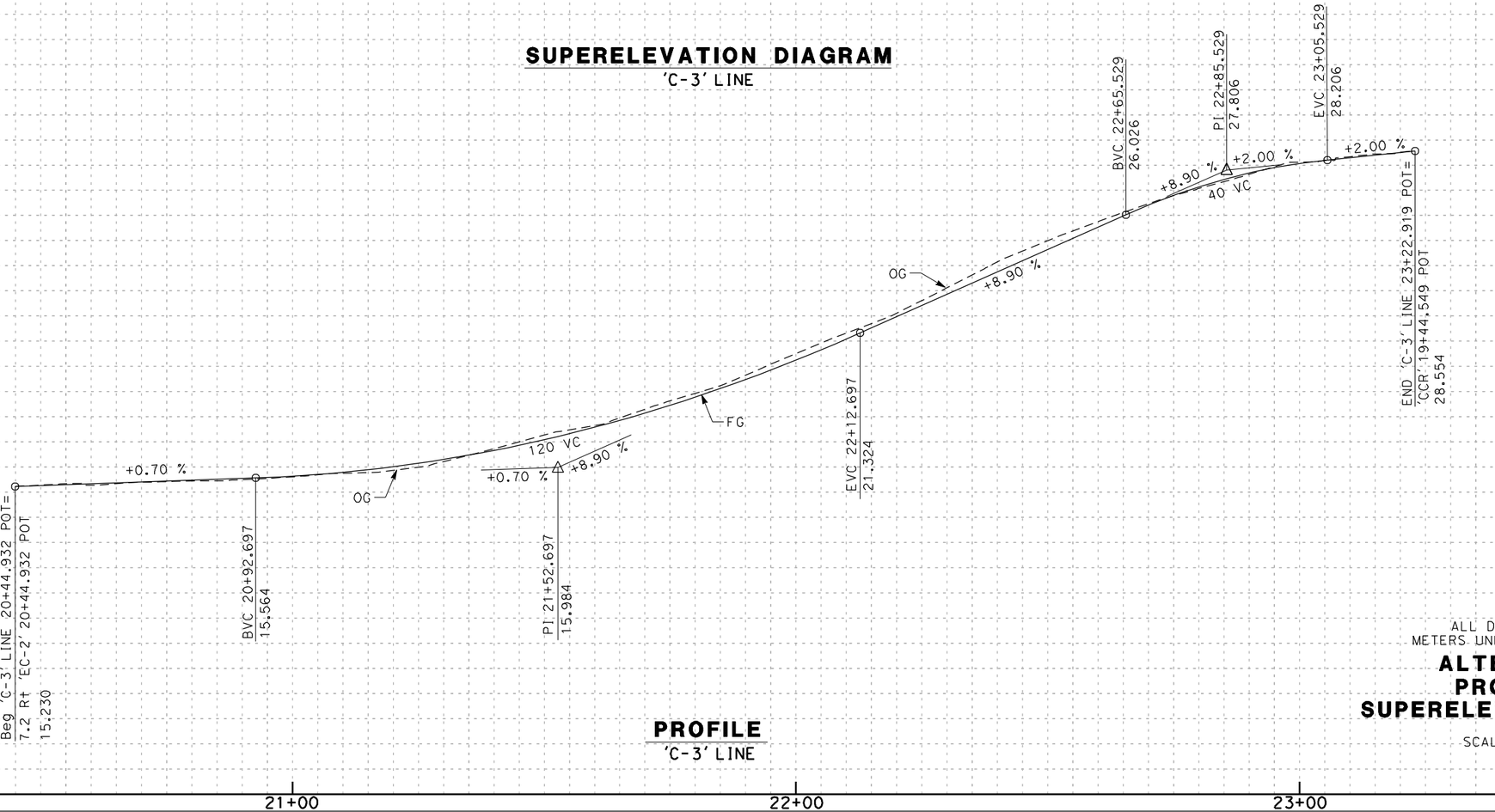
Caltrans

SUPERELEVATION DIAGRAM
'C-3' LINE





PROFILE
'C-3' LINE

Station: 21+00 | 22+00 | 23+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-35

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BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb035_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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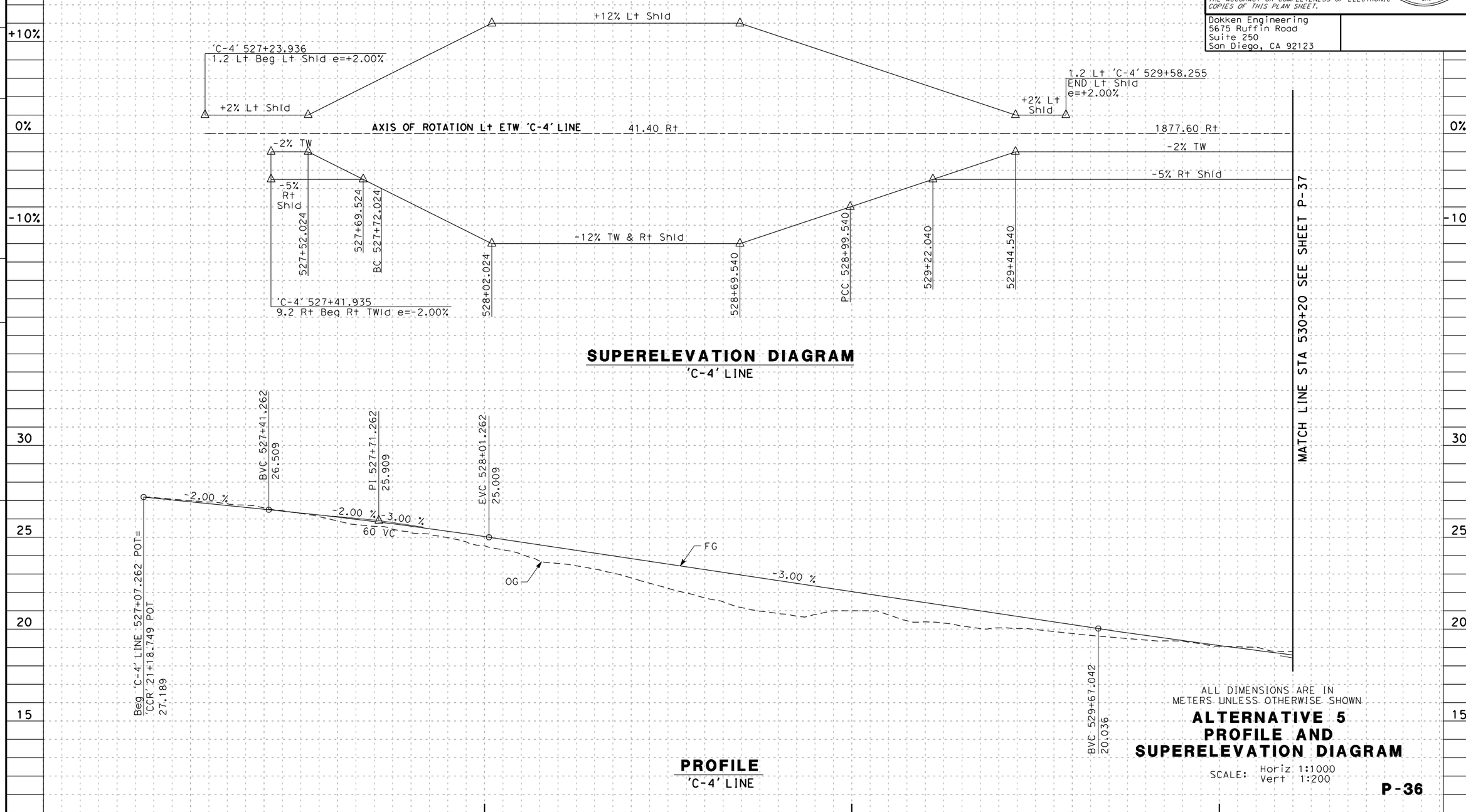

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-36

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:22:44 PM

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10%
0%
-10%

AXIS OF ROTATION Lt ETW 'C-4' LINE

-2% TW

-5% Rt Shld

'C-4' 531+37.359
3.6 Rt END TW e=-2.00%
6.6 Rt END Rt Shld e=-5.00%

EC 530+37.339

MATCH LINE STA 530+20 SEE SHEET P-36

SUPERELEVATION DIAGRAM
'C-4' LINE

END 'C-4' 531+37.359 POT=
7.2 Rt 'WN' 531+37.359 POT
16.431

140 VC

-3.00 %

-1.50 %

OG

FG

-1.50 %

PI 530+37.042
17.936

EVC 531+07.042
16.886

PROFILE
'C-4' LINE

Station: 531+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-37

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:46 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb037_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10% 0% -10%

8.4 Lt 'FLYOV' 13+22.648
Beg Lt Shld e=+2.00%

7.2 Lt 'FLYOV' 12+52.105
Beg Lt TW e=+2.00%

+2% Lt TW

+5% Lt TW & Shld

AXIS OF ROTATION Rt ETW 'FLYOV' LINE 740 Rt

2.4 Rt 'FLYOV' 13+22.648
Beg Rt Shld e=-2.00%

-5% Rt Shld

13+27.779

BC 13+39.779

13+54.779

SUPERELEVATION DIAGRAM
'FLYOV' LINE

'WN' LINE

25.805

'FLYOV' 13+53.997=
'WN' 539+27.977

Beg 'FLYOV' LINE 12+52.105 POT=
12.9 Rt 'CVR-2' 12+53.204 POC
10.325

+1.30 %

BVC 12+95.506
10.889

OG

140 VC

+1.30 %

+7.70 %

PI 13+65.506
11.799

FG

+7.70 %

EVC 14+35.506
17.189

BVC 14+80.506
20.654

'ECR' LINE

'FLYOV' 15+22.328=
'ECR' 10+37.662

OG

MATCH LINE STA 15+60 SEE SHEET P-39

25 20 15 10 5

Station
m³ Exc
Emb

13+00 14+00 15+00

PROFILE
'FLYOV' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-38

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:22:47 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad DGN FILE => ...\1643fb038_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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Caltrans

+10% 0% -10%

MATCH LINE STA 15+60 SEE SHEET P-38

MATCH LINE STA 18+80 SEE SHEET P-40

+6% Rt Shld

740 Rt

AXIS OF ROTATION Rt ETW 'FLYOV' LINE

600 Lt

-6% Lt TW & Shld

16+31.616

EC 16+46.616

BC 17+25.911

17+30.616

18+39.132

EC 18+54.132

SUPERELEVATION DIAGRAM
'FLYOV' LINE

+7.70 %

-4.70 %

PI 16+85.506
36.439

410 VC

FG

'WN' ES
'FLYOVER' 16+02.714
POC = 'WN' 536+79.928
MIN TEMPORARY CLEARANCE = 4.71m

'WN' LINE
'FLYOV' 16+68.172=
'WN' 536+15.337

'SD-56' LINE
'FLYOV' 17+51.526=
'SD-56' 17+51.148

35 30 25 20 15

Station 16+00 17+00 18+00 19+00

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-39

PROFILE
'FLYOV' LINE

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:48 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb039_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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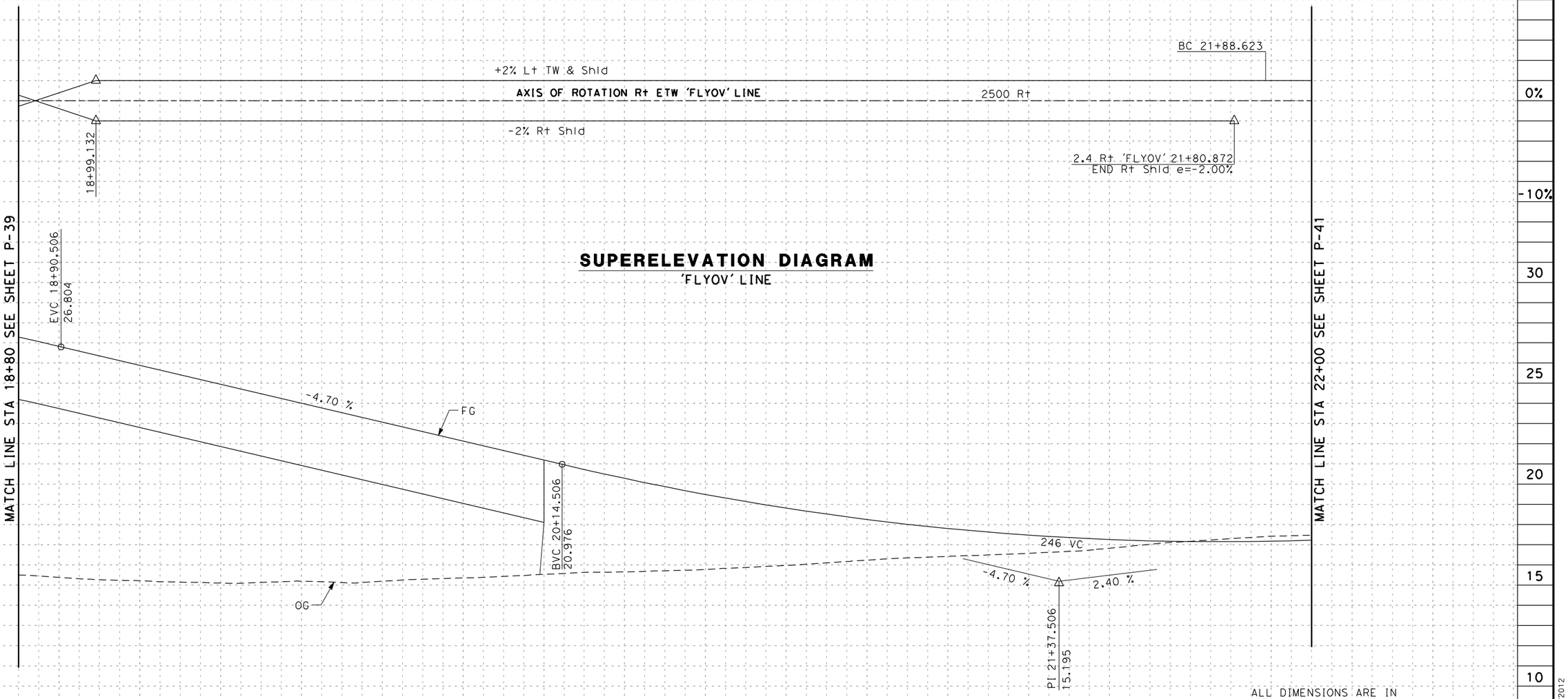
Caltrans

SUPERELEVATION DIAGRAM
'FLYOV' LINE



PROFILE
'FLYOV' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-40

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:49 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb040_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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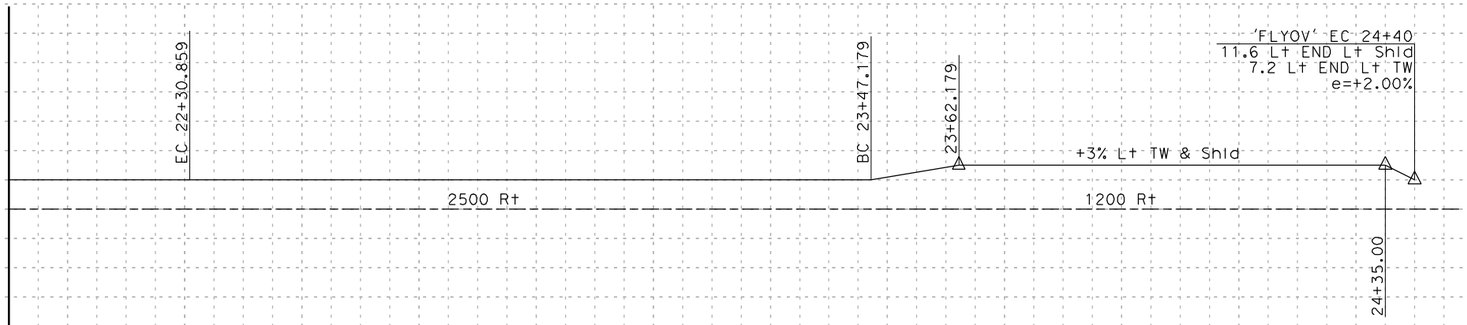
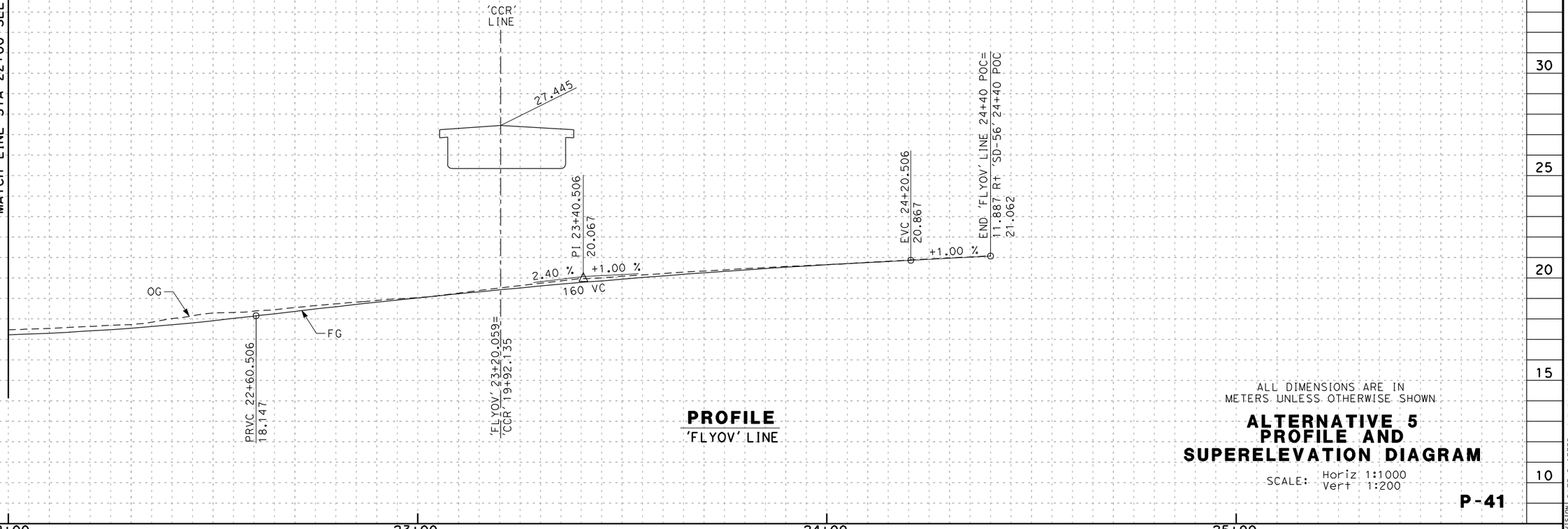


SUPERELEVATION DIAGRAM
'FLYOV' LINE



PROFILE
'FLYOV' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-41

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:22:50 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb041_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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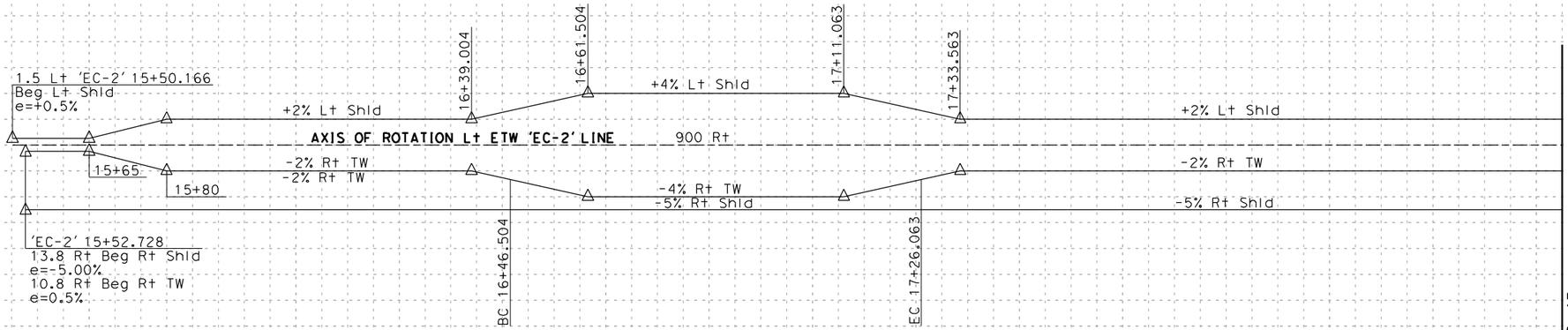
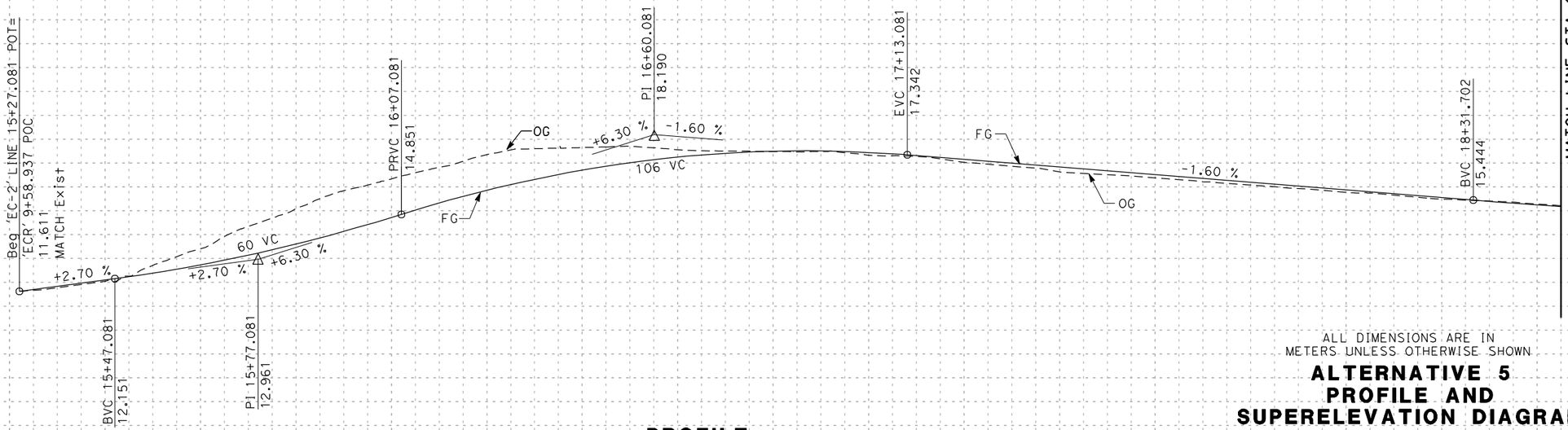


SUPERELEVATION DIAGRAM
'EC-2' LINE



PROFILE
'EC-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-42

+10% 0% -10%

25 20 15 10

Station: 15+00 16+00 17+00 18+00

m^3 Exc / Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:51 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb042_alt5.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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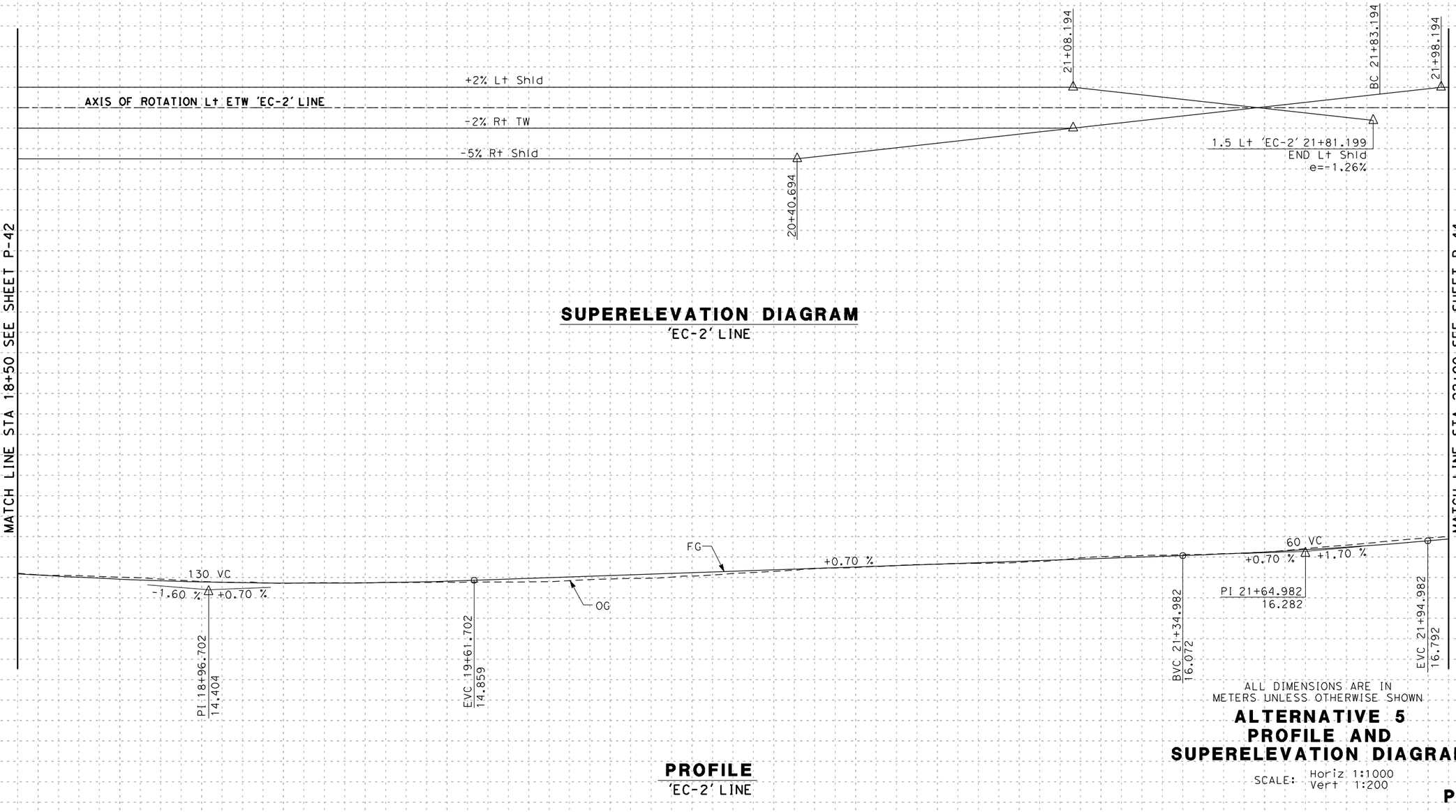
Caltrans

+10%

0%

-10%



SUPERELEVATION DIAGRAM
'EC-2' LINE

PROFILE
'EC-2' LINE

25 20 15 10

Station: 19+00 20+00 21+00 22+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-43

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:52 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb043_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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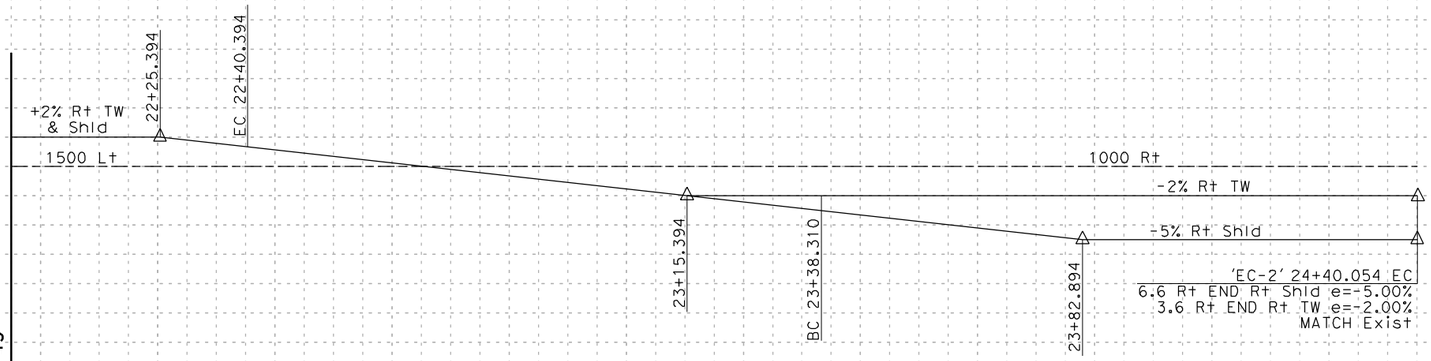
Caltrans

+10%

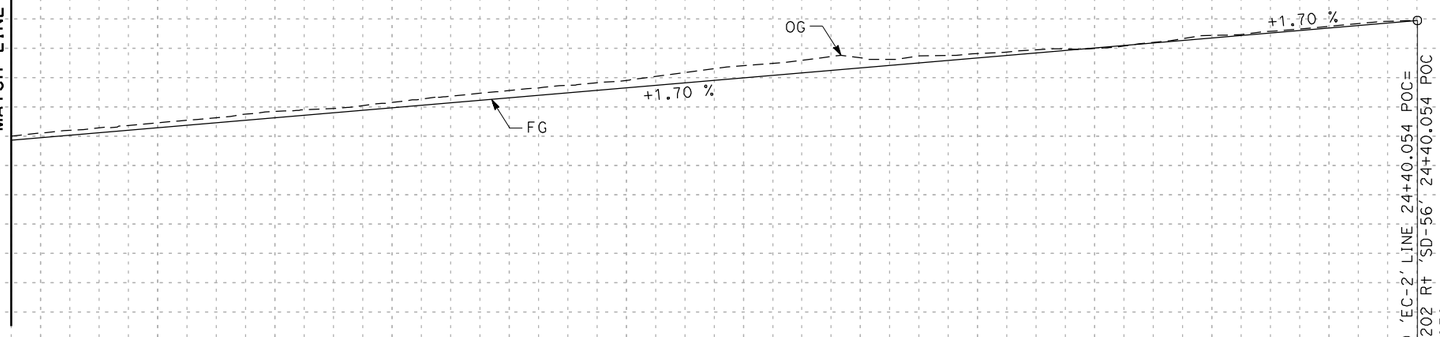
0%

-10%



SUPERELEVATION DIAGRAM
'EC-2' LINE

MATCH LINE STA 22+00 SEE SHEET P-43



PROFILE
'EC-2' LINE

25 20 15 10

Station: 22+00 23+00 24+00 25+00

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-44

LAST REVISION DATE PLOTTED => 3/30/2012
00-00-00 TIME PLOTTED => 1:22:53 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb044_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10% 0% -10%

1.2 Lt 'EC-3' 535+60.201
Beg Lt Shld
e=+4.00%

+6% Lt Shld

AXIS OF ROTATION SL 'EC-3' LINE
660 Rt

500 Lt

+7% Rt TW & Shld

'EC-3' 537+36.420
18.0 Rt END Rt TW e=+2.00%
20.4 Rt END Rt Shld e=+2.00%

-2% Rt TW

-5% Rt Shld

-6% Rt TW & Shld

'EC-3' 534+77.903
7.2 Rt Beg Rt TW e=-2.00%
9.6 Rt Beg Rt Shld e=-5.00%

535+45.201 | BC 535+60.201 | 535+67.701 | 535+75.201 | 535+81.331 | EC 535+96.331 | BC 536+63.116 | 536+78.831 | 537+01.677 | EC 537+19.677 | 537+26.677

-7% Lt TW & Shld

'EC-3' 537+34.2
3.6 Lt END Lt TW e=-2.00%
4.8 Lt END Lt Shld e=-2.00%

SUPERELEVATION DIAGRAM
'EC-3' LINE

PROFILE
'EC-3' LINE

Beg 'EC-3' LINE '534+77.903 POT= 7.2 Rt 'WN' 534+77.903 POT
16.070

+1.30 % | BVC 535+07.797 16.459 | OG | FG | 535+44.076 16.694 | +1.30 % | PI 535+67.797 17.239 | -3.00 % | 120 VC | FG | EVC 536+27.797 15.439 | -3.00 % | BVC 536+79.676 13.882 | OG | 60 VC | -3.00 % | -0.70 % | PI 537+09.676 12.982 | EVC 537+39.676 12.772 | -0.70 % | END 'EC-3' LINE 537+61.168 POT= 'ECR' 10+50.491 POT 12.622

20 15 10

Station: 535+00 | 536+00 | 537+00

m^3 Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-45

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:54 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb045_alt5.dgn

CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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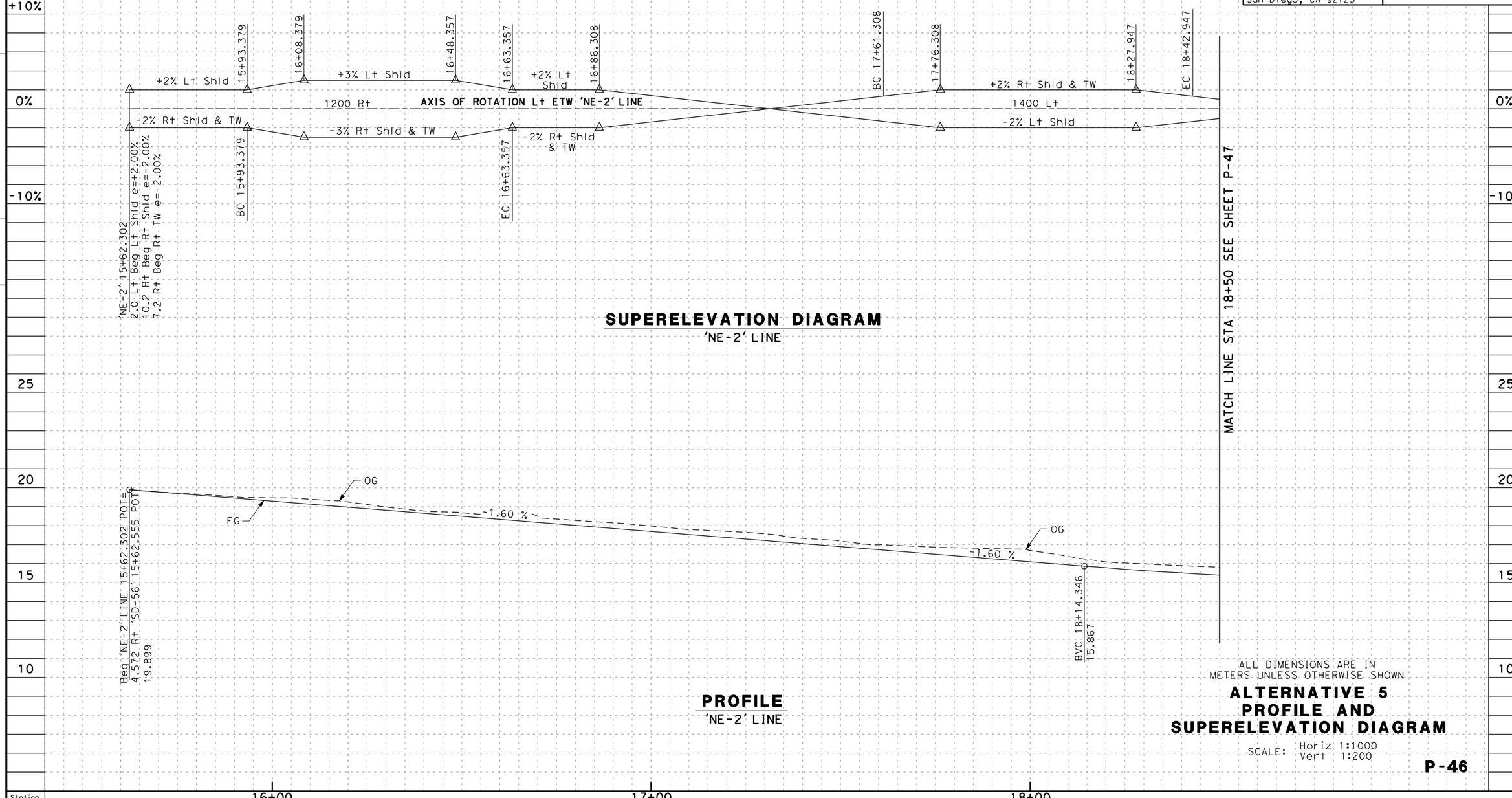

SUPERELEVATION DIAGRAM
'NE-2' LINE

PROFILE
'NE-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-46

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Caltrans

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:22:55 PM

LAST REVISION 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb046_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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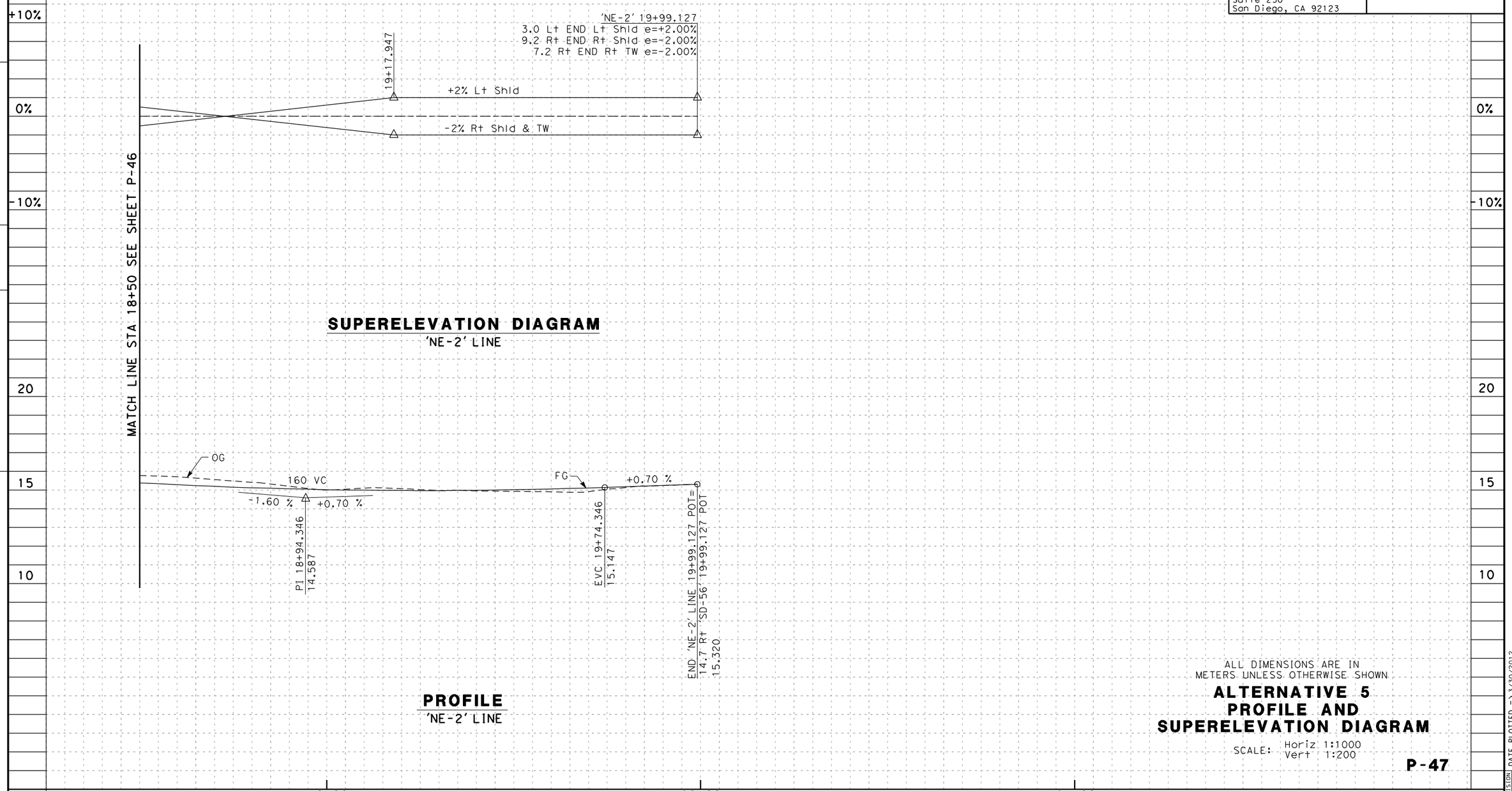

SUPERELEVATION DIAGRAM
'NE-2' LINE

PROFILE
'NE-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-47

Station
m³ Exc
Emb

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:22:56 PM
LAST REVISION 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb047_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

-10%
0%
-10%

AXIS OF ROTATION CENTER LINE 'CVS' LINE

-2% Rt Shld & TW | -2% Lt & Rt Shld & TW

'CVS' 12+52.105
Beg Rt Shld & TW
e=-2.00%
MATCH Exist

'CVS' 13+22.904
Beg Lt Shld & TW
e=-2.00%

'CVS' 15+36.663
END Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CVS' LINE

20
15
10
5

Beg 'CVS' LINE 12+52.105 POT=
12.9 Rt 'CVR-2' 12+53.204 POC
10.325

BVC 12+94.906
10.881

PI 13+62.906
11.765

PVRC 14+30.906
10.609

PI 14+72.906
9.895

END 'CVS' LINE 15+36.663 POT=
'ECR' 9+58.937 POC
11.617

OG | +1.30 % | FG | +1.30 % | -1.70 % | 136 VC | -1.70 % | OG | -1.70 % | 84 VC | +2.70 % | FG | +2.70 %

PROFILE
'CVS' LINE

Station: 13+00 | 14+00 | 15+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-48

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:22:57 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb048_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

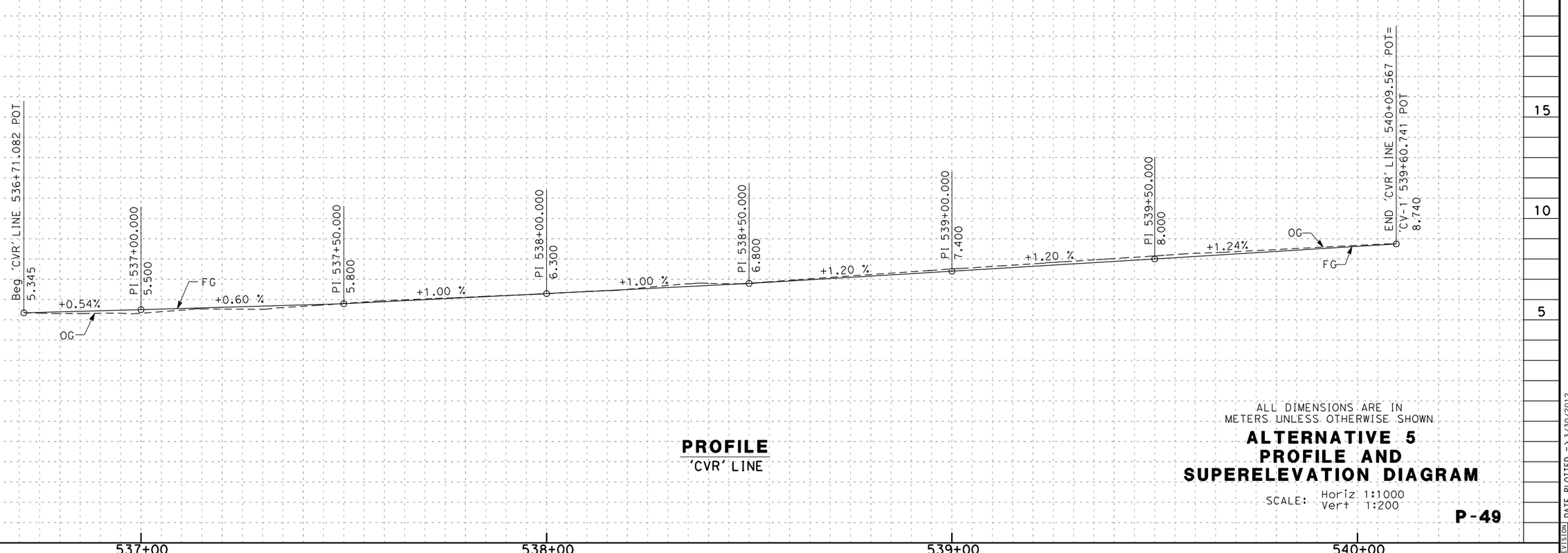
AXIS OF ROTATION CENTER LINE 'CVR' LINE

-2% Lt & Rt Shld & TW

'CVR' 536+71.082
Beg Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

'CVR' 540+09.567
END Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CVR' LINE



PROFILE
'CVR' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-49

Station	537+00	538+00	539+00	540+00
m^3 Exc				
m^3 Emb				

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:22:59 PM

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Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10% 0% -10%

AXIS OF ROTATION CENTER LINE 'CVR-2' LINE

-2% Lt & Rt Shld & TW

'CVR-2' 11+50.847
Beg Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

MATCH LINE STA 14+30 SEE SHEET P-51

SUPERELEVATION DIAGRAM

'CVR-2' LINE

Beg 'CVR-2' LINE 11+50.847 POT=
'CV-1' 539+65.827 POT
8.700

FG
OG
+1.60 %
BVC 12+86.050
10.863
PI 13+16.050
11.343
+1.60 %
+0.40%
60 VC
EVC 13+46.050
11.463
+0.40%

15 10 5

Station 12+00 13+00 14+00

m³ Exc Emb

PROFILE

'CVR-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-50

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:23:00 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb050_alt5.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

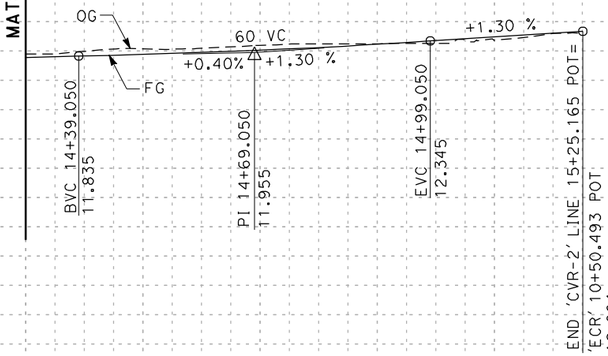
Caltrans

+10% 0% -10%

MATCH LINE STA 14+30 SEE SHEET P-50

'CVR-2' 15+25.165
END L+ & R+ Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CVR-2' LINE



PROFILE
'CVR-2' LINE

Station 15+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 5
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-51

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:23:01 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
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CU 00000

EA 177900