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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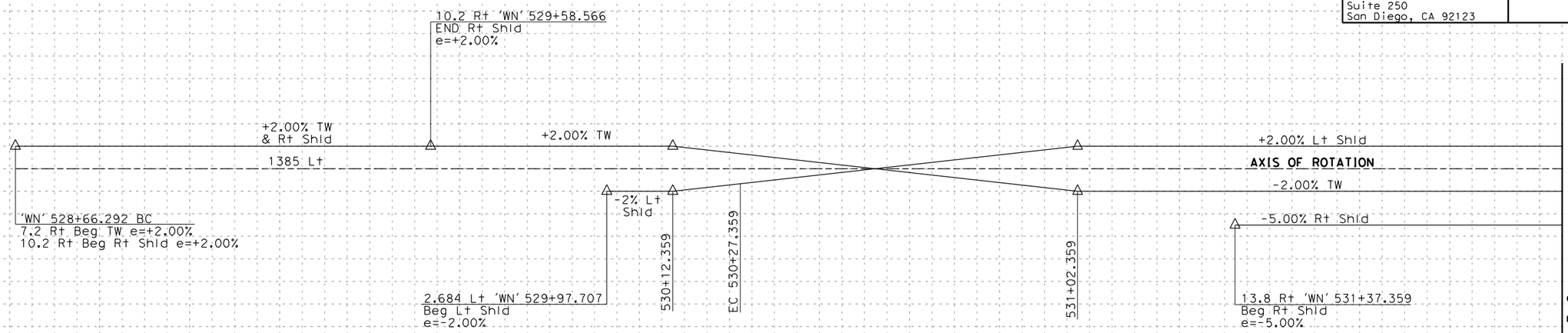
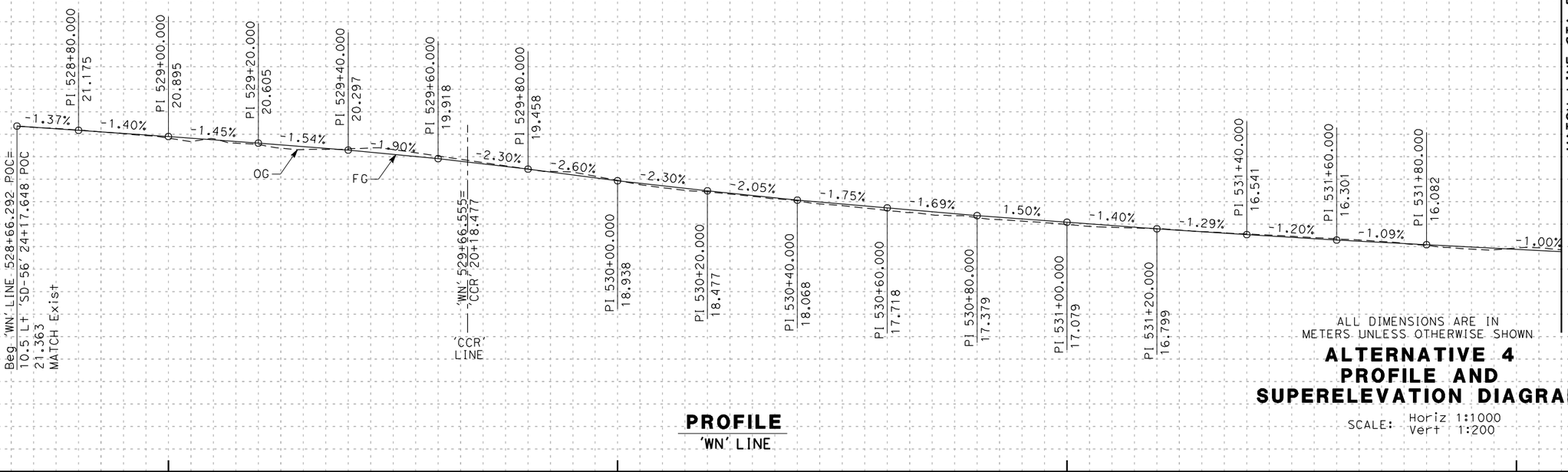


SUPERELEVATION DIAGRAM

'WN' LINE



PROFILE

'WN' LINE

Station	529+00	530+00	531+00	532+00
m^3 Exc				
m^3 Emb				

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 1:17:15 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb001_alt4.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%
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

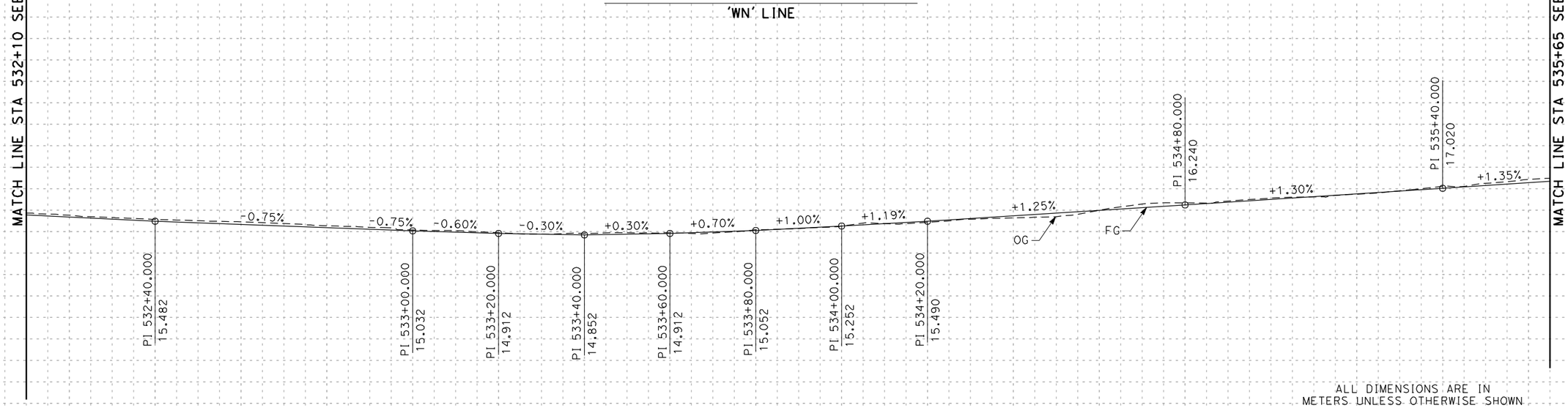
-2.00% TW

-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



PROFILE
'WN' LINE

Station
533+00
534+00
535+00

m^3 Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:16 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb002_alt4.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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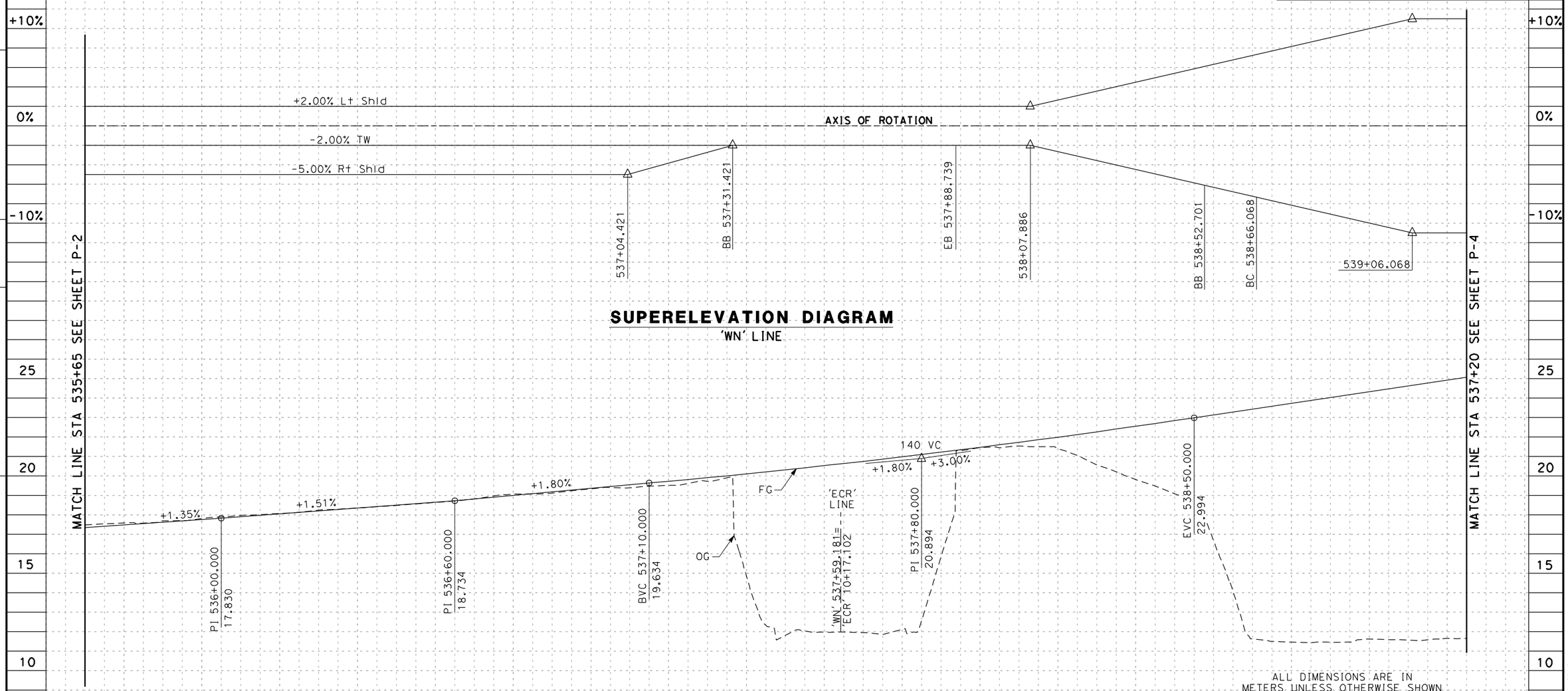

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-3

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CONSULTANT FUNCTIONAL SUPERVISOR

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LAST REVISION 00-00-00

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

SUPERELEVATION DIAGRAM
'WN' LINE

+10%
0%
-10%

+11.00% Lt Shld

210 Rt

AXIS OF ROTATION

-11.00% TW & Rt Shld

542+33.081

EC 542+73.081

PI 541+86.00
33.074

+3.00%

-2.40%

228 VC

FG

541+98.667
31.554

'NT' LINE

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

OG

'CV-1' LINE

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

BVC 540+72.000
29.654

+3.00%

'CVR' LINE

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

MATCH LINE STA 537+20 SEE SHEET P-3

MATCH LINE STA 542+75 SEE SHEET P-5

30
25
20
15
10

PROFILE
'WN' LINE

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

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-4

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:17:18 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb004_alt4.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

+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

MATCH LINE STA 546+30 SEE SHEET P-6

SUPERELEVATION DIAGRAM
'WN' LINE

40 35 30 25 10

PRVC 543+00.000
30.338
543+71.579
29.479
170 VC
-2.40%
+3.30%
FG
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%

PROFILE
'WN' LINE

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

m³ Exc
m³ Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:19 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb005_alt4.dgn

CU 00000

EA 177900

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

50 45 40 35 30

Station: 547+00 548+00 549+00

m³ Exc / Emb

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
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 => 1:17:20 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb006_alt4.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

SUPERELEVATION DIAGRAM
'WN' LINE

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

60 55 50 45 40

Station
m^3 Exc
Emb

550+00 551+00 552+00 553+00

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:21 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb007_alt4.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

+10% 0% -10%

MATCH LINE STA 553+40 SEE SHEET P-7

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

BC 556+27.904

556+42.902

+2.00% TW
& R† Shld

3000 L†

554+95.402

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

555+52.902

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

MATCH LINE STA 556+95 SEE SHEET P-9

SUPERELEVATION DIAGRAM

'WN' LINE

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

+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%

70 65 60 55 50

PROFILE

'WN' LINE

Station: 554+00 555+00 556+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:22 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad DGN FILE => ...\1643fb008_alt4.dgn | CU 00000 | EA 177900

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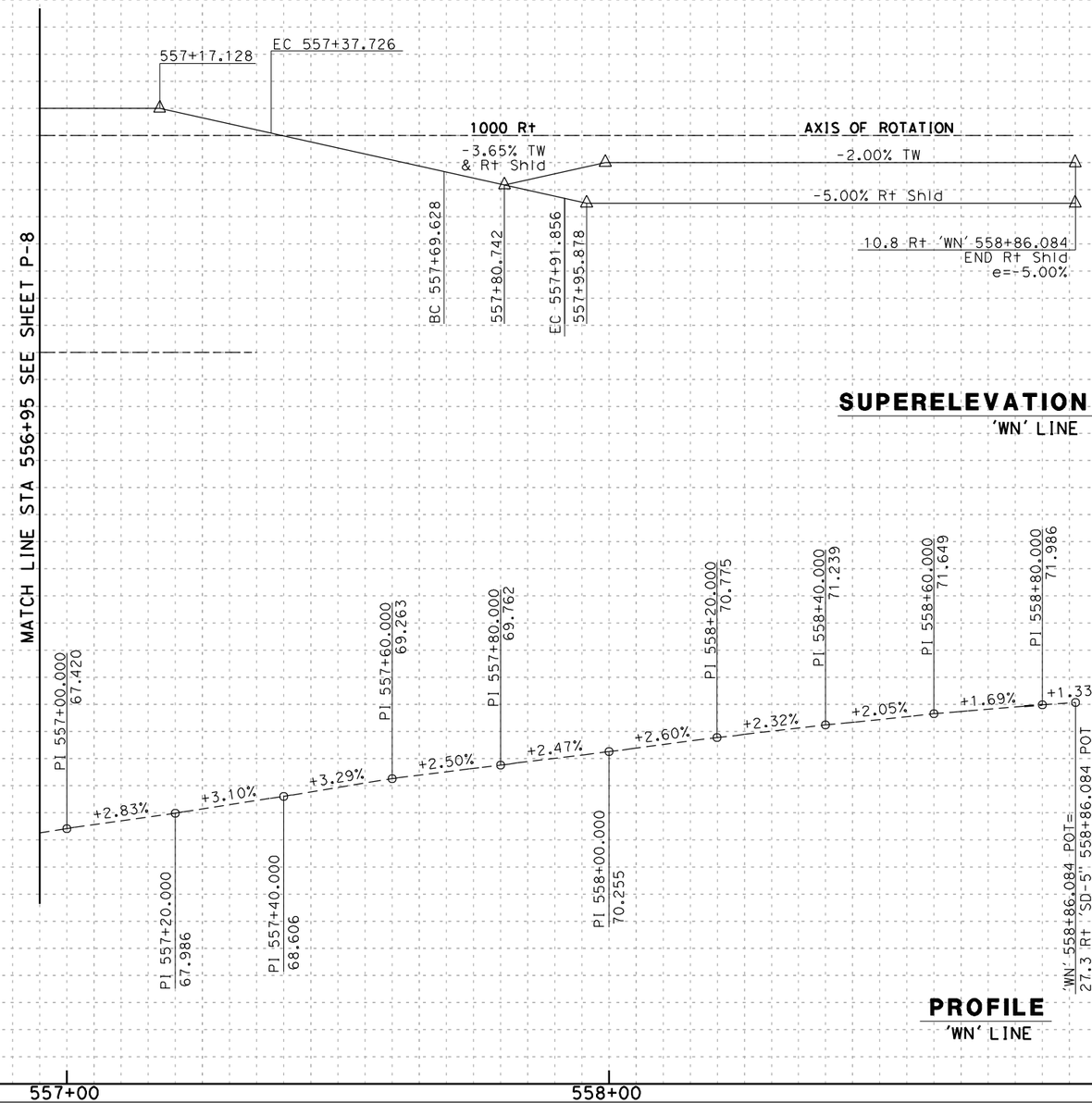

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 1:17:24 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb009_alt4.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

'DEL' 557+63.937
Beg Lt & Rt TW
e=-2.00%
MATCH Exist

'DEL' 555+14.803 POT
106.976

-9.43 %

PI 555+40.000
104.600

-8.40 %

PI 555+60.000
102.920

-9.15 %

PI 555+80.000
101.090

-8.20 %

PI 556+00.000
99.450

-8.90 %

PI 556+20.000
97.670

-9.75 %

PI 556+40.000
95.720

-9.55 %

'DEL' 556+53.180
94.461
MATCH Exist

PI 556+60.000
93.810

-8.15 %

PI 556+80.000
92.180

-7.90 %

PI 557+00.000
90.600

-7.31 %

'DEL' 557+20 BVC
89.139

120 VC

-7.00%

-1.60%

PI 557+80
84.939

MATCH LINE STA 557+95 SEE SHEET P-11

+10%
0%
-10%

110
105
100
95
90
85
80
75

Station: 556+00 | 557+00 | 558+00

m³ Exc
m³ Emb

PROFILE

'DEL' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-10

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TIME PLOTTED => 1:17:25 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb010_alt4.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

REGISTERED CIVIL ENGINEER DATE

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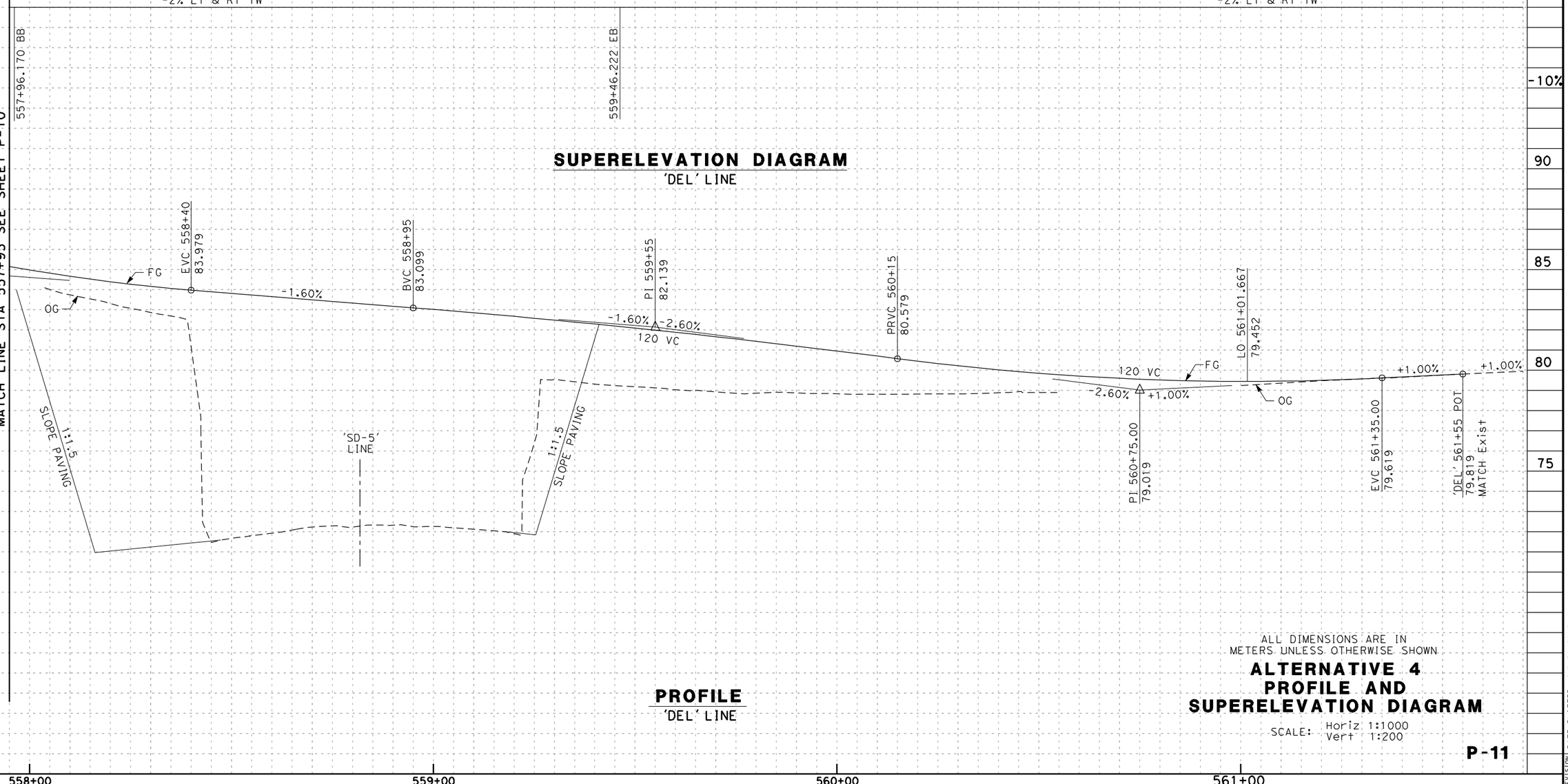
Caltrans

SUPERELEVATION DIAGRAM

'DEL' LINE



PROFILE

'DEL' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-11

LAST REVISION | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:17:26 PM | 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb011_alt4.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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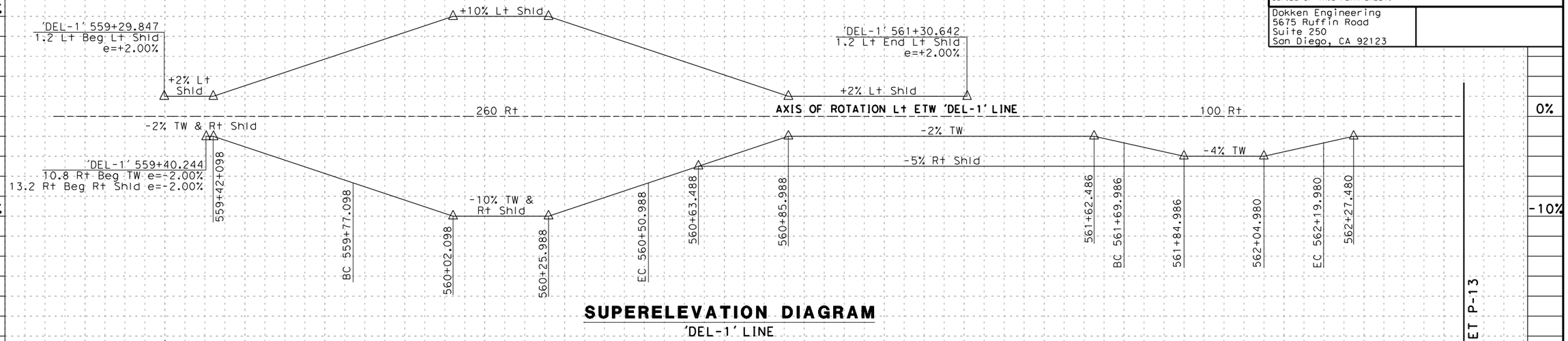
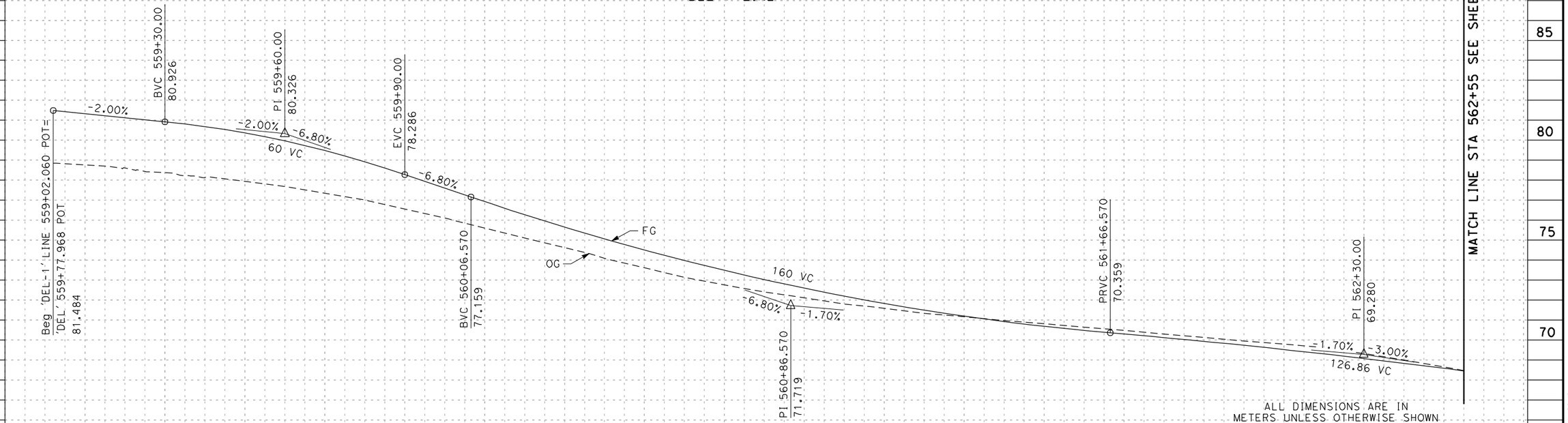
SUPERELEVATION DIAGRAM

'DEL-1' LINE



PROFILE

'DEL-1' LINE



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 11:17:27 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb012_alt4.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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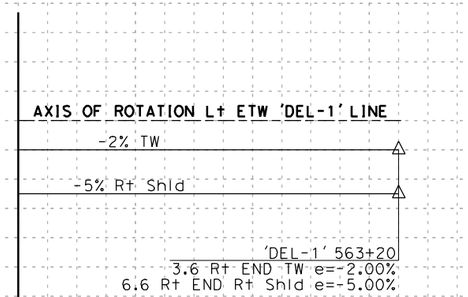
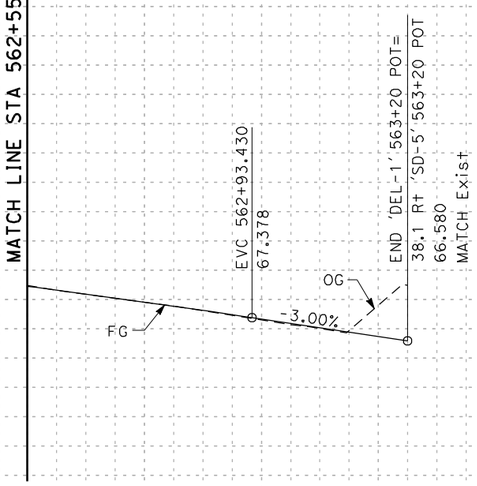
+10%
0%
-10%
80
75
70
65



SUPERELEVATION DIAGRAM
'DEL-1' LINE



PROFILE
'DEL-1' LINE

Station: 559+00 | 563+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 1:17:28 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb013_alt4.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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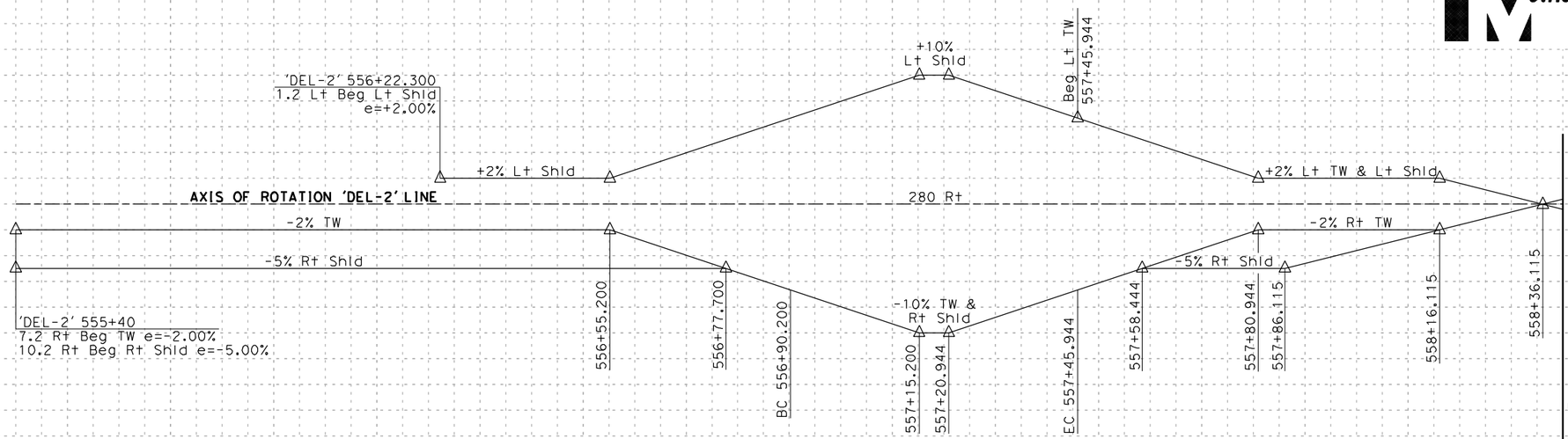
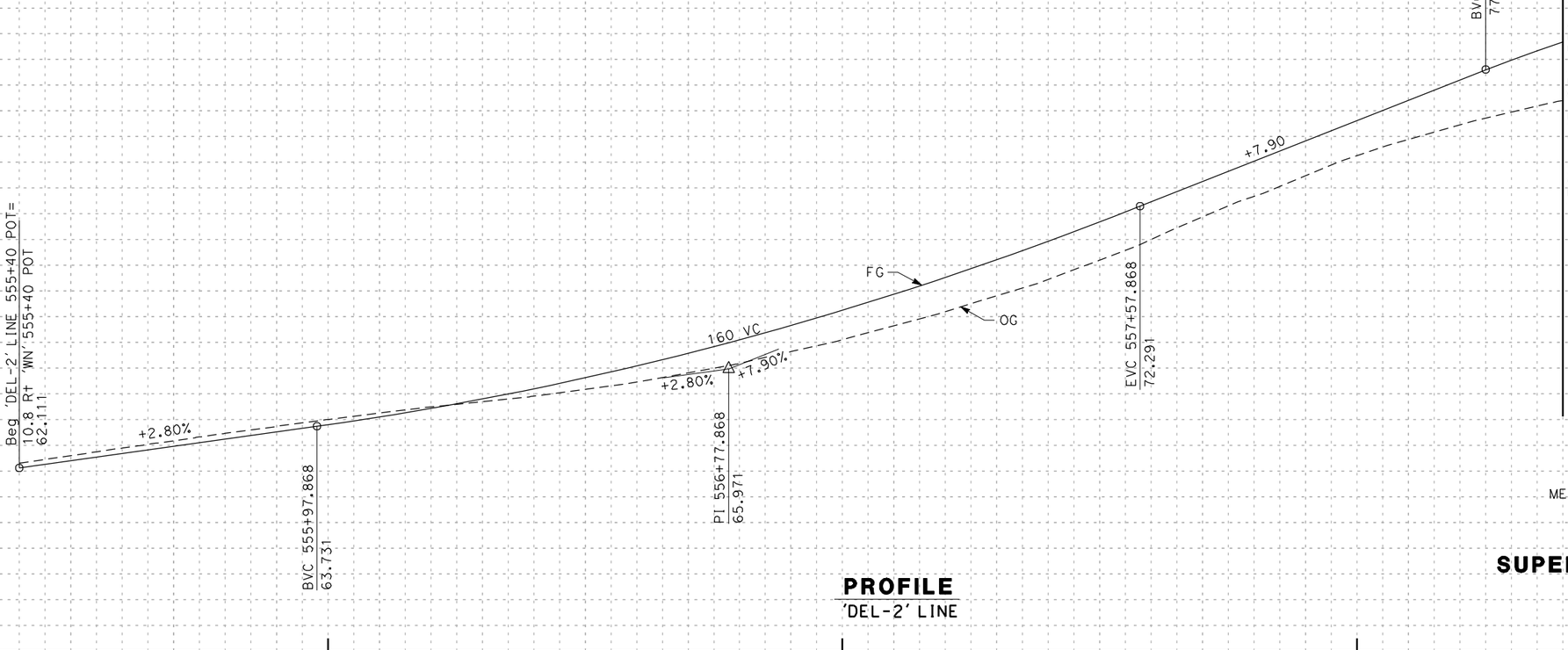
Caltrans

SUPERELEVATION DIAGRAM
'DEL-2' LINE





ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-14

PROFILE
'DEL-2' LINE

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:17:29 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb014_alt4.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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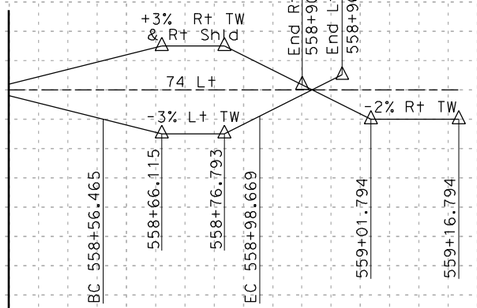
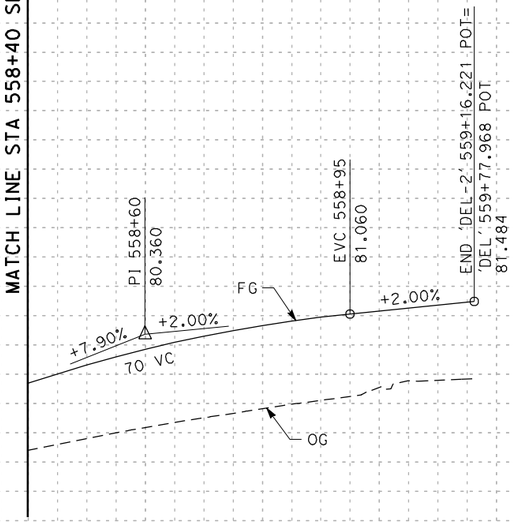
Caltrans

+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

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 11:17:30 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb015_alt4.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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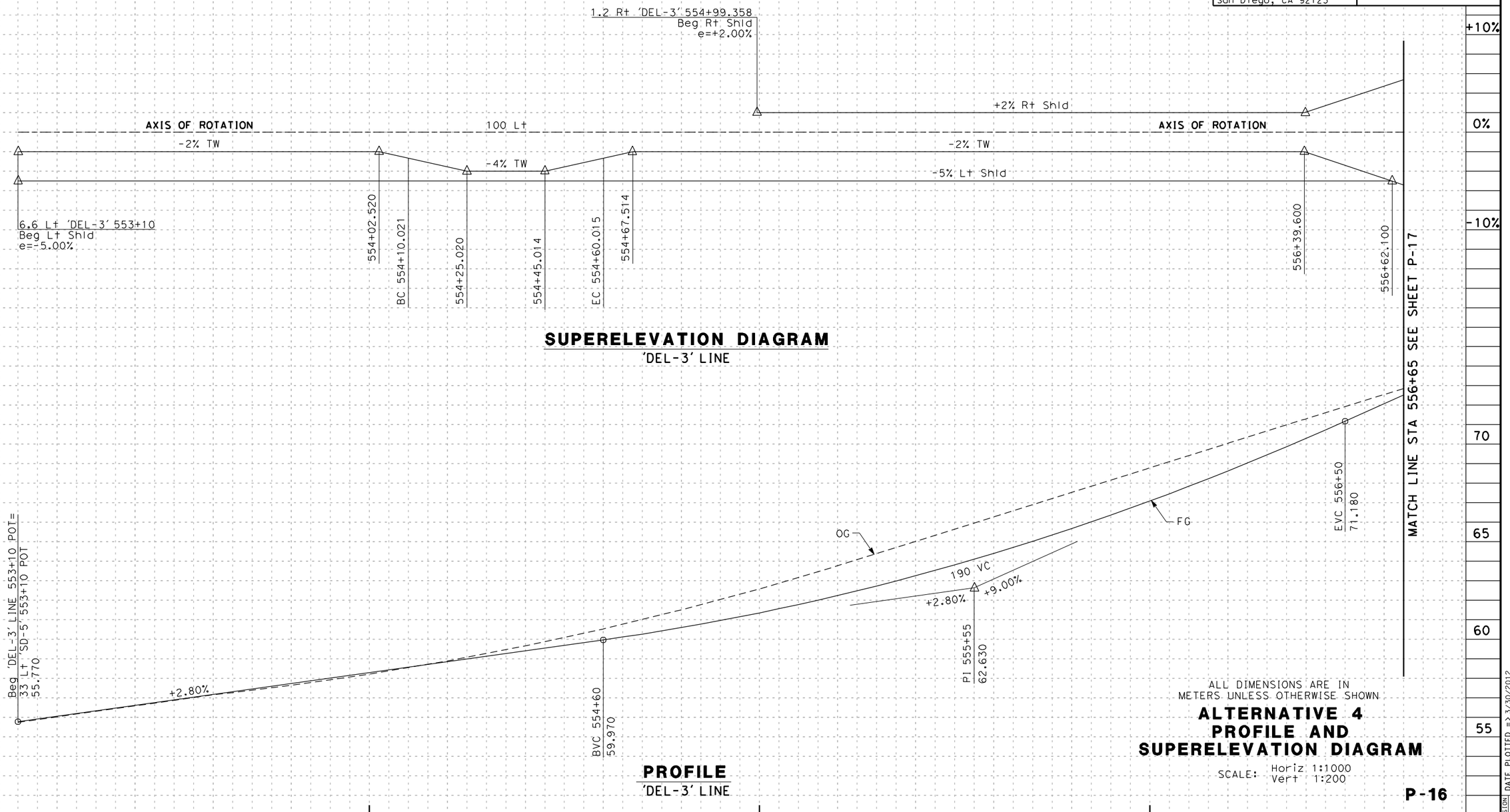

SUPERELEVATION DIAGRAM
'DEL-3' LINE

PROFILE
'DEL-3' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:31 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb016_alt4.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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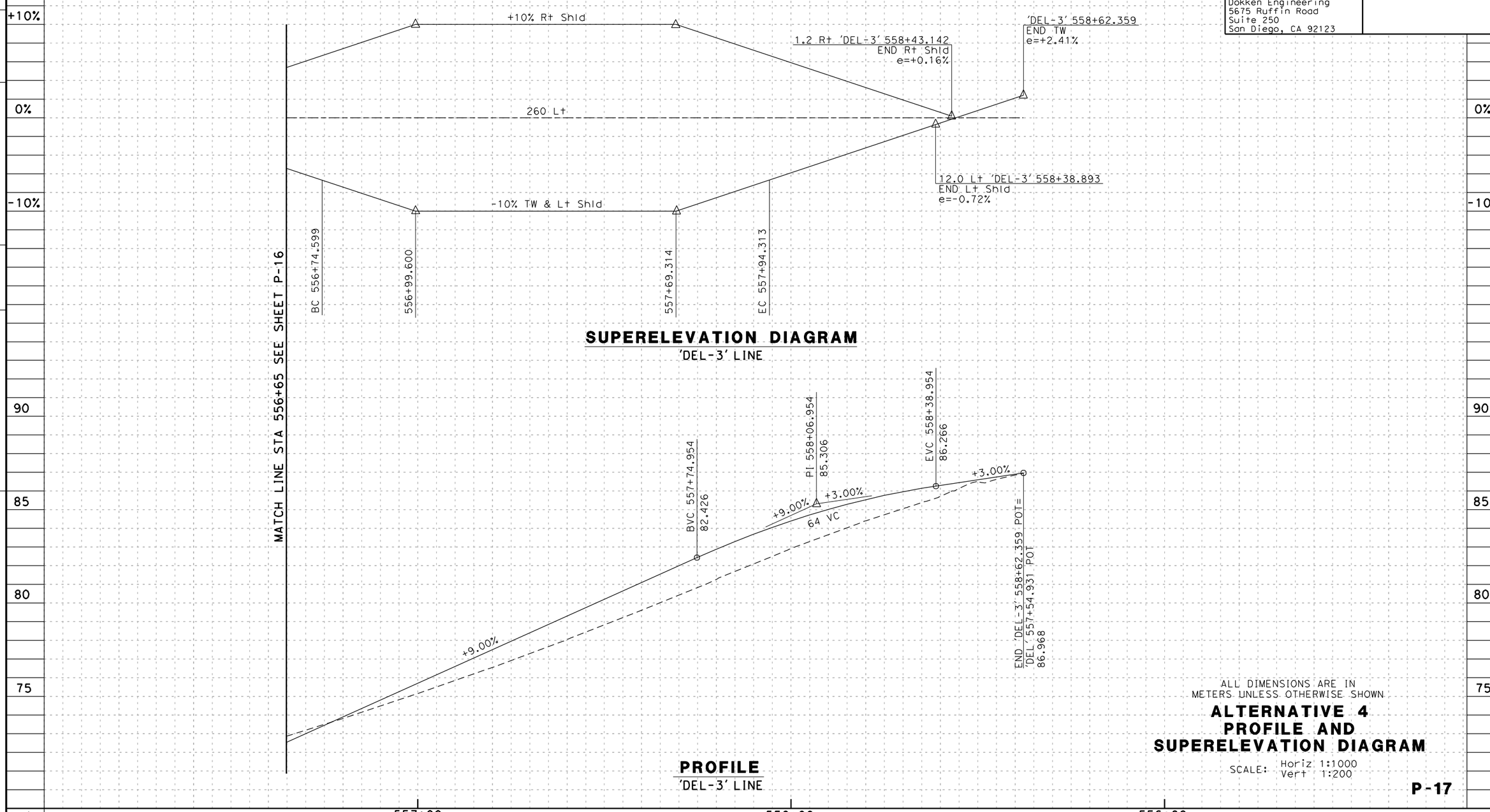

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-17

Station

m³ Exc Emb

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TIME PLOTTED => 1:17:33 PM

LAST REVISION 00-00-00

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USERNAME => Merjad
DGN FILE => ...\1643fb017_alt4.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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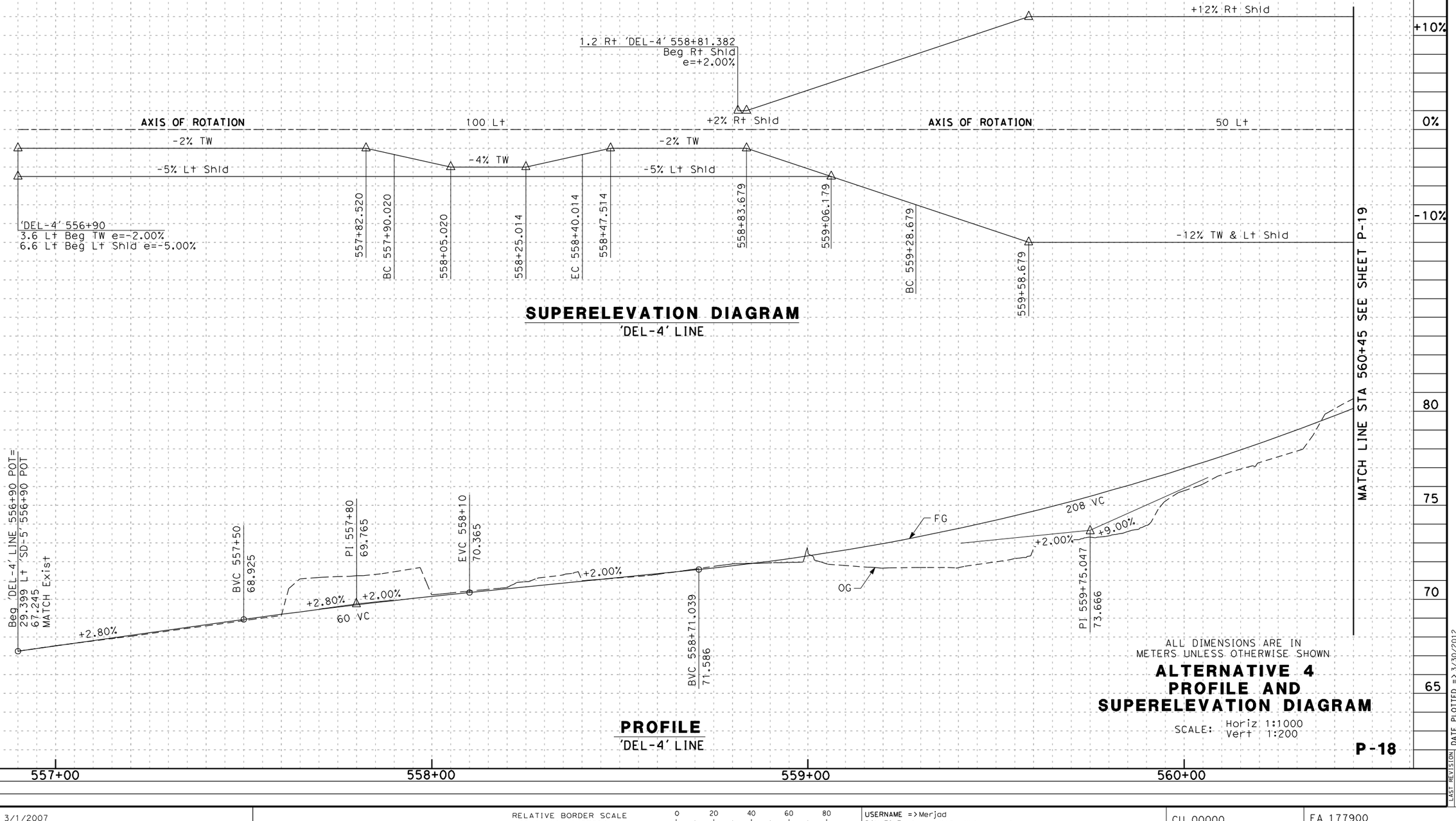

SUPERELEVATION DIAGRAM
'DEL-4' LINE

PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:34 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb018_alt4.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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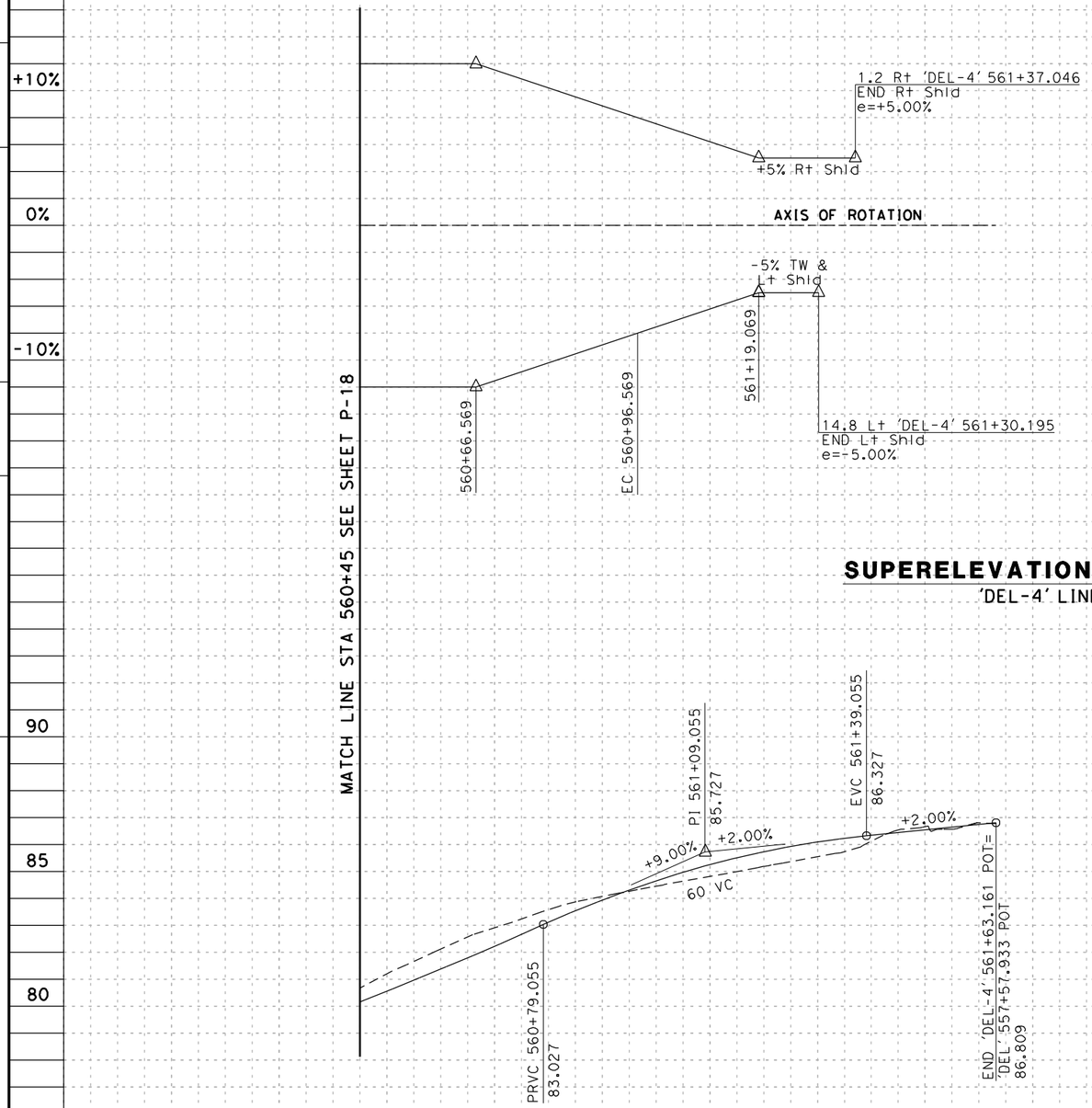

SUPERELEVATION DIAGRAM
'DEL-4' LINE

PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-19

Station	
m³	Exc
	Emb

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CONSULTANT FUNCTIONAL SUPERVISOR

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TIME PLOTTED => 1:17:35 PM

LAST REVISION 00-00-00

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+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 4
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 => 11:17:36 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb020_alt4.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

+10% 0% -10%

1.2 Lt 'CV-1' 542+41.431
END Lt Shld
e=+2.00%

BC 543+42.370

543+57.370

'CV-1' 544+28.983 EC
3.6 Rt END TW
6.6 Rt END Rt Shld
e=+2.00%

+2% TW & Rt Shld

AXIS OF ROTATION Lt ETW 'CV-1' LINE

1507.2 Lt

542+67.370

SUPERELEVATION DIAGRAM
'CV-1' LINE

MATCH LINE STA 542+35 SEE SHEET P-20

PRVC 543+42.212
25.051

PI 543+74.212
26.971

EVC 544+0(
28.475

+4.70 %

+6.00 %

64 VC

FG

OG

64 VC
+3.80 % +6.00 %

END 'CV-1' 544+28.983 EC=
7.2 R+ 'NT' 544+28.983 EC
29.546

BVC 542+78.212
21.915

PI 543+10.212
23.131

30 25 20 15

Station
m^3 Exc
Emb

543+00 544+00

PROFILE
'CV-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:37 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb021_alt4.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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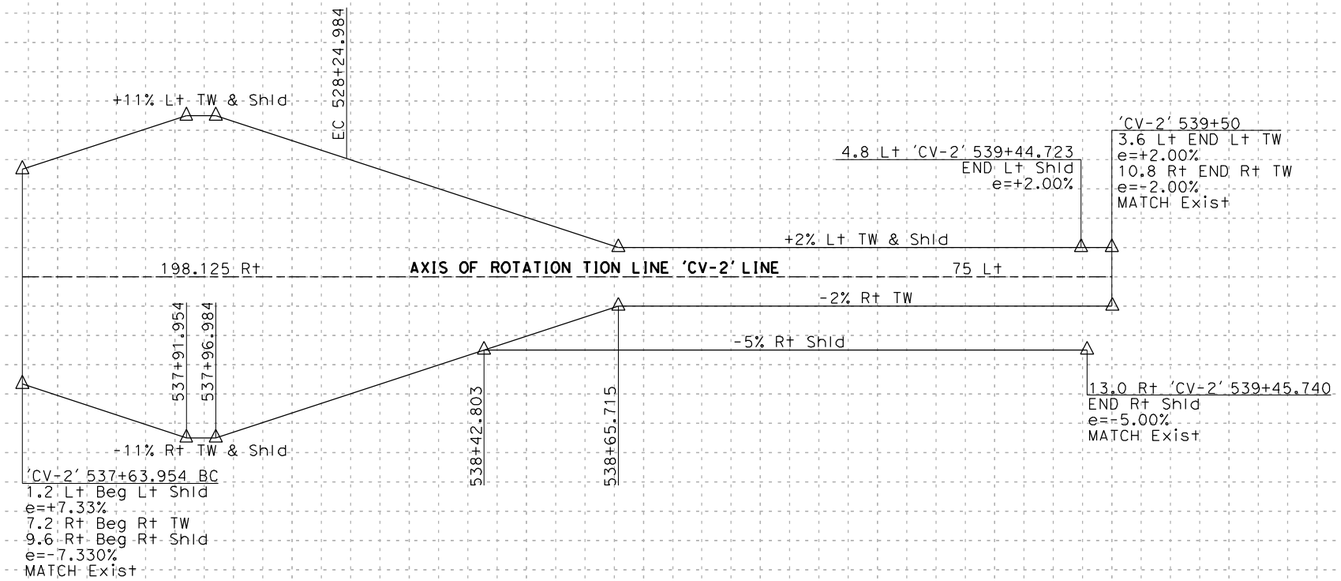
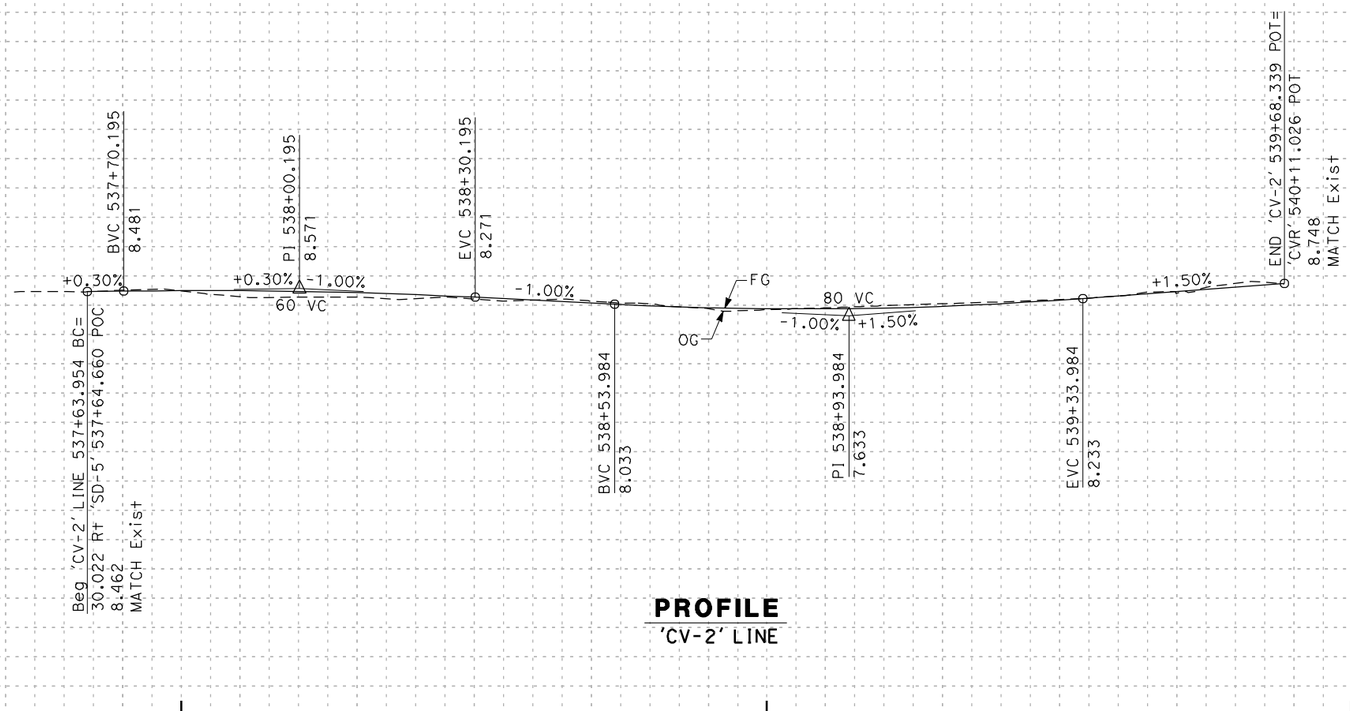


SUPERELEVATION DIAGRAM
'CV-2' LINE



PROFILE
'CV-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-22

Station: 538+00 | 539+00 | 540+00

m^3 Exc / Emb

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:17:38 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb022_alt4.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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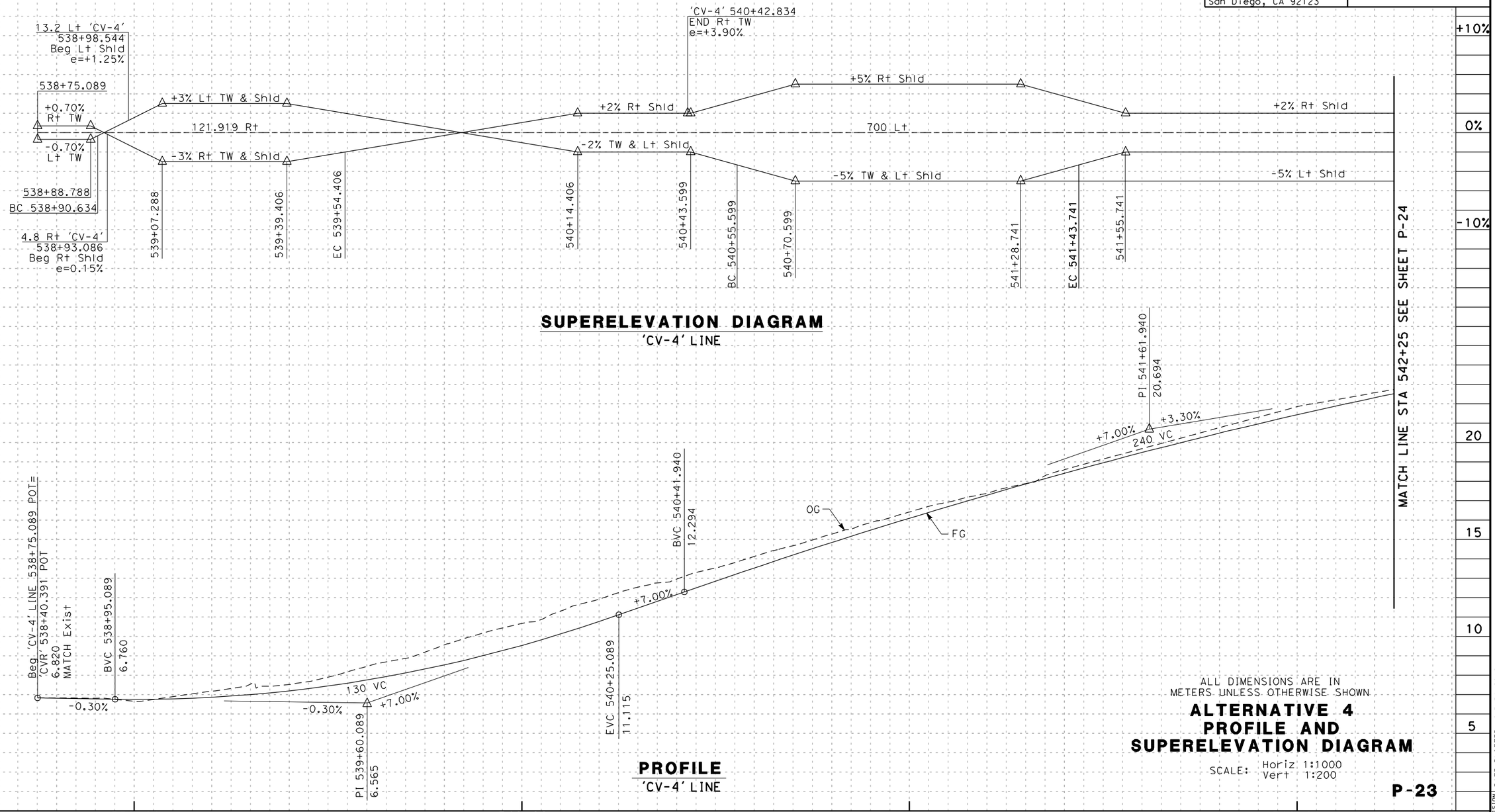
SUPERELEVATION DIAGRAM
'CV-4' LINE



PROFILE
'CV-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 1:17:39 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb023_alt4.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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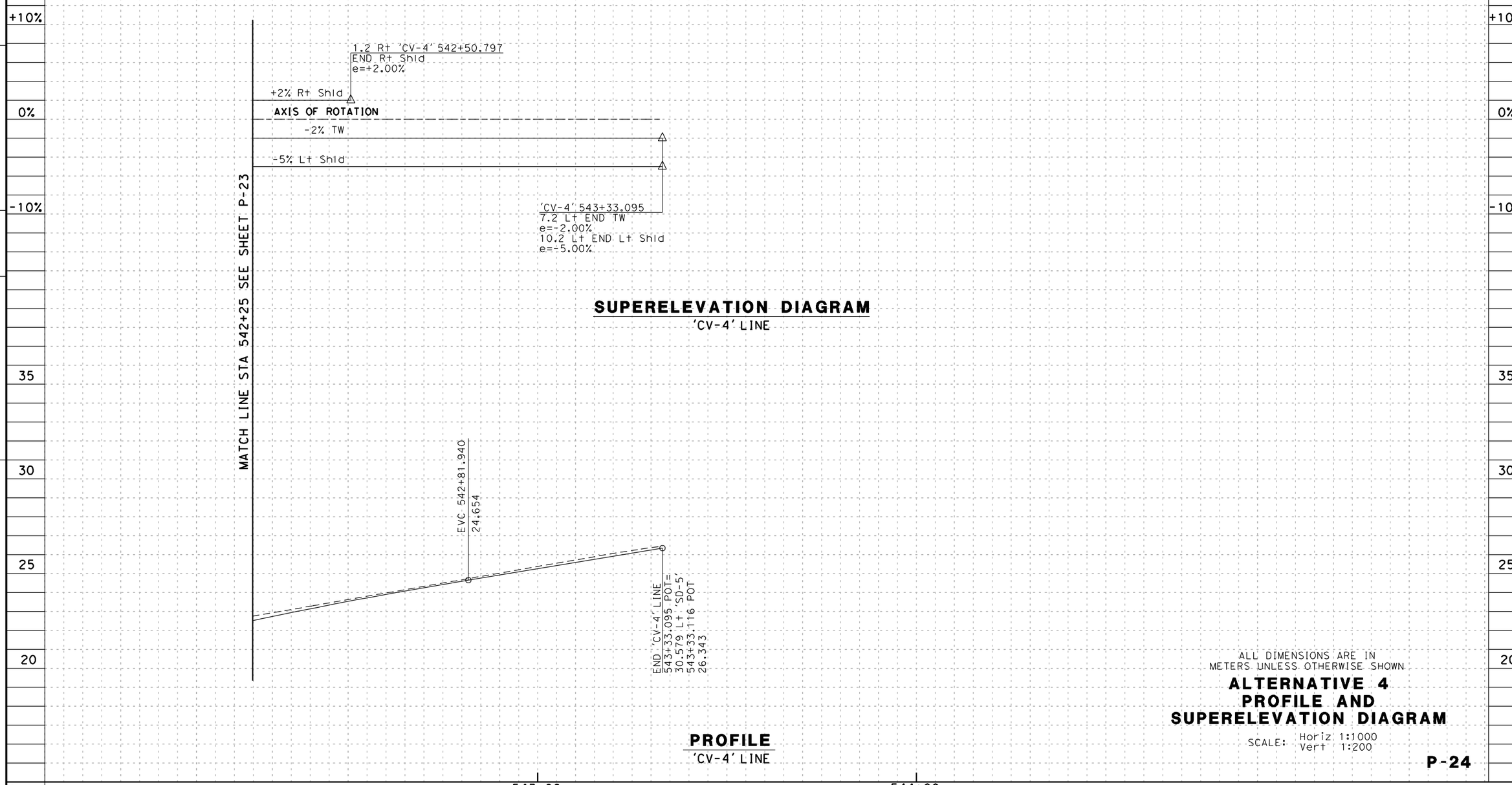

SUPERELEVATION DIAGRAM
'CV-4' LINE

PROFILE
'CV-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-24

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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DATE PLOTTED => 3/30/2012
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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 => ...\1643fb024_alt4.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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+10% 0% -10%

'NT' 539+80.097
1.5 Lt Beg Lt Shld
7.2 Rt Beg TW
10.2 Rt Beg Rt Shld
e=+0.00%
MATCH Exist

+9% Lt Shld

AXIS OF ROTATION Lt ETW 'NT' LINE 350 Rt

-9% TW & Rt Shld

BC 540+00.740

540+33.740

540+93.378

EC 541+26.378

541+92.917

10.2 Rt 'NT' 542+42.800
END Rt Shld
e=+2.00%

+2% TW & Rt Shld

1500 Lt

-2% Lt Shld

BC 542+22.918

542+37.918

MATCH LINE STA 543+20 SEE SHEET P-26

SUPERELEVATION DIAGRAM
'NT' LINE

30 25 20 15 10

Beg 'NT' LINE 539+80.097 POT=
51.654 Rt 'SD-5' 539+85.501 POC
16.916
MATCH Exist

+2.00 %

BVC 540+13.927
17.593

PI 540+63.927
18.593

+2.00 % +0.30 %
100 VC

OG

EVC 541+13.927
18.743

FG

+0.30 %

BVC 541+54.927
18.806

OG

FG

172 VC
+0.30 % +6.00 %

PI 542+40.927
19.124

PROFILE
'NT' LINE

Station: 540+00 541+00 542+00 543+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 1:17:41 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb025_alt4.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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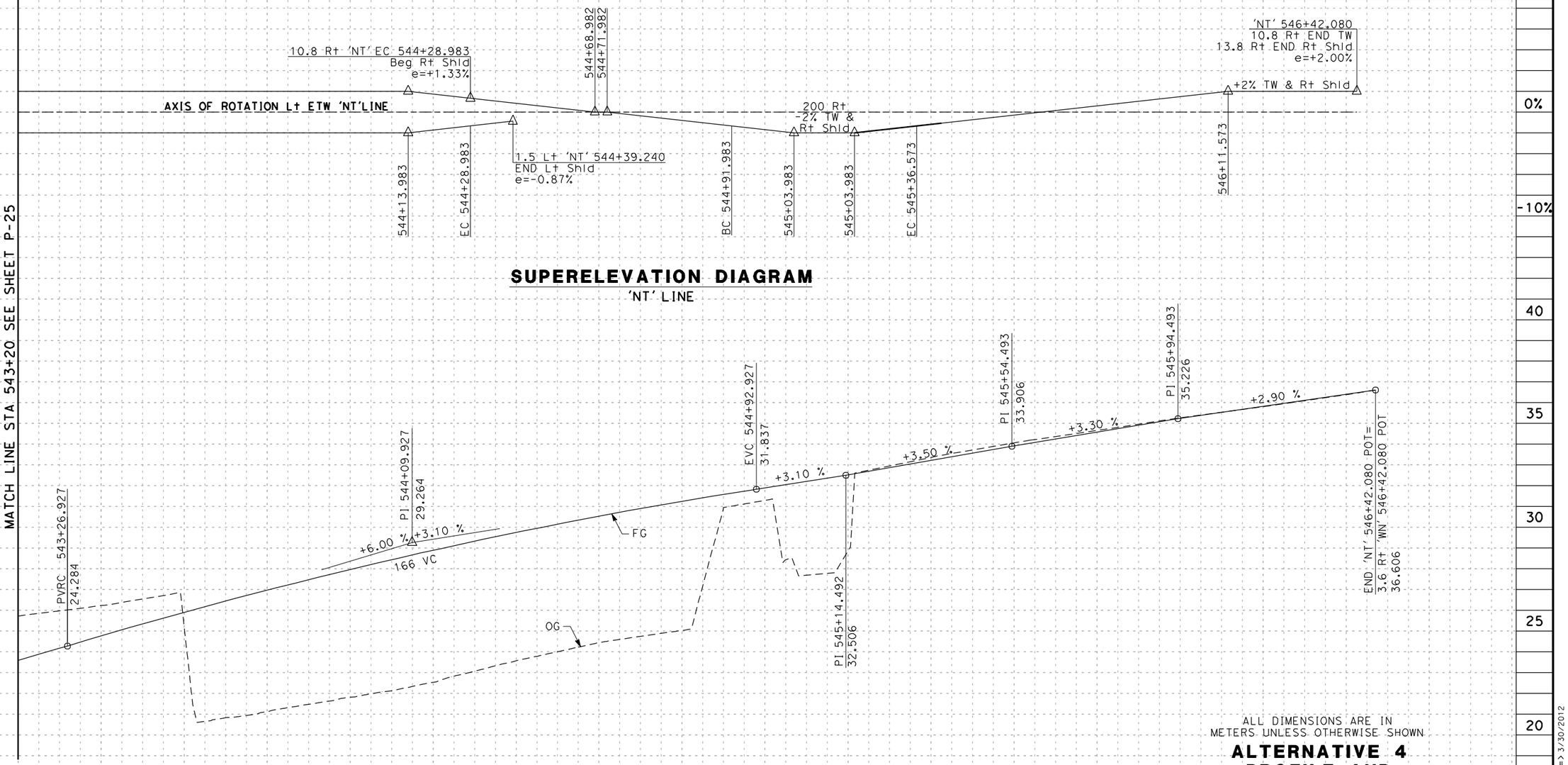

SUPERELEVATION DIAGRAM
'NT' LINE

PROFILE
'NT' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
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 => 11:17:43 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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DGN FILE => ...\1643fb026_alt4.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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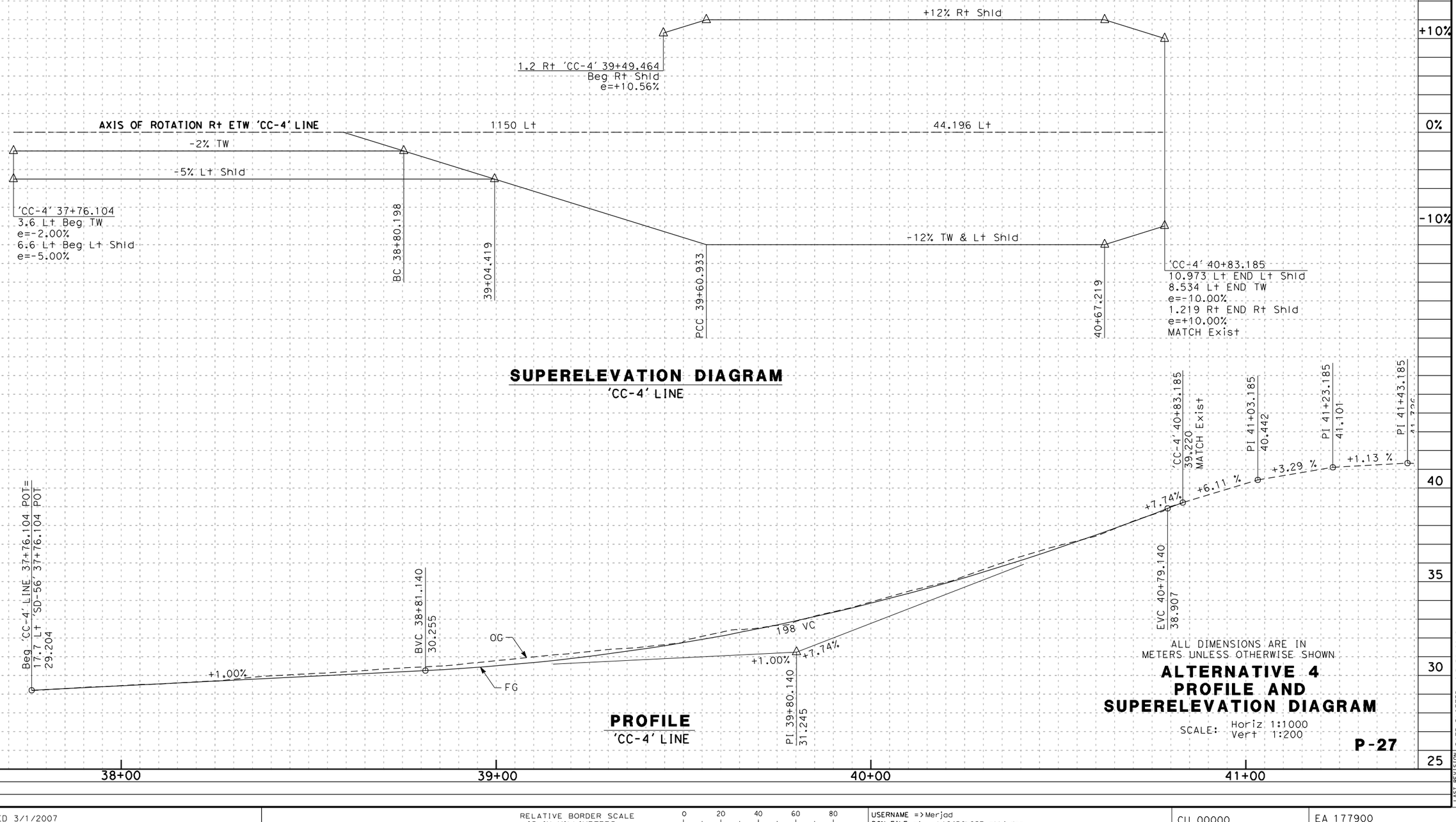

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-27

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:17:44 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb027_alt4.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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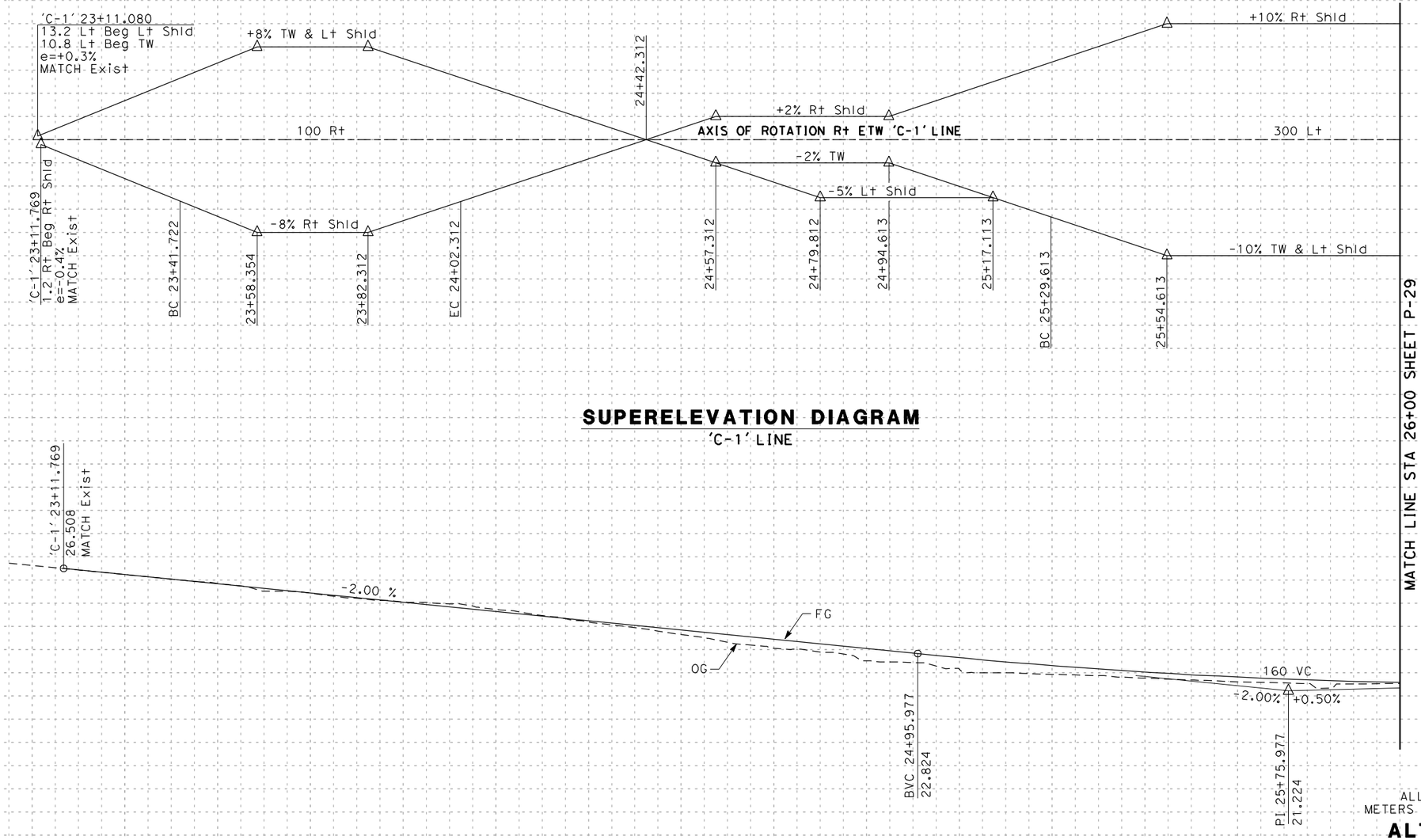

SUPERELEVATION DIAGRAM
'C-1' LINE

PROFILE
'C-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-28

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:17:45 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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DGN FILE => ...\1643fb028_alt4.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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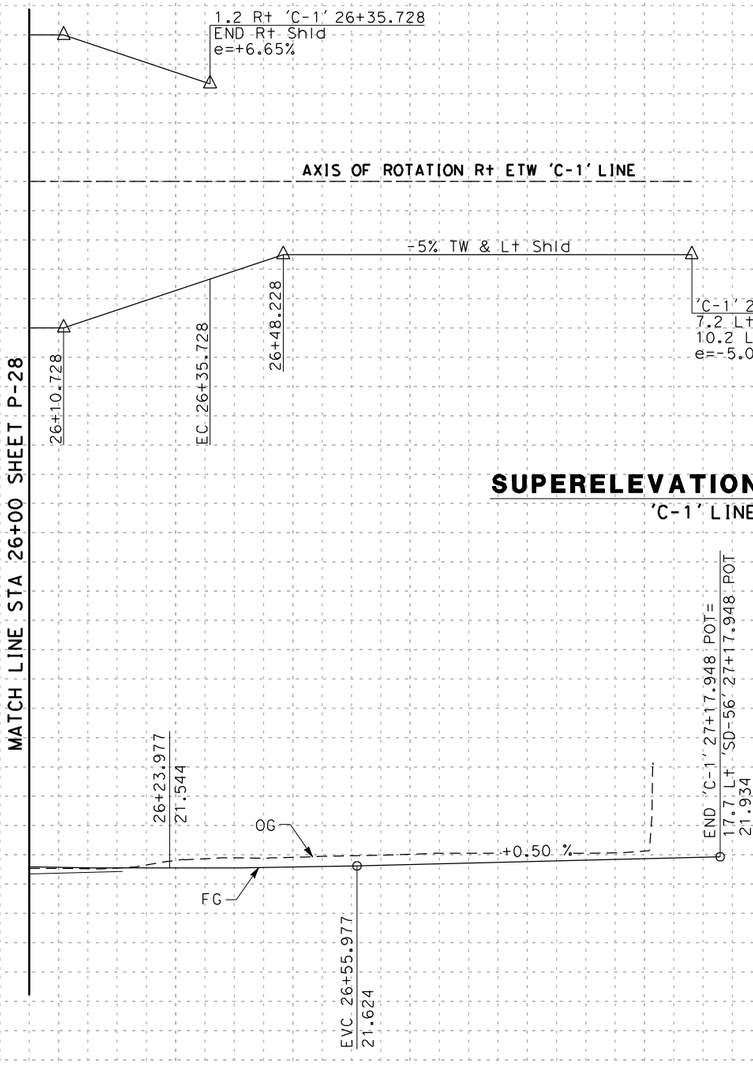

SUPERELEVATION DIAGRAM
'C-1' LINE

PROFILE
'C-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-29

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:17:46 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb029_alt4.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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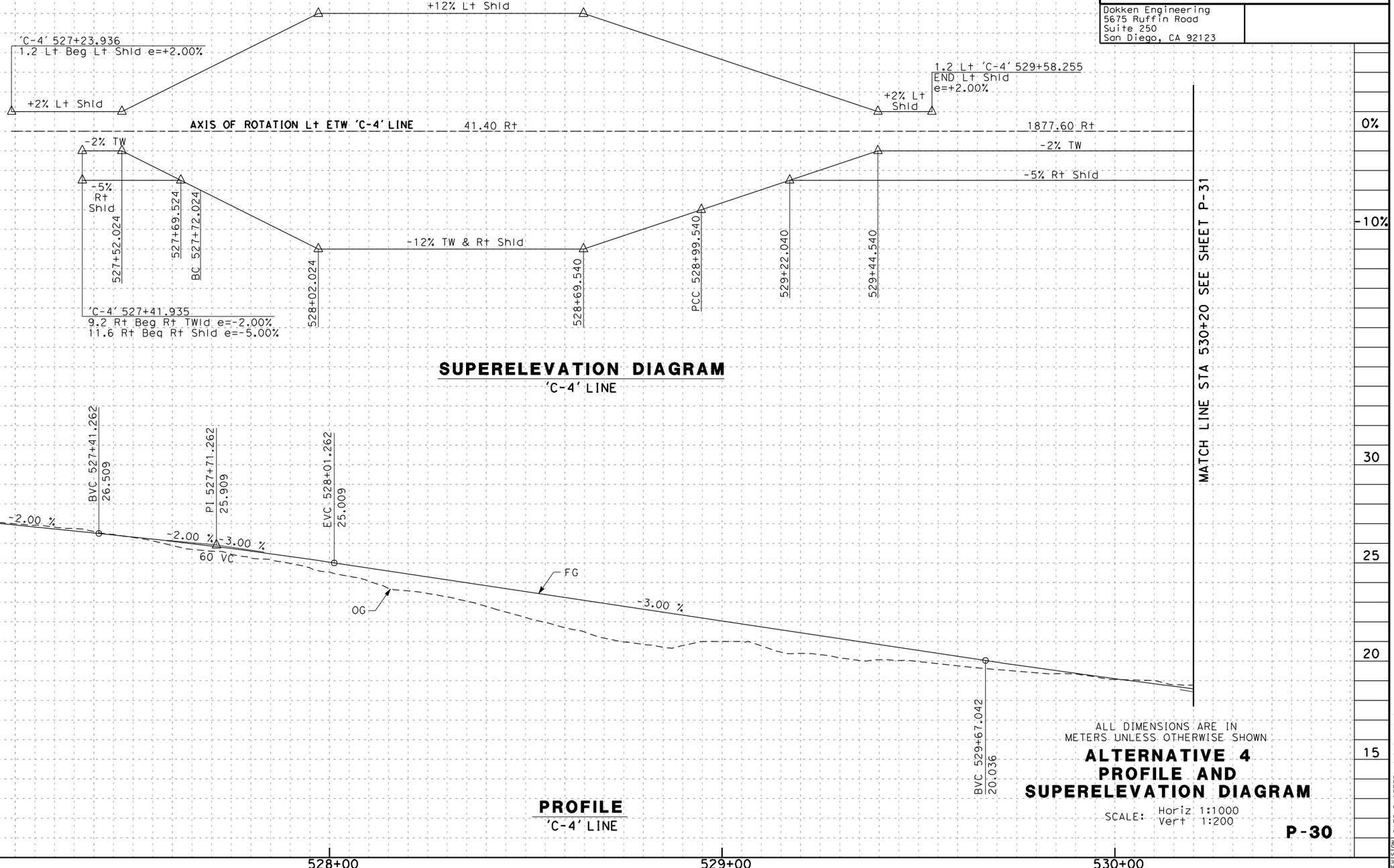

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-30

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:17:47 PM

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RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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DGN FILE => ...\1643fb030_alt4.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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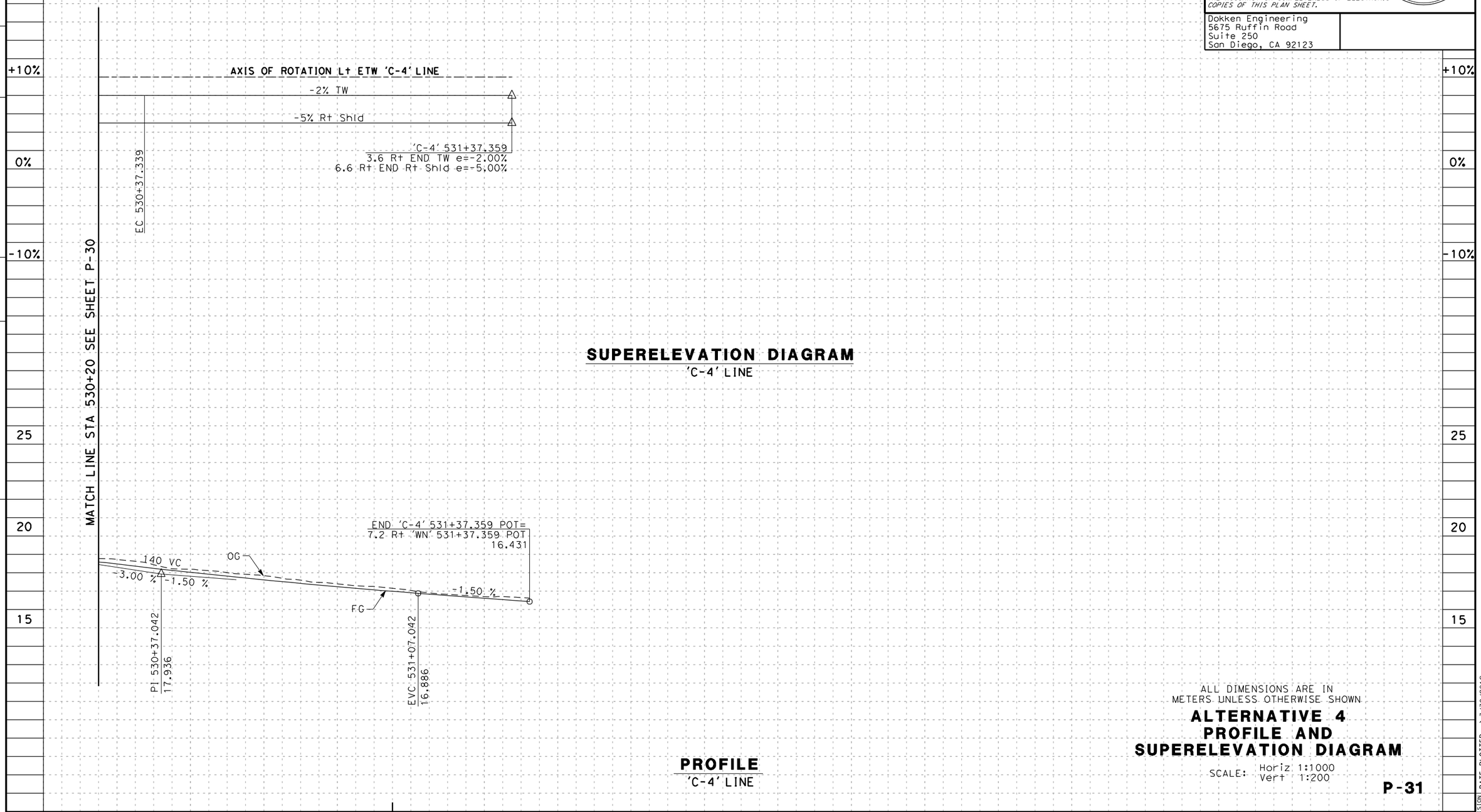

SUPERELEVATION DIAGRAM
'C-4' LINE

PROFILE
'C-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-31

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DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:17:48 PM

LAST REVISION 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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DGN FILE => ...\1643fb031_alt4.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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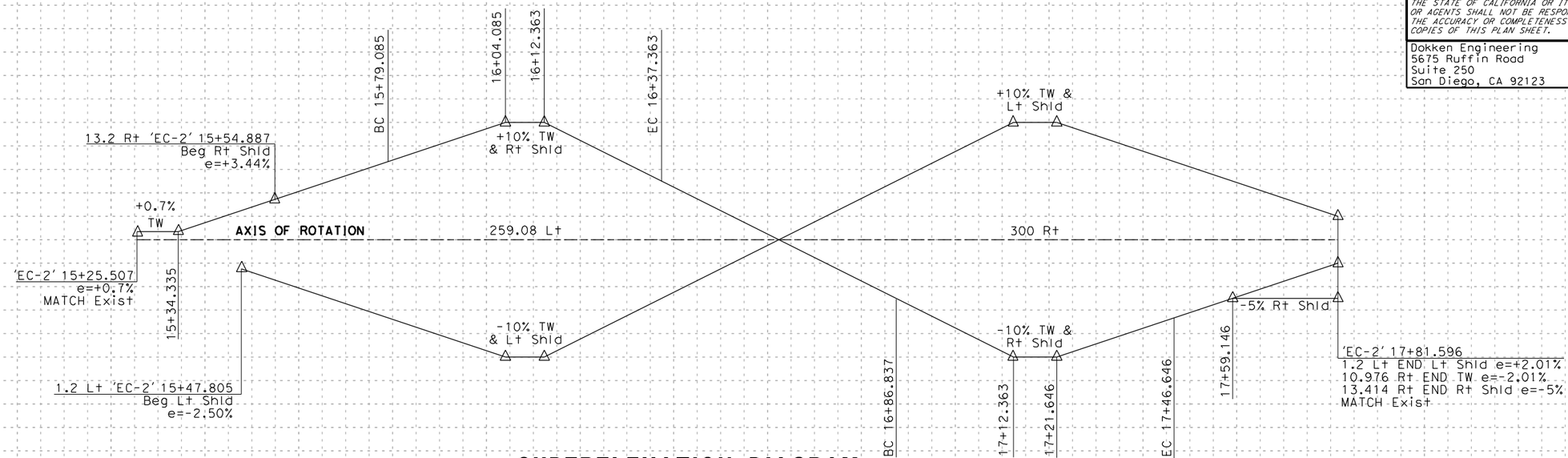
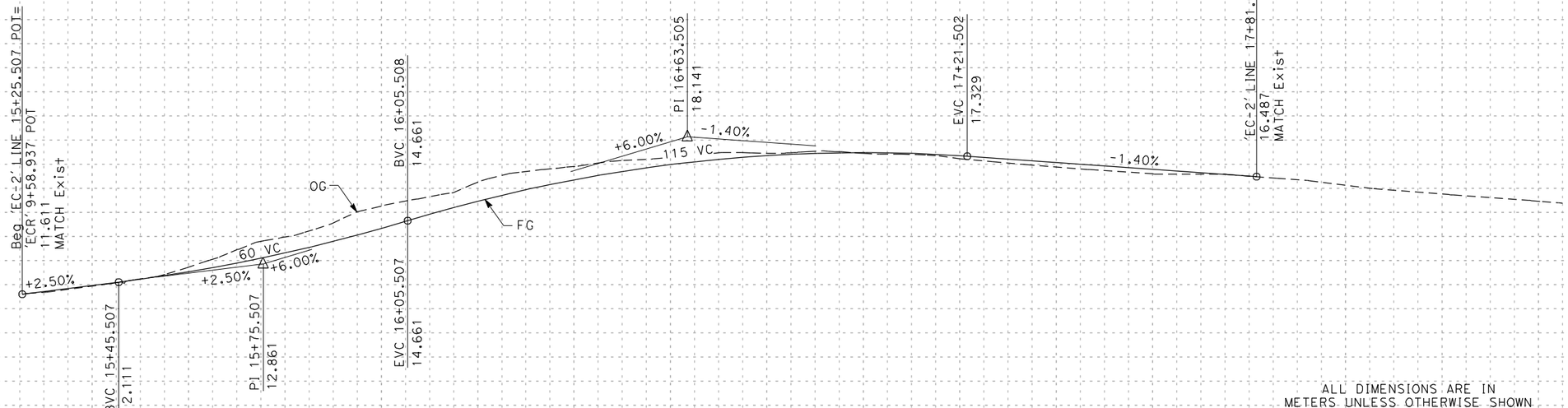
SUPERELEVATION DIAGRAM

'EC-2' LINE



PROFILE

'EC-2' LINE



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4 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 => 11:17:49 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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DGN FILE => ...\1643fb032_alt4.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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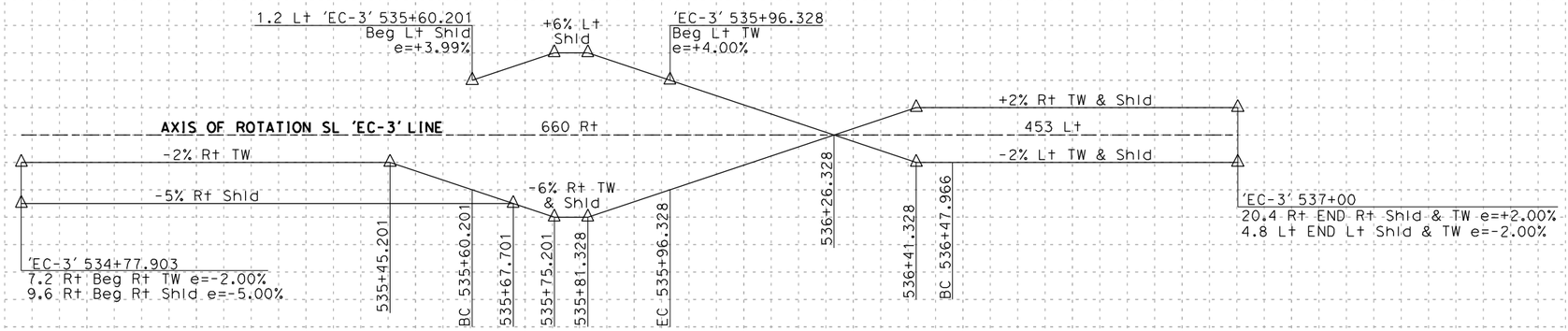
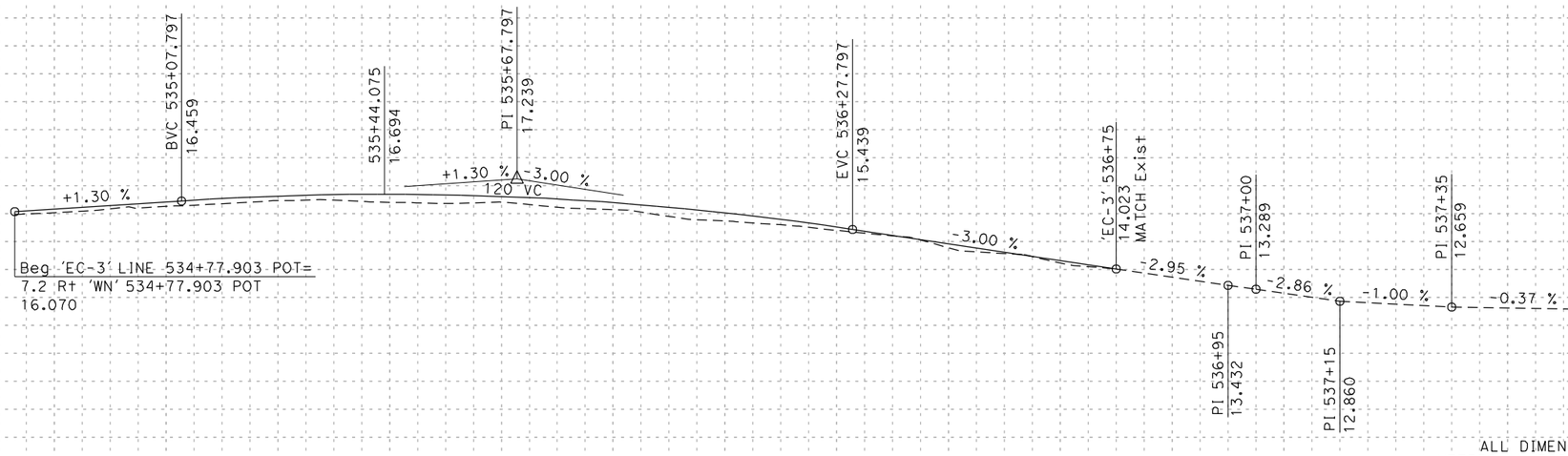


SUPERELEVATION DIAGRAM
'EC-3' LINE



PROFILE
'EC-3' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-33

+10% 0% -10%

20 15 10

Station 22+00 535+00 536+00 537+00

m^3 Exc Emb

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:17:51 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb033_alt4.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%

AXIS OF ROTATION CENTER LINE 'CVS' LINE

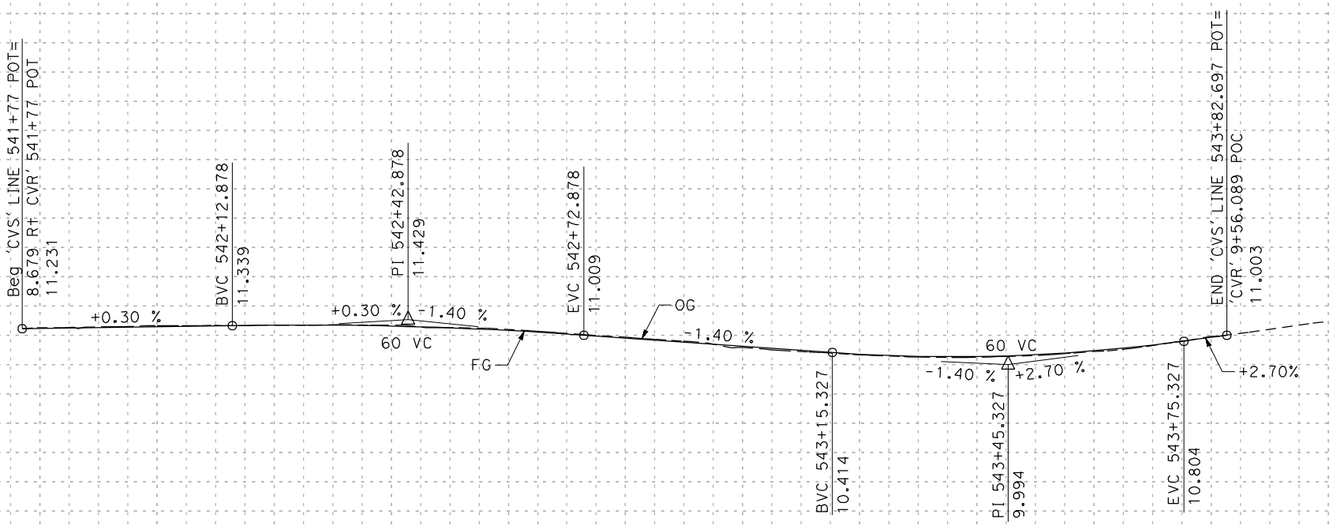
-2% Lt & Rt Shld & TW

'CVS' 541+77.000
Beg Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

'CVS' 543+82.697
END Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM

'CVS' LINE



PROFILE

'CVS' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 4
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-34

Station: 542+00 | 543+00 | 544+00

m^3 Exc
Emb

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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

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CU 00000

EA 177900