

CHANNEL ALIGNMENT

HORIZONTAL ALIGNMENT NAME: RIVER
 STATION NORTHING EASTING
 ELEMENT: LINEAR
 PI 207+40.00 497227.2939 1558615.6438
 PI 210+48.56 496957.8105 1558465.3562
 TANGENT DIRECTION: S 29°08'52.36" W
 TANGENT LENGTH: 308.56

**DETOUR VT 73
 CURVE NO. 1 DATA**

Δ = 23°14'31.01"
 D = 13°28'52.90"
 R = 425.00'
 T = 87.40'
 L = 172.40'
 E = 8.89'
 BANK = 4.4% MAX.
 25 MPH DESIGN

**VT 100
 CURVE NO. 1 DATA**

Δ = 9°33'33.70"
 D = 4°46'28.73"
 R = 1200.00'
 T = 100.34'
 L = 200.21'
 E = 4.19'
 BANK = NONE
 MATCH EXISTING

MAINLINE ALIGNMENT

HORIZONTAL ALIGNMENT NAME: VT 73 PROPOSED
 STATION NORTHING EASTING

ELEMENT: LINEAR
 POB 454+00.00 497056.0810 1557726.5852
 PC 454+25.38 497074.2003 1557744.3580
 TANGENT DIRECTION: N 44°26'48.47" E
 TANGENT LENGTH: 25.38

ELEMENT: CIRCULAR
 PC 454+25.38 497074.2003 1557744.3580
 PI 455+64.76 497173.7049 1557841.9595
 CC 496724.0770 1558101.3085
 PCC 456+97.24 497208.3682 1557976.9620
 RADIUS: 500.00
 DELTA: 31°09'10.90" RIGHT

DEGREE OF CURVATURE (ARC): 11°27'32.96"
 LENGTH: 271.86
 TANGENT: 139.38
 CHORD: 268.52
 MIDDLE ORDINATE: 18.36
 EXTERNAL: 19.06

ELEMENT: CIRCULAR
 PC 456+97.24 497208.3682 1557976.9620
 PI 457+99.63 497233.8321 1558076.1362
 CC 496791.8777 1558083.9000
 PT 458+98.28 497211.8671 1558176.1436
 RADIUS: 430.00
 DELTA: 26°47'15.18" RIGHT

DEGREE OF CURVATURE (ARC): 13°19'28.56"
 LENGTH: 201.04
 TANGENT: 102.39
 CHORD: 199.21
 MIDDLE ORDINATE: 11.70
 EXTERNAL: 12.02

ELEMENT: LINEAR
 PT 458+98.28 497211.8671 1558176.1436
 PC 460+25.05 497184.6729 1558299.9604
 TANGENT DIRECTION: S 77°36'45.45" E
 TANGENT LENGTH: 126.77

ELEMENT: CIRCULAR
 PC 460+25.05 497184.6729 1558299.9604
 PI 461+01.89 497168.1885 1558375.0146
 CC 496647.4771 1558181.9743
 PT 461+77.75 497131.7645 1558442.6767
 RADIUS: 550.00
 DELTA: 15°54'25.81" RIGHT

DEGREE OF CURVATURE (ARC): 10°25'02.69"
 LENGTH: 152.70
 TANGENT: 76.84
 CHORD: 152.21
 MIDDLE ORDINATE: 5.29
 EXTERNAL: 5.34

ELEMENT: LINEAR
 PT 461+77.75 497131.7645 1558442.6767
 POE 463+85.00 497033.5249 1558625.1689
 TANGENT DIRECTION: S 61°42'19.64" E
 TANGENT LENGTH: 207.25

PROJECT NAME: ROCHESTER
 PROJECT NUMBER: ER BRF 0162(18)

FILE NAME: zilc332allgn.dgn PLOT DATE: 8/19/2013
 PROJECT LEADER: S.E. BURBANK DRAWN BY: C.L. CILLEY
 DESIGNED BY: C.L. CILLEY CHECKED BY: D.M. PECK
 BR 19 ALIGNMENT LAYOUT SHEET SHEET 188 OF 238



**VT 73
 CURVE NO. 1 DATA**
 Δ = 57°56'26.08"
 D1 = 11°27'32.96"
 D2 = 13°19'28.56"
 R1 = 500.00'
 R2 = 430.00'
 T1 = 267.95'
 T2 = 249.97'
 L1 = 271.86'
 L2 = 201.04'
 E = 67.27'
 35 MPH DESIGN

**VT 73
 CURVE NO. 2 DATA**
 Δ = 15°54'25.81"
 D = 10°25'02.69"
 R = 550.00'
 T = 76.84'
 L = 152.70'
 E = 5.34'
 BANK = 5.4% MAX.
 35 MPH DESIGN

DETOUR ALIGNMENT

HORIZONTAL ALIGNMENT NAME: DETOUR VT 73
 STATION NORTHING EASTING

ELEMENT: LINEAR
 POB 100+00.00 497211.4983 1558177.8231
 PC 100+03.44 497210.7957 1558181.1917
 TANGENT DIRECTION: S 78°13'11.08" E
 TANGENT LENGTH: 3.44

ELEMENT: CIRCULAR
 PC 100+03.44 497210.7957 1558181.1917
 PI 100+90.84 497192.9518 1558266.7529
 CC 496794.7472 1558094.4242
 PT 101+75.84 497142.7923 1558338.3291
 RADIUS: 425.00
 DELTA: 23°14'31.01" RIGHT

DEGREE OF CURVATURE (ARC): 13°28'52.90"
 LENGTH: 172.40
 TANGENT: 87.40
 CHORD: 171.22
 MIDDLE ORDINATE: 8.71
 EXTERNAL: 8.89

ELEMENT: LINEAR
 PT 101+75.84 497142.7923 1558338.3291
 POE 104+85.00 496965.4052 1558591.4553
 TANGENT DIRECTION: S 54°58'40.06" E
 TANGENT LENGTH: 309.09

VT 100 ALIGNMENT

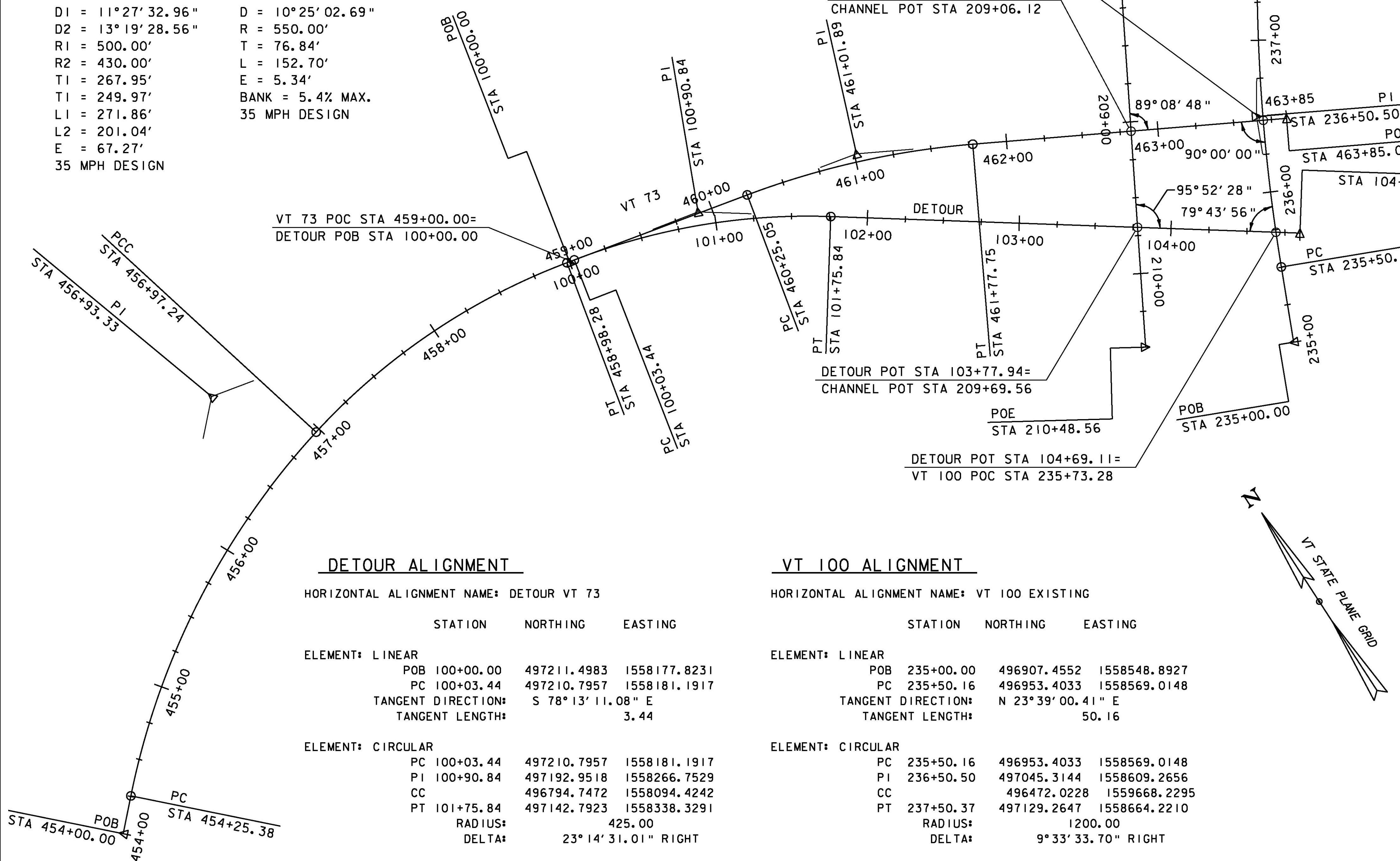
HORIZONTAL ALIGNMENT NAME: VT 100 EXISTING
 STATION NORTHING EASTING

ELEMENT: LINEAR
 POB 235+00.00 496907.4552 1558548.8927
 PC 235+50.16 496953.4033 1558569.0148
 TANGENT DIRECTION: N 23°39'00.41" E
 TANGENT LENGTH: 50.16

ELEMENT: CIRCULAR
 PC 235+50.16 496953.4033 1558569.0148
 PI 236+50.50 497045.3144 1558609.2656
 CC 496472.0228 1559668.2295
 PT 237+50.37 497129.2647 1558664.2210
 RADIUS: 1200.00
 DELTA: 9°33'33.70" RIGHT

DEGREE OF CURVATURE (ARC): 4°46'28.73"
 LENGTH: 200.21
 TANGENT: 100.34
 CHORD: 199.98
 MIDDLE ORDINATE: 4.17
 EXTERNAL: 4.19

ELEMENT: LINEAR
 PT 237+50.37 497129.2647 1558664.2210
 POE 238+20.00 497187.5208 1558702.3565
 TANGENT DIRECTION: N 33°12'34.11" E
 TANGENT LENGTH: 69.63



DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (2007)