Maricopa Association of Governments

HASSAYAMPA VALLEY RAIL CORRIDORS COST ANALYSIS UPDATE

FINAL REPORT | APPENDIX

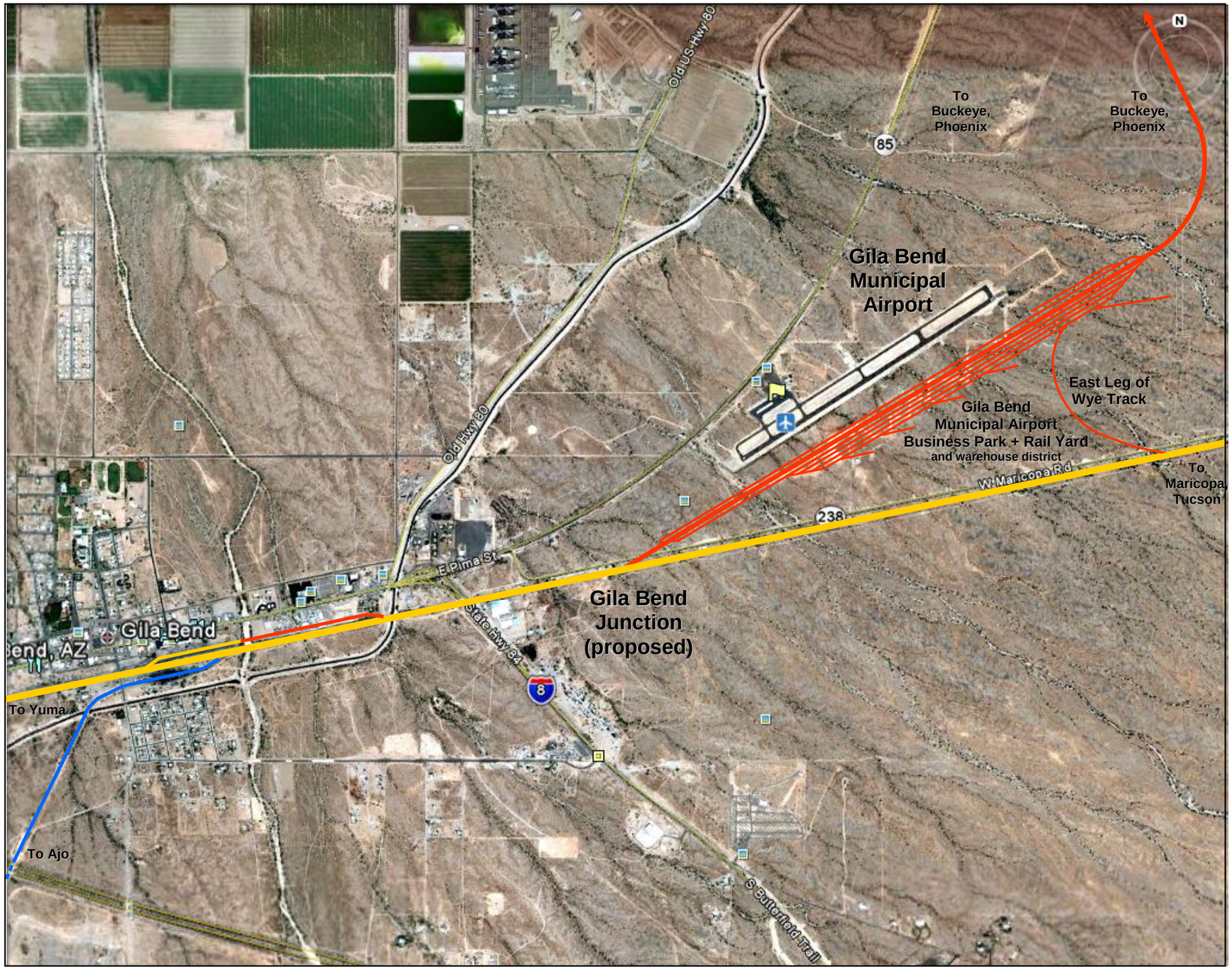
OCTOBER 2013

Prepared for
MARICOPA ASSOCIATION of GOVERNMENTS

Prepared by
Kimley-Horn and Associates, Inc.

Appendix A

Potential Concept for Gila Bend, Arizona Railroad Lines, and Facilities



MARICOPA ASSOCIATION of GOVERNMENTS

WEST VALLEY RAIL CORRIDORS COST ANALYSIS

2012

Gila Bend, Arizona Railroad Lines and Facilities

UNION PACIFIC RAILROAD
(SUNSET ROUTE – MAINLINE)

PROPOSED 'GILA BEND-BUCKEYE' RAIL CONNECTION
(+ new siding in downtown Gila Bend)
(*THIS RAIL CORRIDOR IS NOT CURRENTLY SPONSORED, ENDORSED OR FUNDED BY ANY GOVERNMENT AGENCY OR PRIVATE RAILROAD.)

Rail Yard – 7,000ft
Rail Yard main siding – 10,000ft

TUCSON, CORNELIA & GILA BEND RAILROAD
(owned by Freeport McMoRan)
(Out of Service since 1997)

Appendix B1

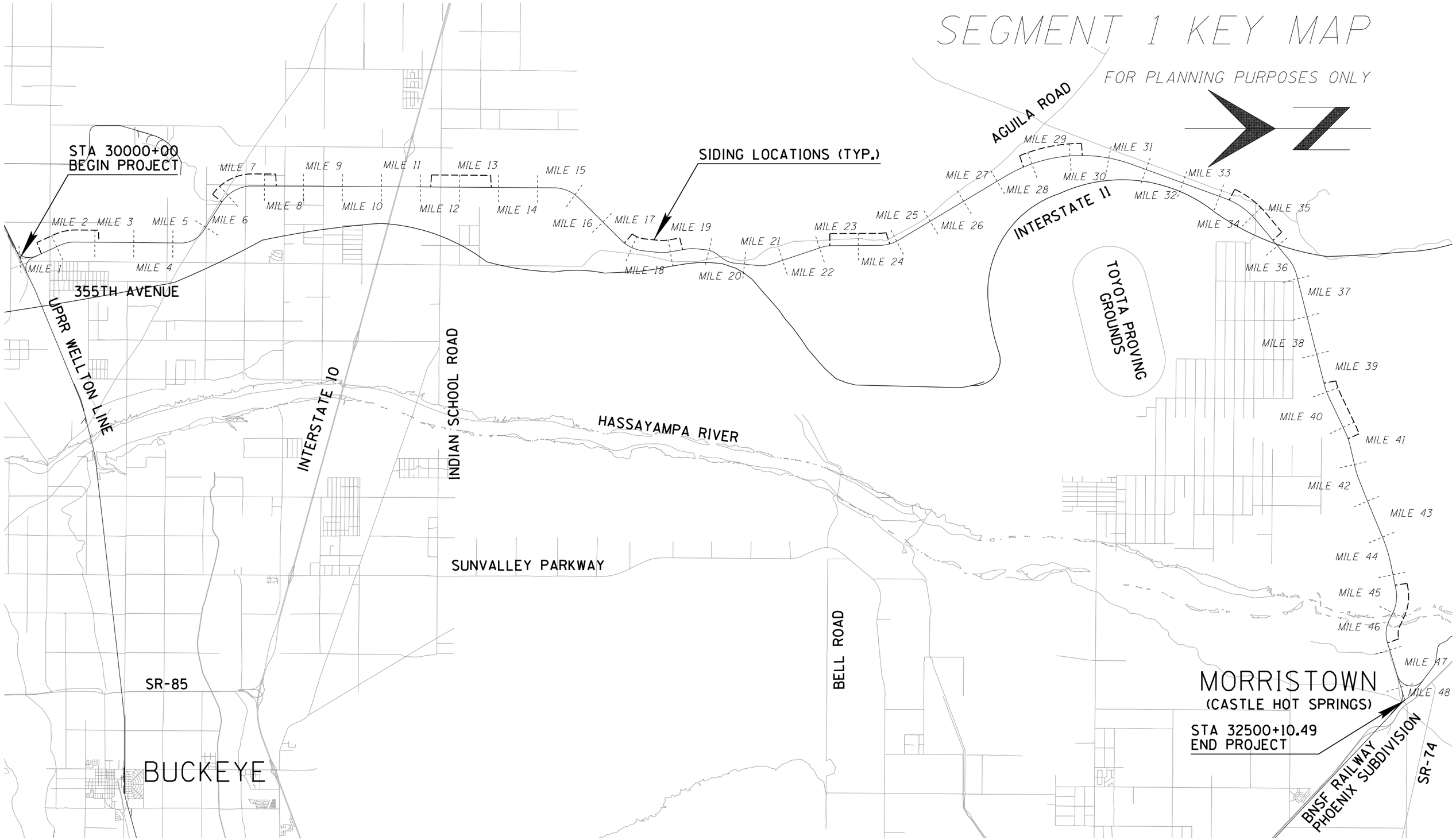
Segment No. 1 Horizontal Alignment and Vertical Profile

HORIZONTAL ALIGNMENTS AND VERTICAL PROFILE HAVE BEEN PROVIDED FOR PLANNING PURPOSES ONLY TO PROVIDE A BASIS FOR A PLANNING-LEVEL ESTIMATE OF PROBABLE COST

MAG HASSAYAMPA VALLEY RAIL CORRIDORS COST ANALYSIS

SEGMENT 1 KEY MAP

FOR PLANNING PURPOSES ONLY



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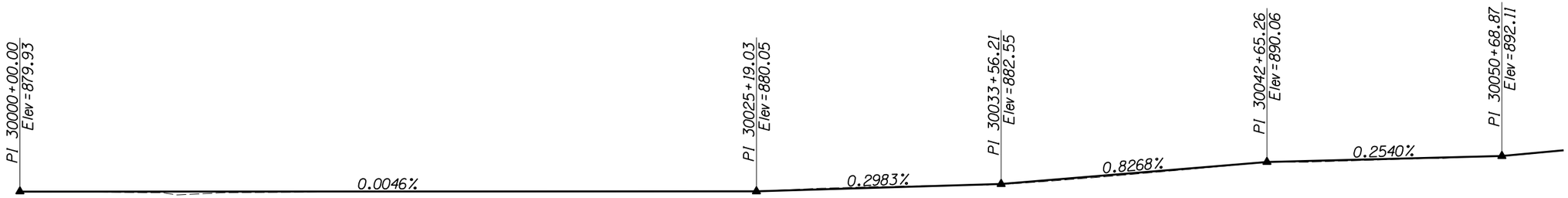
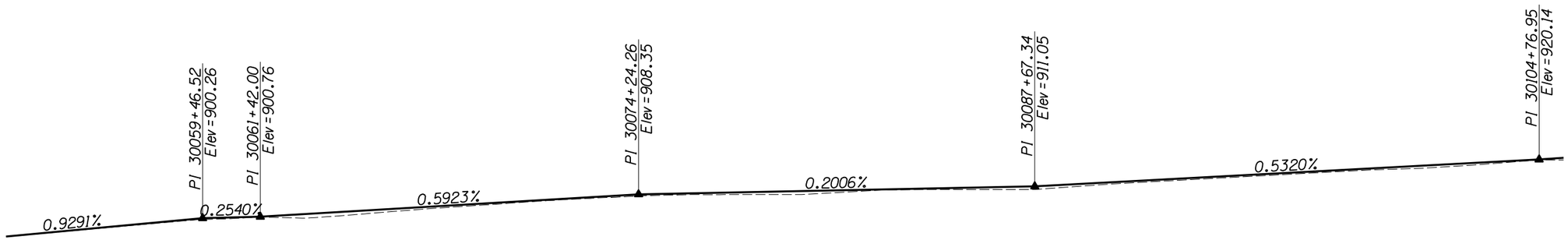
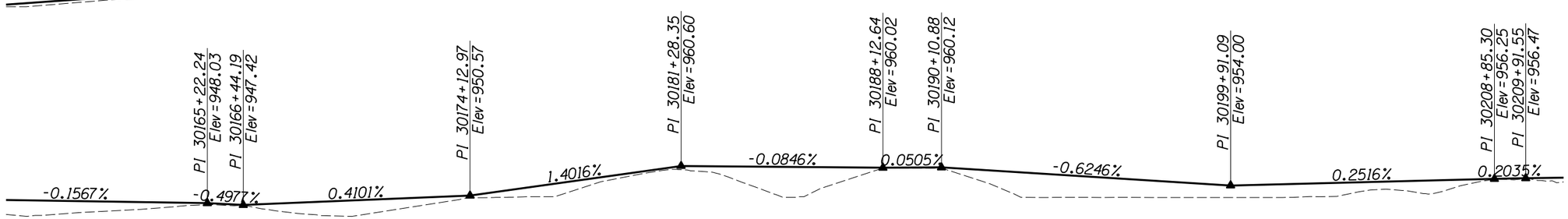


MILE 1



MILE 2

MILE 3



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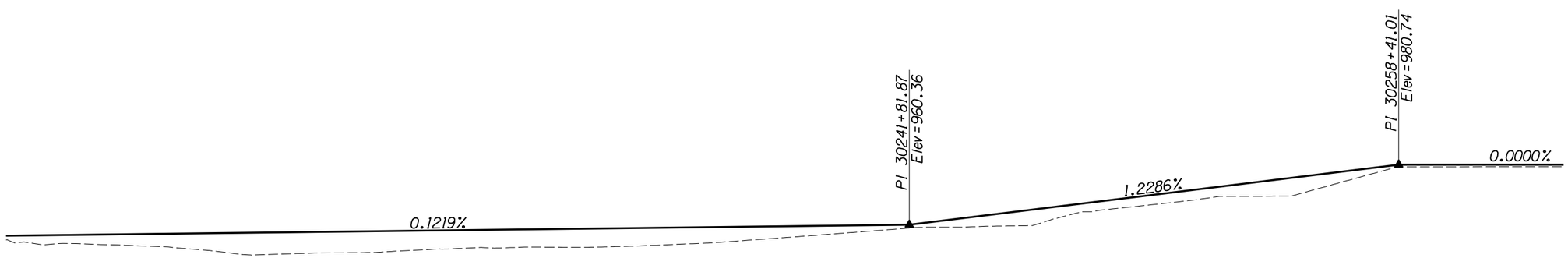

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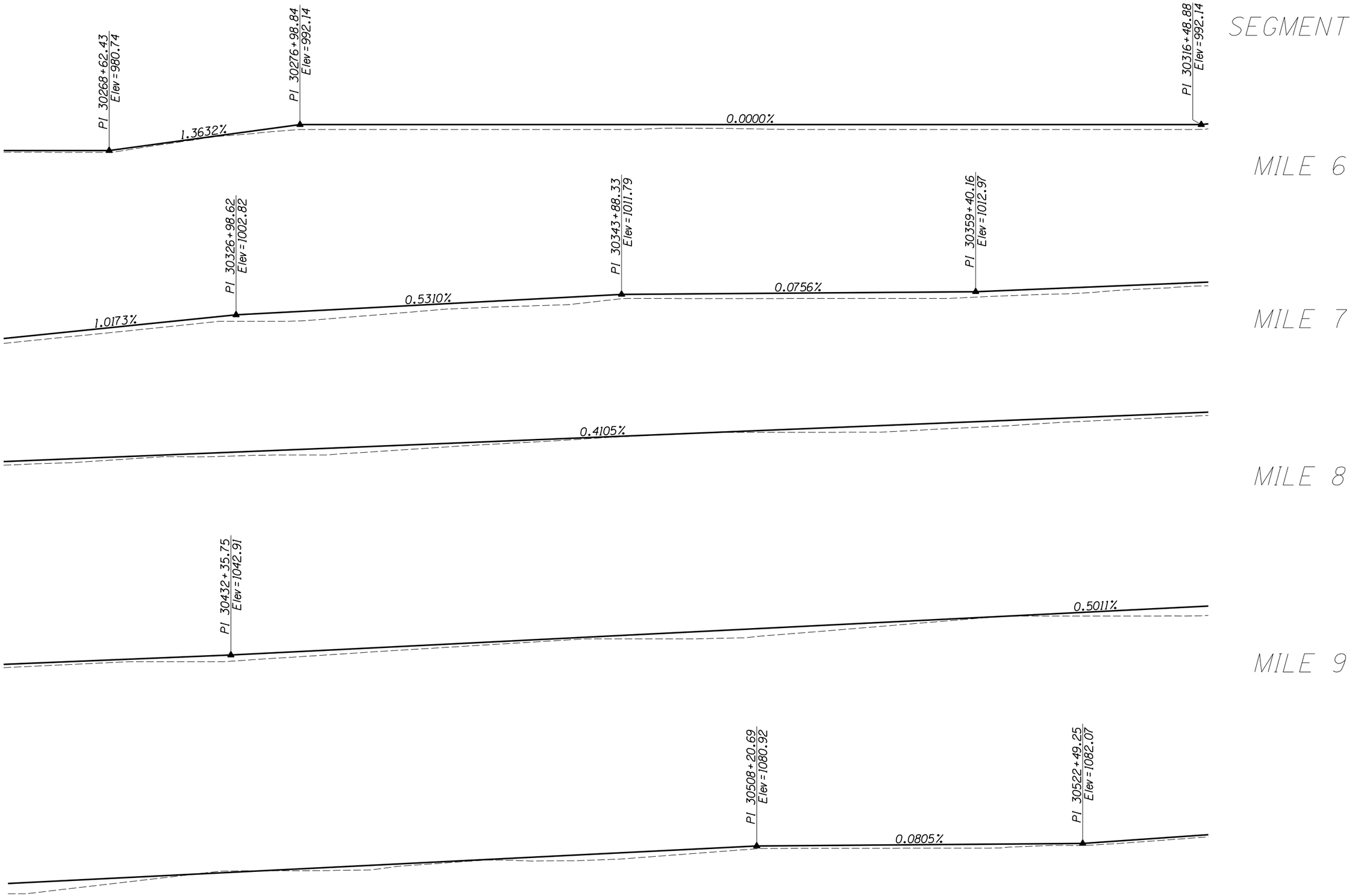
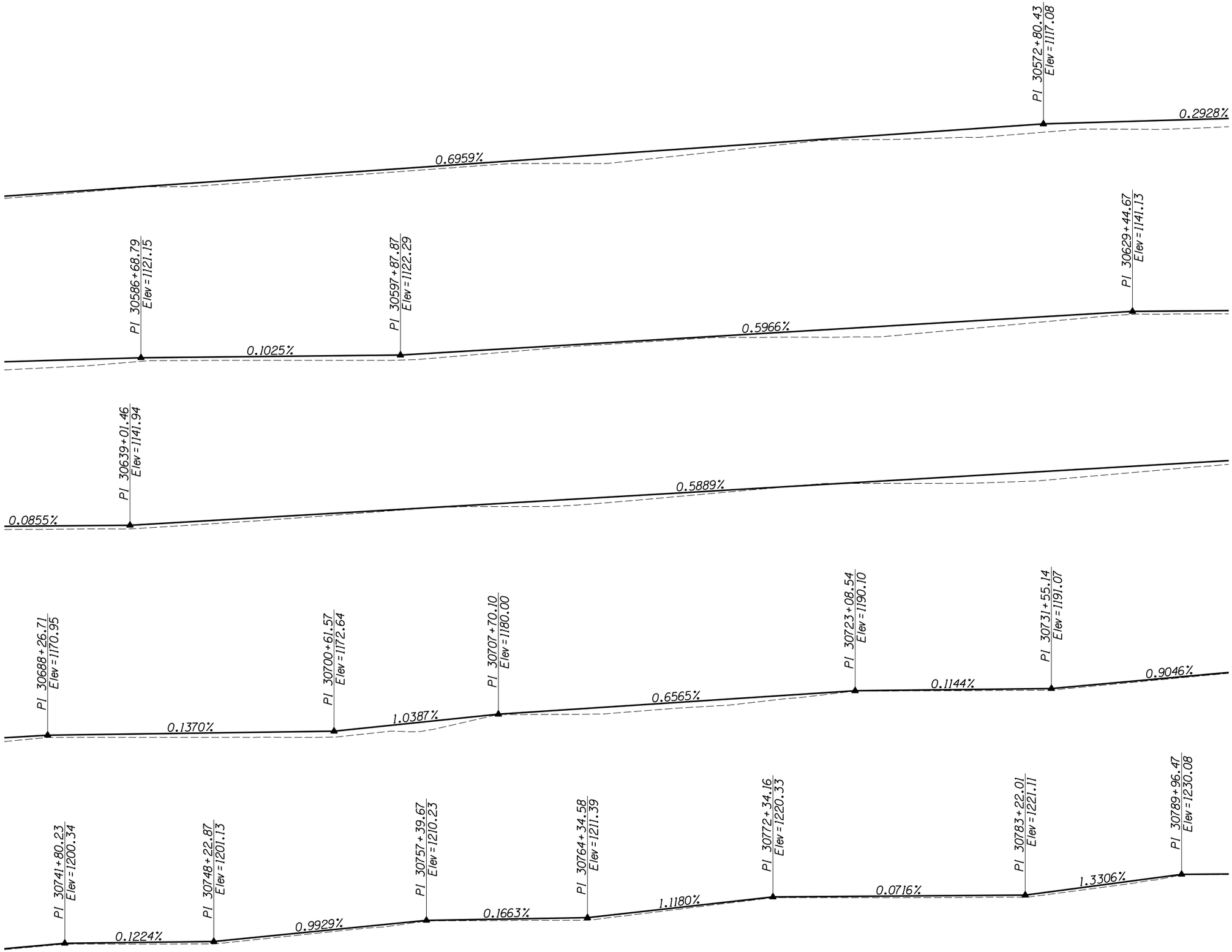
FOR PLANNING PURPOSES ONLY



FOR PLANNING PURPOSES ONLY

SEGMENT 1



MILE 11

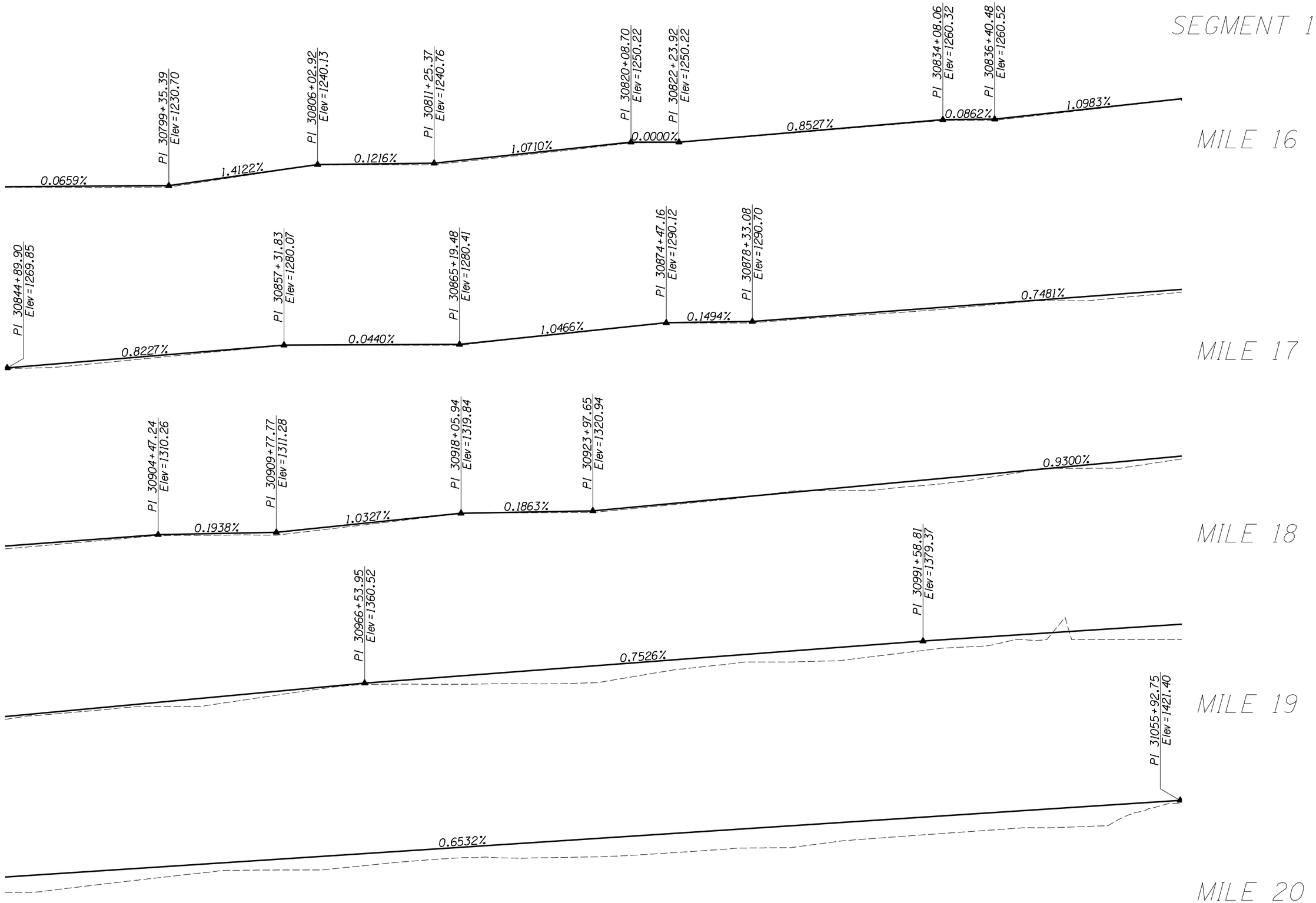
MILE 12

MILE 13

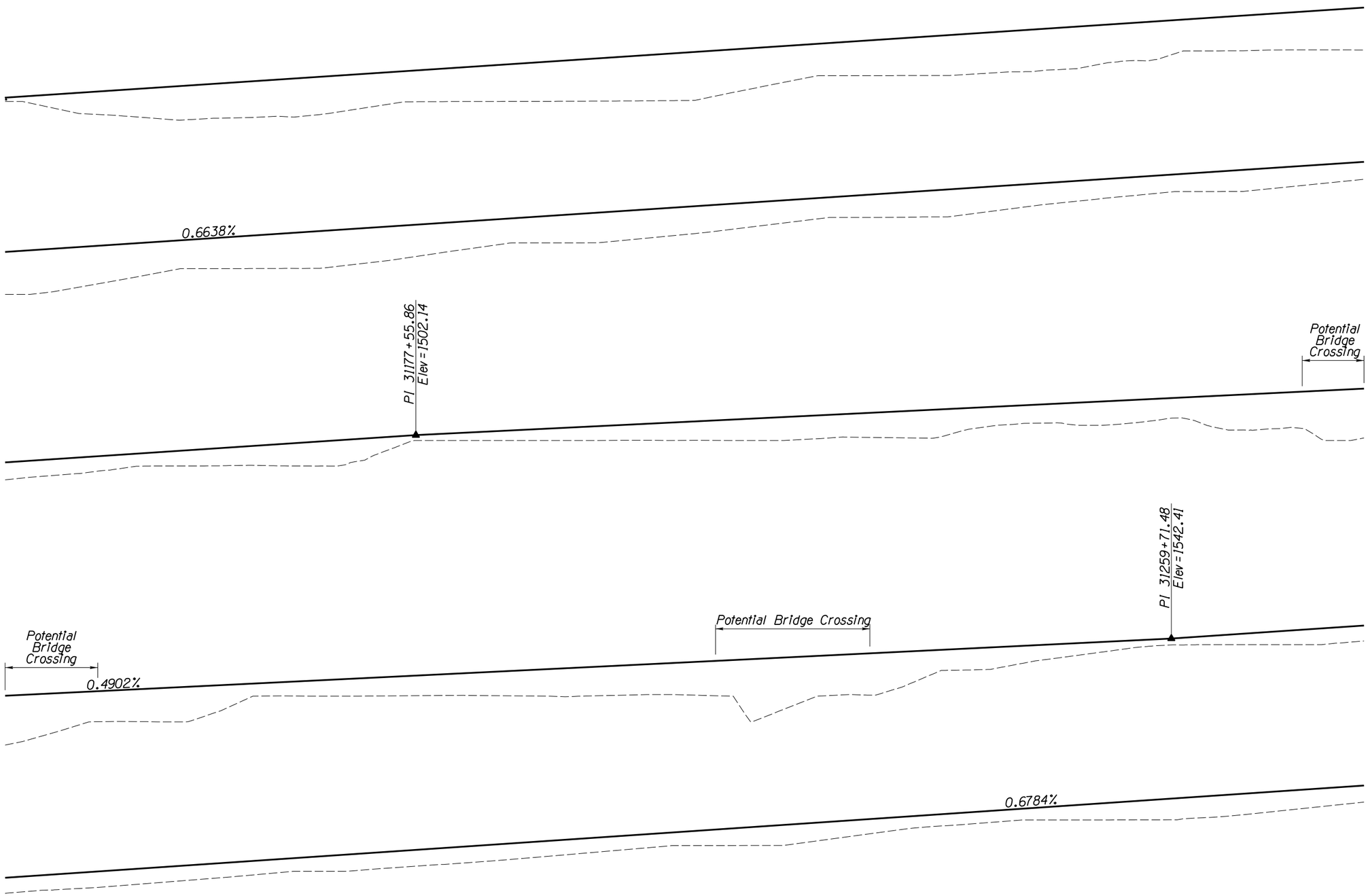
MILE 14

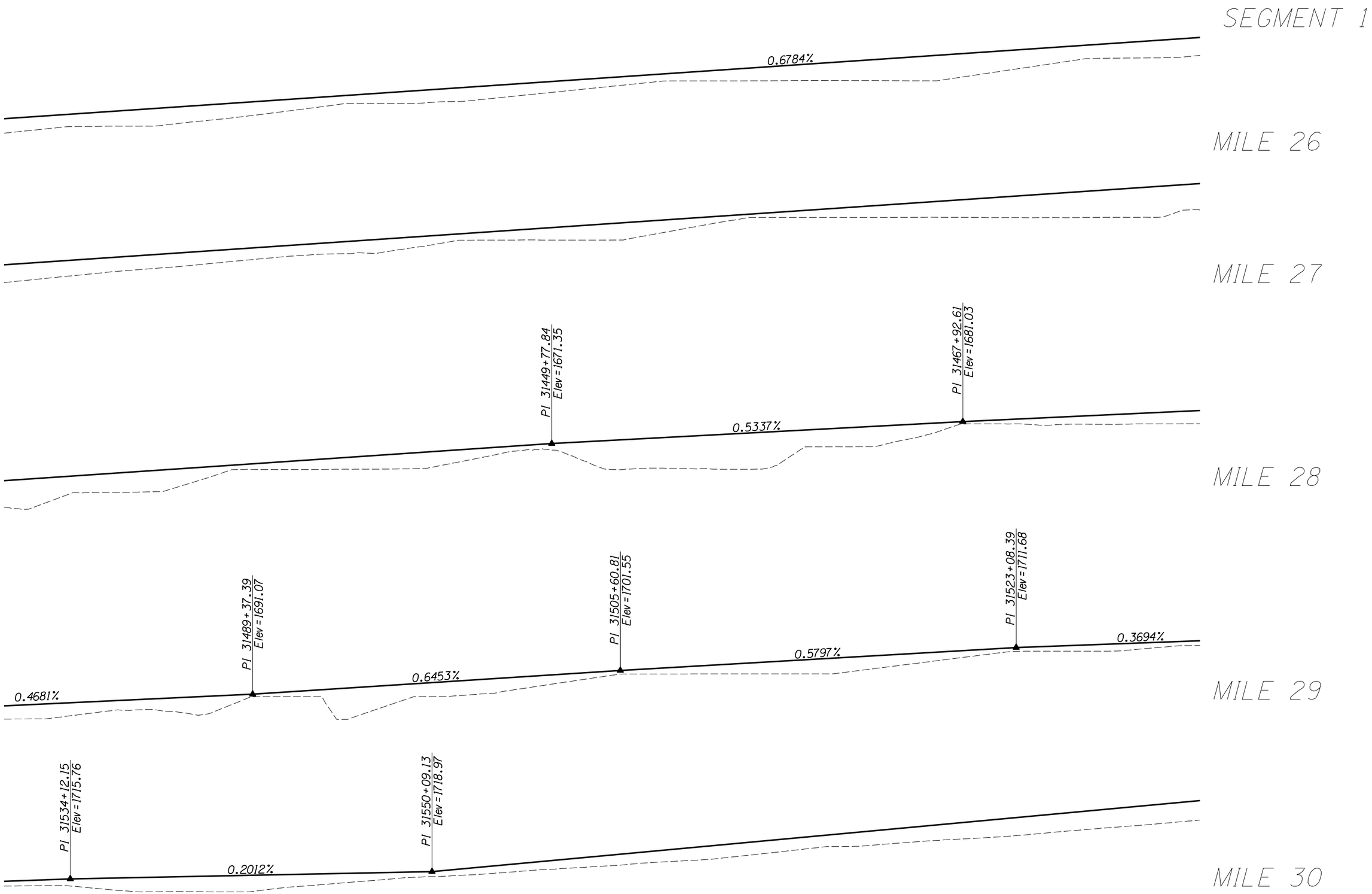
MILE 15

FOR PLANNING PURPOSES ONLY

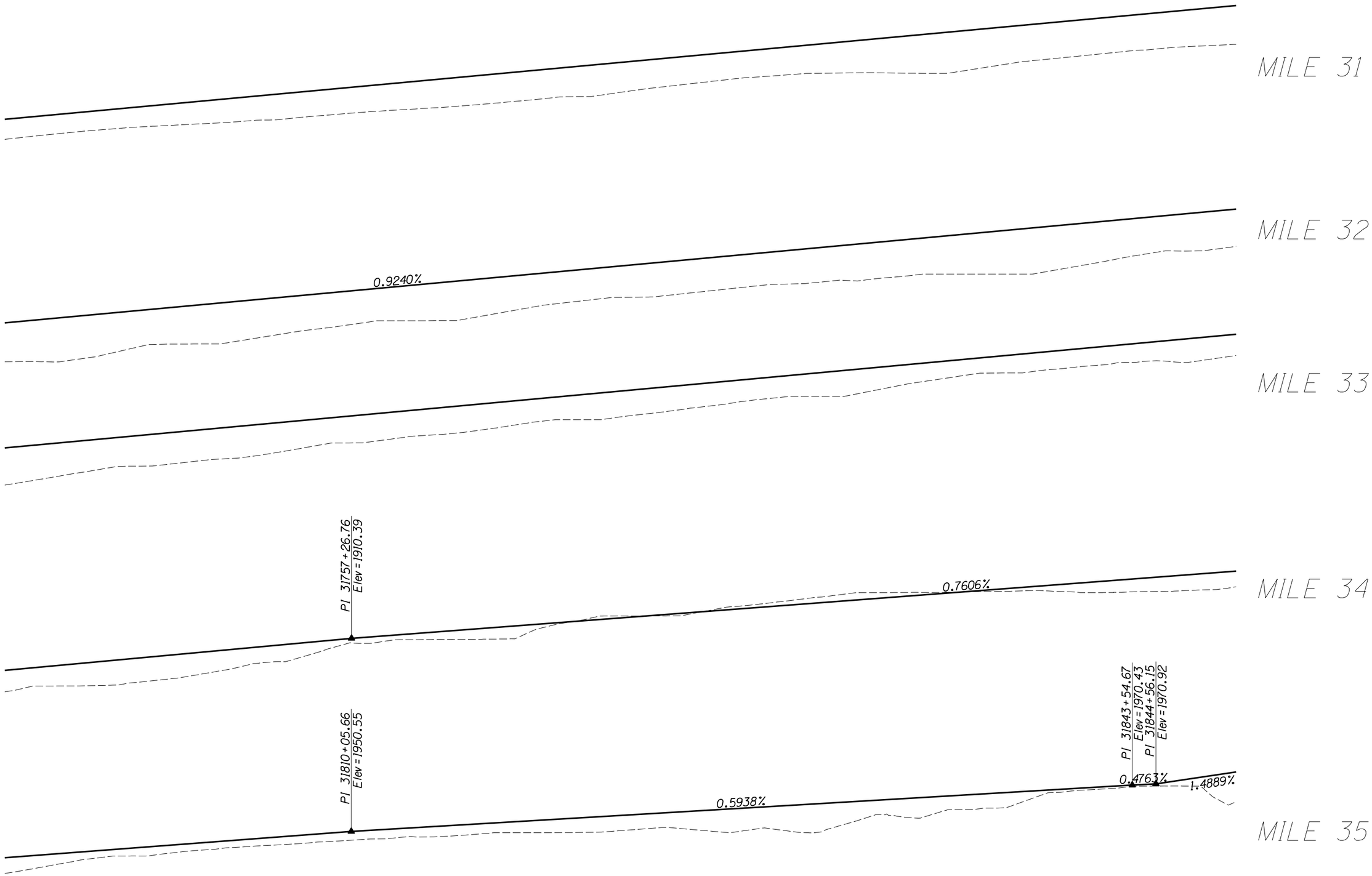


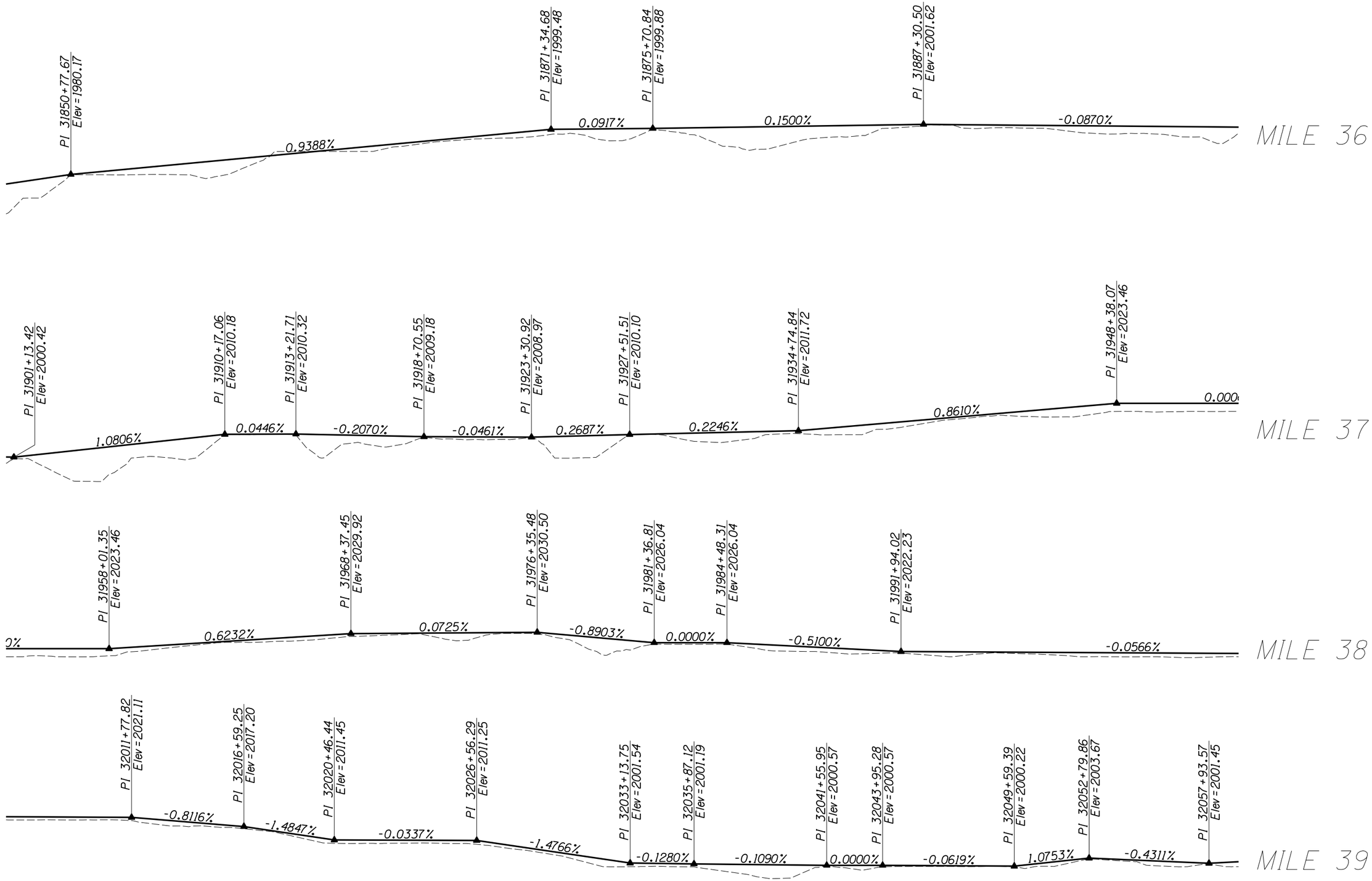
FOR PLANNING PURPOSES ONLY

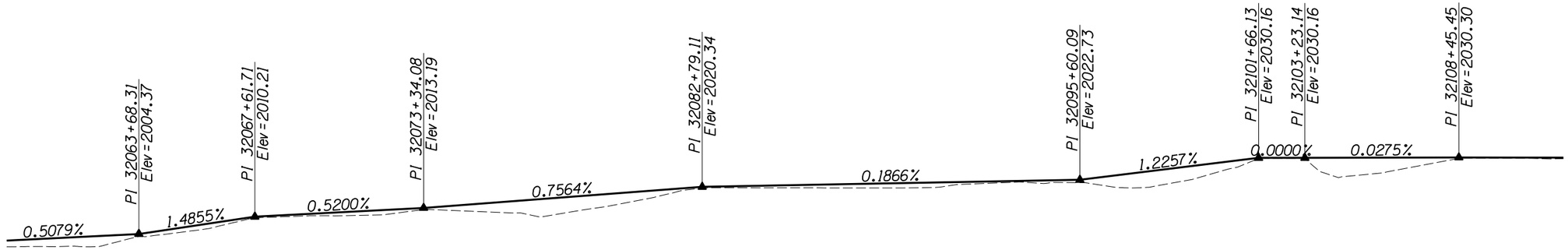

MILE 21
0.6638%
PI 31177+55.86
Elev=1502.14
Potential Bridge Crossing
MILE 22
MILE 23
PI 31259+71.48
Elev=1542.41
Potential Bridge Crossing
Potential Bridge Crossing
0.4902%
MILE 24
0.6784%
MILE 25

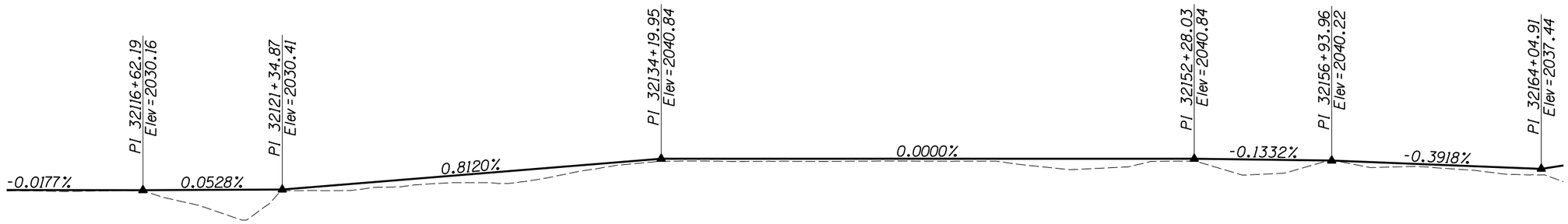


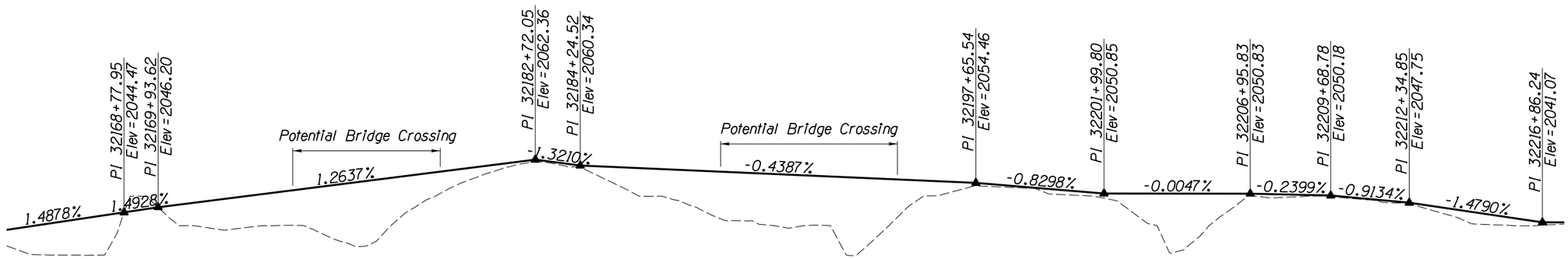
FOR PLANNING PURPOSES ONLY

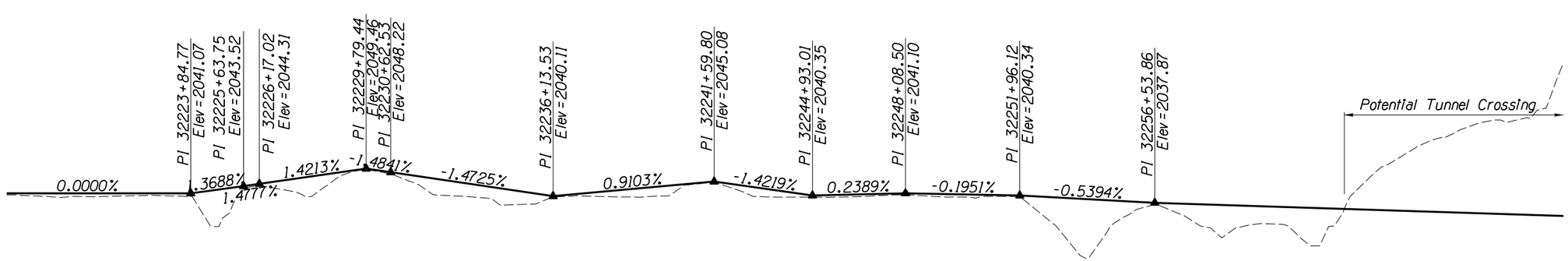

MILE 31
MILE 32
0.9240%
MILE 33
PI 31757+26.76
Elev=1910.39
0.7606%
MILE 34
PI 31810+05.66
Elev=1950.55
0.5938%
PI 31843+54.67
Elev=1970.43
PI 31844+56.15
Elev=1970.92
0.4763%
1.4889%
MILE 35


PI 31850+77.67
Elev=1980.17
0.9388%
PI 31871+34.68
Elev=1999.48
0.0917%
PI 31875+70.84
Elev=1999.88
0.1500%
PI 31887+30.50
Elev=2001.62
-0.0870%
MILE 36
PI 31901+13.42
Elev=2000.42
1.0806%
PI 31910+17.06
Elev=2010.18
0.0446%
PI 31913+21.71
Elev=2010.32
-0.2070%
PI 31918+70.55
Elev=2009.18
-0.0461%
PI 31923+30.92
Elev=2008.97
0.2687%
PI 31927+51.51
Elev=2010.10
0.2246%
PI 31934+74.84
Elev=2011.72
0.8610%
PI 31948+38.07
Elev=2023.46
MILE 37
PI 31958+01.35
Elev=2023.46
0.6232%
PI 31968+37.45
Elev=2029.92
0.0725%
PI 31976+35.48
Elev=2030.50
-0.8903%
PI 31981+36.81
Elev=2026.04
0.0000%
PI 31984+48.31
Elev=2026.04
-0.5100%
PI 31991+94.02
Elev=2022.23
-0.0566%
MILE 38
PI 32011+77.82
Elev=2021.11
-0.8116%
PI 32016+59.25
Elev=2017.20
-1.4847%
PI 32020+46.44
Elev=2011.45
-0.0337%
PI 32026+56.29
Elev=2011.25
-1.4766%
PI 32033+13.75
Elev=2001.54
-0.1280%
PI 32035+87.12
Elev=2001.19
-0.1090%
PI 32041+55.95
Elev=2000.57
0.0000%
PI 32043+95.28
Elev=2000.57
-0.0619%
PI 32049+59.39
Elev=2000.22
1.0753%
PI 32052+79.86
Elev=2003.67
-0.4311%
PI 32057+93.57
Elev=2001.45
MILE 39

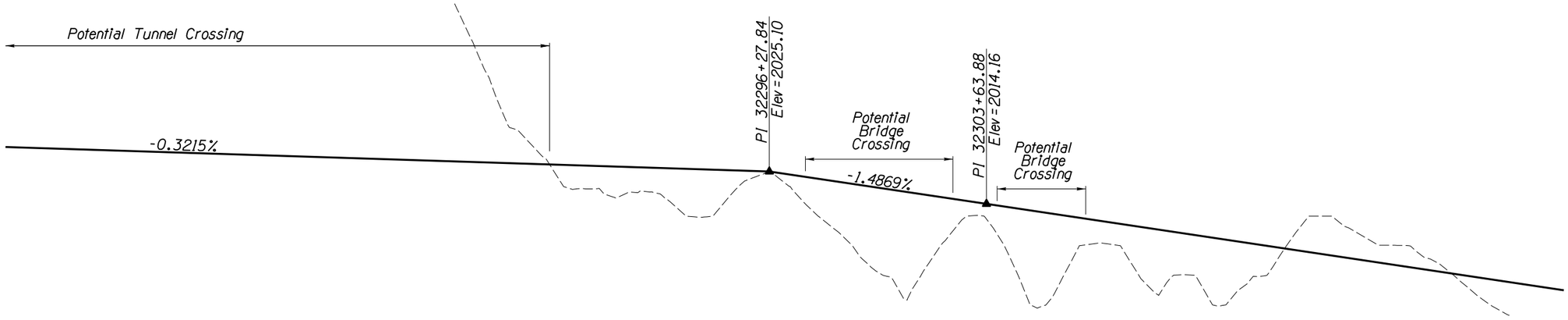




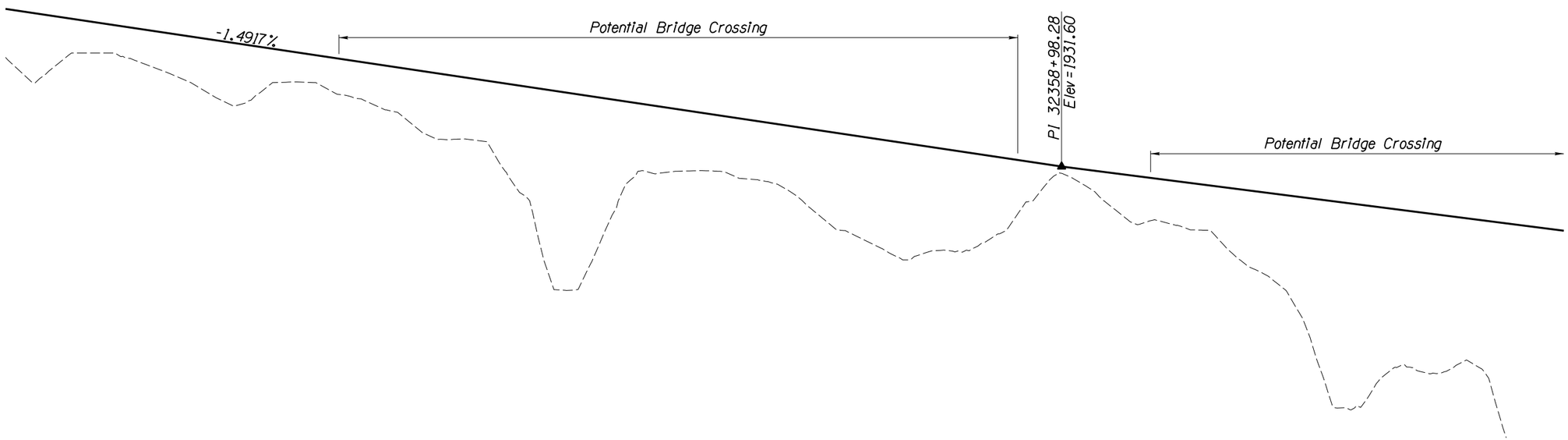




FOR PLANNING PURPOSES ONLY



MILE 44



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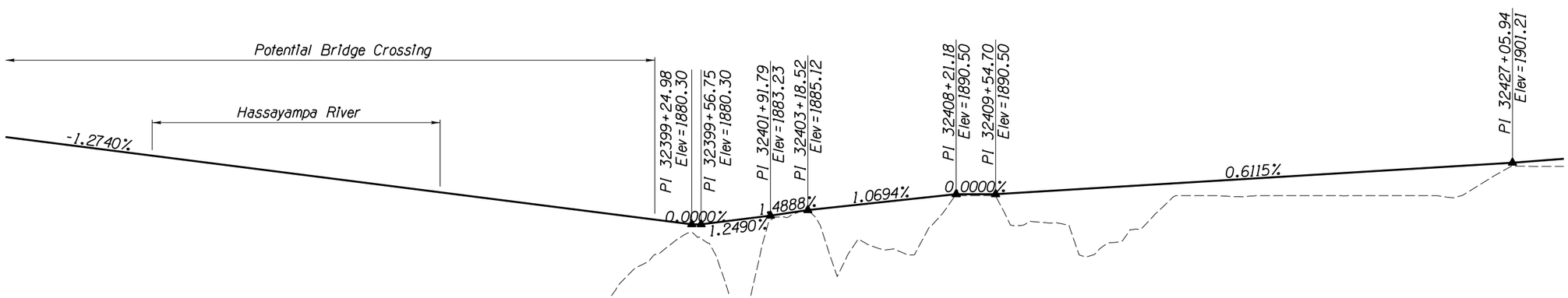

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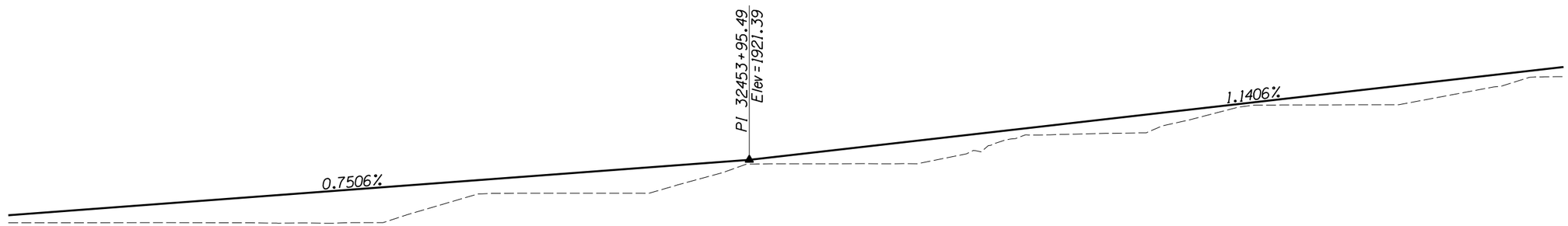

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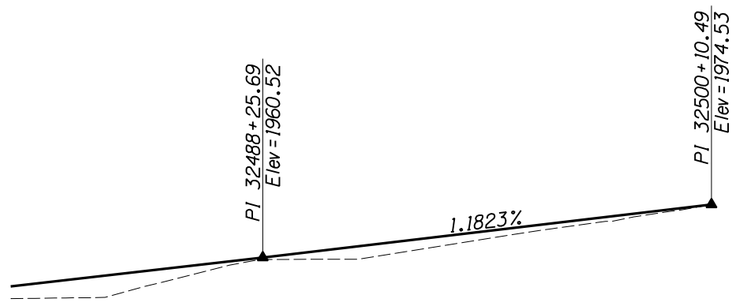


MILE 48

Appendix B2

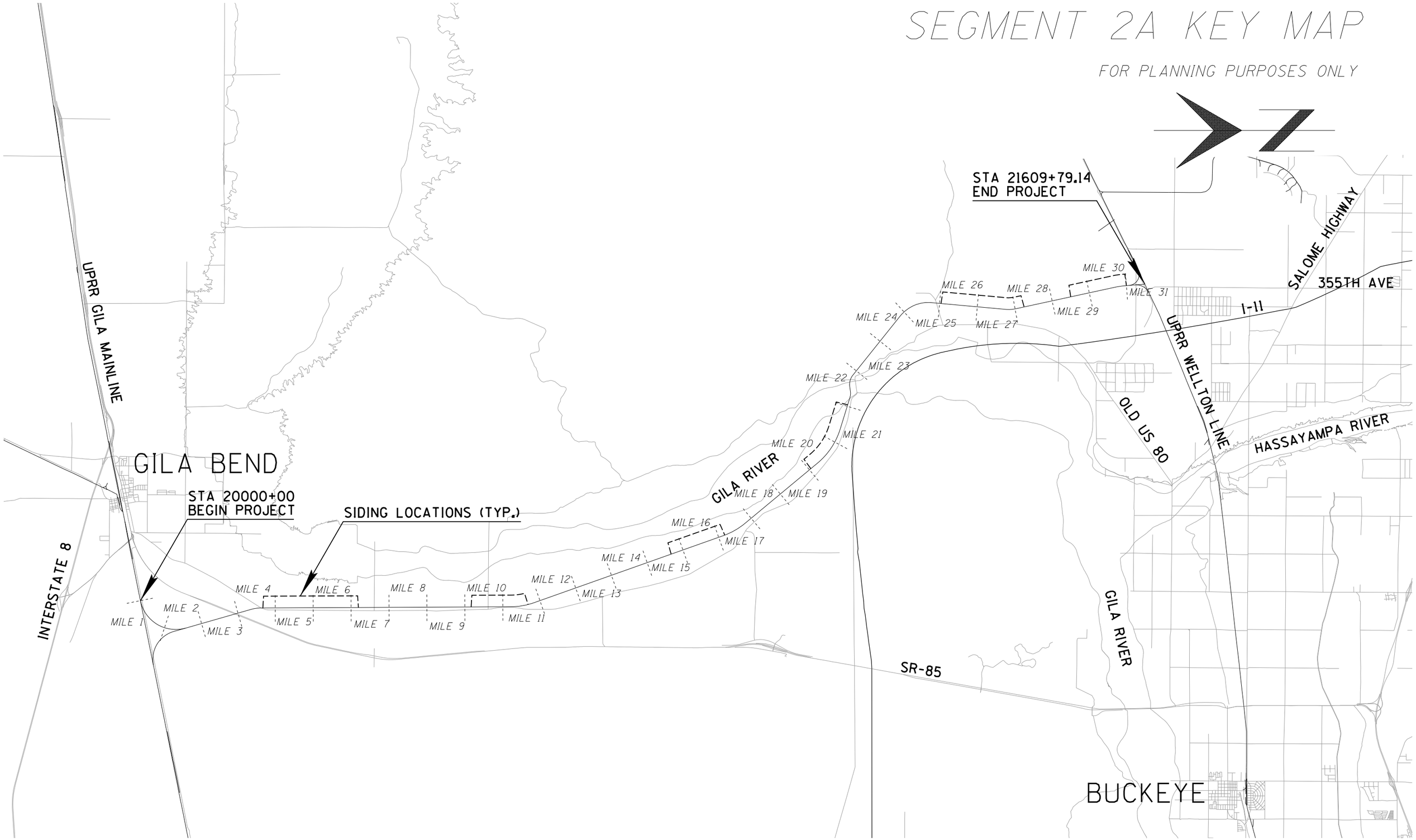
Segment No. 2A Horizontal Alignment and Vertical Profile

HORIZONTAL ALIGNMENTS AND VERTICAL PROFILE HAVE BEEN PROVIDED FOR PLANNING PURPOSES ONLY TO PROVIDE A BASIS FOR A PLANNING-LEVEL ESTIMATE OF PROBABLE COST

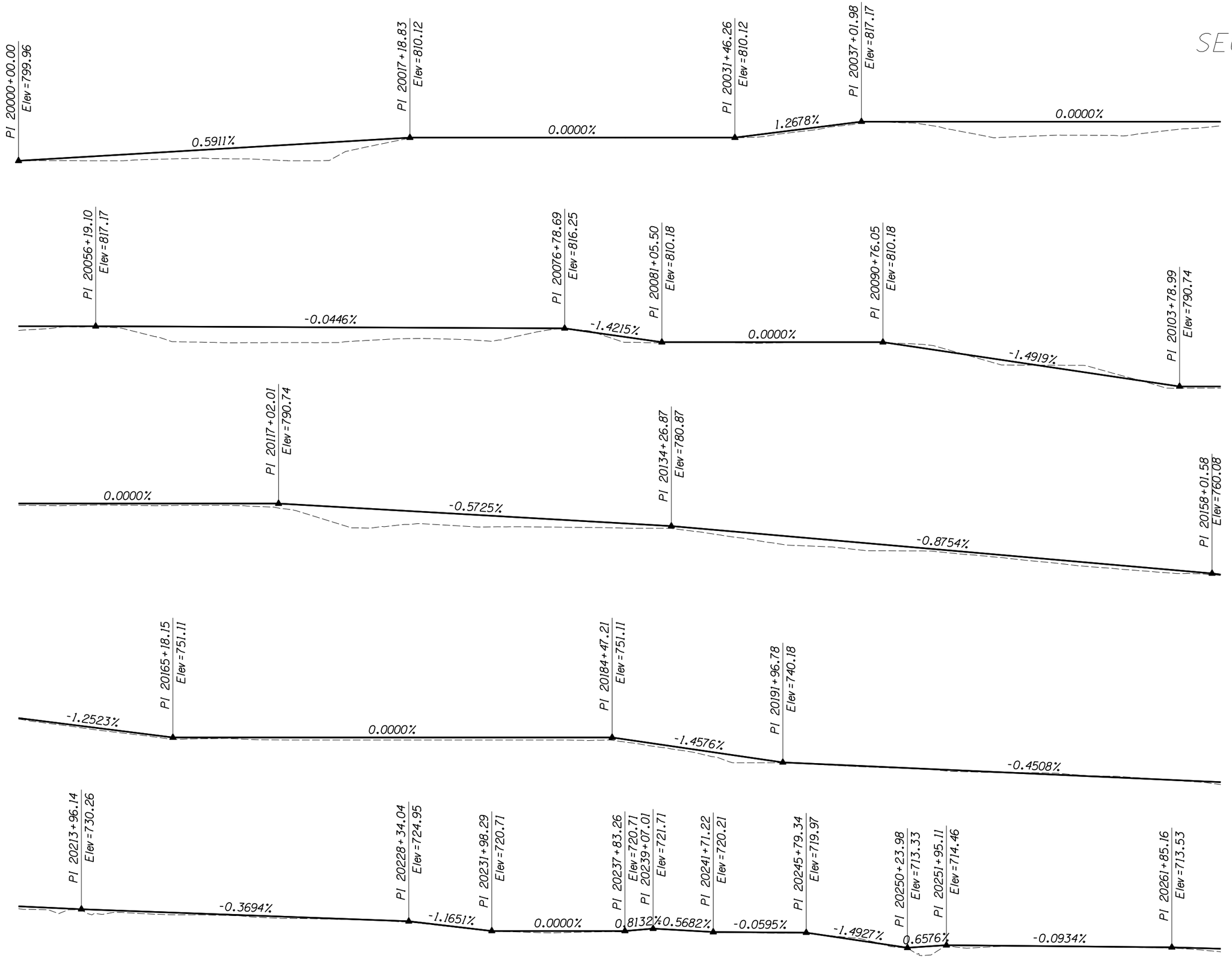
MAG HASSAYAMPA VALLEY RAIL CORRIDORS COST ANALYSIS

SEGMENT 2A KEY MAP

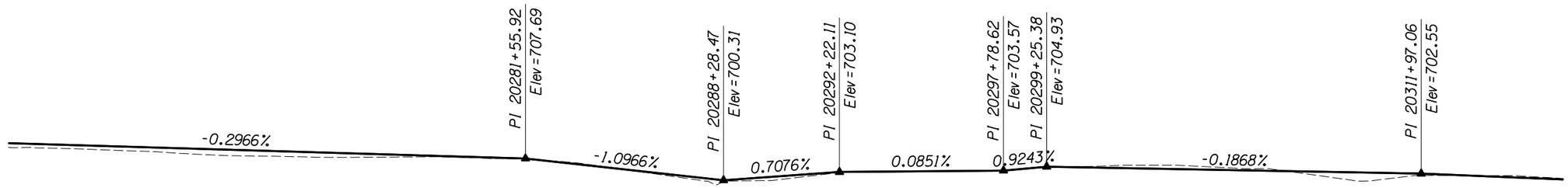
FOR PLANNING PURPOSES ONLY



SEGMENT 2A



FOR PLANNING PURPOSES ONLY



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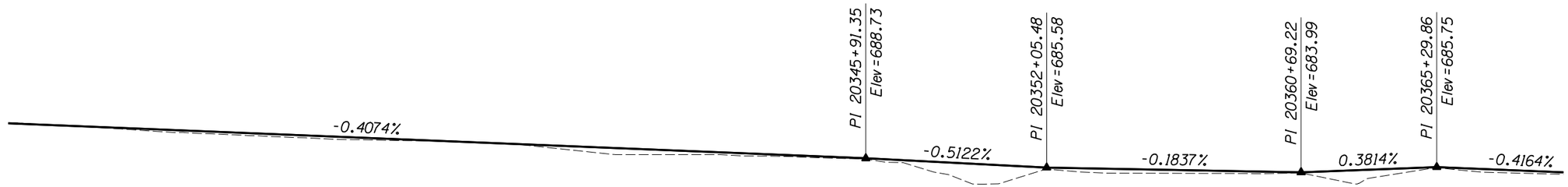
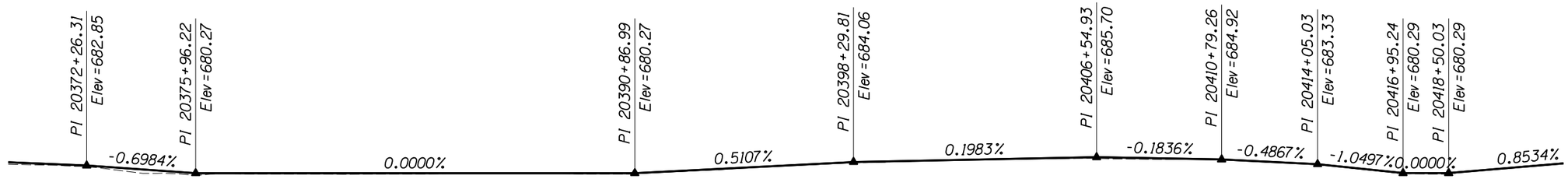
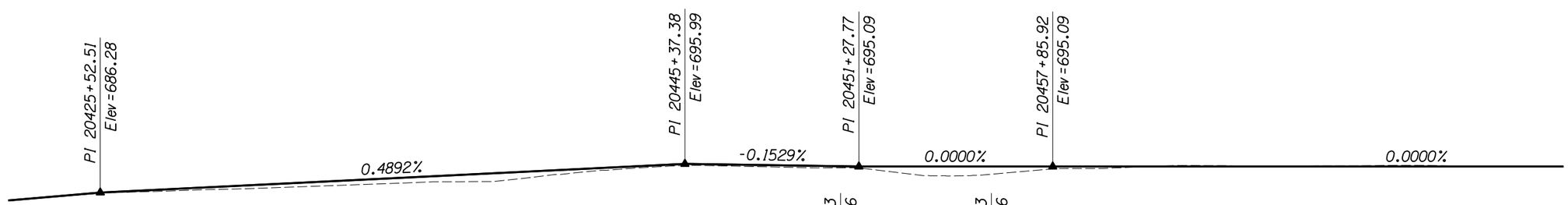


MILE 7



MILE 8



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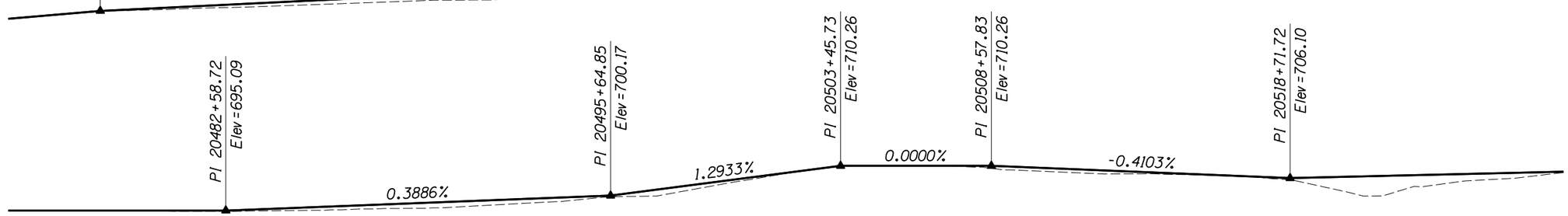
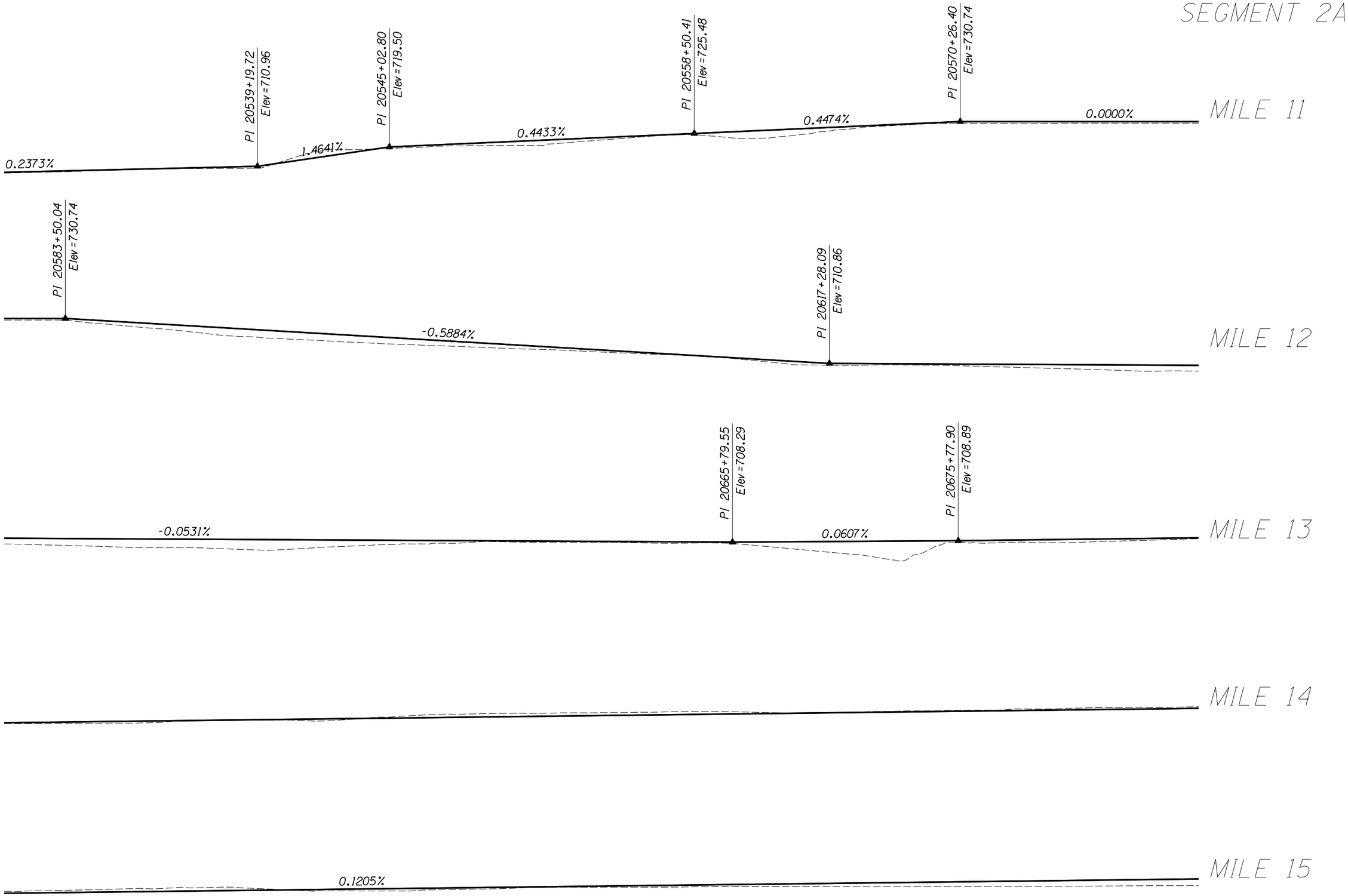
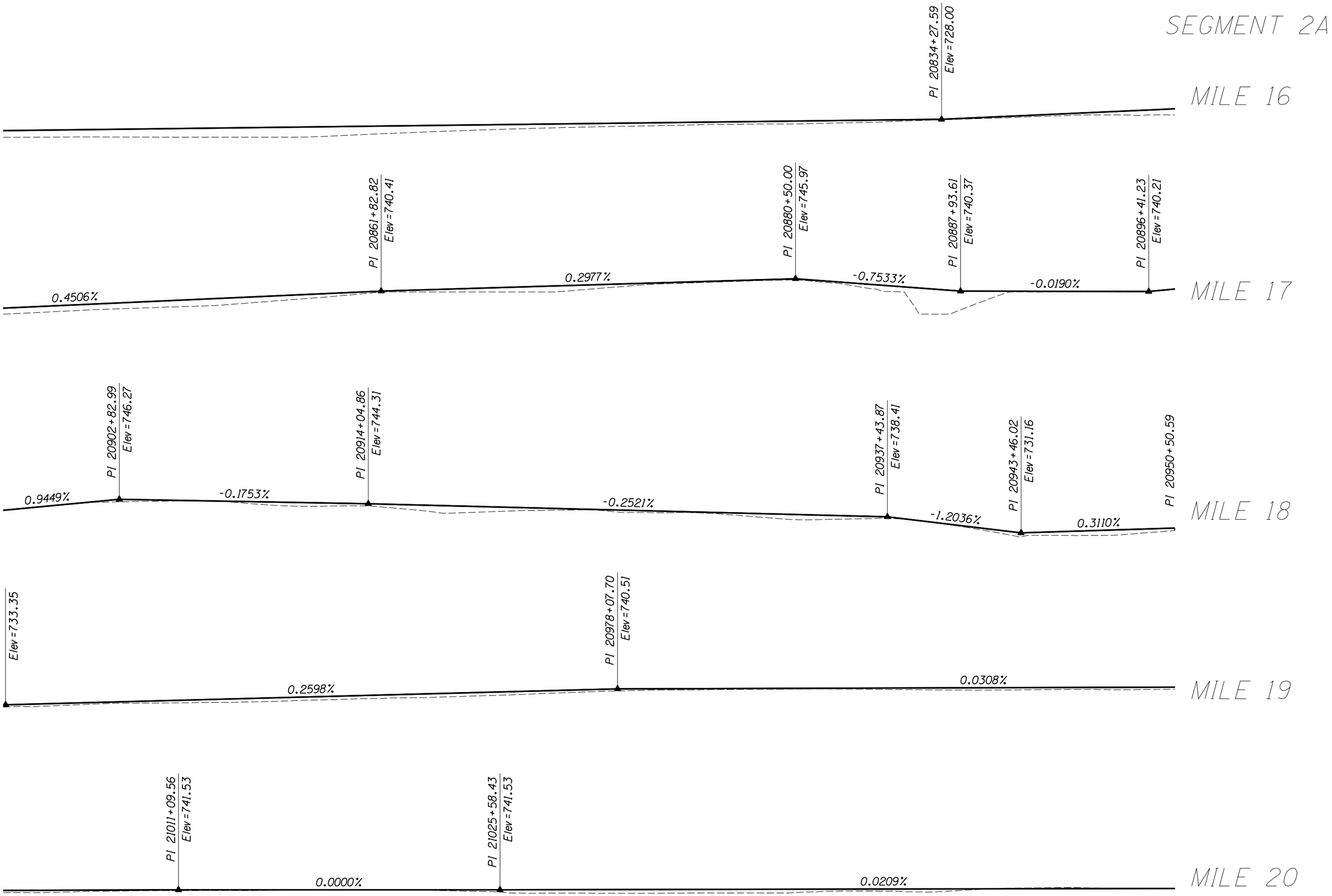
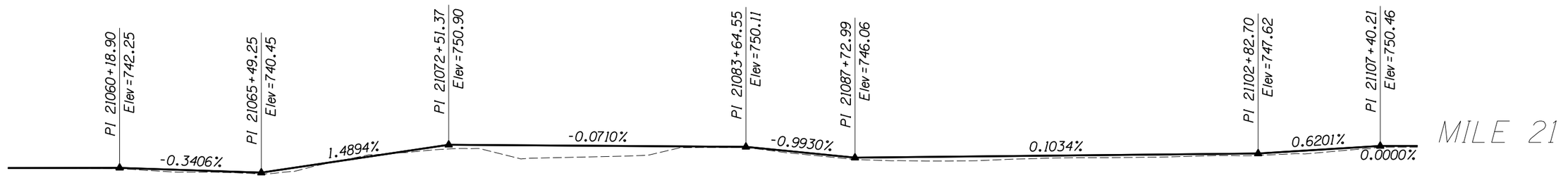


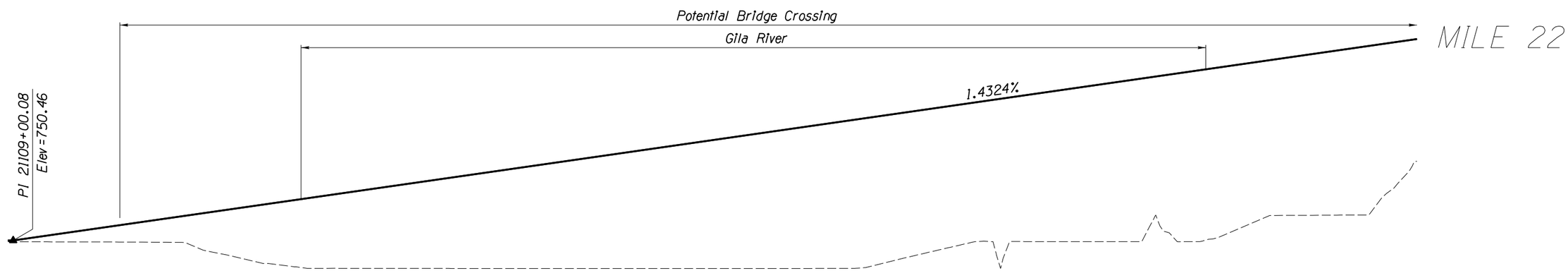
MILE 10

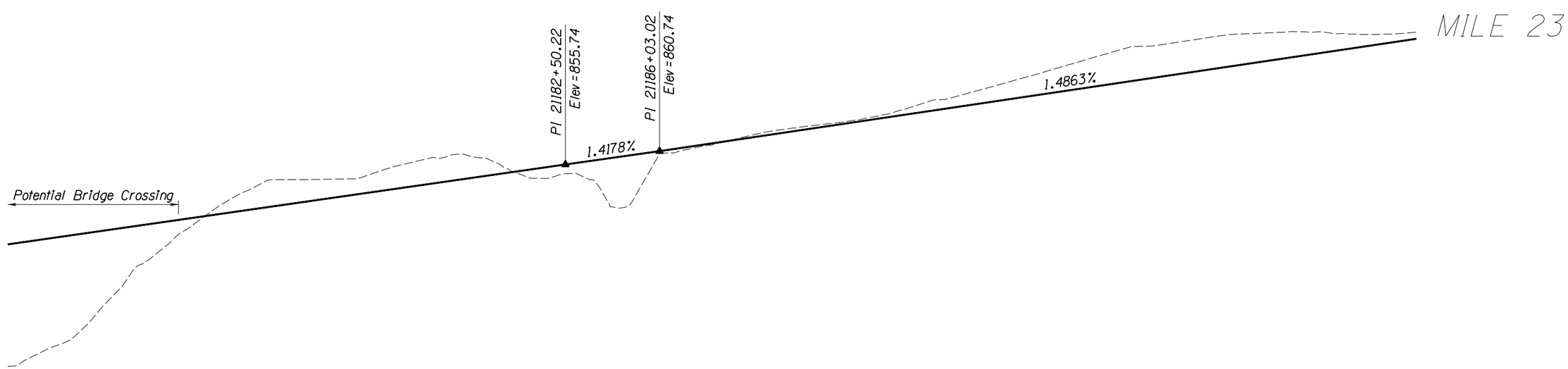

PI 20539+19.72
Elev=710.96
PI 20545+02.80
Elev=719.50
PI 20558+50.41
Elev=725.48
PI 20570+26.40
Elev=730.74
0.2373%
1.4641%
0.4433%
0.4474%
0.0000%
MILE 11
PI 20583+50.04
Elev=730.74
PI 20617+28.09
Elev=710.86
-0.5884%
MILE 12
PI 20665+79.55
Elev=708.29
PI 20675+77.90
Elev=708.89
-0.0531%
0.0607%
MILE 13
MILE 14
0.1205%
MILE 15

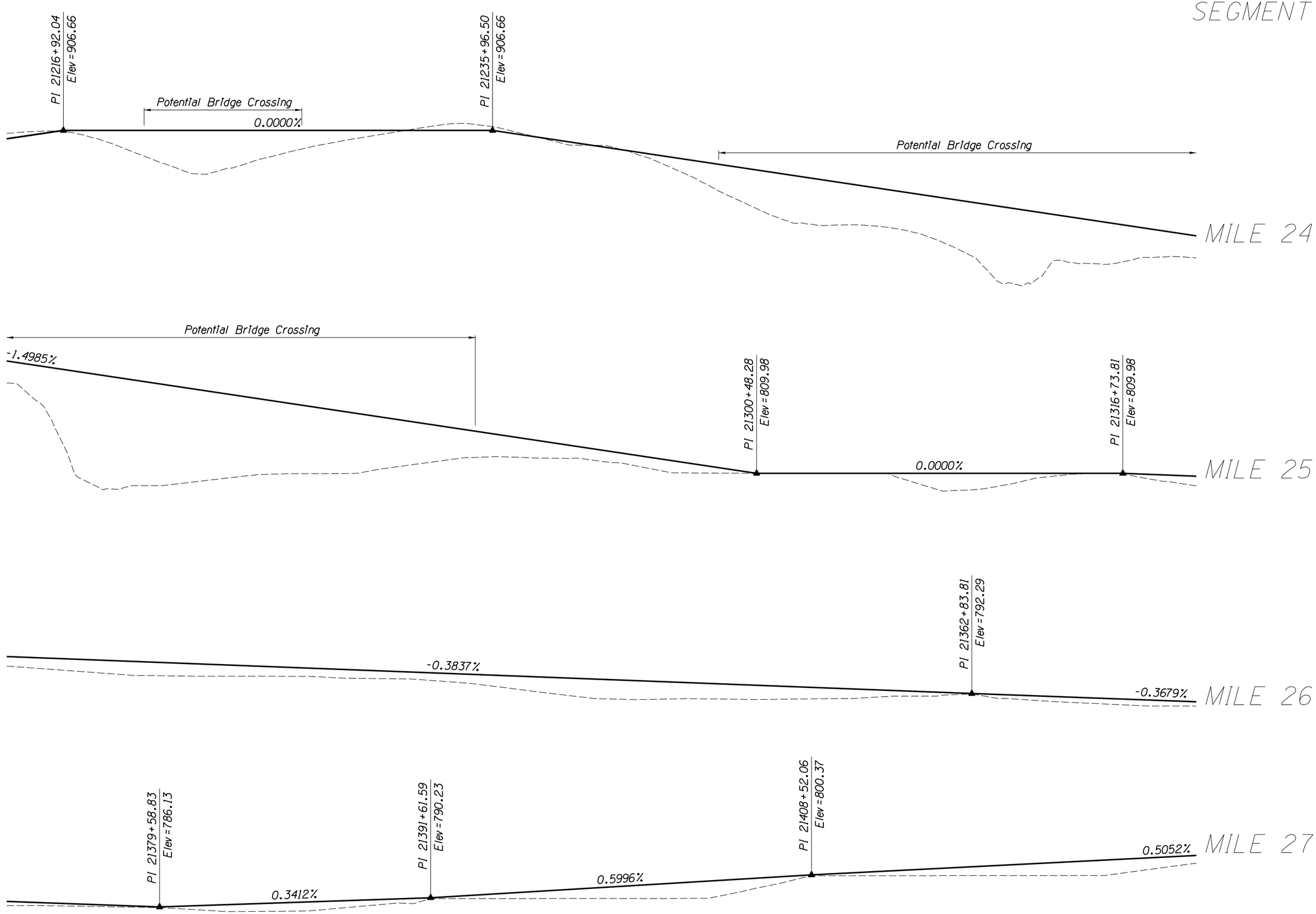


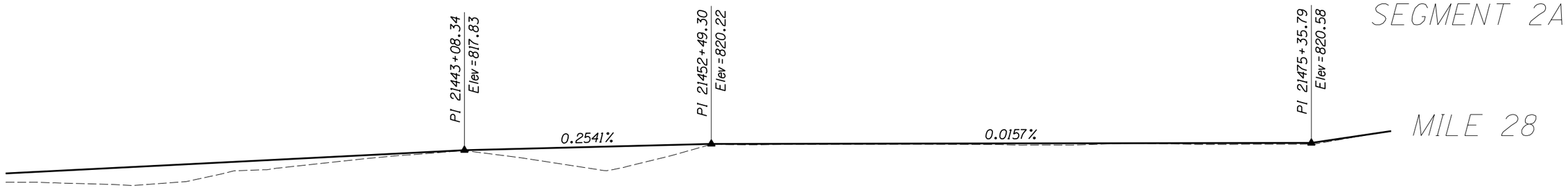
FOR PLANNING PURPOSES ONLY

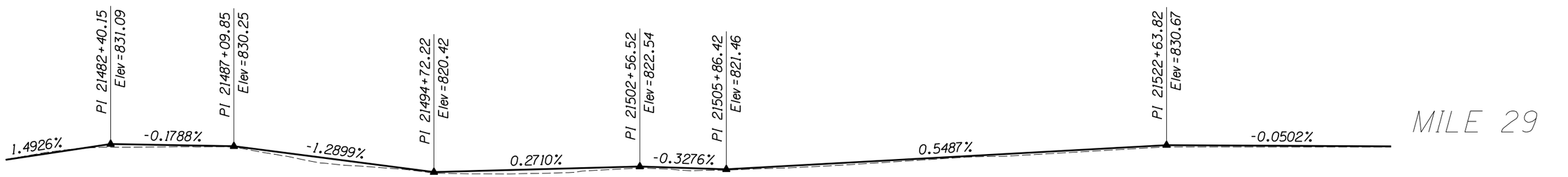

PI 21060+18.90
Elev=742.25
PI 21065+49.25
Elev=740.45
PI 21072+51.37
Elev=750.90
PI 21083+64.55
Elev=750.11
PI 21087+72.99
Elev=746.06
PI 21102+82.70
Elev=747.62
PI 21107+40.21
Elev=750.46
-0.3406%
1.4894%
-0.0710%
-0.9930%
0.1034%
0.6201%
0.0000%
MILE 21

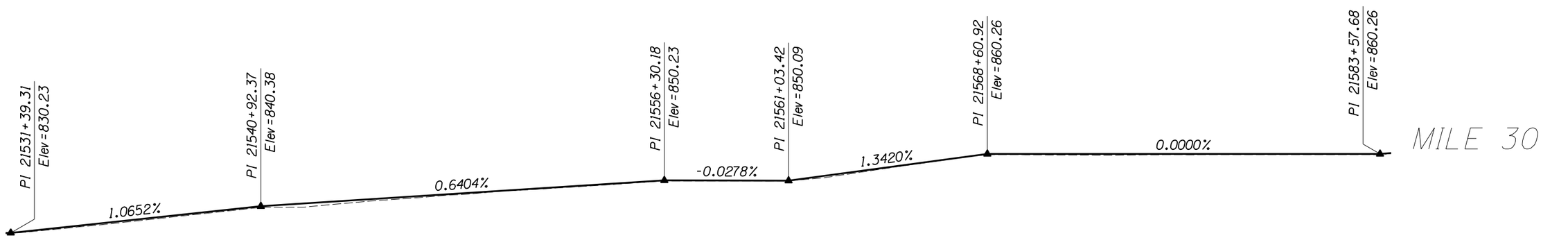

Potential Bridge Crossing
Gila River
MILE 22
PI 21109+00.08
Elev=750.46
1.4324%

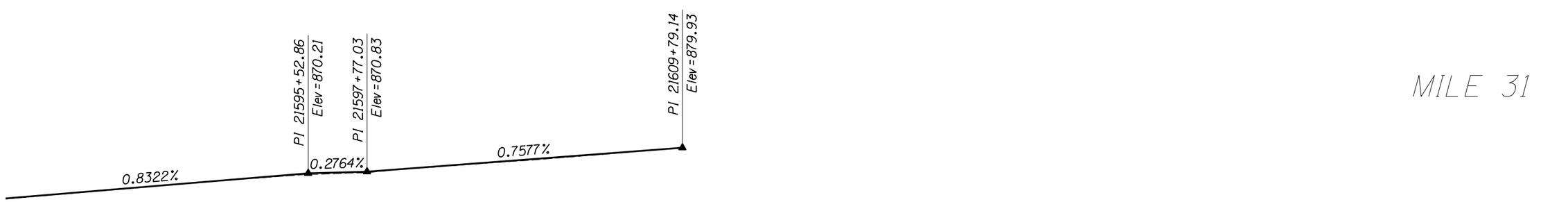

MILE 23
PI 21182+50.22
Elev=855.74
PI 21186+03.02
Elev=860.74
1.4178%
1.4863%
Potential Bridge Crossing


PI 21216+92.04
Elev=906.66
Potential Bridge Crossing
0.0000%
PI 21235+96.50
Elev=906.66
Potential Bridge Crossing
MILE 24
Potential Bridge Crossing
-1.4985%
PI 21300+48.28
Elev=809.98
PI 21316+73.81
Elev=809.98
0.0000%
MILE 25
PI 21362+83.81
Elev=792.29
-0.3837%
-0.3679%
MILE 26
PI 21379+58.83
Elev=786.13
PI 21391+61.59
Elev=790.23
PI 21408+52.06
Elev=800.37
0.3412%
0.5996%
0.5052%
MILE 27









FOR PLANNING PURPOSES ONLY

Appendix B3

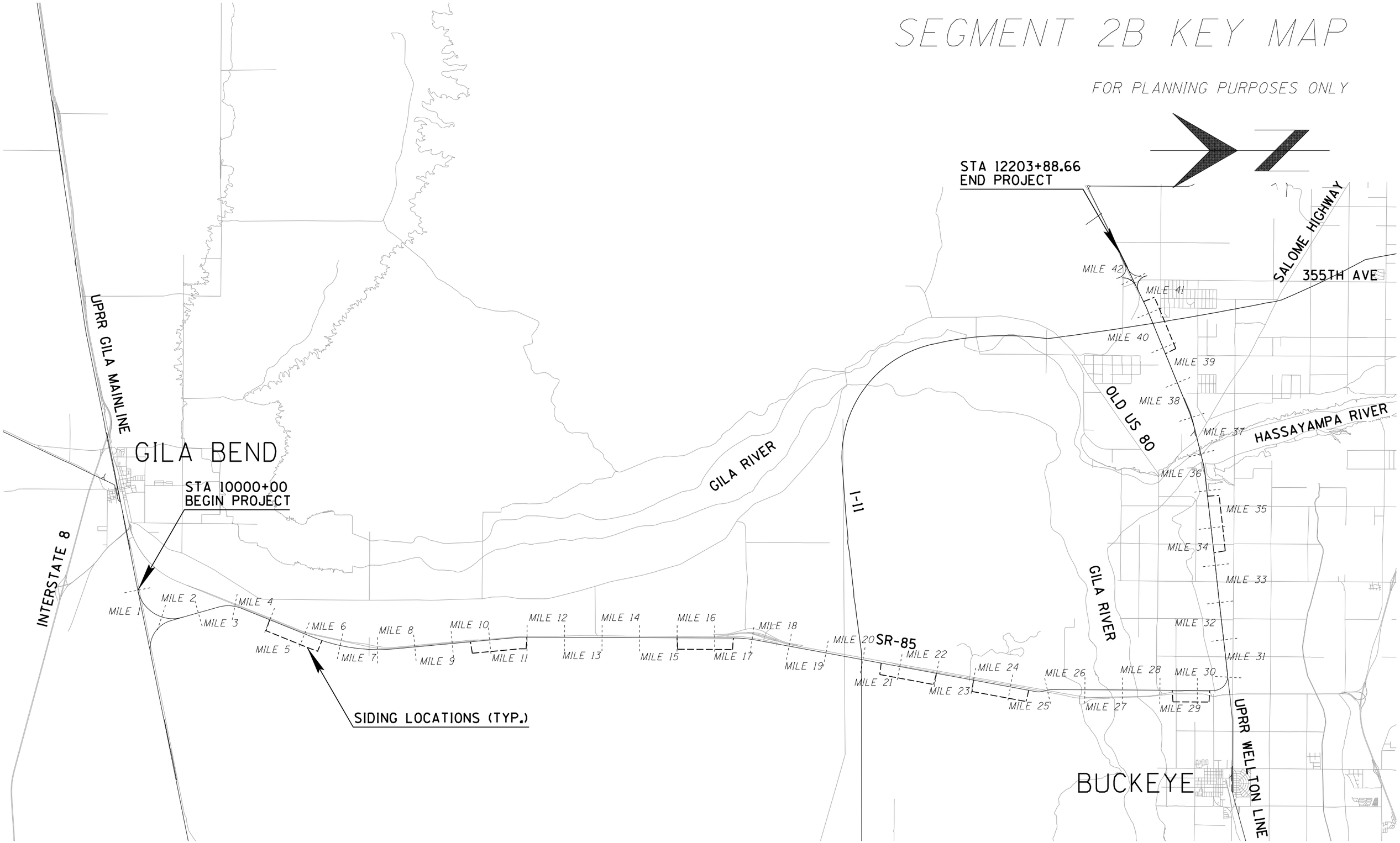
Segment No. 2B Horizontal Alignment and Vertical Profile

HORIZONTAL ALIGNMENTS AND VERTICAL PROFILE HAVE BEEN PROVIDED FOR PLANNING PURPOSES ONLY TO PROVIDE A BASIS FOR A PLANNING-LEVEL ESTIMATE OF PROBABLE COST

MAG HASSAYAMPA VALLEY RAIL CORRIDORS COST ANALYSIS

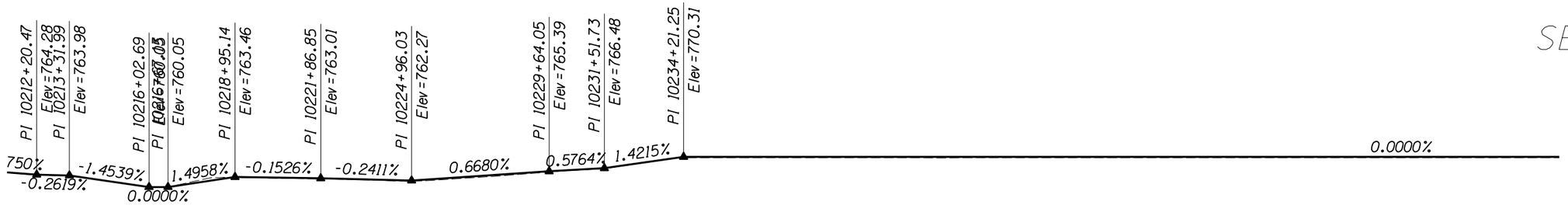
SEGMENT 2B KEY MAP

FOR PLANNING PURPOSES ONLY



SEGMENT 2B

FOR PLANNING PURPOSES ONLY



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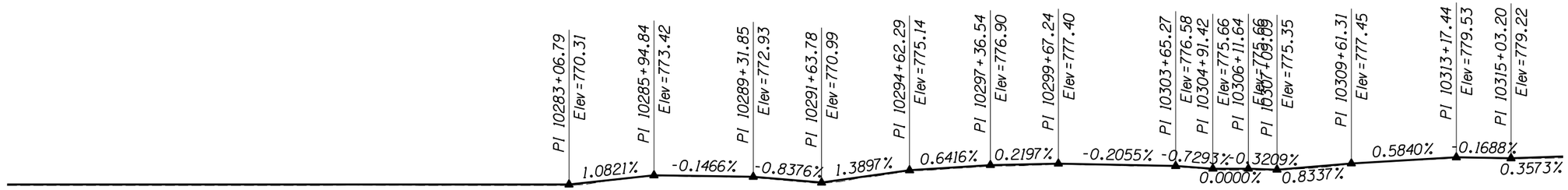

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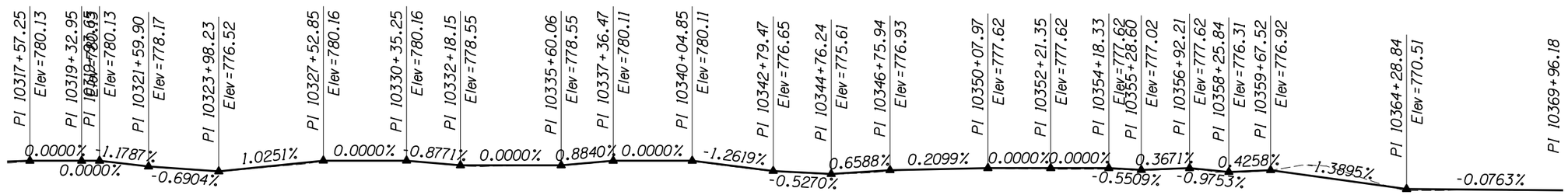
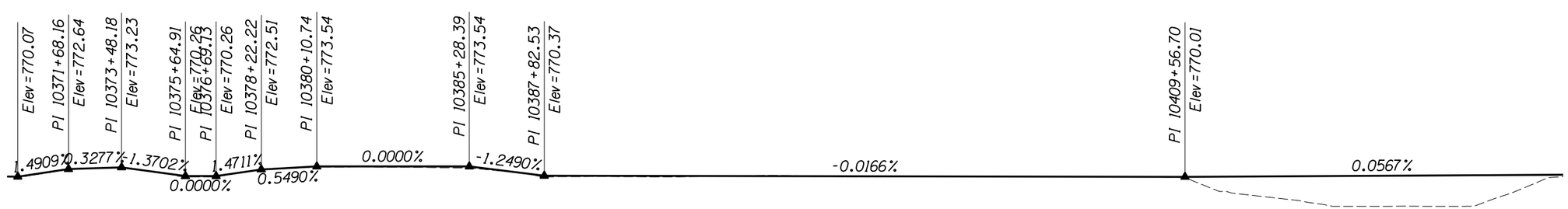
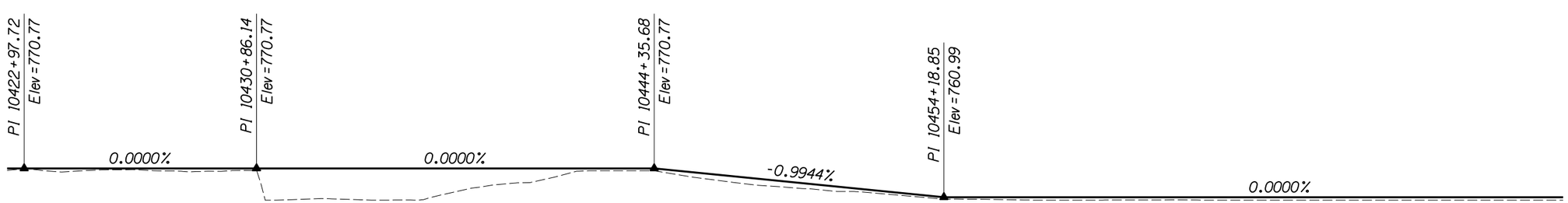


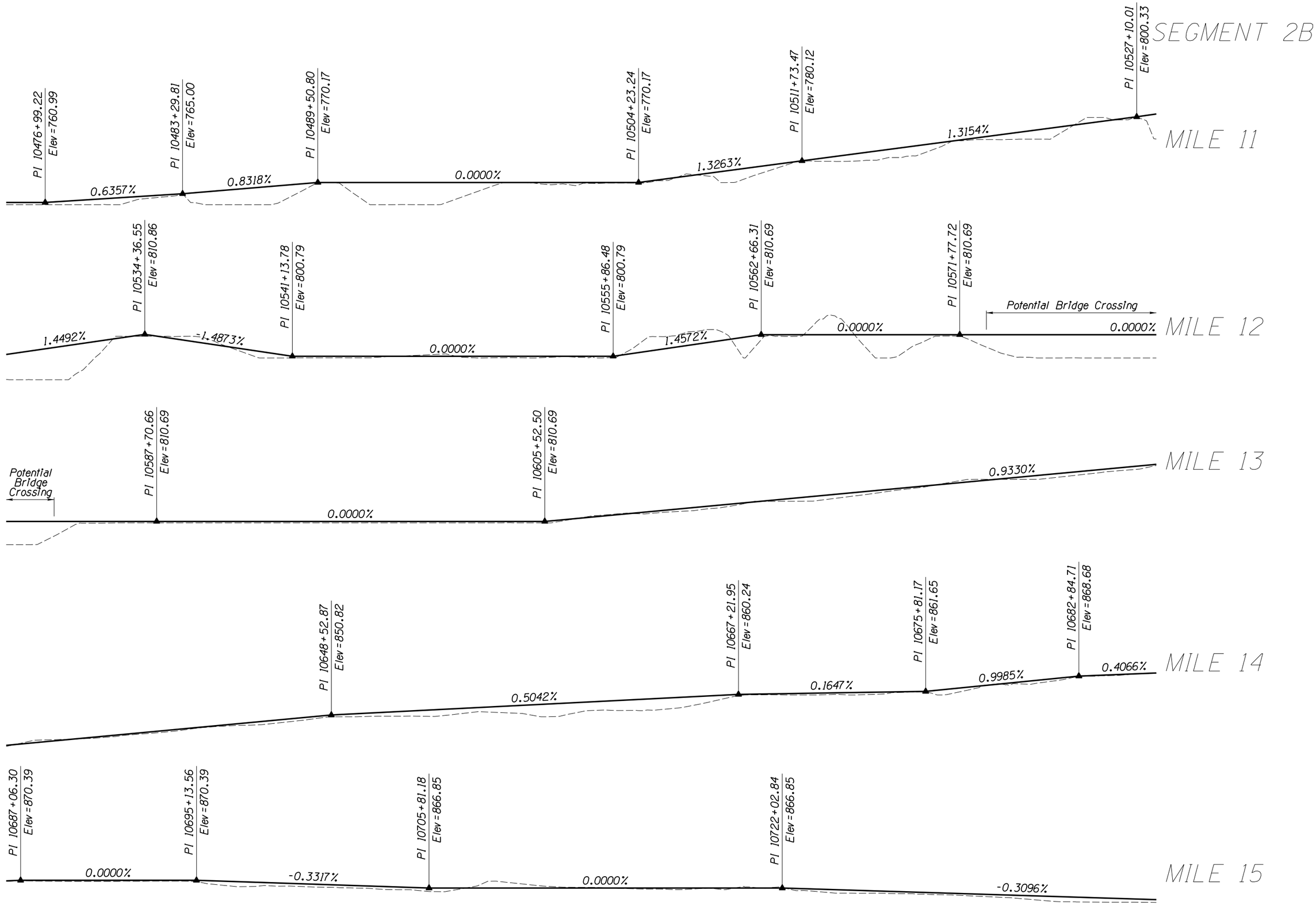
MILE 8



MILE 9

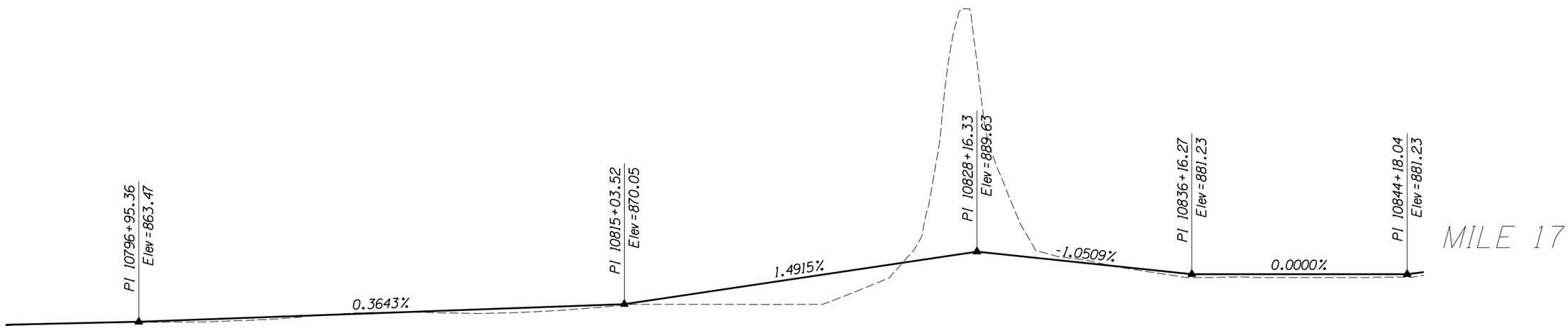


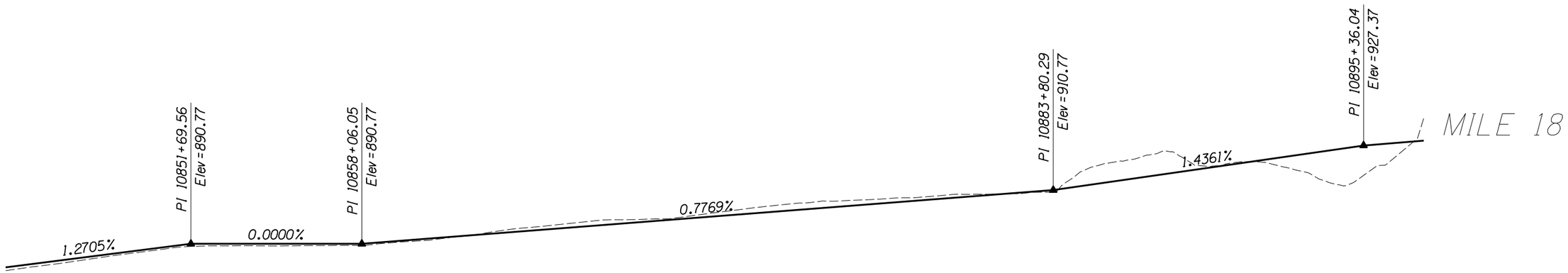
MILE 10

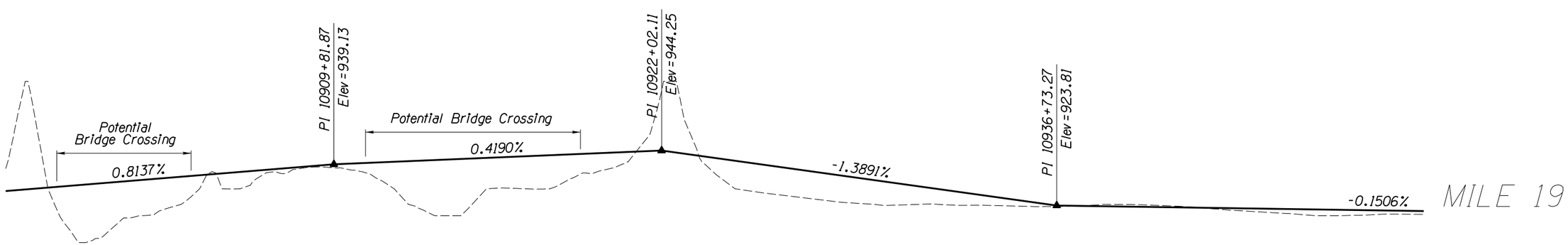


FOR PLANNING PURPOSES ONLY

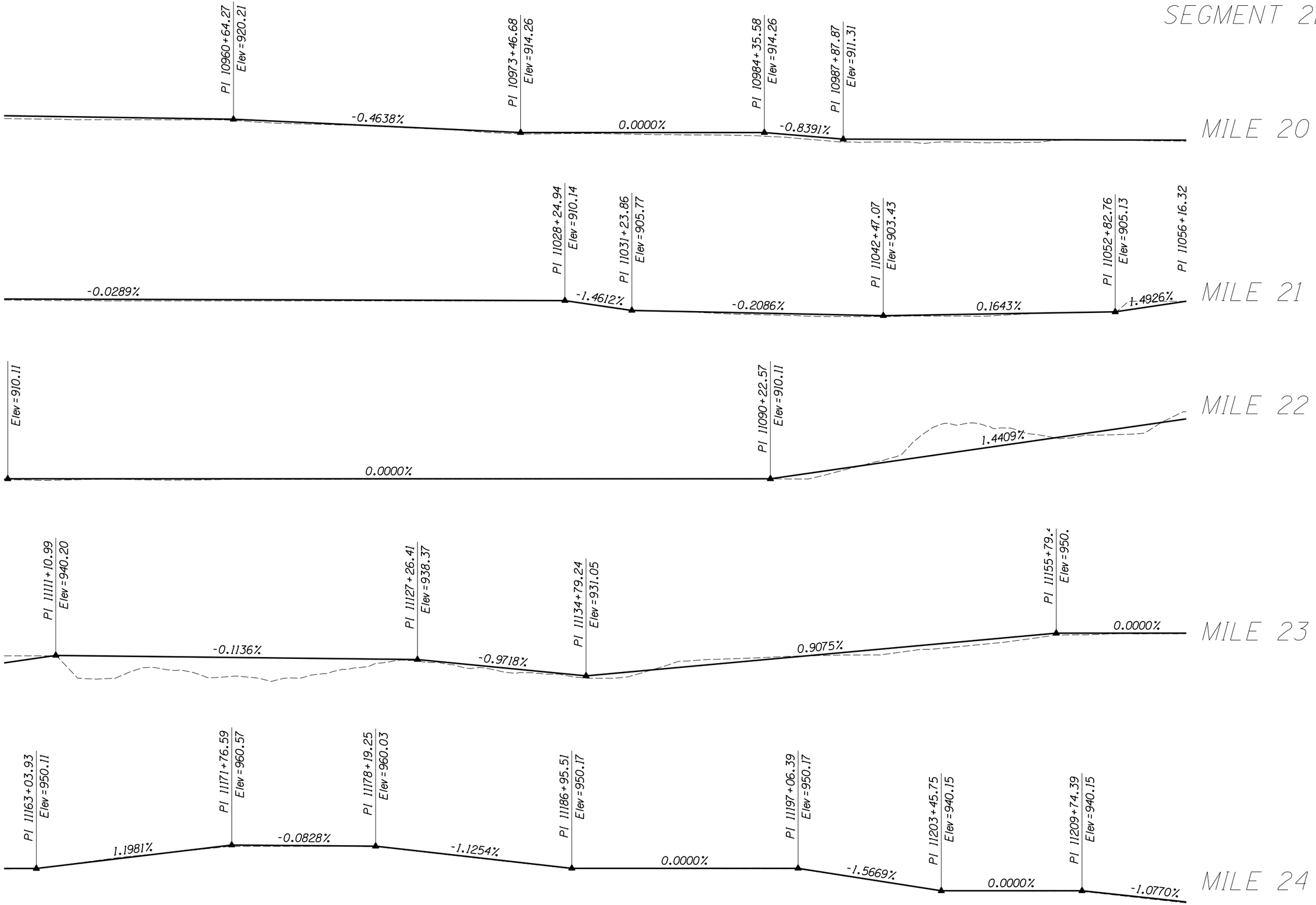
PI 10744+00.66
Elev=860.05
PI 10757+45.34
Elev=854.98
-0.3768%
0.2148%
MILE 16


PI 10796+95.36
Elev=863.47
PI 10815+03.52
Elev=870.05
PI 10828+16.33
Elev=889.63
PI 10836+16.27
Elev=881.23
PI 10844+18.04
Elev=881.23
0.3643%
1.4915%
-1.0509%
0.0000%
MILE 17

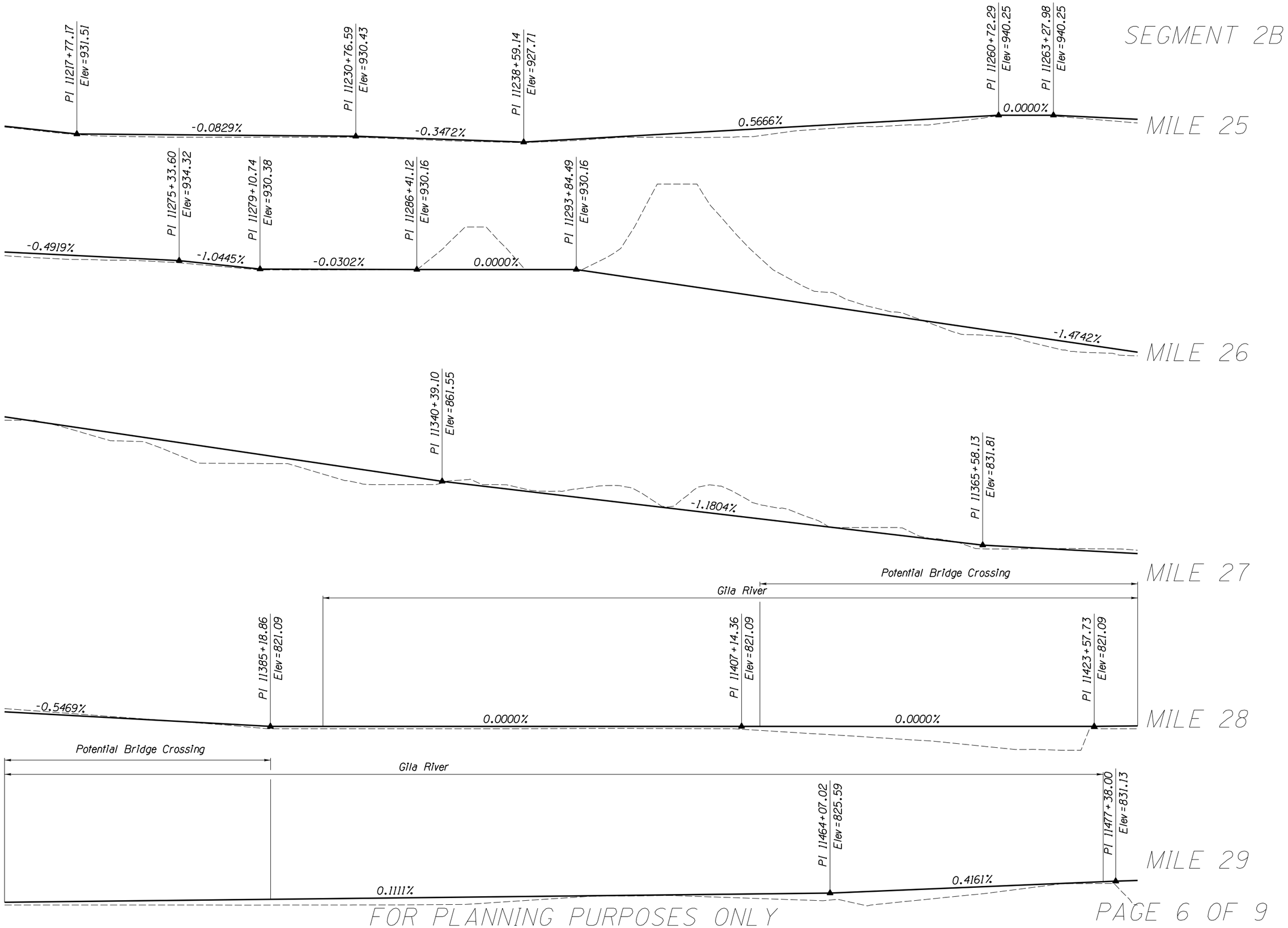

PI 10851+69.56
Elev=890.77
PI 10858+06.05
Elev=890.77
PI 10883+80.29
Elev=910.77
PI 10895+36.04
Elev=927.37
1.2705%
0.0000%
0.7769%
1.4361%
MILE 18


Potential
Bridge Crossing
0.8137%
PI 10909+81.87
Elev=939.13
Potential Bridge Crossing
0.4190%
PI 10922+02.11
Elev=944.25
-1.3891%
PI 10936+73.27
Elev=923.81
-0.1506%
MILE 19

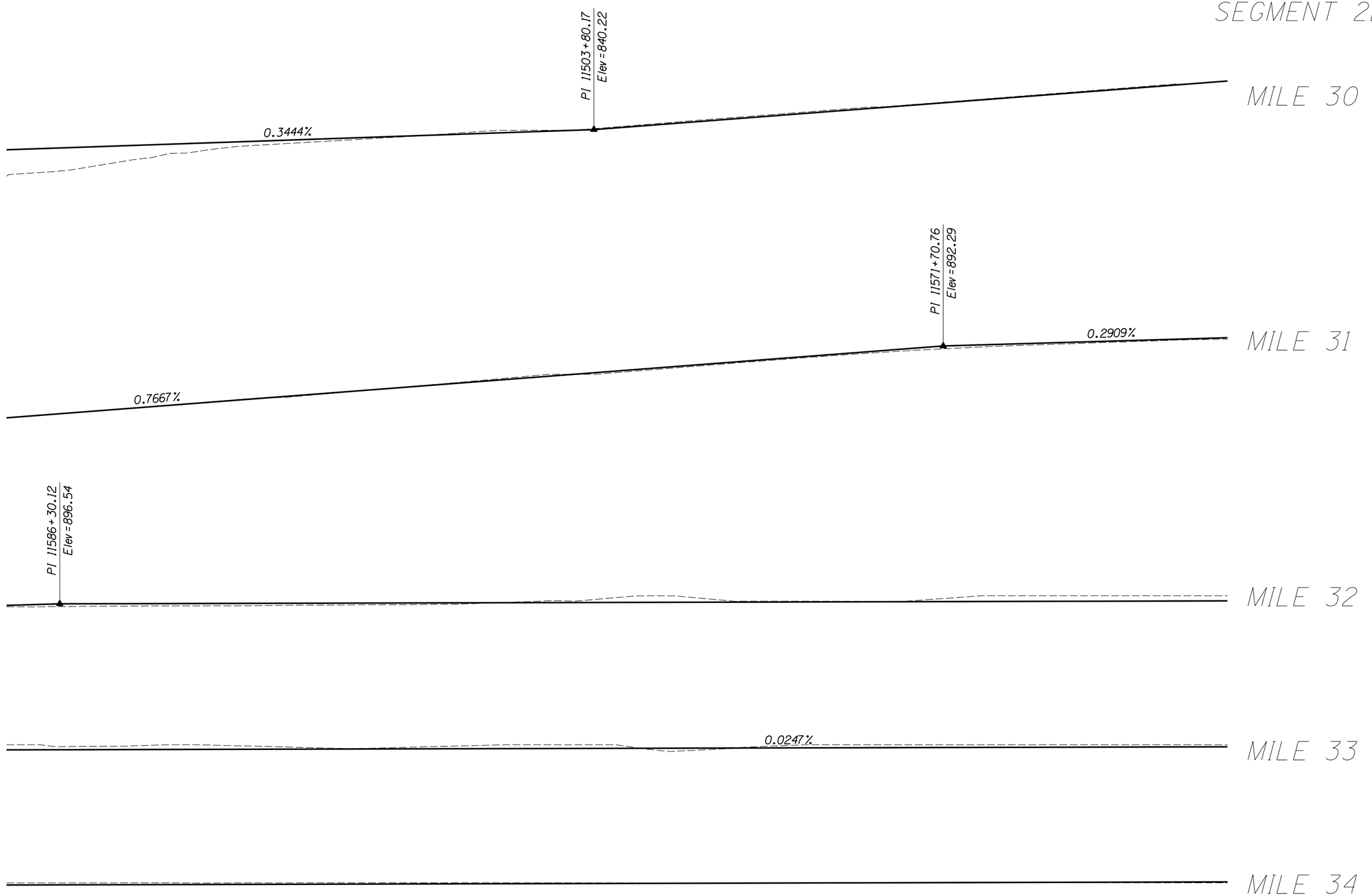
SEGMENT 2B

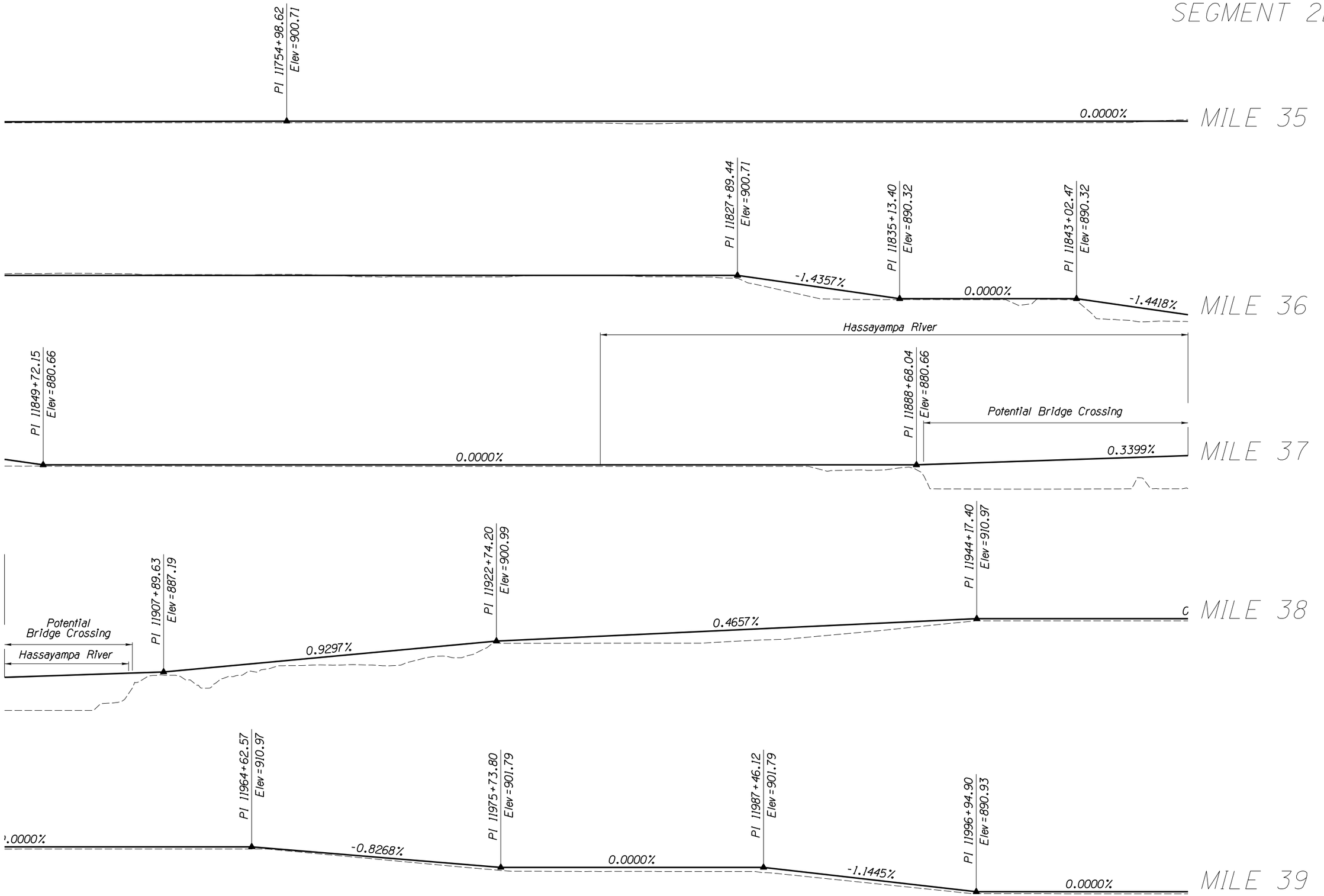


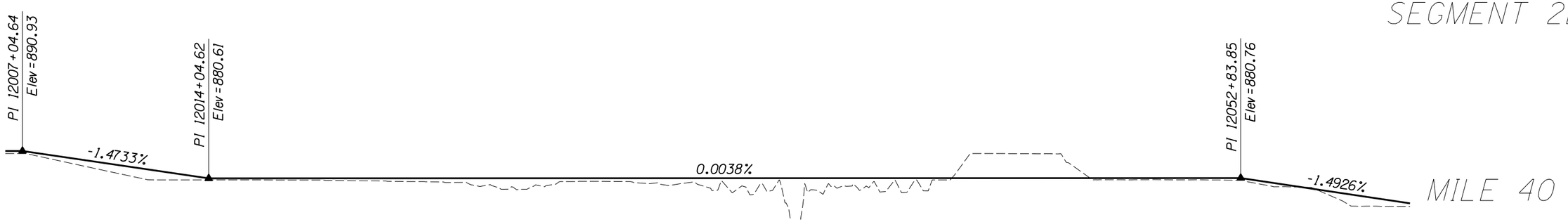
FOR PLANNING PURPOSES ONLY

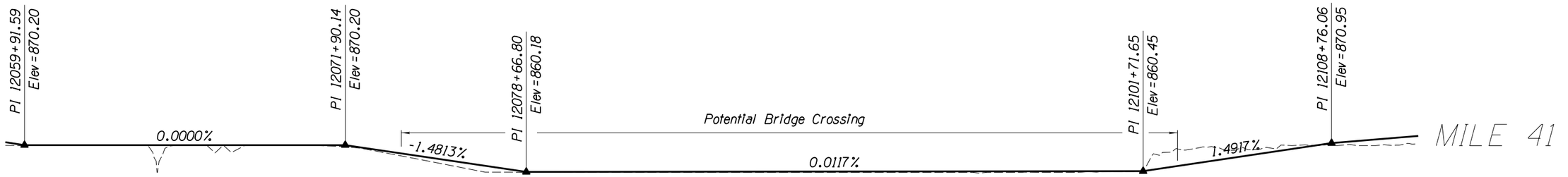


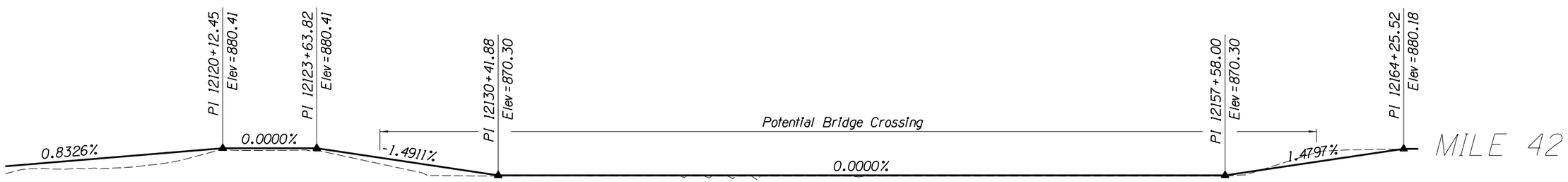
FOR PLANNING PURPOSES ONLY

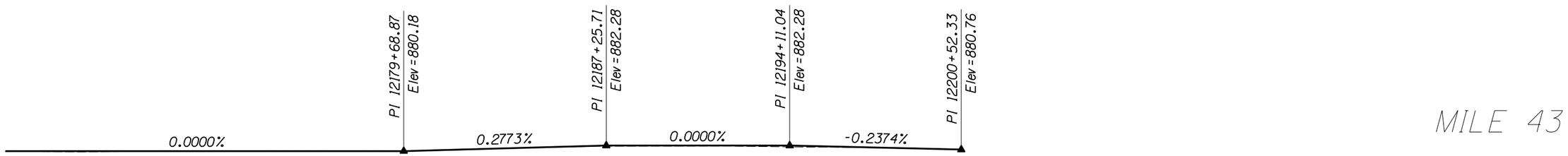

PI 11503+80.17
Elev=840.22
0.3444%
MILE 30
PI 11571+70.76
Elev=892.29
0.2909%
MILE 31
0.7667%
PI 11586+30.12
Elev=896.54
MILE 32
0.0247%
MILE 33
MILE 34


PI 11754+98.62
Elev=900.71
0.0000%
MILE 35
PI 11827+89.44
Elev=900.71
PI 11835+13.40
Elev=890.32
PI 11843+02.47
Elev=890.32
-1.4357%
0.0000%
-1.4418%
MILE 36
Hassayampa River
PI 11849+72.15
Elev=880.66
PI 11888+68.04
Elev=880.66
Potential Bridge Crossing
0.0000%
0.3399%
MILE 37
PI 11907+89.63
Elev=887.19
PI 11922+74.20
Elev=900.99
PI 11944+17.40
Elev=910.97
Potential
Bridge Crossing
Hassayampa River
0.9297%
0.4657%
MILE 38
PI 11964+62.57
Elev=910.97
PI 11975+73.80
Elev=901.79
PI 11987+46.12
Elev=901.79
PI 11996+94.90
Elev=890.93
-0.8268%
0.0000%
-1.1445%
0.0000%
MILE 39


PI 12007+04.64
Elev=890.93
PI 12014+04.62
Elev=880.61
PI 12052+83.85
Elev=880.76
-1.4733%
0.0038%
-1.4926%
MILE 40


PI 12059+91.59
Elev=870.20
PI 12071+90.14
Elev=870.20
PI 12078+66.80
Elev=860.18
PI 12101+71.65
Elev=860.45
PI 12108+76.06
Elev=870.95
Potential Bridge Crossing
0.0000%
-1.4813%
0.0117%
1.4917%
MILE 41


PI 12120+12.45
Elev=880.41
PI 12123+63.82
Elev=880.41
PI 12130+41.88
Elev=870.30
PI 12157+58.00
Elev=870.30
PI 12164+25.52
Elev=880.18
Potential Bridge Crossing
0.8326%
0.0000%
-1.4911%
0.0000%
1.4797%
MILE 42


PI 12179+68.87
Elev=880.18
PI 12187+25.71
Elev=882.28
PI 12194+11.04
Elev=882.28
PI 12200+52.33
Elev=880.76
0.0000%
0.2773%
0.0000%
-0.2374%
MILE 43