

Horizontal Alignment Review Report

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Project: Design

Description:

File Name: c:\users\jpenix\appdata\local\bentley\projectwise\workingdir\ohiodot-pw.bentley.com_ohiodot-pw-02\jon.penix@dot.ohio.gov\d0674170\117779_Car_164_1022_FB001.dgn

Last Revised: 3/17/2023 13:34:16

Note: All units in this report are in feet unless specified otherwise.

Alignment Name: CL_EXRW_SR164_1022

Alignment Description:

Alignment Style: Alignment\RW_X_Centerline

		Station	Northing	Easting
Element: Linear				
POT	()	538+22.01 R1	436111.840	219348.193
PC	()	544+01.63 R1	436514.847	219764.780
Tangential Direction:		N45°56'57.217"E		
Tangential Length:		579.620		
Element: Circular				
PC	()	544+01.63 R1	436514.847	219764.780
HPI	()	544+51.22 R1	436549.330	219800.424
CC	()		436245.369	220025.474
PCC	()	545+00.25 R1	436573.359	219843.808
Radius:		374.940		
Delta:		15°04'11.000" Right		
Degree of Curvature (Arc):		15°16'52.750"		
Length:		98.615		
Tangent:		49.594		
Chord:		98.331		
Middle Ordinate:		3.238		
External:		3.266		
Back Tangent Direction:		N45°56'57.217"E		
Back Radial Direction:		S44°03'02.783"E		
Chord Direction:		N53°29'02.717"E		
Ahead Radial Direction:		S28°58'51.783"E		
Ahead Tangent Direction:		N61°01'08.217"E		
Element: Circular				
PCC	()	545+00.25 R1	436573.359	219843.808
HPI	()	545+76.44 R1	436610.275	219910.458
CC	()		436286.134	220002.895

PCC	()	546+49.98 R1	436614.067	219986.556
	Radius:	328.340		
	Delta:	26°07'43.000" Right		
Degree of Curvature (Arc):		17°27'00.493"		
	Length:	149.733		
	Tangent:	76.192		
	Chord:	148.439		
	Middle Ordinate:	8.498		
	External:	8.724		
Back Tangent Direction:		N61°01'08.217"E		
Back Radial Direction:		S28°58'51.783"E		
Chord Direction:		N74°04'59.717"E		
Ahead Radial Direction:		S02°51'08.783"E		
Ahead Tangent Direction:		N87°08'51.217"E		
Element: Circular				
PCC	()	546+49.98 R1	436614.067	219986.556
HPI	()	547+25.23 R1	436617.812	220061.719
CC	()		435824.806	220025.881
PT	()	548+00.04 R1	436607.302	220136.237
	Radius:	790.240		
	Delta:	10°52'48.000" Right		
Degree of Curvature (Arc):		07°15'01.540"		
	Length:	150.060		
	Tangent:	75.256		
	Chord:	149.835		
	Middle Ordinate:	3.559		
	External:	3.575		
Back Tangent Direction:		N87°08'51.217"E		
Back Radial Direction:		S02°51'08.783"E		
Chord Direction:		S87°24'44.783"E		
Ahead Radial Direction:		S08°01'39.217"W		
Ahead Tangent Direction:		S81°58'20.783"E		
Element: Linear				
PT	()	548+00.04 R1	436607.302	220136.237
PC	()	548+50.04 R1	436600.320	220185.748
Tangential Direction:		S81°58'20.783"E		
Tangential Length:		50.000		
Element: Circular				
PC	()	548+50.04 R1	436600.320	220185.748
HPI	()	549+41.18 R1	436587.592	220275.998
CC	()		435361.470	220011.031
PCC	()	550+32.00 R1	436561.918	220363.452
	Radius:	1251.110		
	Delta:	08°20'00.000" Right		
Degree of Curvature (Arc):		04°34'46.544"		

Length: 181.967
 Tangent: 91.144
 Chord: 181.806
 Middle Ordinate: 3.307
 External: 3.316
 Back Tangent Direction: S81°58'20.783"E
 Back Radial Direction: S08°01'39.217"W
 Chord Direction: S77°48'20.783"E
 Ahead Radial Direction: S16°21'39.217"W
 Ahead Tangent Direction: S73°38'20.783"E

Element: Circular

PCC	()	550+32.00 R1	436561.918	220363.452
HPI	()	551+26.60 R1	436535.271	220454.217
CC	()		436012.159	220202.057
PT	()	552+19.51 R1	436480.863	220531.601
Radius:		572.960		
Delta:		18°45'00.000" Right		
Degree of Curvature (Arc):		09°59'59.861"		
Length:		187.501		
Tangent:		94.596		
Chord:		186.665		
Middle Ordinate:		7.653		
External:		7.756		
Back Tangent Direction:		S73°38'20.783"E		
Back Radial Direction:		S16°21'39.217"W		
Chord Direction:		S64°15'50.783"E		
Ahead Radial Direction:		S35°06'39.217"W		
Ahead Tangent Direction:		S54°53'20.783"E		

Element: Linear

PT	()	552+19.51 R1	436480.863	220531.601
PC	()	555+82.01 R1	436272.367	220828.140
Tangential Direction:		S54°53'20.783"E		
Tangential Length:		362.500		

Element: Circular

PC	()	555+82.01 R1	436272.367	220828.140
HPI	()	556+55.56 R1	436230.062	220888.311
CC	()		436057.223	220676.873
PT	()	557+25.45 R1	436162.679	220917.804
Radius:		263.000		
Delta:		31°15'00.000" Right		
Degree of Curvature (Arc):		21°47'07.683"		
Length:		143.444		
Tangent:		73.555		
Chord:		141.673		
Middle Ordinate:		9.719		

External:	10.092
Back Tangent Direction:	S54°53'20.783"E
Back Radial Direction:	S35°06'39.217"W
Chord Direction:	S39°15'50.783"E
Ahead Radial Direction:	S66°21'39.217"W
Ahead Tangent Direction:	S23°38'20.783"E