

# HORIZONTAL & VERTICAL CONTROL

Chain IL78 contains:  
260 CUR 200 210 CUR 220 CUR 230 CUR 240 CUR 250 A10717

Beginning chain IL78 description

Point 260 N 2,072,595.3220 E 2,346,710.1504 Sta 710+17.41

Course from 260 to PC 200 N 2° 14' 17.01" W Dist 2,254.0414'

Curve Data  
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**Curve 200**  
P.I. Station 735+28.83 N 2,075,104.8272 E 2,346,612.0755  
Delta = 0° 26' 34.53" (RT)  
Degree = 0° 05' 09.76"  
Tangent = 257.3795'  
Length = 514.7564'  
Radius = 66,587.9424'  
External = 0.4974'  
Long Chord = 514.7552'  
Mid. Ord. = 0.4974'  
P.C. Station 732+71.45 N 2,074,847.6440 E 2,346,622.1266  
P.T. Station 737+86.21 N 2,075,362.0804 E 2,346,604.0129  
C.C. N 2,077,448.0063 E 2,413,159.2756

Course from PT 200 to 210 N 1° 47' 42.48" W Dist 5,062.9086'

Point 210 N 2,080,422.5042 E 2,346,445.4128 Sta 788+49.11

Course from 210 to PC 220 N 2° 02' 04.01" W Dist 6,665.9263'

Curve Data  
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**Curve 220**  
P.I. Station 859+61.57 N 2,087,530.4720 E 2,346,192.9182  
Delta = 0° 29' 09.68" (RT)  
Degree = 0° 03' 15.92"  
Tangent = 446.5247'  
Length = 893.0441'  
Radius = 105,278.1778'  
External = 0.9469'  
Long Chord = 893.0414'  
Mid. Ord. = 0.9469'  
P.C. Station 855+15.04 N 2,087,084.2287 E 2,346,208.7700  
P.T. Station 864+08.09 N 2,087,976.8336 E 2,346,180.8523  
C.C. N 2,090,821.6417 E 2,451,420.5872

Course from PT 220 to PC 230 N 1° 32' 54.33" W Dist 5,696.2427'

Curve Data  
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**Curve 230**  
P.I. Station 925+78.19 N 2,094,144.6843 E 2,346,014.1249  
Delta = 0° 29' 23.48" (LT)  
Degree = 0° 03' 06.08"  
Tangent = 473.8610'  
Length = 947.7163'  
Radius = 110,849.1710'  
External = 1.0128'  
Long Chord = 947.7134'  
Mid. Ord. = 1.0128'  
P.C. Station 921+04.33 N 2,093,670.9963 E 2,346,026.9295  
P.T. Station 930+52.04 N 2,094,618.2455 E 2,345,997.2710  
C.C. N 2,090,675.6499 E 2,235,218.2358

Course from PT 230 to PC 240 N 2° 02' 17.81" W Dist 4,050.1293'

Curve Data  
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**Curve 240**  
P.I. Station 978+66.16 N 2,099,429.3157 E 2,345,826.0463  
Delta = 0° 22' 49.58" (LT)  
Degree = 0° 01' 29.63"  
Tangent = 763.9868'  
Length = 1,527.9680'  
Radius = 230,118.0312'  
External = 1.2682'  
Long Chord = 1,527.9652'  
Mid. Ord. = 1.2682'  
P.C. Station 971+02.17 N 2,098,665.8123 E 2,345,853.2192  
P.T. Station 986+30.14 N 2,100,192.6219 E 2,345,793.8045  
C.C. N 2,090,481.1562 E 2,115,880.7867

Course from PT 240 to PC 250 N 2° 25' 07.40" W Dist 4,334.4869'

Curve Data  
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**Curve 250**  
P.I. Station 1033+60.75 N 2,104,919.0177 E 2,345,594.1627  
Delta = 1° 09' 54.45" (RT)  
Degree = 0° 08' 49.46"  
Tangent = 396.1234'  
Length = 792.2196'  
Radius = 38,957.9140'  
External = 2.0138'  
Long Chord = 792.2059'  
Mid. Ord. = 2.0137'  
P.C. Station 1029+64.63 N 2,104,523.2472 E 2,345,610.8800  
P.T. Station 1037+56.85 N 2,105,315.0463 E 2,345,585.4965  
C.C. N 2,106,167.3532 E 2,384,534.0861

Course from PT 250 to A10717 N 1° 15' 12.95" W Dist 8,121.8796'

Point A10717 N 2,113,434.9820 E 2,345,407.8090 Sta 1118+78.73

Ending chain IL78 description

CURVE POINT NUMBERS					
CHAIN	CURVE	PI	CC	PC	PT
IL78	200	200	201	202	203
IL78	220	220	221	222	223
IL78	230	230	231	232	233
IL78	240	240	241	242	243
IL78	250	250	251	252	253

### BENCH MARKS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
400	2080638.7999	2346396.4696	915.1014	IL78	790+67.01	41.2338' LT	R.O.W. MARKER, TOE
401	2085240.8157	2346310.8035	941.1846	IL78	836+69.17	36.5273' RT	PLUG, VERTICAL CONTROL STATION
402	2088476.7743	2346204.2006	960.1728	IL78	869+07.21	36.849' RT	PLUG, VERTICAL CONTROL STATION
403	2091282.6917	2346040.8798	942.6411	IL78	897+16.52	50.5911' LT	PLUG, VERTICAL CONTROL STATION
404	2093985.3500	2346054.8088	958.0627	IL78	924+17.71	36.8067' RT	VERTICAL CONTROL STATION
405	2095007.5051	2345966.0125	907.9535	IL78	934+42.17	17.3938' LT	VERTICAL CONTROL STATION
406	2095743.1005	2345939.9744	905.5226	IL78	941+78.23	17.2524' LT	VERTICAL CONTROL STATION
407	2096484.8675	2345871.1424	901.9020	IL78	949+21.97	59.6583' LT	VERTICAL CONTROL STATION
408	2104565.6335	2345526.4661	980.4665	IL78	1030+10.44	82.5769' LT	VERTICAL CONTROL STATION
409	2106520.8072	2345593.6169	952.7421	IL78	1049+62.14	34.4977' RT	DISK, PERM. SURVEY MARKER
410	2107074.5128	2345503.5365	932.3151	IL78	1055+17.69	43.4474' LT	PLUG, VERTICAL CONTROL STATION
411	2107192.6751	2345501.2725	944.1208	IL78	1056+35.87	43.1258' LT	DISK, PERM. SURVEY MARKER
412	2112376.6533	2345389.6008	945.0177	IL78	1108+21.05	41.3576' LT	PLUG, VERTICAL CONTROL STATION
413	2114773.2537	2345434.9286	993.6375	IL78	OUT OF CHAIN	-----	VERTICAL CONTROL STATION
414	2079076.0472	2346520.2903	921.3792	IL78	775+00.97	32.6618' RT	VERTICAL CONTROL STATION
415	2076141.4069	2346620.7288	988.6119	IL78	745+64.63	41.1208' RT	VERTICAL CONTROL STATION
416	2072530.3139	2346744.0523	967.0659	IL78	OUT OF CHAIN	-----	VERTICAL CONTROL STATION