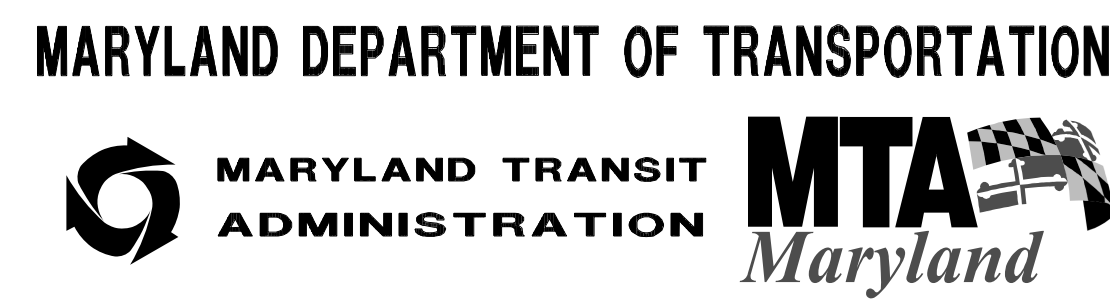


SEGMENT 1 TRACK ALIGNMENT DATA - TRACK 1

CURVE No.	POINT	STATION	NORTHING	EASTING	DATA
	POB	100+03.49	478925.8548	1285351.7318	
			CURVE BEFORE SPIRAL		
CN 1-100					TOTAL CENTRAL ANGLE: 10°19'27" RIGHT
					Ls (1): 30.00'
					THETA (1): 1°41'07"
	PI	100+49.97	478957.8929	1285385.4110	Rc: 510.00'
	PC	100+03.49	478925.8548	1285351.7318	DELTA (c): 8°38'20"
	CS	100+80.39	478974.4620	1285411.2241	Lc: 76.90'
	ST	101+10.39	478991.1532	1285436.1506	DEGREE OF CURVATURE: 11°14'04"
					Tc: 38.52'
					Eq: 0.000"
					Eu: 1.747"
					DESIGN SPEED: 15 MPH
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 56°45'17.00" E / 318.59'
			COMPOUND CURVE WITH SPIRALS		
CN 1-105					TOTAL CENTRAL ANGLE: 14°16'05" RIGHT
					Ls (1) / (2) / (3): 30.00' / 28.00' / 28.00'
					THETA (1) / (2) / (3): 1°04'03" / 1°11'49" / 0°12'02"
	PI	105+54.52	479234.6363	1285807.5907	Rc (1) / (2): 805.00' / 4000.00'
	TS	104+28.98	479165.8140	1285702.6004	DELTA (c) (1) / (2): 9°58'33" / 1°49'38"
	SC	104+58.98	479182.1043	1285727.7916	Lc (1) / (2): 140.16' / 127.56'
	CS	105+99.14	479246.0681	1285852.3067	DEGREE OF CURVATURE (1) / (2): 7°07'03" / 1°25'57"
	SC	106+27.14	479256.3165	1285878.3631	Tc (1) / (2): 70.26' / 63.78'
	CS	107+54.70	479300.1320	1285998.1512	Eq (1) / (2): 0.750" / 0.000"
	ST	107+82.70	479309.2682	1286024.6187	Eu (1) / (2): 0.357" / 0.396"
					DESIGN SPEED (1) / (2): 15 MPH / 20 MPH
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 71°01'22.28" E / 431.62'
			CURVE WITH SPIRALS		
CN 1-113					TOTAL CENTRAL ANGLE: 0°59'04" RIGHT
					Ls (1) / (2): 31.00' / 31.00'
					THETA (1) / (2): 0°05'04" / 0°05'04"
	PI	113+20.21	479484.0618	1286532.9148	Rc: 10520.00'
	TS	112+14.32	479449.6273	1286432.7801	DELTA (c): 0°48'57"
	SC	112+45.32	479459.6938	1286462.1001	Lc: 149.78'
	CS	113+95.09	479507.1803	1286604.1471	DEGREE OF CURVATURE: 0°32'41"
	ST	114+26.09	479516.7705	1286633.6264	Tc: 74.89'
					Eq: 0.250"
					Eu: 0.512"
					DESIGN SPEED: 45 MPH
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 72°00'26.73" E / 420.80'
			CURVE WITH SPIRALS		
CN 1-125					TOTAL CENTRAL ANGLE: 46°27'57" LEFT
					Ls (1) / (2): 200.00' / 200.00'
					THETA (1) / (2): 4°12'00" / 4°12'00"
	PI	125+32.89	479858.6898	1287686.4100	Rc: 1364.17'
	TS	118+46.77	479646.7519	1287033.8442	DELTA (c): 38°03'57"
	SC	120+46.77	479713.1436	1287222.4524	Lc: 906.32'
	CS	129+53.09	480299.5055	1287891.6464	DEGREE OF CURVATURE: 4°12'00"
	ST	131+53.09	480477.7569	1287982.2407	Tc: 470.60'
					Eq: 3.250"
					Eu: 2.628"
					DESIGN SPEED: 45 MPH
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 25°32'29.48" E / 381.14'
			CURVE WITH SPIRALS		
CN 1-136					TOTAL CENTRAL ANGLE: 0°04'28" RIGHT
					Ls (1) / (2): 25.00' / 25.00'
					THETA (1) / (2): 0°00'17" / 0°00'17"
	PI	136+44.18	480920.8521	1288193.9806	Rc: 150000.00'
	TS	135+34.23	480821.6468	1288146.5738	DELTA (c): 0°03'54"
	SC	135+59.23	480844.2034	1288157.3536	Lc: 169.90'
	CS	137+29.13	480997.4525	1288230.7084	DEGREE OF CURVATURE: 0°02'18"
	ST	137+54.13	481019.9956	1288241.5162	Tc: 84.95'
					Eq: 0.000"
					Eu: 0.080"
					DESIGN SPEED: 55 MPH



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0	RELEASE FOR CONSTRUCTION	JJO	09/25/19
1	NDC-490 PLCO-145 BET DETACHMENT	JUF	12/17/21

REVISIONS

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		RAF	
		DF	
		JUF	

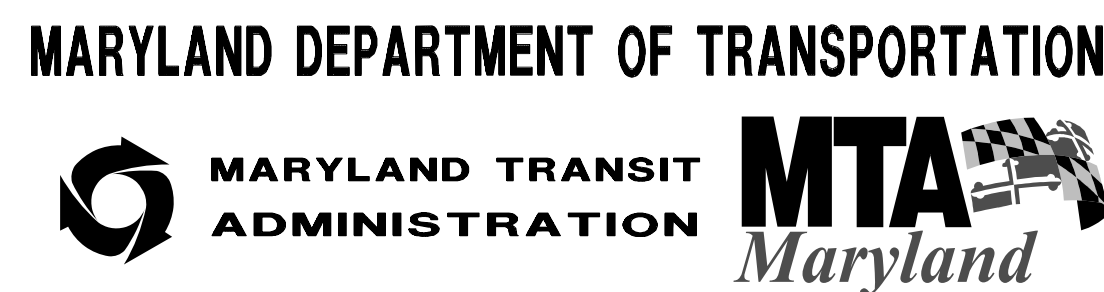
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CONTRACT NO. 0-0000-0000
DRAWING NO. S1050PTW-603
SHEET NO. 7 OF 67

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SEGMENT 1 TRACK ALIGNMENT DATA - TRACK 1

CURVE No.	POINT	STATION	NORTHING	EASTING	DATA
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 25°36'57.48" E / 880.66'
CN 1-159	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 39°52'44" RIGHT
					Ls (1) / (2): 150.00' / 150.00'
					THETA (1) / (2): 1°13'40" / 1°13'40"
	PI	159+79.59	483026.7170	1289203.6637	Rc: 3500.00'
	TS	146+34.79	481814.0950	1288622.2570	DELTA (c): 37°25'24"
	SC	147+84.79	481948.8824	1288688.0707	Lc: 2286.05'
				DEGREE OF CURVATURE: 1°38'13"	
				Tc: 1185.48'	
				Ed: 2.000"	
				Eu: 1.423"	
				DESIGN SPEED: 55 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 65°29'40.99" E / 1859.15'
CN 1-192	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 1°19'39" LEFT
					Ls (1) / (2): 60.00' / 60.00'
					THETA (1) / (2): 0°10'18" / 0°10'18"
	PI	192+26.01	484416.2071	1292251.8770	Rc: 10014.17'
	TS	190+80.00	484355.6433	1292119.0143	DELTA (c): 0°59'03"
	SC	191+40.00	484380.5844	1292173.5848	Lc: 172.02'
				DEGREE OF CURVATURE: 0°34'20"	
				Tc: 86.01'	
				Ed: 0.500"	
				Eu: 0.696"	
				DESIGN SPEED: 55 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 64°10'02.01" E / 366.66'
CN 1-203	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 31°33'18" RIGHT
					Ls (1) / (2): 220.00' / 220.00'
					THETA (1) / (2): 3°56'21" / 3°56'21"
	PI	203+01.09	484884.6724	1293219.5309	Rc: 1600.00'
	TS	197+38.67	484639.6015	1292713.3168	DELTA (c): 23°40'37"
	SC	199+58.67	484730.8841	1292913.4347	Lc: 661.19'
				DEGREE OF CURVATURE: 3°34'52"	
				Tc: 335.38'	
				Ed: 3.500"	
				Eu: 2.688"	
				DESIGN SPEED: 50 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 84°16'39.51" E / 1617.00'
CN 1-234	COMPOUND CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 64°28'35" LEFT
					Ls (1) / (2) / (3) / (4): 135.00' / 70.00' / 70.00' / 80.00'
					THETA (1) / (2) / (3) / (4): 2°24'35" / 3°11'29" / 2°53'42" / 1°05'22"
					Rc (1) / (2) / (3): 1605.00' / 1032.67' / 2103.89'
					DELTA (c) (1) / (2) / (3): 24°19'37" / 14°24'51" / 16°08'59"
					Lc (1) / (2) / (3): 681.46' / 259.79' / 593.01'
					DEGREE OF CURVATURE (1) / (2) / (3): 3°34'11" / 5°32'54" / 2°43'24"
					Tc (1) / (2) / (3): 345.94' / 130.59' / 298.48'
					Ed (1) / (2) / (3): 2.250" / 2.500" / 1.250"
					Eu (1) / (2) / (3): 1.698" / 2.198" / 1.056"
					DESIGN SPEED (1) / (2) / (3): 40 MPH / 35 MPH / 35 MPH
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 31°14'45.66" E / 110.00'
CN 1-245	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 2°52'37" LEFT
					Ls (1) / (2): 40.00' / 40.00'
					THETA (1) / (2): 0°26'27" / 0°26'27"
	PI	245+41.41	485652.0246	1297056.4899	Rc: 2600.00'
	TS	244+56.12	485579.1052	1297012.2482	DELTA (c): 1°59'44"
	SC	244+96.12	485613.3561	1297032.9090	Lc: 90.55'
				DEGREE OF CURVATURE: 2°12'13"	
				Tc: 45.28'	
				Ed: 0.500"	
				Eu: 0.871"	
				DESIGN SPEED: 30 MPH	



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0	RELEASE FOR CONSTRUCTION	JJO	09/25/19
NO.	DESCRIPTION	BY	DATE

APPR CHECK DRAWN DESIGN
 AZ
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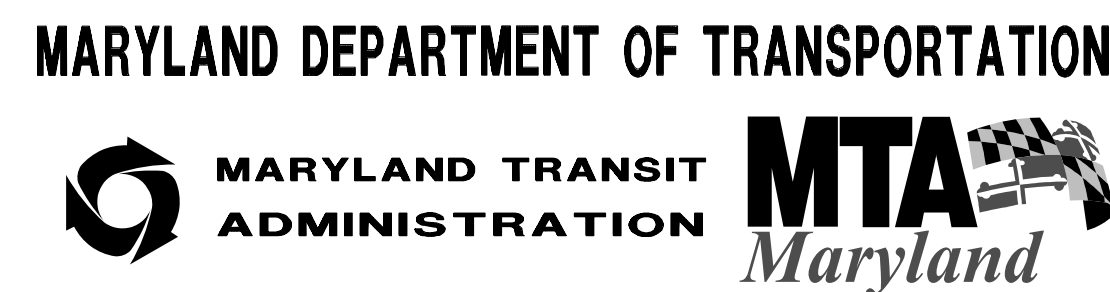
PURPLE LINE LIGHT RAIL
 SEGMENT 1 - TRACK ALIGNMENT
 TRACK 1 - HORIZONTAL ALIGNMENT DATA
 DATE: SEPTEMBER 25, 2019 SCALE: N.T.S.

CONTRACT NO. 0-0000-0000
 DRAWING NO. S1050PTW-604
 SHEET NO. 8 OF 67

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SEGMENT 1 TRACK ALIGNMENT DATA - TRACK 1

CURVE No.	POINT	STATION	NORTHING	EASTING	DATA
TANGENT BETWEEN CURVES					BEARING / DISTANCE: N 28°22'08.51" E / 736.20'
CN 1-263	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 93°03'55" RIGHT
					Ls (1) / (2): 180.00' / 195.00'
					THETA (1) / (2): 5°55'13" / 6°24'49"
	PI	263+73.64	487264.2346	1297927.0827	Rc: 871.00'
	TS	253+62.87	486374.8592	1297446.8203	DELTA (c): 80°43'52"
	SC	255+42.87	486530.1296	1297537.7068	Lc: 1227.26'
				DEGREE OF CURVATURE: 6°34'41"	
				Tc: 740.38'	
				Ed: 3.250"	
				Eu: 2.319"	
				DESIGN SPEED: 35 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 58°33'56.42" E / 694.93'
CN 1-277	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 0°50'58" LEFT
					Ls (1) / (2): 40.00' / 40.00'
					THETA (1) / (2): 0°04'58" / 0°04'58"
	PI	277+82.65	486306.9740	1299493.2167	Rc: 13839.54'
	TS	276+60.07	486370.9069	1299388.6187	DELTA (c): 0°41'02"
	SC	277+00.07	486350.0625	1299422.7583	Lc: 165.17'
				DEGREE OF CURVATURE: 0°24'50"	
				Tc: 82.59'	
				Ed: 0.250"	
				Eu: 0.616"	
				DESIGN SPEED: 55 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 58°32'52.94" E / 492.16'
CN 1-280	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 0°52'01" RIGHT
					Ls (1) / (2): 40.00' / 40.00'
					THETA (1) / (2): 0°05'04" / 0°05'04"
	PI	280+27.83	486182.2235	1299704.2851	Rc: 13558.06'
	SS	279+05.24	486244.5987	1299598.7509	DELTA (c): 0°41'53"
	SC	279+45.24	486224.2292	1299633.1759	Lc: 165.17'
				DEGREE OF CURVATURE: 0°25'21"	
				Tc: 82.59'	
				Ed: 0.250"	
				Eu: 0.634"	
				DESIGN SPEED: 55 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 58°32'52.94" E / 492.16'
CN 1-287	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 0°28'47" RIGHT
					Ls (1) / (2): 31.00' / 31.00'
					THETA (1) / (2): 0°01'43" / 0°01'43"
	PI	287+87.82	485785.6730	1300352.6162	Rc: 30986.00'
	TS	286+42.58	485861.4574	1300228.7143	DELTA (c): 0°25'21"
	SC	286+73.58	485845.2777	1300255.1570	Lc: 228.48'
				DEGREE OF CURVATURE: 0°11'06"	
				Tc: 114.24'	
				Ed: 0.000"	
				Eu: 0.387"	
				DESIGN SPEED: 55 MPH	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 58°04'05.65" E / 174.35'
CN 1-292	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 0°33'08" LEFT
					Ls (1) / (2): 29.00' / 29.00'
					THETA (1) / (2): 0°02'00" / 0°02'00"
	PI	292+42.37	485545.2570	1300738.3839	Rc: 25000.00'
	TS	291+07.40	485616.6403	1300623.8433	DELTA (c): 0°29'09"
	SC	291+36.40	485601.3068	1300648.4579	Lc: 211.93'
				DEGREE OF CURVATURE: 0°13'45"	
				Tc: 105.96'	
				Ed: 0.000"	
				Eu: 0.479"	
				DESIGN SPEED: 55 MPH	



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0	RELEASE FOR CONSTRUCTION	JJO	09/25/19
REVISIONS			

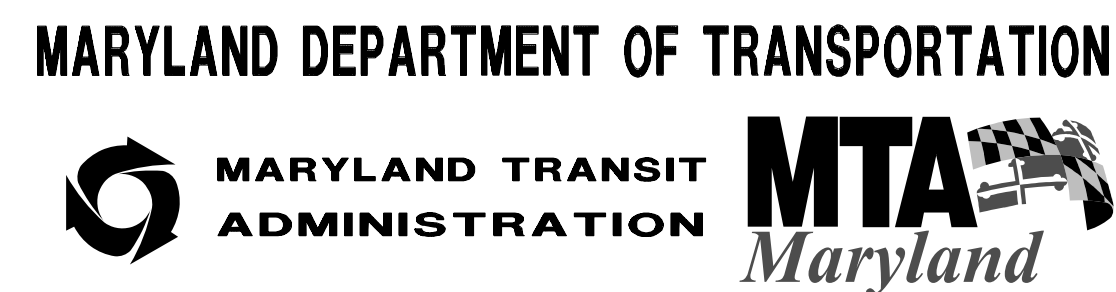
APPR CHECK DRAWN DESIGN
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PURPLE LINE LIGHT RAIL
 SEGMENT 1 - TRACK ALIGNMENT
 TRACK 1 - HORIZONTAL ALIGNMENT DATA
 DATE: SEPTEMBER 25, 2019 SCALE: N.T.S.

CONTRACT NO. 0-0000-0000
 DRAWING NO. S1050PTW-605
 SHEET NO. 9 OF 67

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SEGMENT 1 TRACK ALIGNMENT DATA - TRACK 1					
CURVE No.	POINT	STATION	NORTHING	EASTING	DATA
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 58°37'13.43" E / 186.03'
CN 1-296	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 6°53'33" RIGHT
					Ls (1) / (2): 70.00' / 70.00'
					THETA (1) / (2): 1°20'13" / 1°20'13"
	PI	296+88.69	485312.8505	1301119.4318	Rc: 1500.00'
	TS	295+63.36	485378.1149	1301012.4259	DELTA (c): 4°13'07"
	SC	296+33.36	485341.2027	1301071.9007	Lc: 110.44'
	CS	297+43.80	485278.1443	1301162.5426	DEGREE OF CURVATURE: 3°49'11"
ST	298+13.80	485235.2164	1301217.8323	Tc: 55.25'	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 51°43'40.64" E / 112.71'
CN 1-299	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 1°35'14" LEFT
					Ls (1) / (2): 18.00' / 18.00'
					THETA (1) / (2): 0°07'56" / 0°07'56"
	PI	299+89.53	485126.3668	1301355.7981	Rc: 3900.00'
	TS	299+26.51	485165.4018	1301306.3216	DELTA (c): 1°19'22"
	SC	299+44.51	485154.2635	1301320.4616	Lc: 90.03'
	CS	300+34.55	485099.4818	1301391.9102	DEGREE OF CURVATURE: 1°28'09"
ST	300+52.55	485088.7172	1301406.3367	Tc: 45.02'	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 53°18'54.43" E / 392.26'
CN 1-306	CURVE WITH SPIRALS				TOTAL CENTRAL ANGLE: 7°37'43" RIGHT
					Ls (1) / (2): 100.00' / 100.00'
					THETA (1) / (2): 1°05'59" / 1°05'59"
	PI	306+68.50	484720.7403	1301900.2876	Rc: 2605.00'
	TS	304+44.81	484854.3751	1301720.9040	DELTA (c): 5°25'45"
	SC	305+44.81	484794.1229	1301800.7122	Lc: 246.84'
	CS	307+91.65	484633.8728	1301988.3461	DEGREE OF CURVATURE: 2°11'58"
ST	308+91.65	484564.4747	1302060.3431	Tc: 123.51'	
TANGENT BETWEEN CURVES					BEARING / DISTANCE: S 45°41'11.17" E / 1343.09'
MATCH POINT SEGMENT 1 - SEGMENT 3		320+00.00	483790.2007	1302853.3955	



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PURPLE LINE LIGHT RAIL
 SEGMENT 1 - TRACK ALIGNMENT
 TRACK 1 - HORIZONTAL ALIGNMENT DATA
 DATE: SEPTEMBER 25, 2019 SCALE: N.T.S.

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