PID 107376
MOT-75-14.74 PAVEMENT CALCULATION

Calculated By: TES Date: 12/14/2021
Check By: JAE Date: 12/14/2021

						872	204	206	206	206	206	254	302	304	407	407	407	442	442	452	888	
					CONCRETE MEDIAN AREA	VOID REDUCING ASPHALT MEMBRANE (VRAM)	PROOF ROLLING (RECONSTRUCTION 1 HR PER 2,000 SY)	CEMENT STABILIZED SUBGRADE, 12" DEEP	CEMENT (115 pounds per cubic foot @ 5%, 12" thickness @ 0.005 Ton's)	CURING COAT	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SUBGRADE	PAVEMENT PLANING, ASPHALT CONCRETE DEPTH - 1.5"	ASPHALT CONCRETE BASE, PG64-22 (8")	6" AGGREGATE BASE	TACK COAT, 702.13	NON-TRACKING TACK COAT	NON-TRACKING TACK COAT	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19" MM, TYPE A, (446), AS PER PLAN	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN	12.5" NON REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/QA	HIGH FRICTION SURFACE SYSTEM	
	STATION		CADD	LENGTH	2.8125		2000						0.6667	0.50	0.0700	0.0550	0.0850	0.1458	0.1250	1.0417		Depth (ft)
	FROM	TO	AREA (SF)	(FT)	SF	FT	HOUR	SY	TON	SY	LS	SY	CY	CY	GAL	GAL	GAL	CY	CY	SY	SY	DESCRIPTION
Mainline I-75	385+76.00	390+08.17	52409.35	432.17	-	864.3400	-	-	-	-	-	5823.2611	-	-		-	494.9772	-	242.6359	-	-	Mill/Overlay
Mainline I-75	392+16.88	409+43.53	246544.43	1726.65	-	3453.3000	-	-	-	-	-	27393.8256	-	-		-	2328.4752	-	1141.4094	-	-	Mill/Overlay
Mainline I-75	412+42.63	424+95.42	175349.23	1252.79	-	2505.5800	-	-	-	-	-	19483.2478	-	-		-	1656.0761	-	811.8020	-	-	Mill/Overlay
Ramp D4	686+65.53	692+02.77	16115.93	537.24	-		-	-	-	-	-	1790.6589	-	-		-	152.2060	-	74.6108	-	-	Mill/Overlay
Ramp D4	696+45.25	698+08.60	4626.72	163.35	-		-	-	-	-	-	514.0800	-	-		-	43.6968	-	21.4200	-	-	Mill/Overlay
Ramp E2	584+95.25	587+67.96	10917.26	272.71	-		-	-	-	-	-	1213.0289	-	-		-	103.1075	-	50.5429	-	-	Mill/Overlay
Ramp E5	786+59.80	807+43.46	97174.68	2083.66	-	4167.3200	-	-	-	-	-	10797.1867	-	-		-	917.7609	-	449.8828	-	-	Mill/Overlay
			02/IMS/PV	SUBTOTAL		10991.0	0.0	0.0	0.0	0.0		67016.0	0.0	0.0	0.0	0.0	5697.0	0.0	2793.0	0.0	0.0	
Mainline I-75	422+90.00	423+95.00	9302.18	105.00		210.0000	0.5168	1033.5756	26.75	1033.5756	-	-	229.6835	172.2626		170.5400	-	50.2433	43.0656			Area with existing Median Barrier. Matching existing pavement, no step outs
Mainline I-75	423+95.00	424+95.42	9336.19	100.42	282.4312	200.8400	0.5187	1037.3544	26.85	1037.3544	-	-	230.5232	172.8924		171.1635	-	50.4270	41.9155			Area with new Median Barrier. Matching existing pavement, no step outs
Mainline I-75	426+91.12	444+57.67	236379.37	1766.55	4968.4219	3533.1000	13.1322	26264.3744	679.60	26264.3744	-	-	5836.5277	4377.3957		4333.6218	-	1276.7404	1071.3470	-	-	
I75 - LT Step out	430+95.46	444+57.67	-	1362.21	-		0.2144	428.8439	11.10	428.8439	-	-	14.0145	33.6348		6.9372	-	0.0000	-	-	-	Ex. Noise wall from 426+91.12 to 430+95.46
I75 - RT Step out	426+91.12	437+94.93	-	1103.81	-		0.1737	347.4957	9.00	347.4957	-	-	11.3561	27.2546		5.6213	-	0.0000	-	-	-	
I75 - RT Step out	437+94.93	438+89.08	-	94.15	-		0.0262	52.3056	1.36	52.3056	-	-	6.9741	6.1023		4.6988	-	1.1018	-	-	-	Rt Type D Concrete Barrier
I75 - RT Step out	438+89.08	440+45.73	-	156.65	-		0.0247	49.3157	1.28	49.3157	-	-	1.6116	3.8679		0.7978	-	0.0000	-	-	-	
Approachh Slab I-75	444+57.67	444+82.67	2100	25	-	50.0000	-	-	-	-	-	-	-	-	16.3333	12.8333	-	11.3426	9.7222	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	444+57.67	444+82.67	950	25	-	-	0.0528	105.5556	2.74	105.5556	-	-	-	17.5926	7.3889	5.8056	-	5.1312	4.3981	-	-	
Approachh Slab - LT Step out	444+57.67	444+82.67	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	444+57.67	444+82.67	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab I-75	446+86.73	447+11.73	2100	25	-	50.0000	-	-	-	-	-	-	-	-	16.3333	12.8333	-	11.3426	9.7222	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	446+86.73	447+11.73	950	25	-	-	0.0528	105.5556	2.74	105.5556	-	-	-	17.5926	7.3889	5.8056	-	5.1312	4.3981	-	-	
Approachh Slab - LT Step out	446+86.73	447+11.73	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	446+86.73	447+11.73	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab I-75	471+43.51	471+68.51	1800	25	-	50.0000	-	-	-	-	-	-	-	-	14.0000	11.0000	-	9.7222	8.3333	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	471+43.51	471+68.51	1000	25	-	-	0.0556	111.1111	2.88	111.1111	-	-	-	18.5185	7.7778	6.1111	-	5.4012	4.6296	-	-	
Approachh Slab - LT Step out	471+43.51	471+68.51	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	471+43.51	471+68.51	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab I-75	472+87.27	473+12.27	1800	25	-	50.0000	-	-	-	-	-	-	-	-	14.0000	11.0000	-	9.7222	8.3333	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	472+87.27	473+12.27	1000	25	-	-	0.0556	111.1111	2.88	111.1111	-	-	-	18.5185	7.7778	6.1111	-	5.4012	4.6296	-	-	
Approachh Slab - LT Step out	472+87.27	473+12.27	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	472+87.27	473+12.27	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	

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	STATION		CADD	LENGTH		872	204	206	206	206	206	254	302	304	407	407	407	442	442	452	888	
					CONCRETE MEDIAN AREA	VOID REDUCING ASPHALT MEMBRANE (VRAM)	PROOF ROLLING (RECONSTRUCTION 1 HR PER 2,000 SY)	CEMENT STABILIZED SUBGRADE, 12" DEEP	CEMENT (115 pounds per cubic foot @ 5%, 12" thickness @ 0.005 Ton's)	CURING COAT	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SUBGRADE	PAVEMENT PLANING, ASPHALT CONCRETE DEPTH - 1.5"	ASPHALT CONCRETE BASE, PG64-22 (8")	6" AGGREGATE BASE	TACK COAT, 702.13	NON-TRACKING TACK COAT	NON-TRACKING TACK COAT	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19" MM, TYPE A, (446), AS PER PLAN	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN	12.5" NON REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/QA	HIGH FRICTION SURFACE SYSTEM	
					2.8125		2000						0.6667	0.50	0.0700	0.0550	0.0850	0.1458	0.1250	1.0417		Depth (ft)
	FROM	TO	AREA (SF)	(FT)	SF	FT	HOUR	SY	TON	SY	LS	SY	CY	CY	GAL	GAL	GAL	CY	CY	SY	SY	DESCRIPTION
Approachh Slab I-75	486+59.03	486+84.03	1800	25	-	50.0000	-	-	-	-	-	-	-	-	14.0000	11.0000	-	9.7222	8.3333	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	486+59.03	486+84.03	1000	25	-	-	0.0556	111.1111	2.88	111.1111	-	-	-	18.5185	7.7778	6.1111	-	5.4012	4.6296	-	-	
Approachh Slab - LT Step out	486+59.03	486+84.03	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	486+59.03	486+84.03	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab I-75	488+65.56	488+90.56	1800	25	-	50.0000	-	-	-	-	-	-	-	-	14.0000	11.0000	-	9.7222	8.3333	-	-	Mill/Overlay
Approachh Slab - Median and Shoulders Pvt	488+65.56	488+90.56	1000	25	-	-	0.0556	111.1111	2.88	111.1111	-	-	-	18.5185	7.7778	6.1111	-	5.4012	4.6296	-	-	
Approachh Slab - LT Step out	488+65.56	488+90.56	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Approachh Slab - RT Step out	488+65.56	488+90.56	-	25	-	-	0.0021	4.1667	0.11	4.1667	-	-	-	0.6944	-	-	-	-	-	-	-	
Ramp N-8	2+80.93	7+41.91	11482.32	460.98	-		0.6379	1275.8133	33.02	1275.8133	-	-	-	212.6356		-	-	-	-	1275.8133	-	
N8 - LT Step out	2+80.93	7+41.91	-	460.98	-		0.0512	102.4400	2.66	102.4400	-	-	-	4.2683		-	-	-	-	-	-	
N8 - RT Step out	2+80.93	7+41.91	-	460.98	-		0.0512	102.4400	2.66	102.4400	-	-	-	4.2683		-	-	-	-	-	-	
Mainline I-75	447+11.73	455+49.17	109800.51	837.44	2355.3000	1674.8800	6.1000	12200.0567	315.68	12200.0567	-	-	2711.1237	2033.3428		2013.0094	-	593.0583	497.4315	-	-	
I75 - LT Step out	447+11.73	455+25.07	-	813.34	-		0.1280	256.0515	6.63	256.0515	-	-	8.3677	20.0825		4.1420	-	0.0000	-	-	-	
I75 - RT Step out	447+11.73	455+49.17	-	837.44	-		0.1318	263.6385	6.83	263.6385	-	-	8.6156	20.6775		4.2647	-	0.0000	-	-	-	
Ramp N-7	445+86.90	448+33.00	6685.28	246.1	-		-	-			-	742.8089	-	-		-	63.1388	-	30.9504	-	-	Mill/Overlay
Ramp N-7	448+33.00	450+20.86	4685.52	187.86	-		0.2603	520.6133	13.48	520.6133	-	-	-	86.7689		-	-	-	-	520.6133	-	
N7 - LT Step out	448+33.00	450+20.86	-	187.86	-		0.0296	59.1411	1.54	59.1411	-	-	1.9327	4.6385		0.9567	-	0.0000	-	-	-	
N7 - RT Step out	448+33.00	450+20.86	-	187.86	-		0.0197	59.1411	1.54	59.1411	-	-	1.9327	4.6385		0.9567	-	0.0000	-	-	-	
Ramp N-6	445+94.83	455+47.77	28443.68	952.94	-		-	-			-	3160.4089	-	-		-	268.6348	-	131.6837	-	-	Mill/Overlay
Ramp N-6A	440+39.91	444+50.00	12137.86	410.09	-		-	-			-	1348.6511	-	-		-	114.6353	-	56.1938	-	-	Mill/Overlay
Ramp N-6A	444+50.00	447+09.87	7333.5	259.87	-		0.4074	814.8333	21.09	814.8333	-	-	181.0741	135.8056		134.4475	-	39.6100		-	-	
N6A - LT Step out	444+50.00	447+09.87	-	259.87	-		0.0409	81.8109	2.12	81.8109	-	-	2.6736	6.4165		1.3234	-	0.0000	-	-	-	
N6A - RT Step out	444+50.00	447+09.87	-	259.87	-		0.0409	81.8109	2.12	81.8109	-	-	2.6736	6.4165		1.3234	-	0.0000	-	-	-	
Mainline I-75	461+76.52	471+43.51	110950.2	966.99	2719.6594	1933.9800	6.1639	12327.8000	318.99	12327.8000	-	-	2739.5111	2054.6333		2034.0870	-	599.2681	501.0673	-	-	
I75 - LT Step out	463+39.25	471+43.51	-	804.26	-		0.1266	253.1930	6.56	253.1930	-	-	8.2743	19.8583		4.0958	-	0.0000	-	-	-	Existing Wall from 461+76.52 to 463+39.25 No Step outs
I75 - RT Step out	461+76.52	471+43.51	-	966.99	-		0.1522	304.4228	7.88	304.4228	-	-	9.9485	23.8763		4.9245	-	0.0000	-	-	-	
Mainline I-75	473+12.27	486+59.03	175298.65	1346.76	3787.7625	2693.5200	9.7388	19477.6278	503.99	19477.6278	-	-	4328.3617	3246.2713		3213.8086	-	946.8291	794.0319	-	-	
I75 - LT Step out	473+12.27	486+59.03	-	1346.76	-		0.2120	423.9800	10.98	423.9800	-	-	13.8556	33.2533		6.8585	-	0.0000	-	-	-	
I75 - RT Step out	473+12.27	485+95.37	-	1283.1	-		0.2020	403.9389	10.46	403.9389	-	-	13.2006	31.6815		6.5343	-	0.0000	-	-	-	
I75 - RT Step out	485+95.37	486+59.03	-	63.66	-		0.0177	35.3667	0.92	35.3667	-	-	4.7156	4.1261		3.1771	-	0.7450	-	-	-	Rt Type D Concrete Barrier

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	FROM	TO	AREA (SF)	(FT)	CONCRETE MEDIAN AREA	VOID REDUCING ASPHALT MEMBRANE (VRAM)	PROOF ROLLING (RECONSTRUCTION 1 HR PER 2,000 SY)	CEMENT STABILIZED SUBGRADE, 12" DEEP	CEMENT (115 pounds per cubic foot @ 5%, 12" thickness @ 0.005 Ton's)	CURING COAT	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SUBGRADE	PAVEMENT PLANING, ASPHALT CONCRETE DEPTH - 1.5"	ASPHALT CONCRETE BASE, PG64-22 (8")	6" AGGREGATE BASE	TACK COAT, 702.13	NON-TRACKING TACK COAT	NON-TRACKING TACK COAT	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19" MM, TYPE A, (446), AS PER PLAN	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN	12.5" NON REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/QA	HIGH FRICTION SURFACE SYSTEM	
					2.8125		2000						0.6667	0.50	0.0700	0.0550	0.0850	0.1458	0.1250	1.0417		Depth (ft)
					SF	FT	HOUR	SY	TON	SY	LS	SY	CY	CY	GAL	GAL	GAL	CY	CY	SY	SY	DESCRIPTION
Ramp N-2	7+63.51	11+93.00	12170.42	429.49	-		0.6761	1352.2689	34.99	1352.2689	-	-	-	225.3781		-	-	-	-	1352.2689	-	
N2 - LT Step out	7+63.51	11+73.00	-	409.49	-		0.0341	68.2483	1.77	68.2483	-	-	-	11.3747		-	-	-	-	-	-	Lt Type 6 Curb (curb ends at 11+73)
N2 - LT Step out	11+73.00	11+93.00		20	-		0.0022	4.4444	0.12	4.4444	-	-	-	0.1852		-	-	-	-	-	-	
N2 - RT Step out	7+63.51	11+93.00	-	429.49	-		0.0477	95.4422	2.47	95.4422	-	-	-	3.9768		-	-	-	-	-	-	
Ramp N-3	1+04.00	4+35.18	8315.33	331.18	-		0.4620	923.9256	23.91	923.9256	-	-	-	153.9876		-	-	-	-	923.9256	-	
N3 - RT Step out	1+04.00	4+35.18	-	331.18	-		0.0368	73.5956	1.91	73.5956	-	-	-	3.0665		-	-	-	-	-	-	
N3 - LT Step out	1+04.00	4+35.18	-	331.18	-		0.0276	55.1967	1.43	55.1967	-	-	-	9.1994		-	-	-	-	-	-	Lt Type 6 Curb
Mainline I-75	488+90.56	514+91.59	317697.12	2601.03	7315.3969	5202.0600	17.6498	35299.6800	913.38	35299.6800	-	-	7844.3733	5883.2800		5824.4472	-	1715.9567	1436.9524	-	-	
I75 - LT Step out	488+90.56	498+08.84	-	918.28	-		0.1445	289.0881	7.49	289.0881	-	-	9.4473	22.6736		4.6764	-	0.0000	-	-	-	
I75 - LT Step out	511+55.68	514+91.59	-	335.91	-		0.0311	62.2056	1.61	62.2056	-	-	13.8235	10.3676		10.2639	-	3.0239	-	-	-	Lt Type D Concrete Barrier with Noise Wall
I75 - RT Step out	488+90.56	497+15.16	-	824.6	-		0.1298	259.5963	6.72	259.5963	-	-	8.4835	20.3605		4.1994	-	0.0000	-	-	-	
I75 - RT Step out	497+15.16	504+25.00	-	709.84	-		0.0657	131.4519	3.41	131.4519	-	-	29.2115	21.9086		21.6896	-	6.3900	-	-	-	Rt Type D Concrete Barrier with Noise Wall
I75 - RT Step out	504+25.00	511+00.00	-	675	-		0.1012	202.3438	5.24	202.3438	-	-	-	33.7240		-	-	-	-	-	-	Rt Type C Concrete Barrier with Noise Wall
I75 - RT Step out	511+00.00	514+91.59	-	391.59	-		0.0363	72.5167	1.88	72.5167	-	-	16.1148	12.0861		11.9652	-	3.5251	-	-	-	Rt Type D Concrete Barrier with Noise Wall
Ramp N-1	1+30.14	3+69.25	6044.23	239.11	-		0.3358	671.5811	17.38	671.5811	-	-	-	111.9302		-	-	-	-	671.5811	-	
N1 - LT Step out	1+30.14	3+69.25	-	239.11	-		0.0199	39.8517	1.04	39.8517	-	-	-	6.6419		-	-	-	-	-	-	Lt Type 6 Curb
N1 - RT Step out	1+30.14	3+69.25	-	239.11	-		0.0266	53.1356	1.38	53.1356	-	-	-	2.2140		-	-	-	-	-	-	
Ramp N-4	62+49.58	78+55.25	52702.39	1605.67	-		2.9279	5855.8211	151.52	5855.8211	-	-	-	975.9702		-	-	-	-	5855.8211	-	
N4 - LT Step out	63+60.33	72+50.19		889.86	-		0.0824	164.7889	4.27	164.7889	-	-	-	27.4648		-	-	-	-	164.7889	-	Adjacent to ex. Pavmt. 62+49.58 to 63+60.33. Lt Type D Concrete Barrier with Noise Wall
N4A - LT Step out	72+54.16	74+45.04		190.88	-		0.0212	42.4178	1.10	42.4178	-	-	-	1.7674		-	-	-	-	-	-	
N4 - LT Step out	74+45.04	77+02.16		257.12	-		0.0286	57.1378	1.48	57.1378	-	-	-	2.3807		-	-	-	-	-	-	
N4 - LT Step out	77+02.16	78+55.25		153.09	-		0.0142	28.3500	0.74	28.3500	-	-	-	4.7250		-	-	-	-	28.3500	-	Lt Type D Concrete Barrier with Noise Wall
N4 - RT Step out	62+49.58	65+41.60		292.02	-		0.0324	64.8933	1.68	64.8933	-	-	-	2.7039		-	-	-	-	-	-	
N4 - RT Step out	65+41.60	78+55.25		1313.65	-		0.1969	393.7909	10.19	393.7909	-	-	-	65.6318		-	-	-	-	393.7909	-	Rt Type C Barrier with no step out
Mainline I-75	516+47.64	558+07.79	487546.75	4160.15	11700.4219	8320.3000	27.0859	54171.8611	1401.70	54171.8611	-	-	12038.1914	9028.6435		8938.3571	-	2633.3544	2202.9923	-	-	
I75 - LT Step out	516+47.64	533+08.00	-	1660.36	-		0.4612	922.4222	23.87	922.4222	-	-	68.3276	51.2457		50.7332	-	14.9467	-	-	-	Lt Type D Concrete Barrier
I75 - LT Step out	533+08.00	539+85.00	-	677	-		0.1066	213.1296	5.52	213.1296	-	-	6.9650	16.7160		3.4477	-	0.0000	-	-	-	
I75 - LT Step out	539+85.00	541+74.00	-	189	-		0.0525	105.0000	2.72	105.0000	-	-	14.0000	12.2500		9.4325	-	2.2118	-	-	-	Lt Type D Concrete Barrier
I75 - LT Step out	541+74.00	558+07.79	-	1633.79	-		0.2572	514.3413	13.31	514.3413	-	-	16.8085	40.3405		8.3202	-	0.0000	-	-	-	
I75 - RT Step out	516+47.64	523+43.29	-	695.65	-		0.0644	128.8241	3.34	128.8241	-	-	28.6276	21.4707		21.2560	-	6.2623	-	-	-	Rt Type D Concrete Barrier with Noise Wall
I75 - RT Step out	523+43.29	529+55.00		611.71	-		0.1699	339.8389	8.80	339.8389	-	-	45.3119	39.6479		30.5289	-	7.1586	-	-	-	Rt Type D Concrete Barrier
I75 - RT Step out	529+55.00	539+90.76	-	1035.76	-		0.1630	326.0726	8.44	326.0726	-	-	10.6560	25.5743		5.2747	-	0.0000	-	-	-	
I75 - RT Step out	539+90.76	540+64.76	-	74	-		0.0206	41.1111	1.07	41.1111	-	-	5.4815	4.7963		3.6931	-	0.8660	-	-	-	Rt Type D Concrete Barrier
I75 - RT Step out	540+64.76	551+93.94	-	1129.18	-		0.1777	355.4826	9.20	355.4826	-	-	11.6171	27.8810		5.7505	-	0.0000	-	-	-	
I75 - RT Step out	551+93.94	552+42.84	-	48.9	-		0.0136	27.1667	0.71	27.1667	-	-	3.6222	3.1694		2.4405	-	0.5723	-	-	-	Rt Type D Concrete Barrier
I75 - RT Step out	552+42.84	558+07.79	-	564.95	-		0.0889	177.8546	4.61	177.8546	-	-	5.8122	13.9494		2.8771	-	0.0000	-	-	-	
Mainline I-75 RT	558+07.79	595+50.00	214863.36	3742.21	-	7484.4200	-	-			-	23873.7067	-	-		-	2029.2651	-	994.7378	-	-	Mill/Overlay
Mainline I-75 LT	558+07.79	606+00.00	264771.31	4792.21	-	9584.4200	-	-			-	29419.0344	-	-		-	2500.6179	-	1225.7931	-	-	Mill/Overlay
Mainline I-75	440+01.00	444+57.67	25653.69	456.67	642.1922		-	-			-	-	-	-		-	-	-	-	-	2779.0553	
Mainline I-75	447+11.73	455+49.17	42136.03	837.44	1177.6500		-	-			-	-	-	-		-	-	-	-	-	4550.9311	
				01/IMS/PV SUBTOTAL		41138.0	92.0	182548.0	4723.81	182548.0	1	58545.0	36544.0	29764.0	135.0	27193.0	4977.0	8046.0	9109.0	11187.0	7330.0	
																	32170.0					
				GRAND TOTAL		52129.0	92.0	182548.0	4723.81	182548.0	1	125561.0	37291.0	29764.0	135.0	27193.0	10674.0	8046.0	11902.0	11187.0	7330.0	
																37867.0						

PID 107376
MOT-75-14.74 PAVEMENT CALCULATION

Calculated By: TES Date: 12/14/2021
Check By: JAE Date: 12/14/2021

ASPHALT BASE STEP OUT WIDTH(FT)		
CONC. BASE	AGG. BASE	SUBGRADE
0.8333	1.3333	2.8333

TYPE D BARRIER - STEP OUT WIDTH(FT)							
ASPH. CONC. INT.		CONC. BASE	AGG. BASE				SUBGRADE
2.1667		3.0000	3.5000				5.0000

TYPE D BARRIER with NOISE WALL (NO STEP OUT)- STEP OUT WIDTH(FT)					
ASPH. CONC. INT.		CONC. BASE		AGG. BASE	SUBGRADE
1.6667		1.6667		1.6667	1.6667

CONC. PAVEMENT TYPE C BARRIER (WITH NO STEP OUT) STEP OUT WIDTH(FT)		
AGG. BASE	SUBGRADE	CONC. PVT
2.6979	2.6979	2.6979

TYPE C BARRIER with NOISE WALL (NO STEP OUT) - STEP OUT WIDTH(FT)					
ASPH. CONC. INT.		CONC. BASE		AGG. BASE	SUBGRADE
-		-		2.6979	2.6979

CONC. PAVEMENT BASE STEP OUT WIDTH(FT)	
AGG. BASE	SUBGRADE
0.5000	2.0000

CONC. PAVEMENT with CURB - BASE STEP OUT WIDTH(FT)	
AGG. BASE	SUBGRADE
1.5000	1.5000

CONC. PAVEMENT TYPE D BARRIER STEP OUT WIDTH(FT)					
AGG. BASE				SUBGRADE	CONC. PVT
2.1667				3.6667	1.6667

CONC. PAVEMENT TYPE D BARRIER with NOISE WALL (NO STEP OUT) STEP OUT WIDTH(FT)				
	AGG. BASE		SUBGRADE	CONC. PVT
	1.6667		1.6667	1.6667

PAVEMENT RESTORATION FOR STORM PIPES CARRIED TO GENERAL NOTE

STA.	PIPE SIZE (IN FEET)	LENGTH (pipe length being replaced)	TRENCH WIDTH (1.5XSPAN) + 2 FEET EACH SIDE OF TRENCH	302 ASPHALT CONCRETE BASE, PG64-22 (9 3/4")		202 PAVEMENT REMOVED, AS PER PLAN
		4	1.5	0.8125		
			4	CY		SY
557+87.50						
	1	4	5.5	17.88		2.44
	1.5	4	6.25	20.31		2.78
	2	4	7	22.75		3.11
557+87.50						
	1.5	4	6.25	20.31		2.78
	1.5	4	6.25	20.31		2.78
			Total (carried to general note)	102		14

PAVEMENT RESTORATION AT BARRIER REMOVAL

STA.	STA.	AREA (2' EACH SIDE OF BARRIER)		302 ASPHALT CONCRETE BASE, PG64-22 (4")			
		4		0.3333			
				CY			
573+04.00	573+52.00	192		63.99			
581+89.07	587+01.00	2047.72		682.51			
			SUBTOTAL (carried to grand total)	747			

MOT-75-14.74 - PAVEMENT CORES

PID 107376

Coring and Subgrade Exploration Report
MOT-75-14.74
Montgomery County, Ohio
PID: 107376

Table 3: Pavement Core Summary

Core ID	Alignment	Asphalt Thickness (in)	Concrete Thickness (in)	Total Thickness (in)	Core ID	Alignment	Asphalt Thickness (in)	Concrete Thickness (in)	Total Thickness (in)
B-001-0-14	IR-75	9.25	0.25	9.5	DC-5	IR-75	0	11.5	11.5
B-002-0-14	IR-75	10.75	0	10.75	DC-6	IR-75	0	10	10
B-004-0-14	IR-75	10	0	10	DC-7	IR-75	0	11.5	11.5
B-005-0-14	IR-75	8	0	8	DC-8	IR-75	0	11	11
B-012-0-14	IR-75	9.25	0	9.25	B-001-0-20	IR-75	13	0	13
B-013-0-14	IR-75	9.5	0	9.5	B-002-0-20	IR-75	6.5	9	15.5
B-014-0-14	IR-75	8	0	8	B-003-0-20	IR-75	15	0	15
B-015-0-14	IR-75	10.25	0	10.25	B-004-0-20	IR-75	14.5	0	14.5
C-1	IR-75	12.5	0	12.5	B-007-0-20	IR-75	14.5	0	14.5
C-2	IR-75	6	15	21	B-008-0-20	IR-75	10	0	10
C-3	IR-75	14.25	0	14.25	B-009-0-20	IR-75	19	0	19
C-4	IR-75	14.25	0	14.25	B-010-0-20	IR-75	6	8	14
C-5	IR-75	6.5	0	6.5	B-012-0-20	IR-75	4.5	8	12.5
C-6	IR-75	3.5	13	16.5	B-013-0-20	IR-75	11	0	11
C-7	IR-75	13	0	13	B-014-0-20	IR-75	7	10.5	17.5
C-8	IR-75	12	0	12	B-015-0-20	IR-75	3.5	8.5	12
C-9	IR-75	11.75	0	11.75	B-016-0-20	IR-75	9	4	13
C-10	IR-75	2.75	8.5	11.25	B-017-0-20	IR-75	8	8	16
C-11	IR-75	12	0	12	B-018-0-20	IR-75	12	0	12
C-12	IR-75	11.25	0	11.25	B-019-0-20	IR-75	13	0	13
C-13	IR-75	15.75	0	15.75	B-020-0-20	IR-75	13	0	13
C-14	IR-75	15.5	0	15.5	B-021-0-20	IR-75	9.5	0	9.5
C-15	IR-75	13.5	0	13.5	B-022-0-20	IR-75	10.5	0	10.5
C-16	IR-75	17	8.5	25.5	B-024-0-20	IR-75	9	0	9
C-17	IR-75	15.75	0	15.75	B-025-0-20	IR-75	11	0	11
C-18	IR-75	15.75	0	15.75	B-026-0-20	IR-75	4.5	9	13.5
C-19	IR-75	8	16	24	B-027-0-20	IR-75	6	10	16
C-20	IR-75	18	0	18	B-028-0-20	IR-75	16	0	16
C-21	IR-75	3	12.75	15.75	B-029-0-20	IR-75	10.5	0	10.5
C-22	IR-75	10.5	0	10.5	B-030-0-20	IR-75	17.5	0	17.5
C-23	IR-75	3	15.5	18.5	B-031-0-20	IR-75	12.5	0	12.5
C-24	IR-75	9.5	0	9.5	B-032-0-20	IR-75	14.5	0	14.5
C-25	IR-75	15	0	15	B-033-0-20	IR-75	19.5	0	19.5
C-26	IR-75	7.5	8	15.5	B-034-0-20	IR-75	14.5	0	14.5
C-27	IR-75	18	0	18	B-035-0-20	IR-75	9.5	0	9.5
C-28	IR-75	18	0	18	B-036-0-20	IR-75	15	0	15
C-29	IR-75	5	13	18	B-037-0-20	IR-75	9.5	0	9.5
C-30	IR-75	11.25	0	11.25	B-038-0-20	IR-75	12	0	12
C-31	IR-75	2.25	12.75	15	B-039-0-20	IR-75	13	0	13
C-32	IR-75	11.5	0	11.5	B-040-0-20	IR-75	6	10	16
C-33	IR-75	16.5	0	16.5	B-041-0-20	IR-75	4	10	14
C-34	IR-75	7.5	8	15.5	B-042-0-20	IR-75	12.5	0	12.5
C-35	IR-75	15.25	0	15.25	B-043-0-20	IR-75	12	0	12
C-36	IR-75	16	0	16	B-044-0-20	IR-75	13	0	13
DC-1	IR-75	0	11.75	11.75	B-045-0-20	IR-75	14	0	14
DC-2	IR-75	0	11.75	11.75	B-046-0-20	IR-75	12	0	12
DC-3	IR-75	0	10.75	10.75	B-047-0-20	IR-75	11.5	0	11.5
DC-4	IR-75	0	10	10	B-048-0-20	IR-75	5.5	0	5.5
B-049-0-20	IR-75	12	0	12	X-001-0-20	IR-75	4	0	4
B-050-0-20	IR-75	5	10	15	X-002-0-20	IR-75	3	13.5	16.5
B-051-0-20	IR-75	13.5	0	13.5	X-003-0-20	IR-75	6.5	0	6.5
B-052-0-20	IR-75	4	0	4	X-004-0-20	IR-75	5	9.5	14.5
B-053-0-20	IR-75	5.5	0	5.5					

Average Project Pavement Thickness
13.0881 inches
1.090675 decimal of foot

Average Historical Pavement Thickness
11.62676 inches
0.968897 decimal of foot

Combined Average Thickness Pavement
12.35743 inches
1.029786 decimal of foot

Proposed Thickness

1	1.5	
2	1.75	
3	8	
4	6	
Total	17.25	Inches
	1.4375	decimal of foot

Note:
Average of borings greater than proposed pavement = 2"
(2/12)*100*60=1000/27=37*2=74 CU YD
Round to 100 CU YD
Assume 2 lcoations 100*2 = 200 CU YD

MOT-75-14.74 - PAVEMENT CORES
PID 107376

Coring and Subgrade Exploration Report
MOT-75-14.74
Montgomery County, Ohio
PID: 107376

Table 4: Measured Pavement Thickness at Boring Locations

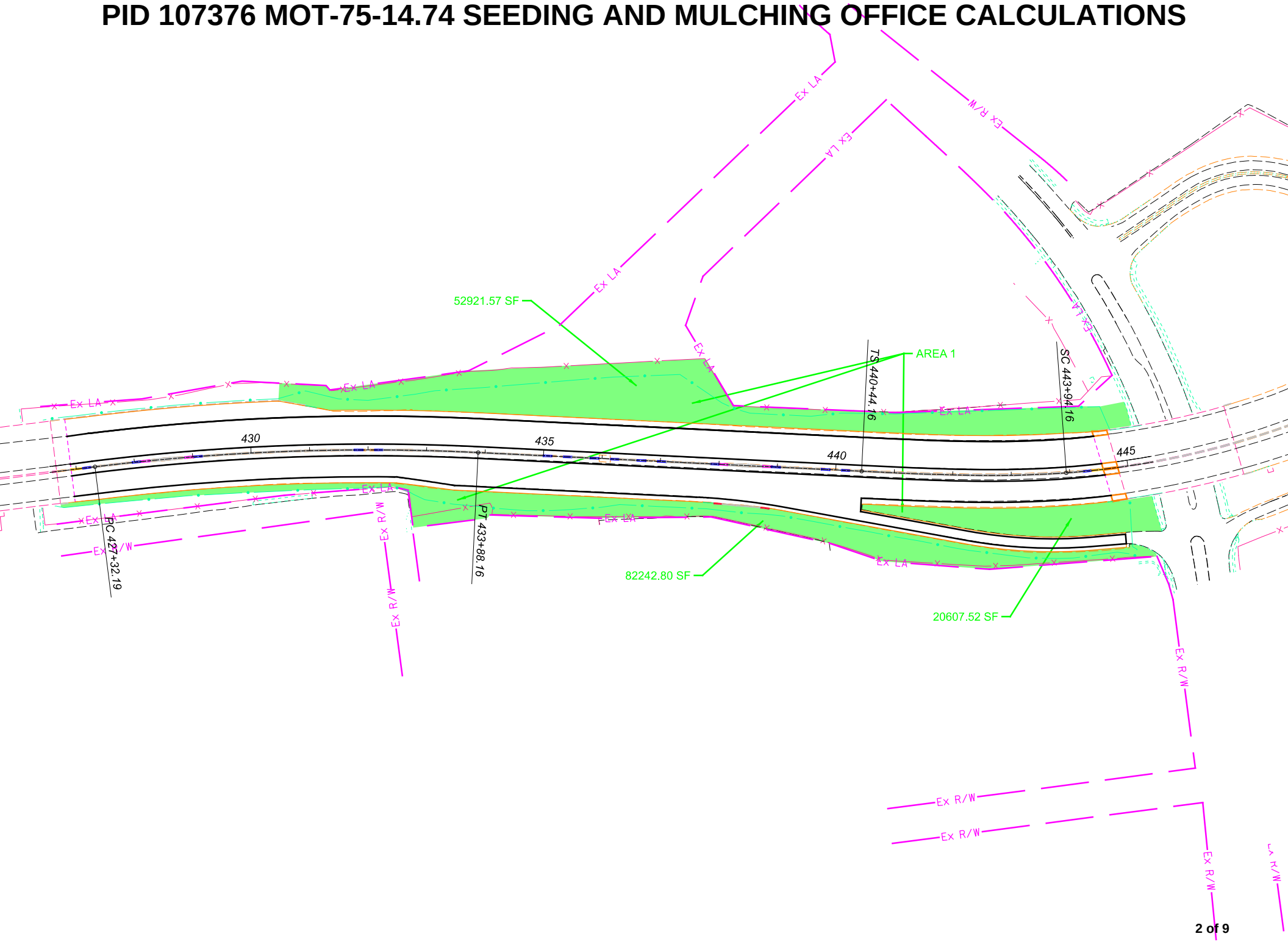
Boring ID	Proposed Alignment	Asphalt thickness (in)	Concrete thickness (in)	Base thickness (in)	Total thickness (in)	Boring ID	Proposed Alignment	Asphalt thickness (in)	Concrete thickness (in)	Base thickness (in)	Total thickness (in)
B-001-0-14	IR-75	9.5	-	8.5	9.5	B-015-0-20	IR-75	5	7	-	12
B-002-0-14	IR-75	10.8	-	-	10.8	B-016-0-20	IR-75 / N1	10	4	-	14
B-004-0-14	IR-75	10	-	8	10	B-017-0-20	IR-75	8	8	-	16
B-005-0-14	IR-75	8	-	-	8	B-018-0-20	IR-75	12	-	-	12
B-006-0-14	IR-75	9	-	3	9	B-019-0-20	Wagner Ford Ramp	11	-	3	11
B-007-0-14	IR-75	8	-	4	8	B-020-0-20	IR-75	13	-	-	13
B-008-0-14	IR-75 / Ramp N-3	9	-	8	9	B-021-0-20	Wagner Ford Ramp	11	-	3	11
B-009-0-14	IR-75 / Ramp N-3	8	-	4	8	B-022-0-20	IR-75	13	-	5	13
B-010-0-14	IR-75 / Ramp N-3	8	-	4	8	B-023-0-20	Wagner Ford Ramp	12	-	7	12
B-011-0-14	IR-75 / Ramp N-3	5	2	-	7	B-024-0-20	IR-75	9	-	-	9
B-011-1-14	IR-75	11	-	5	11	B-025-0-20	Wagner Ford Ramp	9	-	9	9
B-011-2-14	IR-75	10	-	8	10	B-026-0-20	IR-75	4	10	6	14
B-011-3-14	IR-75	13	-	5	13	B-027-0-20	IR-75	6	10	-	16
B-012-0-14	IR-75	9.3	-	-	9.3	B-028-0-20	IR-75	16	-	-	16
B-013-0-14	IR-75	9.5	-	7.5	9.5	B-029-0-20	IR-75	10	-	-	10
B-014-0-14	IR-75	8	-	-	8	B-030-0-20	IR-75	14	-	6	14
B-015-0-14	IR-75	10.3	-	7.5	10.3	B-031-0-20	IR-75	12	-	-	12
B-015-1-14	IR-75	9	-	4	9	B-032-0-20	IR-75	14	-	5	14
B-001-0-20	IR-75	12.5	-	-	12.5	B-033-0-20	IR-75	11	-	-	11
B-002-0-20	IR-75	6.5	9.5	-	16	B-034-0-20	IR-75	16	-	8	16
B-003-0-20	IR-75	14	-	-	14	B-035-0-20	IR-75	11	-	-	11
B-004-0-20	IR-75 / Ramp N-8	14	-	-	14	B-036-0-20	IR-75	10	-	-	10
B-005-0-20	IR-75	12	-	-	12	B-037-0-20	IR-75	11	-	-	11
B-006-0-20	IR-75 / Ramp N-6A	5	8	-	13	B-038-0-20	IR-75	11	-	-	11
B-007-0-20	IR-75 / Ramp N-7	14	-	-	14	B-039-0-20	IR-75	11	-	-	11
B-008-0-20	IR-75 / Ramp N-6	11	-	-	11	B-040-0-20	Ramp N-8	6	10	-	16
B-009-0-20	IR-75	18.8	-	-	18.8	B-041-0-20	Ramp N-8	4	9.8	-	13.8
B-010-0-20	IR-75	6.5	7.5	-	14	B-042-0-20	Ramp N-7	13	-	-	13
B-011-0-20	IR-75	15	-	-	15	B-043-0-20	Ramp N-6A	12	-	-	12
B-012-0-20	IR-75	4	8	-	12	B-044-0-20	Ramp N-6A	12	-	-	12
B-013-0-20	IR-75	10	-	-	10	B-045-0-20	Ramp N-6	12	-	-	12
B-014-0-20	IR-75	8	10	-	18	B-046-0-20	Ramp N-6	11	-	-	11
B-047-0-20	Ramp N-2	11	-	-	11	B-051-0-20	Wagner Ford Ramp	11	-	5	11
B-048-0-20	Ramp N-2	12	-	-	12	B-052-0-20	Keats Drive	1	-	16	1
B-049-0-20	Ramp N-3	11	-	-	11	B-053-0-20	Keats Drive	4	8	5	4
B-050-0-20	Ramp N-1	5	10	-	15						

Average Historical Pavement Thickness
11.62676 inches
0.968897 decimal of foot

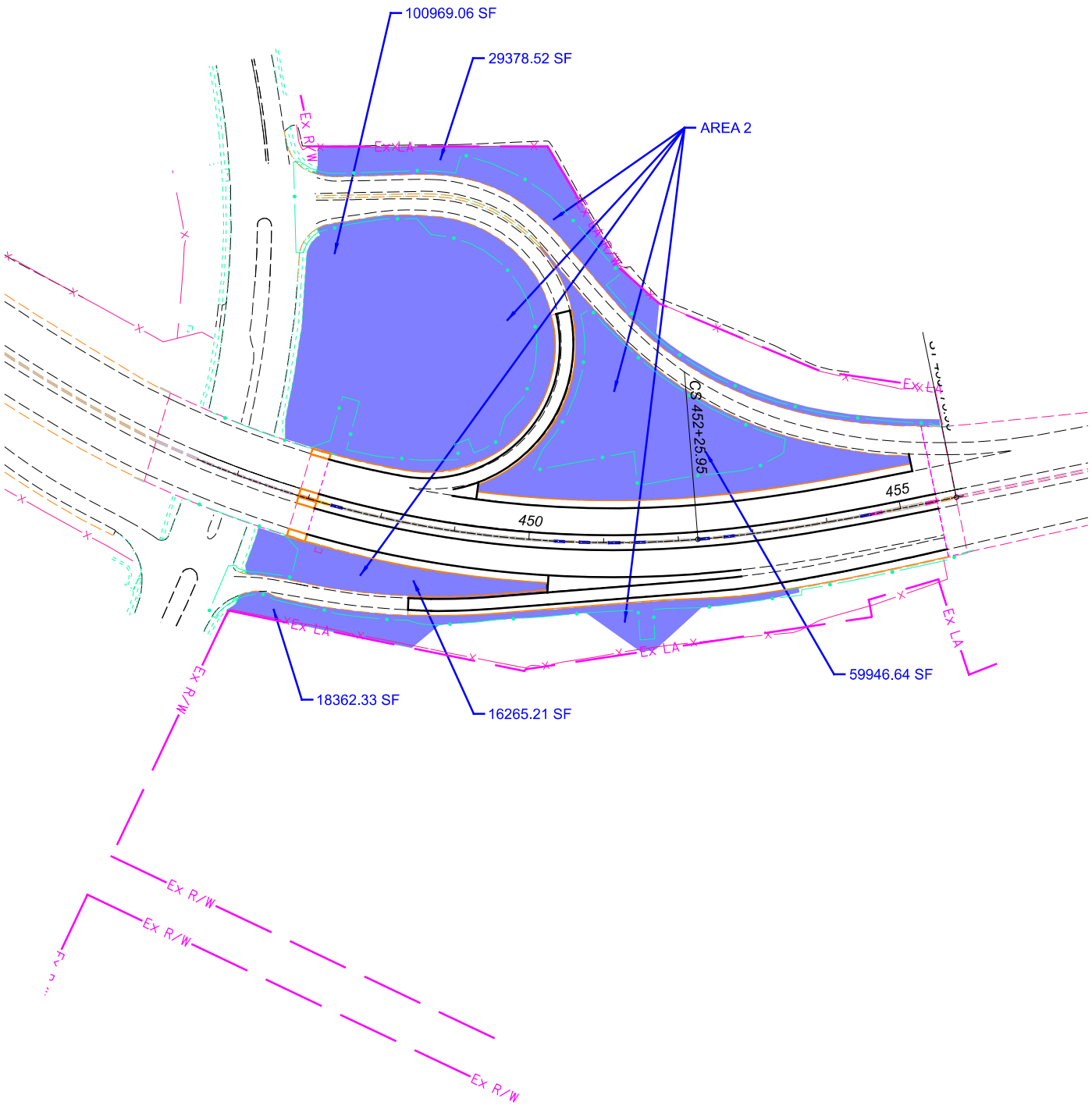
PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS

SEEDING AND MULCHING QUANTITIES						TOTAL (SF)	TOTAL (SY)	TOTAL (SY) ROUNDED
Area 1 (SF)	52921.57	82242.80	20607.52	-	-	155771.89	17307.99	17400.00
Area 2 (SF)	100969.06	16265.21	18362.33	59946.64	29378.52	224921.76	24991.31	25000.00
Area 3 (SF)	25504.13	25348.46	-	-	-	50852.59	5650.29	5700.00
Area 4 (SF)	67358.55	58389.18	13144.75	12595.04	-	151487.52	16831.95	16900.00
Area 5 (SF)	60842.86	10068.85	43820.68	22815.35	-	137547.74	15283.08	15300.00
Area 6 (SF)	96298.22	70222.97	9817.72	139.20	-	176478.11	19608.68	19700.00
		TOTAL SEEDING AND MULCHING AREA (SF)				**897059.61**	-	-
		TOTAL SEEDING AND MULCHING AREA (SY)				**-**	**99673.29**	**-**
		TOTAL SEEDING AND MULCHING AREA USED (SY)				**-**	**-**	**100000**

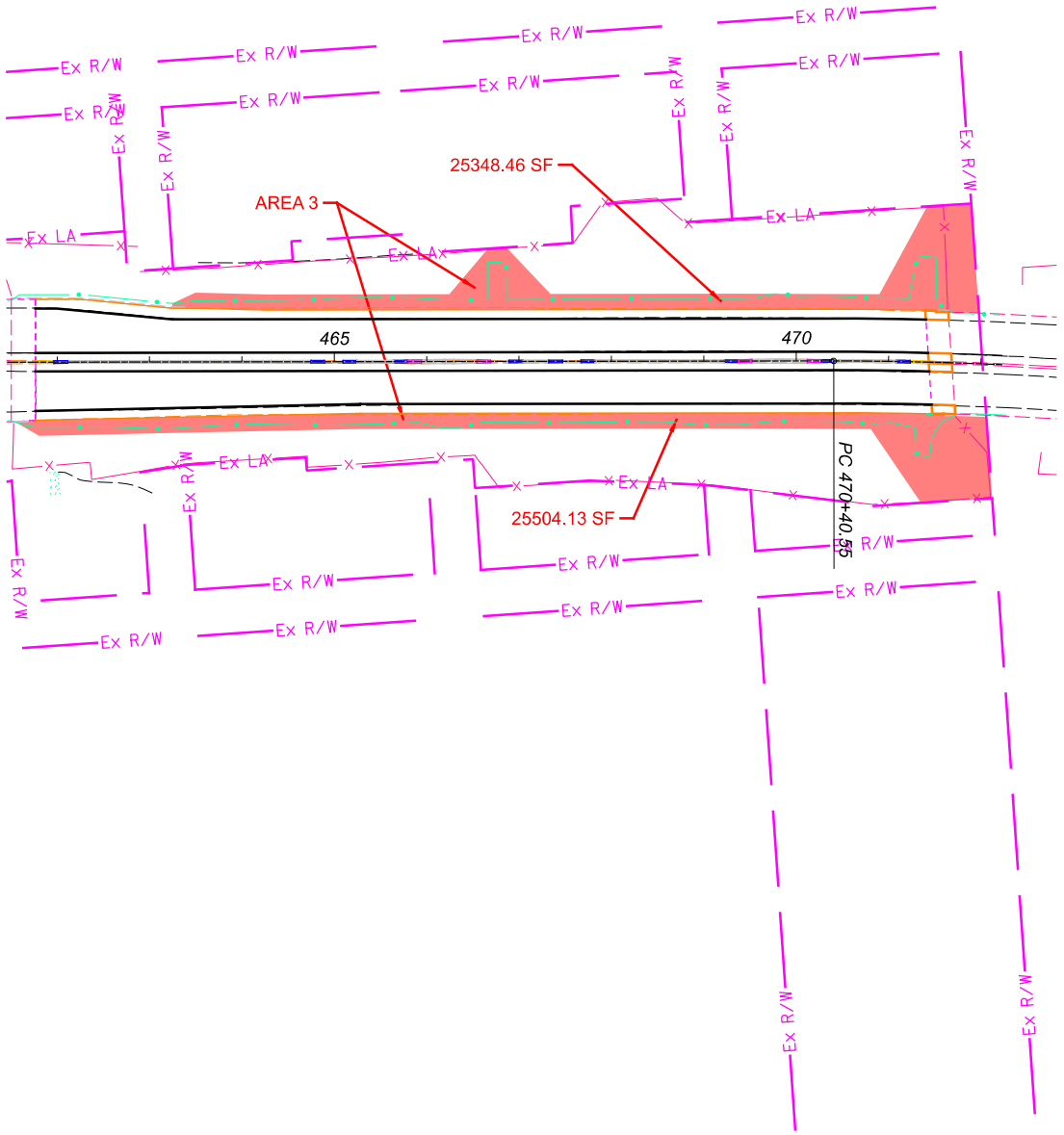
PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



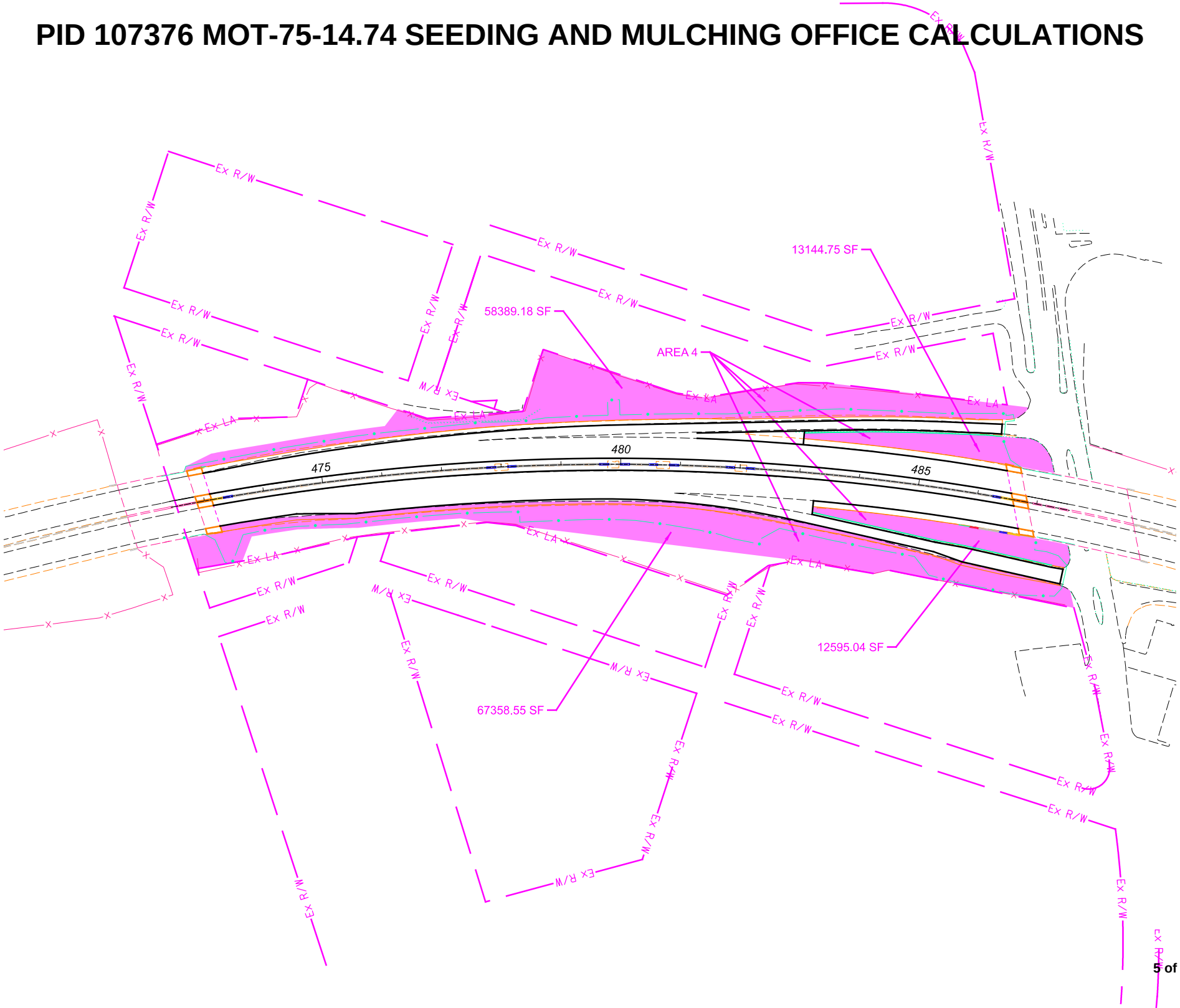
PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



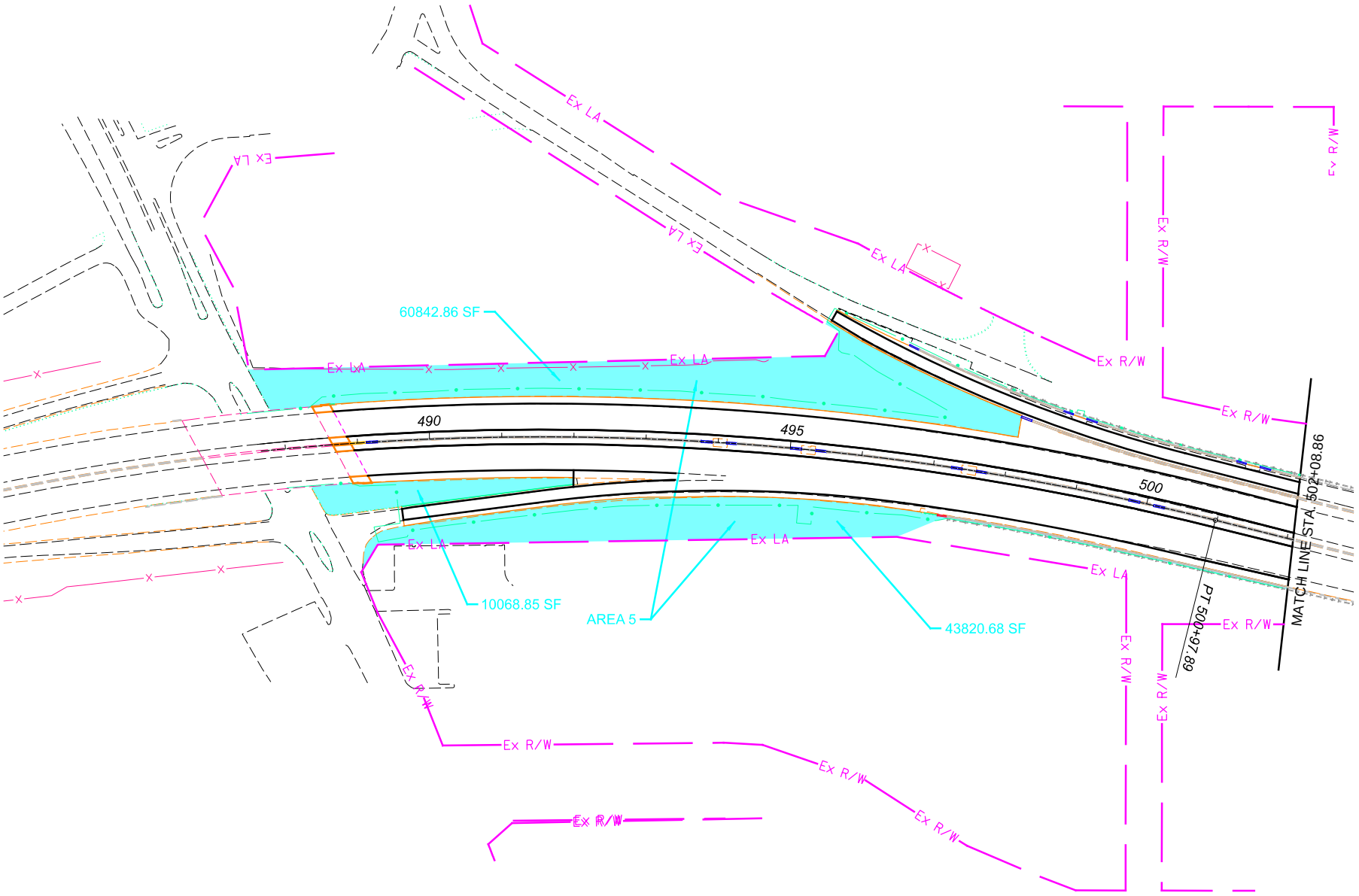
PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



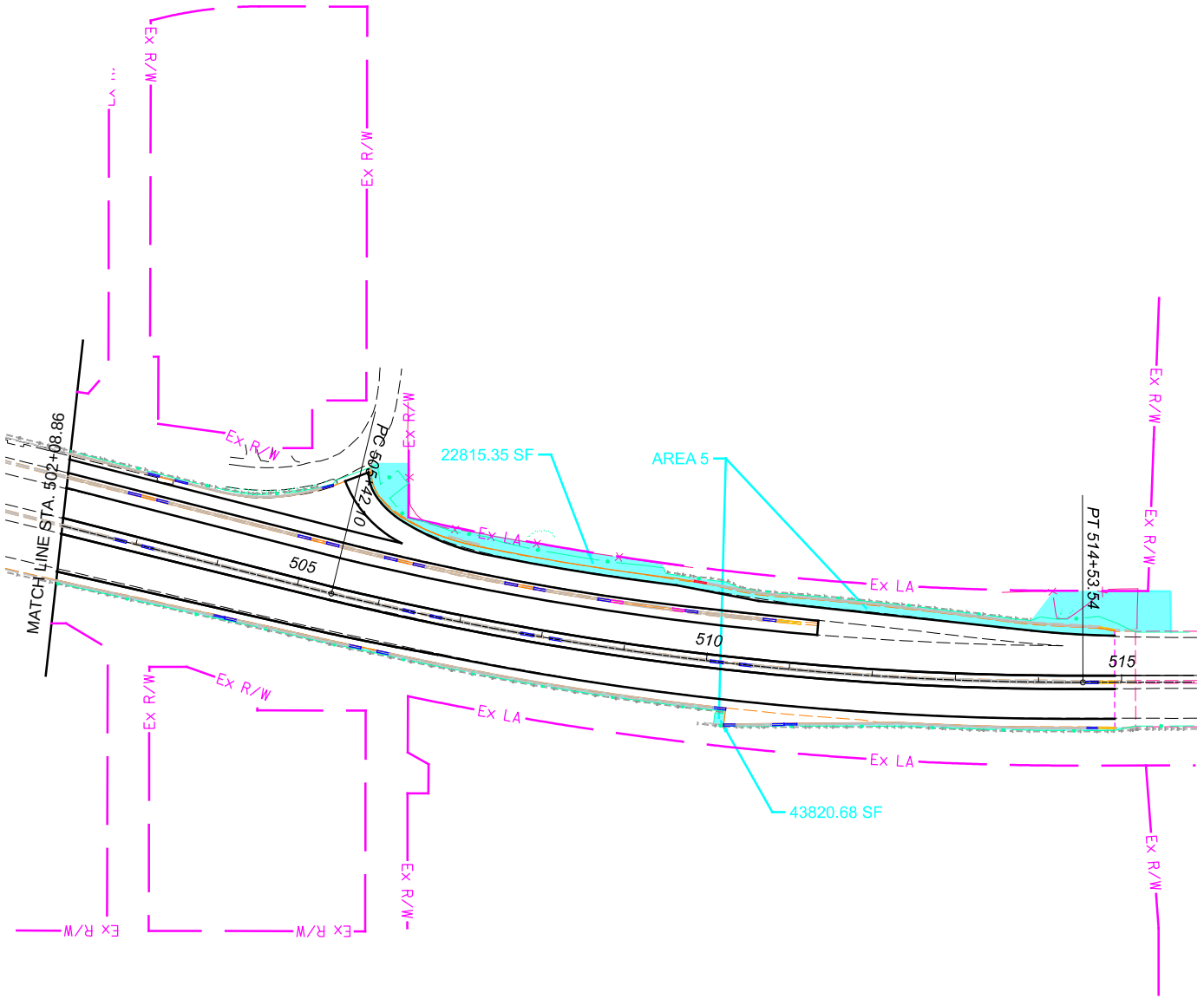
PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



PID 107376 MOT-75-14.74 SEEDING AND MULCHING OFFICE CALCULATIONS



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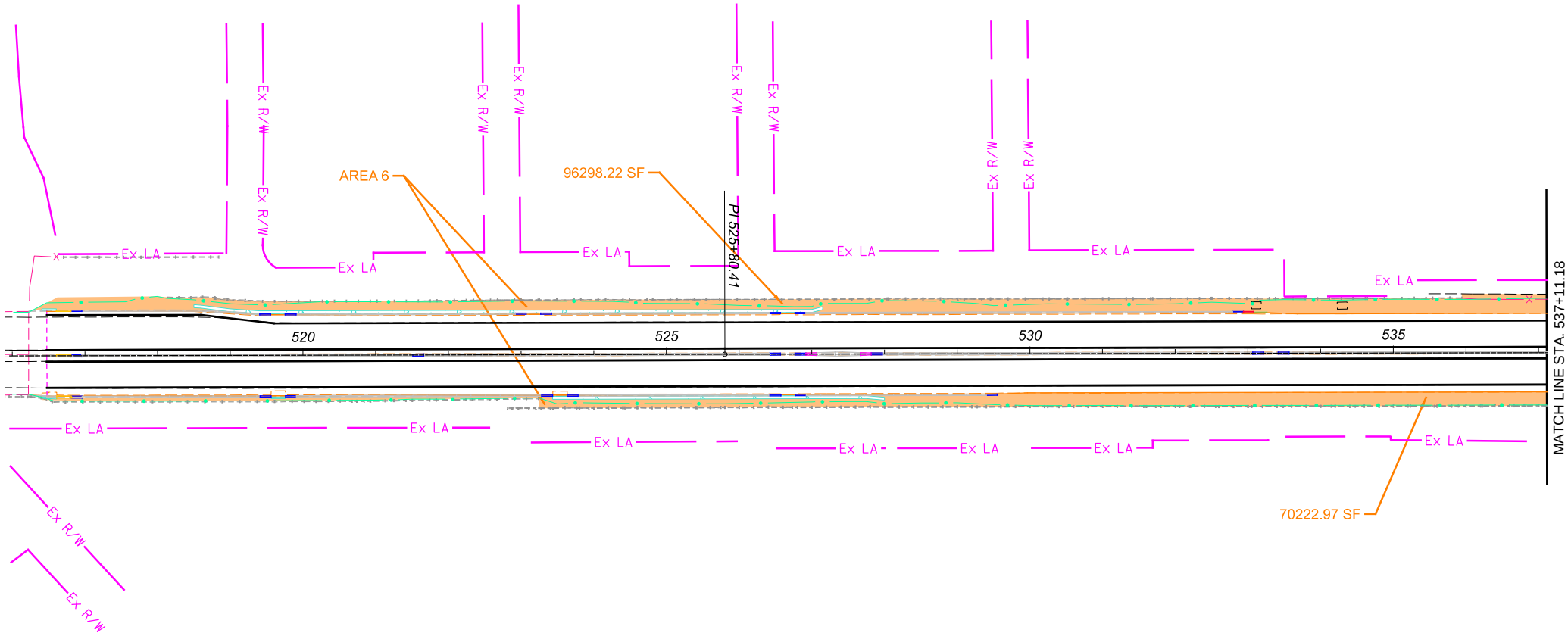

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