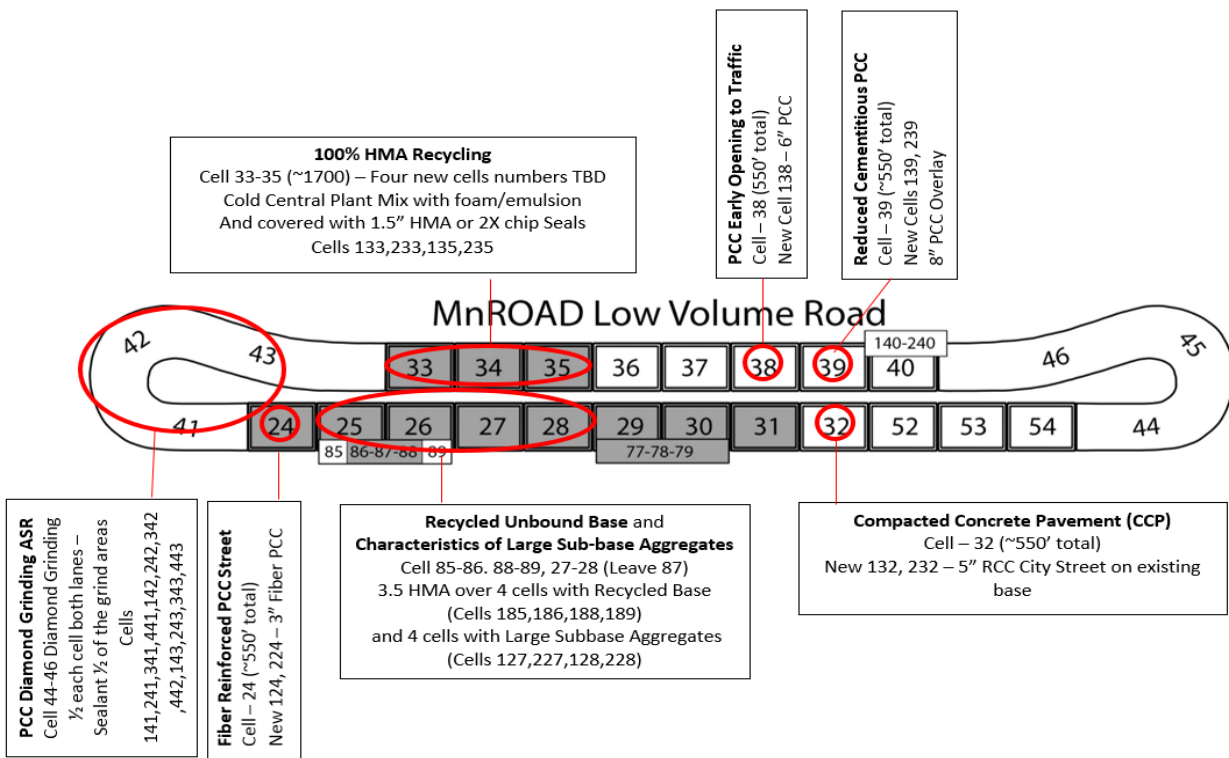


2017 MnROAD-NRRA CONSTRUCTION

Low Volume Road



Length (ft) Gap (ft)	100% HMA Recycling Study							PCC Early Traffic Opening		Reduced Cementitious PCC		
	Original 33	Original 34	Original 35	New 133	New 233	New 135	New 235	Original 38	New 138	Original 39	New 139	New 239
	4" 58-34 PPA	4" 58-34 SBS+PPA	4" 58-34 SBS	2X Chip 3" Cold Recycling (Emulsion) 1" HMA	2X Chip 3" Cold Recycling (Foam) 1" HMA	1.5" HMA 3" Cold Recycling (Foam) 1" HMA	1.5" HMA 3" Cold Recycling (Emulsion) 1" HMA	6" Trans Tined 15'Lx12"W 1" dowel	6" Reg Mix 15'Lx12"W 1" dowel	4" Perv Overlay	8" PCC w/ Optimized Cement Mix #1	8" PCC w/ Optimized Cement Mix #2
	12" Class 6	12" Class 6	12" Class 6	12" Class 6	12" Class 6	12" Class 6	12" Class 6	5" Class 5	5" Class 5	6" 20'Lx12"W 1" dowel	15'Lx12"W 1" dowel	15'Lx12"W 1" dowel
	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	5" Class 5	5" Class 5	5" Class 5
	Sep 07	Sep 07	Sep 07	1" Double Chip Seal	1" Double Chip Seal	1.5" HMA Overlay	1.5" HMA Overlay			Clay	Clay	Clay
	500	499	499	2017	2017	2017	2017	Jul 93	2017	Oct 08	2017	2017
	71	54	132	425	425	425	437	480	480	440	270	272.5
								67	67	67		

Length (ft) Gap (ft)	Fiber Reinforced PCC			Recycled Unbound Base							
	Original 24	New 124	New 224	Original 85	Original 86	Original 88	Original 89	New 185	New 186	New 188	New 189
	3" 58-34	3" Fiber Reinf PCC	3" Fiber Reinf PCC	7" Pervious PCC	5" Porous HMA	5" Porous HMA	7" Pervious PCC	3.5" HMA	3.5" HMA	3.5" HMA	3.5" HMA
	4" Class 6	4" Class 6	4" Class 6	4" RR Ballast	4" RR Ballast	4" RR Ballast	4" RR Ballast	12" Coarse RCA	12" Fine RCA	12" Limestone Aggregate Class 6	12" Recycled Aggregate Base Class 6
	Sand	Sand	Sand	8" CA-15	10" CA-15	10" CA-15	8" CA-15	3.5" Select Granular Borrow	3.5" Select Granular Borrow	3.5" Select Granular Borrow	3.5" Select Granular Borrow
	100' Fog Seals 2008 2009 2010 2011 2012	5'Lx6'W	5'Lx5'W with 5'Lx4'L CL	Type V Geo- Textile	Type V Geo- Textile	Type V Geo- Textile	Type V Geo- Textile	Sand	Sand	Clay	Clay
	Chip Seal 2014			Sand	Sand	Clay	Clay				
	Oct 08	2017	2017	Oct 08	Oct 08	Oct 08	Oct 08	2017	2017	2017	2017
	507	280	285	216	235	225	217	216	235	225	217
		41		0	0	0	43				

Large Subbase Aggregate				Large Subbase Aggregate				Compacted Concrete Pavement (CCP)				PCC Diamond Grinding ASR			
Original		New		Original		New		Original		New		Original		New	
27		127		28		128		32		132		41 - 43		141-143, 241-243, 341-343, 441-443	
2" 52-34		3.5" HMA		6" SFDR Chip Seal		3.5" HMA		5" Astro Turf 10Lx12W		5" CCP 15x12		12" Trans Tined 12'Lx15"W 1" Dowels		Refer to the note below	
2" 58-34				2012 Spot Repairs Fog Seal				Class 1f							
6" Class 5		6" Class 6		4" Class 5		6" Class 6		6" Class 1c		7" Class 5Q		7" Class 5Q			
GCBD		Fabric				Fabric				7" Class 5Q					
2009 Chip Seal		18" Large Aggregate Subbase 1 lift		2009 Chip Seal		9" Large Aggregate Subbase		Clay		Clay		Clay		Clay	
7" Clay Borrow		Type-5 Separator		7" Clay Borrow		Type-5 Separator				7" Class 5Q					
Clay		Clay		Clay		Clay				Clay					
Aug 06		2017		Sep 11		2017		Jun 00		2017		Jul 93		2017	
499		282.5		500		285		460		240				230	
68				65				0							

Note: Plan view for Cells 141 - 443

Plan view for Cells 141-145												
Cell	141	241	341	441	142	242	342	442	143	243	343	443
Outside Lane	No Work	Sealer	Diamond grind (0.25" removal) Sealer	Diamond grind (0.25" removal)	Diamond grind (0.25" removal)	Diamond grind (0.25" removal) Sealer	Sealer	No Work	Diamond grind (0.25" removal)	Diamond grind (0.25" removal) Sealer	Sealer	No Work
Inside Lane	No Work	Sealer	Diamond grind (0.25" removal) Sealer	Diamond grind (0.25" removal)	Diamond grind (0.25" removal)	Diamond grind (0.25" removal) Sealer	Sealer	No Work	Diamond grind (0.25" removal)	Diamond grind (0.25" removal) Sealer	Sealer	No Work