

Flexible Pavement Design Checklist

	FPDM	Satisfactory Yes/No/NA
Digitally Signed & Sealed Cover Page with Concurrence Signature Block for District Design Engineer's Approval		
Project Description include Type of Work		
Traffic Data Analysis		
Summary Design Criteria		
Typical Section Analysis (Drawing (TSP) or Written)		
Pavement Recommendations (M&R, Full Depth, Cross Slope Correction)		
Calculations for Pavement Design		
Pavement Type Selection Memo (If Applicable)		
New Construction and Widening		
Field Review (Visual Inspection)		
Correct Reliability (%R)	Table 5.2	
Traffic Data and ESAL Calculations match TL for Pavement Design	2.2.1	
Resilient Modulus (Mr) from Testing when required	5.2.3	
Base Material & High Water Clearance Evaluated	5.2.2	
Friction Course Material - Correct Friction Course	Chap 4	
Stabilization Material was depth verified	5.6.1	
Structural Course was correct coefficient used	Table 5.4	
Shoulder Design was layer sequence evaluated	8	
Rehabilitation and Cross Slope Correction		
Field Evaluation (Visual Inspection)		
Correct Reliability (%R)	Table 5.2	
Existing Coring and Pavement Evaluation Report is it complete	7.4.3	
Traffic Data and ESAL Calculations match TL for Pavement Design	2.2.1	
Structural Course was correct reduction coefficient used	Table 7.1	
Friction Course Material - Correct Friction Course	Chap 4	
Overbuild Recommendations	7.8.2	
FWD Report (Mr)- Correct Value Used	7.3	
Existing Cross Slope Evaluation and Method of Correction	7.5	
Design Calculations		
Existing Sne	7.4	
Required SNr	7.2/5.2	
Calculated SNC	7.6/5.3	
Sketches of Layer Sequence (include existing and shoulders)	Figure 6.1	
Backup Documentation		
Project Location Map		
Traffic Data		
Resilient Modulus (Mr) - FWD or Mr (Lab Test)		
SLD		
Typical Section Package		
Pavement Coring and Evaluation Report		
GPR Data		
Profilograph Cross Slope/Rut Data		
Drainage - Base Clearance Data		
Quality Control Checklist Complete	Appendix B	
Bridges		
Check for Asphalt Overlay		
Is depth of overlay included in PC & E Report		

Min LA Pavement Design		Table 5.5	
	Min SP-Structural	4"	
	Min Base	9 (10")	
Min Ramp Pavement Design			
	Min SP-Structural	2"	
	Min Base	9 (10")	
Min LA Shoulder			
	Min SP-Structural	1.5"	
	Min Base	1 (4")	
Traffic Level			5.6.5
	< 0.3	TL A	
	0.3 to < 3	TL B	
	3 to < 10	TL C	
	10 to < 30	TL D	
	>= 30	TL E	
Spread Rate			4.1
	FC-9.5	110 lb/sqy	
	FC-12.5	165 lb/sqy	
	FC-5	80 lb/sqy	
Base Clearance			5.2.2
		3' above High Water	
		2' above = 25% Mr reduction	
		1' above = 50% Mr reduction	
Structural Coefficients (New)			Table 5.4
	FC-5	0.00	
	FC-12.5, FC 9.5	.44	
	SP	0.44	
	Base (Limerock)	.18	
	Base (Type B-12.5)	.30	
	Stabilization (Type B)	.08	
Layer Thickness			
		Fine Mix	5.6.6
	SP-9.5	1" to 1.5"	
	SP-12.5	1.5" to 2.5"	
		SP 9.5 limited to Top two lifts	
		No SP 9.5 in TL-D or TL-E	
Turnpike Specific			
	PG 76-22, in the top structural lift and friction course regardless of traffic level (Travel Lanes Only)		TPPPH 16.2.7.1
	TL D and TL E require SP 12.5		5.6.6
	New Construction 95% Reliability		TPPPH 16.2.7.1
	Rehabilitation 99% Reliability		TPPPH 16.2.7.1
	Temporary Pavement Designs 80% Min. Reliability		TPPPH 16.2.7.1
	20 Year Design Life		TPPPH 16.2.7.1

Structural Coefficients (Existing)				Table 7.1	
Layer	Good	Fair	Poor		
FC-2 or FC-5	0	0	0		
FC-1 or FC-4	0.17	0.15	0.12		
FC-3	0.2	0.17	0.15		
FC 12.5 or 9.5	0.34	0.25	0.15		
Type S or SP	0.34	0.25	0.15		
Type I	0.3	0.23	0.15		
Type II	0.17	0.15	0.12		
Type III	0.25	0.2	0.15		
Binder	0.25	0.2	0.15		
ABC 1	0.17	0.14	0.1		
ABC 2	0.2	0.16	0.12		
ABC 3	0.25	0.2	0.15		
Type B 12.5	0.25	0.2	0.15		
SAHM	0.13	0.11	0.08		
SBRM	0.13	0.11	0.08		