

Project: KNO-229/308-13.06/0.00
 Intersection of SR 229 and SR 308/Laymon Rd
 PID: 115984

ROUNDBOUT CRITICAL DESIGN PARAMETERS

	SR 229	SR 229	SR 308	Laymon Rd (TR 259)		
DESIGN PARAMETERS	EAST LEG 1	WEST LEG 2	NORTH LEG 3	SOUTH LEG 4		
Existing Approach Width, FT	13 +/-	11 +/-	14 +/-	13 +/-		
Entry Width, FT	19.00	18.00	19.75	18.05		
Entry Angle, PHI ϕ , DEG	22.64	31.18	20.03	14.66		
Inscribed Circle Diameter, FT	140	140	140	140		
Exit Width, FT	18.98	18.76	19.34	18.87		
Circulating Roadway Width Upstream of Entry, FT	20	20	20	20		

	EAST LEG 1		WEST LEG 2		NORTH LEG 3		SOUTH LEG 4			
FASTEST SPEED PATH										
R1, Radius/Speed, FT/MPH	105.0	20.8	158.3	24.3	154.7	24.1	92.9	19.8		
R2, Radius/Speed, FT/MPH	59.4	16.7	101.4	20.5	96.2	20.1	59.6	16.7		
R3, Radius/Speed, FT/MPH	182.5	25.7	239.1	28.5	168.9	24.9	64.3	17.2		
R4, Radius/Speed, FT/MPH	54.5	16.1	53.5	16.0	53.7	16.0	55.1	16.2		
R5, Radius/Speed, FT/MPH	208.8	27.1	92.4	19.8	78.1	18.5	36.9	13.9		
Bypass R5, Radius/Speed, FT?MPH	N/A		N/A		N/A		N/A			

	EAST LEG 1		WEST LEG 2		NORTH LEG 3		SOUTH LEG 4			
MINIMUM SIGHT PARAMETERS										
Approach Design Speed, MPH	55		55		25		35			
Horizontal Stopping Sight Distance, FT	493.0		493.0		152.0		247.0			
Circulating Intersection Sight Distance, FT/MPH	154	16	153	16	153	16	155	16		
Entering Intersection Sight Distance, FT/MPH	199	21	233	24	231	24	189	20		
Exit (Crosswalk) Stopping Sight Distance, FT/ MPH	170	27	N/A		N/A		N/A			

Design Vehicle:	WB-62, Combine Tractor
Truck Apron Width	14'
OSOW Accommodations:	NA
Circulating Roadway Cross-Slope:	2.00%
Access Control:	NA
Parking Control	NA
Bicycle and Pedestrian Accommodations:	Y

Designer:	ANL (2LMN)
Reviewer	ALL (2LMN)