



ROUNDABOUT CRITICAL DESIGN PARAMETERS

DESIGN PARAMETERS	LEG 1 SB	LEG 2 EB	LEG 3 WB	LEG 4	LEG 5	LEG 6
Approach Width, FT	19.0	19.0	19.0			
Entry Width, FT	21.9	21.9	22.0			
Entry Angle, PHI Φ, DEG	21.0	23.9	18.7			
Inscribed Circle Diameter, FT	140.0	140.0	140.0			
Exit Width, FT	24.1	23.7	22.1			
Circulating Roadway Width Upstream of Entry, FT	22.0	22.0	22.0			

FASTEST SPEED PATH

Commercial Entrance with Less Than

		V	00	MELL	שוקיון	MUCH	orces			
R ₁, Radius/Speed, FT/MPH	217	27	168	25	173	25		7		
R ₂ , Radius/Speed, FT/MPH	53	15	96	19	86	18				
R_3 , Radius/Speed, FT/MPH				24		23				
R ₄ , Radius/Speed, FT/MPH	53	15	53	15	53	15				
R ₅ , Radius/Speed, FT/MPH	99	20			99	20				
Bypass R 5, Radius/Speed, FT/MPH										

MINIMUM SIGHT PARAMETERS

Approach Design Speed, MPH	20.0		35.0		35.0			
Horizontal Stopping Sight Distance, FT	112	2.4	247.8		247.8			
Circulating Intersection Sight Distance, FT/MPH	15	77	15	77	15	77		
Entering Intersection Sight Distance, FT/MPH	20	147	21	154				

Design Vehicle:

WB-67 to stay out of the pan on approach and exit, WB-40 and Bus 45 to circulate without

the use of the truck apron.

Truck Apron Width:

12' Back of curb to Flange of curb

OSOW Accommodations:

None

Circulating Roadway Cross-Slope:

Access Control:

No Access

Parking Control:

The parking lanes end/begin outside of the bike slip anes

Bicycle & Pedestrian Accommodations:

Slip lanes added and sidewalk is widened to 10' wide when bikes are added.

Designer:

Reviewer:

RYAN BETKER

SIGNATURE:

DATE: 7-9-21

NAME: RYAN BETKER

The reviewer's signature on this document indicates that the design has been reviewed and is in general compliance with good roundabout principals. The critical design elements have been addressed. The project design engineer in responsible charge of final plan development will stamp the plans when applicable.





















