



BRIDGE LOAD RATING SUMMARY REPORT

OFFICE OF STRUCTURAL ENGINEERING

OHIO DEPARTMENT OF TRANSPORTATION

SFN	Bridge Number	DISTRICT	GPS COORDINATES	
3002918	GUE-77-0804R	5	LATITUDE: 40.00429873	LONGITUDE: -81.56047304
ORIGINAL YEAR BUILT	YEAR REBUILT	TOTAL BRIDGE LENGTH	FEATURE INTERSECTED (Below)	
1965		93 ft	IR 77 OVER TR 452	

SPECIAL ASSUMPTIONS & COMMENTS

Modeled by JF, reviewed by BPN, Feb. 2023, from original (1965) construction plans, standard drawings and inspection/inventory data.

3 span (28'-0", 35'-0", 28'-0" c/c brgs) continuous reinforced concrete slab (16" thick plus 5" asphalt overlay) on reinforced concrete substructure. Bridge alignment is curved 2deg 30min right (modeled as tangent) with no skew, a roadway width of 49'-10" f/f concrete parapets with aluminum railing and 1'-2" curbs and a design loading of CF-2000(57) adequate for AASHTO alternate loading. Used modified EV live load factors. [EV2=1.3, EV3=1.2]

Please type or select on right using drop down arrow

LOAD RATING PURPOSE:	8 - Update Analysis Model and Software	
GENERAL APPRAISAL (0-9):	6	
LOAD RATING SOFTWARE:	3 - AASHTO BrR	
SOFTWARE VERSION:	7.2.0.3001	
ROUTINE PERMIT LOAD (RPL):	B - Some routine permit Loads are restricted	
RATING SOURCE:	1 - Plan information available for load rating analysis	
LOAD RATING METHOD:	LRFR - Load & Resistance Factor Rating (RF) - Code 8	
DESIGN LOADING:	5 - HS20	

STRUCTURE RATING SUMMARY

OHIO & AASHTO LEGAL VEHICLES					Design Inventory and Operating Ratings			
Legal Load	GVW (Tons)	No of Axles	Rating Factor RF	Safe Weight (Tons)	Loading Type	Rating by RF		
						Inventory	Operating	
2F1	15	2	2.649	15.00	Recommendation: HL93 Loading: 0.671 Operating: 0.869 No Load Posting is Recommended Sign Posting Recommendation:			
3F1	23	3	1.790	23.00				
5C1	40	5	1.278	40.00				
Type 3	25	3	1.704	25.00				
Type 3-3	40	6	1.486	40.00				
Type 3S2	36	5	1.194	36.00				
SPECIALIZED HAULING VEHICLES (SHV)								
SU4/4F1	27	4	1.612	27.00				
SU5	31	5	1.393	31.00				
SU6	34.75	6	1.244	34.75				
SU7	38.75	7	1.141	38.75				

EMERGENCY VEHICLES (EV)					Permit Load (PL) Analysis (optional)				
Check box if rating for EV3 <input checked="" type="checkbox"/>					Loading Type	GVW (Tons)	No of	Rating Factor	Safe Load (Tons)
EV2	28.75	2	1.603	28.75					
EV3	43	3	1.057	43.00	PL 65T	65	7	0.900	58.50

Controlling Legal Load RF	115%	1.15	PL Analysis Method	Load Factor Rating (LFR)
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AGENCY/FIRM/OFFICE: ODOT-Office of Structural Engineering

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