



BRIDGE LOAD RATING SUMMARY REPORT

OFFICE OF STRUCTURAL ENGINEERING

OHIO DEPARTMENT OF TRANSPORTATION

SFN (SNBI Bridge Number)	Ohio Bridge Number (Bridge Asset Name)	District	GPS Coordinates	
4774760	LOR-M0010-2044	3	LATITUDE: 41.375191	LONGITUDE: -81.989103
Original Year Built	Year Re-built	Total length	Structure Type XXX	Feature Intersected
1998	-	260 ft	402	LORAIN ROAD OVER CONRAIL RR
SPECIAL ASSUMPTIONS & COMMENTS	The Source of this load rating is from previous load rating, Dated 5/24/2019. Load Rating updated to include new vehicles. No change was intended in the original source files created by the previous load rater. Load Rating is based on previous load rating original construction plans. Three Span Steel Girder Bridge: Spans = 78'-0", 97'-6", 78'-0"; Bridge Width = 67'-0"; Roadway Width = 52'-0"; Sidewalks = 6'-6" x 12"; Barriers = BR-2 with Vandal Fence; Deck Thickness = 8.5"; Beam Spa. = 7'-6"; 9 ~ W40x167 Steel Beams Concrete = 4.5 ksi; Structural Steel = 50 ksi; Reinforcing = 60 ksi; Additional Rating Factors: 4F1 = 2.115; NRL = 1.509			
Load Rating Purpose:	8 - Update Analysis Model and Software			
Bridge Appraisal Rating (0-9):	7			
Load rating Software:	3 - AASHTO BrR			
Software version:	7.4.1.3001			
Rating Source:	1 - Plan information available for load rating analysis			
Load Rating Method:	LRFR - Load & Resistance Factor Rating (RF) - Code 8			
Design Loading:	6 - HS20-44 & Alternate Military Loading			
STRUCTURE RATING SUMMARY				
OHIO & AASHTO LEGAL VEHICLES				
Legal Load	GVW (Tons)	No of Axles	Rating Factor RF	Safe Weight (Tons)
2F1	15	2	3.575	15.00
3F1	23	3	2.411	23.00
5C1	40	5	1.819	40.00
Type 3	25	3	2.358	25.00
Type 3-3	40	6	1.789	40.00
Type 3S2	36	5	1.847	36.00
SPECIALIZED HAULING VEHICLES (SHV)				
SU4/4F1	27	4	2.104	27.00
SU5	31	5	1.895	31.00
SU6	34.75	6	1.709	34.75
SU7	38.75	7	1.572	38.75
Sign Posting Recommendation:				
EMERGENCY VEHICLES (EV)				
Check box if rating for EV3 ☒				
EV2	28.75	2	2.032	28.75
EV3	43	3	1.754	43.00
Permit Load (PL) Analysis **				
Loading Type	GVW (Tons)	No of Axles	Rating Factor	Calculated Load (Tons)
PL 60T	60	6	2.579	154.74
PL 65T	65	7	2.293	149.05
PL Analysis Method				
Load & Resistance Factor Rating (LRFR)				
Controlling Legal Load RF				
150%				
1.50				
AGENCY/FIRM/OFFICE				
The Mannik & Smith Group, Inc.				
Name		PE Number	Phone Number	Email
Derek R. Hess, PE		84404	419-891-2222	dhess@manniksmithgroup.com
Report Date:		2024-12-05		
Rated By				
Reviewed By				

** ODOT bridges to be analyzed for permit trucks by policy.

BR-100 (01/2024)

Analysis for permit trucks is optional for non-ODOT bridges and at owner's discretion.