



BRIDGE LOAD RATING SUMMARY REPORT

OFFICE OF STRUCTURAL ENGINEERING

OHIO DEPARTMENT OF TRANSPORTATION

SFN	BRIDGE NUMBER	DISTRICT	GPS COORDINATES	
0406635	ATB-00531-09.170	4	LATITUDE: 41.90026111	LONGITUDE: -80.79776667
ORIGINAL CONSTRUCTION YEAR	REHABILITATION YEAR	OVERALL STRUCTURE LENGTH	FEATURE INTERSECTED	
1925	1986, 2008	223 ft	Ashtabula River	

SPECIAL ASSUMPTIONS & COMMENTS

Single leaf bascule truss main span with concrete slab rear approach span and steel floorbeam and stringer forward approach slab. Spans are 18.97' - 156' - 46.25' c/c substructures. Roadway is 20' curb/curb with 6' sidewalks. Span 1 slab is 14.75" thick with 1.25" microsilica overlay (added in 2008), spans 2 & 3 have 3" concrete filled steel grid deck. Original rear approach span and floor systems in spans 2 & 3 replaced in 1986 using 36ksi steel, 4ksi concrete, and 60ksi rebar. 0 degree skew.

Assumptions: Original 1925 material properties taken from BDM Table 927. No force assumed in movable strut and link. Repaired truss members are assumed to have their original capacity.

Applied EV2 Scale Factor = 1.0 and EV3 Scale Factor = 0.8462 (LFR Factors)

PLEASE SELECT ON RIGHT, WHERE APPROPRIATE, BY USING THE DROP DOWN ARROW BUTTON	
LOAD RATING PURPOSE :	8 - Update Analysis Model and Software
GENERAL APPRAISAL (0-9) :	6
(708) LOAD RATING SOFTWARE :	3 - AASHTO BrR (VIRTIS)
SOFTWARE VERSION :	7.1.1.3001
(709) RATING SOURCE :	1 - Plan information available for load rating analysis
(63)(65) RATING METHOD :	6 - Load Factor (LF) rating reported by rating factor (RF)
(31) ORIGINAL DESIGN LOADING :	5 - HS20

STRUCTURE RATING SUMMARY

OHIO LEGAL VEHICLES				DESIGN VEHICLE		
Loading Type	GVW (Tons)	Operating Rating RF	Legal Weight (Tons)	Loading Type	Rating by RF	
					Operating	Inventory
2F1	15	2.376	15.00	HS20 Loading	1.020	0.611
3F1	23	1.574	23.00			
4F1	27	1.365	27.00			
5C1	40	1.066	40.00			
SPECIALIZED HAULING VEHICLES (SHV)				Overall Legal Posting Rating: 100% Posting Recommendation: No Load Posting is Recommended Sign Posting Recommendation:		
SU4	27	1.357	27.00			
SU5	31	1.198	31.00			
SU6	34.75	1.072	34.75			
SU7	38.75	0.977	38.75			
EMERGENCY VEHICLES (EV)						
Check box if this is an NBI bridge <input checked="" type="checkbox"/>						
EV2	28.75	1.272	28.75			
EV3	43	1.009	43.00			

AGENCY/FIRM/OFFICE	Burgess & Niple, Inc	Report Date	2/28/2022
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	Rated By	Reviewed By
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