

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BUREAU OF BRIDGES

BRIDGE ANALYSIS AND RATING REPORT

STRUCTURE IDENTIFICATION DATA

"BARS" File Number 300120 Year Built 1965
Bridge Number 645 70 0943 A
County Route No. SLM Sp. Des.
Structure Type Steel Beam Continuous
Feature Crossed Wills Creek and TR 35
O/A Structure Length 308.82 Ft. No. of Spans 3
Inspection Agency ODOT Maintenance Agency ODOT
Date of Analysis 1/26/84 Data Submitted by CO

LIVE LOADS APPLIED

Standard AASHTO Truck(s) Used: Operating HS25 Inventory HS20

Ohio Legal and Other Standard Vehicle Configuration(s) used:

Vehicle Code No.	Class Code	GVW (Tons)	Vehicle Code No.	Class Code	GVW (Tons)
#1. <u>4S1</u>	<u>S</u>	<u>29</u>	#4. _____	_____	_____
#2. <u>5C3</u>	<u>C</u>	<u>40</u>	#5. _____	_____	_____
#3. <u>6T1</u>	<u>T</u>	<u>40</u>	#6. _____	_____	_____

Class Codes: Single Vehicle - "S", Semi-Trailer Combination - "C",
Truck and Full Trailer - "T"

Special Standard Vehicle(s) Used: (Check "Yes" or "No")

School Bus: Yes ✓ No _____ Emerg. Vehicle: Yes _____ No ✓

Other Special Vehicle(s) Used: (Show sketch(s) including all axle
loads and spacings)

SEN 3061202

BR. NO. 645-70-0943A

RATING SUMMARY

Safe Load Capacities (tons):

Class "S" 43.5 Class "C" 60 Class "T" 60

Maximum Allowable Legal Value _____ Special Vehicle _____

School Bus 19.5 Emergency Vehicle _____

Final Ratings:

Operating 150 % of Legal Loads 60 Tons

Inventory HS14.68 (H or HS Load) 26.42 Tons

Members Rating Low _____

SPECIAL COMMENTS (need for Header Bars, Lane Traffic Guides, Special Signs, etc.)

S1 Built up member
S2 Deck

Ratings and recommendations shown on this form reflect the judgment of this office as to the proper safe load carrying capacities for this structure based on the results obtained by using the latest version of the Bridge Analysis and Rating System (BARS) computer program. Since these ratings and recommendations are substantially dependent upon the data submitted by the originator of the analysis, this office accepts no responsibility for the accuracy thereof.

Date 2/2/84

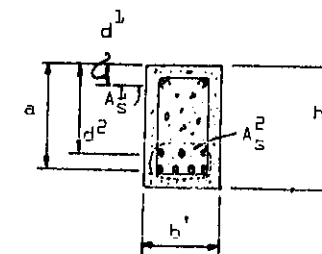
Reviewer's Initials RCI

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

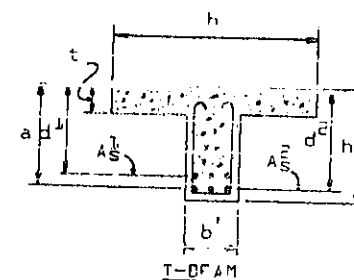
SECTION PROPERTIES (REINFORCED CONCRETE) - GIRDERS, STRINGERS, FLOOR BEAMS																													
															SECTION DESCRIPTION														
CARD TYPE	STRUCTURE								MEMBER ID	BOT FLG	SECTION NO.	"SAME AS EXCEPT"	h in.	a in.	b in.	b' in.	t in.	I	A _s in. ²	d ₁ in.	COMP CODE								
	GROUP ID	NO.	NO.	NO.	NO.	NO.	NO.	NO.																					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	3	0	0	1	2	6	5	0	2				9.25																
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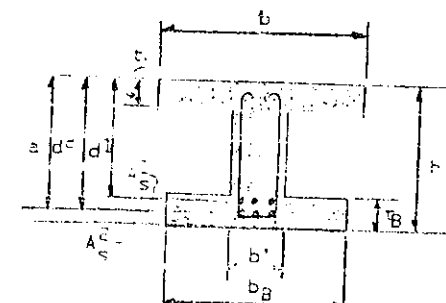
CDC Form No. AAB045



RECTANGULAR BEAM



T-DF A



T-25 AN

RECORD										REC.NO.
0230012ORCI	CO									100
053001200943A	EGUE	40	8.95P2	335787GUE0013	840113	2508	03			200
0630012015FN	3001202	GUE-70-0943A	OVER WILLS CREEK AND TR 35	LOADING CF2000(57)						300
063001202SUPER.	DECK 8.75" THICK	25'-8" F/F	4 BUILT UP MEMBERS	SPACING VARIES						400
063001203PROJ.	312(63)									500
0630012041	"MWS. BIT. 3"(1983)	SEC. AVAIL.=100%								600
08300120S01	03 X	9306	117	SS		1.549				700
08300120S02	01	80003		RC		0.124				800
10300120S01	01		W1578.	9306						900
10300120S01	02		W1578.	117						1000
10300120S01	03		W1578.	9306						1100
10300120S02	01		36.	80003						1200
11300120S01	0101	7806	01							1300
11300120S01	0102	15	02							1400
11300120S02	0101	8000301								1700
11300120S01X0201		12	02							1701
11300120S01X0202		4606	01							1702
12300120S01			01	70.2501	18.	1.9	69.69			1800
12300120S01			01		02 25.5	9826.35	125			1900
12300120S01			01		03 18.	1.9	.5625			2000
12300120S01			02	71.12501	25.	5.09	70.34			2100
12300120S01			02		02 25.5	9826.35	56			2200
12300120S01			02		03 25.	5.09	.78125			2300
13300120S02	01	8.75		01	.66	2.375X				2400
13300120S02	01		12.	02	.97	.3125				2500

STRUCTURE I.D. = 300-120

*
STRUCTURE HEADER AND DESCRIPTION
*

100-- 2 RCI CO EA/I/O/P = FILE REQUESTS AND OUTPUT DATA EXCEPTIONS
TYPE = 322 YEAR = 65 LEN = 308.820FT. WIDTH = 25.667FT. 3 SPANS SP.LOAD =
INV.LL.TRK.= OP.LL.TRK.=

*
STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS
*

200-- 5 BRIDGE=0943A DIST./CO.= E GUE CONST. ROUTE = 40 CONST. SECT.= 8.95P2 CONST. STA.=, 33+57.87
MICROFILM REEL NO. DESIGN PLANS=GUE0013 COMPUTATIONS= CORRESPONDENCE=840113
ROUTE I.D.= 40 MARKED ROUTE = 0943A

*
COMMENTS
*

300-- 6 1 SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
400-- 6 2 SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
500-- 6 3 PROJ. 312(63)
600-- 6 4 1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

*
MEMBER SPECIFICATIONS AND REQUIRED ANALYSIS-GIRDER, STRINGER AND FLOOR BEAM
*

MEMBER ID	SPANS	STIFF. SYMM CODE	SPAN 1 (SPAN 4)	SPAN 2 (SPAN 5)	SPAN 3 (SPAN 6)	MATL CODE	ALLOWABLE STRESS FY	LL DIST. FB	END THRU FL.BM	MAX INV	IMPACT OP.	FACTOR POST	INSTR. SPEC
700-- 8	S 1	3 X	93.500	117.000	0.0	SS	0.0	0.0	1.549	.0	.0	.0	.0
800-- 8	S 2	1	8.016	0.0	0.0	RC	0.0	0.0	0.124	.0	.0	.0	.0

*
SUPERIMPOSED DEAD LOADS-GIRDERS, STRINGERS AND FLOOR BEAMS
*

MEMBER ID	SYMM.	SPAN NO.	DISTANCE FR. LEFT SUPP.	LOAD TYPE	P OR W(L)	W(R)	LENGTH
900--10	S 1	1	0.0 FT.	W	1578.0	0.0	93.500FT.
1000--10	S 1	2	0.0 FT.	W	1578.0	0.0	117.000FT.
1100--10	S 1	3	0.0 FT.	W	1578.0	0.0	93.500FT.

1200--10 S 2 1 0.0 FT. 36.0 0.0 8.016FT.

 * SECTION RANGE SPECIFICATIONS *

MEMBER ID	SYMM.	SPAN NO.	RANGE NO.	RANGE LENGTH	SECTION NO. LEFT	SECTION NO. RIGHT	SEC. VAR.	HINGE CODE	HINGE 1 DIST.	HINGE 2 DIST.	HYBRID CODE	HYBRID FY	GIRDER CODE	GIRDER FY
1300--11	S 1		1	78.500FT.	1	0			0.0 FT.	0.0 FT.		0.		0.
1400--11	S 1		1	15.000FT.	2	0			0.0 FT.	0.0 FT.		0.		0.
1701--11	S 1	X	2	12.000FT.	2	0			0.0 FT.	0.0 FT.		0.		0.
1702--11	S 1	X	2	46.500FT.	1	0			0.0 FT.	0.0 FT.		0.		0.
1700--11	S 2		1	8.016FT.	1	0			0.0 FT.	0.0 FT.		0.		0.

 * SECTION PROPERTIES (STEEL OR TIMBER) - GIRDERS, STRINGERS, FLOOR BEAMS *

MEMBER ID	SEC.	NON-DETAILED DESCRIPTION				DETAILED DESCRIPTION								
		A	I	S	COMPACT	SEC.	SAME	ADR	H	I	A	IX	DY	DX
1800--12	S 1	0	0.0	0.0	0.0	1	0	70.25	1	18.00		1.9	69.7	0.0
1900--12	S 1	0	0.0	0.0	0.0	1	0	0.0	2	25.50	9826.0	35.1	0.0	
2000--12	S 1	0	0.0	0.0	0.0	1	0	0.0	3	18.00		1.9	0.6	
2100--12	S 1	0	0.0	0.0	0.0	2	0	71.13	1	25.00		5.1	70.3	
2200--12	S 1	0	0.0	0.0	0.0	2	0	0.0	2	25.50	9826.0	35.6	0.0	
2300--12	S 1	0	0.0	0.0	0.0	2	0	0.0	3	25.00		5.1	0.8	

 * SECTION PROPERTIES (REINFORCED CONCRETE) - GIRDERS, STRINGERS, FLOOR BEAMS *

MEMBER ID	SECT. NO.	SAME AS	BFL AS	H	A	B	B*	T	I	AS	D	COMP CODE
2400--13	S 2	1	0	8.75	0.0	0.0	12.00	0.0	1	0.66	2.38	X
2500--13	S 2	1	0	0.0	0.0	0.0	0.0	0.0	2	0.90	7.31	

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY
LIVE LOAD RATING

OPERATING
LIVE LOAD RATING

HS20

HS14.68

HS25

70.55 TONS

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-120
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 308.82 FEET
ROADWAY WIDTH 25.67 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY --

MEMBER ID. S 1
SPAN 3
CRITICAL C.P. DIST. 0.0 FEET
LIVE LOAD DESIGNATION HS20

MOMENT
(FT. KIPS)
MEMBER CAPACITY -2965.7
DL EFFECT -2110.9

CAPACITY FOR (LL+I) -854.8
ACTUAL (LL+I) -1164.8

INVENTORY RATING HS14.68

OPERATING RATING SUMMARY --

MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3133.8
DL EFFECT 1033.2

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 1339.8

OPERATING RATING 70.55 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
POSTING ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY LIVE LOAD	RATING	OPERATING LIVE LOAD	RATING	POSTING TRUCK TYPE	GROSS TONS
HS20	HS14.68	HS25	70.55 TONS	VEH. 4S1	66.19
				VEH. 5C3	87.65
				VEH. 6T1	74.76

STRUCTURE DESCRIPTION --

IDENTIFICATION 300-120
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 308.82 FEET
ROADWAY WIDTH 25.67 FEET
NUMBER OF SPANS 3

LOCATION --

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

MICROFILM REEL NUMBERS --

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. 4S1
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET

TRUCK TYPE VEH. 5C3
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET

TRUCK TYPE VEH. 6T1
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3133.8
DL EFFECT 1033.2

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3133.8
DL EFFECT 1033.2

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3133.8
DL EFFECT 1033.2

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 920.4

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 958.6

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 1123.9

POSTING GROSS TONNAGE 66.2

POSTING GROSS TONNAGE 87.7

POSTING GROSS TONNAGE 74.8

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
SPECIAL LOAD ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY LIVE LOAD	RATING	OPERATING LIVE LOAD	RATING	SPECIAL LOAD TRUCK TYPE	GROSS TONS
HS20	HS14.68	HS25	70.55 TONS		
				VEH.SPEC	64.50

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-120
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 308.82 FEET
ROADWAY WIDTH 25.67 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. SPEC
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET

	MOMENT (FT. KIPS)
MEMBER CAPACITY	3133.8
DL EFFECT	1033.2

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 423.4

POSTING GROSS TONNAGE 64.5

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY
LIVE LOAD RATING

OPERATING
LIVE LOAD RATING

HS20 HS33.79

HS25 91.35 TONS

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-120
TYPE 322
YEAR OF CONSTR. 1965
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NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY --

MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET
LIVE LOAD DESIGNATION HS20

MOMENT
(FT. KIPS)
MEMBER CAPACITY 9.7
DL EFFECT 1.0

CAPACITY FOR (LL+I) 8.7
ACTUAL (LL+I) 5.2

INVENTORY RATING HS33.79

OPERATING RATING SUMMARY --

MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.1
DL EFFECT 1.0

CAPACITY FOR (LL+I) 13.1
ACTUAL (LL+I) 6.5

OPERATING RATING 91.35 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
POSTING ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY		OPERATING		POSTING	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS20	HS33.79	HS25	91.35 TONS	VEH. 4S1	146.61
				VEH. 5C3	162.40
				VEH. 6T1	202.21

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

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TYPE 322
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NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. 4S1
MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET

TRUCK TYPE VEH. 5C3
MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET

TRUCK TYPE VEH. 6T1
MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.1
DL EFFECT 1.0

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.1
DL EFFECT 1.0

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.1
DL EFFECT 1.0

CAPACITY FOR (LL+I) 13.1
ACTUAL (LL+I) 2.6

CAPACITY FOR (LL+I) 13.1
ACTUAL (LL+I) 3.2

CAPACITY FOR (LL+I) 13.1
ACTUAL (LL+I) 2.6

POSTING GROSS TONNAGE 146.6

POSTING GROSS TONNAGE 162.4

POSTING GROSS TONNAGE 202.2

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
SPECIAL LOAD ANALYSIS

INPUT CODING --

STRUCTURE 0943A

D/P STR. I.D.-- 300-120

DATE 1/26/84
BY RCI CO

INVENTORY		OPERATING		SPECIAL LOAD	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS20	HS33.79	HS25	91.35 TONS		
				VEH.SPEC	52.78

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

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CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 33+57.87
KEY RTE. 40
MARKED RTE. 0943A

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. SPEC
MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.0 FEET

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.1
DL EFFECT 1.0

CAPACITY FOR (LL+I) 13.1
ACTUAL (LL+I) 3.2
POSTING GROSS TONNAGE 52.8

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING--

STRUCTURE 0943A

D/P STR. ID-- 300-120

DATE 1/26/84

INVENTORY
LIVE LOAD RATING
HS20 HS14.7

OPERATING
LIVE LOAD RATING
HS25 70.55 TONS

BY RCI CO

STRUCTURE DESCRIPTION--

LOCATION--

MICROFILM REEL NUMBERS--

IDENTIFICATION 0943A
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 308.820 FEET
ROADWAY WIDTH 25.667 FEET
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CONSTR. SEC. 8.95P2
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DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS--

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY

MEMBER I.D. S 1
SPAN 3
CRITICAL C.P. DIST. 0.0 FEET
LIVE LOAD DESIGNATION HS20

MOMENT
(FOOT-KIPS)
MEMBER CAPACITY -2965.7
DL EFFECT -2110.9

CAPACITY FOR (LL+I) -854.8
ACTUAL (LL+I) -1164.8

INVENTORY RATING HS14.68

OPERATING RATING SUMMARY

MEMBER I.D. S 1
SPAN 1
CRITICAL C.P. DIST. 37.4 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FOOT-KIPS)
MEMBER CAPACITY 3133.8
DL EFFECT 1033.2

CAPACITY FOR (LL+I) 2100.6
ACTUAL (LL+I) 1339.8

OPERATING RATING 70.55 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
POSTING ANALYSIS

INPUT CODING--

STRUCTURE 0943A

D/P STR. ID-- 300-120

DATE 1/26/84	INVENTORY	OPERATING	POSTING
BY RCI CO	LIVE LOAD RATING	LIVE LOAD RATING	TRUCK TYPE GROSS TONS
	HS20 HS14.7	HS25 70.55 TONS	VEH. 4S1 66.2
			VEH. 5C3 87.7
			VEH. 6T1 74.8

STRUCTURE DESCRIPTION--

LOCATION--

MICROFILM REEL NUMBERS--

IDENTIFICATION	0943A	DISTRICT	E	DESIGN PLANS	GUE0013
TYPE	322	COUNTY	GUE	COMPUTATIONS	
YEAR OF CONSTR.	1965	CONSTR. RTE.	40	CORRESPONDENCE	840113
LENGTH	308.820 FEET	CONSTR. SEC.	8.95P2		
ROADWAY WIDTH	25.667 FEET	CONSTR. STA.	33+57.87		
NUMBER OF SPANS	3	KEY RTE.	40		
		MARKED RTE.	0943A		

ANALYST REMARKS--

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
 SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
 PROJ. 312(63)
 1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

POSTING RATING SUMMARY

TRUCK TYPE	VEH. 4S1	TRUCK TYPE	VEH. 5C3	TRUCK TYPE	VEH. 6T1
MEMBER I.D.	S 1	MEMBER I.D.	S 1	MEMBER I.D.	S 1
SPAN	1	SPAN	1	SPAN	1
CRITICAL C.P. DIST.	37.4 FEET	CRITICAL C.P. DIST.	37.4 FEET	CRITICAL C.P. DIST.	37.4 FEET
	MOMENT		MOMENT		MOMENT
	(FOOT-KIPS)		(FOOT-KIPS)		(FOOT-KIPS)
MEMBER CAPACITY	3133.8	MEMBER CAPACITY	3133.8	MEMBER CAPACITY	3133.8
DL EFFECT	1033.2	DL EFFECT	1033.2	DL EFFECT	1033.2
CAPACITY FOR (LL+I)	2100.6	CAPACITY FOR (LL+I)	2100.6	CAPACITY FOR (LL+I)	2100.6
ACTUAL (LL+I)	920.4	ACTUAL (LL+I)	958.6	ACTUAL (LL+I)	1123.9
POSTING GROSS TONNAGE	66.2	POSTING GROSS TONNAGE	87.7	POSTING GROSS TONNAGE	74.8

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
SPECIAL LOAD ANALYSIS

INPUT CODING--

STRUCTURE 0943A

D/P STR. ID-- 300-120

DATE	1/26/84	INVENTORY		OPERATING		SPECIAL LOAD	
BY	RCI CO	LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
		HS20	HS14.7	HS25	70.55 TONS		
						VEH.SPEC	52.8

STRUCTURE DESCRIPTION--

LOCATION--

MICROFILM REEL NUMBERS--

IDENTIFICATION	0943A	DISTRICT	E	DESIGN PLANS	GUE0013
TYPE	322	COUNTY	GUE	COMPUTATIONS	
YEAR OF CONSTR.	1965	CONSTR. RTE.	40	CORRESPONDENCE	840113
LENGTH	308.820 FEET	CONSTR. SEC.	8.95P2		
ROADWAY WIDTH	25.667 FEET	CONSTR. STA.	33+57.87		
NUMBER OF SPANS	3	KEY RTE.	40		
		MARKED RTE.	0943A		

ANALYST REMARKS--

SFN 3001202 GUE-70-0943A OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
 SUPER. DECK 8.75" THICK 25'-8" F/F 4 BUILT UP MEMBERS SPACING VARIES
 PROJ. 312(63)
 1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

SPECIAL LOAD SUMMARY

TRUCK TYPE	VEH.SPEC
MEMBER I.D.	S 2
SPAN	1
CRITICAL C.P. DIST.	4.0 FEET
	MOMENT
	(FOOT-KIPS)
MEMBER CAPACITY	14.1
DL EFFECT	1.0
CAPACITY FOR (LL+I)	13.1
ACTUAL (LL+I)	3.2
POSTING GROSS TONNAGE	52.8

DETAIL DATA FOR FLEXURAL MEMBER

DATE 26/01/84

NO. SPANS = 1
NOT SYMMETRICAL

D/P STRUCTURE I.D. 300-120
MEMBER I.D.--S02
MATERIAL--RC
LL DIST. FACT. = 0.124
SUPERIMPOSED CONCENTRATED DL(S)
DIST. FROM LT SUPPORT****

SPAN LENGTH				RNG. LENGTH		SEC.NO.		VAR		DL DUE TO		SUPERIMPOSED DISTRIBUTED DL(S)			
NO.	FT.	NO.	FT.	LT	RT	T	T	S	MEM. WEIGHT	W(LT)	W(RT)	SPAN	W(LT)	W(RT)	LENGTH DISTRIBUTED*****
						P	B		LBS/FT	LBS/FT		NO.	LBS/FT	LBS/FT	DIST. FROM LT SUPPORT***
1	8.016	1	8.016	01	01				109.4	109.4		1	96.2	0.0	3.000 - 3.000

SPAN	P	*
NO.	KIPS	FT.

CHECK POINTS RATED--

SPAN DIS FRM					SPAN DIS FRM						
NO.	LT	SPRT	M	VL	VR	NO.	LT	SPRT	M	VL	VR
FT.					FT.						
1	0.000				X						
1	4.008		X								
1	8.016			X							

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/26/84

D/P STRUCTURE I.D. 300-120
MEMBER I.D.--S01
C.P. LOCATION 1.4

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

		---NET AREA---						SECTION		MODULUS----	
H	GROSS AREA	+ BEND	- BEND	+ BEND	- BEND	C (BOT)		TOP + BEND	TOP - BEND	BOTTOM + BEND	BOTTOM - BEND
IN.	SQ. IN.	SQ. IN.	SQ. IN.	IN**4	IN**4	IN.		IN**3	IN**3	IN**3	IN**3
70.25	61.50	61.50	61.50	52837.3	52837.3	35.13		1504.3	1504.3	1504.2	1504.2

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.) Y-ORDINATE			POS AREA =				
***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)							
	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6	
T 0	0.000	0.000	0.000	0.000	0.000	0.000	
E 1	4.632	- 2.092	0.474	0.000	0.000	0.000	
N 2	9.325	- 3.513	0.824	0.000	0.000	0.000	
T 3	14.138	- 4.238	1.039	0.000	0.000	0.000	
H 4	19.133	- 4.386	1.127	0.000	0.000	0.000	
5	15.021	- 4.078	1.105	0.000	0.000	0.000	
P 6	11.210	- 3.440	0.993	0.000	0.000	0.000	
O 7	7.762	- 2.593	0.809	0.000	0.000	0.000	
I 8	4.738	- 1.661	0.569	0.000	0.000	0.000	
N 9	2.163	- 0.767	0.294	0.000	0.000	0.000	
T 0	0.000	0.000	0.000	0.000	0.000	0.000	
POS AREA	824.0	0.0	67.6	0.0	0.0	0.0	AREA
NEG AREA	0.0	313.2	0.0	0.0	0.0	0.0	TOTALS

***** ALLOWABLE STRESS		***** MOMENT CAPACITY			
		TOP + BEND	TOP - BEND	BOTTOM + BEND	BOTTOM - BEND
		FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS
INVENTORY	18000.	2256.4	2256.4	2256.3	2256.3
OPERATING	25000.	3133.9	3133.9	3133.8	3133.8
POST VEH1	25000.	3133.9	3133.9	3133.8	3133.8
POST VEH2	25000.	3133.9	3133.9	3133.8	3133.8
POST VEH3	25000.	3133.9	3133.9	3133.8	3133.8
POST SPEC	25000.	3133.9	3133.9	3133.8	3133.8
***** TOTAL DL MOMENT EFFECT		***** AVAIL. CAPAC. FOR LL+IMPACT			
		TOP +BEND	TOP -BEND	BOT +BEND	BOT -BEND
		F-KIPS	F-KIPS	F-KIPS	F-KIPS
INVENTORY	1033.2	1223.2	3289.7	1223.1	3289.6
OPERATING		2100.7	4167.2	2100.6	4167.1
VEH. 1		2100.7	4167.2	2100.6	4167.1
VEH. 2		2100.7	4167.2	2100.6	4167.1
VEH. 3		2100.7	4167.2	2100.6	4167.1
SPECIAL		2100.7	4167.2	2100.6	4167.1

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .229 FOR +BEND AND = .207 FOR -BEND)

		-----TRUCK LOAD-----				-----LANE LOAD-----						
LIVE LOAD		LL+IMP	LL	LOC.NO. 1 WHEEL	DIR	LL+IMP	LL	LOC.CONC LOAD	LOC.CONC LOAD 2	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
		FT-KIPS	FT-KIPS	FT.		FT-KIPS	FT-KIPS	FT.	FT.			
INV HS20	+BEND	1071.9	872.3	23.400	L	869.9	707.9	37.400		1.141		HS 22.8
	-BEND	284.7	235.9	156.601	R	262.9	217.9	140.300	0.000			
OPER HS25	+BEND	1339.8	1090.3	23.400	L					1.568	70.6	
	-BEND	355.9	294.9	156.601	R							
POST VEH1	+BEND	920.4	749.0	56.402	R					2.282	66.2	
	-BEND	230.9	191.4	155.299	R							
POST VEH2	+BEND	958.6	780.1	21.401	L					2.191	87.7	
	-BEND	293.1	242.9	165.600	R							
POST VEH3	+BEND	1123.9	914.6	20.400	L					1.869	74.8	
	-BEND	304.5	252.4	119.299	L							
POST SPEC	+BEND	423.4	344.5	58.400	R					4.962	64.5	
	-BEND	102.6	85.1	152.000	R							

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/26/84

D/P STRUCTURE I.D. 300-120
MEMBER I.D.--S01
C.P. LOCATION 2.0

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 2

		---NET AREA---						SECTION		MODULUS	
H	GROSS	+	-	IX	IX	C		TOP	TOP	BOTTOM	BOTTOM
IN.	AREA	BEND	BEND	+ BEND	- BEND	(BOT)		+ BEND	- BEND	+ BEND	- BEND
	SQ.IN.	SQ.IN.	SQ.IN.	IN**4	IN**4	IN.		IN**3	IN**3	IN**3	IN**3
71.12	75.50	75.50	75.50	70316.4	70316.4	35.56		1977.1	1977.1	1977.4	1977.4

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)			POS AREA =									
Y-ORDINATE												
***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)												
	SPAN 1		SPAN 2		SPAN 3		SPAN 4		SPAN 5		SPAN 6	
T 0		0.000		0.000		0.000		0.000		0.000		0.000
E 1	-	2.445	-	5.229		1.184		0.000		0.000		0.000
N 2	-	4.738	-	8.783		2.059		0.000		0.000		0.000
T 3	-	6.729	-	10.596		2.597		0.000		0.000		0.000
H 4	-	8.266	-	10.964		2.816		0.000		0.000		0.000
	5	- 9.199	-	10.196		2.763		0.000		0.000		0.000
P 6	-	9.375	-	8.599		2.483		0.000		0.000		0.000
O 7	-	8.644	-	6.482		2.021		0.000		0.000		0.000
I 8	-	6.854	-	4.153		1.423		0.000		0.000		0.000
N 9	-	3.941	-	1.917		0.734		0.000		0.000		0.000
T 0		0.000		0.000		0.000		0.000		0.000		0.000
POS AREA												
NEG AREA												

***** ALLOWABLE STRESS

PSI
INVENTORY 18000.
OPERATING 25000.
POST VEH1 25000.
POST VEH2 25000.
POST VEH3 25000.
POST SPEC 25000.

***** MOMENT CAPACITY

TOP	TOP	BOTTOM	BOTTOM
+ BEND	- BEND	+ BEND	- BEND
FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS
2965.7	2965.7	2966.1	2966.1
4119.0	4119.0	4119.5	4119.5
4119.0	4119.0	4119.5	4119.5
4119.0	4119.0	4119.5	4119.5
4119.0	4119.0	4119.5	4119.5

***** TOTAL DL MOMENT EFFECT

FT-KIPS
- 2110.8

***** AVAIL.CAPAC.FOR LL+IMPACT			
TOP	TOP	BOT	BOT
+BEND	-BEND	+BEND	-BEND
F-KPS	F-KPS	F-KPS	F-KPS
INVENTORY 5076.6	854.9	5076.9	855.2
OPERATING 6229.9	2008.2	6230.4	2008.7
VEH. 1 6229.9	2008.2	6230.4	2008.7
VEH. 2 6229.9	2008.2	6230.4	2008.7
VEH. 3 6229.9	2008.2	6230.4	2008.7
SPECIAL 6229.9	2008.2	6230.4	2008.7

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .229 FOR +BEND AND = .217 FOR -BEND)

		-----TRUCK LOAD-----				-----LANE LOAD-----						
LIVE	LL+IMP	LL	LOC.NO.	DIR	AXLE	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING	SAFE LOAD	RATING
LOAD	FT-KIPS	FT-KIPS	1 WHEEL		SPACE	FT-KIPS	FT-KIPS	LOAD	LOAD 2	FACT.	CAPACITY	VALUE
			FT.		FT.			FT.	FT.		TONS	
INV HS20 +BEND	183.8	149.5	271.251	R		152.2	123.9	247.900				
-BEND	718.0	589.9	156.601	R		1164.8	957.0	140.300	56.100	0.734		HS 14.7
OPER HS25 +BEND	229.7	186.9	271.251	R						2.238	100.7	
-BEND	897.5	737.3	156.601	R								
POST VEH1 +BEND	150.4	122.4	266.897	R						3.449	100.0	
-BEND	582.3	478.4	155.299	R								
POST VEH2 +BEND	184.2	149.9	278.603	R						2.717	108.7	
-BEND	739.2	607.3	165.600	R								
POST VEH3 +BEND	194.7	158.5	230.900	L						2.615	104.6	
-BEND	767.9	630.9	119.300	L								
POST SPEC +BEND	67.1	54.6	268.900	R						7.758	100.9	
-BEND	258.9	212.7	152.000	R								

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/26/84

D/P STRUCTURE I.D. 300-120
MEMBER I.D.--S01
C.P. LOCATION 2.5

***** SECTION PROPERTIES IN RANGE 3 OF SPAN 2

		---NET AREA---						-----SECTION		MODULUS-----	
H	GROSS AREA	+ BEND	- BEND	IX + BEND	IX - BEND	C (BOT)	TOP + BEND	TOP - BEND	BOTTOM + BEND	BOTTOM - BEND	
IN.	SQ. IN.	SQ. IN.	SQ. IN.	IN**4	IN**4	IN.	IN**3	IN**3	IN**3	IN**3	
70.25	61.50	61.50	61.50	52837.3	52837.3	35.13	1504.3	1504.3	1504.2	1504.2	

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)			POS AREA =									
Y-ORDINATE												
***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)												
	SPAN 1		SPAN 2		SPAN 3		SPAN 4		SPAN 5		SPAN 6	
T 0	-	0.000		0.000		0.000		0.000		0.000		0.000
E 1	-	0.855		2.277	-	1.379		0.000		0.000		0.000
N 2	-	1.657		5.232	-	2.398		0.000		0.000		0.000
T 3	-	2.354		9.011	-	3.024		0.000		0.000		0.000
H 4	-	2.892		13.619	-	3.279		0.000		0.000		0.000
		5	-	3.218		19.055	-	3.218		0.000		0.000
P 6	-	3.279		13.619	-	2.892		0.000		0.000		0.000
O 7	-	3.024		9.011	-	2.354		0.000		0.000		0.000
I 8	-	2.398		5.232	-	1.657		0.000		0.000		0.000
N 9	-	1.379		2.277	-	0.855		0.000		0.000		0.000
T 0		0.000		0.000		0.000		0.000		0.000		0.000
A												
TO												
POS AREA		0.0		928.2		0.0		0.0		0.0		0.0
NEG AREA		196.9		0.0		196.9		0.0		0.0		0.0

***** ALLOWABLE STRESS		***** MOMENT CAPACITY					
		TOP		TOP		BOTTOM	
		+ BEND	- BEND	+ BEND	- BEND	+ BEND	- BEND
		FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS
INVENTORY		18000.	2256.4	2256.4	2256.3	2256.3	2256.3
OPERATING		25000.	3133.9	3133.9	3133.8	3133.8	3133.8
POST VEH1		25000.	3133.9	3133.9	3133.8	3133.8	3133.8
POST VEH2		25000.	3133.9	3133.9	3133.8	3133.8	3133.8
POST VEH3		25000.	3133.9	3133.9	3133.8	3133.8	3133.8
POST SPEC		25000.	3133.9	3133.9	3133.8	3133.8	3133.8
***** TOTAL DL MOMENT EFFECT		***** AVAIL. CAPAC. FOR LL+IMPACT					
		TOP		TOP		BOT	
		+BEND	-BEND	+BEND	-BEND	+BEND	-BEND
		F-KPS	F-KPS	F-KPS	F-KPS	F-KPS	F-KPS
952.7		INVENTORY	1303.8	3209.1	1303.7	3209.0	3209.0
		OPERATING	2181.3	4086.6	2181.1	4086.5	4086.5
		VEH. 1	2181.3	4086.6	2181.1	4086.5	4086.5
		VEH. 2	2181.3	4086.6	2181.1	4086.5	4086.5
		VEH. 3	2181.3	4086.6	2181.1	4086.5	4086.5
		SPECIAL	2181.3	4086.6	2181.1	4086.5	4086.5

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .207 FOR +BEND AND = .229 FOR -BEND)

		-----TRUCK LOAD-----					-----LANE LOAD-----						
LIVE LOAD		LL+IMP	LL	LOC.NO.	DIR	AXLE SPACE	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING	SAFE LOAD	RATING
		FT-KIPS	FT-KIPS	1 WHEEL		FT.	FT-KIPS	FT-KIPS	LOAD	LOAD 2	FACT.	CAPACITY	VALUE
				FT.					FT.	FT.		TONS	
INV	HS20 +BEND	1045.0	866.1	138.000	L		884.8	733.3	152.000		1.247		HS 24.9
	-BEND	214.0	174.1	271.251	R		298.3	242.7	247.900	0.000			
OPER	HS25 +BEND	1306.3	1082.6	138.000	L						1.670	75.1	
	-BEND	267.5	217.7	271.251	R								
POST	VEH1 +BEND	899.6	745.5	133.001	L						2.425	70.3	
	-BEND	175.1	142.5	266.900	R								
POST	VEH2 +BEND	939.8	778.9	168.000	R						2.321	92.8	
	-BEND	214.5	174.5	278.600	R								
POST	VEH3 +BEND	1108.3	918.5	134.997	L						1.968	78.7	
	-BEND	226.8	184.5	230.900	L								
POST	SPEC +BEND	412.0	341.4	173.000	R						5.294	68.8	
	-BEND	78.2	63.6	268.900	R								

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/26/84

D/P STRUCTURE I.D. 300-120
MEMBER I.D.--S01
C.P. LOCATION 3.0

***** SECTION PROPERTIES IN RANGE 0 OF SPAN 3

		---NET AREA---						SECTION		MODULUS-----	
H	GROSS	+ -		IX	IX	C		TOP	TOP	BOTTOM	BOTTOM
IN.	AREA	BEND	BEND	+ BEND	- BEND	(BOT)		+ BEND	- BEND	+ BEND	- BEND
	SQ. IN.	SQ. IN.	SQ. IN.	IN**4	IN**4	IN.		IN**3	IN**3	IN**3	IN**3
71.12	75.50	75.50	75.50	70316.4	70316.4	35.56		1977.1	1977.1	1977.4	1977.4

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ALLOWABLE
STRESS

***** MOMENT CAPACITY

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	0.000	0.000	0.000	0.000	0.000	0.000
E 1	0.734	- 1.917	- 3.942	0.000	0.000	0.000
N 2	1.423	- 4.153	- 6.854	0.000	0.000	0.000
T 3	2.021	- 6.482	- 8.644	0.000	0.000	0.000
H 4	2.483	- 8.599	- 9.375	0.000	0.000	0.000
5	2.763	- 10.195	- 9.199	0.000	0.000	0.000
P 6	2.816	- 10.963	- 8.266	0.000	0.000	0.000
O 7	2.597	- 10.595	- 6.729	0.000	0.000	0.000
I 8	2.059	- 8.783	- 4.738	0.000	0.000	0.000
N 9	1.184	- 5.229	- 2.445	0.000	0.000	0.000
T 0	0.000	0.000	0.000	0.000	0.000	0.000

		PSI		FT-KIPS		FT-KIPS	
INVENTORY	18000.	2965.7	2965.7	2965.7	2965.7	2965.7	2965.7
OPERATING	25000.	4119.0	4119.0	4119.5	4119.5	4119.5	4119.5
POST VEH1	25000.	4119.0	4119.0	4119.5	4119.5	4119.5	4119.5
POST VEH2	25000.	4119.0	4119.0	4119.5	4119.5	4119.5	4119.5
POST VEH3	25000.	4119.0	4119.0	4119.5	4119.5	4119.5	4119.5
POST SPEC	25000.	4119.0	4119.0	4119.5	4119.5	4119.5	4119.5

***** TOTAL DL
MOMENT EFFECT

***** AVAIL. CAPAC. FOR LL+IMPACT

POS AREA	169.1	0.0	0.0	0.0	0.0	0.0
NEG AREA	0.0	782.9	562.8	0.0	0.0	0.0

AREA	169.1
TOTALS	1345.7

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .229 FOR +BEND AND = .217 FOR -BEND)

		-----TRUCK LOAD-----			-----LANE LOAD-----						
LIVE		LL+IMP	LL	LOC.NO.	DIR	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING	SAFE LOAD
LOAD		FT-KIPS	FT-KIPS	1 WHEEL	AXLE	FT-KIPS	FT-KIPS	LOAD	LOAD 2	FACT.	CAPACITY
				FT.	SPACE			FT.	FT.		TONS
INV HS20	+BEND	183.8	149.5	32.752	L	152.2	123.9	56.100			
	-BEND	717.9	589.8	147.400	L	1164.8	957.0	163.700	247.900	0.734	HS 14.7
OPER HS25	+BEND	229.7	186.9	32.752	L					2.238	100.7
	-BEND	897.4	737.3	147.400	L						
POST VEH1	+BEND	150.4	122.4	37.100	L					3.449	100.0
	-BEND	582.2	478.4	148.710	L						
POST VEH2	+BEND	184.2	149.9	25.401	L					2.717	108.7
	-BEND	739.2	607.3	138.399	L						
POST VEH3	+BEND	194.7	158.5	73.103	R					2.615	104.6
	-BEND	767.9	630.9	184.700	R						
POST SPEC	+BEND	67.1	54.6	35.100	L					7.758	100.9
	-BEND	258.8	212.7	152.001	L						

DATE 01/26/84

```
***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1
```

H IN.	B IN.	T IN.	BP IN.		AREA SQ. IN.	IX IN**4	AS SQ. IN.	D IN.	ASP SQ. IN.	DP IN.	A IN.	K	J
8.75	12.00	0.00	12.00	+BEND	105.0	669.9	0.90	7.31	0.66	2.37	1.00	.330	.888
				-BEND	105.0	669.9	0.66	6.38	0.90	1.44	1.00	.282	.880

```
***** ALLOWABLE STRESS ***** MOMENT CAPACITY
```

STRESS		MOMENT CAPACITY			
REINF.	CONC	CONC	REINF	REINF	CONC
STEEL		+ BEND	- BEND	+ BEND	- BEND
PSI	PSI	FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS

INVENTORY	20000.	1300.	10.3	6.2	9.7	8.2
OPERATING	29000.	2000.	15.8	8.9	14.1	12.6
POST VEH1	29000.	2000.	15.8	8.9	14.1	12.6
POST VEH2	29000.	2000.	15.8	8.9	14.1	12.6
POST VEH3	29000.	2000.	15.8	8.9	14.1	12.6
POST SPEC	29000.	2000.	15.8	8.9	14.1	12.6

T	0
E	1
N	2
T	3
H	4
	5
P	6
O	7
I	8
N	9
T	0

***** TOTAL DL
MOMENT EFFECT

***** AVAIL.CAPAC.FOR LL+IMPACT

FT-KIPS
1.0

	TOP	TOP	BOT	BOT
	+BEND	-BEND	+BEND	-BEND
	F-KPS	F-KPS	F-KPS	F-KPS
INVENTORY	9.3	7.2	8.7	9.2
OPERATING	14.8	10.0	13.1	13.6
VEH. 1	14.8	10.0	13.1	13.6
VEH. 2	14.8	10.0	13.1	13.6
VEH. 3	14.8	10.0	13.1	13.6
SPECIAL	14.8	10.0	13.1	13.6

AREA
TOTALS
0.0
0.0

```
***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)
```

LIVE LOAD		-----TRUCK LOAD-----					-----LANE LOAD-----				LOC. CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
		LL+IMP	LL	LOC. NO. 1 WHEEL	DIR	AXLE SPACE	LL+IMP	LL	LOC. CONC LOAD					
		FT-KIPS	FT-KIPS	FT.	FT.	FT.	FT-KIPS	FT-KIPS	FT.					
INV	HS20 +BEND	5.2	4.0	- 9.992	L						1.690		HS 33.8	
	-BEND	0.0	0.0	- 5.984	L									
OPER	HS25 +BEND	6.5	5.0	- 9.992	L						2.030	91.4		
	-BEND	0.0	0.0	- 5.984	L									
POST	VEH1 +BEND	2.6	2.0	- 14.992	L						5.055	146.6		
	-BEND	0.0	0.0	- 14.984	L									
POST	VEH2 +BEND	3.2	2.5	- 32.992	L						4.060	162.4		
	-BEND	0.0	0.0	- 7.984	L									
POST	VEH3 +BEND	2.6	2.0	- 12.992	L						5.055	202.2		
	-BEND	0.0	0.0	- 12.984	L									
POST	SPEC +BEND	3.2	2.5	- 16.992	L						4.060	52.8		
	-BEND	0.0	0.0	- 12.984	L									

DATE 01/26/84

SUMMARY OF SHEAR ANALYSIS

D/P STRUCTURE I.D. 300-120

MEMB. ID	SPAN MATL	DIS NO.	FRM LT	L SPRT R	DL SHEAR KIPS	SDL SHEAR KIPS	---INVENTORY---		---OPERATING---		--VEH. 1 --		--VEH. 2 --		--VEH. 3 --		--SPECIAL--					
							LL+I	T	LL+I	T	LL+I	T	LL+I	T	LL+I	T	LL+I	T	LL+I	T	LL+I	T
							MAX.V	L	MIN.V	L	MAX.V	L	MIN.V	L	MAX.V	MIN.V	MAX.V	MIN.V	MAX.V	MIN.V	MAX.V	MIN.V
S01	SS	1	0.000	L	7.1	53.9	60.0	T	8.1	L	75.0	9.7	49.8	6.3	55.8	8.0	57.0	8.3	23.1	2.8		
		2	0.000	L	12.9	92.3	63.1	T	64.1	T	78.9	80.2	51.6	52.5	63.4	64.1	63.5	64.2	23.5	23.9		
		3	0.000	L	13.2	93.6	64.1	T	63.1	T	80.2	78.9	52.5	51.6	64.1	63.4	64.2	63.5	23.9	23.5		
S02	RC	1	0.000	L	0.4	0.0	2.6	T	0.0	T	3.2	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.6	0.0		
		1	8.016	L	0.4	0.1	0.0	T	2.6	T	0.0	3.2	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.6		



inter-office communication

to: John W. Hagan, District Deputy Director date: June 25, 1986
from: Walter J. Jestings, Engineer of Bridges R. E. Johnson, Struc.
subject: Bridge Ratings (BARS) Rating & Inventory Engr.

ATTENTION: Cash Misel, D.B.



Enclosed are reduced copies of the bridge analysis output sheets with attached form BR-100 as well as your input sheets for the following structure(s).

BRIDGE NUMBER	Inventory	RATINGS	
		Operation (percent of legal) Previous	New
FAI-664-0466 SFN 2303515	HS 18.6	150%	150%
PER-204-0166 SFN 6402089	HS 20	150%	150%
GUE-70-0127L SFN 3000788	HS 14.9	150%	150%
GUE-70-0127R SFN 3000818	HS 12.5	150%	145%
6 GUE-70-0943A SFN 3001202	HS 14.7	150%	150%
GUE-70-0943L SFN 3001237	HS 20	150%	150%
GUE-70-0943R SFN 3001261	HS 20	150%	150%
GUE-70-0993L SFN 3001350	HS 20	150%	150%
GUE-70-0993R SFN 3001350	HS 6.0	150%	150%
GUE-70-0993R SFN 3001385	HS 6.0	150%	150%
GUE-70-1232L SFN 3001474	HS 17.5	150%	150%

John W. Hagan
June 25, 1986
Page 2

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	<u>Operation (percent of legal)</u>	
			<u>Previous</u>	<u>New</u>
GUE-70-1232R SFN 3001504	HS 17.5		150%	150%
GUE-70-1656L SFN 3001687	HS 20		150%	150%
GUE-70-1656R SFN 3001717	HS 20		150%	150%
GUE-70-2042L SFN 3001830	HS 12.8		150%	150%
GUE-70-2042R SFN 3001865	HS 13.3		150%	150%
GUE-70-2529L SFN 3002160	HS 13.6		150%	150%
GUE-70-2529R SFN 3002195	HS 13.6		150%	150%
GUE-77-0143L SFN 3002462	HS 20		150%	150%
GUE-77-0143R SFN 3002497	HS 20		150%	150%
GUE-40-0943 SFN 3003094	HS 13.2		150%	150%
GUE-265-0108 SFN 3004481	HS 20		150%	150%
LIC-70-1105L SFN 4503333	HS 20		150%	150%
LIC-70-1193L SFN 4503392	HS 20		150%	150%
LIC-70-1501L SFN 4503570	HS 16.2		150%	150%
LIC-70-1501R SFN 4503600	HS 15.8		150%	150%

John W. Hagan
June 25, 1986
Page 3

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	
		<u>Operation (percent of legal)</u> <u>Previous</u>	<u>New</u>
LIC-70-1572L SFN 4503694	HS 18.8	150%	150%
LIC-70-1572R SFN 4503724	HS 18.3	150%	150%
LIC-70-2422L SFN 4504208	HS 15.2	150%	150%
LIC-70-2583L SFN 4504267	HS 15.2	150%	150%
LIC-70-2583R SFN 4504291	HS 15.2	150%	150%
LIC-158-0097 SFN 4505344	HS 20	150%	150%

If you agree with these ratings, you should post, rescind or change postings as necessary in accordance with Directive No. DH-P-310, dated June 1, 1985. Please remember to send in necessary change sheets to correct the computerized bridge inventory file as soon as possible.

Please note that this rating information will be forwarded to the Central Office, Permit Section as per our standard practice of keeping that office informed of all bridge rating changes. If you for any reason disagree with any or all of these ratings, please notify this office by phone or IOC within two (2) weeks of the date of this IOC, so that we may delay this action until corrected ratings are available. If no response is received from your office during this period, these ratings will be considered accurate and to your satisfaction. The information will then be sent to the Permit office.

WJJ:REJ:dt2
Enclosure(s)

cc: File

JCRCO 6/10/86

REV.
2-1-73

REV
2-1-73

$$96.43' - 116.88' + 88.43' = 67.98' \text{ Br } 5^{\circ} \text{ CDC}$$

use average
 $\frac{8.585}{5.5} = 1.56$
ok use
1.55

$$\begin{array}{r} 8'6'' \cdot 15' \\ \hline 128' \\ 128' + 12' = 140' \\ \hline 140' \cdot 15' \\ \hline 2100' \end{array}$$

REV
10-1-73

$$(2\sqrt{8.59^2 + 8.67^2} + 8.59) \frac{6.1}{9.2\%} = 19.3$$

$461 \frac{13}{16} \times 8 \times 9.8 \div \frac{12 \times 304}{2} =$
 Stiff $5.32 \times 2 \times 68/12 \times 90/304$
 Long Bars $5.32 \times 2 \times 414/304$



Railong 18x2/4
 Bit 3x12x8.6¹⁵₁₆ cor 6.56.27 8.585

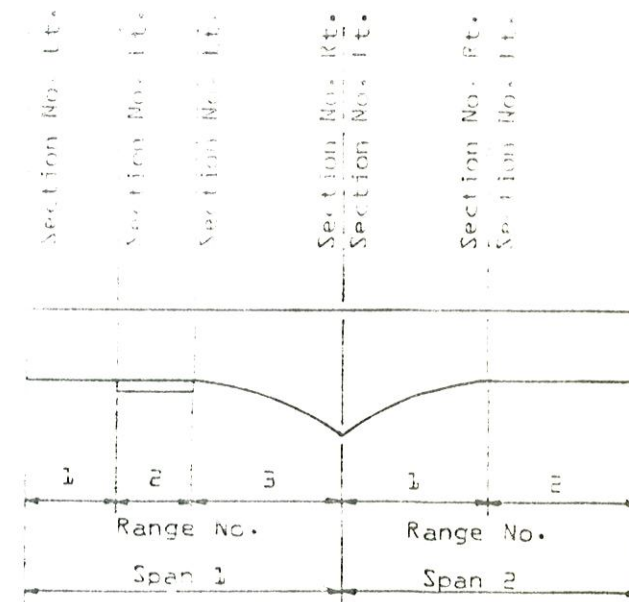


502 B, 1 3x12

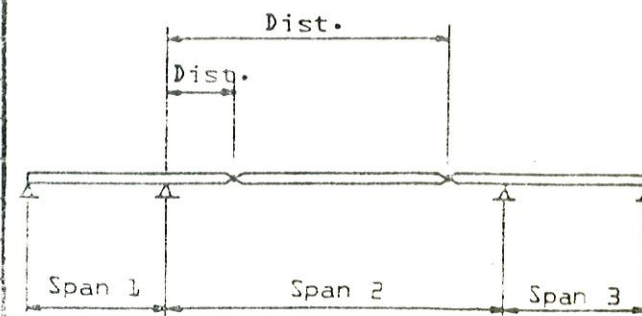
36

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

SECTION RANGE SPECIFICATIONS																															
SECTION RANGE																HINGE LOCATION															
STRUCTURE																HINGE LOCATION															
MEMBER ID																HINGE LOCATION															
GROUP																HINGE LOCATION															
SPAN																HINGE LOCATION															
RANGE																HINGE LOCATION															
FEET																HINGE LOCATION															
INCHES																HINGE LOCATION															
FEET																HINGE LOCATION															
INCHES																HINGE LOCATION															
300120501																7806 01															
0102																15 02															
0201																12 02															
0202																4606 07															
50.2 0101																8000301															

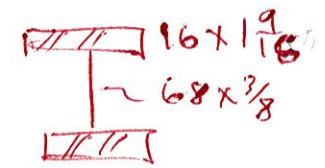
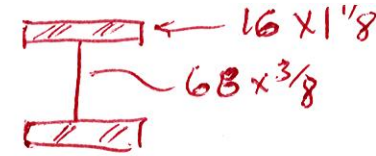


SECTION RANGE

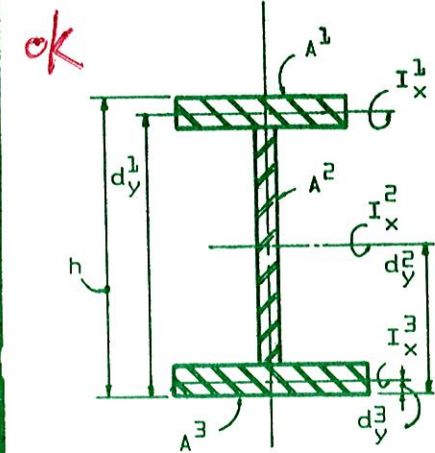


INTERMEDIATE HINGES

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

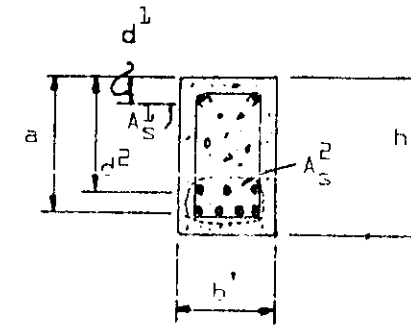


SECTION PROPERTIES {STEEL} - GIRDERS, STRINGERS, FLOOR BEAMS																																																																													
CARD TYPE		STRUCTURE						MEMBER ID				NON-DETAILED DESCRIPTION																								DETAILED DESCRIPTION																																									
												SECTION NO.		A in. ²				I in. ⁴				S in. ³				SECTION NO.		"SAME EXCEPT" A D R		h in.		i		A ⁱ in. ²		I _x ⁱ in. ⁴		i _{dy} in.		i _{dx} in.																																					
		GROUP ID	NO.					BUCKET NO.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74				
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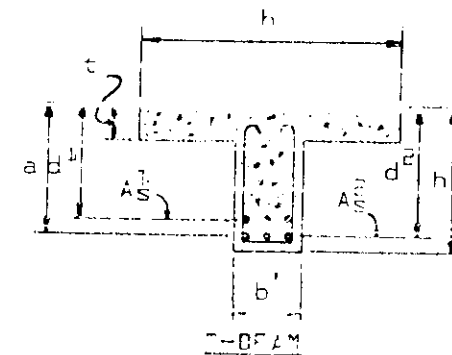


DETAILED DESCRIPTION

INPUT DATA FORM

[illegible]

RECTANGULAR BEAM



2-074

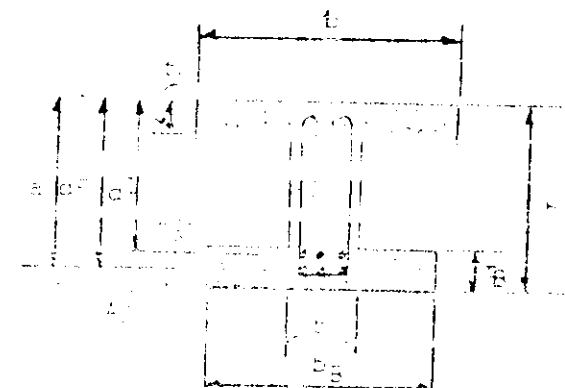


Figure 1 illustrates the experimental setup. A participant is seated at a table, viewing a screen. On the screen, a target (a small circle) and a starting point (a larger circle) are visible. A hand is shown moving from the starting point towards the target. The diagram is labeled with 'Target', 'Starting point', and 'Hand'.

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BUREAU OF BRIDGES

BRIDGE ANALYSIS AND RATING REPORT

STRUCTURE IDENTIFICATION DATA

"BARS" File Number 300123 Year Built 1965
Bridge Number GUE 70 0943 L
County Route No. SLM Sp. Des.
Structure Type Steel Beam Continuous
Feature Crossed Wills Creek and TR 35
O/A Structure Length 294.51 Ft. No. of Spans 3
Inspection Agency ODOT Maintenance Agency ODOT
Date of Analysis 1/11/84 Data Submitted by CO

LIVE LOADS APPLIED

Standard AASHTO Truck(s) Used: Operating HS25 Inventory HS25

Ohio Legal and Other Standard Vehicle Configuration(s) used:

Vehicle Code No.	Class Code	GVW (Tons)	Vehicle Code No.	Class Code	GVW (Tons)
#1. <u>4S1</u>	<u>S</u>	<u>29</u>	#4. _____	_____	_____
#2. <u>5C3</u>	<u>C</u>	<u>40</u>	#5. _____	_____	_____
#3. <u>6T1</u>	<u>T</u>	<u>40</u>	#6. _____	_____	_____

Class Codes: Single Vehicle - "S", Semi-Trailer Combination - "C",
Truck and Full Trailer - "T"

Special Standard Vehicle(s) Used: (Check "Yes" or "No")

School Bus: Yes ✓ No _____ Emerg. Vehicle: Yes _____ No ✓

Other Special Vehicle(s) Used: (Show sketch(s) including all axle
loads and spacings)

SFN

3001237

BR. NO.

GUE-70-0943L

RATING SUMMARY

Safe Load Capacities (tons):

Class "S" 43.5 Class "C" 60 Class "T" 60

Maximum Allowable Legal Value _____ Special Vehicle _____

School Bus 19.5 Emergency Vehicle _____

Final Ratings:

Operating 150 % of Legal Loads 60 Tons

Inventory HS20 (H or HS Load) 36 Tons

Members Rating Low _____

SPECIAL COMMENTS (need for Header Bars, Lane Traffic Guides, Special Signs, etc.)

S1 Built up Member
S2 Deck

Ratings and recommendations shown on this form reflect the judgment of this office as to the proper safe load carrying capacities for this structure based on the results obtained by using the latest version of the Bridge Analysis and Rating System (BARS) computer program. Since these ratings and recommendations are substantially dependent upon the data submitted by the originator of the analysis, this office accepts no responsibility for the accuracy thereof.

Date 1/13/84

Reviewer's Initials RCI

O2300123RCI CO			32265X. 29451	31100403	100
O53001230943L	EGUE	40	8.95P2 2227502GUE0013	840113	200
O63001231SFN 3001237	GUE-70-0943L	OVER WILLS CREEK AND TR 35	LOADING CF2000(57)		300
O63001232SUPER. DECK 9" THICK	31 ¹ / ₂ "	10.25" F/F MIN. WIDTH 5	BUILT UP MEMBERS		400
O63001233SPACING VARIES PROJ.	312(63)				500
O630012341"MWS. BIT. 3"(1983)	SEC. AVAIL.=100%				600
O8300123S01	O3 X	8906	111	SS	1.697
O8300123S02	O1	810		RC	.1216
10300123S01	O1		W1695.	8906	
10300123S01	O2		W1695.	111	
10300123S01	O3		W1695.	8906	
10300123S02	O1		W 36.	810	
11300123S01	O101	7406	O1		
11300123S01	O102	15	O2		
11300123S01X0201		1306	O2		
11300123S01X0202		42	O1		
11300123S02	O101	810	O1		
12300123S01			01	72.12501	17. 1.6 71.59
12300123S01			01	0226.25	10719. 36.06
12300123S01			01	03	17 1.6.53125
12300123S01			02	73.01	24. 4.5 72.25
12300123S01			02	0226.25	10719. 36.5
12300123S01			02	03	24. 4.5 .75
13300123S02	O1	9.	12. 01	.66	2.375X
13300123S02	O1		02	.97	.4375

STRUCTURE I.D. = 300-123

* STRUCTURE HEADER AND DESCRIPTION *

100-- 2 RCI CO EA/I/O/P = FILE REQUESTS AND OUTPUT DATA EXCEPTIONS
TYPE = 322 YEAR = 65 LEN = 294.510FT. WIDTH = 31.854FT. 3 SPANS SP.LOAD =
INV.LL.TRK.= OP.LL.TRK.=

* STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS *

200-- 5 BRIDGE=0943L DIST./CO.= E GUE CONST. ROUTE = 40 CONST. SECT.= 8.95P2 CONST. STA.=, 222+75.02
MICROFILM REEL NO. DESIGN PLANS=GUE0013 COMPUTATIONS= CORRESPONDENCE=840113
ROUTE I.D.= 40 MARKED ROUTE = 0943L

* COMMENTS *

300-- 6 1 SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
400-- 6 2 SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
500-- 6 3 SPACING VARIES PROJ. 312(63)
600-- 6 4 1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

* MEMBER SPECIFICATIONS AND REQUIRED ANALYSIS-GIRDER, STRINGER AND FLOOR BEAM *

MEMBER ID	SPANS SYMM	SPAN 1 CODE (SPAN 4)	SPAN 2 (SPAN 5)	SPAN 3 (SPAN 6)	MATL CODE	ALLOWABLE STRESS FY	FB	FC**	LL DIST. FACTOR	END THRU FL.BM DECK	MAX INV	IMPACT OP.	FACTOR POST	SPEC
700-- 8	S 1	3 X	89.500	111.000	0.0	SS	0.0	0.0	1.697		.0	.0	.0	.0
800-- 8	S 2	1	8.833	0.0	0.0	RC	0.0	0.0	0.122		.0	.0	.0	.0

* SUPERIMPOSED DEAD LOADS-GIRDERS, STRINGERS AND FLOOR BEAMS *

MEMBER ID	SYMM	SPAN NO.	DISTANCE FR. LEFT SUPP.	LOAD TYPE	P OR W(L)	LOAD W(R)	LENGTH
900--10	S 1	1	0.0 FT.	W	1695.0	0.0	89.500FT.
1000--10	S 1	2	0.0 FT.	W	1695.0	0.0	111.000FT.
1100--10	S 1	3	0.0 FT.	W	1695.0	0.0	89.500FT.

1200--10

S 2

1

0.0 FT. W

36.0

0.0

8.833FT.

SECTION RANGE SPECIFICATIONS

MEMBER ID	SYMM.	SPAN NO.	RANGE NO.	RANGE LENGTH	SECTION NO. LEFT	SECTION NO. RIGHT	SEC. VAR.	HINGE CODE	HINGE 1 DIST.	HINGE 2 DIST.	HYBRID CODE	HYBRID FY	GIRDER CODE	GIRDER FY
1300--11	S 1		1	1	74.500FT.	1	0		0.0 FT.	0.0 FT.		0.		0.
1400--11	S 1		1	2	15.000FT.	2	0		0.0 FT.	0.0 FT.		0.		0.
1500--11	S 1	X	2	1	13.500FT.	2	0		0.0 FT.	0.0 FT.		0.		0.
1600--11	S 1	X	2	2	42.000FT.	1	0		0.0 FT.	0.0 FT.		0.		0.
1700--11	S 2		1	1	8.833FT.	1	0		0.0 FT.	0.0 FT.		0.		0.

SECTION PROPERTIES (STEEL OR TIMBER) - GIRDERS, STRINGERS, FLOOR BEAMS

MEMBER ID	SEC.	NON-DETAILED DESCRIPTION	DETAILED DESCRIPTION	IX	DY	DX
1800--12	S 1	O 0.0	O 0.0	1 17.00	71.6	0.0
1900--12	S 1	O 0.0	O 0.0	2 26.25	36.1	0.0
2000--12	S 1	O 0.0	O 0.0	3 17.00	0.5	0.0
2100--12	S 1	O 0.0	O 0.0	1 24.00	72.3	0.0
2200--12	S 1	O 0.0	O 0.0	2 26.25	36.5	0.0
2300--12	S 1	O 0.0	O 0.0	3 24.00	0.8	0.0

SECTION PROPERTIES (REINFORCED CONCRETE) - GIRDERS, STRINGERS, FLOOR BEAMS

MEMBER ID	SECT. NO.	SAME AS	BFL	H	A	B	B*	T	I	AS	D	COMP CODE
2400--13	S 2	1	O	9.00	0.0	0.0	12.00	0.0	1	0.66	2.38	X
2500--13	S 2	1	O	0.0	0.0	0.0	0.0	0.0	2	0.90	7.44	

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
INVENTORY AND/OR OPERATING ANALYSIS

D/P STR. I.D.-- 300-123

INPUT CODING --

DATE 1/11/84
BY RCI CO

STRUCTURE 0943L

INVENTORY
LIVE LOAD RATING

HS25 39.25 TONS

OPERATING
LIVE LOAD RATING

HS25 67.25 TONS

STRUCTURE DESCRIPTION --

IDENTIFICATION 300-123
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.51 FEET
ROADWAY WIDTH 31.85 FEET
NUMBER OF SPANS 3

LOCATION --

DISTRICT
COUNTY
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

MICROFILM REEL NUMBERS --

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY --

MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 2231.1
DL EFFECT 1014.8

CAPACITY FOR (LL+I) 1216.3
ACTUAL (LL+I) 1394.4

INVENTORY RATING 39.25 TONS

OPERATING RATING SUMMARY --

MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 1394.4

OPERATING RATING 67.25 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
POSTING ANALYSIS

INPUT CODING --

STRUCTURE 0943L

D/P STR. I.D.-- 300-123

DATE 1/11/84
BY RCI CO

INVENTORY		OPERATING		POSTING	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS25	39.25 TONS	HS25	67.25 TONS	VEH. 4S1	62.87
				VEH. 5C3	84.49
				VEH. 6T1	71.45

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-123
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.51 FEET
ROADWAY WIDTH 31.85 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. 4S1
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

TRUCK TYPE VEH. 5C3
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

TRUCK TYPE VEH. 6T1
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 961.2

POSTING GROSS TONNAGE 62.9

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 986.6

POSTING GROSS TONNAGE 84.5

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 1166.6

POSTING GROSS TONNAGE 71.5

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
SPECIAL LOAD ANALYSIS

INPUT CODING --

STRUCTURE 0943L

D/P STR. I.D.-- 300-123

DATE 1/11/84
BY RCI CO

INVENTORY		OPERATING		SPECIAL LOAD	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS25	39.25 TONS	HS25	67.25 TONS	VEH.SPEC	61.18

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-123
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.51 FEET
ROADWAY WIDTH 31.85 FEET
NUMBER OF SPANS 3

DISTRICT
COUNTY
CONSTR. RTE.
CONSTR. SEC.
CONSTR. STA.
KEY RTE.
MARKED RTE.

E
GUE
40
8.95P2
222+75.02
40
0943L

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. SPEC
MEMBER ID. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

MOMENT
(FT. KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 442.8
POSTING GROSS TONNAGE 61.2

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING --

STRUCTURE 0943L

D/P STR. I.D.-- 300-123

DATE 1/11/84
BY RCI CO

INVENTORY
LIVE LOAD RATING
HS25 54.50 TONS

OPERATING
LIVE LOAD RATING
HS25 83.22 TONS

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-123
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.51 FEET
ROADWAY WIDTH 31.85 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY --

MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.4 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 9.9
DL EFFECT 1.4

CAPACITY FOR (LL+I) 8.5
ACTUAL (LL+I) 7.0

INVENTORY RATING 54.50 TONS

OPERATING RATING SUMMARY --

MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.4 FEET
LIVE LOAD DESIGNATION HS25

MOMENT
(FT. KIPS)
MEMBER CAPACITY 14.4
DL EFFECT 1.4

CAPACITY FOR (LL+I) 12.9
ACTUAL (LL+I) 7.0

OPERATING RATING 83.22 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE MEMBER
SPECIAL LOAD ANALYSIS

INPUT CODING --

STRUCTURE 0943L

D/P STR. I.D.-- 300-123

DATE 1/11/84
BY RCI CO

INVENTORY		OPERATING		SPECIAL LOAD	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS25	54.50 TONS	HS25	83.22 TONS	VEH. SPEC	48.08

STRUCTURE DESCRIPTION --

LOCATION --

MICROFILM REEL NUMBERS --

IDENTIFICATION 300-123
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.51 FEET
ROADWAY WIDTH 31.85 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS --

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

TRUCK TYPE VEH. SPEC
MEMBER ID. S 2
SPAN 1
CRITICAL C.P. DIST. 4.4 FEET

	MOMENT (FT. KIPS)
MEMBER CAPACITY	14.4
DL EFFECT	1.4

CAPACITY FOR (LL+I) 12.9
ACTUAL (LL+I) 3.5

POSTING GROSS TONNAGE 48.1

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING--		STRUCTURE 0943L		D/P STR. ID-- 300-123	
		INVENTORY		OPERATING	
DATE	1/11/84	LIVE LOAD	RATING	LIVE LOAD	RATING
BY	RCI CO	HS25	39.25 TONS	HS25	67.25 TONS

STRUCTURE DESCRIPTION--		LOCATION--	MICROFILM REEL NUMBERS--	
IDENTIFICATION	0943L	DISTRICT	E	DESIGN PLANS
TYPE	322	COUNTY	GUE	COMPUTATIONS
YEAR OF CONSTR.	1965	CONSTR. RTE.	40	CORRESPONDENCE
LENGTH	294.510 FEET	CONSTR. SEC.	8.95P2	
ROADWAY WIDTH	31.854 FEET	CONSTR. STA.	222+75.02	
NUMBER OF SPANS	3	KEY RTE.	40	
		MARKED RTE.	0943L	

ANALYST REMARKS--

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
 SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
 SPACING VARIES PROJ. 312(63)
 1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

INVENTORY RATING SUMMARY

MEMBER I.D.	S 1
SPAN	1
CRITICAL C.P. DIST.	35.8 FEET
LIVE LOAD DESIGNATION	HS25

	MOMENT
	(FOOT-KIPS)
MEMBER CAPACITY	2231.1
DL EFFECT	1014.8

CAPACITY FOR (LL+I)	1216.3
ACTUAL (LL+I)	1394.4

INVENTORY RATING 39.25 TONS

OPERATING RATING SUMMARY

MEMBER I.D.	S 1
SPAN	1
CRITICAL C.P. DIST.	35.8 FEET
LIVE LOAD DESIGNATION	HS25

	MOMENT
	(FOOT-KIPS)
MEMBER CAPACITY	3098.7
DL EFFECT	1014.8

CAPACITY FOR (LL+I)	2083.9
ACTUAL (LL+I)	1394.4

OPERATING RATING 67.25 TONS

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
POSTING ANALYSIS

INPUT CODING--

DATE 1/11/84
BY RCI CO

STRUCTURE 0943L

D/P STR. ID-- 300-123

INVENTORY		OPERATING		POSTING	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS25	39.25 TONS	HS25	67.25 TONS	VEH. 4S1	62.9
				VEH. 5C3	84.5
				VEH. 6T1	71.5

STRUCTURE DESCRIPTION--

IDENTIFICATION 0943L
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.510 FEET
ROADWAY WIDTH 31.854 FEET
NUMBER OF SPANS 3

LOCATION--

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

MICROFILM REEL NUMBERS--

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS--

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

POSTING RATING SUMMARY

TRUCK TYPE VEH. 4S1
MEMBER I.D. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

TRUCK TYPE VEH. 5C3
MEMBER I.D. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

TRUCK TYPE VEH. 6T1
MEMBER I.D. S 1
SPAN 1
CRITICAL C.P. DIST. 35.8 FEET

MOMENT
(FOOT-KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

MOMENT
(FOOT-KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

MOMENT
(FOOT-KIPS)
MEMBER CAPACITY 3098.7
DL EFFECT 1014.8

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 961.2

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 986.6

CAPACITY FOR (LL+I) 2083.9
ACTUAL (LL+I) 1166.6

POSTING GROSS TONNAGE 62.9

POSTING GROSS TONNAGE 84.5

POSTING GROSS TONNAGE 71.5

SUMMARY OF RATING CALCULATIONS-----STRUCTURE
SPECIAL LOAD ANALYSIS

INPUT CODING--

STRUCTURE 0943L

D/P STR. ID-- 300-123

DATE 1/11/84
BY RCI CO

INVENTORY		OPERATING		SPECIAL LOAD	
LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
HS25	39.25 TONS	HS25	67.25 TONS	VEH. SPEC	48.1

STRUCTURE DESCRIPTION--

LOCATION--

MICROFILM REEL NUMBERS--

IDENTIFICATION 0943L
TYPE 322
YEAR OF CONSTR. 1965
LENGTH 294.510 FEET
ROADWAY WIDTH 31.854 FEET
NUMBER OF SPANS 3

DISTRICT E
COUNTY GUE
CONSTR. RTE. 40
CONSTR. SEC. 8.95P2
CONSTR. STA. 222+75.02
KEY RTE. 40
MARKED RTE. 0943L

DESIGN PLANS GUE0013
COMPUTATIONS
CORRESPONDENCE 840113

ANALYST REMARKS--

SFN 3001237 GUE-70-0943L OVER WILLS CREEK AND TR 35 LOADING CF2000(57)
SUPER. DECK 9" THICK 31'-10.25" F/F MIN. WIDTH 5 BUILT UP MEMBERS
SPACING VARIES PROJ. 312(63)
1"MWS. BIT. 3"(1983) SEC. AVAIL.=100%

SPECIAL LOAD SUMMARY

TRUCK TYPE	VEH. SPEC
MEMBER I.D.	S 2
SPAN	1
CRITICAL C.P. DIST.	4.4 FEET

	MOMENT (FOOT-KIPS)
MEMBER CAPACITY	14.4
DL EFFECT	1.4

CAPACITY FOR (LL+I)	12.9
ACTUAL (LL+I)	3.5

POSTING GROSS TONNAGE	48.1
-----------------------	------

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--SO2
MATERIAL--RC
LL DIST. FACT. = 0.122
SUPERIMPOSED CONCENTRATED DL(S)
DIST. FROM LT SUPPORT****

						VAR	SUPERIMPOSED DISTRIBUTED DL(S)						
						CODE	LENGTH DISTRIBUTED*****						
						S	DIST. FROM LT SUPPORT***						
						DL DUE TO							
						MEM. WEIGHT							
						W(LT)	W(RT)						
						LBS/FT	LBS/FT						
SPAN NO.	LENGTH FT.	RNG. NO.	LENGTH FT.	SEC.NO. LT	SEC.NO. RT	T P B							
							SPAN NO.	W(LT) LBS/FT	W(RT) LBS/FT	* FT.	* FT.		
1	8.833	1	8.833	01	01		112.5	112.5	1	36.0	36.0	0.000	8.833

CHECK POINTS RATED--									
SPAN		DIS		FRM		FUNC			
NO.	LT	SPRT	M	VL	VR	NO.	LT	SPRT	M VL VR
						FT.			
1		0.000			X				
1		4.417	X						
1		8.833		X					

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/11/84

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--S01
C.P. LOCATION 1.4

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

		---NET AREA---		IX		C (BOT) IN.	SECTION		MODULUS	
H	GROSS AREA	+ BEND	- BEND	+ BEND	- BEND		TOP + BEND	TOP - BEND	BOTTOM + BEND	BOTTOM - BEND
IN.	SQ.IN.	SQ.IN.	SQ.IN.	IN**4	IN**4		IN**3	IN**3	IN**3	IN**3
72.12	60.25	60.25	60.25	53641.6	53641.6	36.06	1487.4	1487.4	1487.6	1487.6

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ALLOWABLE
STRESS

***** MOMENT CAPACITY

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	0.000	0.000	0.000	0.000	0.000	0.000
E 1	4.427	- 1.979	0.455	0.000	0.000	0.000
N 2	8.913	- 3.327	0.792	0.000	0.000	0.000
T 3	13.515	- 4.015	0.999	0.000	0.000	0.000
H 4	18.293	- 4.156	1.084	0.000	0.000	0.000
5	14.353	- 3.865	1.064	0.000	0.000	0.000
P 6	10.706	- 3.261	0.956	0.000	0.000	0.000
O 7	7.409	- 2.459	0.778	0.000	0.000	0.000
I 8	4.520	- 1.576	0.548	0.000	0.000	0.000
N 9	2.063	- 0.728	0.283	0.000	0.000	0.000
T 0	0.000	0.000	0.000	0.000	0.000	0.000
POS AREA	753.6	0.0	62.3	0.0	0.0	0.0
NEG AREA	0.0	281.6	0.0	0.0	0.0	0.0

PSI	TOP		BOTTOM	
	+ BEND	- BEND	+ BEND	- BEND
INVENTORY 18000.	2231.1	2231.1	2231.3	2231.3
OPERATING 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH1 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH2 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH3 25000.	3098.7	3098.7	3099.1	3099.1
POST SPEC 25000.	3098.7	3098.7	3099.1	3099.1

***** TOTAL DL
MOMENT EFFECT

AVAIL. CAPAC. FOR LL+IMPACT		LL+IMPACT	
		TOP	BOT
		+BEND	-BEND
		F-KPS	F-KPS
INVENTORY	1014.8	1216.3	3245.8
OPERATING		1216.6	3246.1
VEH. 1		2083.9	4113.5
VEH. 2		2083.9	4113.5
VEH. 3		2083.9	4113.5
SPECIAL		2083.9	4113.5

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .233 FOR +BEND AND = .212 FOR -BEND)

		-----TRUCK LOAD-----				-----LANE LOAD-----				RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
LIVE LOAD		LL+IMP	LL	LOC.NO. 1 WHEEL	DIR	LL+IMP	LL	LOC.CONC LOAD	LOC.CONC LOAD 2			
		FT-KIPS	FT-KIPS	FT.		FT-KIPS	FT-KIPS	FT.	FT.			
INV HS25	+BEND	1394.4	1130.8	21.800	L					0.872	39.3	
	-BEND	369.4	304.9	150.802	R							
OPER HS25	+BEND	1394.4	1130.8	21.800	L					1.495	67.3	
	-BEND	369.4	304.9	150.802	R							
POST VEH1	+BEND	961.2	779.5	54.802	R					2.168	62.9	
	-BEND	240.2	198.2	148.899	R							
POST VEH2	+BEND	986.6	800.1	19.799	L					2.112	84.5	
	-BEND	302.2	249.4	159.804	R							
POST VEH3	+BEND	1166.6	946.1	18.800	L					1.786	71.5	
	-BEND	315.4	260.3	112.900	L							
POST SPEC	+BEND	442.8	359.1	56.800	R					4.706	61.2	
	-BEND	106.7	88.1	145.003	R							

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/11/84

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--SO1
C.P. LOCATION 2.0

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 2

		---NET AREA---						-----SECTION-----		MODULUS-----	
H	GROSS	+	-	IX	IX	C	TOP	TOP	TOP	BOTTOM	BOTTOM
IN.	AREA	BEND	BEND	+ BEND	- BEND	(BOT)	+ BEND	- BEND	+ BEND	- BEND	- BEND
IN.	SQ.IN.	SQ.IN.	SQ.IN.	IN**4	IN**4	IN.	IN**3	IN**3	IN**3	IN**3	IN**3
73.00	74.25	74.25	74.25	72075.0	72075.0	36.50	1974.7	1974.7	1974.7	1974.7	1974.7

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ALLOWABLE
STRESS

***** MOMENT CAPACITY

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	0.000	0.000	0.000	0.000	0.000	0.000
E 1	- 2.357	- 4.948	1.137	0.000	0.000	0.000
N 2	- 4.568	- 8.318	1.980	0.000	0.000	0.000
T 3	- 6.487	- 10.038	2.498	0.000	0.000	0.000
H 4	- 7.968	- 10.389	2.710	0.000	0.000	0.000
5	- 8.866	- 9.663	2.659	0.000	0.000	0.000
P 6	- 9.035	- 8.152	2.390	0.000	0.000	0.000
O 7	- 8.328	- 6.147	1.946	0.000	0.000	0.000
I 8	- 6.600	- 3.940	1.370	0.000	0.000	0.000
N 9	- 3.792	- 1.820	0.707	0.000	0.000	0.000
T 0	0.000	0.000	0.000	0.000	0.000	0.000

PSI	TOP	TOP	BOTTOM	BOTTOM
	+ BEND	- BEND	+ BEND	- BEND
FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS
INVENTORY 18000.	2962.0	2962.0	2962.0	2962.0
OPERATING 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH1 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH2 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH3 25000.	4113.9	4113.9	4113.9	4113.9
POST SPEC 25000.	4113.9	4113.9	4113.9	4113.9

***** TOTAL DL
MOMENT EFFECT

***** AVAIL. CAPAC. FOR LL+IMPACT

FT-KIPS
- 2034.9

	TOP	TOP	BOT	BOT
	+BEND	-BEND	+BEND	-BEND
F-KIPS	F-KIPS	F-KIPS	F-KIPS	F-KIPS
INVENTORY	4996.9	927.1	4996.9	927.1
OPERATING	6148.8	2078.9	6148.8	2078.9
VEH. 1	6148.8	2078.9	6148.8	2078.9
VEH. 2	6148.8	2078.9	6148.8	2078.9
VEH. 3	6148.8	2078.9	6148.8	2078.9
SPECIAL	6148.8	2078.9	6148.8	2078.9

POS AREA	0.0	0.0	155.7	0.0	0.0	0.0	0.0	155.7
NEG AREA	519.1	703.9	0.0	0.0	0.0	0.0	0.0	1223.0

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .233 FOR +BEND AND = .222 FOR -BEND)

		-----TRUCK LOAD-----				-----LANE LOAD-----						
LIVE		LL+IMP	LL	LOC.NO.	DIR	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING	SAFE LOAD	RATING
LOAD		FT-KIPS	FT-KIPS	1 WHEEL		FT-KIPS	FT-KIPS	LOAD	LOAD 2	FACT.	CAPACITY	VALUE
				FT.				FT.	FT.		TONS	
INV HS25	+BEND	242.1	196.3	259.246	R							
	-BEND	931.3	762.1	150.802	R					0.995	44.8	
OPER HS25	+BEND	242.1	196.3	259.246	R							
	-BEND	931.3	762.1	150.802	R					2.232	100.5	
POST VEH1	+BEND	158.6	128.6	255.301	R							
	-BEND	605.4	495.5	148.899	R					3.434	99.6	
POST VEH2	+BEND	192.3	155.9	266.201	R							
	-BEND	761.8	623.4	159.804	R					2.729	109.2	
POST VEH3	+BEND	204.3	165.7	219.300	L							
	-BEND	795.1	650.7	112.900	L					2.615	104.6	
POST SPEC	+BEND	70.7	57.4	257.300	R							
	-BEND	269.1	220.2	145.003	R					7.727	100.4	

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/11/84

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--S01
C.P. LOCATION 2.5

***** SECTION PROPERTIES IN RANGE 3 OF SPAN 2

		---NET AREA---						-----SECTION		MODULUS-----	
H	GROSS	+	-	IX	IX	C		TOP	TOP	BOTTOM	BOTTOM
IN.	AREA	BEND	BEND	+ BEND	- BEND	(BOT)		+ BEND	- BEND	+ BEND	- BEND
	SQ. IN.	SQ. IN.	SQ. IN.	IN**4	IN**4	IN.		IN**3	IN**3	IN**3	IN**3
72.12	60.25	60.25	60.25	53641.6	53641.6	36.06		1487.4	1487.4	1487.6	1487.6

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ALLOWABLE
STRESS

***** MOMENT CAPACITY

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	0.000	0.000	0.000	0.000	0.000	0.000
E 1	- 0.825	2.166	- 1.327	0.000	0.000	0.000
N 2	- 1.599	4.971	- 2.310	0.000	0.000	0.000
T 3	- 2.271	8.558	- 2.915	0.000	0.000	0.000
H 4	- 2.789	12.930	- 3.163	0.000	0.000	0.000
5	- 3.104	18.087	- 3.104	0.000	0.000	0.000
P 6	- 3.163	12.930	- 2.789	0.000	0.000	0.000
O 7	- 2.915	8.558	- 2.271	0.000	0.000	0.000
I 8	- 2.310	4.972	- 1.599	0.000	0.000	0.000
N 9	- 1.327	2.166	- 0.825	0.000	0.000	0.000
T 0	0.000	0.000	0.000	0.000	0.000	0.000

PSI	TOP	TOP	BOTTOM	BOTTOM
	+ BEND	- BEND	+ BEND	- BEND
FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS	FT-KIPS
INVENTORY 18000.	2231.1	2231.1	2231.3	2231.3
OPERATING 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH1 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH2 25000.	3098.7	3098.7	3099.1	3099.1
POST VEH3 25000.	3098.7	3098.7	3099.1	3099.1
POST SPEC 25000.	3098.7	3098.7	3099.1	3099.1

***** TOTAL DL
MOMENT EFFECT

		AVAIL. CAPAC. FOR LL+IMPACT	
		TOP	BOT
		+BEND	-BEND
		F-KPS	F-KPS
		F-KPS	F-KPS
INVENTORY	1335.0	3127.2	1335.2
OPERATING	2202.6	3994.8	2203.0
VEH. 1	2202.6	3994.8	2203.0
VEH. 2	2202.6	3994.8	2203.0
VEH. 3	2202.6	3994.8	2203.0
SPECIAL	2202.6	3994.8	2203.0

POS AREA	0.0	836.2	0.0	0.0	0.0	0.0
NEG AREA	181.7	0.0	181.7	0.0	0.0	0.0

AREA
TOTALS
836.2
363.4

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .212 FOR +BEND AND = .233 FOR -BEND)

		-----TRUCK LOAD-----		-----LANE LOAD-----							
LIVE		LL+IMP	LL	LOC.NO.	DIR	AXLE	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING
LOAD		FT-KIPS	FT-KIPS	1 WHEEL		SPACE	FT-KIPS	FT-KIPS	LOAD	LOAD 2	SAFE LOAD
				FT.		FT.			FT.	FT.	CAPACITY
											TONS
INV HS25 +BEND	1350.0	1114.0	131.000	L							0.989
-BEND	282.5	229.1	259.250	R							
OPER HS25 +BEND	1350.0	1114.0	131.000	L							1.632
-BEND	282.5	229.1	259.250	R							
POST VEH1 +BEND	932.5	769.5	126.001	L							2.362
-BEND	185.1	150.1	255.300	R							
POST VEH2 +BEND	956.1	788.9	181.998	R							2.304
-BEND	224.4	182.0	266.201	R							
POST VEH3 +BEND	1142.2	942.5	127.997	L							1.928
-BEND	238.4	193.4	219.300	L							
POST SPEC +BEND	427.7	352.9	166.000	R							5.150
-BEND	82.6	67.0	257.300	R							

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL STEEL FLEXURAL MEMBER

DATE 01/11/84

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--S01
C.P. LOCATION 3.0

***** SECTION PROPERTIES IN RANGE 0 OF SPAN 3

		---NET AREA---						SECTION		MODULUS-----	
H	GROSS	+	-	IX	IX	C		TOP	TOP	BOTTOM	BOTTOM
IN.	AREA	BEND	BEND	+ BEND	- BEND	(BOT)		+ BEND	- BEND	+ BEND	- BEND
	SQ.IN.	SQ.IN.	SQ.IN.	IN**4	IN**4	IN.		IN**3	IN**3	IN**3	IN**3
73.00	74.25	74.25	74.25	72075.0	72075.0	36.50		1974.7	1974.7	1974.7	1974.7

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ALLOWABLE
STRESS

***** MOMENT CAPACITY

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6	
T 0	0.000	0.000	0.000	0.000	0.000	0.000	
E 1	0.707	- 1.820	- 3.792	0.000	0.000	0.000	
N 2	1.370	- 3.940	- 6.601	0.000	0.000	0.000	
T 3	1.946	- 6.147	- 8.329	0.000	0.000	0.000	
H 4	2.390	- 8.152	- 9.035	0.000	0.000	0.000	
5	2.659	- 9.663	- 8.867	0.000	0.000	0.000	
P 6	2.710	- 10.389	- 7.969	0.000	0.000	0.000	
O 7	2.498	- 10.037	- 6.487	0.000	0.000	0.000	
I 8	1.980	- 8.317	- 4.568	0.000	0.000	0.000	
N 9	1.137	- 4.947	- 2.357	0.000	0.000	0.000	
T 0	0.000	0.000	0.000	0.000	0.000	0.000	
POS AREA	155.7	0.0	0.0	0.0	0.0	0.0	AREA
NEG AREA	0.0	703.9	519.1	0.0	0.0	0.0	TOTALS
							155.7
							1223.0

PSI	TOP	TOP	BOTTOM	BOTTOM
	+ BEND	- BEND	+ BEND	- BEND
INVENTORY 18000.	2962.0	2962.0	2962.0	2962.0
OPERATING 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH1 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH2 25000.	4113.9	4113.9	4113.9	4113.9
POST VEH3 25000.	4113.9	4113.9	4113.9	4113.9
POST SPEC 25000.	4113.9	4113.9	4113.9	4113.9

***** TOTAL DL
MOMENT EFFECT

		AVAIL.CAPAC.FOR LL+IMPACT	
		TOP	BOT
		+BEND	-BEND
		F-KPS	F-KPS
INVENTORY	4996.9	927.0	4996.9
OPERATING	6148.8	2078.9	6148.8
VEH. 1	6148.8	2078.9	6148.8
VEH. 2	6148.8	2078.9	6148.8
VEH. 3	6148.8	2078.9	6148.8
SPECIAL	6148.8	2078.9	6148.8

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .233 FOR +BEND AND = .222 FOR -BEND)

		-----TRUCK LOAD-----				-----LANE LOAD-----						
LIVE		LL+IMP	LL	LOC.NO.	DIR	LL+IMP	LL	LOC.CONC	LOC.CONC	RATING	SAFE LOAD	RATING
LOAD		FT-KIPS	FT-KIPS	1 WHEEL		FT-KIPS	FT-KIPS	LOAD	LOAD 2	FACT.	CAPACITY	VALUE
				FT.				FT.	FT.		TONS	
INV HS25	+BEND	242.1	196.3	30.752	L							
	-BEND	931.3	762.1	139.200	L					0.995	44.8	
OPER HS25	+BEND	242.1	196.3	30.752	L					2.232	100.5	
	-BEND	931.3	762.1	139.200	L							
POST VEH1	+BEND	158.6	128.6	34.700	L					3.434	99.6	
	-BEND	605.4	495.4	141.110	L							
POST VEH2	+BEND	192.3	155.9	23.804	L					2.729	109.2	
	-BEND	761.8	623.4	130.200	L							
POST VEH3	+BEND	204.3	165.7	70.703	R					2.615	104.6	
	-BEND	795.1	650.6	177.100	R							
POST SPEC	+BEND	70.7	57.4	32.700	L					7.727	100.5	
	-BEND	269.0	220.2	145.001	L							

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

DATE 01/11/84

D/P STRUCTURE I.D. 300-123
MEMBER I.D.--S02
C.P. LOCATION 1.50

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
9.00	12.00	0.00	12.00	+BEND	108.0	729.0	0.90	7.44	0.66	2.37	1.00	.327	.888
				-BEND	108.0	729.0	0.66	6.63	0.90	1.56	1.00	.282	.883

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)	0.000	4.417	8.833	POS AREA =	9.8
Y-ORDINATE	0.000	2.208	0.000		

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6	AREA TOTALS
T 0							
E 1							
N 2							
T 3							
H 4							
5							
P 6							
O 7							
I 8							
N 9							
T 0							
POS AREA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEG AREA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	ALLOWABLE STRESS		MOMENT CAPACITY			
	REINF. STEEL PSI	CONC PSI	CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
INVENTORY	20000.	1300.	10.6	6.4	9.9	8.5
OPERATING	29000.	2000.	16.3	9.3	14.4	13.1
POST VEH1	0.	0.	0.0	0.0	0.0	0.0
POST VEH2	0.	0.	0.0	0.0	0.0	0.0
POST VEH3	0.	0.	0.0	0.0	0.0	0.0
POST SPEC	29000.	2000.	16.3	9.3	14.4	13.1

	TOTAL DL MOMENT EFFECT FT-KIPS	AVAIL. CAPAC. FOR LL+IMPACT			
		TOP +BEND F-KIPS	TOP -BEND F-KIPS	BOT +BEND F-KIPS	BOT -BEND F-KIPS
INVENTORY	1.4	9.2	7.9	8.5	10.0
OPERATING		14.9	10.8	12.9	14.5
VEH. 1		0.0	0.0	0.0	0.0
VEH. 2		0.0	0.0	0.0	0.0
VEH. 3		0.0	0.0	0.0	0.0
SPECIAL		14.9	10.8	12.9	14.5

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		-----TRUCK LOAD-----			DIR	-----LANE LOAD-----			LOC. CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
		LL+IMP FT-KIPS	LL FT-KIPS	LOC. NO. 1 WHEEL FT.		LL+IMP FT-KIPS	LL FT-KIPS	LOC. CONC LOAD FT.				
INV HS25	+BEND	7.0	5.4	9.583	L					1.211	54.5	
	-BEND	0.0	0.0	5.167	L							
OPER HS25	+BEND	7.0	5.4	9.583	L					1.849	83.2	
	-BEND	0.0	0.0	5.167	L							
POST VEH1	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST VEH2	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST VEH3	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST SPEC	+BEND	3.5	2.7	16.583	L					3.699	48.1	
	-BEND	0.0	0.0	12.167	L							

DATE 01/11/84

SUMMARY OF SHEAR ANALYSIS

D/P STRUCTURE I.D. 300-123

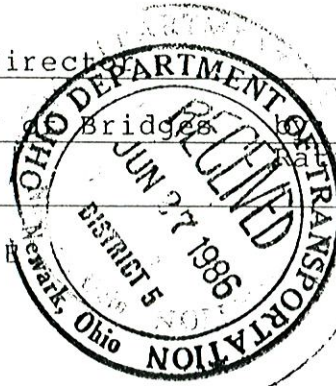
MEMB. ID	MATL	SPAN NO.	DIS LT	FRM SPRT	L R	DL SHEAR KIPS	SDL SHEAR KIPS	---INVENTORY---		---OPERATING---		--VEH. 1 --		--VEH. 2 --		--VEH. 3 --		--SPECIAL--	
								LL+I MAX.V KIPS	T MIN.V KIPS	LL+I MAX.V KIPS	T MIN.V KIPS	LL+I MAX.V KIPS	LL+I MIN.V KIPS	LL+I MAX.V KIPS	LL+I MIN.V KIPS	LL+I MAX.V KIPS	LL+I MIN.V KIPS	LL+I MAX.V KIPS	LL+I MIN.V KIPS
SO1	SS	1	0.000	L		6.7	55.6	81.9	10.5	81.9	10.5	54.5	6.8	60.4	8.6	62.1	9.0	25.4	3.0
		2	0.000	L		12.0	94.1	86.4	87.8	86.4	87.8	56.6	57.6	68.9	69.7	69.0	69.8	25.8	26.2
		3	0.000	L		12.4	96.1	87.8	86.4	87.8	86.4	57.6	56.6	69.7	68.9	69.8	69.0	26.2	25.8
SO2	RC	1	0.000	L		0.5	0.2	3.2	0.0	3.2	0.0							1.6	0.0
		1	8.833	L		0.5	0.2	0.0	3.2	0.0	3.2							0.0	1.6



inter-office communication

to: John W. Hagan, District Deputy Director date: June 25, 1986
from: Walter J. Jestings, Engineer of Bridges R. E. Johnson, Struc.
Rating & Inventory Engr.
subject: Bridge Ratings (BARS)

ATTENTION: Cash Misel, D.B.



Enclosed are reduced copies of the bridge analysis output sheets with attached form BR-100 as well as your input sheets for the following structure(s).

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	
		<u>Operation (percent of legal)</u> <u>Previous</u>	<u>New</u>
FAI-664-0466 SFN 2303515	HS 18.6	150%	150%
PER-204-0166 SFN 6402089	HS 20	150%	150%
GUE-70-0127L SFN 3000788	HS 14.9	150%	150%
GUE-70-0127R SFN 3000818	HS 12.5	150%	145%
GUE-70-0943A SFN 3001202	HS 14.7	150%	150%
GUE-70-0943L SFN 3001237	HS 20	150%	150%
GUE-70-0943R SFN 3001261	HS 20	150%	150%
GUE-70-0993L SFN 3001350	HS 20	150%	150%
GUE-70-0993R SFN 3001350	HS 6.0	150%	150%
GUE-70-0993R SFN 3001385	HS 6.0	150%	150%
GUE-70-1232L SFN 3001474	HS 17.5	150%	150%

John W. Hagan
 June 25, 1986
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<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	
		<u>Operation (percent of legal)</u>	
		<u>Previous</u>	<u>New</u>
GUE-70-1232R SFN 3001504	HS 17.5	150%	150%
GUE-70-1656L SFN 3001687	HS 20	150%	150%
GUE-70-1656R SFN 3001717	HS 20	150%	150%
GUE-70-2042L SFN 3001830	HS 12.8	150%	150%
GUE-70-2042R SFN 3001865	HS 13.3	150%	150%
GUE-70-2529L SFN 3002160	HS 13.6	150%	150%
GUE-70-2529R SFN 3002195	HS 13.6	150%	150%
GUE-77-0143L SFN 3002462	HS 20	150%	150%
GUE-77-0143R SFN 3002497	HS 20	150%	150%
GUE-40-0943 SFN 3003094	HS 13.2	150%	150%
GUE-265-0108 SFN 3004481	HS 20	150%	150%
LIC-70-1105L SFN 4503333	HS 20	150%	150%
LIC-70-1193L SFN 4503392	HS 20	150%	150%
LIC-70-1501L SFN 4503570	HS 16.2	150%	150%
LIC-70-1501R SFN 4503600	HS 15.8	150%	150%

John W. Hagan
June 25, 1986
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<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	
		<u>Operation (percent of legal)</u> <u>Previous</u>	<u>New</u>
LIC-70-1572L SFN 4503694	HS 18.8	150%	150%
LIC-70-1572R SFN 4503724	HS 18.3	150%	150%
LIC-70-2422L SFN 4504208	HS 15.2	150%	150%
LIC-70-2583L SFN 4504267	HS 15.2	150%	150%
LIC-70-2583R SFN 4504291	HS 15.2	150%	150%
LIC-158-0097 SFN 4505344	HS 20	150%	150%

If you agree with these ratings, you should post, rescind or change postings as necessary in accordance with Directive No. DH-P-310, dated June 1, 1985. Please remember to send in necessary change sheets to correct the computerized bridge inventory file as soon as possible.

Please note that this rating information will be forwarded to the Central Office, Permit Section as per our standard practice of keeping that office informed of all bridge rating changes. If you for any reason disagree with any or all of these ratings, please notify this office by phone or IOC within two (2) weeks of the date of this IOC, so that we may delay this action until corrected ratings are available. If no response is received from your office during this period, these ratings will be considered accurate and to your satisfaction. The information will then be sent to the Permit office.

REQ
WJJ:REJ:dt2
Enclosure(s)

cc: File

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

46

STRUCTURE HEADER AND DESCRIPTION																																																																																	
CARD TYPE	STRUCTURE		RATING ANALYST IDENTIFICATION																						ENGR. ATTN. OVERRIDE BATCH RATING EXCEPT'S	OVERRIDE FILE REQUESTS & OUTPUT DATA EXCEPTIONS	STRUCTURE TYPE	YEAR OF CONSTRUCTION	STRUCTURE LENGTH		ROADWAY WIDTH		NUMBER OF SPANS X NEGATIVE SPEC.	LIVE LOAD TRUCK DESIGNATION																																															
	GROUP ID	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22					23	24	25	26		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
0,2	3	0012	JCR CO																												322	65			30		03																																												
REV																																																																																	
10-1-73																																																																																	

JCR CO 6/10/86

STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS																																																																															
CARD TYPE	STRUCTURE		BRIDGE NUMBER	DISTRICT	COUNTY	CONSTRUCTION			MICROFILM REEL NO.			KEY ROUTE ID.	MARKED ROUTE																																																																		
	GROUP ID	NO.				ROUTE	SECTION	STATION	DESIGN PLANS	COMPUTATIONS	CORRESPONDENCE																																																																				
0,5	3	0012	6943R	6	45	40	8.95	P2	2233	144	64500.13																																																																				
REV.																																																																															
2-1-73																																																																															

COMMENTS																																																																																	
CARD TYPE	STRUCTURE		SEQ	ANALYST REMARKS TO BE DUPLICATED IN FORM AND CONTENT ON SUMMARY OF RATING CALCULATIONS																																																																													
	GROUP ID	NO.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78
0,6	3	0012	1	SUPER. DECK 9.25" THICK 32'-0" F/F 4' RAIL UP MEMBERS SPACED AT 10'-																																																																													
0,6			2	1" PLUS. R/F. 3" (1983) SEC. AVAIL. 100%																																																																													
0,6			3																																																																														
0,6			4																																																																														
0,6			5																																																																														
0,6			6																																																																														

REV 2-1-73

[BI-59(1986): 3" Asph, 5A condition
150% Legal, ODOT I&M]

CDC Form No. AA6037

10/5.5
542
105 = 9.25 x 12.5 = 115.625

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

CDC Form No. AAB042

S Deck $74 \times 12.5 \times 10 = 0$
 Parapet $\left[\frac{10 \times 102}{2} \times \frac{25 \times 27}{2} \right] + (14 \times 112) + (12 \times 8) \times \frac{2 \times 130}{4 \times 144}$
 Haunch $9 \times 116^3 \times 130 / 144$
 X Frame $1195^2 + 2 \sqrt{1195^2 + 69^2} \times \frac{23 \times 6.1}{12 \times 302}$
 Stiff $5.32 \times 2 \times 74 / 12 \times 99 / 302$
 Long Bar $5.32 \times 2 \times 466.5 / 302$
 Railing $18 \times 2 / 4$
 Bit $30 \times 12 \times 10$ Dist.

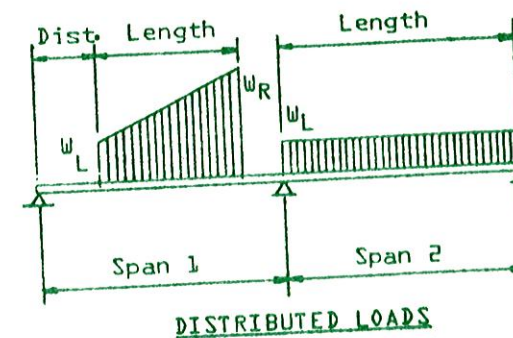
332.42 ✓
11.13 ✓
15.32 ✓
10.65 ✓
7.06 ✓
9.00 ✓

360 ✓

1961.83



36



BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

SECTION RANGE LOCATIONS

HINGE LOCATION

STRUCTURE

MEMBER ID

SYMMETRICAL?

SECTION

SEC

CODE

FIRST HINGE
DISTANCE FROM
LEFT

SECOND HINGE
DISTANCE FROM
LEFT

SECTION

SECTION

GROUP

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

3001-6501

0101

7103

01

1309

01

1103

02

4109

01

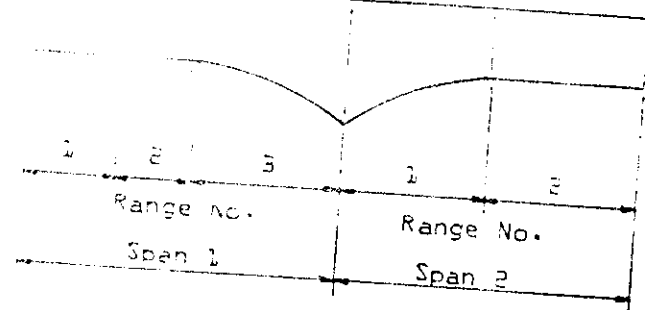
906

01

SO.2

0101

SECTION RANGE



Dist.

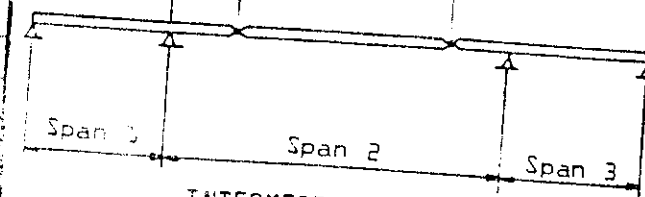
Dist.

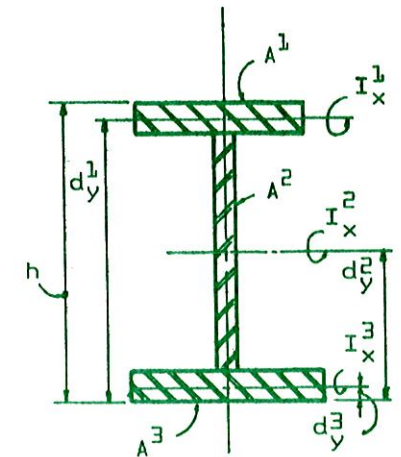
Span 1

Span 2

Span 3

INTERMEDIATE HINGES





DETAILED DESCRIPTION

[illegible]



inter-office communication

to: John W. Hagan, District Deputy Director date: June 25, 1986
from: Walter J. Jestings, Engineer of Bridges R. E. Johnson, Struc.
subject: Bridge Ratings (BARS) Rating & Inventory Engr.

ATTENTION: Cash Misel, D.B.



Enclosed are reduced copies of the bridge analysis output sheets with attached form BR-100 as well as your input sheets for the following structure(s).

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	
		<u>Operation (percent of legal)</u>	
		<u>Previous</u>	<u>New</u>
FAI-664-0466 SFN 2303515	HS 18.6	150%	150%
PER-204-0166 SFN 6402089	HS 20	150%	150%
GUE-70-0127L SFN 3000788	HS 14.9	150%	150%
GUE-70-0127R SFN 3000818	HS 12.5	150%	145%
GUE-70-0943A SFN 3001202	HS 14.7	150%	150%
GUE-70-0943L SFN 3001237	HS 20	150%	150%
GUE-70-0943R SFN 3001261	HS 20	150%	150%
GUE-70-0993L SFN 3001350	HS 20	150%	150%
GUE-70-0993R SFN 3001350	HS 6.0	150%	150%
GUE-70-0993R SFN 3001385	HS 6.0	150%	150%
GUE-70-1232L SFN 3001474	HS 17.5	150%	150%

John W. Hagan
June 25, 1986
Page 2

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	<u>Operation (percent of legal)</u>	
			<u>Previous</u>	<u>New</u>
GUE-70-1232R SFN 3001504	HS 17.5		150%	150%
GUE-70-1656L SFN 3001687	HS 20		150%	150%
GUE-70-1656R SFN 3001717	HS 20		150%	150%
GUE-70-2042L SFN 3001830	HS 12.8		150%	150%
GUE-70-2042R SFN 3001865	HS 13.3		150%	150%
GUE-70-2529L SFN 3002160	HS 13.6		150%	150%
GUE-70-2529R SFN 3002195	HS 13.6		150%	150%
GUE-77-0143L SFN 3002462	HS 20		150%	150%
GUE-77-0143R SFN 3002497	HS 20		150%	150%
GUE-40-0943 SFN 3003094	HS 13.2		150%	150%
GUE-265-0108 SFN 3004481	HS 20		150%	150%
LIC-70-1105L SFN 4503333	HS 20		150%	150%
LIC-70-1193L SFN 4503392	HS 20		150%	150%
LIC-70-1501L SFN 4503570	HS 16.2		150%	150%
LIC-70-1501R SFN 4503600	HS 15.8		150%	150%

John W. Hagan
June 25, 1986
Page 3

<u>BRIDGE NUMBER</u>	<u>Inventory</u>	<u>RATINGS</u>	<u>Operation (percent of legal)</u>	
			<u>Previous</u>	<u>New</u>
LIC-70-1572L SFN 4503694	HS 18.8		150%	150%
LIC-70-1572R SFN 4503724	HS 18.3		150%	150%
LIC-70-2422L SFN 4504208	HS 15.2		150%	150%
LIC-70-2583L SFN 4504267	HS 15.2		150%	150%
LIC-70-2583R SFN 4504291	HS 15.2		150%	150%
LIC-158-0097 SFN 4505344	HS 20		150%	150%

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REQ
WJJ:REJ:dt2
Enclosure(s)

cc: File

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

STRUCTURE HEADER AND DESCRIPTION																																																																															
CARD TYPE	STRUCTURE		RATING ANALYST IDENTIFICATION	ENGR. ATTN. OVERRIDE BATCH RATING EXCEPT'S	OVERRIDE FILE REQUESTS & OUTPUT DATA EXCEPTIONS	STRUCTURE TYPE	YEAR OF CONSTRUCTION	STRUCTURE LENGTH		ROADWAY WIDTH		NUMBER OF SPANS X NEGATIVE SPEC.	LIVE LOAD TRUCK DESIGNATION																																																																		
	GROUP ID	NO.						FEET	IN.	FEET	IN.		INV.	OPER.																																																																	
02	300	23	RCI CO				322	65	29	45	30	10	4	63																																																																	

REV
10-1-73

JCRCO 6/10/86

STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS																																																																															
CARD TYPE	STRUCTURE		BRIDGE NUMBER	DISTRICT	COUNTY	CONSTRUCTION			MICROFILM REEL NO.			KEY ROUTE ID.	MARKED ROUTE																																																																		
	GROUP ID	NO.				ROUTE	SECTION	STATION	DESIGN PLANS	COMPUTA- TIONS	CORRES- PONDENCE																																																																				
05	300	23	136	5	40	8	95	12	22	27	50	26	62	13	40	0943L																																																															

REV.
2-1-73

COMMENTS																																																																															
CARD TYPE	STRUCTURE		SEQ	ANALYST REMARKS TO BE DUPLICATED IN FORM AND CONTENT ON SUMMARY OF RATING CALCULATIONS																																																																											
	GROUP ID	NO.																																																																													
0b	300	23	1	SPN 3.001237 GUS-10-11-31 OVER WILLS CREEK AND TR 35. LOADING CF2000 (5.7)																																																																											
0b			2	SUPER. DECK 9" THICK 311-2.25" E/F MIN. WIDTH 5' BUILT UP MEMBERS																																																																											
0b			3	SPICING VARIES PROJ. 312(63)																																																																											
0b			4	1" JWS. BIT. 3" (1983) SEC. AVAIL. = 100%																																																																											
0b			5																																																																												
0b			6																																																																												

REV
2-1-73

[BI-59(1986): 3" Asph, 5A condition
150% Legal, ODOT IEM]

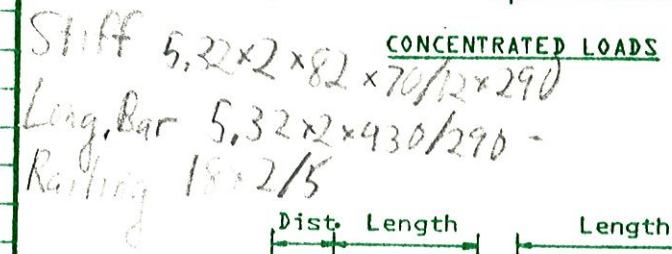
$$\frac{8+2}{15 + \frac{9 \times 12.5 \times 3 \times 12}{1600}} S^2$$

239.77 ✓

9.96

18.29

Haanch $9 \times 116 \times 150 / 144$
 XFrame $117^2 + 2\sqrt{117} \times 65^2 \times \frac{27 \times 6.1}{12 \times 290} +$
 $117^2 \times 4 \times 6.1 / 12 \times 290 =$



17.55 -
15.78 -
7.2 -


$$\begin{array}{r} 336 \\ \hline 1694.55 \\ \hline \approx 36 \end{array}$$

502 3×12

The diagram shows a continuous beam with three spans, labeled Span 1, Span 2, and Span 3. The beam is supported by four vertical supports. The distance between the first and second support is labeled 'Span 1', between the second and third support is 'Span 2', and between the third and fourth support is 'Span 3'. Above the beam, there are two horizontal dimension lines. The first dimension line, labeled 'Dist.', spans the length of Span 1. The second dimension line, also labeled 'Dist.', spans the length of Span 2. The beam is shown with a slight downward deflection in the middle of Span 2.

INTERMEDIATE HINGES

$70 \times \frac{3}{8}$

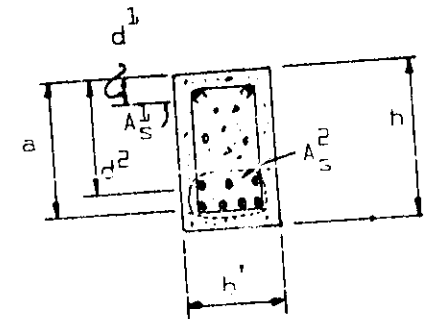
CDC Form No. AAB044

BRIDGE ANALYSIS AND RATING SYSTEM INPUT DATA FORM

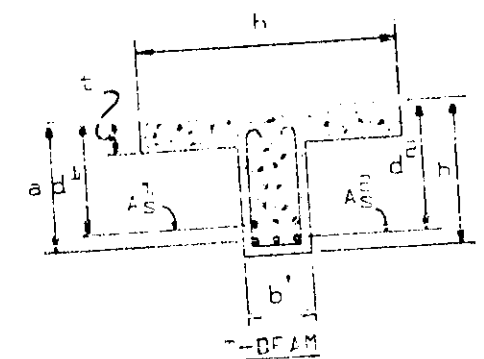
SECTION PROPERTIES {REINFORCED CONCRETE} - GIRDERS, STRINGERS, FLOOR BEAMS

SECTION DESCRIPTION

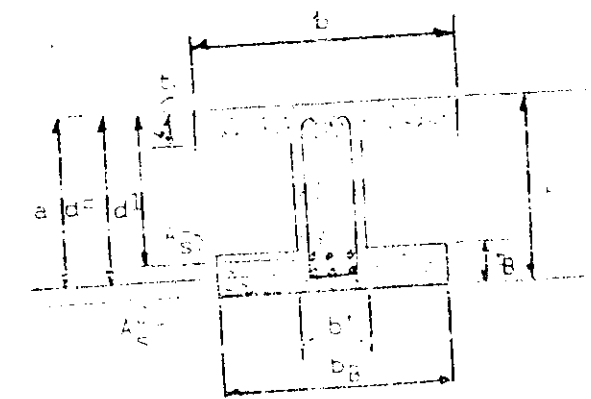
CARD TYPE	STRUCTURE						MEMBER ID	BOT FLG	SECTION NO.	"SAME AS EXCEPT"	h in.	a in.	b in.	b' in.	t in.	i	A _s ¹ in. ²	d ¹ in.	COMP CODE
	GROUP ID	NO.																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	3	3	0	1	2	3	8	0	2	9	1						6.6	2.3	75
1	3	3	0	1	2	3	8	0	2	9	1						9.7	4.3	75



RECTANGULAR BEAM



T-BEAM



T-BEAM