Bridge Load Rating

Prepared for

Rhode Island
Department of Transportation

EAST PROVIDENCE/PROVIDENCE, RI
INTERSTATE I95 EASTBOUND
OVER
GANO STREET, SEEKONK RIVER, WATER STREET & WATERFRONT DRIVE

Bridge No. 020001
Bridge Name: Washington Bridge South

Date of Rating: 02/26/2024

Prepared By:

AI Engineers
10 Orms Street, Suite 320
Providence, RI 02904

ASLAM H. SIDDIQUI
No. 12758
REGISTERED
PROFESSIONAL ENGINEER
CIVIL

2/26/2024

MEMORANDUM

DATE:	02/26/2024
TO:	Mary Vittoria-Bertrand. P.E.
COPY TO:	John Preiss, DOT.BridgeRatingsGroup
FROM:	Aslam Siddiqui
RE:	MPA 359- Bridge 020001 Load Rating Supplemental Evaluation

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Purpose:

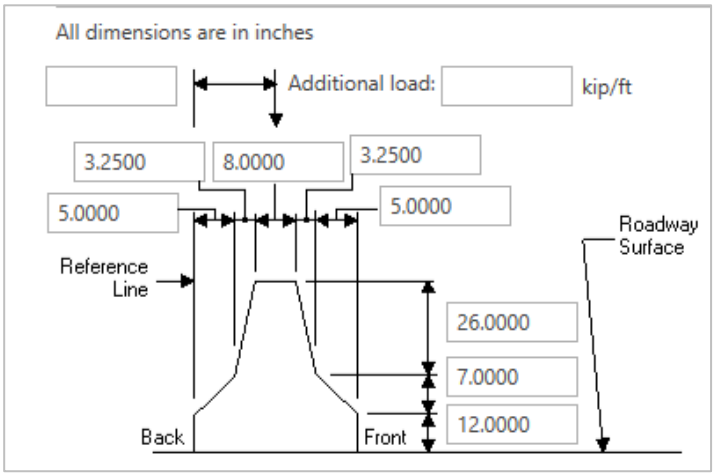
AI Engineers (AIE) was tasked by RIDOT to review and update the current 2019 load rating on file for bridge 020001 to evaluate the structure for 6 lanes of traffic. AIE was to assume a concrete barrier will be installed to separate the bounds of traffic. The previous load rating report and model was provided by RIDOT and updated accordingly for all vehicle types.

In addition to the superstructure, AIE was asked to consider the increased live load effect on the substructure, specifically the pier caps.

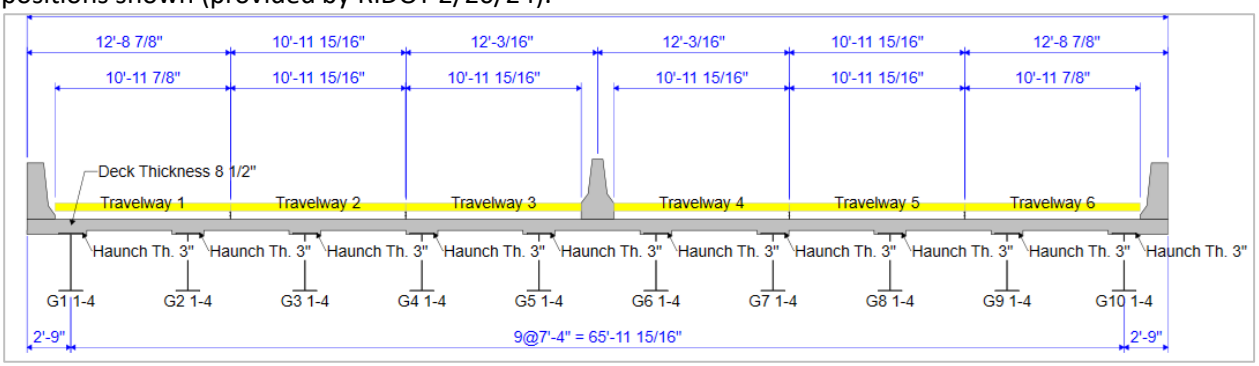
A traffic/lane diagram was provided by RIDOT and is attached to this report (see appendix).

Below are a summary of changes made to the xml file received by RIDOT on 2/20/2024:

1. The haunch inputs were adjusted for exterior girders.
2. The control options were adjusted/updated for all girders.
3. Stiffeners were added to all girders.
4. A median barrier based on RIDOT standard drawings was assumed and input in the centerline of the roadway in the BrR model.



5. The median barrier dead load was distributed by (60/40) distribution - 60% to G5 and G6 & 40% to the remaining girders.
6. The travel way was adjusted to contain 6 lanes. See the attached appendix with the lane positions shown (provided by RIDOT 2/20/24).



7. The LLDF that were input previously into the BrR model were deleted.

Analysis:

1. EV live load factor of 1.3 was used for analysis.
2. Surface Roughness Rating = 2 (Average).
3. To simplify analysis, the pier caps were grouped into 5 distinct groups based on similar geometry, loading, and reinforcement. This is consistent with the design calculations provided by RIDOT. The pier caps are grouped as follows:
   - Pier 1
   - Piers 2, 5, 8, 11, 12
   - Piers 3, 10, 13
   - Piers 6, 7
   - Piers 4, 9

4. Shear in the pier cap directly over the columns has been ignored.
5. The force effects from the BrR superstructure model were extracted to analyze the substructure. Conservatively, the maximum reactions (DL and LL) for each girder were applied at each support location of the pier for the analysis. A girder-line model in BrR was created for each of the pier caps. The girder-line model has the concrete and steel reinforcement added as shown in the plans. The capacity of the pier cap was then calculated internally by BrR. The capacities were manually extracted and combined with the LL and DL effects of the pier cap model and ratings were computed manually.

SUPERSTRUCTURE SUMMARY OF BRIDGE RATING

Town/City:	East Providence & Providence, RI	Bridge No.:	0020001
Route Carried:	Interstate I-95 (EB)	Crosses:	Gano St., Seekonk River, Water St. & Waterfront Dr
Owner:	State Highway Agency	Year Built:	1930
Maintained By:	State Highway Agency	Year(s) Rebuilt/Rehab:	1971, 2002, 2004, 2008

VEHICLE TYPE		Strength RF	Service RF	Tons
HL-93	INV	0.69	NA	NA
	OPER	0.89	NA	NA
H20		2.44	-	48.7
TYPE 3		2.02	-	50.4
TYPE 3S2		1.55	-	55.9
TYPE 3-3		1.49	-	59.6
LTLLM		2.29	-	91.6
SU 4		1.85	-	50.0
SU 5		1.63	-	50.6
SU 6		1.48	-	51.6
SU 7		1.36	-	52.7
EV2		1.94	-	55.7
EV3		1.30	-	55.9
RI-3		1.46	-	55.5
RI-4		1.50	-	56.1
RI-5		1.13	-	59.3
RI-5B		0.93	-	57.8
RI-6		0.97	-	63.3
RI-OP1		1.58	-	89.0
RI-OP2		1.38	-	110.5
RI-OP3		1.27	-	143.4
RI-OP4		1.12	-	93.7
RI-OP5		1.57	-	110.2
Fatigue		N/A		
RIPTA		2.44	-	50.8

Gray shaded vehicles types considered legal loads.

*Controlling fatigue location only. Other locations not reported in this load rating.

LRFR Evaluation Factors	
Surface Roughness Rating :	2
Gov. Condition Factor, ϕ_c :	1.00
System Factor, ϕ_s :	1.00
ADTT (One-Way) :	8640

Posting Analysis	
Posting Recommendation	NO
Gov. Legal Rating Factor :	1.30
Gov.Legal Load Model :	EV3

QA/QC	
Analysis By:	Himal Gyawali
Independent Reviewer:	Aslam Siddiqui
QA By:	Damian Silverstrim
LR Date:	2/22/2024

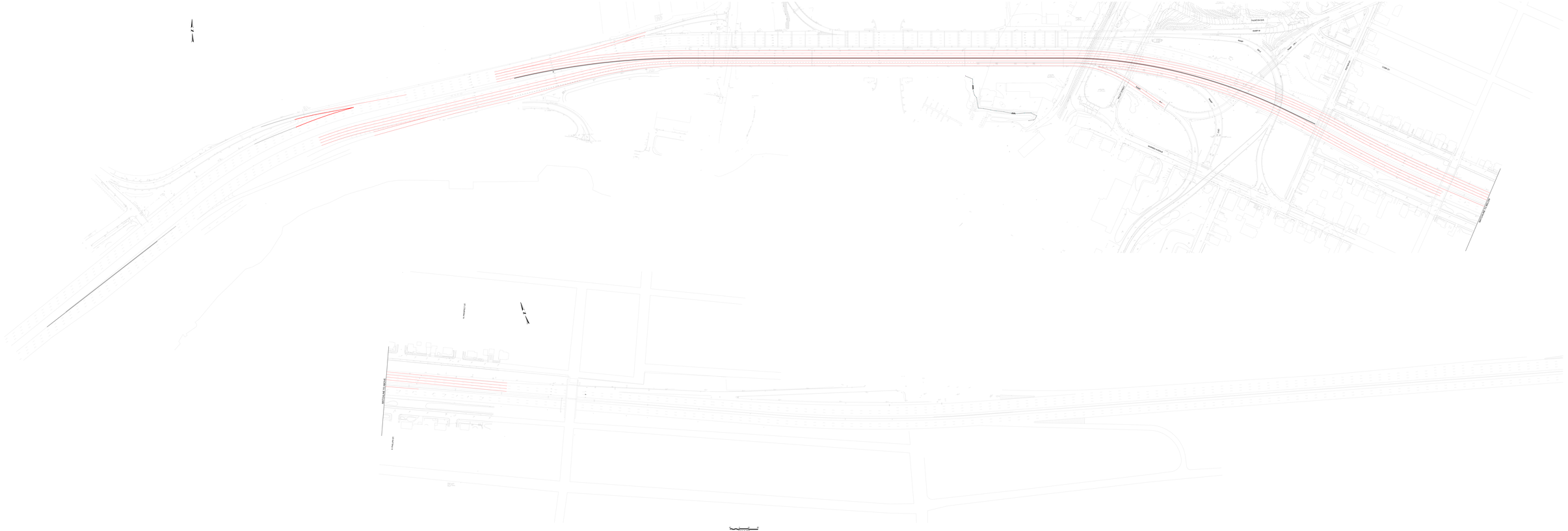
LR = Load Rating Gov. = Governing

Please check the following items that apply:

✓	Bridge load rating is not governed by deck rating
	Bridge load rating is not governed by substructure rating
✓	Connections do not control the load rating
	Exterior girder controls the load rating
	Bridge plans do not exist
	Load rating based on Inventory Inspection (baseline load rating)
	Load test performed
	Refined analysis performed
	Material testing performed
	Bridge has infinite fatigue life
	Bridge has finite fatigue life ; Fatigue Serviceability Index is [ ]
	Flag for bearing/web crippling/web yielding check per RIBLRG Section 6.4.1.2
	Traffic restriction; reported rating factors for unrestricted portion

Appendix:

Traffic Configuration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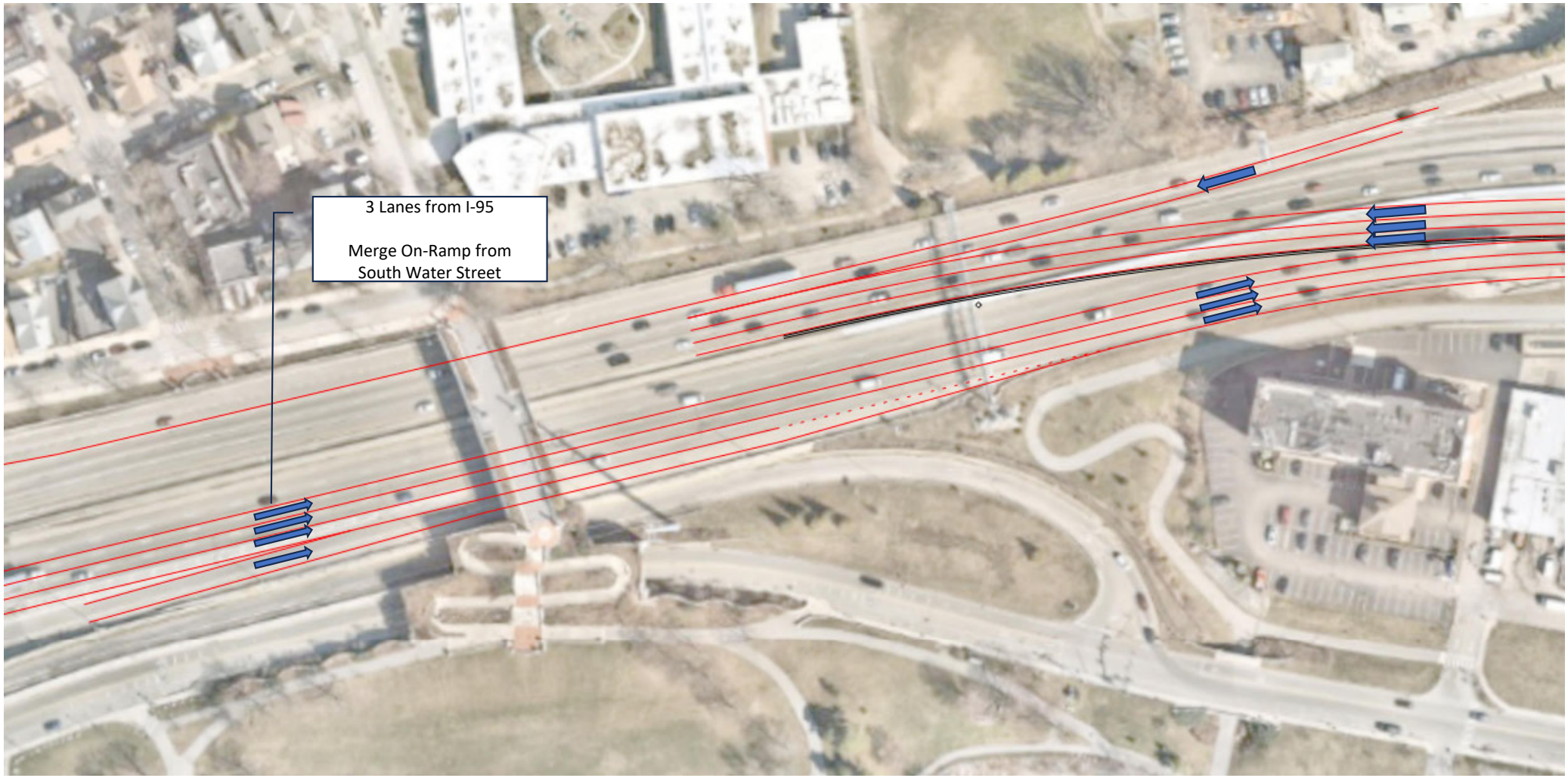
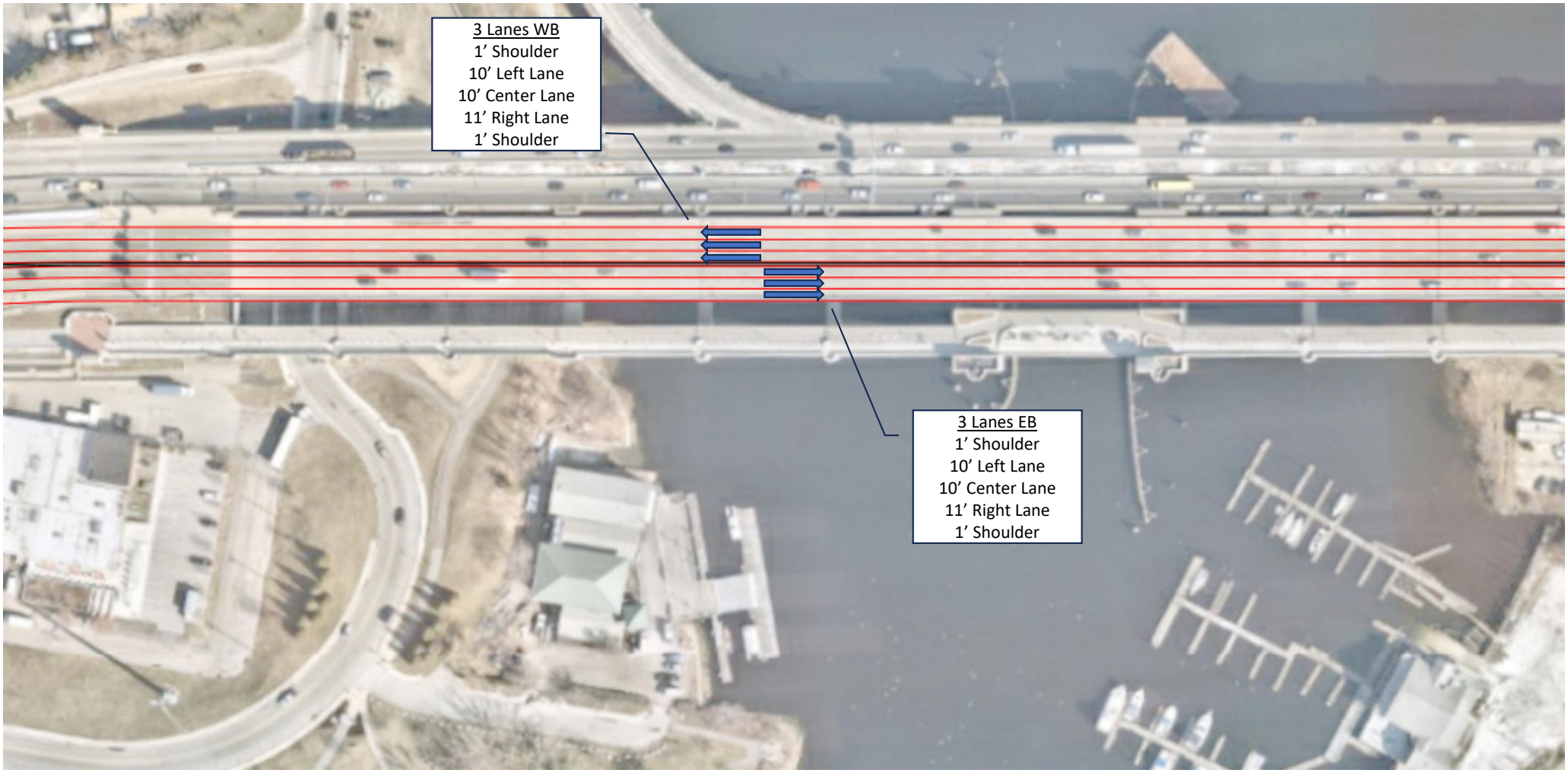
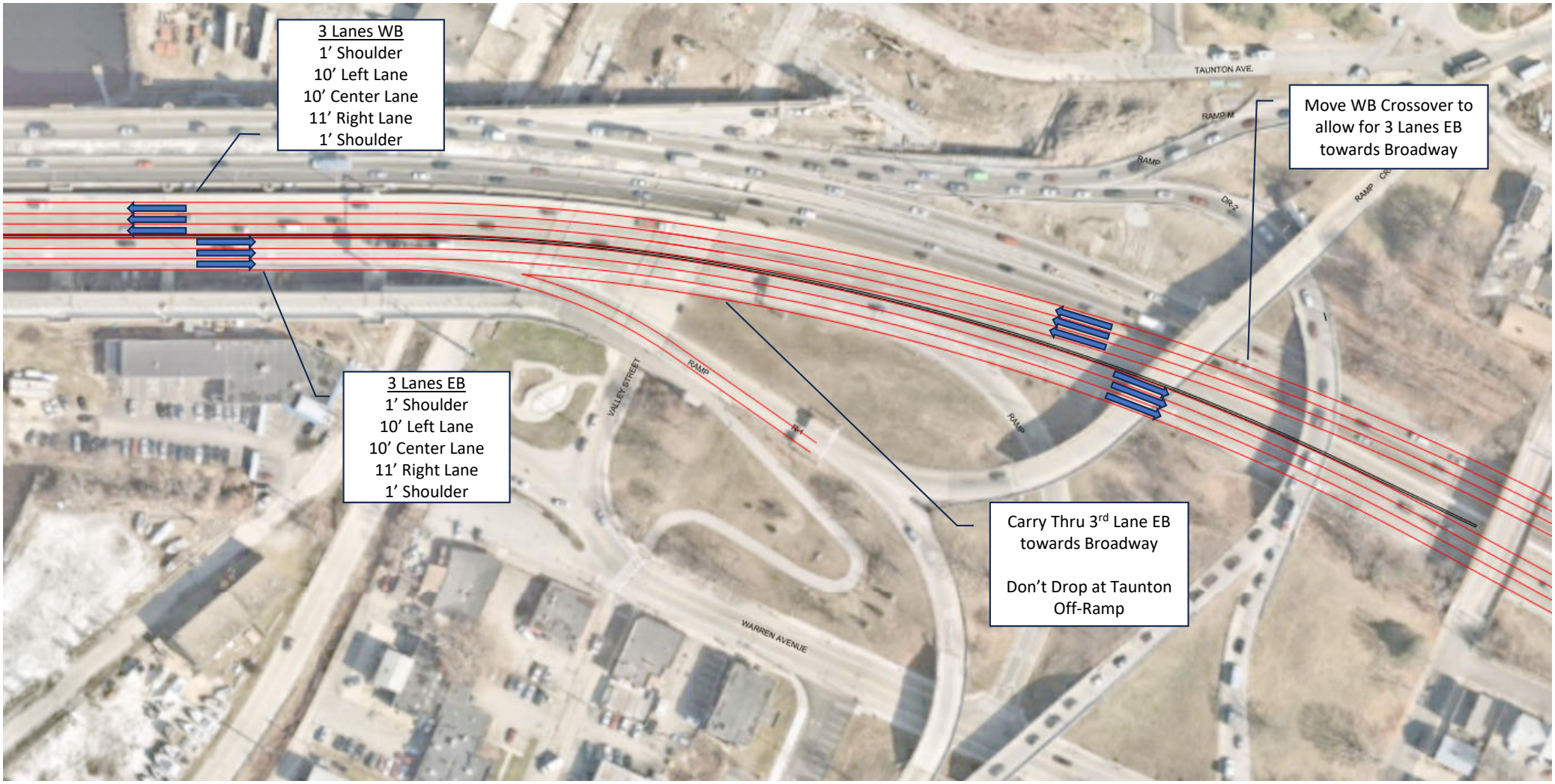

3 Lanes from I-95
Merge On-Ramp from
South Water Street


3 Lanes WB
1’ Shoulder
10’ Left Lane
10’ Center Lane
11’ Right Lane
1’ Shoulder
3 Lanes EB
1’ Shoulder
10’ Left Lane
10’ Center Lane
11’ Right Lane
1’ Shoulder


3 Lanes WB
1' Shoulder
10' Left Lane
10' Center Lane
11' Right Lane
1' Shoulder
3 Lanes EB
1' Shoulder
10' Left Lane
10' Center Lane
11' Right Lane
1' Shoulder
Move WB Crossover to allow for 3 Lanes EB towards Broadway
Carry Thru 3rd Lane EB towards Broadway
Don't Drop at Taunton Off-Ramp
TAUNTON AVE.
RAMP M
RAMP
DR-2
RAMP
VALLEY STREET
RAMP
RAMP
WARREN AVENUE

PIER CAP SUMMARY OF BRIDGE RATING

SUBSTRUCTURE ONLY

VEHICLE TYPE		Strength RF	Service RF	Tons
HL-93	INV	0.42	NA	NA
	OPER	0.54	NA	NA
H20		2.71	-	54.3
TYPE 3		2.18	-	54.4
TYPE 3S2		1.53	-	55.0
TYPE 3-3		1.39	-	55.5
SU 4		2.01	-	54.3
SU 5		1.76	-	54.4
SU 6		1.57	-	54.4
SU 7		1.41	-	54.5
EV2		2.11	-	60.7
EV3		1.41	-	60.7
RI-3		1.60	-	60.6
RI-4		1.62	-	60.6
RI-5		1.16	-	60.9
RI-5B		0.97	-	60.7
RI-6		0.92	-	60.0
RI-OP1		1.23	-	69.6
RI-OP2		0.90	-	72.3
RI-OP3		0.67	-	75.7
RI-OP4		0.83	-	70.1
RI-OP5		1.03	-	72.1
Fatigue		N/A		
RIPTA		2.63	-	54.6

Gray shaded vehicles types considered legal loads.

*Controlling fatigue location only. Other locations not reported in this load rating.

LRFR Evaluation Factors	
Surface Roughness Rating :	2
Gov. Condition Factor, ϕ_c :	1.00
System Factor, ϕ_s :	1.00
ADTT (One-Way) :	8640

Posting Analysis	
Posting Recommendation	NO
Gov. Legal Rating Factor :	1.39
Gov.Legal Load Model :	TYPE 3-3

QA/QC	
Analysis By:	Pappu Baniya
Independent Reviewer:	Aslam Siddiqui
QA By:	Damian Silverstrim
LR Date:	2/22/2024

LR = Load Rating Gov. = Governing

BREAKDOWN OF BRIDGE RATING

Pier Caps

LRFR RATING LOAD (LEGAL LOADS)

BRIDGE COMPONENT	HL-93 DESIGN LOAD		LEGAL LOAD (TONS / RATING FACTOR) *The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.*										
	INV	OPR	H20	TYPE 3	TYPE 3S2	TYPE 3-3	SU4	SU5	SU6	SU7	EV2	EV3	RI-PTA
Pier Cap 1 Strength I , Flexure	*0.65*	*0.85*	*3.32*	*2.67*	*1.91*	*1.75*	*2.47*	*2.15*	*1.92*	*1.73*	*2.59*	*1.73*	*3.24*
			66.4	66.8	68.6	70.0	66.6	66.8	66.8	67.0	74.4	74.5	67.5
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 1 Strength I , Shear	*0.90*	*1.17*	*4.57*	*3.68*	*2.63*	*2.41*	*3.40*	*2.97*	*2.65*	*2.38*	*3.57*	*2.39*	*4.47*
			91.5	92.1	94.6	96.5	91.8	92.0	92.1	92.3	102.6	102.7	93.0
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 2, 5, 8, 11, 12 Strength I , Flexure	*1.20*	*1.56*	*7.13*	*5.73*	*4.04*	*3.69*	*5.29*	*4.62*	*4.12*	*3.70*	*5.55*	*3.71*	*6.92*
			142.6	143.2	145.5	147.4	142.9	143.1	143.3	143.4	159.6	159.7	143.9
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap Pier Cap 2, 5, 8, 11, 12 Strength I , Shear	*1.09*	*1.42*	*6.49*	*5.22*	*3.68*	*3.36*	*4.82*	*4.20*	*3.75*	*3.37*	*5.05*	*3.38*	*6.30*
			129.8	130.4	132.5	134.2	130.1	130.3	130.4	130.6	145.3	145.4	131.0
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 3, 10, 13 Strength I , Flexure	*0.91*	*1.18*	*5.90*	*4.73*	*3.32*	*3.02*	*4.37*	*3.82*	*3.41*	*3.06*	*4.59*	*3.07*	*5.71*
			117.9	118.3	119.6	120.7	118.1	118.3	118.3	118.4	131.8	131.9	118.7
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L

Notes: = **Controlling Rating Factor**

= **Below Statutory Rating Factor**

BREAKDOWN OF BRIDGE RATING (CONT)

Pier Caps

LRFR RATING LOAD (LEGAL LOADS)

BRIDGE COMPONENT	HL-93 DESIGN LOAD		LEGAL LOAD (TONS / RATING FACTOR) *The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.*										
	INV	OPR	H20	TYPE 3	TYPE 3S2	TYPE 3-3	SU4	SU5	SU6	SU7	EV2	EV3	RI-PTA
Pier Cap 3, 10, 13 Strength I, Shear	***0.42***	***0.54***	***2.71***	***2.18***	***1.53***	***1.39***	***2.01***	***1.76***	***1.57***	***1.41***	***2.11***	***1.41***	***2.63***
			54.3	54.4	55.0	55.5	54.3	54.4	54.4	54.5	60.7	60.7	54.6
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 6, 7 Strength I, Flexure	***1.01***	***1.31***	***6.30***	***5.06***	***3.56***	***3.24***	***4.67***	***4.08***	***3.64***	***3.27***	***4.90***	***3.28***	***6.11***
			125.9	126.4	128.3	129.7	126.2	126.4	126.5	126.6	140.9	140.9	127.2
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 6, 7 Strength I, Shear	***0.72***	***0.93***	***4.49***	***3.60***	***2.54***	***2.31***	***3.33***	***2.90***	***2.59***	***2.33***	***3.49***	***2.34***	***4.36***
			89.7	90.1	91.4	92.4	89.9	90.1	90.1	90.2	100.4	100.4	90.6
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 4, 9 Strength I, Flexure	***3.18***	***4.12***	***9.85***	***8.33***	***6.68***	***6.46***	***7.62***	***6.76***	***6.22***	***5.76***	***7.97***	***5.36***	***10.10***
			197.1	208.3	240.5	258.4	205.8	209.6	216.3	223.3	229.0	230.4	210.0
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 4, 9 Strength I, Shear	***2.92***	***3.78***	***9.03***	***7.63***	***6.12***	***5.92***	***6.99***	***6.20***	***5.70***	***5.28***	***7.30***	***4.91***	***9.25***
			180.6	190.9	220.3	236.8	188.6	192.1	198.2	204.6	209.9	211.1	192.5
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L

Notes:

= Controlling Rating Factor

= Below Statutory Rating Factor

BREAKDOWN OF BRIDGE RATING (CONT)

Pier Caps

LRFR RATING LOAD (RI PERMIT LOADS)

BRIDGE COMPONENT	PERMIT LOAD (TONS / RATING FACTOR)									
	The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.									
	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5
Pier Cap 1 Strength II , Flexure	***1.96***	***1.98***	***1.44***	***1.19***	***1.17***	***1.57***	***1.27***	***1.00***	***1.10***	***1.44***
	74.3	74.3	75.2	74.6	76.3	88.9	101.6	113.5	92.4	100.9
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 1 Strength II , Shear	***2.70***	***2.73***	***1.98***	***1.64***	***1.62***	***2.17***	***1.75***	***1.38***	***1.52***	***1.99***
	102.4	102.4	103.6	102.8	105.2	122.5	140.0	156.5	127.3	139.1
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 2, 5, 8, 11, 12 Strength II , Flexure	***4.20***	***4.25***	***3.07***	***2.56***	***2.46***	***3.29***	***2.61***	***1.98***	***2.27***	***2.96***
	159.4	159.3	160.6	159.8	159.8	185.7	208.9	223.6	190.4	207.4
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap Pier Cap 2, 5, 8, 11, 12 Strength II , Shear	***3.82***	***3.87***	***2.79***	***2.33***	***2.24***	***2.99***	***2.38***	***1.80***	***2.06***	***2.70***
	145.2	145.1	146.3	145.5	145.5	169.1	190.2	203.5	173.4	188.9
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 3, 10, 13 Strength II , Flexure	***3.47***	***3.51***	***2.53***	***2.11***	***2.00***	***2.68***	***1.96***	***1.46***	***1.81***	***2.24***
	131.8	131.7	132.4	132.0	130.3	151.3	157.2	164.5	152.3	156.8
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L

Notes: = **Controlling Rating Factor**

= **Below Statutory Rating Factor**

BREAKDOWN OF BRIDGE RATING (CONT)

Pier Caps

LRFR RATING LOAD (RI PERMIT LOADS)

BRIDGE COMPONENT	PERMIT LOAD (TONS / RATING FACTOR)									
	The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.									
	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5
Pier Cap 3, 10, 13 Strength II , Shear	***1.60***	***1.62***	***1.16***	***0.97***	***0.92***	***1.23***	***0.90***	***0.67***	***0.83***	***1.03***
	60.6	60.6	60.9	60.7	60.0	69.6	72.3	75.7	70.1	72.1
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 6, 7 Strength II , Flexure	***3.70***	***3.75***	***2.70***	***2.26***	***2.16***	***2.84***	***2.11***	***1.59***	***1.93***	***2.41***
	140.8	140.7	141.7	141.0	140.6	160.5	169.0	179.4	161.8	168.4
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 6, 7 Strength II , Shear	***2.64***	***2.67***	***1.93***	***1.61***	***1.54***	***2.02***	***1.51***	***1.13***	***1.37***	***1.71***
	100.3	100.3	101.0	100.5	100.2	114.4	120.4	127.9	115.3	120.0
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 4, 9 Strength II , Flexure	***6.00***	***6.20***	***4.80***	***3.89***	***4.17***	***4.97***	***4.44***	***4.00***	***3.57***	***5.08***
	228.0	232.3	251.5	243.4	270.8	280.7	355.1	452.5	300.2	355.3
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 4, 9 Strength II , Shear	***5.50***	***5.68***	***4.40***	***3.57***	***3.82***	***4.55***	***4.07***	***3.67***	***3.27***	***4.65***
	209.0	212.9	230.5	223.0	248.1	257.2	325.4	414.6	275.1	325.5
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L

Notes: = **Controlling Rating Factor**

= **Below Statutory Rating Factor**

Bridge Rating Results Report

Bridge ID	Vehicle	Rating level	Rating factor	Rating method	Capacity (Ton)	Time stamp	Rated by	Impact	Lane	Up to date	DB	Vehicle path
020001	EV2	Legal	1.938	LRFR	55.714	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	EV3	Legal	1.300	LRFR	55.913	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	H20	Legal	2.436	LRFR	48.711	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	HL-93 (US)	Inventory	0.685	LRFR	24.667	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	HL-93 (US)	Operating	0.888	LRFR	31.975	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	Lane-Type Legal Load	Legal	2.216	LRFR	88.623	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI 3	Permit	1.461	LRFR	55.529	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI 4	Permit	1.497	LRFR	56.124	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI 5	Permit	1.131	LRFR	59.265	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI 5B	Permit	0.925	LRFR	57.828	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI 6	Permit	0.974	LRFR	63.314	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-OP1	Permit	1.576	LRFR	89.040	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-OP2	Permit	1.381	LRFR	110.508	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-OP3	Permit	1.269	LRFR	143.437	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-OP4	Permit	1.115	LRFR	93.688	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-OP5	Permit	1.574	LRFR	110.186	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	RI-PTA	Legal	2.444	LRFR	50.832	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	SU4	Legal	1.851	LRFR	49.974	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	SU5	Legal	1.631	LRFR	50.560	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	SU6	Legal	1.484	LRFR	51.569	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	SU7	Legal	1.359	LRFR	52.669	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	Type 3	Legal	2.016	LRFR	50.396	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	Type 3-3	Legal	1.490	LRFR	59.593	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	
020001	Type 3S2	Legal	1.554	LRFR	55.957	Thursday, Febr...	virtis	As Requested	As Requested	☑	☐	

AI Engineers				Bridge:		020001					Prepared by:		PB	
											Date:		02/2024	
				Subject:		All Reactions					Checked by:		BP	
											Date:		02/2024	
Span	**Member**	**Support**	**DC**	**DW**	**HL-93**	**HL-93**	**Type 3**	**Type 3S2**	**Type 3-3**	**SU4**	**SU5**	**SU6**	**SU7**	**H20**
1 to 4	G1 1-4	1	55.42	0	66.75	66.75	32.3	39.19	39.92	35.38	39.77	42.94	46.08	27.58
1 to 4	G10 1-4	1	57.41	0	64.61	64.61	31.27	37.93	38.64	34.25	38.5	41.57	44.61	26.7
1 to 4	G2 1-4	1	46.84	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G3 1-4	1	47.41	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G4 1-4	1	47.41	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G5 1-4	1	54.34	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G6 1-4	1	54.34	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G7 1-4	1	47.41	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G8 1-4	1	47.41	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G9 1-4	1	46.84	0	85.85	85.85	41.55	50.41	51.34	45.51	51.15	55.24	59.28	35.47
1 to 4	G1 1-4	2	170.73	0	120.22	120.22	35.4	49.66	54.08	38.37	43.93	49.2	54.75	28.52
1 to 4	G10 1-4	2	176.93	0	116.37	116.37	34.26	48.07	52.35	37.14	42.52	47.62	53	27.61
1 to 4	G2 1-4	2	142.89	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G3 1-4	2	143.83	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G4 1-4	2	143.83	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G5 1-4	2	164.93	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G6 1-4	2	164.93	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G7 1-4	2	143.83	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G8 1-4	2	143.83	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G9 1-4	2	142.89	0	154.37	154.37	45.57	63.92	69.57	49.4	56.57	63.34	70.5	36.72
1 to 4	G1 1-4	3	133.44	0	115.41	115.41	35.27	49.24	53.45	38.25	43.74	48.98	54.51	28.42
1 to 4	G10 1-4	3	138.32	0	111.71	111.71	34.14	47.67	51.74	37.02	42.34	47.41	52.77	27.51
1 to 4	G2 1-4	3	110.92	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G3 1-4	3	111.78	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G4 1-4	3	111.78	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G5 1-4	3	128.81	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G6 1-4	3	128.81	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G7 1-4	3	111.78	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G8 1-4	3	111.78	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G9 1-4	3	110.92	0	148.36	148.36	45.36	63.33	68.74	49.19	56.26	62.98	70.1	36.55
1 to 4	G1 1-4	4	206.63	0	131.61	131.61	35.85	50.55	55.23	38.83	44.48	49.82	55.47	28.84
1 to 4	G10 1-4	4	213.91	0	127.39	127.39	34.7	48.93	53.46	37.58	43.05	48.22	53.69	27.91
1 to 4	G2 1-4	4	174.27	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G3 1-4	4	175.36	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G4 1-4	4	175.36	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G5 1-4	4	199.87	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G6 1-4	4	199.87	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G7 1-4	4	175.36	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G8 1-4	4	175.36	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G9 1-4	4	174.27	0	169.21	169.21	46.1	64.99	71.01	49.92	57.19	64.05	71.32	37.08
1 to 4	G1 1-4	5	73.29	0	71.76	71.76	32.98	41.53	43.12	36.02	40.67	44.27	47.9	27.79
1 to 4	G10 1-4	5	75.85	0	69.46	69.46	31.93	40.2	41.74	34.87	39.36	42.85	46.37	26.9
1 to 4	G2 1-4	5	61.8	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G3 1-4	5	62.41	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G4 1-4	5	62.41	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G5 1-4	5	71.35	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G6 1-4	5	71.35	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G7 1-4	5	62.41	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G8 1-4	5	62.41	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
1 to 4	G9 1-4	5	61.8	0	92.3	92.3	42.42	53.42	55.47	46.33	52.3	56.93	61.61	35.74
10 to 14	G1	1	74.49	0	69.14	69.14	31.87	40.02	41.5	34.82	39.29	42.74	46.22	26.88
10 to 14	G10	1	74.16	0	69.11	69.11	31.88	40.02	41.5	34.82	39.3	42.75	46.23	26.88
10 to 14	G2	1	62.87	0	91.86	91.86	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G3	1	63.47	0	91.85	91.85	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G4	1	63.45	0	91.85	91.85	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G5	1	72.4	0	91.84	91.84	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G6	1	72.38	0	91.84	91.84	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G7	1	63.4	0	91.83	91.83	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G8	1	63.39	0	91.82	91.82	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G9	1	62.76	0	91.82	91.82	42.35	53.17	55.14	46.26	52.21	56.79	61.42	35.71
10 to 14	G1	2	204.83	0	127.82	127.82	34.91	49.22	53.79	37.8	43.29	48.49	54.01	28.07
10 to 14	G10	2	202.6	0	127.82	127.82	34.91	49.23	53.79	37.81	43.3	48.5	54.02	28.08
10 to 14	G2	2	172.56	0	169.8	169.8	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G3	2	173.69	0	169.8	169.8	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G4	2	173.79	0	169.79	169.79	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G5	2	198.11	0	169.79	169.79	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G6	2	198.22	0	169.79	169.79	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G7	2	174.1	0	169.79	169.79	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G8	2	174.19	0	169.78	169.78	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G9	2	173.26	0	169.78	169.78	46.38	65.39	71.45	50.22	57.51	64.42	71.75	37.3
10 to 14	G1	3	152.51	0	114.43	114.43	34.12	47.65	51.72	36.99	42.31	47.37	52.73	27.5
10 to 14	G10	3	155.29	0	113.47	113.47	34.12	47.65	51.72	36.99	42.31	47.37	52.73	27.5
10 to 14	G2	3	126.93	0	151.88	151.88	45.33	63.31	68.72	49.14	56.21	62.93	70.06	36.53

AI Engineers			Bridge:		020001							Prepared by:		PB	
												Date:		02/2024	
			Subject:		All Reactions							Checked by:		BP	
												Date:		02/2024	
Span	**Member**	**Support**	**Type EV2**	**Type EV3**	**RI 3**	**RI 4**	**RI 5**	**RI 5B**	**RI 6**	**RI-OP1**	**RI-OP2**	**RI-OP3**	**RI-OP4**	**RI-OP5**	**RI-PTA**
1 to 4	G1 1-4	1	37.78	56.12	50.2	48.45	61.6	76.43	66.91	51.8	55.33	58.64	71.07	48.37	26.62
1 to 4	G10 1-4	1	36.57	54.32	48.59	46.9	59.63	73.98	64.77	51.8	55.33	58.64	71.07	48.37	25.76
1 to 4	G2 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G3 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G4 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G5 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G6 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G7 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G8 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G9 1-4	1	48.59	72.18	64.56	62.32	79.24	98.31	86.06	62.06	66.28	70.25	85.15	57.94	34.23
1 to 4	G1 1-4	2	40.76	60.92	53.95	53.3	73.55	88.47	86.58	70.35	87.18	110.18	100.68	76.76	29.17
1 to 4	G10 1-4	2	39.46	58.97	52.22	51.59	71.19	85.63	83.81	70.35	87.18	110.18	100.68	76.76	28.24
1 to 4	G2 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G3 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G4 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G5 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G6 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G7 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G8 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G9 1-4	2	52.54	78.49	69.53	68.59	94.72	113.91	111.41	83.82	104.36	131.71	120.41	91.91	37.59
1 to 4	G1 1-4	3	40.62	60.7	53.79	53.16	73.17	88.1	85.36	72.78	92.73	115.5	106.48	81.78	29.03
1 to 4	G10 1-4	3	39.32	58.76	52.07	51.46	70.83	85.28	82.62	72.78	92.73	115.5	106.48	81.78	28.1
1 to 4	G2 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G3 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G4 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G5 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G6 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G7 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G8 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G9 1-4	3	52.24	78.06	69.18	68.37	94.1	113.3	109.77	87.18	111.06	138.31	127.53	97.95	37.34
1 to 4	G1 1-4	4	41.3	61.7	54.65	53.97	74.64	89.62	88.72	74.04	97.34	125.83	108.87	85.63	29.64
1 to 4	G10 1-4	4	39.97	59.72	52.9	52.24	72.25	86.75	85.87	74.04	97.34	125.83	108.87	85.63	28.69
1 to 4	G2 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G3 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G4 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G5 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G6 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G7 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G8 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G9 1-4	4	53.1	79.33	70.27	69.39	95.98	115.23	114.06	88.68	116.56	150.68	130.38	102.54	38.11
1 to 4	G1 1-4	5	38.44	57.18	51.02	49.48	64.19	78.96	71.69	64.45	73.12	81.78	90	63.99	27.22
1 to 4	G10 1-4	5	37.21	55.35	49.38	47.89	62.13	76.43	69.39	64.45	73.12	81.78	90	63.99	26.35
1 to 4	G2 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G3 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G4 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G5 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G6 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G7 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G8 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
1 to 4	G9 1-4	5	49.44	73.54	65.62	63.63	82.56	101.56	92.22	77.21	87.62	97.99	107.82	76.67	35.01
10 to 14	G1	1	37.16	55.27	49.32	47.81	61.93	76.23	69.03	53.55	60.52	67.57	74.68	52.95	26.3
10 to 14	G10	1	37.16	55.27	49.32	47.81	61.94	76.24	69.04	53.6	60.57	67.63	74.75	53	26.31
10 to 14	G2	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G3	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G4	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G5	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G6	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G7	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G8	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G9	1	49.37	73.43	65.53	63.52	82.28	101.28	91.72	64.15	72.49	80.94	89.46	63.43	34.95
10 to 14	G1	2	40.17	60.08	53.19	52.52	72.64	87.25	86.41	67.83	90.37	117.18	99.75	79.51	28.82
10 to 14	G10	2	40.17	60.08	53.2	52.53	72.66	87.26	86.42	67.9	90.45	117.32	99.84	79.59	28.83
10 to 14	G2	2	53.36	79.81	70.66	69.77	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G3	2	53.36	79.81	70.66	69.77	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G4	2	53.36	79.81	70.66	69.77	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G5	2	53.36	79.81	70.66	69.77	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G6	2	53.36	79.81	70.66	69.78	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G7	2	53.36	79.81	70.66	69.78	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G8	2	53.36	79.81	70.66	69.78	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G9	2	53.36	79.81	70.66	69.78	96.5	115.9	114.79	81.25	108.23	140.35	119.48	95.23	38.29
10 to 14	G1	3	39.28	58.7	52.06	51.41	70.78	85.24	82.66	72.75	92.74	115.74	106.4	81.75	28.09
10 to 14	G10	3	39.29	58.7	52.06	51.42	70.79	85.25	82.66	72.81	92.81	115.82	106.5	81.81	28.09
10 to 14	G2	3	52.2	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.09	138.64	127.45	97.92	37.32

AI Engineers				Bridge:		020001					Prepared by:		PB	
											Date:		02/2024	
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											Date:		02/2024	
Span	**Member**	**Support**	**DC**	**DW**	**HL-93**	**HL-93**	**Type 3**	**Type 3S2**	**Type 3-3**	**SU4**	**SU5**	**SU6**	**SU7**	**H20**
10 to 14	G3	3	127.34	0	151.71	151.71	45.33	63.31	68.72	49.14	56.21	62.93	70.06	36.53
10 to 14	G4	3	126.93	0	151.55	151.55	45.33	63.31	68.72	49.14	56.21	62.93	70.06	36.53
10 to 14	G5	3	145.04	0	151.4	151.4	45.33	63.31	68.72	49.14	56.21	62.93	70.06	36.53
10 to 14	G6	3	144.59	0	151.29	151.29	45.33	63.31	68.72	49.14	56.21	62.93	70.06	36.53
10 to 14	G7	3	125.76	0	151.14	151.14	45.33	63.31	68.71	49.14	56.21	62.93	70.06	36.53
10 to 14	G8	3	125.4	0	151	151	45.33	63.31	68.71	49.14	56.21	62.93	70.06	36.53
10 to 14	G9	3	124.22	0	150.86	150.86	45.33	63.31	68.71	49.14	56.21	62.93	70.06	36.53
10 to 14	G1	4	114.98	0	110.47	110.47	34.08	47.5	51.37	36.97	42.29	47.34	52.67	27.53
10 to 14	G10	4	88.82	0	109.9	109.9	34.11	47.48	51.34	36.98	42.3	47.36	52.69	27.54
10 to 14	G2	4	97.99	0	146.68	146.68	45.29	63.11	68.25	49.12	56.18	62.91	69.98	36.57
10 to 14	G3	4	100.6	0	146.59	146.59	45.29	63.1	68.24	49.12	56.19	62.91	69.98	36.58
10 to 14	G4	4	102.42	0	146.51	146.51	45.29	63.1	68.24	49.12	56.19	62.91	69.98	36.58
10 to 14	G5	4	119.49	0	146.42	146.42	45.29	63.09	68.23	49.12	56.19	62.91	69.98	36.58
10 to 14	G6	4	121.44	0	146.34	146.34	45.3	63.09	68.23	49.12	56.19	62.91	69.98	36.58
10 to 14	G7	4	107.55	0	146.25	146.25	45.3	63.08	68.22	49.13	56.19	62.92	69.99	36.59
10 to 14	G8	4	109.14	0	146.16	146.16	45.3	63.08	68.22	49.13	56.19	62.92	69.99	36.59
10 to 14	G9	4	109.9	0	146.06	146.06	45.31	63.08	68.21	49.13	56.2	62.92	69.99	36.59
10 to 14	G1	5	303.98	0	155.89	155.89	36.22	51.6	56.83	39.17	44.92	50.33	56.08	29.04
10 to 14	G10	5	332.47	0	141.74	141.74	35	49.75	54.72	37.86	43.42	48.65	54.19	28.09
10 to 14	G2	5	249.57	0	205.08	205.08	47.91	68.22	75.16	51.81	59.42	66.59	74.19	38.41
10 to 14	G3	5	246.46	0	202.9	202.9	47.71	67.92	74.81	51.6	59.17	66.3	73.88	38.26
10 to 14	G4	5	242.16	0	200.79	200.79	47.51	67.64	74.48	51.39	58.92	66.03	73.57	38.11
10 to 14	G5	5	269.09	0	198.36	198.36	47.33	67.36	74.16	51.19	58.7	65.76	73.27	37.95
10 to 14	G6	5	264.34	0	196.75	196.75	47.15	67.07	73.85	50.99	58.47	65.51	72.99	37.82
10 to 14	G7	5	229.59	0	194.67	194.67	46.98	66.78	73.53	50.81	58.24	65.27	72.72	37.67
10 to 14	G8	5	225.51	0	192.14	192.14	46.81	66.54	73.22	50.63	58.05	65.04	72.47	37.55
10 to 14	G9	5	220.36	0	190.18	190.18	46.64	66.3	72.95	50.46	57.85	64.83	72.22	37.42
10 to 14	G1	6	123.64	0	80.48	80.48	32.81	43.29	46.07	35.69	40.53	44.56	48.73	27.16
10 to 14	G10	6	142.03	0	79.65	79.65	34.85	44.63	46.93	37.94	42.94	46.8	50.87	29.1
10 to 14	G2	6	103.28	0	106.15	106.15	43.53	57.35	60.97	47.37	53.78	59.1	64.61	36.07
10 to 14	G3	6	102.09	0	105.44	105.44	43.5	57.21	60.77	47.34	53.73	59.04	64.51	36.06
10 to 14	G4	6	100.08	0	104.69	104.69	43.45	57.05	60.53	47.3	53.67	58.95	64.39	36.05
10 to 14	G5	6	110.7	0	103.93	103.93	43.4	56.87	60.29	47.25	53.6	58.85	64.26	36.03
10 to 14	G6	6	108.16	0	109.29	109.29	46.66	60.26	63.88	50.88	57.62	63.02	68.62	38.83
10 to 14	G7	6	93.55	0	108.45	108.45	46.58	60.04	63.58	50.69	57.4	62.65	68.2	38.79
10 to 14	G8	6	91.5	0	107.61	107.61	46.5	59.82	63.15	50.61	57.3	62.51	68.02	38.76
10 to 14	G9	6	88.66	0	106.76	106.76	46.42	59.58	62.74	50.53	57.2	62.37	67.83	38.72
5 to 9	G1 5-9	1	63.02	0	71.17	71.17	32.8	40.91	42.3	35.85	40.42	43.91	47.42	27.73
5 to 9	G10 5-9	1	63.15	0	68.96	68.96	31.78	39.64	40.98	34.73	39.16	42.54	45.94	26.86
5 to 9	G2 5-9	1	52.76	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G3 5-9	1	53.36	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G4 5-9	1	53.36	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G5 5-9	1	61.26	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G6 5-9	1	61.35	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G7 5-9	1	53.36	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G8 5-9	1	53.26	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G9 5-9	1	52.67	0	91.52	91.52	42.18	52.61	54.39	46.1	51.98	56.47	60.98	35.66
5 to 9	G1 5-9	2	216.93	0	140.33	140.33	35.52	50.33	55.22	38.45	44.07	49.36	54.97	28.55
5 to 9	G10 5-9	2	217.38	0	135.97	135.97	34.41	48.77	53.5	37.25	42.7	47.83	53.26	27.66
5 to 9	G2 5-9	2	182.31	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G3 5-9	2	183.42	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G4 5-9	2	183.42	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G5 5-9	2	209.61	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G6 5-9	2	209.46	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G7 5-9	2	183.42	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G8 5-9	2	183.57	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G9 5-9	2	182.46	0	180.46	180.46	45.67	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G1 5-9	3	236.89	0	147.23	147.23	35.57	50.45	55.44	38.48	44.11	49.42	55.04	28.56
5 to 9	G10 5-9	3	237.35	0	142.65	142.65	34.46	48.88	53.72	37.28	42.74	47.88	53.33	27.68
5 to 9	G2 5-9	3	200.09	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G3 5-9	3	201.25	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G4 5-9	3	201.25	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G5 5-9	3	228.68	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G6 5-9	3	228.74	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G7 5-9	3	201.25	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G8 5-9	3	201.19	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G9 5-9	3	200.03	0	189.33	189.33	45.74	64.87	71.3	49.48	56.72	63.55	70.78	36.73
5 to 9	G1 5-9	4	237.16	0	147.27	147.27	35.56	50.44	55.45	38.47	44.11	49.41	55.04	28.56
5 to 9	G10 5-9	4	237.62	0	142.69	142.69	34.46	48.87	53.72	37.28	42.74	47.87	53.32	27.67
5 to 9	G2 5-9	4	200.34	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G3 5-9	4	201.49	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G4 5-9	4	201.49	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G5 5-9	4	228.96	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73

AI Engineers			Bridge:		020001							Prepared by:		PB	
												Date:		02/2024	
			Subject:		All Reactions							Checked by:		BP	
												Date:		02/2024	
Span	**Member**	**Support**	**Type EV2**	**Type EV3**	**RI 3**	**RI 4**	**RI 5**	**RI 5B**	**RI 6**	**RI-OP1**	**RI-OP2**	**RI-OP3**	**RI-OP4**	**RI-OP5**	**RI-PTA**
10 to 14	G3	3	52.2	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.09	138.63	127.45	97.92	37.32
10 to 14	G4	3	52.2	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.08	138.63	127.45	97.92	37.32
10 to 14	G5	3	52.2	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.08	138.62	127.45	97.92	37.32
10 to 14	G6	3	52.2	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.08	138.62	127.45	97.92	37.32
10 to 14	G7	3	52.19	77.99	69.17	68.31	94.04	113.25	109.82	87.14	111.08	138.62	127.45	97.91	37.31
10 to 14	G8	3	52.19	77.99	69.17	68.31	94.04	113.25	109.82	87.13	111.08	138.61	127.45	97.91	37.31
10 to 14	G9	3	52.19	77.99	69.17	68.31	94.04	113.25	109.81	87.13	111.07	138.61	127.45	97.91	37.31
10 to 14	G1	4	39.25	58.7	52.04	51.38	70.64	85.16	81.97	72.67	91.64	113.4	106.22	80.86	28.01
10 to 14	G10	4	39.26	58.73	52.05	51.4	70.64	85.16	81.85	72.74	91.53	113.03	106.31	80.77	28
10 to 14	G2	4	52.15	78	69.14	68.27	93.85	113.14	108.89	87.05	109.74	135.76	127.23	96.83	37.21
10 to 14	G3	4	52.15	78	69.14	68.27	93.84	113.14	108.87	87.05	109.71	135.7	127.23	96.81	37.21
10 to 14	G4	4	52.16	78.01	69.14	68.27	93.84	113.14	108.85	87.05	109.69	135.64	127.23	96.79	37.2
10 to 14	G5	4	52.16	78.01	69.14	68.27	93.84	113.14	108.83	87.05	109.66	135.58	127.23	96.77	37.2
10 to 14	G6	4	52.16	78.01	69.15	68.28	93.84	113.14	108.81	87.05	109.63	135.51	127.23	96.75	37.2
10 to 14	G7	4	52.16	78.02	69.15	68.28	93.84	113.14	108.79	87.05	109.61	135.45	127.23	96.72	37.2
10 to 14	G8	4	52.16	78.02	69.15	68.28	93.84	113.14	108.77	87.05	109.58	135.38	127.23	96.7	37.2
10 to 14	G9	4	52.16	78.02	69.15	68.28	93.84	113.14	108.75	87.05	109.55	135.31	127.22	96.68	37.19
10 to 14	G1	5	41.68	62.32	55.12	54.41	75.66	90.5	91.84	77.28	105.43	142.27	114.25	92.47	30.02
10 to 14	G10	5	40.29	60.22	53.29	52.6	73.05	87.49	88.23	74.76	101.02	134.48	110.38	88.67	28.99
10 to 14	G2	5	55.15	82.43	72.93	71.98	100.07	119.76	121.42	92.18	125.64	169.33	136.22	110.22	39.72
10 to 14	G3	5	54.91	82.09	72.62	71.68	99.64	119.25	120.79	91.79	124.98	168.21	135.63	109.66	39.54
10 to 14	G4	5	54.68	81.75	72.31	71.4	99.22	118.77	120.25	91.42	124.36	167.13	135.08	109.12	39.37
10 to 14	G5	5	54.47	81.42	72.04	71.11	98.8	118.3	119.71	91.04	123.76	166.06	134.51	108.6	39.2
10 to 14	G6	5	54.25	81.12	71.76	70.84	98.42	117.83	119.17	90.69	123.16	165.03	133.96	108.09	39.06
10 to 14	G7	5	54.06	80.79	71.49	70.58	98.04	117.37	118.65	90.33	122.57	163.98	133.45	107.57	38.92
10 to 14	G8	5	53.88	80.54	71.26	70.33	97.69	116.96	118.16	90.03	121.99	162.93	132.94	107.05	38.77
10 to 14	G9	5	53.7	80.27	71.03	70.08	97.35	116.58	117.66	89.72	121.41	161.88	132.49	106.56	38.64
10 to 14	G1	6	38.06	56.72	50.44	49.21	65.51	79.72	75.89	67.52	82.89	100.87	96.41	72.57	27.15
10 to 14	G10	6	40.45	60.35	53.77	52.16	68.38	83.64	77.61	70.67	83.21	97.54	99.97	72.89	28.68
10 to 14	G2	6	50.52	75.28	66.96	65.3	86.84	105.72	100.48	80.71	98.81	119.87	115.15	86.51	36.03
10 to 14	G3	6	50.48	75.22	66.92	65.25	86.7	105.59	100.17	80.6	98.38	118.98	114.9	86.13	35.99
10 to 14	G4	6	50.44	75.15	66.86	65.18	86.52	105.42	99.82	80.46	97.9	118	114.59	85.71	35.95
10 to 14	G5	6	50.39	75.08	66.8	65.11	86.34	105.24	99.46	80.3	97.41	116.99	114.27	85.28	35.91
10 to 14	G6	6	54.1	80.77	71.91	69.83	92.27	112.58	105.18	85.52	102.51	121.9	121.49	89.67	38.58
10 to 14	G7	6	54.02	80.64	71.81	69.71	92.01	112.02	104.73	85.31	101.71	120.77	121.07	89.15	38.52
10 to 14	G8	6	53.94	80.51	71.71	69.59	91.75	111.76	104.17	85.09	101.11	119.39	120.64	88.61	38.27
10 to 14	G9	6	53.86	80.38	71.6	69.47	91.2	111.49	103.69	84.87	100.48	118.1	120.2	87.88	38.2
5 to 9	G1 5-9	1	38.26	56.89	50.79	49.2	63.5	78.28	70.46	53.18	59.53	66.01	73.94	52.07	27.06
5 to 9	G10 5-9	1	37.07	55.12	49.21	47.67	61.52	75.84	68.27	53.66	60.07	66.6	74.61	52.54	26.22
5 to 9	G2 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G3 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G4 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G5 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G6 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G7 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G8 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G9 5-9	1	49.2	73.16	65.32	63.26	81.66	100.66	90.61	63.72	71.33	79.09	88.6	62.39	34.8
5 to 9	G1 5-9	2	40.89	61.12	54.1	53.42	74.04	88.75	88.89	71.84	90.42	119.35	104.15	79.68	29.41
5 to 9	G10 5-9	2	39.61	59.22	52.41	51.75	71.74	85.99	86.13	72.48	91.24	120.43	105.09	80.4	28.5
5 to 9	G2 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G3 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G4 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G5 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G6 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G7 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G8 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G9 5-9	2	52.58	78.6	69.57	68.69	95.22	114.14	114.31	86.07	108.34	143	124.78	95.46	37.82
5 to 9	G1 5-9	3	40.93	61.21	54.15	53.46	74.18	88.9	89.29	73.44	98.75	131.38	108.34	86.74	29.42
5 to 9	G10 5-9	3	39.66	59.3	52.46	51.79	71.87	86.13	86.51	74.1	99.64	132.56	109.31	87.52	28.51
5 to 9	G2 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G3 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G4 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G5 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G6 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G7 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G8 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G9 5-9	3	52.63	78.71	69.63	68.74	95.39	114.32	114.82	88	118.32	157.41	129.8	103.93	37.83
5 to 9	G1 5-9	4	40.92	61.2	54.14	53.45	74.17	88.88	89.3	73.43	98.76	131.39	108.33	86.73	29.41
5 to 9	G10 5-9	4	39.65	59.29	52.45	51.78	71.86	86.11	86.52	74.09	99.65	132.57	109.31	87.51	28.5
5 to 9	G2 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G3 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G4 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G5 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	All Reactions	Checked by:	BP
			Date:	02/2024

Span	Member	Support	DC	DW	HL-93	HL-93	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
5 to 9	G6 5-9	4	229	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G7 5-9	4	201.49	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G8 5-9	4	201.45	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G9 5-9	4	200.29	0	189.39	189.39	45.73	64.87	71.3	49.47	56.72	63.54	70.77	36.73
5 to 9	G1 5-9	5	216.29	0	140.25	140.25	35.52	50.33	55.22	38.45	44.08	49.36	54.98	28.55
5 to 9	G10 5-9	5	216.74	0	135.89	135.89	34.42	48.77	53.5	37.25	42.71	47.83	53.27	27.66
5 to 9	G2 5-9	5	181.69	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G3 5-9	5	182.41	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G4 5-9	5	182.41	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G5 5-9	5	208.56	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G6 5-9	5	208.42	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G7 5-9	5	182.41	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G8 5-9	5	182.54	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G9 5-9	5	181.83	0	180.37	180.37	45.68	64.73	71.01	49.44	56.68	63.48	70.7	36.71
5 to 9	G1 5-9	6	63.59	0	71.16	71.16	32.8	40.91	42.29	35.85	40.42	43.91	47.42	27.73
5 to 9	G10 5-9	6	63.72	0	68.94	68.94	31.78	39.64	40.98	34.73	39.16	42.54	45.94	26.86
5 to 9	G2 5-9	6	53.33	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G3 5-9	6	53.52	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G4 5-9	6	53.52	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G5 5-9	6	61.44	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G6 5-9	6	61.53	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G7 5-9	6	53.52	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G8 5-9	6	53.44	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66
5 to 9	G9 5-9	6	53.24	0	91.5	91.5	42.18	52.61	54.39	46.1	51.98	56.47	60.97	35.66

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	All Reactions	Checked by:	BP
			Date:	02/2024

Span	Member	Support	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
5 to 9	G6 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G7 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G8 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G9 5-9	4	52.62	78.69	69.62	68.73	95.37	114.29	114.83	87.98	118.33	157.43	129.8	103.92	37.82
5 to 9	G1 5-9	5	40.89	61.13	54.1	53.42	74.05	88.79	88.89	73.36	98.13	129.39	108.14	86.22	29.41
5 to 9	G10 5-9	5	39.62	59.23	52.42	51.76	71.74	86.02	86.12	74.02	99.01	130.56	109.11	87	28.5
5 to 9	G2 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G3 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G4 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G5 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G6 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G7 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G8 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G9 5-9	5	52.58	78.61	69.57	68.69	95.22	114.17	114.31	87.9	117.58	155.04	129.57	103.31	37.82
5 to 9	G1 5-9	6	38.26	56.89	50.79	49.2	63.5	78.28	70.46	63.81	71.43	79.19	88.73	62.47	27.06
5 to 9	G10 5-9	6	37.07	55.12	49.21	47.67	61.52	75.84	68.27	64.39	72.07	79.9	89.53	63.04	26.22
5 to 9	G2 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G3 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G4 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G5 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G6 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G7 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G8 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8
5 to 9	G9 5-9	6	49.2	73.16	65.32	63.26	81.65	100.66	90.61	76.46	85.58	94.88	106.31	74.85	34.8

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
1	0	0	0	0	0	4577.21	99.00
1	0.63	0.63	-1.61	0	0	-4639.63	99.00
1	1.25	1.25	-6.45	0	0	-4700.54	99.00
1	1.88	1.88	-14.5	0	0	-4752.95	99.00
1	2.25	2.25	-20.88	0	0	-4778.79	99.00
1	2.5	2.5	-25.78	-42.68	-15.23	-4778.79	237.04
1	3.13	3.13	-40.28	-149.39	-53.31	-4778.79	65.53
1	3.75	3.75	-58.01	-256.1	-91.38	-4778.79	36.92
1	4.38	4.38	-78.95	-362.8	-129.46	-4778.79	25.11
1	5	5	-103.12	-469.51	-167.53	-4778.79	18.66
1	5.63	5.63	-130.52	-576.21	-205.61	-4778.79	14.57
1	6.25	6.25	-161.13	-682.92	-243.68	-4778.79	11.75
2	0	6.25	-161.13	-682.92	-243.68	-4778.79	11.75
2	3.33	9.58	231.22	430.91	337.75	8783.2	18.12
2	3.73	9.98	271.3	505.82	375.33	8783.2	16.01
2	7.45	13.7	589.26	1,218.27	732.7	8783.2	6.85
2	10.67	16.92	771.72	1,833.48	1,041.31	8783.2	4.08
2	11.18	17.43	792.74	1,857.60	1,050.18	8783.2	4.01
2	14.9	21.15	881.75	2,034.27	1,115.18	8783.2	3.54
2	18	24.25	868.55	2,181.30	1,169.28	8783.2	3.27
2	18.63	24.88	856.29	2,121.05	1,131.13	8783.2	3.44
2	22.35	28.6	716.35	1,761.96	903.75	8783.2	4.84
2	25.33	31.58	521.72	1,474.37	721.65	8783.2	6.70
2	26.08	32.33	461.94	1,280.55	618.16	8803.31	8.24
2	29.8	36.05	93.06	307.09	98.41	8841.35	65.20
2	32.67	38.92	-268.77	-442.05	-301.57	-7160.05	16.00
2	33.53	39.78	-390.3	-807.93	-488.71	-7160.05	8.91
2	37.25	43.5	-988.13	-2,395.74	-1,300.83	-7160.05	1.73
3	0	43.5	-988.13	-2,395.74	-1,300.83	-7160.05	1.73
3	2.03	45.53	-757.29	-1,797.37	-957.89	-7104.91	3.14
3	2.75	46.25	-682.87	-1,583.14	-835.11	-7034.79	3.87
3	4.05	47.55	-560.29	-1,385.98	-716.99	-7034.79	4.94
3	6.08	49.57	-397.11	-1,078.87	-532.99	-7034.79	7.49
3	8.1	51.6	-267.77	-771.75	-348.99	-7034.79	12.64
3	10.08	53.58	-173.87	-470.95	-168.78	-7034.79	28.39
3	10.13	53.63	-172.25	-470.63	-168.26	-6042.18	23.95
3	12.15	55.65	-110.57	-454.77	-143.2	-4577.21	20.79
3	14.18	57.68	-82.71	-438.91	-118.15	-4577.21	25.56

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
3	16.2	59.7	-88.68	-423.05	-93.09	-4577.21	32.54
3	17.42	60.92	-108.54	-413.52	-78.04	-4577.21	38.68
3	18.23	61.73	-128.49	-522.69	-131.48	-4577.21	22.02
3	20.25	63.75	-202.12	-796.19	-265.37	-4577.21	9.65
4	0	63.75	-202.12	-796.19	-265.37	-4577.21	9.65
4	0.7	64.45	-163.72	-672.33	-224.09	-4577.21	12.12
4	1.4	65.15	-129.36	-548.48	-182.81	-4577.21	15.69
4	2.1	65.85	-99.04	-424.63	-141.53	-4577.21	21.32
4	2.8	66.55	-72.76	-300.78	-100.25	-4577.21	31.54
4	3.5	67.25	-50.53	-176.93	-58.97	-4577.21	56.00
4	4.2	67.95	-32.34	-53.08	-17.69	-4577.21	194.39
4	4.5	68.25	-25.78	0	0	-4577.21	99.00
4	4.9	68.65	-18.19	0	0	-4577.21	99.00
4	5.6	69.35	-8.08	0	0	-4577.21	99.00
4	6.3	70.05	-2.02	0	0	-4577.21	99.00
4	7	70.75	0	0	0	-4577.21	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 1 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	Location	Distance	Shear From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Vr	RF
1	0	0	0	0	0	1122	99.00
1	0.63	0.63	-5.16	0	0	1220.3	99.00
1	1.25	1.25	-10.31	0	0	1244.8	99.00
1	1.88	1.88	-15.47	0	0	1270	99.00
1	2.25	2.25	-18.56	-170.73	-60.92	1293.2	13.34
1	2.5	2.5	-20.62	-170.73	-60.92	1296.7	13.35
1	3.13	3.13	-25.78	-170.73	-60.92	1324.6	13.62
1	3.75	3.75	-30.94	-170.73	-60.92	1320.5	13.49
2	3.33	9.58	103.95	191.26	95.94	1214	6.77
2	3.73	9.98	100.72	191.26	95.94	1384.9	8.18
2	7.45	13.7	69.99	191.26	95.94	1518.2	9.55
2	10.67	16.92	43.45	47.43	17.45	1351.9	54.59
2	11.18	17.43	39.26	47.43	17.45	1351.9	54.82
2	14.9	21.15	8.53	47.43	17.45	1286.7	53.64
2	18	24.25	-17.04	-96.4	-61.04	1286.7	14.43
2	18.63	24.88	-22.2	-96.4	-61.04	1286.7	14.35
2	22.35	28.6	-52.93	-96.4	-61.04	1286.7	13.86
2	25.33	31.58	-77.54	-261.33	-139.53	1348.5	5.10
2	26.08	32.33	-83.66	-261.33	-139.53	1383.9	5.25
2	29.8	36.05	-114.39	-261.33	-139.53	1547.5	5.94
2	32.67	38.92	-138.04	-426.26	-218.02	1391.1	2.42
2	33.53	39.78	-145.13	-426.26	-218.02	1391.1	2.39
3	2.75	46.25	99.66	151.66	90.86	1369.8	8.94
3	4.05	47.55	88.93	151.66	90.86	1463.6	9.84
3	6.08	49.57	72.23	151.66	90.86	1531.08	10.59
3	8.1	51.6	55.52	151.66	90.86	1509.1	10.58
3	10.08	53.58	39.16	7.83	12.37	1500.93	89.68
3	10.13	53.63	38.81	7.83	12.37	1501.61	89.75
3	12.15	55.65	22.11	7.83	12.37	-1571.65	95.41
3	14.18	57.68	5.4	7.83	12.37	-1572.38	96.75
3	16.2	59.7	-11.3	7.83	12.37	-1572.38	96.29
3	17.42	60.92	-21.34	-135.06	-66.12	-1474.24	14.88
4	2.8	66.55	34.65	176.93	58.97	1363.71	14.34
4	3.5	67.25	28.87	176.93	58.97	1422.46	15.20
4	4.2	67.95	23.1	176.93	58.97	1481.2	16.06
4	4.5	68.25	20.62	0	0	1539.95	99.00
4	4.9	68.65	17.32	0	0	1598.7	99.00
4	5.6	69.35	11.55	0	0	1611.04	99.00
4	6.3	70.05	5.77	0	0	1611.04	99.00
4	7	70.75	0	0	0	1611.04	99.00

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 2, 5, 8, 11, 12 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
1	0	0	0	0	0	4715.6	99.00
1	1.33	1.33	-7.24	0	0	-7034.79	99.00
1	2.25	2.25	-20.88	0	0	-7034.79	99.00
1	2.65	2.65	-28.97	-86.77	-24.45	-7034.79	216.77
1	3.98	3.97	-65.18	-374.2	-105.43	-7034.79	47.32
1	5.3	5.3	-115.87	-661.64	-186.42	-7034.79	25.02
1	6.63	6.63	-181.05	-949.07	-267.4	-7034.79	16.17
1	7.95	7.95	-260.71	-1236.5	-348.38	-7034.79	11.40
1	9.28	9.27	-354.85	-1523.93	-429.37	-7034.79	8.40
1	10.6	10.6	-463.48	-1811.37	-510.35	-7056.79	6.35
1	11.93	11.93	-586.6	-2098.8	-591.34	-7112.48	4.89
1	13.25	13.25	-724.19	-2386.23	-672.32	-7133.86	3.71
2	0	13.25	-724.19	-2386.23	-672.32	-7133.86	3.71
2	3.03	16.28	-359.8	-1130.77	-183.76	-7133.86	22.06
2	3.33	16.58	-326.9	-1002.81	-133.96	-7133.86	31.42
2	6.05	19.3	-70.9	-370.59	91.27	7468.67	58.30
2	9.08	22.32	142.51	333.38	342.06	7468.67	15.46
2	10.67	23.92	224.49	703.79	474.03	7419.21	10.16
2	12.1	25.35	280.43	774.44	480.20	7385.07	9.72
2	15.13	28.37	342.86	923.57	493.23	7385.07	9.05
2	18	31.25	332.22	1,065.30	505.61	7385.07	8.58
2	18.15	31.4	329.79	1,045.18	494.47	7401.51	8.84
2	21.18	34.42	241.23	639.46	269.74	7468.67	18.16
2	24.2	37.45	77.18	233.73	45	7468.67	121.03
2	25.33	38.58	-3.73	81.73	-39.2	7468.67	144.46
2	27.23	40.48	-162.37	-568.5	-328.42	-7133.86	14.57
2	30.25	43.5	-477.4	-1608.29	-790.92	-7133.86	4.40
3	0	43.5	-477.4	-1,608.29	-790.92	-7133.86	4.40
3	2.03	45.53	-297.64	-612.44	-358.58	-7089.4	12.77
3	2.42	45.92	-266.78	-419.82	-274.96	-7034.79	17.28
3	2.75	46.25	-241.5	-325.71	-229.99	-7034.79	21.16
3	4.05	47.55	-151.71	-197.14	-156.79	4715.6	21.00
3	6.08	49.57	-39.6	3.13	-42.78	4715.6	83.83
3	8.1	51.6	38.67	203.41	71.23	4715.6	47.66
3	10.08	53.58	82.54	399.56	182.9	4660.75	17.07
3	10.13	53.63	83.11	396.03	181.97	4577.21	16.82
3	12.15	55.65	93.72	224.58	136.82	4577.21	23.50
3	14.18	57.68	70.51	53.12	91.67	-4577.21	37.11

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 2, 5, 8, 11, 12 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Moment From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Mr**	**RF**
3	16.2	59.7	13.46	-118.33	46.51	-4577.21	72.98
3	17.42	60.92	-37.08	-221.34	19.39	-4577.21	168.77
3	18.23	61.73	-77.42	-437.27	-62.17	-4577.21	48.67
3	20.25	63.75	-202.12	-978.21	-266.49	-4577.21	8.95
4	0	63.75	-202.12	-978.21	-266.49	-4577.21	8.95
4	0.7	64.45	-163.72	-826.04	-225.04	-4577.21	11.42
4	1.4	65.15	-129.36	-673.88	-183.58	-4577.21	14.97
4	2.1	65.85	-99.04	-521.71	-142.13	-4577.21	20.57
4	2.8	66.55	-72.76	-369.55	-100.67	-4577.21	30.75
4	3.5	67.25	-50.53	-217.38	-59.22	-4577.21	55.11
4	4.2	67.95	-32.34	-65.21	-17.77	-4577.21	192.86
4	4.5	68.25	-25.78	0	0	-4577.21	99.00
4	4.9	68.65	-18.19	0	0	-4577.21	99.00
4	5.6	69.35	-8.08	0	0	-4577.21	99.00
4	6.3	70.05	-2.02	0	0	4577.21	99.00
4	7	70.75	0	0	0	4577.21	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 2, 5, 8, 11, 12 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	Location	Distance	Shear From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Vr	RF
1	0	0	0	0	0	-1132.74	99.00
1	1.33	1.33	-10.93	0	0	-1301.8	99.00
1	2.25	2.25	-18.56	-216.93	-61.12	-1301.8	12.68
1	2.65	2.65	-21.86	-216.93	-61.12	-1472.14	14.77
1	3.98	3.97	-32.79	-216.93	-61.12	-1572.21	15.86
1	5.3	5.3	-43.72	-216.93	-61.12	-1572.21	15.69
1	6.63	6.63	-54.66	-216.93	-61.12	-1572.21	15.51
1	7.95	7.95	-65.59	-216.93	-61.12	-1572.21	15.34
1	9.28	9.27	-76.52	-216.93	-61.12	-1572.21	15.17
1	10.6	10.6	-87.45	-216.93	-61.12	-1572.21	15.00
2	3.03	16.28	107.98	415.03	161.51	1363.72	3.38
2	3.33	16.58	105.44	232.72	82.91	1598.68	10.91
2	6.05	19.3	83.03	232.72	82.91	1507.71	10.33
2	9.08	22.32	58.07	232.72	82.91	1473.02	10.29
2	10.67	23.92	44.94	49.3	4.31	1377.78	224.88
2	12.1	25.35	33.11	49.3	4.31	1340.38	220.84
2	15.13	28.37	8.16	49.3	4.31	1299.35	219.08
2	18	31.25	-15.56	-134.12	-74.29	1373.86	12.29
2	18.15	31.4	-16.8	-134.12	-74.29	-1390.35	12.44
2	21.18	34.42	-41.75	-134.12	-74.29	-1506.5	13.32
2	24.2	37.45	-66.71	-134.12	-74.29	-1518.87	13.13
2	25.33	38.58	-76.06	-343.73	-152.89	-1595.9	5.39
2	27.23	40.48	-91.67	-343.73	-152.89	-1363.74	4.12
3	2.42	45.92	77.19	282.32	134.9	1245.19	4.54
3	2.75	46.25	74.44	98.9	56.3	1336.34	15.30
3	4.05	47.55	63.71	98.9	56.3	1414.79	16.55
3	6.08	49.57	47.01	98.9	56.3	1528.37	18.39
3	8.1	51.6	30.3	98.9	56.3	1534.53	18.76
3	10.08	53.58	13.94	-84.67	-22.3	1526.36	48.40
3	10.13	53.63	13.59	-84.67	-22.3	-1518.59	48.15
3	12.15	55.65	-3.11	-84.67	-22.3	-1572.38	50.45
3	14.18	57.68	-19.82	-84.67	-22.3	-1572.38	49.73
3	16.2	59.7	-36.52	-84.67	-22.3	-1623.67	50.78
3	17.42	60.92	-46.56	-267.13	-100.9	-1464.87	8.18
4	2.8	66.55	34.65	217.38	59.22	1307.5	12.89
4	3.5	67.25	28.87	217.38	59.22	1366.25	13.75
4	4.2	67.95	23.1	217.38	59.22	1424.99	14.61
4	4.5	68.25	20.62	0	0	1483.74	99.00
4	4.9	68.65	17.32	0	0	1568.91	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 2, 5, 8, 11, 12 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
4	5.6	69.35	11.55	0	0	1611.04	99.00
4	6.3	70.05	5.77	0	0	1611.04	99
4	7	70.75	0	0	0	1611.04	99

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
1	0	0	0	0	0	4749.58	99.00
1	1.33	1.33	-7.24	0	0	-7735.23	99.00
1	2.25	2.25	-20.88	0	0	-7735.23	99.00
1	2.65	2.65	-28.97	-121.59	-24.93	-7735.23	232.87
1	3.98	3.97	-65.18	-524.37	-107.5	-7735.23	50.08
1	5.3	5.3	-115.87	-927.14	-190.08	-7735.23	26.03
1	6.63	6.63	-181.05	-1329.91	-272.65	-7735.23	16.49
1	7.95	7.95	-260.71	-1732.69	-355.22	-7735.23	11.35
1	9.28	9.27	-354.85	-2135.46	-437.8	-7754.32	8.16
1	10.6	10.6	-463.48	-2538.23	-520.37	-7800.84	5.98
1	11.93	11.93	-586.6	-2941.01	-602.95	-7819.37	4.35
1	13.25	13.25	-724.19	-3343.78	-685.52	-7819.37	3.07
2	0	13.25	-724.19	-3343.78	-685.52	-7819.37	3.07
2	3.03	16.28	-359.8	-1623.02	-176.64	-7819.37	23.26
2	3.33	16.58	-326.9	-1447.63	-124.77	-7819.37	34.53
2	6.05	19.3	-70.9	-580.26	108.3	-7819.37	49.76
2	9.08	22.32	142.51	385.55	367.83	-7819.37	14.97
2	10.67	23.92	224.49	893.73	504.39	7424.12	9.19
2	12.1	25.35	280.43	998.10	509.70	7385.07	8.73
2	15.13	28.37	342.86	1,218.37	520.90	7385.07	8.02
2	18	31.25	332.22	1,427.71	531.55	7385.07	7.50
2	18.15	31.4	329.79	1,402.31	519.85	7468.01	7.85
2	21.18	34.42	241.23	890.04	283.76	7483.2	16.45
2	24.2	37.45	77.18	377.78	47.67	7483.2	111.58
2	25.33	38.58	-3.73	185.85	-40.78	7483.2	136.69
2	27.23	40.48	-162.37	-643.52	-342.44	-7819.37	15.30
2	30.25	43.5	-477.4	-1969.78	-824.82	-7819.37	4.44
3	0	43.5	-477.4	-1,969.78	-824.82	-7819.37	4.44
3	2.03	45.53	-297.64	-757.52	-378.76	-7819.37	13.20
3	2.42	45.92	-266.78	-523.05	-292.49	-7778.79	17.86
3	2.75	46.25	-241.5	-411.62	-246.11	-7735.23	21.63
3	4.05	47.55	-151.71	-275.48	-170.23	-7735.23	32.54
3	6.08	49.57	-39.6	-63.43	-52.05	-7735.23	112.41
3	8.1	51.6	38.67	148.62	66.14	-7735.23	87.24
3	10.08	53.58	82.54	356.31	181.9	-7735.23	30.39
3	10.13	53.63	83.11	351.27	180.97	-7735.23	30.57
3	12.15	55.65	93.72	106.67	136.07	-6936.41	37.80
3	14.18	57.68	70.51	-137.94	91.16	-4904.2	39.18

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
3	16.2	59.7	13.46	-382.55	46.25	-4577.21	67.90
3	17.42	60.92	-37.08	-529.51	19.27	-4577.21	154.44
3	18.23	61.73	-77.42	-805.28	-63.54	-4577.21	42.06
3	20.25	63.75	-202.12	-1496.12	-270.99	-4577.21	6.97
4	0	63.75	-202.12	-1496.12	-270.99	-4577.21	6.97
4	0.7	64.45	-163.72	-1263.39	-228.84	-4577.21	9.39
4	1.4	65.15	-129.36	-1030.66	-186.68	-4577.21	12.89
4	2.1	65.85	-99.04	-797.93	-144.53	-4577.21	18.39
4	2.8	66.55	-72.76	-565.2	-102.37	-4577.21	28.40
4	3.5	67.25	-50.53	-332.47	-60.22	-4577.21	52.35
4	4.2	67.95	-32.34	-99.74	-18.07	-4577.21	187.82
4	4.5	68.25	-25.78	0	0	-4577.21	99.00
4	4.9	68.65	-18.19	0	0	-4577.21	99.00
4	5.6	69.35	-8.08	0	0	-4577.21	99.00
4	6.3	70.05	-2.02	0	0	4577.21	99.00
4	7	70.75	0	0	0	-4577.21	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 3, 10, 13 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	Location	Distance	Shear From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Vr	RF
1	0	0	0	0	0	-2158.33	99.00
1	1.33	1.33	-10.93	0	0	-2284.36	99.00
1	2.25	2.25	-18.56	-303.98	-62.32	-1650.27	15.39
1	2.65	2.65	-21.86	-303.98	-62.32	-1650.27	15.34
1	3.98	3.97	-32.79	-303.98	-62.32	-1807.38	17.11
1	5.3	5.3	-43.72	-303.98	-62.32	-1892.56	18.00
1	6.63	6.63	-54.66	-303.98	-62.32	-1898.1	17.90
1	7.95	7.95	-65.59	-303.98	-62.32	-1898.1	17.73
1	9.28	9.27	-76.52	-303.98	-62.32	-1898.1	17.56
1	10.6	10.6	-87.45	-303.98	-62.32	-1898.1	17.39
2	3.03	16.28	107.98	568.85	168.22	1154.76	1.41
2	3.33	16.58	105.44	319.28	85.79	1733.22	10.78
2	6.05	19.3	83.03	319.28	85.79	1669.22	10.46
2	9.08	22.32	58.07	319.28	85.79	1645.01	10.52
2	10.67	23.92	44.94	72.82	3.7	2029.63	391.36
2	12.1	25.35	33.11	72.82	3.7	1992.93	386.80
2	15.13	28.37	8.16	72.82	3.7	1934.31	381.10
2	18	31.25	-15.56	-169.34	-78.05	1935.34	16.80
2	18.15	31.4	-16.8	-169.34	-78.05	-1823.47	15.68
2	21.18	34.42	-41.75	-169.34	-78.05	-1876.83	15.90
2	24.2	37.45	-66.71	-169.34	-78.05	-1947.66	16.29
2	25.33	38.58	-76.06	-438.43	-159.47	-1924.24	6.18
2	27.23	40.48	-91.67	-438.43	-159.47	-1268.7	2.92
3	2.42	45.92	77.19	334.31	139.15	848.11	1.84
3	2.75	46.25	74.44	104.72	58.36	1816.02	20.98
3	4.05	47.55	63.71	104.72	58.36	1915.85	22.48
3	6.08	49.57	47.01	104.72	58.36	2112.57	25.35
3	8.1	51.6	30.3	104.72	58.36	1944.95	23.41
3	10.08	53.58	13.94	-120.79	-22.18	-2115.92	67.54
3	10.13	53.63	13.59	-120.79	-22.18	-2039.87	64.92
3	12.15	55.65	-3.11	-120.79	-22.18	-1996.85	63.88
3	14.18	57.68	-19.82	-120.79	-22.18	-1971.47	62.28
3	16.2	59.7	-36.52	-120.79	-22.18	-1902.14	59.15
3	17.42	60.92	-46.56	-341.15	-102.45	-1738.15	9.41
4	2.8	66.55	34.65	332.47	60.22	1175.44	9.15
4	3.5	67.25	28.87	332.47	60.22	1241.81	10.09
4	4.2	67.95	23.1	332.47	60.22	1308.26	11.03
4	4.5	68.25	20.62	0	0	1308.26	99.00
4	4.9	68.65	17.32	0	0	2405.18	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 3, 10, 13 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
4	5.6	69.35	11.55	0	0	2496.8	99
4	6.3	70.05	5.77	0	0	2589.71	99
4	7	70.75	0	0	0	2682.65	99.00

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6,7 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
1	0	0	0	0	0	4577.21	99.00
1	0.58	0.57	-1.36	0	0	-4634.76	99.00
1	1.15	1.15	-5.46	0	0	-4690.24	99.00
1	1.73	1.73	-12.27	0	0	-4743.79	99.00
1	2.25	2.25	-20.88	0	0	-4772.72	99.00
1	2.3	2.3	-21.82	-11.86	-3.06	-4778.04	99.00
1	2.88	2.88	-34.1	-148.22	-38.25	-4778.04	91.51
1	3.45	3.45	-49.1	-284.59	-73.44	-4778.04	45.68
1	4.03	4.03	-66.83	-420.96	-108.63	-4778.04	29.52
1	4.6	4.6	-87.28	-557.33	-143.82	-4778.04	21.25
1	5.18	5.18	-110.47	-693.69	-179.01	-4778.04	16.21
1	5.75	5.75	-136.38	-830.06	-214.2	-4778.04	12.82
2	0	5.75	-136.38	-830.06	-214.2	-4778.04	12.82
2	2.95	8.7	121.96	217.53	177.2	-4778.04	18.90
2	3.33	9.08	150.26	353.66	228.06	8783.88	27.50
2	5.9	11.65	308.52	750.91	366.63	8783.88	15.65
2	8.85	14.6	423.27	1,207.50	525.89	8783.88	9.87
2	10.67	16.42	458.22	1,488.67	623.97	8783.88	7.83
2	11.8	17.55	466.23	1,435.73	595.98	8783.88	8.27
2	14.75	20.5	437.4	1,297.92	523.11	8857.59	9.84
2	17.7	23.45	336.77	1,160.11	450.24	8864.25	11.95
2	18	23.75	322.51	1,146.10	442.83	8864.25	12.21
2	20.65	26.4	164.34	488.36	168.84	8864.25	36.67
2	23.6	29.35	-79.88	-243.85	-136.17	-8864.25	47.79
2	25.33	31.08	-256.86	-674.07	-315.38	-8877.55	18.81
2	26.55	32.3	-395.9	-1254.62	-536.91	-8883.75	9.77
2	29.5	35.25	-783.71	-2662.26	-1074.06	-8883.75	3.28
3	0	35.25	-783.71	-2,662.26	-1,074.06	-8883.75	3.28
3	2.75	38	-435.49	-875.96	-384.30	-8883.75	14.50
3	2.85	38.1	-424	-831.15	-367.09	-8872.14	15.30
3	3.17	38.42	-388.17	-689.26	-312.58	-8835.26	18.43
3	5.7	40.95	-131.31	-134.27	-75.87	-8835.26	86.21
3	8.55	43.8	94.38	490.09	190.43	-8835.26	32.74
3	10.08	45.33	188.07	826.01	333.71	6818.48	12.80
3	11.4	46.65	253.05	849.21	353.13	6817.32	11.85
3	14.25	49.5	344.71	899.44	395.16	6702.93	10.02
3	17.1	52.35	369.37	949.67	437.2	6684.73	8.86
3	17.42	52.67	367.97	955.25	441.87	6684.73	8.76

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6,7 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
3	19.95	55.2	327.01	492.5	279.89	6684.73	15.56
3	22.8	58.05	217.64	-28.1	97.66	-4696.18	34.57
3	25.65	60.9	41.26	-548.69	-84.57	-4696.18	36.01
3	28.5	63.75	-202.12	-1069.29	-266.8	-4696.18	8.96
4	0	63.75	-202.12	-1069.29	-266.8	-4696.18	8.96
4	0.7	64.45	-163.72	-902.96	-225.3	-4696.18	11.48
4	1.4	65.15	-129.36	-736.62	-183.8	-4696.18	15.12
4	2.1	65.85	-99.04	-570.29	-142.3	-4696.18	20.86
4	2.8	66.55	-72.76	-403.95	-100.79	-4696.18	31.29
4	3.5	67.25	-50.53	-237.62	-59.29	-4696.18	56.26
4	4.2	67.95	-32.34	-71.29	-17.79	-4696.18	197.46
4	4.5	68.25	-25.78	0	0	-4690.24	99.00
4	4.9	68.65	-18.19	0	0	-4656.77	99.00
4	5.6	69.35	-8.08	0	0	-4622.13	99.00
4	6.3	70.05	-2.02	0	0	-4587.63	99.00
4	7	70.75	0	0	0	-4577.21	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 6,7 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
1	0	0	0	0	0	-1148.78	99.00
1	0.58	0.57	-4.74	0	0	-1172.64	99.00
1	1.15	1.15	-9.49	0	0	-1195.35	99.00
1	1.73	1.73	-14.23	0	0	-1218.19	99.00
1	2.25	2.25	-18.56	-237.16	-61.2	-1242.5	11.60
1	2.3	2.3	-18.97	-237.16	-61.2	-1247.68	11.66
1	2.88	2.88	-23.72	-237.16	-61.2	-1267.93	11.84
1	3.45	3.45	-28.46	-237.16	-61.2	-1293.6	12.09
2	2.95	8.7	75.41	355.12	132.68	1349.26	4.70
2	3.33	9.08	72.24	154.78	53.99	1589.07	18.60
2	5.9	11.65	51.07	154.78	53.99	1511.57	17.87
2	8.85	14.6	26.73	154.78	53.99	1379.88	16.43
2	10.67	16.42	11.74	-46.71	-24.7	-1286.76	37.80
2	11.8	17.55	2.39	-46.71	-24.7	-1286.76	38.16
2	14.75	20.5	-21.94	-46.71	-24.7	-1352.22	39.44
2	17.7	23.45	-46.28	-46.71	-24.7	-1371.7	39.10
2	18	23.75	-48.76	-248.2	-103.39	-1483.4	8.27
2	20.65	26.4	-70.62	-248.2	-103.39	-1582.6	8.81
2	23.6	29.35	-94.96	-248.2	-103.39	-1515.89	8.09
2	25.33	31.08	-109.26	-477.16	-182.08	-1376.63	2.72
2	26.55	32.3	-119.29	-477.16	-182.08	-1298.41	2.34
3	2.75	38	115.28	448.07	172.13	1264.93	2.51
3	2.85	38.1	114.46	448.07	172.13	1334.57	2.82
3	3.17	38.42	111.84	219.07	93.44	1484.31	8.81
3	5.7	40.95	90.94	219.07	93.44	1608.69	10.05
3	8.55	43.8	67.43	219.07	93.44	1507.97	9.47
3	10.08	45.33	54.78	17.62	14.75	1402.9	68.44
3	11.4	46.65	43.92	17.62	14.75	1401.19	69.06
3	14.25	49.5	20.41	17.62	14.75	1349.71	67.91
3	17.1	52.35	-3.11	17.62	14.75	1358.09	69.47
3	17.42	52.67	-5.72	-182.67	-63.94	-1427.35	14.34
3	19.95	55.2	-26.62	-182.67	-63.94	-1525.71	15.21
3	22.8	58.05	-50.13	-182.67	-63.94	-1539.1	15.02
3	25.65	60.9	-73.64	-182.67	-63.94	-1539.1	14.66
4	2.8	66.55	34.65	237.62	59.29	1356.6	13.19
4	3.5	67.25	28.87	237.62	59.29	1415.34	14.04
4	4.2	67.95	23.1	237.62	59.29	1474.6	14.90
4	4.5	68.25	20.62	0	0	1536.59	99.00
4	4.9	68.65	17.32	0	0	1597.07	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 6,7 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
4	5.6	69.35	11.55	0	0	1610.61	99
4	6.3	70.05	5.77	0	0	1611.04	99
4	7	70.75	0	0	0	1611.04	99.00

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
1	0	0	0	0	0	4730.04	99.00
1	1.33	1.33	-7.24	0	0	-7049.23	99.00
1	2.25	2.25	-20.88	0	0	-7049.23	99.00
1	2.65	2.65	-28.97	-55.23	-22.76	-7049.23	234.69
1	3.98	3.97	-65.18	-238.19	-98.14	-7049.23	52.28
1	5.3	5.3	-115.87	-421.14	-173.51	-7049.23	28.28
1	6.63	6.63	-181.05	-604.1	-248.89	-7049.23	18.75
1	7.95	7.95	-260.71	-787.06	-324.27	-7049.23	13.62
1	9.28	9.27	-354.85	-970.01	-399.65	-7049.23	10.38
1	10.6	10.6	-463.48	-1152.97	-475.03	-7071.78	8.18
1	11.93	11.93	-586.6	-1335.92	-550.41	-7141.63	6.62
1	13.25	13.25	-724.19	-1518.88	-625.79	-7162.5	5.36
2	0	13.25	-724.19	-1518.88	-625.79	-7162.5	5.36
2	3.03	16.28	-359.8	-718.74	-169.67	-7162.5	26.36
2	3.33	16.58	-326.9	-637.19	-123.18	-7162.5	37.20
2	6.05	19.3	-70.9	-234.28	86.96	-7162.5	59.98
2	9.08	22.32	142.51	214.35	320.96	-7162.5	16.10
2	10.67	23.92	224.49	450.41	444.08	-7162.5	10.95
2	12.1	25.35	280.43	495.30	449.70	7438.06	11.06
2	15.13	28.37	342.86	590.04	461.57	7400.14	10.39
2	18	31.25	332.22	680.08	472.85	7400.14	9.98
2	18.15	31.4	329.79	667.23	462.42	7400.14	10.24
2	21.18	34.42	241.23	408.13	252.17	7417.49	20.15
2	24.2	37.45	77.18	149.03	41.91	7496.59	132.41
2	25.33	38.58	-3.73	51.96	-36.86	7496.59	154.99
2	27.23	40.48	-162.37	-363.24	-307.25	7496.59	17.12
2	30.25	43.5	-477.4	-1027.21	-739.64	-7162.5	5.49
3	0	43.5	-477.4	-1,027.21	-739.64	-7162.5	5.49
3	2.03	45.53	-297.64	-391.47	-335.63	-7162.5	14.44
3	2.42	45.92	-266.78	-268.51	-257.49	-7162.5	19.40
3	2.75	46.25	-241.5	-208.50	-215.47	-7110.79	23.38
3	4.05	47.55	-151.71	-126.45	-147.02	-7049.23	35.06
3	6.08	49.57	-39.6	1.35	-40.41	-7049.23	133.21
3	8.1	51.6	38.67	129.16	66.2	-7049.23	79.47
3	10.08	53.58	82.54	254.33	170.62	-7049.23	29.88
3	10.13	53.63	83.11	252.09	169.75	-7049.23	30.05
3	12.15	55.65	93.72	143.31	127.67	-6055.88	34.70
3	14.18	57.68	70.51	34.54	85.59	-4589.49	40.07

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 RF - Controlling Legal	Checked by:	BP
			Date:	02/2024

Span	Location	Distance	Moment From BrR			Factored Capacity	Rating Factor
			Self	DL	DVL	Mr	RF
3	16.2	59.7	13.46	-74.24	43.5	-4589.49	79.22
3	17.42	60.92	-37.08	-139.6	18.22	-4589.49	184.44
3	18.23	61.73	-77.42	-276.78	-57.94	-4589.49	55.05
3	20.25	63.75	-202.12	-620.46	-248.71	-4589.49	11.01
4	0	63.75	-202.12	-620.46	-248.71	-4589.49	11.01
4	0.7	64.45	-163.72	-523.94	-210.03	-4589.49	13.66
4	1.4	65.15	-129.36	-427.43	-171.34	-4589.49	17.48
4	2.1	65.85	-99.04	-330.91	-132.65	-4589.49	23.50
4	2.8	66.55	-72.76	-234.4	-93.96	-4589.49	34.43
4	3.5	67.25	-50.53	-137.88	-55.27	-4589.49	60.60
4	4.2	67.95	-32.34	-41.36	-16.58	-4589.49	208.66
4	4.5	68.25	-25.78	0	0	-4589.49	99.00
4	4.9	68.65	-18.19	0	0	-4589.49	99.00
4	5.6	69.35	-8.08	0	0	-4589.49	99.00
4	6.3	70.05	-2.02	0	0	-4589.49	99.00
4	7	70.75	0	0	0	4589.49	99.00
						4577.21	

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 4, 9 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
1	0	0	0	0	0	-1197.97	99.00
1	1.33	1.33	-10.93	0	0	-1367.03	99.00
1	2.25	2.25	-18.56	-138.08	-56.89	-1537.38	18.14
1	2.65	2.65	-21.86	-138.08	-56.89	-1638.35	19.45
1	3.98	3.97	-32.79	-138.08	-56.89	-1638.35	19.26
1	5.3	5.3	-43.72	-138.08	-56.89	-1638.35	19.08
1	6.63	6.63	-54.66	-138.08	-56.89	-1638.35	18.90
1	7.95	7.95	-65.59	-138.08	-56.89	-1638.35	18.71
1	9.28	9.27	-76.52	-138.08	-56.89	-1638.35	18.53
1	10.6	10.6	-87.45	-138.08	-56.89	-1638.35	18.34
2	3.03	16.28	107.98	264.51	150.78	1427.98	4.91
2	3.33	16.58	105.44	148.31	77.35	1663.35	13.39
2	6.05	19.3	83.03	148.31	77.35	1572.14	12.76
2	9.08	22.32	58.07	148.31	77.35	1537.44	12.72
2	10.67	23.92	44.94	31.32	3.92	1442.92	264.44
2	12.1	25.35	33.11	31.32	3.92	1406.04	260.11
2	15.13	28.37	8.16	31.32	3.92	1364.7	258.11
2	18	31.25	-15.56	-85.65	-69.51	-1439.52	14.53
2	18.15	31.4	-16.8	-85.65	-69.51	-1455.85	14.69
2	21.18	34.42	-41.75	-85.65	-69.51	-1570.92	15.62
2	24.2	37.45	-66.71	-85.65	-69.51	-1583.3	15.41
2	25.33	38.58	-76.06	-219.49	-142.94	-1660.54	6.95
2	27.23	40.48	-91.67	-219.49	-142.94	-1427.99	5.59
3	2.42	45.92	77.19	180.03	126.08	1309.99	6.03
3	2.75	46.25	74.44	63.11	52.65	1401.92	17.97
3	4.05	47.55	63.71	63.11	52.65	1479.91	19.31
3	6.08	49.57	47.01	63.11	52.65	1594.51	21.29
3	8.1	51.6	30.3	63.11	52.65	1601.79	21.70
3	10.08	53.58	13.94	-53.72	-20.78	1593.63	55.86
3	10.13	53.63	13.59	-53.72	-20.78	-1584.95	55.56
3	12.15	55.65	-3.11	-53.72	-20.78	-1637.77	58.00
3	14.18	57.68	-19.82	-53.72	-20.78	-1637.77	57.22
3	16.2	59.7	-36.52	-53.72	-20.78	-1688.88	58.34
3	17.42	60.92	-46.56	-169.72	-94.21	-1530.08	10.29
4	2.8	66.55	34.65	137.88	55.27	1372.73	16.10
4	3.5	67.25	28.87	137.88	55.27	1431.47	17.02
4	4.2	67.95	23.1	137.88	55.27	1490.22	17.94
4	4.5	68.25	20.62	0	0	1490.22	99.00
4	4.9	68.65	17.32	0	0	1548.97	99.00

AI Engineers		Bridge:	020001			Prepared by:	PB
						Date:	02/2024
		Subject:	Pier 4, 9 RF - Controlling Legal			Checked by:	BP
						Date:	02/2024
Span	**Location**	**Distance**	**Shear From BrR**			**Factored Capacity**	**Rating Factor**
			Self	**DL**	**DVL**	**Vr**	**RF**
4	5.6	69.35	11.55	0	0	1634.19	99
4	6.3	70.05	5.77	0	0	1676.45	99
4	7	70.75	0	0	0	1676.45	99.00

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 1	1	0	0	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	0.63	0.63	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	1.25	1.25	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	1.88	1.88	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	2.25	2.25	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	2.5	2.5	237.04	89.23	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 1	1	3.13	3.13	65.53	24.67	31.98	99.00	72.08	66.18	93.28	81.48	72.75	65.37	99.00
Pier 1	1	3.75	3.75	36.92	13.90	18.02	56.97	40.61	37.29	52.56	45.91	40.99	36.83	70.70
Pier 1	1	4.38	4.38	25.11	9.45	12.25	38.75	27.62	25.36	35.75	31.22	27.88	25.05	48.09
Pier 1	1	5	5	18.66	7.02	9.10	28.78	20.52	18.84	26.56	23.19	20.71	18.61	35.72
Pier 1	1	5.63	5.63	14.57	5.49	7.11	22.49	16.03	14.72	20.74	18.12	16.18	14.54	27.91
Pier 1	1	6.25	6.25	11.75	4.42	5.74	18.14	12.93	11.87	16.73	14.61	13.05	11.73	22.51
Pier 1	2	0	6.25	11.75	4.42	5.74	18.14	12.93	11.87	16.73	14.61	13.05	11.73	22.51
Pier 1	2	3.33	9.58	18.12	6.82	8.84	27.96	19.93	18.30	25.79	22.53	20.11	18.07	34.70
Pier 1	2	3.73	9.98	16.01	6.03	7.81	24.70	17.61	16.17	22.79	19.91	17.77	15.97	30.66
Pier 1	2	7.45	13.7	6.85	2.58	3.34	10.57	7.53	6.92	9.75	8.52	7.60	6.83	13.12
Pier 1	2	10.67	16.92	4.08	1.54	1.99	6.30	4.49	4.12	5.81	5.08	4.53	4.07	7.82
Pier 1	2	11.18	17.43	4.01	1.51	1.96	6.18	4.41	4.05	5.70	4.98	4.45	4.00	7.67
Pier 1	2	14.9	21.15	3.54	1.33	1.73	5.47	3.90	3.58	5.05	4.41	3.93	3.54	6.79
Pier 1	2	18	24.25	3.27	1.23	1.60	5.05	3.60	3.30	4.65	4.07	3.63	3.26	6.26
Pier 1	2	18.63	24.88	3.44	1.30	1.68	5.31	3.79	3.48	4.90	4.28	3.82	3.43	6.59
Pier 1	2	22.35	28.6	4.84	1.82	2.36	7.47	5.32	4.89	6.89	6.02	5.37	4.83	9.27
Pier 1	2	25.33	31.58	6.70	2.52	3.27	10.34	7.37	6.77	9.54	8.33	7.44	6.69	12.83
Pier 1	2	26.08	32.33	8.24	3.10	4.02	12.72	9.07	8.33	11.74	10.25	9.15	8.22	15.79
Pier 1	2	29.8	36.05	65.20	24.54	31.82	99.00	71.71	65.85	92.81	81.06	72.38	65.04	99.00
Pier 1	2	32.67	38.92	16.00	6.02	7.81	24.68	17.59	16.16	22.77	19.89	17.76	15.96	30.63
Pier 1	2	33.53	39.78	8.91	3.35	4.35	13.75	9.80	9.00	12.69	11.08	9.89	8.89	17.07
Pier 1	2	37.25	43.5	1.73	0.65	0.85	2.67	1.91	1.75	2.47	2.15	1.92	1.73	3.32
Pier 1	3	0	43.5	1.73	0.65	0.85	2.67	1.91	1.75	2.47	2.15	1.92	1.73	3.32
Pier 1	3	2.03	45.53	3.14	1.18	1.53	4.85	3.45	3.17	4.47	3.91	3.49	3.13	6.01
Pier 1	3	2.75	46.25	3.87	1.46	1.89	5.97	4.26	3.91	5.51	4.81	4.30	3.86	7.41
Pier 1	3	4.05	47.55	4.94	1.86	2.41	7.62	5.43	4.99	7.03	6.14	5.48	4.93	9.45
Pier 1	3	6.08	49.57	7.49	2.82	3.65	11.56	8.24	7.56	10.66	9.31	8.31	7.47	14.34
Pier 1	3	8.1	51.6	12.64	4.76	6.17	19.50	13.90	12.77	17.99	15.72	14.03	12.61	24.21
Pier 1	3	10.08	53.58	28.39	10.69	13.85	43.80	31.22	28.67	40.41	35.29	31.51	28.32	54.36
Pier 1	3	10.13	53.63	23.95	9.02	11.69	36.95	26.34	24.19	34.09	29.78	26.59	23.89	45.86
Pier 1	3	12.15	55.65	20.79	7.83	10.15	32.08	22.87	21.00	29.60	25.85	23.08	20.74	39.81
Pier 1	3	14.18	57.68	25.56	9.62	12.47	39.43	28.11	25.81	36.38	31.77	28.37	25.49	48.94
Pier 1	3	16.2	59.7	32.54	12.25	15.88	50.20	35.79	32.86	46.32	40.45	36.12	32.46	62.30
Pier 1	3	17.42	60.92	38.68	14.56	18.88	59.69	42.55	39.07	55.07	48.10	42.94	38.59	74.08
Pier 1	3	18.23	61.73	22.02	8.29	10.74	33.97	24.22	22.24	31.34	27.37	24.44	21.96	42.16
Pier 1	3	20.25	63.75	9.65	3.63	4.71	14.89	10.61	9.75	13.74	12.00	10.71	9.63	18.48
Pier 1	4	0	63.75	9.65	3.63	4.71	14.89	10.61	9.75	13.74	12.00	10.71	9.63	18.48
Pier 1	4	0.7	64.45	12.12	4.56	5.92	18.71	13.34	12.25	17.26	15.07	13.46	12.09	23.22
Pier 1	4	1.4	65.15	15.69	5.91	7.66	24.22	17.26	15.85	22.34	19.51	17.42	15.66	30.05
Pier 1	4	2.1	65.85	21.32	8.03	10.40	32.89	23.45	21.53	30.35	26.51	23.67	21.27	40.82
Pier 1	4	2.8	66.55	31.54	11.87	15.39	48.66	34.69	31.85	44.89	39.21	35.01	31.46	60.39
Pier 1	4	3.5	67.25	56.00	21.08	27.33	86.40	61.59	56.55	79.71	69.62	62.16	55.86	99.00
Pier 1	4	4.2	67.95	194.39	73.18	94.86	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 1	4	4.5	68.25	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	4.9	68.65	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	5.6	69.35	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	6.3	70.05	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	7	70.75	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
			Controlling RF	**1.73**	**0.65**	**0.85**	**2.67**	**1.91**	**1.75**	**2.47**	**2.15**	**1.92**	**1.73**	**3.32**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 1	1	0	0	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	0.63	0.63	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	1.25	1.25	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	1.88	1.88	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	2.25	2.25	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	2.5	2.5	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 1	1	3.13	3.13	97.90	65.53	73.98	74.90	54.28	45.13	44.40	59.51	48.02	38.00	41.58	54.54	99.00
Pier 1	1	3.75	3.75	55.16	36.92	41.68	42.20	30.58	25.42	25.02	33.53	27.06	21.41	23.43	30.73	69.12
Pier 1	1	4.38	4.38	37.52	25.11	28.35	28.70	20.80	17.29	17.02	22.81	18.40	14.56	15.94	20.90	47.01
Pier 1	1	5	5	27.87	18.66	21.06	21.32	15.45	12.85	12.64	16.94	13.67	10.82	11.84	15.53	34.92
Pier 1	1	5.63	5.63	21.77	14.57	16.45	16.66	12.07	10.04	9.87	13.23	10.68	8.45	9.25	12.13	27.28
Pier 1	1	6.25	6.25	17.56	11.75	13.27	13.44	9.74	8.09	7.96	10.67	8.61	6.82	7.46	9.78	22.01
Pier 1	2	0	6.25	17.56	11.75	13.27	13.44	9.74	8.09	7.96	10.67	8.61	6.82	7.46	9.78	22.01
Pier 1	2	3.33	9.58	27.07	18.12	20.45	20.71	15.01	12.48	12.28	16.45	13.28	10.51	11.50	15.08	33.92
Pier 1	2	3.73	9.98	23.92	16.01	18.07	18.30	13.26	11.02	10.85	14.54	11.73	9.28	10.16	13.32	29.97
Pier 1	2	7.45	13.7	10.23	6.85	7.73	7.83	5.67	4.72	4.64	6.22	5.02	3.97	4.35	5.70	12.82
Pier 1	2	10.67	16.92	6.10	4.08	4.61	4.67	3.38	2.81	2.77	3.71	2.99	2.37	2.59	3.40	7.64
Pier 1	2	11.18	17.43	5.99	4.01	4.52	4.58	3.32	2.76	2.71	3.64	2.94	2.32	2.54	3.33	7.50
Pier 1	2	14.9	21.15	5.29	3.54	4.00	4.05	2.94	2.44	2.40	3.22	2.60	2.05	2.25	2.95	6.63
Pier 1	2	18	24.25	4.89	3.27	3.69	3.74	2.71	2.25	2.22	2.97	2.40	1.90	2.08	2.72	6.12
Pier 1	2	18.63	24.88	5.14	3.44	3.89	3.93	2.85	2.37	2.33	3.13	2.52	2.00	2.18	2.86	6.44
Pier 1	2	22.35	28.6	7.23	4.84	5.46	5.53	4.01	3.33	3.28	4.39	3.55	2.81	3.07	4.03	9.06
Pier 1	2	25.33	31.58	10.01	6.70	7.57	7.66	5.55	4.62	4.54	6.09	4.91	3.89	4.25	5.58	12.55
Pier 1	2	26.08	32.33	12.32	8.24	9.31	9.42	6.83	5.68	5.59	7.49	6.04	4.78	5.23	6.86	15.43
Pier 1	2	29.8	36.05	97.40	65.20	73.60	74.52	54.00	44.90	44.18	59.21	47.78	37.80	41.37	54.26	99.00
Pier 1	2	32.67	38.92	23.90	16.00	18.06	18.28	13.25	11.02	10.84	14.53	11.72	9.28	10.15	13.31	29.95
Pier 1	2	33.53	39.78	13.31	8.91	10.06	10.19	7.38	6.14	6.04	8.09	6.53	5.17	5.66	7.42	16.68
Pier 1	2	37.25	43.5	2.59	1.73	1.96	1.98	1.44	1.19	1.17	1.57	1.27	1.00	1.10	1.44	3.24
Pier 1	3	0	43.5	2.59	1.73	1.96	1.98	1.44	1.19	1.17	1.57	1.27	1.00	1.10	1.44	3.24
Pier 1	3	2.03	45.53	4.69	3.14	3.55	3.59	2.60	2.16	2.13	2.85	2.30	1.82	1.99	2.61	5.88
Pier 1	3	2.75	46.25	5.78	3.87	4.37	4.42	3.21	2.67	2.62	3.52	2.84	2.24	2.46	3.22	7.25
Pier 1	3	4.05	47.55	7.38	4.94	5.57	5.64	4.09	3.40	3.35	4.48	3.62	2.86	3.13	4.11	9.24
Pier 1	3	6.08	49.57	11.19	7.49	8.46	8.56	6.20	5.16	5.07	6.80	5.49	4.34	4.75	6.23	14.02
Pier 1	3	8.1	51.6	18.89	12.64	14.27	14.45	10.47	8.71	8.57	11.48	9.26	7.33	8.02	10.52	23.67
Pier 1	3	10.08	53.58	42.41	28.39	32.05	32.45	23.51	19.55	19.23	25.78	20.80	16.46	18.01	23.63	53.14
Pier 1	3	10.13	53.63	35.78	23.95	27.04	27.37	19.84	16.49	16.23	21.75	17.55	13.89	15.20	19.93	44.83
Pier 1	3	12.15	55.65	31.06	20.79	23.47	23.76	17.22	14.32	14.09	18.88	15.24	12.06	13.19	17.30	38.92
Pier 1	3	14.18	57.68	38.18	25.56	28.85	29.21	21.17	17.60	17.32	23.21	18.73	14.82	16.22	21.27	47.84
Pier 1	3	16.2	59.7	48.61	32.54	36.73	37.19	26.95	22.40	22.05	29.55	23.84	18.87	20.65	27.08	60.91
Pier 1	3	17.42	60.92	57.79	38.68	43.67	44.22	32.04	26.64	26.21	35.13	28.35	22.43	24.55	32.20	72.42
Pier 1	3	18.23	61.73	32.89	22.02	24.85	25.16	18.24	15.16	14.92	19.99	16.13	12.77	13.97	18.32	41.22
Pier 1	3	20.25	63.75	14.42	9.65	10.89	11.03	7.99	6.65	6.54	8.76	7.07	5.60	6.12	8.03	18.07
Pier 1	4	0	63.75	14.42	9.65	10.89	11.03	7.99	6.65	6.54	8.76	7.07	5.60	6.12	8.03	18.07
Pier 1	4	0.7	64.45	18.11	12.12	13.69	13.86	10.04	8.35	8.22	11.01	8.88	7.03	7.69	10.09	22.70
Pier 1	4	1.4	65.15	23.45	15.69	17.72	17.94	13.00	10.81	10.63	14.25	11.50	9.10	9.96	13.06	29.38
Pier 1	4	2.1	65.85	31.85	21.32	24.07	24.37	17.66	14.68	14.45	19.36	15.62	12.36	13.53	17.74	39.91
Pier 1	4	2.8	66.55	47.12	31.54	35.60	36.05	26.12	21.72	21.37	28.64	23.11	18.29	20.01	26.25	59.04
Pier 1	4	3.5	67.25	83.66	56.00	63.21	64.00	46.38	38.56	37.94	50.85	41.03	32.47	35.53	46.61	99.00
Pier 1	4	4.2	67.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 1	4	4.5	68.25	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	4.9	68.65	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	5.6	69.35	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	6.3	70.05	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	7	70.75	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
			Controlling RF	**2.59**	**1.73**	**1.96**	**1.98**	**1.44**	**1.19**	**1.17**	**1.57**	**1.27**	**1.00**	**1.10**	**1.44**	**3.24**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 1	1	0	0	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	0.63	0.63	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	1.25	1.25	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	1.88	1.88	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	1	2.25	2.25	13.34	5.02	6.51	20.58	14.67	13.47	18.99	16.59	14.81	13.31	25.55
Pier 1	1	2.5	2.5	13.35	5.03	6.52	20.60	14.69	13.49	19.01	16.60	14.82	13.32	25.57
Pier 1	1	3.13	3.13	13.62	5.13	6.65	21.02	14.98	13.76	19.39	16.94	15.12	13.59	26.09
Pier 1	1	3.75	3.75	13.49	5.08	6.58	20.81	14.84	13.62	19.20	16.77	14.98	13.46	25.83
Pier 1	2	3.33	9.58	6.77	2.55	3.31	10.45	7.45	6.84	9.64	8.42	7.52	6.76	12.97
Pier 1	2	3.73	9.98	8.18	3.08	3.99	12.62	8.99	8.26	11.64	10.17	9.08	8.16	15.66
Pier 1	2	7.45	13.7	9.55	3.60	4.66	14.74	10.51	9.65	13.60	11.88	10.61	9.53	18.30
Pier 1	2	10.67	16.92	54.59	20.55	26.64	84.22	60.04	55.13	77.70	67.87	60.60	54.45	99.00
Pier 1	2	11.18	17.43	54.82	20.64	26.75	84.58	60.29	55.36	78.03	68.15	60.85	54.68	99.00
Pier 1	2	14.9	21.15	53.64	20.19	26.17	82.76	58.99	54.17	76.35	66.69	59.54	53.50	99.00
Pier 1	2	18	24.25	14.43	5.43	7.04	22.26	15.87	14.57	20.54	17.94	16.02	14.39	27.63
Pier 1	2	18.63	24.88	14.35	5.40	7.00	22.14	15.78	14.49	20.42	17.84	15.93	14.31	27.47
Pier 1	2	22.35	28.6	13.86	5.22	6.76	21.39	15.25	14.00	19.73	17.24	15.39	13.83	26.55
Pier 1	2	25.33	31.58	5.10	1.92	2.49	7.87	5.61	5.15	7.26	6.34	5.66	5.09	9.76
Pier 1	2	26.08	32.33	5.25	1.98	2.56	8.10	5.78	5.30	7.48	6.53	5.83	5.24	10.06
Pier 1	2	29.8	36.05	5.94	2.24	2.90	9.17	6.54	6.00	8.46	7.39	6.60	5.93	11.38
Pier 1	2	32.67	38.92	2.42	0.91	1.18	3.73	2.66	2.44	3.44	3.01	2.69	2.41	4.63
Pier 1	2	33.53	39.78	2.39	0.90	1.17	3.68	2.63	2.41	3.40	2.97	2.65	2.38	4.57
Pier 1	3	2.75	46.25	8.94	3.36	4.36	13.79	9.83	9.03	12.72	11.11	9.92	8.92	17.11
Pier 1	3	4.05	47.55	9.84	3.71	4.80	15.19	10.83	9.94	14.01	12.24	10.93	9.82	18.85
Pier 1	3	6.08	49.57	10.59	3.99	5.17	16.34	11.65	10.70	15.08	13.17	11.76	10.57	20.28
Pier 1	3	8.1	51.6	10.58	3.98	5.16	16.33	11.64	10.69	15.07	13.16	11.75	10.56	20.27
Pier 1	3	10.08	53.58	89.68	33.76	43.76	99.00	98.64	90.57	99.00	99.00	99.00	89.46	99.00
Pier 1	3	10.13	53.63	89.75	33.79	43.80	99.00	98.71	90.64	99.00	99.00	99.00	89.53	99.00
Pier 1	3	12.15	55.65	95.41	35.91	46.56	99.00	99.00	96.35	99.00	99.00	99.00	95.17	99.00
Pier 1	3	14.18	57.68	96.75	36.42	47.21	99.00	99.00	97.71	99.00	99.00	99.00	96.51	99.00
Pier 1	3	16.2	59.7	96.29	36.25	46.99	99.00	99.00	97.25	99.00	99.00	99.00	96.05	99.00
Pier 1	3	17.42	60.92	14.88	5.60	7.26	22.95	16.36	15.02	21.18	18.50	16.51	14.84	28.49
Pier 1	4	2.8	66.55	14.34	5.40	7.00	22.12	15.77	14.48	20.41	17.83	15.92	14.30	27.46
Pier 1	4	3.5	67.25	15.20	5.72	7.42	23.45	16.72	15.35	21.64	18.90	16.87	15.16	29.11
Pier 1	4	4.2	67.95	16.06	6.05	7.84	24.78	17.66	16.22	22.86	19.97	17.83	16.02	30.75
Pier 1	4	4.5	68.25	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	4.9	68.65	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	5.6	69.35	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	6.3	70.05	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
Pier 1	4	7	70.75	99.00	37.27	48.31	99.00	99.00	99.00	99.00	99.00	99.00	98.76	99.00
			Controlling RF	**2.39**	**0.90**	**1.17**	**3.68**	**2.63**	**2.41**	**3.40**	**2.97**	**2.65**	**2.38**	**4.57**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 1 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 1	1	0	0	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	0.63	0.63	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	1.25	1.25	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	1.88	1.88	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	1	2.25	2.25	19.93	13.34	15.06	15.25	11.05	9.19	9.04	12.12	9.78	7.74	8.47	11.10	24.98
Pier 1	1	2.5	2.5	19.95	13.35	15.07	15.26	11.06	9.19	9.05	12.13	9.78	7.74	8.47	11.11	25.00
Pier 1	1	3.13	3.13	20.35	13.62	15.38	15.57	11.28	9.38	9.23	12.37	9.98	7.90	8.64	11.34	25.50
Pier 1	1	3.75	3.75	20.15	13.49	15.23	15.42	11.17	9.29	9.14	12.25	9.89	7.82	8.56	11.23	25.26
Pier 1	2	3.33	9.58	10.12	6.77	7.65	7.74	5.61	4.67	4.59	6.15	4.96	3.93	4.30	5.64	12.68
Pier 1	2	3.73	9.98	12.22	8.18	9.23	9.35	6.77	5.63	5.54	7.43	5.99	4.74	5.19	6.81	15.31
Pier 1	2	7.45	13.7	14.27	9.55	10.79	10.92	7.91	6.58	6.47	8.68	7.00	5.54	6.06	7.95	17.89
Pier 1	2	10.67	16.92	81.55	54.59	61.62	62.39	45.21	37.59	36.99	49.57	40.00	31.65	34.64	45.43	99.00
Pier 1	2	11.18	17.43	81.89	54.82	61.88	62.65	45.40	37.75	37.14	49.78	40.17	31.78	34.78	45.62	99.00
Pier 1	2	14.9	21.15	80.13	53.64	60.55	61.30	44.43	36.93	36.34	48.71	39.30	31.10	34.03	44.64	99.00
Pier 1	2	18	24.25	21.55	14.43	16.29	16.49	11.95	9.94	9.78	13.10	10.57	8.37	9.16	12.01	27.01
Pier 1	2	18.63	24.88	21.43	14.35	16.20	16.40	11.88	9.88	9.72	13.03	10.51	8.32	9.10	11.94	26.86
Pier 1	2	22.35	28.6	20.71	13.86	15.65	15.84	11.48	9.55	9.39	12.59	10.16	8.04	8.80	11.54	25.95
Pier 1	2	25.33	31.58	7.62	5.10	5.76	5.83	4.22	3.51	3.45	4.63	3.74	2.96	3.24	4.24	9.55
Pier 1	2	26.08	32.33	7.85	5.25	5.93	6.00	4.35	3.62	3.56	4.77	3.85	3.05	3.33	4.37	9.83
Pier 1	2	29.8	36.05	8.88	5.94	6.71	6.79	4.92	4.09	4.03	5.40	4.35	3.45	3.77	4.95	11.12
Pier 1	2	32.67	38.92	3.61	2.42	2.73	2.77	2.00	1.67	1.64	2.20	1.77	1.40	1.54	2.01	4.53
Pier 1	2	33.53	39.78	3.57	2.39	2.70	2.73	1.98	1.64	1.62	2.17	1.75	1.38	1.52	1.99	4.47
Pier 1	3	2.75	46.25	13.35	8.94	10.09	10.21	7.40	6.15	6.06	8.12	6.55	5.18	5.67	7.44	16.73
Pier 1	3	4.05	47.55	14.71	9.84	11.11	11.25	8.15	6.78	6.67	8.94	7.21	5.71	6.25	8.19	18.43
Pier 1	3	6.08	49.57	15.82	10.59	11.96	12.11	8.77	7.29	7.18	9.62	7.76	6.14	6.72	8.82	19.83
Pier 1	3	8.1	51.6	15.81	10.58	11.95	12.10	8.77	7.29	7.17	9.61	7.76	6.14	6.72	8.81	19.81
Pier 1	3	10.08	53.58	99.00	89.68	99.00	99.00	74.28	61.76	60.77	81.44	65.72	52.00	56.91	74.64	99.00
Pier 1	3	10.13	53.63	99.00	89.75	99.00	99.00	74.34	61.80	60.81	81.50	65.77	52.04	56.95	74.70	99.00
Pier 1	3	12.15	55.65	99.00	95.41	99.00	99.00	79.02	65.70	64.64	86.64	69.91	55.32	60.54	79.40	99.00
Pier 1	3	14.18	57.68	99.00	96.75	99.00	99.00	80.14	66.62	65.55	87.86	70.90	56.10	61.39	80.52	99.00
Pier 1	3	16.2	59.7	99.00	96.29	99.00	99.00	79.76	66.31	65.24	87.44	70.56	55.83	61.10	80.14	99.00
Pier 1	3	17.42	60.92	22.22	14.88	16.79	17.00	12.32	10.24	10.08	13.51	10.90	8.63	9.44	12.38	27.85
Pier 1	4	2.8	66.55	21.42	14.34	16.19	16.39	11.88	9.87	9.72	13.02	10.51	8.31	9.10	11.93	26.84
Pier 1	4	3.5	67.25	22.71	15.20	17.16	17.37	12.59	10.47	10.30	13.80	11.14	8.81	9.64	12.65	28.45
Pier 1	4	4.2	67.95	23.99	16.06	18.13	18.36	13.30	11.06	10.88	14.58	11.77	9.31	10.19	13.37	30.06
Pier 1	4	4.5	68.25	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	4.9	68.65	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	5.6	69.35	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	6.3	70.05	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
Pier 1	4	7	70.75	99.00	99.00	99.00	99.00	82.00	68.17	67.08	89.90	72.55	57.40	62.82	82.39	99.00
			Controlling RF	**3.57**	**2.39**	**2.70**	**2.73**	**1.98**	**1.64**	**1.62**	**2.17**	**1.75**	**1.38**	**1.52**	**1.99**	**4.47**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 2, 5, 8, 11, 12 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 5	1	0	0	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	1	1.33	1.33	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	1	2.25	2.25	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	1	2.65	2.65	216.77	70.14	90.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	1	3.98	3.97	47.32	15.31	19.85	73.00	51.51	46.96	67.44	58.83	52.53	47.16	90.82
Pier 5	1	5.3	5.3	25.02	8.09	10.49	38.59	27.24	24.83	35.65	31.10	27.77	24.94	48.02
Pier 5	1	6.63	6.63	16.17	5.23	6.78	24.95	17.61	16.05	23.05	20.11	17.95	16.12	31.04
Pier 5	1	7.95	7.95	11.40	3.69	4.78	17.59	12.41	11.31	16.25	14.17	12.66	11.36	21.88
Pier 5	1	9.28	9.27	8.40	2.72	3.52	12.95	9.14	8.33	11.97	10.44	9.32	8.37	16.11
Pier 5	1	10.6	10.6	6.35	2.05	2.66	9.80	6.91	6.30	9.05	7.90	7.05	6.33	12.19
Pier 5	1	11.93	11.93	4.89	1.58	2.05	7.54	5.32	4.85	6.96	6.07	5.42	4.87	9.38
Pier 5	1	13.25	13.25	3.71	1.20	1.56	5.73	4.04	3.69	5.29	4.62	4.12	3.70	7.13
Pier 5	2	0	13.25	3.71	1.20	1.56	5.73	4.04	3.69	5.29	4.62	4.12	3.70	7.13
Pier 5	2	3.03	16.28	22.06	7.14	9.25	34.04	24.02	21.89	31.44	27.43	24.49	21.99	42.35
Pier 5	2	3.33	16.58	31.42	10.17	13.18	48.47	34.21	31.18	44.78	39.06	34.88	31.32	60.31
Pier 5	2	6.05	19.3	58.30	18.86	24.45	89.93	63.46	57.85	83.08	72.48	64.71	58.10	99.00
Pier 5	2	9.08	22.32	15.46	5.00	6.48	23.85	16.83	15.34	22.03	19.22	17.16	15.41	29.67
Pier 5	2	10.67	23.92	10.16	3.29	4.26	15.67	11.06	10.08	14.47	12.63	11.27	10.12	19.49
Pier 5	2	12.1	25.35	9.72	3.14	4.08	14.99	10.58	9.64	13.85	12.08	10.79	9.69	18.65
Pier 5	2	15.13	28.37	9.05	2.93	3.80	13.96	9.85	8.98	12.90	11.25	10.04	9.02	17.37
Pier 5	2	18	31.25	8.58	2.78	3.60	13.23	9.34	8.51	12.22	10.66	9.52	8.55	16.46
Pier 5	2	18.15	31.4	8.84	2.86	3.71	13.64	9.62	8.77	12.60	10.99	9.81	8.81	16.97
Pier 5	2	21.18	34.42	18.16	5.88	7.62	28.01	19.77	18.02	25.88	22.58	20.16	18.10	34.85
Pier 5	2	24.2	37.45	121.03	39.16	50.76	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	25.33	38.58	144.46	46.74	60.59	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	27.23	40.48	14.57	4.71	6.11	22.48	15.86	14.46	20.76	18.11	16.17	14.52	27.96
Pier 5	2	30.25	43.5	4.40	1.42	1.85	6.79	4.79	4.37	6.27	5.47	4.89	4.39	8.45
Pier 5	3	0	43.5	4.40	1.42	1.85	6.79	4.79	4.37	6.27	5.47	4.89	4.39	8.45
Pier 5	3	2.03	45.53	12.77	4.13	5.35	19.70	13.90	12.67	18.20	15.87	14.17	12.73	24.51
Pier 5	3	2.42	45.92	17.28	5.59	7.25	26.66	18.81	17.15	24.63	21.48	19.18	17.22	33.17
Pier 5	3	2.75	46.25	21.16	6.85	8.87	32.64	23.03	21.00	30.15	26.30	23.49	21.09	40.61
Pier 5	3	4.05	47.55	21.00	6.79	8.81	32.39	22.86	20.84	29.92	26.10	23.31	20.93	40.30
Pier 5	3	6.08	49.57	83.83	27.12	35.16	99.00	91.26	83.19	99.00	99.00	93.06	83.56	99.00
Pier 5	3	8.1	51.6	47.66	15.42	19.99	73.52	51.88	47.29	67.92	59.25	52.90	47.50	91.47
Pier 5	3	10.08	53.58	17.07	5.52	7.16	26.33	18.58	16.94	24.32	21.22	18.95	17.01	32.76
Pier 5	3	10.13	53.63	16.82	5.44	7.05	25.94	18.31	16.69	23.97	20.91	18.67	16.76	32.28
Pier 5	3	12.15	55.65	23.50	7.60	9.85	36.25	25.58	23.32	33.49	29.21	26.08	23.42	45.10
Pier 5	3	14.18	57.68	37.11	12.01	15.56	57.25	40.40	36.83	52.89	46.14	41.20	36.99	71.23
Pier 5	3	16.2	59.7	72.98	23.61	30.61	99.00	79.45	72.42	99.00	90.73	81.01	72.74	99.00
Pier 5	3	17.42	60.92	168.77	54.60	70.78	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	3	18.23	61.73	48.67	15.75	20.41	75.09	52.99	48.30	69.37	60.51	54.03	48.51	93.42
Pier 5	3	20.25	63.75	8.95	2.90	3.76	13.81	9.75	8.88	12.76	11.13	9.94	8.92	17.18
Pier 5	4	0	63.75	8.95	2.90	3.76	13.81	9.75	8.88	12.76	11.13	9.94	8.92	17.18
Pier 5	4	0.7	64.45	11.42	3.69	4.79	17.61	12.43	11.33	16.27	14.19	12.67	11.38	21.91
Pier 5	4	1.4	65.15	14.97	4.84	6.28	23.10	16.30	14.86	21.34	18.61	16.62	14.92	28.74
Pier 5	4	2.1	65.85	20.57	6.66	8.63	31.74	22.40	20.42	29.32	25.58	22.84	20.51	39.49
Pier 5	4	2.8	66.55	30.75	9.95	12.90	47.44	33.48	30.51	43.82	38.23	34.13	30.65	59.02
Pier 5	4	3.5	67.25	55.11	17.83	23.11	85.01	59.99	54.68	78.53	68.51	61.17	54.93	99.00
Pier 5	4	4.2	67.95	192.86	62.40	80.89	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	4	4.5	68.25	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	4.9	68.65	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	5.6	69.35	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	6.3	70.05	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	7	70.75	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
			Controlling RF	**3.71**	**1.20**	**1.56**	**5.73**	**4.04**	**3.69**	**5.29**	**4.62**	**4.12**	**3.70**	**7.13**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 2, 5, 8, 11, 12 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 5	1	0	0	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	1	1.33	1.33	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	1	2.25	2.25	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	1	2.65	2.65	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	1	3.98	3.97	70.73	47.32	53.46	54.14	39.06	32.59	31.33	41.88	33.27	25.21	28.89	37.76	88.15
Pier 5	1	5.3	5.3	37.39	25.02	28.26	28.62	20.65	17.23	16.56	22.14	17.59	13.33	15.27	19.96	46.61
Pier 5	1	6.63	6.63	24.17	16.17	18.27	18.50	13.35	11.14	10.71	14.32	11.37	8.62	9.87	12.91	30.13
Pier 5	1	7.95	7.95	17.04	11.40	12.88	13.04	9.41	7.85	7.55	10.09	8.02	6.07	6.96	9.10	21.24
Pier 5	1	9.28	9.27	12.55	8.40	9.49	9.61	6.93	5.78	5.56	7.43	5.90	4.47	5.13	6.70	15.64
Pier 5	1	10.6	10.6	9.49	6.35	7.17	7.27	5.24	4.37	4.20	5.62	4.47	3.38	3.88	5.07	11.83
Pier 5	1	11.93	11.93	7.30	4.89	5.52	5.59	4.03	3.36	3.23	4.32	3.44	2.60	2.98	3.90	9.10
Pier 5	1	13.25	13.25	5.55	3.71	4.20	4.25	3.07	2.56	2.46	3.29	2.61	1.98	2.27	2.96	6.92
Pier 5	2	0	13.25	5.55	3.71	4.20	4.25	3.07	2.56	2.46	3.29	2.61	1.98	2.27	2.96	6.92
Pier 5	2	3.03	16.28	32.98	22.06	24.93	25.24	18.21	15.19	14.61	19.53	15.51	11.75	13.47	17.61	41.10
Pier 5	2	3.33	16.58	46.96	31.42	35.50	35.95	25.94	21.64	20.80	27.81	22.09	16.74	19.18	25.07	58.53
Pier 5	2	6.05	19.3	87.14	58.30	65.86	66.70	48.12	40.14	38.60	51.60	40.99	31.05	35.59	46.52	99.00
Pier 5	2	9.08	22.32	23.11	15.46	17.46	17.69	12.76	10.64	10.23	13.68	10.87	8.23	9.44	12.33	28.80
Pier 5	2	10.67	23.92	15.18	10.16	11.47	11.62	8.38	6.99	6.72	8.99	7.14	5.41	6.20	8.10	18.92
Pier 5	2	12.1	25.35	14.53	9.72	10.98	11.12	8.02	6.69	6.43	8.60	6.83	5.18	5.93	7.75	18.10
Pier 5	2	15.13	28.37	13.53	9.05	10.22	10.35	7.47	6.23	5.99	8.01	6.36	4.82	5.52	7.22	16.86
Pier 5	2	18	31.25	12.82	8.58	9.69	9.81	7.08	5.91	5.68	7.59	6.03	4.57	5.24	6.84	15.98
Pier 5	2	18.15	31.4	13.21	8.84	9.99	10.11	7.30	6.09	5.85	7.83	6.22	4.71	5.40	7.05	16.47
Pier 5	2	21.18	34.42	27.14	18.16	20.52	20.78	14.99	12.51	12.02	16.07	12.77	9.67	11.09	14.49	33.83
Pier 5	2	24.2	37.45	99.00	99.00	99.00	99.00	99.00	83.34	80.13	99.00	85.10	64.47	73.88	96.57	99.00
Pier 5	2	25.33	38.58	99.00	99.00	99.00	99.00	99.00	99.00	95.65	99.00	99.00	76.96	88.19	99.00	99.00
Pier 5	2	27.23	40.48	21.78	14.57	16.46	16.67	12.03	10.03	9.65	12.90	10.24	7.76	8.89	11.63	27.14
Pier 5	2	30.25	43.5	6.58	4.40	4.97	5.04	3.63	3.03	2.91	3.90	3.10	2.35	2.69	3.51	8.20
Pier 5	3	0	43.5	6.58	4.40	4.97	5.04	3.63	3.03	2.91	3.90	3.10	2.35	2.69	3.51	8.20
Pier 5	3	2.03	45.53	19.08	12.77	14.42	14.61	10.54	8.79	8.45	11.30	8.98	6.80	7.79	10.19	23.79
Pier 5	3	2.42	45.92	25.83	17.28	19.52	19.77	14.26	11.90	11.44	15.29	12.15	9.21	10.55	13.79	32.19
Pier 5	3	2.75	46.25	31.62	21.16	23.90	24.21	17.46	14.57	14.01	18.73	14.88	11.27	12.92	16.88	39.41
Pier 5	3	4.05	47.55	31.38	21.00	23.72	24.02	17.33	14.46	13.90	18.58	14.76	11.18	12.82	16.75	39.11
Pier 5	3	6.08	49.57	99.00	83.83	94.71	95.91	69.20	57.73	55.50	74.20	58.95	44.66	51.18	66.89	99.00
Pier 5	3	8.1	51.6	71.24	47.66	53.84	54.53	39.34	32.82	31.55	42.18	33.51	25.39	29.09	38.03	88.78
Pier 5	3	10.08	53.58	25.51	17.07	19.28	19.53	14.09	11.75	11.30	15.11	12.00	9.09	10.42	13.62	31.80
Pier 5	3	10.13	53.63	25.14	16.82	19.00	19.24	13.88	11.58	11.13	14.89	11.82	8.96	10.27	13.42	31.33
Pier 5	3	12.15	55.65	35.12	23.50	26.55	26.88	19.40	16.18	15.56	20.80	16.52	12.52	14.34	18.75	43.77
Pier 5	3	14.18	57.68	55.47	37.11	41.93	42.46	30.63	25.56	24.57	32.85	26.10	19.77	22.66	29.61	69.14
Pier 5	3	16.2	59.7	99.00	72.98	82.45	83.50	60.24	50.25	48.32	64.60	51.31	38.88	44.55	58.23	99.00
Pier 5	3	17.42	60.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	89.91	99.00	99.00	99.00
Pier 5	3	18.23	61.73	72.75	48.67	54.99	55.69	40.18	33.52	32.23	43.08	34.22	25.93	29.71	38.84	90.68
Pier 5	3	20.25	63.75	13.38	8.95	10.12	10.24	7.39	6.17	5.93	7.93	6.30	4.77	5.47	7.14	16.68
Pier 5	4	0	63.75	13.38	8.95	10.12	10.24	7.39	6.17	5.93	7.93	6.30	4.77	5.47	7.14	16.68
Pier 5	4	0.7	64.45	17.07	11.42	12.90	13.06	9.42	7.86	7.56	10.11	8.03	6.08	6.97	9.11	21.27
Pier 5	4	1.4	65.15	22.38	14.97	16.91	17.13	12.36	10.31	9.91	13.25	10.53	7.98	9.14	11.95	27.89
Pier 5	4	2.1	65.85	30.75	20.57	23.24	23.54	16.98	14.17	13.62	18.21	14.47	10.96	12.56	16.42	38.33
Pier 5	4	2.8	66.55	45.96	30.75	34.74	35.18	25.38	21.18	20.36	27.22	21.62	16.38	18.77	24.54	57.29
Pier 5	4	3.5	67.25	82.37	55.11	62.26	63.05	45.49	37.95	36.49	48.78	38.75	29.36	33.64	43.97	99.00
Pier 5	4	4.2	67.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	4	4.5	68.25	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	4.9	68.65	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	5.6	69.35	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	6.3	70.05	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	7	70.75	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
			Controlling RF	**5.55**	**3.71**	**4.20**	**4.25**	**3.07**	**2.56**	**2.46**	**3.29**	**2.61**	**1.98**	**2.27**	**2.96**	**6.92**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 2, 5, 8, 11, 12 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 5	1	0	0	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	1	1.33	1.33	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	1	2.25	2.25	12.68	4.10	5.32	19.56	13.80	12.58	18.07	15.76	14.07	12.64	24.34
Pier 5	1	2.65	2.65	14.77	4.78	6.20	22.79	16.08	14.66	21.05	18.36	16.40	14.72	28.35
Pier 5	1	3.98	3.97	15.86	5.13	6.65	24.47	17.26	15.74	22.60	19.72	17.60	15.81	30.44
Pier 5	1	5.3	5.3	15.69	5.08	6.58	24.20	17.08	15.57	22.36	19.50	17.41	15.64	30.11
Pier 5	1	6.63	6.63	15.51	5.02	6.51	23.93	16.89	15.40	22.11	19.29	17.22	15.46	29.78
Pier 5	1	7.95	7.95	15.34	4.96	6.43	23.67	16.70	15.23	21.87	19.08	17.03	15.29	29.45
Pier 5	1	9.28	9.27	15.17	4.91	6.36	23.40	16.52	15.05	21.62	18.86	16.84	15.12	29.12
Pier 5	1	10.6	10.6	15.00	4.85	6.29	23.14	16.33	14.88	21.38	18.65	16.65	14.95	28.79
Pier 5	2	3.03	16.28	3.38	1.09	1.42	5.22	3.68	3.36	4.82	4.20	3.75	3.37	6.49
Pier 5	2	3.33	16.58	10.91	3.53	4.58	16.83	11.88	10.83	15.55	13.56	12.11	10.87	20.94
Pier 5	2	6.05	19.3	10.33	3.34	4.33	15.93	11.24	10.25	14.72	12.84	11.46	10.29	19.82
Pier 5	2	9.08	22.32	10.29	3.33	4.32	15.88	11.21	10.22	14.67	12.80	11.43	10.26	19.76
Pier 5	2	10.67	23.92	224.88	72.76	94.31	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	12.1	25.35	220.84	71.45	92.62	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	15.13	28.37	219.08	70.88	91.88	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	18	31.25	12.29	3.98	5.15	18.96	13.38	12.19	17.51	15.28	13.64	12.25	23.59
Pier 5	2	18.15	31.4	12.44	4.03	5.22	19.20	13.55	12.35	17.73	15.47	13.81	12.40	23.88
Pier 5	2	21.18	34.42	13.32	4.31	5.59	20.55	14.50	13.22	18.99	16.56	14.79	13.28	25.57
Pier 5	2	24.2	37.45	13.13	4.25	5.51	20.25	14.29	13.03	18.71	16.32	14.57	13.08	25.20
Pier 5	2	25.33	38.58	5.39	1.74	2.26	8.31	5.87	5.35	7.68	6.70	5.98	5.37	10.34
Pier 5	2	27.23	40.48	4.12	1.33	1.73	6.36	4.49	4.09	5.88	5.13	4.58	4.11	7.91
Pier 5	3	2.42	45.92	4.54	1.47	1.90	7.00	4.94	4.50	6.47	5.64	5.04	4.52	8.71
Pier 5	3	2.75	46.25	15.30	4.95	6.42	23.60	16.65	15.18	21.80	19.02	16.98	15.25	29.36
Pier 5	3	4.05	47.55	16.55	5.36	6.94	25.54	18.02	16.43	23.59	20.58	18.37	16.50	31.77
Pier 5	3	6.08	49.57	18.39	5.95	7.71	28.37	20.02	18.25	26.21	22.86	20.41	18.33	35.30
Pier 5	3	8.1	51.6	18.76	6.07	7.87	28.94	20.42	18.62	26.74	23.32	20.82	18.70	36.01
Pier 5	3	10.08	53.58	48.40	15.66	20.30	74.67	52.69	48.03	68.98	60.17	53.73	48.24	92.89
Pier 5	3	10.13	53.63	48.15	15.58	20.19	74.28	52.41	47.78	68.62	59.86	53.45	47.99	92.41
Pier 5	3	12.15	55.65	50.45	16.32	21.16	77.84	54.93	50.07	71.90	62.73	56.01	50.29	96.84
Pier 5	3	14.18	57.68	49.73	16.09	20.86	76.72	54.14	49.35	70.88	61.83	55.21	49.57	95.46
Pier 5	3	16.2	59.7	50.78	16.43	21.30	78.34	55.28	50.39	72.37	63.14	56.37	50.62	97.47
Pier 5	3	17.42	60.92	8.18	2.65	3.43	12.62	8.90	8.12	11.66	10.17	9.08	8.15	15.70
Pier 5	4	2.8	66.55	12.89	4.17	5.41	19.89	14.03	12.79	18.37	16.03	14.31	12.85	24.74
Pier 5	4	3.5	67.25	13.75	4.45	5.77	21.21	14.97	13.64	19.59	17.09	15.26	13.70	26.39
Pier 5	4	4.2	67.95	14.61	4.73	6.13	22.53	15.90	14.49	20.81	18.16	16.21	14.56	28.03
Pier 5	4	4.5	68.25	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	4.9	68.65	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	5.6	69.35	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	6.3	70.05	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
Pier 5	4	7	70.75	99.00	32.03	41.52	99.00	99.00	98.24	99.00	99.00	99.00	98.68	99.00
			Controlling RF	**3.38**	**1.09**	**1.42**	**5.22**	**3.68**	**3.36**	**4.82**	**4.20**	**3.75**	**3.37**	**6.49**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 2, 5, 8, 11, 12 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 5	1	0	0	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	1	1.33	1.33	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	1	2.25	2.25	18.95	12.68	14.32	14.51	10.47	8.73	8.39	11.22	8.92	6.75	7.74	10.12	23.62
Pier 5	1	2.65	2.65	22.08	14.77	16.69	16.90	12.19	10.17	9.78	13.07	10.39	7.87	9.02	11.79	27.52
Pier 5	1	3.98	3.97	23.70	15.86	17.92	18.14	13.09	10.92	10.50	14.04	11.15	8.45	9.68	12.65	29.54
Pier 5	1	5.3	5.3	23.45	15.69	17.72	17.95	12.95	10.80	10.39	13.88	11.03	8.36	9.58	12.52	29.22
Pier 5	1	6.63	6.63	23.19	15.51	17.53	17.75	12.81	10.68	10.27	13.73	10.91	8.26	9.47	12.38	28.90
Pier 5	1	7.95	7.95	22.93	15.34	17.33	17.55	12.66	10.57	10.16	13.58	10.79	8.17	9.37	12.24	28.58
Pier 5	1	9.28	9.27	22.68	15.17	17.14	17.36	12.52	10.45	10.04	13.43	10.67	8.08	9.26	12.11	28.26
Pier 5	1	10.6	10.6	22.42	15.00	16.94	17.16	12.38	10.33	9.93	13.28	10.55	7.99	9.16	11.97	27.94
Pier 5	2	3.03	16.28	5.05	3.38	3.82	3.87	2.79	2.33	2.24	2.99	2.38	1.80	2.06	2.70	6.30
Pier 5	2	3.33	16.58	16.31	10.91	12.33	12.48	9.01	7.51	7.22	9.66	7.67	5.81	6.66	8.71	20.33
Pier 5	2	6.05	19.3	15.44	10.33	11.67	11.81	8.52	7.11	6.84	9.14	7.26	5.50	6.30	8.24	19.24
Pier 5	2	9.08	22.32	15.39	10.29	11.63	11.78	8.50	7.09	6.82	9.11	7.24	5.48	6.28	8.21	19.18
Pier 5	2	10.67	23.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	12.1	25.35	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	15.13	28.37	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 5	2	18	31.25	18.37	12.29	13.88	14.06	10.14	8.46	8.14	10.88	8.64	6.55	7.50	9.81	22.89
Pier 5	2	18.15	31.4	18.60	12.44	14.06	14.24	10.27	8.57	8.24	11.01	8.75	6.63	7.60	9.93	23.18
Pier 5	2	21.18	34.42	19.91	13.32	15.05	15.24	11.00	9.17	8.82	11.79	9.37	7.10	8.13	10.63	24.82
Pier 5	2	24.2	37.45	19.62	13.13	14.83	15.02	10.84	9.04	8.69	11.62	9.23	6.99	8.01	10.48	24.46
Pier 5	2	25.33	38.58	8.06	5.39	6.09	6.17	4.45	3.71	3.57	4.77	3.79	2.87	3.29	4.30	10.04
Pier 5	2	27.23	40.48	6.16	4.12	4.66	4.72	3.40	2.84	2.73	3.65	2.90	2.20	2.52	3.29	7.68
Pier 5	3	2.42	45.92	6.78	4.54	5.13	5.19	3.75	3.12	3.00	4.02	3.19	2.42	2.77	3.62	8.45
Pier 5	3	2.75	46.25	22.87	15.30	17.28	17.50	12.63	10.53	10.13	13.54	10.76	8.15	9.34	12.21	28.50
Pier 5	3	4.05	47.55	24.74	16.55	18.70	18.94	13.66	11.40	10.96	14.65	11.64	8.82	10.11	13.21	30.84
Pier 5	3	6.08	49.57	27.49	18.39	20.78	21.04	15.18	12.66	12.18	16.28	12.93	9.80	11.23	14.67	34.26
Pier 5	3	8.1	51.6	28.04	18.76	21.19	21.46	15.49	12.92	12.42	16.61	13.19	9.99	11.45	14.97	34.95
Pier 5	3	10.08	53.58	72.34	48.40	54.68	55.38	39.95	33.33	32.05	42.84	34.03	25.78	29.55	38.62	90.17
Pier 5	3	10.13	53.63	71.97	48.15	54.39	55.09	39.74	33.15	31.88	42.62	33.85	25.65	29.39	38.42	89.69
Pier 5	3	12.15	55.65	75.42	50.45	57.00	57.73	41.65	34.74	33.41	44.66	35.48	26.88	30.80	40.26	93.99
Pier 5	3	14.18	57.68	74.34	49.73	56.19	56.90	41.05	34.25	32.93	44.02	34.97	26.49	30.36	39.68	92.65
Pier 5	3	16.2	59.7	75.91	50.78	57.37	58.10	41.92	34.97	33.62	44.95	35.71	27.05	31.00	40.52	94.60
Pier 5	3	17.42	60.92	12.22	8.18	9.24	9.36	6.75	5.63	5.41	7.24	5.75	4.36	4.99	6.53	15.24
Pier 5	4	2.8	66.55	19.27	12.89	14.56	14.75	10.64	8.88	8.54	11.41	9.06	6.87	7.87	10.29	24.02
Pier 5	4	3.5	67.25	20.55	13.75	15.53	15.73	11.35	9.47	9.10	12.17	9.67	7.32	8.39	10.97	25.61
Pier 5	4	4.2	67.95	21.83	14.61	16.50	16.71	12.06	10.06	9.67	12.93	10.27	7.78	8.92	11.65	27.21
Pier 5	4	4.5	68.25	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	4.9	68.65	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	5.6	69.35	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	6.3	70.05	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
Pier 5	4	7	70.75	99.00	99.00	99.00	99.00	81.72	68.17	65.55	87.63	69.61	52.74	60.44	79.00	99.00
			Controlling RF	**5.05**	**3.38**	**3.82**	**3.87**	**2.79**	**2.33**	**2.24**	**2.99**	**2.38**	**1.80**	**2.06**	**2.70**	**6.30**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 13	1	0	0	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	1	1.33	1.33	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	1	2.25	2.25	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	1	2.65	2.65	232.87	69.16	89.65	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	1	3.98	3.97	50.08	14.87	19.28	77.21	54.22	49.23	71.39	62.27	55.57	49.88	96.25
Pier 13	1	5.3	5.3	26.03	7.73	10.02	40.13	28.18	25.59	37.10	32.36	28.88	25.92	50.03
Pier 13	1	6.63	6.63	16.49	4.90	6.35	25.43	17.86	16.22	23.51	20.51	18.30	16.43	31.70
Pier 13	1	7.95	7.95	11.35	3.37	4.37	17.51	12.30	11.16	16.19	14.12	12.60	11.31	21.82
Pier 13	1	9.28	9.27	8.16	2.42	3.14	12.57	8.83	8.02	11.63	10.14	9.05	8.12	15.67
Pier 13	1	10.6	10.6	5.98	1.78	2.30	9.23	6.48	5.88	8.53	7.44	6.64	5.96	11.50
Pier 13	1	11.93	11.93	4.35	1.29	1.67	6.71	4.71	4.28	6.20	5.41	4.83	4.33	8.36
Pier 13	1	13.25	13.25	3.07	0.91	1.18	4.73	3.32	3.02	4.37	3.82	3.41	3.06	5.90
Pier 13	2	0	13.25	3.07	0.91	1.18	4.73	3.32	3.02	4.37	3.82	3.41	3.06	5.90
Pier 13	2	3.03	16.28	23.26	6.91	8.95	35.86	25.18	22.87	33.16	28.92	25.81	23.17	44.70
Pier 13	2	3.33	16.58	34.53	10.26	13.29	53.24	37.39	33.95	49.23	42.94	38.32	34.40	66.37
Pier 13	2	6.05	19.3	49.76	14.78	19.15	76.72	53.88	48.92	70.93	61.87	55.22	49.56	95.64
Pier 13	2	9.08	22.32	14.97	4.45	5.76	23.08	16.21	14.72	21.34	18.62	16.61	14.91	28.78
Pier 13	2	10.67	23.92	9.19	2.73	3.54	14.17	9.95	9.04	13.10	11.43	10.20	9.15	17.66
Pier 13	2	12.1	25.35	8.73	2.59	3.36	13.47	9.46	8.59	12.45	10.86	9.69	8.70	16.79
Pier 13	2	15.13	28.37	8.02	2.38	3.09	12.37	8.69	7.89	11.44	9.98	8.90	7.99	15.42
Pier 13	2	18	31.25	7.50	2.23	2.89	11.57	8.13	7.38	10.70	9.33	8.33	7.47	14.42
Pier 13	2	18.15	31.4	7.85	2.33	3.02	12.10	8.50	7.71	11.19	9.76	8.71	7.82	15.08
Pier 13	2	21.18	34.42	16.45	4.89	6.33	25.37	17.81	16.18	23.45	20.46	18.26	16.39	31.62
Pier 13	2	24.2	37.45	111.58	33.13	42.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	25.33	38.58	136.69	40.59	52.62	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	27.23	40.48	15.30	4.54	5.89	23.59	16.57	15.04	21.81	19.03	16.98	15.24	29.41
Pier 13	2	30.25	43.5	4.44	1.32	1.71	6.84	4.81	4.36	6.33	5.52	4.93	4.42	8.53
Pier 13	3	0	43.5	4.44	1.32	1.71	6.84	4.81	4.36	6.33	5.52	4.93	4.42	8.53
Pier 13	3	2.03	45.53	13.20	3.92	5.08	20.35	14.30	12.98	18.82	16.42	14.65	13.15	25.37
Pier 13	3	2.42	45.92	17.86	5.30	6.88	27.54	19.34	17.56	25.46	22.21	19.82	17.79	34.33
Pier 13	3	2.75	46.25	21.63	6.42	8.32	33.34	23.42	21.26	30.83	26.89	24.00	21.54	41.56
Pier 13	3	4.05	47.55	32.54	9.66	12.53	50.17	35.24	31.99	46.39	40.46	36.11	32.41	62.54
Pier 13	3	6.08	49.57	112.41	33.38	43.27	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	3	8.1	51.6	87.24	25.91	33.58	99.00	94.47	85.77	99.00	99.00	96.81	86.90	99.00
Pier 13	3	10.08	53.58	30.39	9.03	11.70	46.86	32.91	29.88	43.32	37.79	33.73	30.27	58.41
Pier 13	3	10.13	53.63	30.57	9.08	11.77	47.13	33.10	30.06	43.58	38.01	33.93	30.45	58.76
Pier 13	3	12.15	55.65	37.80	11.22	14.55	58.27	40.93	37.16	53.88	47.00	41.94	37.65	72.65
Pier 13	3	14.18	57.68	39.18	11.64	15.08	60.41	42.43	38.52	55.86	48.72	43.48	39.03	75.31
Pier 13	3	16.2	59.7	67.90	20.16	26.14	99.00	73.52	66.75	96.79	84.42	75.35	67.63	99.00
Pier 13	3	17.42	60.92	154.44	45.87	59.46	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	3	18.23	61.73	42.06	12.49	16.19	64.84	45.54	41.35	59.95	52.29	46.67	41.89	80.83
Pier 13	3	20.25	63.75	6.97	2.07	2.68	10.74	7.54	6.85	9.93	8.66	7.73	6.94	13.39
Pier 13	4	0	63.75	6.97	2.07	2.68	10.74	7.54	6.85	9.93	8.66	7.73	6.94	13.39
Pier 13	4	0.7	64.45	9.39	2.79	3.61	14.48	10.17	9.23	13.39	11.68	10.42	9.35	18.05
Pier 13	4	1.4	65.15	12.89	3.83	4.96	19.87	13.95	12.67	18.37	16.02	14.30	12.83	24.77
Pier 13	4	2.1	65.85	18.39	5.46	7.08	28.36	19.92	18.08	26.22	22.87	20.41	18.32	35.35
Pier 13	4	2.8	66.55	28.40	8.43	10.93	43.79	30.75	27.92	40.49	35.32	31.52	28.29	54.59
Pier 13	4	3.5	67.25	52.35	15.55	20.15	80.72	56.69	51.47	74.63	65.10	58.10	52.15	99.00
Pier 13	4	4.2	67.95	187.82	55.78	72.30	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	4	4.5	68.25	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	4.9	68.65	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	5.6	69.35	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	6.3	70.05	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	7	70.75	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
			Controlling RF	**3.07**	**0.91**	**1.18**	**4.73**	**3.32**	**3.02**	**4.37**	**3.82**	**3.41**	**3.06**	**5.90**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 13	1	0	0	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	1	1.33	1.33	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	1	2.25	2.25	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	1	2.65	2.65	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	1	3.98	3.97	74.84	50.08	56.59	57.32	41.25	34.47	32.72	43.70	32.07	23.76	29.59	36.56	93.17
Pier 13	1	5.3	5.3	38.90	26.03	29.41	29.79	21.44	17.91	17.01	22.71	16.67	12.35	15.38	19.00	48.43
Pier 13	1	6.63	6.63	24.65	16.49	18.64	18.88	13.59	11.35	10.78	14.39	10.56	7.83	9.75	12.04	30.69
Pier 13	1	7.95	7.95	16.97	11.35	12.83	13.00	9.35	7.81	7.42	9.91	7.27	5.39	6.71	8.29	21.13
Pier 13	1	9.28	9.27	12.19	8.16	9.22	9.33	6.72	5.61	5.33	7.12	5.22	3.87	4.82	5.95	15.17
Pier 13	1	10.6	10.6	8.94	5.98	6.76	6.85	4.93	4.12	3.91	5.22	3.83	2.84	3.54	4.37	11.14
Pier 13	1	11.93	11.93	6.50	4.35	4.92	4.98	3.58	2.99	2.84	3.80	2.79	2.06	2.57	3.18	8.09
Pier 13	1	13.25	13.25	4.59	3.07	3.47	3.51	2.53	2.11	2.00	2.68	1.96	1.46	1.81	2.24	5.71
Pier 13	2	0	13.25	4.59	3.07	3.47	3.51	2.53	2.11	2.00	2.68	1.96	1.46	1.81	2.24	5.71
Pier 13	2	3.03	16.28	34.76	23.26	26.28	26.62	19.16	16.01	15.20	20.30	14.89	11.04	13.74	16.98	43.27
Pier 13	2	3.33	16.58	51.61	34.53	39.02	39.53	28.44	23.77	22.56	30.13	22.11	16.39	20.41	25.21	64.25
Pier 13	2	6.05	19.3	74.36	49.76	56.23	56.96	40.98	34.25	32.51	43.42	31.86	23.61	29.40	36.33	92.58
Pier 13	2	9.08	22.32	22.37	14.97	16.92	17.14	12.33	10.30	9.78	13.07	9.59	7.10	8.85	10.93	27.86
Pier 13	2	10.67	23.92	13.73	9.19	10.39	10.52	7.57	6.33	6.01	8.02	5.89	4.36	5.43	6.71	17.10
Pier 13	2	12.1	25.35	13.05	8.73	9.87	10.00	7.19	6.01	5.71	7.62	5.59	4.14	5.16	6.38	16.25
Pier 13	2	15.13	28.37	11.99	8.02	9.07	9.18	6.61	5.52	5.24	7.00	5.14	3.81	4.74	5.86	14.93
Pier 13	2	18	31.25	11.21	7.50	8.48	8.59	6.18	5.16	4.90	6.55	4.81	3.56	4.43	5.48	13.96
Pier 13	2	18.15	31.4	11.73	7.85	8.87	8.98	6.46	5.40	5.13	6.85	5.02	3.72	4.64	5.73	14.60
Pier 13	2	21.18	34.42	24.59	16.45	18.59	18.83	13.55	11.32	10.75	14.36	10.54	7.81	9.72	12.01	30.61
Pier 13	2	24.2	37.45	99.00	99.00	99.00	99.00	91.90	76.79	72.91	97.37	71.45	52.95	65.93	81.46	99.00
Pier 13	2	25.33	38.58	99.00	99.00	99.00	99.00	99.00	94.07	89.32	99.00	87.53	64.86	80.77	99.00	99.00
Pier 13	2	27.23	40.48	22.87	15.30	17.29	17.52	12.60	10.53	10.00	13.35	9.80	7.26	9.04	11.17	28.47
Pier 13	2	30.25	43.5	6.63	4.44	5.02	5.08	3.66	3.06	2.90	3.87	2.84	2.11	2.62	3.24	8.26
Pier 13	3	0	43.5	6.63	4.44	5.02	5.08	3.66	3.06	2.90	3.87	2.84	2.11	2.62	3.24	8.26
Pier 13	3	2.03	45.53	19.73	13.20	14.92	15.11	10.87	9.09	8.63	11.52	8.45	6.26	7.80	9.64	24.56
Pier 13	3	2.42	45.92	26.69	17.86	20.18	20.45	14.71	12.29	11.67	15.59	11.44	8.48	10.55	13.04	33.23
Pier 13	3	2.75	46.25	32.32	21.63	24.44	24.75	17.81	14.88	14.13	18.87	13.85	10.26	12.78	15.79	40.24
Pier 13	3	4.05	47.55	48.63	32.54	36.77	37.25	26.80	22.40	21.26	28.40	20.84	15.44	19.23	23.76	60.55
Pier 13	3	6.08	49.57	99.00	99.00	99.00	99.00	92.59	77.37	73.46	98.10	71.99	53.35	66.43	82.07	99.00
Pier 13	3	8.1	51.6	99.00	87.24	98.59	99.00	71.86	60.04	57.01	76.13	55.87	41.40	51.55	63.70	99.00
Pier 13	3	10.08	53.58	45.42	30.39	34.34	34.79	25.03	20.92	19.86	26.52	19.46	14.42	17.96	22.19	56.55
Pier 13	3	10.13	53.63	45.69	30.57	34.55	34.99	25.18	21.04	19.98	26.68	19.58	14.51	18.07	22.32	56.88
Pier 13	3	12.15	55.65	56.49	37.80	42.71	43.26	31.13	26.01	24.70	32.98	24.20	17.94	22.34	27.60	70.32
Pier 13	3	14.18	57.68	58.56	39.18	44.28	44.85	32.28	26.97	25.60	34.19	25.09	18.59	23.15	28.61	72.91
Pier 13	3	16.2	59.7	99.00	67.90	76.72	77.72	55.92	46.73	44.37	59.25	43.48	32.22	40.12	49.57	99.00
Pier 13	3	17.42	60.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	98.90	73.29	91.26	99.00	99.00
Pier 13	3	18.23	61.73	62.85	42.06	47.52	48.14	34.64	28.94	27.48	36.70	26.93	19.96	24.85	30.70	78.25
Pier 13	3	20.25	63.75	10.41	6.97	7.87	7.97	5.74	4.80	4.55	6.08	4.46	3.31	4.12	5.09	12.96
Pier 13	4	0	63.75	10.41	6.97	7.87	7.97	5.74	4.80	4.55	6.08	4.46	3.31	4.12	5.09	12.96
Pier 13	4	0.7	64.45	14.03	9.39	10.61	10.75	7.73	6.46	6.14	8.19	6.01	4.46	5.55	6.86	17.47
Pier 13	4	1.4	65.15	19.26	12.89	14.56	14.75	10.61	8.87	8.42	11.24	8.25	6.11	7.61	9.41	23.98
Pier 13	4	2.1	65.85	27.49	18.39	20.79	21.05	15.15	12.66	12.02	16.05	11.78	8.73	10.87	13.43	34.22
Pier 13	4	2.8	66.55	42.45	28.40	32.10	32.51	23.39	19.55	18.56	24.78	18.19	13.48	16.78	20.74	52.84
Pier 13	4	3.5	67.25	78.24	52.35	59.16	59.93	43.12	36.03	34.21	45.68	33.52	24.84	30.94	38.22	97.41
Pier 13	4	4.2	67.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	89.13	99.00	99.00	99.00
Pier 13	4	4.5	68.25	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	4.9	68.65	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	5.6	69.35	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	6.3	70.05	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	7	70.75	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
			Controlling RF	**4.59**	**3.07**	**3.47**	**3.51**	**2.53**	**2.11**	**2.00**	**2.68**	**1.96**	**1.46**	**1.81**	**2.24**	**5.71**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 13	1	0	0	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	1	1.33	1.33	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	1	2.25	2.25	15.39	4.57	5.93	23.73	16.67	15.13	21.94	19.14	17.08	15.33	29.59
Pier 13	1	2.65	2.65	15.34	4.56	5.91	23.65	16.61	15.08	21.87	19.08	17.03	15.28	29.49
Pier 13	1	3.98	3.97	17.11	5.08	6.59	26.38	18.53	16.82	24.40	21.28	18.99	17.05	32.89
Pier 13	1	5.3	5.3	18.00	5.34	6.93	27.75	19.49	17.69	25.65	22.38	19.97	17.92	34.59
Pier 13	1	6.63	6.63	17.90	5.31	6.89	27.59	19.38	17.59	25.51	22.25	19.86	17.82	34.40
Pier 13	1	7.95	7.95	17.73	5.26	6.82	27.33	19.19	17.43	25.27	22.04	19.67	17.66	34.07
Pier 13	1	9.28	9.27	17.56	5.21	6.76	27.07	19.01	17.26	25.03	21.83	19.48	17.49	33.75
Pier 13	1	10.6	10.6	17.39	5.16	6.69	26.81	18.83	17.10	24.79	21.62	19.30	17.32	33.42
Pier 13	2	3.03	16.28	1.41	0.42	0.54	2.18	1.53	1.39	2.01	1.76	1.57	1.41	2.71
Pier 13	2	3.33	16.58	10.78	3.20	4.15	16.62	11.67	10.60	15.37	13.40	11.96	10.74	20.72
Pier 13	2	6.05	19.3	10.46	3.11	4.03	16.12	11.32	10.28	14.91	13.00	11.61	10.42	20.10
Pier 13	2	9.08	22.32	10.52	3.12	4.05	16.22	11.39	10.34	15.00	13.08	11.67	10.48	20.22
Pier 13	2	10.67	23.92	391.36	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	12.1	25.35	386.80	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	15.13	28.37	381.10	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	18	31.25	16.80	4.99	6.47	25.90	18.19	16.51	23.94	20.88	18.64	16.73	32.28
Pier 13	2	18.15	31.4	15.68	4.66	6.04	24.17	16.98	15.41	22.35	19.50	17.40	15.62	30.13
Pier 13	2	21.18	34.42	15.90	4.72	6.12	24.51	17.21	15.63	22.66	19.77	17.64	15.83	30.55
Pier 13	2	24.2	37.45	16.29	4.84	6.27	25.11	17.64	16.01	23.22	20.25	18.07	16.22	31.31
Pier 13	2	25.33	38.58	6.18	1.84	2.38	9.53	6.69	6.08	8.81	7.68	6.86	6.16	11.88
Pier 13	2	27.23	40.48	2.92	0.87	1.13	4.51	3.17	2.87	4.17	3.64	3.24	2.91	5.62
Pier 13	3	2.42	45.92	1.84	0.55	0.71	2.84	2.00	1.81	2.63	2.29	2.05	1.84	3.55
Pier 13	3	2.75	46.25	20.98	6.23	8.08	32.35	22.72	20.63	29.91	26.09	23.29	20.90	40.33
Pier 13	3	4.05	47.55	22.48	6.68	8.65	34.65	24.34	22.10	32.04	27.95	24.94	22.39	43.20
Pier 13	3	6.08	49.57	25.35	7.53	9.76	39.08	27.44	24.92	36.13	31.52	28.13	25.25	48.72
Pier 13	3	8.1	51.6	23.41	6.95	9.01	36.10	25.35	23.02	33.37	29.11	25.98	23.32	45.00
Pier 13	3	10.08	53.58	67.54	20.06	26.00	99.00	73.14	66.40	96.28	83.98	74.95	67.27	99.00
Pier 13	3	10.13	53.63	64.92	19.28	24.99	99.00	70.30	63.83	92.55	80.72	72.04	64.66	99.00
Pier 13	3	12.15	55.65	63.88	18.97	24.59	98.49	69.17	62.81	91.07	79.43	70.89	63.63	99.00
Pier 13	3	14.18	57.68	62.28	18.49	23.97	96.02	67.43	61.23	88.78	77.44	69.11	62.03	99.00
Pier 13	3	16.2	59.7	59.15	17.57	22.77	91.19	64.05	58.15	84.32	73.55	65.64	58.92	99.00
Pier 13	3	17.42	60.92	9.41	2.80	3.62	14.51	10.19	9.25	13.42	11.70	10.44	9.37	18.09
Pier 13	4	2.8	66.55	9.15	2.72	3.52	14.11	9.91	9.00	13.05	11.38	10.16	9.12	17.59
Pier 13	4	3.5	67.25	10.09	3.00	3.89	15.56	10.93	9.92	14.39	12.55	11.20	10.05	19.40
Pier 13	4	4.2	67.95	11.03	3.28	4.25	17.01	11.95	10.85	15.73	13.72	12.24	10.99	21.21
Pier 13	4	4.5	68.25	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	4.9	68.65	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	5.6	69.35	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	6.3	70.05	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
Pier 13	4	7	70.75	99.00	29.40	38.11	99.00	99.00	97.33	99.00	99.00	99.00	98.61	99.00
			Controlling RF	**1.41**	**0.42**	**0.54**	**2.18**	**1.53**	**1.39**	**2.01**	**1.76**	**1.57**	**1.41**	**2.71**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 3, 10, 13 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 13	1	0	0	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	1	1.33	1.33	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	1	2.25	2.25	23.00	15.39	17.39	17.62	12.68	10.59	10.06	13.43	9.86	7.30	9.10	11.24	28.64
Pier 13	1	2.65	2.65	22.93	15.34	17.34	17.56	12.64	10.56	10.03	13.39	9.82	7.28	9.07	11.20	28.55
Pier 13	1	3.98	3.97	25.57	17.11	19.34	19.59	14.10	11.78	11.18	14.93	10.96	8.12	10.11	12.49	31.84
Pier 13	1	5.3	5.3	26.89	18.00	20.34	20.60	14.82	12.39	11.76	15.70	11.52	8.54	10.63	13.14	33.48
Pier 13	1	6.63	6.63	26.74	17.90	20.22	20.48	14.74	12.32	11.69	15.62	11.46	8.49	10.57	13.07	33.30
Pier 13	1	7.95	7.95	26.49	17.73	20.03	20.29	14.60	12.20	11.58	15.47	11.35	8.41	10.48	12.94	32.98
Pier 13	1	9.28	9.27	26.24	17.56	19.84	20.10	14.46	12.08	11.47	15.32	11.24	8.33	10.38	12.82	32.67
Pier 13	1	10.6	10.6	25.99	17.39	19.65	19.90	14.32	11.97	11.36	15.17	11.14	8.25	10.28	12.70	32.35
Pier 13	2	3.03	16.28	2.11	1.41	1.60	1.62	1.16	0.97	0.92	1.23	0.90	0.67	0.83	1.03	2.63
Pier 13	2	3.33	16.58	16.11	10.78	12.18	12.34	8.88	7.42	7.04	9.41	6.90	5.12	6.37	7.87	20.06
Pier 13	2	6.05	19.3	15.63	10.46	11.82	11.97	8.61	7.20	6.83	9.13	6.70	4.96	6.18	7.64	19.46
Pier 13	2	9.08	22.32	15.72	10.52	11.89	12.04	8.67	7.24	6.87	9.18	6.74	4.99	6.22	7.68	19.57
Pier 13	2	10.67	23.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	12.1	25.35	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	15.13	28.37	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 13	2	18	31.25	25.10	16.80	18.98	19.23	13.83	11.56	10.98	14.66	10.76	7.97	9.93	12.26	31.25
Pier 13	2	18.15	31.4	23.43	15.68	17.72	17.95	12.91	10.79	10.24	13.68	10.04	7.44	9.26	11.45	29.17
Pier 13	2	21.18	34.42	23.76	15.90	17.96	18.20	13.09	10.94	10.39	13.87	10.18	7.54	9.39	11.61	29.58
Pier 13	2	24.2	37.45	24.34	16.29	18.41	18.64	13.42	11.21	10.64	14.21	10.43	7.73	9.62	11.89	30.30
Pier 13	2	25.33	38.58	9.24	6.18	6.98	7.07	5.09	4.25	4.04	5.39	3.96	2.93	3.65	4.51	11.50
Pier 13	2	27.23	40.48	4.37	2.92	3.30	3.35	2.41	2.01	1.91	2.55	1.87	1.39	1.73	2.13	5.44
Pier 13	3	2.42	45.92	2.76	1.84	2.08	2.11	1.52	1.27	1.21	1.61	1.18	0.88	1.09	1.35	3.43
Pier 13	3	2.75	46.25	31.36	20.98	23.71	24.02	17.28	14.44	13.71	18.31	13.44	9.96	12.40	15.32	39.04
Pier 13	3	4.05	47.55	33.59	22.48	25.40	25.73	18.51	15.47	14.69	19.61	14.39	10.67	13.28	16.41	41.82
Pier 13	3	6.08	49.57	37.88	25.35	28.64	29.01	20.88	17.44	16.56	22.12	16.23	12.03	14.98	18.50	47.16
Pier 13	3	8.1	51.6	34.99	23.41	26.46	26.80	19.28	16.11	15.30	20.43	14.99	11.11	13.83	17.09	43.56
Pier 13	3	10.08	53.58	99.00	67.54	76.33	77.31	55.63	46.49	44.13	58.94	43.25	32.05	39.91	49.31	99.00
Pier 13	3	10.13	53.63	97.02	64.92	73.36	74.31	53.47	44.68	42.42	56.65	41.57	30.81	38.36	47.40	99.00
Pier 13	3	12.15	55.65	95.47	63.88	72.19	73.12	52.62	43.97	41.74	55.75	40.91	30.31	37.75	46.64	99.00
Pier 13	3	14.18	57.68	93.07	62.28	70.38	71.29	51.30	42.86	40.69	54.35	39.88	29.55	36.80	45.47	99.00
Pier 13	3	16.2	59.7	88.40	59.15	66.84	67.71	48.72	40.71	38.65	51.62	37.88	28.07	34.95	43.19	99.00
Pier 13	3	17.42	60.92	14.07	9.41	10.64	10.77	7.75	6.48	6.15	8.21	6.03	4.47	5.56	6.87	17.51
Pier 13	4	2.8	66.55	13.68	9.15	10.34	10.48	7.54	6.30	5.98	7.99	5.86	4.34	5.41	6.68	17.03
Pier 13	4	3.5	67.25	15.08	10.09	11.41	11.55	8.31	6.95	6.60	8.81	6.46	4.79	5.96	7.37	18.78
Pier 13	4	4.2	67.95	16.49	11.03	12.47	12.63	9.09	7.59	7.21	9.63	7.07	5.24	6.52	8.06	20.53
Pier 13	4	4.5	68.25	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	4.9	68.65	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	5.6	69.35	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	6.3	70.05	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
Pier 13	4	7	70.75	99.00	99.00	99.00	99.00	81.54	68.14	64.69	86.39	63.40	46.98	58.50	72.28	99.00
			Controlling RF	**2.11**	**1.41**	**1.60**	**1.62**	**1.16**	**0.97**	**0.92**	**1.23**	**0.90**	**0.67**	**0.83**	**1.03**	**2.63**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6, 7 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 7	1	0	0	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	0.58	0.57	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	1.15	1.15	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	1.73	1.73	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	2.25	2.25	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	2.3	2.3	1190.53	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 7	1	2.88	2.88	91.51	28.24	36.61	99.00	99.00	90.54	99.00	99.00	99.00	91.22	99.00
Pier 7	1	3.45	3.45	45.68	14.10	18.28	70.46	49.68	45.20	65.13	56.81	50.72	45.54	87.74
Pier 7	1	4.03	4.03	29.52	9.11	11.81	45.53	32.10	29.21	42.09	36.71	32.77	29.42	56.69
Pier 7	1	4.6	4.6	21.25	6.56	8.50	32.77	23.11	21.02	30.29	26.42	23.59	21.18	40.81
Pier 7	1	5.18	5.18	16.21	5.00	6.49	25.01	17.63	16.04	23.12	20.16	18.00	16.16	31.14
Pier 7	1	5.75	5.75	12.82	3.96	5.13	19.78	13.94	12.69	18.28	15.95	14.23	12.78	24.63
Pier 7	2	0	5.75	12.82	3.96	5.13	19.78	13.94	12.69	18.28	15.95	14.23	12.78	24.63
Pier 7	2	2.95	8.7	18.90	5.83	7.56	29.15	20.55	18.70	26.95	23.51	20.98	18.84	36.30
Pier 7	2	3.33	9.08	27.50	8.49	11.00	42.42	29.91	27.21	39.22	34.21	30.54	27.42	52.83
Pier 7	2	5.9	11.65	15.65	4.83	6.26	24.14	17.02	15.49	22.32	19.47	17.38	15.60	30.06
Pier 7	2	8.85	14.6	9.87	3.05	3.95	15.22	10.73	9.76	14.07	12.27	10.96	9.84	18.95
Pier 7	2	10.67	16.42	7.83	2.42	3.13	12.08	8.51	7.75	11.16	9.74	8.69	7.80	15.04
Pier 7	2	11.8	17.55	8.27	2.55	3.31	12.76	8.99	8.18	11.79	10.28	9.18	8.24	15.88
Pier 7	2	14.75	20.5	9.84	3.04	3.94	15.17	10.70	9.73	14.02	12.23	10.92	9.80	18.89
Pier 7	2	17.7	23.45	11.95	3.69	4.78	18.43	12.99	11.82	17.04	14.86	13.27	11.91	22.95
Pier 7	2	18	23.75	12.21	3.77	4.88	18.83	13.28	12.08	17.41	15.18	13.56	12.17	23.45
Pier 7	2	20.65	26.4	36.67	11.32	14.67	56.56	39.88	36.28	52.28	45.60	40.71	36.55	70.43
Pier 7	2	23.6	29.35	47.79	14.75	19.12	73.72	51.97	47.29	68.14	59.44	53.06	47.64	91.79
Pier 7	2	25.33	31.08	18.81	5.81	7.53	29.02	20.46	18.62	26.83	23.40	20.89	18.76	36.14
Pier 7	2	26.55	32.3	9.77	3.02	3.91	15.07	10.63	9.67	13.93	12.15	10.85	9.74	18.77
Pier 7	2	29.5	35.25	3.28	1.01	1.31	5.06	3.56	3.24	4.67	4.08	3.64	3.27	6.30
Pier 7	3	0	35.25	3.28	1.01	1.31	5.06	3.56	3.24	4.67	4.08	3.64	3.27	6.30
Pier 7	3	2.75	38	14.50	4.48	5.80	22.37	15.77	14.35	20.68	18.03	16.10	14.46	27.85
Pier 7	3	2.85	38.1	15.30	4.72	6.12	23.61	16.64	15.14	21.82	19.03	16.99	15.26	29.39
Pier 7	3	3.17	38.42	18.43	5.69	7.37	28.43	20.04	18.23	26.28	22.92	20.46	18.37	35.40
Pier 7	3	5.7	40.95	86.21	26.61	34.49	99.00	93.76	85.31	99.00	99.00	95.72	85.94	99.00
Pier 7	3	8.55	43.8	32.74	10.10	13.10	50.50	35.60	32.39	46.68	40.72	36.35	32.64	62.88
Pier 7	3	10.08	45.33	12.80	3.95	5.12	19.74	13.92	12.66	18.24	15.91	14.21	12.76	24.58
Pier 7	3	11.4	46.65	11.85	3.66	4.74	18.28	12.89	11.72	16.90	14.74	13.16	11.81	22.76
Pier 7	3	14.25	49.5	10.02	3.09	4.01	15.46	10.90	9.92	14.29	12.46	11.13	9.99	19.25
Pier 7	3	17.1	52.35	8.86	2.73	3.55	13.67	9.64	8.77	12.63	11.02	9.84	8.83	17.02
Pier 7	3	17.42	52.67	8.76	2.70	3.50	13.51	9.52	8.67	12.49	10.89	9.72	8.73	16.82
Pier 7	3	19.95	55.2	15.56	4.80	6.22	24.00	16.92	15.39	22.18	19.35	17.27	15.51	29.88
Pier 7	3	22.8	58.05	34.57	10.67	13.83	53.33	37.60	34.21	49.29	43.00	38.38	34.46	66.40
Pier 7	3	25.65	60.9	36.01	11.11	14.41	55.54	39.16	35.63	51.34	44.78	39.98	35.90	69.16
Pier 7	3	28.5	63.75	8.96	2.76	3.58	13.82	9.74	8.86	12.77	11.14	9.95	8.93	17.21
Pier 7	4	0	63.75	8.96	2.76	3.58	13.82	9.74	8.86	12.77	11.14	9.95	8.93	17.21
Pier 7	4	0.7	64.45	11.48	3.54	4.59	17.71	12.49	11.36	16.37	14.28	12.75	11.45	22.05
Pier 7	4	1.4	65.15	15.12	4.67	6.05	23.33	16.45	14.96	21.56	18.81	16.79	15.08	29.05
Pier 7	4	2.1	65.85	20.86	6.44	8.35	32.18	22.69	20.64	29.75	25.95	23.17	20.80	40.07
Pier 7	4	2.8	66.55	31.29	9.66	12.52	48.27	34.03	30.96	44.62	38.92	34.75	31.20	60.11
Pier 7	4	3.5	67.25	56.26	17.36	22.51	86.78	61.18	55.66	80.21	69.97	62.46	56.08	99.00
Pier 7	4	4.2	67.95	197.46	60.95	79.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 7	4	4.5	68.25	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	4.9	68.65	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	5.6	69.35	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	6.3	70.05	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	7	70.75	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
			Controlling RF	**3.28**	**1.01**	**1.31**	**5.06**	**3.56**	**3.24**	**4.67**	**4.08**	**3.64**	**3.27**	**6.30**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6, 7 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 7	1	0	0	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	0.58	0.57	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	1.15	1.15	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	1.73	1.73	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	2.25	2.25	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	2.3	2.3	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 7	1	2.88	2.88	99.00	91.51	99.00	99.00	75.50	63.00	60.38	79.33	58.98	44.34	53.77	67.16	99.00
Pier 7	1	3.45	3.45	68.30	45.68	51.63	52.30	37.69	31.45	30.14	39.60	29.44	22.13	26.84	33.53	85.20
Pier 7	1	4.03	4.03	44.14	29.52	33.36	33.79	24.35	20.32	19.48	25.59	19.03	14.30	17.34	21.66	55.05
Pier 7	1	4.6	4.6	31.77	21.25	24.01	24.32	17.53	14.63	14.02	18.42	13.69	10.29	12.48	15.59	39.63
Pier 7	1	5.18	5.18	24.24	16.21	18.32	18.56	13.38	11.16	10.70	14.06	10.45	7.85	9.53	11.90	30.24
Pier 7	1	5.75	5.75	19.17	12.82	14.49	14.68	10.58	8.83	8.46	11.11	8.26	6.21	7.53	9.41	23.91
Pier 7	2	0	5.75	19.17	12.82	14.49	14.68	10.58	8.83	8.46	11.11	8.26	6.21	7.53	9.41	23.91
Pier 7	2	2.95	8.7	28.26	18.90	21.36	21.64	15.59	13.01	12.47	16.38	12.18	9.16	11.11	13.87	35.25
Pier 7	2	3.33	9.08	41.13	27.50	31.09	31.49	22.69	18.94	18.15	23.84	17.73	13.33	16.16	20.19	51.30
Pier 7	2	5.9	11.65	23.40	15.65	17.69	17.92	12.91	10.78	10.33	13.57	10.09	7.58	9.20	11.49	29.19
Pier 7	2	8.85	14.6	14.75	9.87	11.15	11.30	8.14	6.79	6.51	8.55	6.36	4.78	5.80	7.24	18.40
Pier 7	2	10.67	16.42	11.71	7.83	8.85	8.96	6.46	5.39	5.17	6.79	5.05	3.79	4.60	5.75	14.60
Pier 7	2	11.8	17.55	12.36	8.27	9.35	9.47	6.82	5.69	5.46	7.17	5.33	4.01	4.86	6.07	15.42
Pier 7	2	14.75	20.5	14.71	9.84	11.12	11.26	8.11	6.77	6.49	8.53	6.34	4.77	5.78	7.22	18.34
Pier 7	2	17.7	23.45	17.87	11.95	13.50	13.68	9.86	8.23	7.88	10.36	7.70	5.79	7.02	8.77	22.28
Pier 7	2	18	23.75	18.26	12.21	13.80	13.98	10.07	8.41	8.06	10.58	7.87	5.92	7.17	8.96	22.77
Pier 7	2	20.65	26.4	54.83	36.67	41.45	41.98	30.25	25.25	24.20	31.79	23.64	17.77	21.55	26.91	68.39
Pier 7	2	23.6	29.35	71.46	47.79	54.01	54.71	39.43	32.90	31.54	41.43	30.80	23.15	28.08	35.08	89.13
Pier 7	2	25.33	31.08	28.13	18.81	21.27	21.54	15.52	12.95	12.42	16.31	12.13	9.12	11.06	13.81	35.09
Pier 7	2	26.55	32.3	14.61	9.77	11.04	11.19	8.06	6.73	6.45	8.47	6.30	4.73	5.74	7.17	18.23
Pier 7	2	29.5	35.25	4.90	3.28	3.70	3.75	2.70	2.26	2.16	2.84	2.11	1.59	1.93	2.41	6.11
Pier 7	3	0	35.25	4.90	3.28	3.70	3.75	2.70	2.26	2.16	2.84	2.11	1.59	1.93	2.41	6.11
Pier 7	3	2.75	38	21.68	14.50	16.39	16.60	11.96	9.98	9.57	12.57	9.35	7.03	8.52	10.64	27.05
Pier 7	3	2.85	38.1	22.88	15.30	17.30	17.52	12.63	10.54	10.10	13.27	9.86	7.41	8.99	11.23	28.54
Pier 7	3	3.17	38.42	27.56	18.43	20.83	21.10	15.20	12.69	12.16	15.98	11.88	8.93	10.83	13.53	34.37
Pier 7	3	5.7	40.95	99.00	86.21	97.44	98.71	71.13	59.36	56.89	74.74	55.57	41.77	50.66	63.28	99.00
Pier 7	3	8.55	43.8	48.95	32.74	37.00	37.48	27.01	22.54	21.60	28.38	21.10	15.86	19.24	24.03	61.06
Pier 7	3	10.08	45.33	19.13	12.80	14.46	14.65	10.56	8.81	8.44	11.09	8.25	6.20	7.52	9.39	23.86
Pier 7	3	11.4	46.65	17.72	11.85	13.39	13.57	9.78	8.16	7.82	10.27	7.64	5.74	6.96	8.70	22.10
Pier 7	3	14.25	49.5	14.98	10.02	11.33	11.47	8.27	6.90	6.61	8.69	6.46	4.86	5.89	7.36	18.69
Pier 7	3	17.1	52.35	13.25	8.86	10.01	10.14	7.31	6.10	5.85	7.68	5.71	4.29	5.21	6.50	16.53
Pier 7	3	17.42	52.67	13.10	8.76	9.90	10.03	7.23	6.03	5.78	7.59	5.64	4.24	5.15	6.43	16.33
Pier 7	3	19.95	55.2	23.26	15.56	17.58	17.81	12.84	10.71	10.27	13.49	10.03	7.54	9.14	11.42	29.02
Pier 7	3	22.8	58.05	51.69	34.57	39.07	39.58	28.52	23.80	22.81	29.97	22.28	16.75	20.31	25.37	64.48
Pier 7	3	25.65	60.9	53.84	36.01	40.70	41.23	29.71	24.79	23.76	31.22	23.21	17.45	21.16	26.43	67.16
Pier 7	3	28.5	63.75	13.39	8.96	10.12	10.26	7.39	6.17	5.91	7.77	5.77	4.34	5.26	6.57	16.71
Pier 7	4	0	63.75	13.39	8.96	10.12	10.26	7.39	6.17	5.91	7.77	5.77	4.34	5.26	6.57	16.71
Pier 7	4	0.7	64.45	17.17	11.48	12.98	13.15	9.47	7.91	7.58	9.95	7.40	5.56	6.75	8.43	21.41
Pier 7	4	1.4	65.15	22.62	15.12	17.09	17.32	12.48	10.41	9.98	13.11	9.75	7.33	8.89	11.10	28.21
Pier 7	4	2.1	65.85	31.20	20.86	23.58	23.89	17.21	14.36	13.77	18.09	13.45	10.11	12.26	15.31	38.91
Pier 7	4	2.8	66.55	46.79	31.29	35.37	35.83	25.82	21.55	20.65	27.13	20.17	15.16	18.39	22.97	58.37
Pier 7	4	3.5	67.25	84.12	56.26	63.58	64.41	46.41	38.73	37.12	48.77	36.26	27.26	33.06	41.29	99.00
Pier 7	4	4.2	67.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	95.67	99.00	99.00	99.00
Pier 7	4	4.5	68.25	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	4.9	68.65	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	5.6	69.35	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	6.3	70.05	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	7	70.75	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
			Controlling RF	**4.90**	**3.28**	**3.70**	**3.75**	**2.70**	**2.26**	**2.16**	**2.84**	**2.11**	**1.59**	**1.93**	**2.41**	**6.11**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6, 7 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 7	1	0	0	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	0.58	0.57	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	1.15	1.15	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	1.73	1.73	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	1	2.25	2.25	11.60	3.58	4.64	17.89	12.62	11.48	16.54	14.43	12.88	11.56	22.28
Pier 7	1	2.3	2.3	11.66	3.60	4.66	17.98	12.68	11.54	16.62	14.50	12.94	11.62	22.39
Pier 7	1	2.88	2.88	11.84	3.65	4.74	18.26	12.87	11.71	16.88	14.72	13.14	11.80	22.74
Pier 7	1	3.45	3.45	12.09	3.73	4.84	18.64	13.14	11.96	17.23	15.03	13.42	12.05	23.21
Pier 7	2	2.95	8.7	4.70	1.45	1.88	7.25	5.11	4.65	6.71	5.85	5.22	4.69	9.03
Pier 7	2	3.33	9.08	18.60	5.74	7.44	28.69	20.23	18.40	26.52	23.13	20.65	18.54	35.72
Pier 7	2	5.9	11.65	17.87	5.52	7.15	27.57	19.43	17.68	25.48	22.23	19.84	17.81	34.32
Pier 7	2	8.85	14.6	16.43	5.07	6.57	25.34	17.87	16.25	23.42	20.43	18.24	16.38	31.55
Pier 7	2	10.67	16.42	37.80	11.67	15.12	58.31	41.11	37.40	53.90	47.01	41.97	37.68	72.60
Pier 7	2	11.8	17.55	38.16	11.78	15.27	58.87	41.50	37.76	54.41	47.46	42.37	38.04	73.30
Pier 7	2	14.75	20.5	39.44	12.17	15.78	60.84	42.89	39.02	56.24	49.05	43.79	39.32	75.75
Pier 7	2	17.7	23.45	39.10	12.07	15.64	60.31	42.52	38.69	55.75	48.63	43.41	38.98	75.10
Pier 7	2	18	23.75	8.27	2.55	3.31	12.76	9.00	8.19	11.80	10.29	9.19	8.25	15.89
Pier 7	2	20.65	26.4	8.81	2.72	3.52	13.59	9.58	8.72	12.56	10.96	9.78	8.78	16.92
Pier 7	2	23.6	29.35	8.09	2.50	3.24	12.47	8.79	8.00	11.53	10.06	8.98	8.06	15.53
Pier 7	2	25.33	31.08	2.72	0.84	1.09	4.19	2.96	2.69	3.88	3.38	3.02	2.71	5.22
Pier 7	2	26.55	32.3	2.34	0.72	0.93	3.60	2.54	2.31	3.33	2.90	2.59	2.33	4.49
Pier 7	3	2.75	38	2.51	0.77	1.00	3.87	2.73	2.48	3.57	3.12	2.78	2.50	4.81
Pier 7	3	2.85	38.1	2.82	0.87	1.13	4.35	3.07	2.79	4.02	3.51	3.13	2.81	5.42
Pier 7	3	3.17	38.42	8.81	2.72	3.53	13.60	9.59	8.72	12.57	10.96	9.79	8.79	16.93
Pier 7	3	5.7	40.95	10.05	3.10	4.02	15.51	10.93	9.95	14.33	12.50	11.16	10.02	19.31
Pier 7	3	8.55	43.8	9.47	2.92	3.79	14.60	10.29	9.37	13.50	11.77	10.51	9.44	18.18
Pier 7	3	10.08	45.33	68.44	21.13	27.38	99.00	74.44	67.72	97.59	85.12	75.99	68.23	99.00
Pier 7	3	11.4	46.65	69.06	21.32	27.63	99.00	75.11	68.34	98.47	85.89	76.68	68.85	99.00
Pier 7	3	14.25	49.5	67.91	20.96	27.17	99.00	73.86	67.20	96.83	84.46	75.40	67.70	99.00
Pier 7	3	17.1	52.35	69.47	21.44	27.80	99.00	75.56	68.74	99.00	86.41	77.14	69.26	99.00
Pier 7	3	17.42	52.67	14.34	4.43	5.74	22.12	15.59	14.19	20.45	17.83	15.92	14.29	27.54
Pier 7	3	19.95	55.2	15.21	4.69	6.08	23.46	16.54	15.05	21.68	18.91	16.89	15.16	29.21
Pier 7	3	22.8	58.05	15.02	4.63	6.01	23.16	16.33	14.86	21.41	18.67	16.67	14.97	28.84
Pier 7	3	25.65	60.9	14.66	4.53	5.87	22.62	15.95	14.51	20.91	18.24	16.28	14.62	28.16
Pier 7	4	2.8	66.55	13.19	4.07	5.28	20.34	14.34	13.05	18.80	16.40	14.64	13.14	25.33
Pier 7	4	3.5	67.25	14.04	4.33	5.62	21.66	15.27	13.89	20.02	17.46	15.59	14.00	26.97
Pier 7	4	4.2	67.95	14.90	4.60	5.96	22.99	16.21	14.75	21.25	18.54	16.55	14.86	28.63
Pier 7	4	4.5	68.25	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	4.9	68.65	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	5.6	69.35	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	6.3	70.05	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
Pier 7	4	7	70.75	99.00	30.56	39.61	99.00	99.00	97.96	99.00	99.00	99.00	98.69	99.00
			Controlling RF	**2.34**	**0.72**	**0.93**	**3.60**	**2.54**	**2.31**	**3.33**	**2.90**	**2.59**	**2.33**	**4.49**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 6, 7 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 7	1	0	0	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	0.58	0.57	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	1.15	1.15	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	1.73	1.73	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	1	2.25	2.25	17.35	11.60	13.11	13.28	9.57	7.99	7.65	10.06	7.48	5.62	6.82	8.51	21.63
Pier 7	1	2.3	2.3	17.43	11.66	13.18	13.35	9.62	8.03	7.69	10.11	7.51	5.65	6.85	8.56	21.74
Pier 7	1	2.88	2.88	17.70	11.84	13.38	13.55	9.77	8.15	7.81	10.26	7.63	5.74	6.96	8.69	22.08
Pier 7	1	3.45	3.45	18.07	12.09	13.66	13.84	9.97	8.32	7.98	10.48	7.79	5.86	7.10	8.87	22.54
Pier 7	2	2.95	8.7	7.03	4.70	5.32	5.38	3.88	3.24	3.10	4.08	3.03	2.28	2.76	3.45	8.77
Pier 7	2	3.33	9.08	27.81	18.60	21.02	21.29	15.34	12.80	12.27	16.12	11.99	9.01	10.93	13.65	34.69
Pier 7	2	5.9	11.65	26.72	17.87	20.20	20.46	14.74	12.30	11.79	15.49	11.52	8.66	10.50	13.12	33.33
Pier 7	2	8.85	14.6	24.56	16.43	18.57	18.81	13.55	11.31	10.84	14.24	10.59	7.96	9.65	12.06	30.64
Pier 7	2	10.67	16.42	56.52	37.80	42.72	43.28	31.19	26.02	24.94	32.77	24.36	18.31	22.21	27.74	70.50
Pier 7	2	11.8	17.55	57.07	38.16	43.13	43.69	31.49	26.28	25.18	33.08	24.60	18.49	22.42	28.01	71.18
Pier 7	2	14.75	20.5	58.98	39.44	44.58	45.16	32.54	27.15	26.03	34.19	25.42	19.11	23.17	28.95	73.56
Pier 7	2	17.7	23.45	58.47	39.10	44.19	44.76	32.26	26.92	25.80	33.90	25.20	18.94	22.97	28.70	72.92
Pier 7	2	18	23.75	12.37	8.27	9.35	9.47	6.83	5.70	5.46	7.17	5.33	4.01	4.86	6.07	15.43
Pier 7	2	20.65	26.4	13.17	8.81	9.96	10.09	7.27	6.07	5.81	7.64	5.68	4.27	5.18	6.47	16.43
Pier 7	2	23.6	29.35	12.09	8.09	9.14	9.26	6.67	5.57	5.34	7.01	5.21	3.92	4.75	5.94	15.08
Pier 7	2	25.33	31.08	4.07	2.72	3.07	3.11	2.24	1.87	1.79	2.36	1.75	1.32	1.60	2.00	5.07
Pier 7	2	26.55	32.3	3.49	2.34	2.64	2.67	1.93	1.61	1.54	2.02	1.51	1.13	1.37	1.71	4.36
Pier 7	3	2.75	38	3.75	2.51	2.83	2.87	2.07	1.73	1.65	2.17	1.62	1.21	1.47	1.84	4.67
Pier 7	3	2.85	38.1	4.22	2.82	3.19	3.23	2.33	1.94	1.86	2.45	1.82	1.37	1.66	2.07	5.26
Pier 7	3	3.17	38.42	13.18	8.81	9.96	10.09	7.27	6.07	5.82	7.64	5.68	4.27	5.18	6.47	16.44
Pier 7	3	5.7	40.95	15.03	10.05	11.36	11.51	8.29	6.92	6.63	8.72	6.48	4.87	5.91	7.38	18.75
Pier 7	3	8.55	43.8	14.15	9.47	10.70	10.84	7.81	6.52	6.25	8.21	6.10	4.59	5.56	6.95	17.66
Pier 7	3	10.08	45.33	99.00	68.44	77.36	78.36	56.47	47.12	45.17	59.34	44.12	33.16	40.22	50.24	99.00
Pier 7	3	11.4	46.65	99.00	69.06	78.06	79.07	56.98	47.55	45.57	59.87	44.51	33.46	40.58	50.69	99.00
Pier 7	3	14.25	49.5	99.00	67.91	76.76	77.75	56.03	46.76	44.81	58.87	43.77	32.90	39.90	49.84	99.00
Pier 7	3	17.1	52.35	99.00	69.47	78.53	79.54	57.32	47.83	45.85	60.23	44.78	33.66	40.82	50.99	99.00
Pier 7	3	17.42	52.67	21.44	14.34	16.21	16.42	11.83	9.87	9.46	12.43	9.24	6.95	8.43	10.52	26.74
Pier 7	3	19.95	55.2	22.74	15.21	17.19	17.41	12.55	10.47	10.04	13.18	9.80	7.37	8.94	11.16	28.36
Pier 7	3	22.8	58.05	22.45	15.02	16.97	17.19	12.39	10.34	9.91	13.02	9.68	7.27	8.82	11.02	28.01
Pier 7	3	25.65	60.9	21.92	14.66	16.57	16.79	12.10	10.09	9.68	12.71	9.45	7.10	8.62	10.76	27.35
Pier 7	4	2.8	66.55	19.72	13.19	14.90	15.10	10.88	9.08	8.70	11.43	8.50	6.39	7.75	9.68	24.59
Pier 7	4	3.5	67.25	21.00	14.04	15.87	16.08	11.58	9.67	9.27	12.17	9.05	6.80	8.25	10.31	26.19
Pier 7	4	4.2	67.95	22.29	14.90	16.84	17.06	12.30	10.26	9.83	12.92	9.61	7.22	8.76	10.94	27.80
Pier 7	4	4.5	68.25	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	4.9	68.65	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	5.6	69.35	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	6.3	70.05	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
Pier 7	4	7	70.75	99.00	99.00	99.00	99.00	81.68	68.16	65.33	85.83	63.81	47.97	58.17	72.66	99.00
			Controlling RF	**3.49**	**2.34**	**2.64**	**2.67**	**1.93**	**1.61**	**1.54**	**2.02**	**1.51**	**1.13**	**1.37**	**1.71**	**4.36**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 9	1	0	0	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	1.33	1.33	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	2.25	2.25	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	2.65	2.65	234.69	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	3.98	3.97	52.28	31.05	40.25	81.30	65.18	63.04	74.38	65.97	60.73	56.23	96.16
Pier 9	1	5.3	5.3	28.28	16.79	21.77	43.97	35.25	34.10	40.23	35.68	32.84	30.41	52.01
Pier 9	1	6.63	6.63	18.75	11.14	14.44	29.16	23.38	22.61	26.68	23.66	21.78	20.17	34.49
Pier 9	1	7.95	7.95	13.62	8.09	10.48	21.17	16.97	16.42	19.37	17.18	15.81	14.64	25.04
Pier 9	1	9.28	9.27	10.38	6.16	7.99	16.14	12.94	12.52	14.77	13.10	12.06	11.17	19.09
Pier 9	1	10.6	10.6	8.18	4.86	6.30	12.72	10.20	9.86	11.64	10.32	9.50	8.80	15.05
Pier 9	1	11.93	11.93	6.62	3.93	5.10	10.30	8.26	7.99	9.42	8.36	7.69	7.12	12.18
Pier 9	1	13.25	13.25	5.36	3.18	4.12	8.33	6.68	6.46	7.62	6.76	6.22	5.76	9.85
Pier 9	2	0	13.25	5.36	3.18	4.12	8.33	6.68	6.46	7.62	6.76	6.22	5.76	9.85
Pier 9	2	3.03	16.28	26.36	15.66	20.29	40.99	32.86	31.79	37.50	33.26	30.62	28.35	48.49
Pier 9	2	3.33	16.58	37.20	22.09	28.64	57.85	46.38	44.86	52.93	46.94	43.21	40.01	68.43
Pier 9	2	6.05	19.3	59.98	35.62	46.18	93.27	74.78	72.33	85.34	75.69	69.67	64.52	99.00
Pier 9	2	9.08	22.32	16.10	9.56	12.39	25.03	20.07	19.41	22.90	20.31	18.70	17.31	29.61
Pier 9	2	10.67	23.92	10.95	6.50	8.43	17.02	13.65	13.20	15.57	13.81	12.71	11.77	20.13
Pier 9	2	12.1	25.35	11.06	6.57	8.52	17.21	13.79	13.34	15.74	13.96	12.85	11.90	20.35
Pier 9	2	15.13	28.37	10.39	6.17	8.00	16.16	12.95	12.53	14.78	13.11	12.07	11.17	19.11
Pier 9	2	18	31.25	9.98	5.93	7.68	15.52	12.44	12.03	14.20	12.59	11.59	10.73	18.36
Pier 9	2	18.15	31.4	10.24	6.08	7.88	15.92	12.76	12.34	14.56	12.92	11.89	11.01	18.83
Pier 9	2	21.18	34.42	20.15	11.97	15.51	31.33	25.12	24.30	28.67	25.43	23.41	21.67	37.06
Pier 9	2	24.2	37.45	132.41	78.63	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	25.33	38.58	154.99	92.05	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	27.23	40.48	17.12	10.17	13.18	26.63	21.35	20.65	24.36	21.61	19.89	18.42	31.50
Pier 9	2	30.25	43.5	5.49	3.26	4.23	8.54	6.85	6.62	7.82	6.93	6.38	5.91	10.10
Pier 9	3	0	43.5	5.49	3.26	4.23	8.54	6.85	6.62	7.82	6.93	6.38	5.91	10.10
Pier 9	3	2.03	45.53	14.44	8.58	11.12	22.46	18.00	17.42	20.55	18.22	16.77	15.53	26.56
Pier 9	3	2.42	45.92	19.40	11.52	14.93	30.16	24.18	23.39	27.60	24.48	22.53	20.86	35.68
Pier 9	3	2.75	46.25	23.38	13.88	18.00	36.35	29.14	28.19	33.26	29.50	27.15	25.14	43.00
Pier 9	3	4.05	47.55	35.06	20.82	26.99	54.52	43.71	42.28	49.89	44.25	40.73	37.71	64.49
Pier 9	3	6.08	49.57	133.21	79.11	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	3	8.1	51.6	79.47	47.20	61.18	99.00	99.00	95.84	99.00	99.00	92.31	85.48	99.00
Pier 9	3	10.08	53.58	29.88	17.75	23.01	46.47	37.25	36.04	42.51	37.71	34.71	32.14	54.96
Pier 9	3	10.13	53.63	30.05	17.84	23.13	46.72	37.46	36.23	42.75	37.91	34.90	32.32	55.26
Pier 9	3	12.15	55.65	34.70	20.61	26.72	53.96	43.26	41.85	49.37	43.79	40.31	37.33	63.83
Pier 9	3	14.18	57.68	40.07	23.80	30.85	62.30	49.95	48.32	57.01	50.56	46.54	43.10	73.70
Pier 9	3	16.2	59.7	79.22	47.05	60.99	99.00	98.76	95.53	99.00	99.00	92.02	85.21	99.00
Pier 9	3	17.42	60.92	184.44	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	3	18.23	61.73	55.05	32.70	42.38	85.61	68.63	66.39	78.33	69.47	63.95	59.22	99.00
Pier 9	3	20.25	63.75	11.01	6.54	8.48	17.13	13.73	13.28	15.67	13.90	12.79	11.85	20.26
Pier 9	4	0	63.75	11.01	6.54	8.48	17.13	13.73	13.28	15.67	13.90	12.79	11.85	20.26
Pier 9	4	0.7	64.45	13.66	8.11	10.52	21.24	17.03	16.47	19.44	17.24	15.87	14.69	25.13
Pier 9	4	1.4	65.15	17.48	10.38	13.46	27.18	21.79	21.08	24.87	22.06	20.30	18.80	32.15
Pier 9	4	2.1	65.85	23.50	13.95	18.09	36.54	29.29	28.34	33.43	29.65	27.29	25.27	43.22
Pier 9	4	2.8	66.55	34.43	20.45	26.51	53.54	42.92	41.52	48.98	43.45	39.99	37.03	63.33
Pier 9	4	3.5	67.25	60.60	35.99	46.65	94.23	75.54	73.07	86.21	76.47	70.39	65.18	99.00
Pier 9	4	4.2	67.95	208.66	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	4.5	68.25	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	4.9	68.65	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	5.6	69.35	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	6.3	70.05	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	7	70.75	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
			Controlling RF	**5.36**	**3.18**	**4.12**	**8.33**	**6.68**	**6.46**	**7.62**	**6.76**	**6.22**	**5.76**	**9.85**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Flexure Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 9	1	0	0	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	1	1.33	1.33	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	1	2.25	2.25	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	1	2.65	2.65	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	3.98	3.97	77.74	52.28	58.56	60.45	46.84	37.99	40.65	48.48	43.32	39.07	34.87	49.52	98.53
Pier 9	1	5.3	5.3	42.04	28.28	31.67	32.69	25.33	20.55	21.98	26.22	23.43	21.13	18.86	26.78	53.29
Pier 9	1	6.63	6.63	27.88	18.75	21.00	21.68	16.80	13.63	14.58	17.39	15.54	14.02	12.51	17.76	35.35
Pier 9	1	7.95	7.95	20.24	13.62	15.25	15.74	12.20	9.89	10.59	12.63	11.28	10.18	9.08	12.90	25.66
Pier 9	1	9.28	9.27	15.43	10.38	11.63	12.00	9.30	7.54	8.07	9.63	8.60	7.76	6.92	9.83	19.56
Pier 9	1	10.6	10.6	12.16	8.18	9.16	9.46	7.33	5.94	6.36	7.59	6.78	6.11	5.46	7.75	15.42
Pier 9	1	11.93	11.93	9.85	6.62	7.42	7.66	5.93	4.81	5.15	6.14	5.49	4.95	4.42	6.27	12.48
Pier 9	1	13.25	13.25	7.97	5.36	6.00	6.20	4.80	3.89	4.17	4.97	4.44	4.00	3.57	5.08	10.10
Pier 9	2	0	13.25	7.97	5.36	6.00	6.20	4.80	3.89	4.17	4.97	4.44	4.00	3.57	5.08	10.10
Pier 9	2	3.03	16.28	39.20	26.36	29.52	30.48	23.62	19.16	20.49	24.45	21.84	19.70	17.58	24.97	49.68
Pier 9	2	3.33	16.58	55.32	37.20	41.67	43.02	33.33	27.04	28.92	34.50	30.82	27.80	24.81	35.24	70.12
Pier 9	2	6.05	19.3	89.19	59.98	67.18	69.36	53.74	43.59	46.64	55.63	49.70	44.83	40.01	56.82	99.00
Pier 9	2	9.08	22.32	23.93	16.10	18.03	18.61	14.42	11.70	12.52	14.93	13.34	12.03	10.74	15.25	30.34
Pier 9	2	10.67	23.92	16.28	10.95	12.26	12.66	9.81	7.95	8.51	10.15	9.07	8.18	7.30	10.37	20.63
Pier 9	2	12.1	25.35	16.45	11.06	12.39	12.79	9.91	8.04	8.60	10.26	9.17	8.27	7.38	10.48	20.85
Pier 9	2	15.13	28.37	15.45	10.39	11.64	12.01	9.31	7.55	8.08	9.63	8.61	7.76	6.93	9.84	19.58
Pier 9	2	18	31.25	14.84	9.98	11.18	11.54	8.94	7.25	7.76	9.26	8.27	7.46	6.66	9.45	18.81
Pier 9	2	18.15	31.4	15.22	10.24	11.47	11.84	9.17	7.44	7.96	9.49	8.48	7.65	6.83	9.70	19.29
Pier 9	2	21.18	34.42	29.96	20.15	22.57	23.30	18.05	14.64	15.67	18.69	16.70	15.06	13.44	19.09	37.98
Pier 9	2	24.2	37.45	99.00	99.00	99.00	99.00	99.00	96.23	99.00	99.00	99.00	98.95	88.31	99.00	99.00
Pier 9	2	25.33	38.58	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	27.23	40.48	25.46	17.12	19.18	19.80	15.34	12.44	13.31	15.88	14.19	12.80	11.42	16.22	32.27
Pier 9	2	30.25	43.5	8.17	5.49	6.15	6.35	4.92	3.99	4.27	5.09	4.55	4.11	3.66	5.20	10.35
Pier 9	3	0	43.5	8.17	5.49	6.15	6.35	4.92	3.99	4.27	5.09	4.55	4.11	3.66	5.20	10.35
Pier 9	3	2.03	45.53	21.47	14.44	16.17	16.70	12.94	10.50	11.23	13.39	11.97	10.79	9.63	13.68	27.22
Pier 9	3	2.42	45.92	28.84	19.40	21.73	22.43	17.38	14.10	15.08	17.99	16.07	14.50	12.94	18.37	36.56
Pier 9	3	2.75	46.25	34.76	23.38	26.18	27.03	20.94	16.99	18.18	21.68	19.37	17.47	15.59	22.14	44.06
Pier 9	3	4.05	47.55	52.14	35.06	39.27	40.54	31.41	25.48	27.26	32.52	29.05	26.20	23.39	33.21	66.09
Pier 9	3	6.08	49.57	99.00	99.00	99.00	99.00	99.00	96.81	99.00	99.00	99.00	99.00	88.85	99.00	99.00
Pier 9	3	8.1	51.6	99.00	79.47	89.01	91.89	71.20	57.76	61.79	73.70	65.85	59.39	53.01	75.28	99.00
Pier 9	3	10.08	53.58	44.43	29.88	33.47	34.55	26.77	21.72	23.23	27.71	24.76	22.33	19.93	28.31	56.32
Pier 9	3	10.13	53.63	44.67	30.05	33.65	34.74	26.92	21.84	23.36	27.86	24.89	22.45	20.04	28.46	56.63
Pier 9	3	12.15	55.65	51.60	34.70	38.87	40.13	31.09	25.22	26.98	32.18	28.75	25.93	23.15	32.87	65.41
Pier 9	3	14.18	57.68	59.58	40.07	44.88	46.33	35.90	29.12	31.15	37.16	33.20	29.94	26.72	37.95	75.52
Pier 9	3	16.2	59.7	99.00	79.22	88.73	91.60	70.97	57.57	61.59	73.47	65.64	59.20	52.84	75.04	99.00
Pier 9	3	17.42	60.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	3	18.23	61.73	81.86	55.05	61.66	63.66	49.32	40.01	42.80	51.05	45.61	41.14	36.72	52.15	99.00
Pier 9	3	20.25	63.75	16.38	11.01	12.34	12.74	9.87	8.00	8.56	10.21	9.13	8.23	7.35	10.43	20.76
Pier 9	4	0	63.75	16.38	11.01	12.34	12.74	9.87	8.00	8.56	10.21	9.13	8.23	7.35	10.43	20.76
Pier 9	4	0.7	64.45	20.31	13.66	15.30	15.80	12.24	9.93	10.62	12.67	11.32	10.21	9.11	12.94	25.75
Pier 9	4	1.4	65.15	25.99	17.48	19.58	20.21	15.66	12.70	13.59	16.21	14.48	13.06	11.66	16.56	32.95
Pier 9	4	2.1	65.85	34.94	23.50	26.32	27.17	21.05	17.08	18.27	21.79	19.47	17.56	15.67	22.26	44.29
Pier 9	4	2.8	66.55	51.19	34.43	38.56	39.81	30.85	25.02	26.77	31.93	28.53	25.73	22.96	32.61	64.89
Pier 9	4	3.5	67.25	90.10	60.60	67.87	70.07	54.29	44.04	47.11	56.20	50.21	45.29	40.42	57.40	99.00
Pier 9	4	4.2	67.95	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	4.5	68.25	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	4.9	68.65	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	5.6	69.35	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	6.3	70.05	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	7	70.75	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
			Controlling RF	**7.97**	**5.36**	**6.00**	**6.20**	**4.80**	**3.89**	**4.17**	**4.97**	**4.44**	**4.00**	**3.57**	**5.08**	**10.10**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor										
Load Factor				1.3	1.75	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Pier	Span	Location	Distance	Controlling Legal	HL-93 INV	HL-93 OPR	Type 3	Type 3S2	Type 3-3	SU4	SU5	SU6	SU7	H20
Pier 9	1	0	0	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	1.33	1.33	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	1	2.25	2.25	18.14	10.77	13.97	28.21	22.61	21.88	25.81	22.89	21.07	19.51	33.37
Pier 9	1	2.65	2.65	19.45	11.55	14.97	30.24	24.25	23.45	27.67	24.54	22.59	20.92	35.77
Pier 9	1	3.98	3.97	19.26	11.44	14.83	29.96	24.02	23.23	27.41	24.31	22.38	20.72	35.43
Pier 9	1	5.3	5.3	19.08	11.33	14.69	29.67	23.79	23.01	27.15	24.08	22.16	20.52	35.09
Pier 9	1	6.63	6.63	18.90	11.22	14.55	29.38	23.56	22.79	26.88	23.84	21.95	20.32	34.75
Pier 9	1	7.95	7.95	18.71	11.11	14.40	29.09	23.33	22.56	26.62	23.61	21.73	20.12	34.41
Pier 9	1	9.28	9.27	18.53	11.00	14.26	28.81	23.10	22.34	26.36	23.38	21.52	19.93	34.07
Pier 9	1	10.6	10.6	18.34	10.89	14.12	28.52	22.87	22.12	26.09	23.14	21.30	19.73	33.74
Pier 9	2	3.03	16.28	4.91	2.92	3.78	7.63	6.12	5.92	6.99	6.20	5.70	5.28	9.03
Pier 9	2	3.33	16.58	13.39	7.95	10.31	20.82	16.69	16.14	19.05	16.89	15.55	14.40	24.62
Pier 9	2	6.05	19.3	12.76	7.58	9.82	19.84	15.91	15.39	18.15	16.10	14.82	13.72	23.47
Pier 9	2	9.08	22.32	12.72	7.56	9.80	19.79	15.86	15.34	18.10	16.06	14.78	13.69	23.40
Pier 9	2	10.67	23.92	264.44	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	12.1	25.35	260.11	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	15.13	28.37	258.11	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	18	31.25	14.53	8.63	11.19	22.59	18.11	17.52	20.67	18.34	16.88	15.63	26.73
Pier 9	2	18.15	31.4	14.69	8.73	11.31	22.85	18.32	17.72	20.91	18.54	17.07	15.80	27.03
Pier 9	2	21.18	34.42	15.62	9.28	12.03	24.29	19.48	18.84	22.23	19.71	18.15	16.80	28.73
Pier 9	2	24.2	37.45	15.41	9.15	11.87	23.97	19.22	18.59	21.93	19.45	17.90	16.58	28.35
Pier 9	2	25.33	38.58	6.95	4.13	5.35	10.80	8.66	8.38	9.89	8.77	8.07	7.47	12.78
Pier 9	2	27.23	40.48	5.59	3.32	4.30	8.69	6.97	6.74	7.96	7.06	6.49	6.01	10.28
Pier 9	3	2.42	45.92	6.03	3.58	4.64	9.38	7.52	7.27	8.58	7.61	7.00	6.49	11.09
Pier 9	3	2.75	46.25	17.97	10.67	13.83	27.94	22.40	21.67	25.57	22.68	20.87	19.33	33.05
Pier 9	3	4.05	47.55	19.31	11.47	14.86	30.02	24.07	23.28	27.47	24.36	22.42	20.77	35.51
Pier 9	3	6.08	49.57	21.29	12.64	16.39	33.10	26.54	25.67	30.28	26.86	24.72	22.89	39.15
Pier 9	3	8.1	51.6	21.70	12.89	16.70	33.74	27.05	26.16	30.87	27.38	25.20	23.34	39.91
Pier 9	3	10.08	53.58	55.86	33.18	43.01	86.87	69.64	67.36	79.48	70.49	64.89	60.08	99.00
Pier 9	3	10.13	53.63	55.56	32.99	42.77	86.39	69.26	67.00	79.04	70.11	64.53	59.76	99.00
Pier 9	3	12.15	55.65	58.00	34.44	44.65	90.19	72.30	69.94	82.51	73.18	67.37	62.38	99.00
Pier 9	3	14.18	57.68	57.22	33.98	44.05	88.98	71.34	69.01	81.41	72.21	66.47	61.55	99.00
Pier 9	3	16.2	59.7	58.34	34.65	44.92	90.72	72.73	70.36	83.01	73.62	67.77	62.75	99.00
Pier 9	3	17.42	60.92	10.29	6.11	7.92	15.99	12.82	12.40	14.63	12.98	11.95	11.06	18.92
Pier 9	4	2.8	66.55	16.10	9.56	12.40	25.04	20.08	19.42	22.91	20.32	18.70	17.32	29.62
Pier 9	4	3.5	67.25	17.02	10.11	13.10	26.47	21.22	20.53	24.22	21.48	19.77	18.31	31.31
Pier 9	4	4.2	67.95	17.94	10.65	13.81	27.90	22.37	21.63	25.52	22.64	20.84	19.30	33.00
Pier 9	4	4.5	68.25	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	4.9	68.65	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	5.6	69.35	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	6.3	70.05	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	4	7	70.75	99.00	58.80	76.22	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
			Controlling RF	**4.91**	**2.92**	**3.78**	**7.63**	**6.12**	**5.92**	**6.99**	**6.20**	**5.70**	**5.28**	**9.03**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Pier 4, 9 All Vehicle Rating Factor	Checked by:	BP
			Date:	02/2024

				Shear Rating Factor												
Load Factor				1.3	1.3	1.3	1.3	1.3	1.3	1.35	1.2	1.2	1.2	1.2	1.2	1.45
Pier	Span	Location	Distance	Type EV2	Type EV3	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5	RI-PTA
Pier 9	1	0	0	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	1	1.33	1.33	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	1	2.25	2.25	26.97	18.14	20.32	20.97	16.25	13.18	14.10	16.82	15.03	13.56	12.10	17.18	34.19
Pier 9	1	2.65	2.65	28.92	19.45	21.78	22.49	17.42	14.13	15.12	18.04	16.11	14.54	12.97	18.42	36.66
Pier 9	1	3.98	3.97	28.65	19.26	21.58	22.28	17.26	14.00	14.98	17.87	15.96	14.40	12.85	18.25	36.31
Pier 9	1	5.3	5.3	28.37	19.08	21.37	22.06	17.09	13.87	14.83	17.69	15.81	14.26	12.73	18.07	35.96
Pier 9	1	6.63	6.63	28.10	18.90	21.16	21.85	16.93	13.73	14.69	17.52	15.66	14.12	12.60	17.90	35.61
Pier 9	1	7.95	7.95	27.82	18.71	20.96	21.63	16.76	13.60	14.55	17.35	15.50	13.98	12.48	17.72	35.26
Pier 9	1	9.28	9.27	27.55	18.53	20.75	21.42	16.60	13.46	14.40	17.18	15.35	13.85	12.36	17.55	34.92
Pier 9	1	10.6	10.6	27.27	18.34	20.54	21.21	16.43	13.33	14.26	17.01	15.20	13.71	12.23	17.37	34.57
Pier 9	2	3.03	16.28	7.30	4.91	5.50	5.68	4.40	3.57	3.82	4.55	4.07	3.67	3.27	4.65	9.25
Pier 9	2	3.33	16.58	19.91	13.39	14.99	15.48	11.99	9.73	10.41	12.41	11.09	10.01	8.93	12.68	25.23
Pier 9	2	6.05	19.3	18.97	12.76	14.29	14.75	11.43	9.27	9.92	11.83	10.57	9.54	8.51	12.09	24.05
Pier 9	2	9.08	22.32	18.92	12.72	14.25	14.71	11.40	9.25	9.89	11.80	10.54	9.51	8.49	12.05	23.98
Pier 9	2	10.67	23.92	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	12.1	25.35	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	15.13	28.37	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00	99.00
Pier 9	2	18	31.25	21.61	14.53	16.27	16.80	13.02	10.56	11.30	13.48	12.04	10.86	9.69	13.76	27.39
Pier 9	2	18.15	31.4	21.85	14.69	16.46	16.99	13.16	10.68	11.42	13.63	12.17	10.98	9.80	13.92	27.69
Pier 9	2	21.18	34.42	23.23	15.62	17.50	18.06	14.00	11.35	12.15	14.49	12.94	11.68	10.42	14.80	29.44
Pier 9	2	24.2	37.45	22.92	15.41	17.26	17.82	13.81	11.20	11.98	14.29	12.77	11.52	10.28	14.60	29.05
Pier 9	2	25.33	38.58	10.33	6.95	7.78	8.03	6.22	5.05	5.40	6.44	5.76	5.19	4.63	6.58	13.10
Pier 9	2	27.23	40.48	8.31	5.59	6.26	6.47	5.01	4.06	4.35	5.19	4.63	4.18	3.73	5.30	10.54
Pier 9	3	2.42	45.92	8.97	6.03	6.75	6.97	5.40	4.38	4.69	5.59	5.00	4.51	4.02	5.71	11.37
Pier 9	3	2.75	46.25	26.72	17.97	20.13	20.78	16.10	13.06	13.97	16.67	14.89	13.43	11.99	17.02	33.87
Pier 9	3	4.05	47.55	28.71	19.31	21.62	22.32	17.30	14.03	15.01	17.90	16.00	14.43	12.88	18.29	36.39
Pier 9	3	6.08	49.57	31.65	21.29	23.84	24.61	19.07	15.47	16.55	19.74	17.64	15.91	14.20	20.16	40.12
Pier 9	3	8.1	51.6	32.26	21.70	24.30	25.09	19.44	15.77	16.87	20.12	17.98	16.22	14.47	20.55	40.89
Pier 9	3	10.08	53.58	83.06	55.86	62.57	64.59	50.05	40.60	43.43	51.80	46.28	41.75	37.26	52.91	99.00
Pier 9	3	10.13	53.63	82.61	55.56	62.23	64.24	49.77	40.38	43.19	51.52	46.03	41.52	37.05	52.63	99.00
Pier 9	3	12.15	55.65	86.24	58.00	64.96	67.06	51.96	42.15	45.09	53.78	48.05	43.34	38.68	54.94	99.00
Pier 9	3	14.18	57.68	85.09	57.22	64.09	66.17	51.27	41.59	44.49	53.07	47.41	42.77	38.17	54.20	99.00
Pier 9	3	16.2	59.7	86.75	58.34	65.35	67.46	52.27	42.40	45.36	54.11	48.34	43.60	38.91	55.26	99.00
Pier 9	3	17.42	60.92	15.29	10.29	11.52	11.89	9.22	7.48	8.00	9.54	8.52	7.69	6.86	9.74	19.39
Pier 9	4	2.8	66.55	23.94	16.10	18.04	18.62	14.43	11.70	12.52	14.93	13.34	12.04	10.74	15.25	30.35
Pier 9	4	3.5	67.25	25.31	17.02	19.06	19.68	15.25	12.37	13.23	15.79	14.10	12.72	11.35	16.12	32.08
Pier 9	4	4.2	67.95	26.68	17.94	20.09	20.74	16.07	13.04	13.95	16.64	14.86	13.41	11.97	16.99	33.81
Pier 9	4	4.5	68.25	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	4.9	68.65	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	5.6	69.35	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	6.3	70.05	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
Pier 9	4	7	70.75	99.00	99.00	99.00	99.00	88.69	71.95	76.97	91.81	82.03	73.99	66.03	93.78	99.00
			Controlling RF	**7.30**	**4.91**	**5.50**	**5.68**	**4.40**	**3.57**	**3.82**	**4.55**	**4.07**	**3.67**	**3.27**	**4.65**	**9.25**

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Rating Breakdown	Checked by:	BP
			Date:	02/2024

	HL-93 DESIGN LOAD		LEGAL LOAD (TONS / RATING FACTOR) *The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.*										
	INV	**OPR**	**H20**	**TYPE 3**	**TYPE 3S2**	**TYPE 3-3**	**SU4**	**SU5**	**SU6**	**SU7**	**EV2**	**EV3**	**RI-PTA**
Pier Cap 1 Strength I/II , Flexure	***0.65***	***0.85***	***3.32***	***2.67***	***1.91***	***1.75***	***2.47***	***2.15***	***1.92***	***1.73***	***2.59***	***1.73***	***3.24***
			66.4	66.8	68.6	70.0	66.6	66.8	66.8	67.0	74.4	74.5	67.5
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 1 Strength I/II , Shear	***0.90***	***1.17***	***4.57***	***3.68***	***2.63***	***2.41***	***3.40***	***2.97***	***2.65***	***2.38***	***3.57***	***2.39***	***4.47***
			91.5	92.1	94.6	96.5	91.8	92.0	92.1	92.3	102.6	102.7	93.0
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 2, 5, 8, 11, 12 Strength I/II , Flexure	***1.20***	***1.56***	***7.13***	***5.73***	***4.04***	***3.69***	***5.29***	***4.62***	***4.12***	***3.70***	***5.55***	***3.71***	***6.92***
			142.6	143.2	145.5	147.4	142.9	143.1	143.3	143.4	159.6	159.7	143.9
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap Pier Cap 2, 5, 8, 11, 12 Strength I/II , Shear	***1.09***	***1.42***	***6.49***	***5.22***	***3.68***	***3.36***	***4.82***	***4.20***	***3.75***	***3.37***	***5.05***	***3.38***	***6.30***
			129.8	130.4	132.5	134.2	130.1	130.3	130.4	130.6	145.3	145.4	131.0
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 3, 10, 13 Strength I/II , Flexure	***0.91***	***1.18***	***5.90***	***4.73***	***3.32***	***3.02***	***4.37***	***3.82***	***3.41***	***3.06***	***4.59***	***3.07***	***5.71***
			117.9	118.3	119.6	120.7	118.1	118.3	118.3	118.4	131.8	131.9	118.7
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 3, 10, 13 Strength I/II , Shear	***0.42***	***0.54***	***2.71***	***2.18***	***1.53***	***1.39***	***2.01***	***1.76***	***1.57***	***1.41***	***2.11***	***1.41***	***2.63***
			54.3	54.4	55.0	55.5	54.3	54.4	54.4	54.5	60.7	60.7	54.6
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 6, 7 Strength I/II , Flexure	***1.01***	***1.31***	***6.30***	***5.06***	***3.56***	***3.24***	***4.67***	***4.08***	***3.64***	***3.27***	***4.90***	***3.28***	***6.11***
			125.9	126.4	128.3	129.7	126.2	126.4	126.5	126.6	140.9	140.9	127.2
POI (Controlling)	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 6, 7 Strength I/II , Shear	***0.72***	***0.93***	***4.49***	***3.60***	***2.54***	***2.31***	***3.33***	***2.90***	***2.59***	***2.33***	***3.49***	***2.34***	***4.36***
			89.7	90.1	91.4	92.4	89.9	90.1	90.1	90.2	100.4	100.4	90.6
POI (Controlling)	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 4, 9 Strength I/II , Flexure	***3.18***	***4.12***	***9.85***	***8.33***	***6.68***	***6.46***	***7.62***	***6.76***	***6.22***	***5.76***	***7.97***	***5.36***	***10.10***
			197.1	208.3	240.5	258.4	205.8	209.6	216.3	223.3	229.0	230.4	210.0
POI (Controlling)	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 4, 9 Strength I/II , Shear	***2.92***	***3.78***	***9.03***	***7.63***	***6.12***	***5.92***	***6.99***	***6.20***	***5.70***	***5.28***	***7.30***	***4.91***	***9.25***
			180.6	190.9	220.3	236.8	188.6	192.1	198.2	204.6	209.9	211.1	192.5
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L

AI Engineers	Bridge:	020001	Prepared by:	PB
			Date:	02/2024
	Subject:	Rating Breakdown	Checked by:	BP
			Date:	02/2024

PERMIT LOAD (TONS / RATING FACTOR)

The values below are for the controlling limit state force effect and location. Refer to Appendix D for a detailed breakdown of other limit states and force effects.

	RI 3	RI 4	RI 5	RI 5B	RI 6	RI-OP1	RI-OP2	RI-OP3	RI-OP4	RI-OP5
Pier Cap 1 Strength I/II , Flexure	***1.96***	***1.98***	***1.44***	***1.19***	***1.17***	***1.57***	***1.27***	***1.00***	***1.10***	***1.44***
POI (Controlling)	74.3	74.3	75.2	74.6	76.3	88.9	101.6	113.5	92.4	100.9
	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 1 Strength I/II , Shear	***2.70***	***2.73***	***1.98***	***1.64***	***1.62***	***2.17***	***1.75***	***1.38***	***1.52***	***1.99***
POI (Controlling)	102.4	102.4	103.6	102.8	105.2	122.5	140.0	156.5	127.3	139.1
	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 2, 5, 8, 11, 12 Strength I/II , Flexure	***4.20***	***4.25***	***3.07***	***2.56***	***2.46***	***3.29***	***2.61***	***1.98***	***2.27***	***2.96***
POI (Controlling)	159.4	159.3	160.6	159.8	159.8	185.7	208.9	223.6	190.4	207.4
	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap Pier Cap 2, 5, 8, 11, 12 Strength I/II , Shear	***3.82***	***3.87***	***2.79***	***2.33***	***2.24***	***2.99***	***2.38***	***1.80***	***2.06***	***2.70***
	145.2	145.1	146.3	145.5	145.5	169.1	190.2	203.5	173.4	188.9
POI (Controlling)	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 3, 10, 13 Strength I/II , Flexure	***3.47***	***3.51***	***2.53***	***2.11***	***2.00***	***2.68***	***1.96***	***1.46***	***1.81***	***2.24***
POI (Controlling)	131.8	131.7	132.4	132.0	130.3	151.3	157.2	164.5	152.3	156.8
	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 3, 10, 13 Strength I/II , Shear	***1.60***	***1.62***	***1.16***	***0.97***	***0.92***	***1.23***	***0.90***	***0.67***	***0.83***	***1.03***
POI (Controlling)	60.6	60.6	60.9	60.7	60.0	69.6	72.3	75.7	70.1	72.1
	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L
Pier Cap 6, 7 Strength I/II , Flexure	***3.70***	***3.75***	***2.70***	***2.26***	***2.16***	***2.84***	***2.11***	***1.59***	***1.93***	***2.41***
POI (Controlling)	140.8	140.7	141.7	141.0	140.6	160.5	169.0	179.4	161.8	168.4
	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L	2-1.00L
Pier Cap 6, 7 Strength I/II , Shear	***2.64***	***2.67***	***1.93***	***1.61***	***1.54***	***2.02***	***1.51***	***1.13***	***1.37***	***1.71***
POI (Controlling)	100.3	100.3	101.0	100.5	100.2	114.4	120.4	127.9	115.3	120.0
	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L	2-0.90L
Pier Cap 4, 9 Strength I/II , Flexure	***6.00***	***6.20***	***4.80***	***3.89***	***4.17***	***4.97***	***4.44***	***4.00***	***3.57***	***5.08***
POI (Controlling)	228.0	232.3	251.5	243.4	270.8	280.7	355.1	452.5	300.2	355.3
	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L	2-0.00L
Pier Cap 4, 9 Strength I/II , Shear	***5.50***	***5.68***	***4.40***	***3.57***	***3.82***	***4.55***	***4.07***	***3.67***	***3.27***	***4.65***
POI (Controlling)	209.0	212.9	230.5	223.0	248.1	257.2	325.4	414.6	275.1	325.5
	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L	2-0.10L