

# Creating Reports & Getting Results Out of AASHTO BrDR

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Ohio Department of Transportation

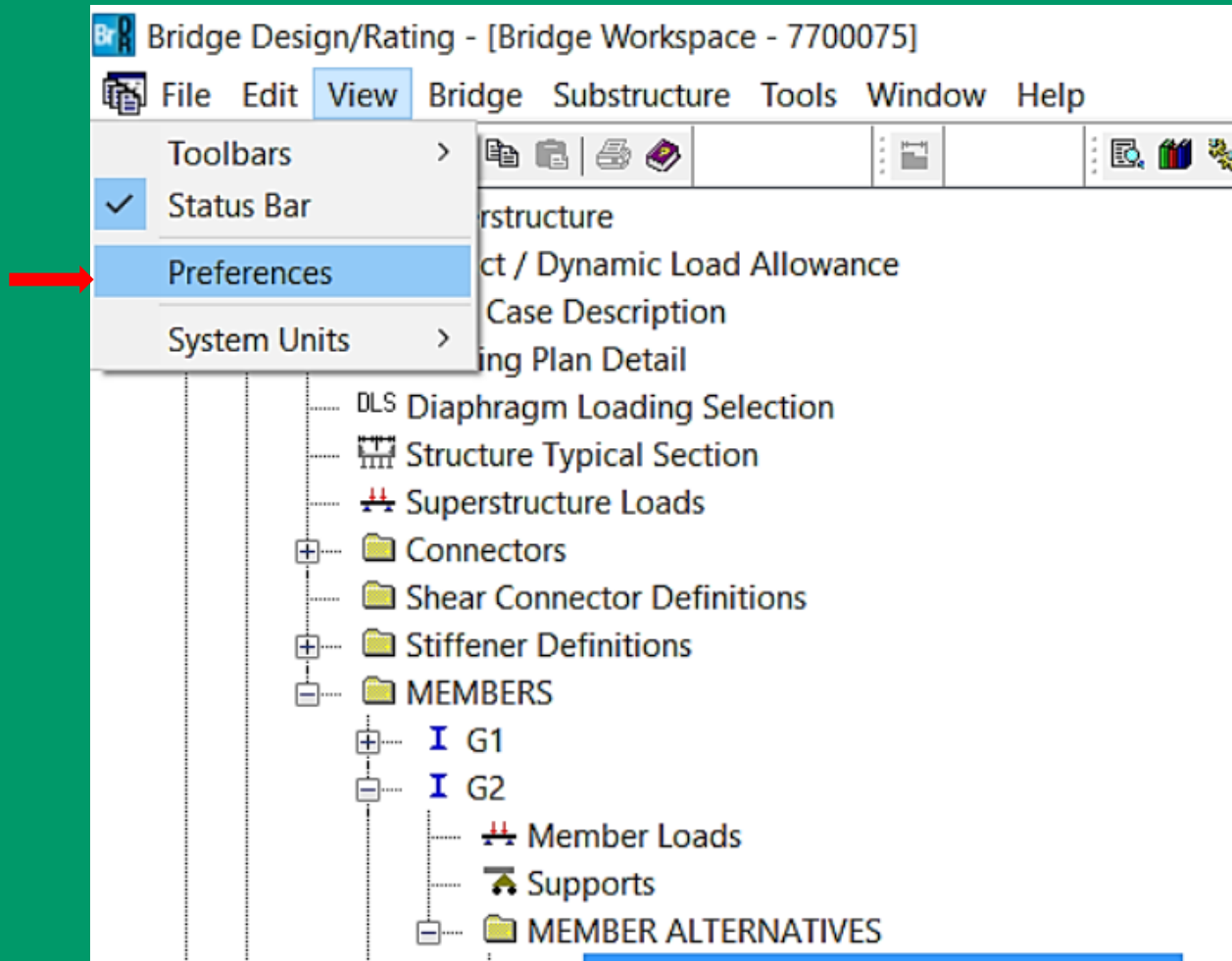
# AASHTOWare Br Design and Rating

1. Preference Settings
2. Analysis Setting
3. Output Setting at Member Alt. Level
4. Reports





# Preferences



# Preferences

Preferences ✕

Bridge Explorer **Bridge Workspace** Confirmations Analysis Report Tool

Options

Backup data to file every:  minutes

Validate before saving

Display the entered number of decimal positions

Rating Live Load Distribution Factor

Compute simple beam distribution factor based on:

LFD/ASD

AASHTO Standard Specifications for Highway Bridges Article 3.6.3

AASHTO Manual for Bridge Evaluation Article 6B.6.2.2

LFD/ASD Distribution Factor for Exterior Beams

Use only lever rule for exterior beams

OK

Cancel

Help



# Preferences

Preferences [X]

Bridge Explorer | Bridge Workspace | Confirmations | **Analysis** | Report Tool

Default Analysis Settings Template

ODOT\_LFD\_Legal\_SHV\_Rating

Analysis Output Folder

Use the current user's "My Documents" folder [Browse...]

C:\Users\Amjad\Documents

Issue warning at startup for network drive

Analysis Output Viewer

Use alternate viewer [Browse...]

Floorbeam Analysis

Automatically save the new computed stringer reactions

Remove previous analysis results before beginning a new analysis.

Validate before substructure analysis

OK

Cancel

Help



# Preferences

Preferences

Bridge Explorer | Bridge Workspace | Confirmations | Analysis | Report Tool

Default Analysis Settings Template  
ODOT\_LFD\_Legal\_SHV\_Rating

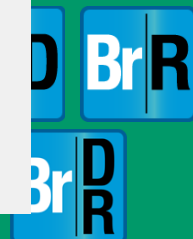

Analysis Output Folder  
 Use the current user's "My Documents" folder  
Browse...  
C:\Users\Amjad\Documents  
 Issue warning at startup for network drive

Analysis Output Viewer  
 Use alternate viewer  
Browse...  
[Empty dropdown]

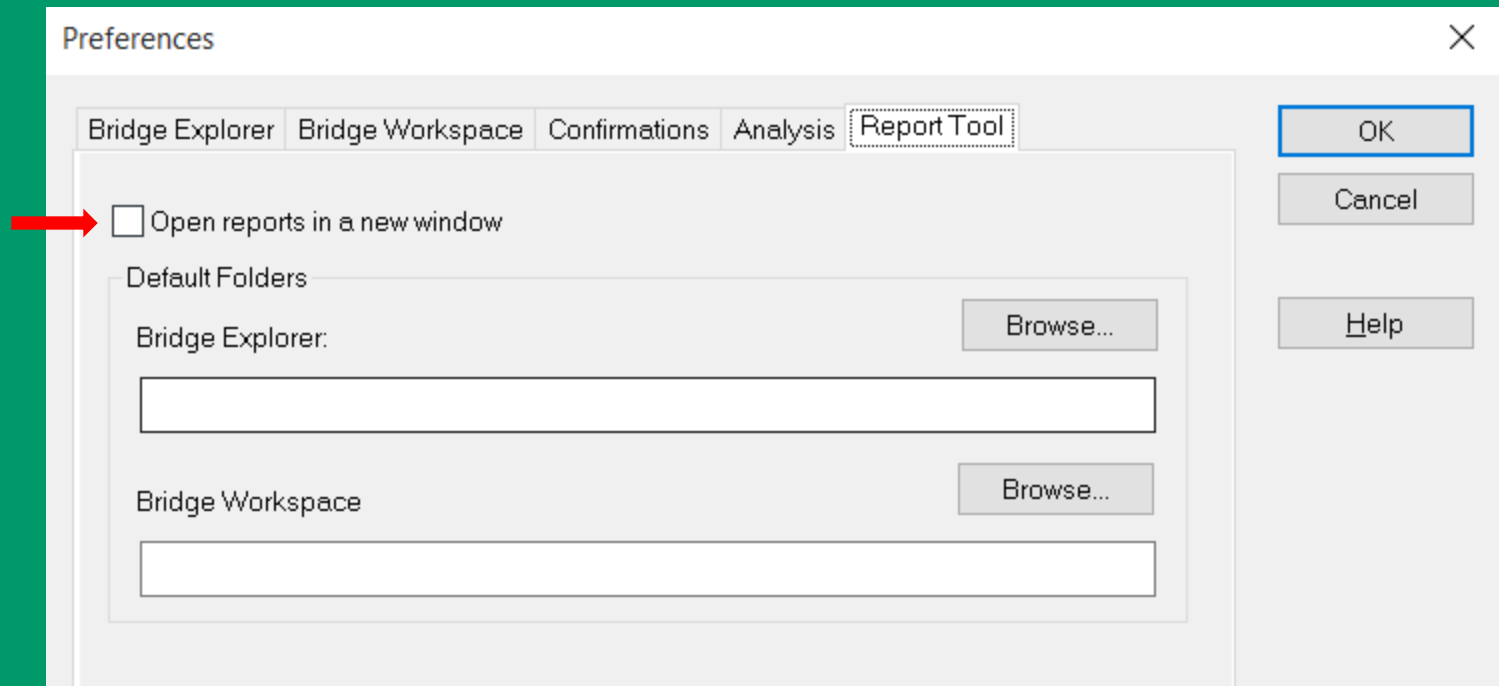
Floorbeam Analysis  
 Automatically save the new computed stringer reactions

Remove previous analysis results before beginning a new analysis.  
 Validate before substructure analysis

OK  
Cancel  
Help



# Preferences





# Analysis Setting Output Controls

Design Review     Rating    Rating Method:

Analysis Type:

Lane/Impact Loading Type:     Apply Preference Setting:

Vehicles   **Output**   Engine   Description

Tabular Results:

- Dead Load Action Report
- LFD Critical Loads Report
- Live Load Action Report
- Truss Panel Point Concurrent Forces Report
- Truss Panel Point Maximum Forces Report

AASHTO Engine Reports:

- Miscellaneous Reports:
  - Girder Properties
  - Summary Influence Line Loading
  - Detailed Influence Line Loading
  - Capacity Summary
  - Capacity Detailed Computations
  - FE Model for DL Analysis
  - FE Model for LL Analysis
  - LL Influence Lines FE Model
  - LL Influence Lines FE Actions
  - LL Distrib. Factor Computations
  - Regression Data

Select All   Clear All    Select All   Clear All



# Member Alternate Controls

Member Alternative Description

Member Alternative: Left Superstructure Left 1st Interior

Description Specs Factors Engine Import Control Options

Description:

Material Type: Steel

Girder Type: Plate

Default Units: US Customary

Girder property input method:  
 Schedule based  
 Cross-section based

End bearing locations:  
Left:  in  
Right:  in

Simple DL, continuous LL

Default rating method:  
LFD

Self Load:  
Load case: Engine Assigned  
Additional self load =  kip/ft  
Additional self load =  %

# Member Alternate Controls

Bridge Explorer (35 Bridge Design/Rating bridges retrieved for the current folder, all rows retrieved)

Bridge Workspace - 7700075

Member Alternative Description

Member Alternative: Left Superstructure Left 1st Interior

Description Specs Factors Engine Import Control Options

**LRFD**

- Points of Interest
  - Generate at tenth points
  - Generate at section change points
  - Generate at user-defined points
  - Generate at stiffeners
- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Ignore long. reinf in negative moment capacity
- Consider deck reinf. development length
- Distribution Factor Application Method
  - By axle
  - By POI

**LRFR**

- Points of Interest
  - Generate at tenth points
  - Generate at section change points
  - Generate at user-defined points
  - Generate at stiffeners
- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Evaluate remaining fatigue life
- Ignore long. reinf in negative moment capacity
- Include field splices in rating
- Consider deck reinf. development length
- Distribution Factor Application Method
  - By axle
  - By POI

**LFD**

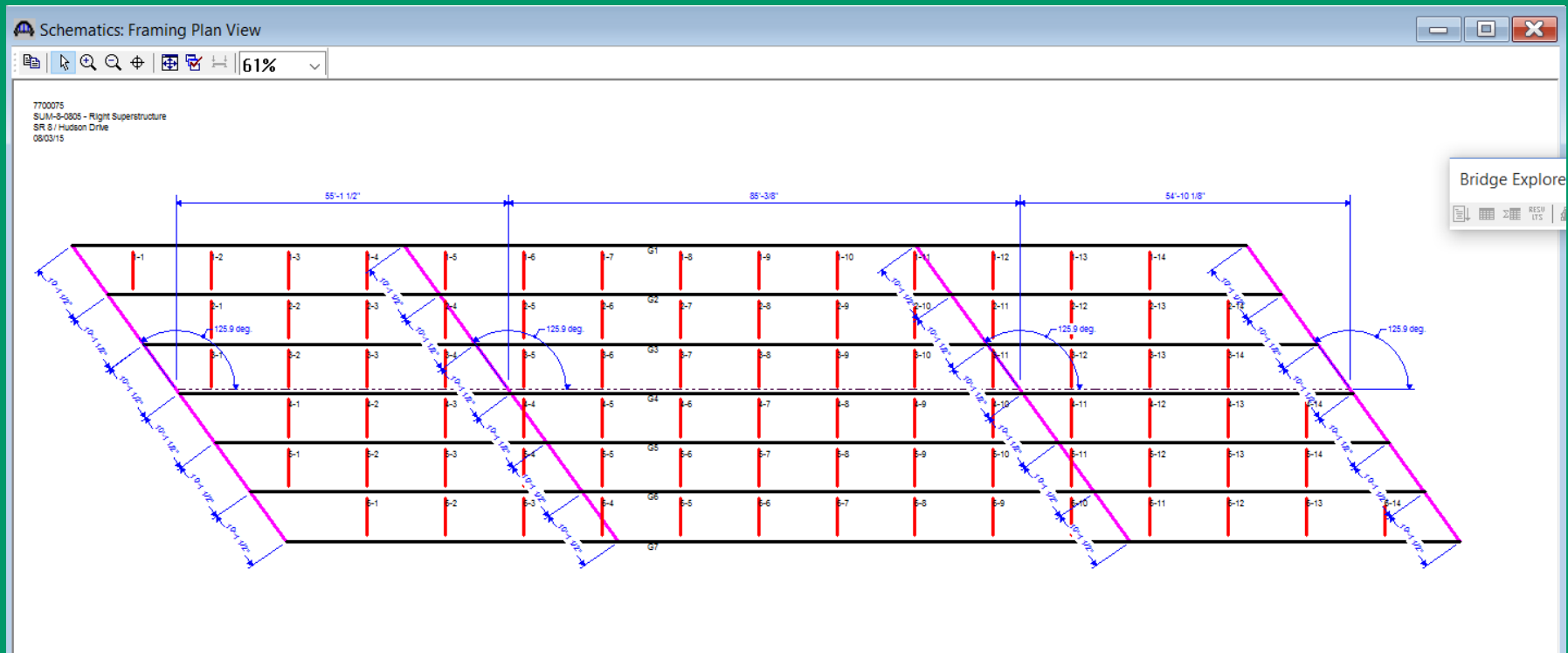
- Points of Interest
  - Generate at tenth points
  - Generate at section change points
  - Generate at user-defined points
- Allow moment redistribution
- Allow plastic analysis of cover plates
- Include field splices in rating
- Include bearing stiffeners in rating
- Allow plastic analysis
- Ignore long. reinf in negative moment capacity

**ASD**

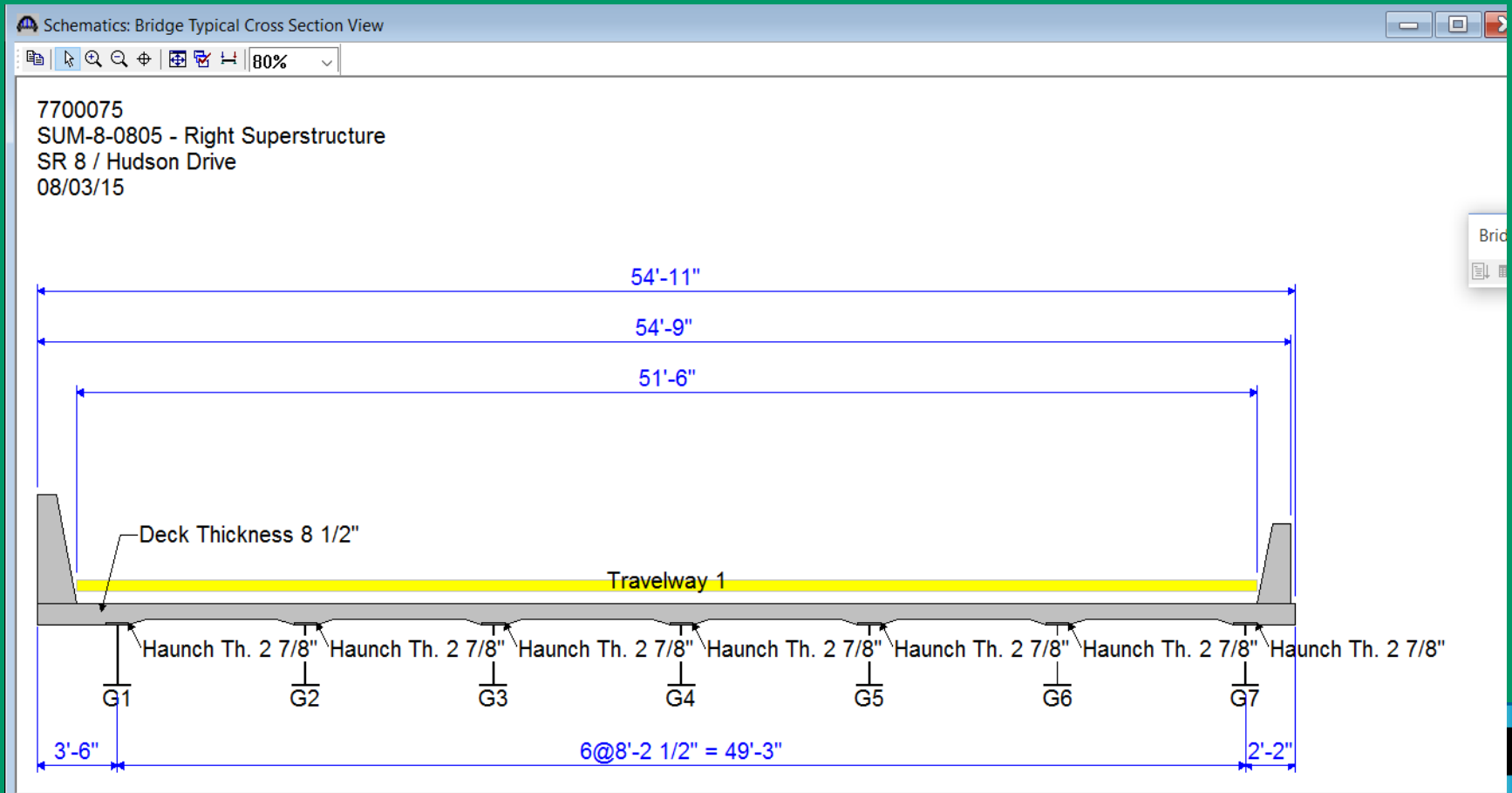
- Points of Interest
  - Generate at tenth points
  - Generate at section change points
  - Generate at user-defined points
- Ignore long. reinf in negative moment capacity
- Consider deck reinf. development length

Getting Results

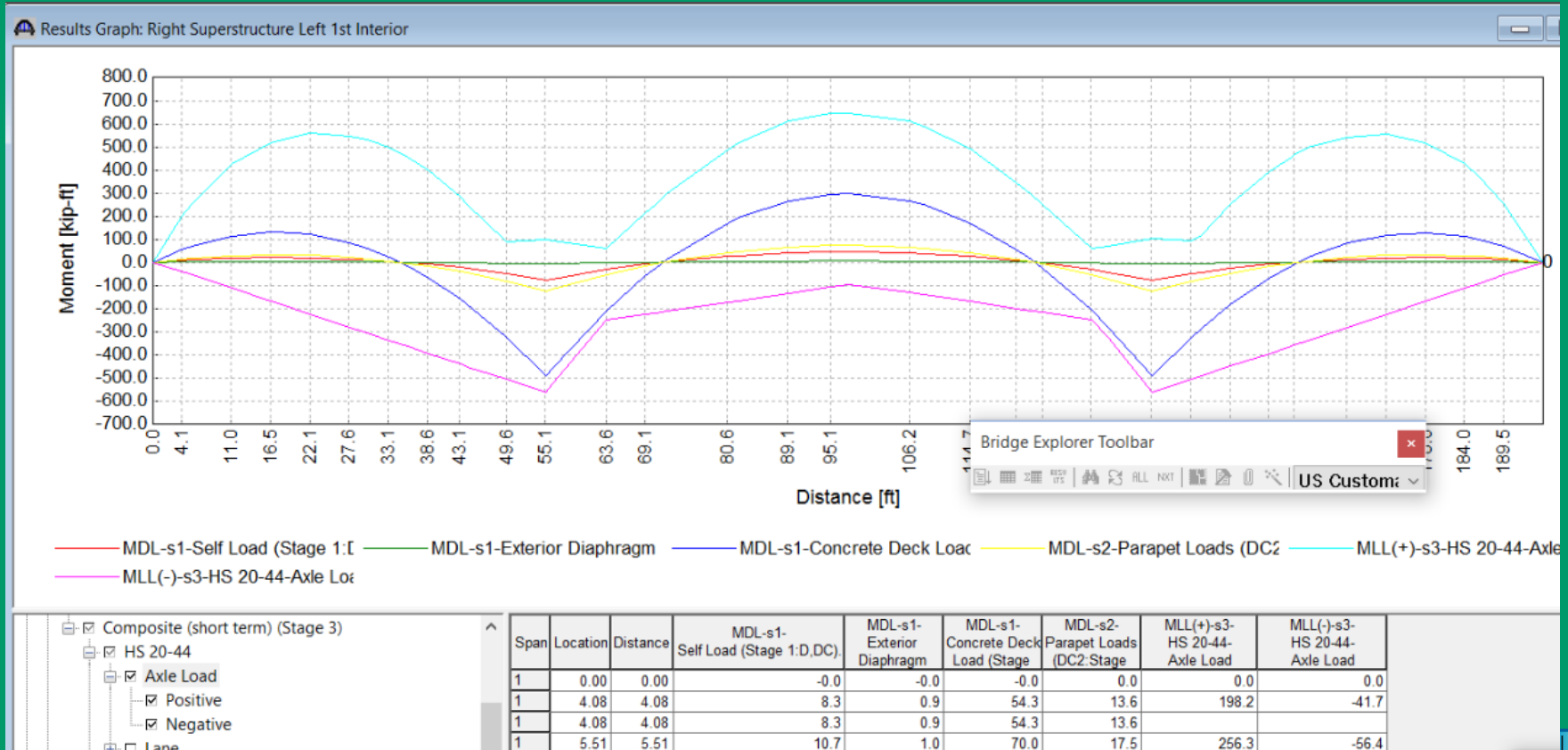
# Framing Plan View



# Cross-Section View



# Output – Tables & Graphs



# Reports

- **Bridge Explorer**
- **Bridge Workspace**
- **Post Bridge Analysis**



# Summary Report

	BID	Bridge ID	Bridge Name	District	County	Facility	Location	Route	Feature Intersected	M
	37	2500612	FRA-023R-0832	Dist 02	Franklin	US 23	0.36 MI. N. OF SR-104	23	CSX & NS RAILROA	
	36	5202493	MED-71-0342 L	Dist 03	Medina	IR 71	1.54 mi N of SR83	71	Over W.&L.E R/R	
	35	2510020	FRA-70-1373R	Not Applicable	Franklin	IR 70	0.5 miles E of Scioto Rvr	70	Short St.	
	34	7803362	TRU-80-0155R	04	Trumbull	IR 80	TRU	80	RR	
	33	7837659	TRU-C0046-0002	Dist 02	Trumbull	CH 46	1500 FT SE of SR 11	46	Squaw Creek	
	32	0249610	ALL-ML11-0010	01	Allen	ML11	Over Ottawa River	11	Ottawa River	
	31	7700075	SUM-8-0805	04	Summit	SR 8	1.94 mi N of SR 59	8	Hudson Drive	
	30	Simple DL-Cont LL-Splice	Simple DL Splice	Unknown	Unknown (P)	N/A	N/A	-1	N/A	
	29	Splice Example	Splice Example					-1		
	28	Gusset Plate Example	Gusset Plate Example	Dist 01			Some Highway			
	27	MultiCell Box Examples	Multi Cell Box Examples					100		
	26	LFD Curved Guide Spec	LFD Curved Guide Spec Example					1		
	25	Culvert Example 1	Culvert Example 1					STH60		
	24	Visual Reference 1	Visual Reference 1	Dist 01	Clark	I-76	WAITSFIELD	I-76	MAD RIVER	
	23	LRFD Substructure Example 4	LRFD Substructure Example 4 (NHI Hammer Head)					-1		
	22	LRFD Substructure Example 3	LRFD Substructure Example 3							
	21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COUNTY	4034	FOUR MILE CREEK	
	20	LRFD Substructure Example 1	LRFD Substructure Example 1							
	19	TrussTrainingExample	Truss Training Example					5		
	18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	Dist 01	Adams	I-95	NY	15		
	17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	Dist 02	Allen	I-75	GNV	-1		
	16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	Dist 01	Adams	I-75	JAX	-1		
	15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	Dist 07	Auglaize	I-95	ATL	-1		
	14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	Dist 11		I-95	NYC	-1		
	13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	Dist 06	Columbiana	NJ-Turnpike	NJCity	-1		
	12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)					-1		
	11	RCTrainingBridge1	RC Training Bridge1(LFD)					-1		





# Summary Report

## Bridge Rating Results

System of Units

US Customary  SI / Metric

Lane/Impact Loading Type

As Requested  Detailed

Display Format

Multiple rating levels per row v

	Bridge Id	Vehicle	Inventory Rating Factor	Operating Rating Factor	Legal Operating Rating Factor	Legal Rating Factor	Permit Inventory Rating Factor	Permit Operating Rating Factor	Permit Rating Factor	Inventory Rating Method	Operating Rating Method	Legal Operating Rating Method	Legal Rating Method	Permit In Rating M
	2510020	HS 20-44	1.633	2.727						LFD	LFD			
	2510020	NRL			2.602							LFD		
	7803362	HS 20-44	1.362	2.275						LFD	LFD			
	7803362	NRL			2.940							LFD		
	7837659	HS 20-44	1.288	2.868						LFD	LFD			
	7837659	NRL			2.486							LFD		
	0249610	HS 20-44	1.267	2.237						LFD	LFD			
	0249610	NRL			2.100							LFD		

Show up-to-date results only

View Structure Rating Results

Save All



# Summary Report

Bridge Explorer (35 Bridge Design/Rating bridges retrieved for the current folder, all rows retrieved)

Analysis Results - Left Superstructure Left 1st Interior

Report Type: Rating Results Summary | Lane/Impact Loading Type:  As Requested  Detailed | Display Format: Multiple rating levels per row

Live Load	Live Load Type	Rating Method	Inventory Load Rating (Ton)	Operating Load Rating (Ton)	Legal Operating Load Rating (Ton)	Permit Inventory Load Rating (Ton)	Permit Operating Load Rating (Ton)	Inventory Rating Factor	Operating Rating Factor	Legal Operating Rating Factor	Permit Inventory Rating Factor	Permit Operating Rating Factor	Inventory Location (ft)	Inventory Location Span-(%)	Operating Location (ft)	Operating Location Span-(%)
HS 20-44	Lane	LFD	62.67	104.66				1.741	2.907				55.13	2 - ( 0.0)	55.13	2 - ( 0.0)
HS 20-44	Axle Load	LFD	51.68	86.30				1.435	2.397				97.65	2 - ( 50.0)	97.65	2 - ( 50.0)
NRL	Axle Load	LFD			82.86					2.072						
SU4	Axle Load	LFD			77.25					2.861						
SU5	Axle Load	LFD			80.83					2.607						
SU6	Axle Load	LFD			81.48					2.345						
SU7	Axle Load	LFD			83.57					2.157						
OH-2F1	Axle Load	LFD			72.52					4.835						
OH-3F1	Axle Load	LFD			74.87					3.255						
OH-4F1	Axle Load	LFD			78.03					2.890						
OH-5C1	Axle Load	LFD			123.31					3.083						

AASHTO LFR Engine Version 6.7.0.3001



# Analysis Summary Report

Report Type: Live Load Actions | Stage: Composite (short term) (Stage 3) | Live Load: HS 20-44 | Live Load Type: Axle Load

Span	Location (ft)	% Span	Positive Moment (kip-ft)	Negative Moment (kip-ft)	Positive Shear (kip)	Negative Shear (kip)	Positive Axial (kip)	Negative Axial (kip)	Positive Reaction (kip)	Negative Reaction (kip)	Positive X Deflection (in)	Negative X Deflection (in)	Positive Y Deflection (in)	Negative Y Deflection (in)	% Impact Pos Reaction	% Impact Neg Reaction
1	0.00	0.0	0.00	0.00	61.04	-11.59	0.00	0.00	61.04	-11.59	0.0000	0.0000	0.0000	0.0000	27.758	27.758
1	5.51	10.0	270.10	-59.21	49.33	-11.00	0.00	0.00			0.0000	0.0000	0.0412	-0.0762		
1	11.03	20.0	449.08	-118.43	41.31	-11.08	0.00	0.00			0.0000	0.0000	0.0798	-0.1432		
1	11.75	21.3	466.25	-126.20	40.28	-11.09	0.00	0.00			0.0000	0.0000	0.0845	-0.1508		
1	16.54	30.0	544.43	-177.64	33.50	-13.84	0.00	0.00			0.0000	0.0000	0.1128	-0.1938		
1	22.05	40.0	585.86	-236.85	26.00	-21.63	0.00	0.00			0.0000	0.0000	0.1378	-0.2215		
1	24.75	44.9	582.03	-265.83	22.56	-25.35	0.00	0.00			0.0000	0.0000	0.1461	-0.2260		
1	27.57	50.0	571.89	-296.06	19.15	-29.13	0.00	0.00			0.0000	0.0000	0.1518	-0.2244		
1	33.08	60.0	524.55	-355.28	12.92	-37.17	0.00	0.00			0.0000	0.0000	0.1522	-0.2053		
1	35.67	64.7	478.87	-383.12	10.16	-40.85	0.00	0.00			0.0000	0.0000	0.1469	-0.1884		
1	37.75	68.5	434.33	-405.46	8.14	-43.70	0.00	0.00			0.0000	0.0000	0.1402	-0.1720		
1	38.59	70.0	415.85	-414.49	7.35	-44.84	0.00	0.00			0.0000	0.0000	0.1370	-0.1648		
1	44.10	80.0	264.88	-473.70	2.55	-51.74	0.00	0.00			0.0000	0.0000	0.1076	-0.1126		
1	49.62	90.0	94.54	-532.91	1.92	-57.83	0.00	0.00			0.0000	0.0000	0.0626	-0.0551		
1	50.75	92.1	96.69	-545.08	1.92	-58.98	0.00	0.00			0.0000	0.0000	0.0512	-0.0429		
1	55.13	100.0	105.04	-592.13	1.91	-63.12	0.00	0.00	71.07	-6.74	0.0000	0.0000	0.0000	0.0000	27.758	27.758
2	0.00	0.0	105.04	-592.13	66.04	-4.83	0.00	0.00	71.07	-6.74	0.0000	0.0000	0.0000	0.0000	27.758	27.758
2	8.50	10.0	61.98	-263.40	58.39	-4.72	0.00	0.00			0.0000	0.0000	0.0650	-0.1254		
2	8.62	10.1	61.43	-262.84	58.30	-4.72	0.00	0.00			0.0000	0.0000	0.0657	-0.1273		
2	15.37	18.1	266.57	-230.37	52.93	-4.75	0.00	0.00			0.0000	0.0000	0.1027	-0.2402		
2	17.01	20.0	312.63	-222.50	51.54	-5.21	0.00	0.00			0.0000	0.0000	0.1098	-0.2676		
2	21.62	25.4	429.35	-200.30	47.46	-8.30	0.00	0.00			0.0000	0.0000	0.1253	-0.3408		
2	25.51	30.0	516.25	-181.59	43.82	-11.28	0.00	0.00			0.0000	0.0000	0.1334	-0.3951		
2	34.01	40.0	640.85	-140.69	35.53	-18.68	0.00	0.00			0.0000	0.0000	0.1378	-0.4841		
2	34.62	40.7	646.59	-137.76	34.93	-19.25	0.00	0.00			0.0000	0.0000	0.1375	-0.4888		
2	42.52	50.0	677.79	-99.78	27.15	-27.20	0.00	0.00			0.0000	0.0000	0.1273	-0.5184		
2	47.62	56.0	666.13	-122.99	21.91	-32.21	0.00	0.00			0.0000	0.0000	0.1338	-0.5061		
2	51.02	60.0	642.48	-139.14	18.67	-35.58	0.00	0.00			0.0000	0.0000	0.1364	-0.4845		
2	59.52	70.0	513.57	-179.55	11.20	-43.87	0.00	0.00			0.0000	0.0000	0.1320	-0.3955		
2	60.62	71.3	490.65	-184.77	10.35	-44.91	0.00	0.00			0.0000	0.0000	0.1302	-0.3812		
2	68.02	80.0	311.52	-219.96	5.20	-51.58	0.00	0.00			0.0000	0.0000	0.1087	-0.2681		



# BWS Reports

The screenshot displays the Bridge Workspace software interface. On the left, a hierarchical tree view shows the project structure. The 'Left Superstructure' folder is expanded, revealing sub-items such as 'Impact / Dynamic Load Allowance', 'Load Case Description', 'Framing Plan Detail', 'Diaphragm Loading Selection', 'Structure Typical Section', 'Superstructure Loads', 'Connectors', 'Shear Connector Definitions', 'Stiffener Definitions', and 'MEMBERS'. Under 'MEMBERS', 'G1' and 'G2' are listed. 'G2' is expanded to show 'Member Loads', 'Supports', and 'MEMBER ALTERNATIVES'. The 'MEMBER ALTERNATIVES' folder is further expanded, with 'Left Superstructure Left 1st Interior (E) (C)' selected and highlighted in blue. This selected item has its own sub-tree containing 'Default Materials', 'Impact / Dynamic Load Allowance', 'Live Load Distribution', 'Hinge Locations', 'Girder Profile', 'Splice Locations', 'Deck Profile', 'Haunch Profile', 'Lateral Support', 'Stiffener Ranges', 'Bearing Stiffener Locations', 'Points of Interest', and 'Deterioration Profile'. On the right side of the interface, a 'Bridge Workspace Toolbar' is visible. A red arrow points to the 'Print' icon (represented by a document with a printer) in the toolbar.



# BWS Reports

Username: brr

Date: Tuesday, August 04, 2015 00:33:48

## **Bridge ID 7700075 SUM-8-0805**

NBI Structure ID (8): 7700075

Description: rated by APM, from Stage 3 plans, rated 6/2015  
checked by JBD, 4/2015

Three span (55.13'-85.03'-54.83') continuous steel plate griders with 8.5" composite reinforced concrete deck.

## **Superstructure Definition Left Superstructure**

### **Member G2**

Link with: None

Description: Left Superstructure Left 1st Interior

### **Member Alternative Left Superstructure Left 1st Interior**

Description:

Description

Material Type: Steel

Girder Type: Plate

Member units: US Customary

Girder property input method: Schedule based

Left end X: (in)

Right end X: (in)

Additional Self Load: (kip/ft)

Additional Self Load %: (%)




# BWS Reports

Report Type: BWS Report    Advanced     Begin each topic on a new page when printed

Report

New    **Open**    Merge    Save    Save As    Generate



Open

<< BrDR67 > Report Definitions > Bridge Workspace    Search Bridge Workspace

Organize    New folder

Name	Date modified	Type	Size
BWS Report for floor system floorbeam-...	6/30/2015 11:49 A...	ABR File	36 K
BWS Report for floor system girder-floor...	6/30/2015 11:49 A...	ABR File	38 K
BWS Report for floor system girder-floor...	6/30/2015 11:49 A...	ABR File	54 K
BWS Report for floorline floorbeam-strin...	6/30/2015 11:49 A...	ABR File	48 K
BWS Report for floorline girder-floorbea...	6/30/2015 11:49 A...	ABR File	49 K
BWS Report for floorline girder-floorbea...	6/30/2015 11:49 A...	ABR File	69 K
BWS Report for frame pier.abr	6/30/2015 11:49 A...	ABR File	11 K
BWS Report for multicell box.abr	6/30/2015 11:49 A...	ABR File	15 K
BWS Report for pile bent pier.abr	6/30/2015 11:49 A...	ABR File	10 K
BWS Report for ps girders.abr	6/30/2015 11:49 A...	ABR File	47 K
BWS Report for RC Box Culvert.abr	6/30/2015 11:49 A...	ABR File	3 K

File name:    AASHTOWare Bridge Report De

Open    Cancel



# BWS Reports

**Bridge**

Bridge Id:	7700075
Structure Number:	7700075
Name:	SUM-8-0805
Creation Timestamp:	Sunday, August 02, 2015 23:55:49
Last Modified Timestamp:	Monday, August 03, 2015 23:55:45
Description:	rated by APM, from Stage 3 plans, rated 6/2015 checked by JBD, 4/2015. 120.67' out to out width. SBR-1-13 railings with SBR-2-13 median barrier included in strength calculations.
Location:	1.94 mi N of SR 59
Bridge Completely Defined Indicator:	FALSE
Template Indicator:	FALSE
Facility Carried:	SR 8
Feature Intersected:	Hudson Drive
Year Built:	2015
System Of Units:	US Customary
Route Number:	8
Length:	200.54
Mile/Km Post:	8.05
Recent ADTT:	6273
District:	D
County:	77
Owner:	1
Maintainer:	1
Administrative Area:	



# BWS Reports

Specification Checks for Right Superstructure Left 1st Interior - 30 of 1323

- Span 2 - 13.95 ft.
- Span 2 - 15.37 ft.
- Span 2 - 17.01 ft.
- Span 2 - 20.45 ft.
- Span 2 - 25.51 ft.
- Span 2 - 26.95 ft.
- Span 2 - 33.45 ft.
- Span 2 - 34.01 ft.
- Span 2 - 39.95 ft.
- Span 2 - 42.51 ft.
- Span 2 - 46.45 ft.
- Span 2 - 51.02 ft.
- Span 2 - 52.95 ft.
- Span 2 - 59.52 ft.
- Span 2 - 65.95 ft.
- Span 2 - 68.02 ft.
- Span 2 - 69.70 ft.
- Span 2 - 72.45 ft.
- Span 2 - 76.53 ft.
- Span 2 - 78.95 ft.
- Span 2 - 81.99 ft.
- Span 2 - 85.03 ft.
- Span 3 - 3.46 ft.
- Span 3 - 5.48 ft.
- Span 3 - 6.92 ft.
- Span 3 - 10.97 ft.
- Span 2 - 12.42 ft.

Specification Reference

- 10.48.4.1.Mr Noncomposite Mr Calculation
- 10.48.4.1.Rb Noncomposite Rb Calculation
- ✓ 10.48.8 LFD Shear Calculations
- NA 10.50.1.1.2 Composite Compact Positive Moment Section
- ✓ 10.50.1.2 Noncompact Positive Moment Members
- 10.50.1.2.Rb Composite Rb Calculation
- NA 10.50.2.1
- ✓ 10.50.2.2
- 10.50.2.2
- NA 10.53.1.2
- ✓ 6B.4 Steel Combined Moment and Shear
- ✓ 6B.4 Steel Flexure Moment
- ✓ 6B.4 Steel Flexure Overload
- ✓ 6B.4 Steel Flexure Stress
- ✓ 6B.4 Steel Shear Stress
- 10.50.1.2.Rb Composite Rb Calculation
- Depth of web in compression in the Elastic Range (Dc)
- First Yield Moment (My) Calculations for All Sections
- ✓ LFD General Steel Flexural Results
- 10.50.1.2.Rb Composite Rb Calculation
- LFD Steel Elastic Section Properties
- Plastic Moment (Mp) for Composite Sections in Negative Moment
- Plastic Moment (Mp) for Composite Sections in Positive Moment
- NA Plastic Moment (Mp) for Noncomposite Sections
- Steel Stresses for Sections in Positive Flexure

Bridge Explorer Toolbar

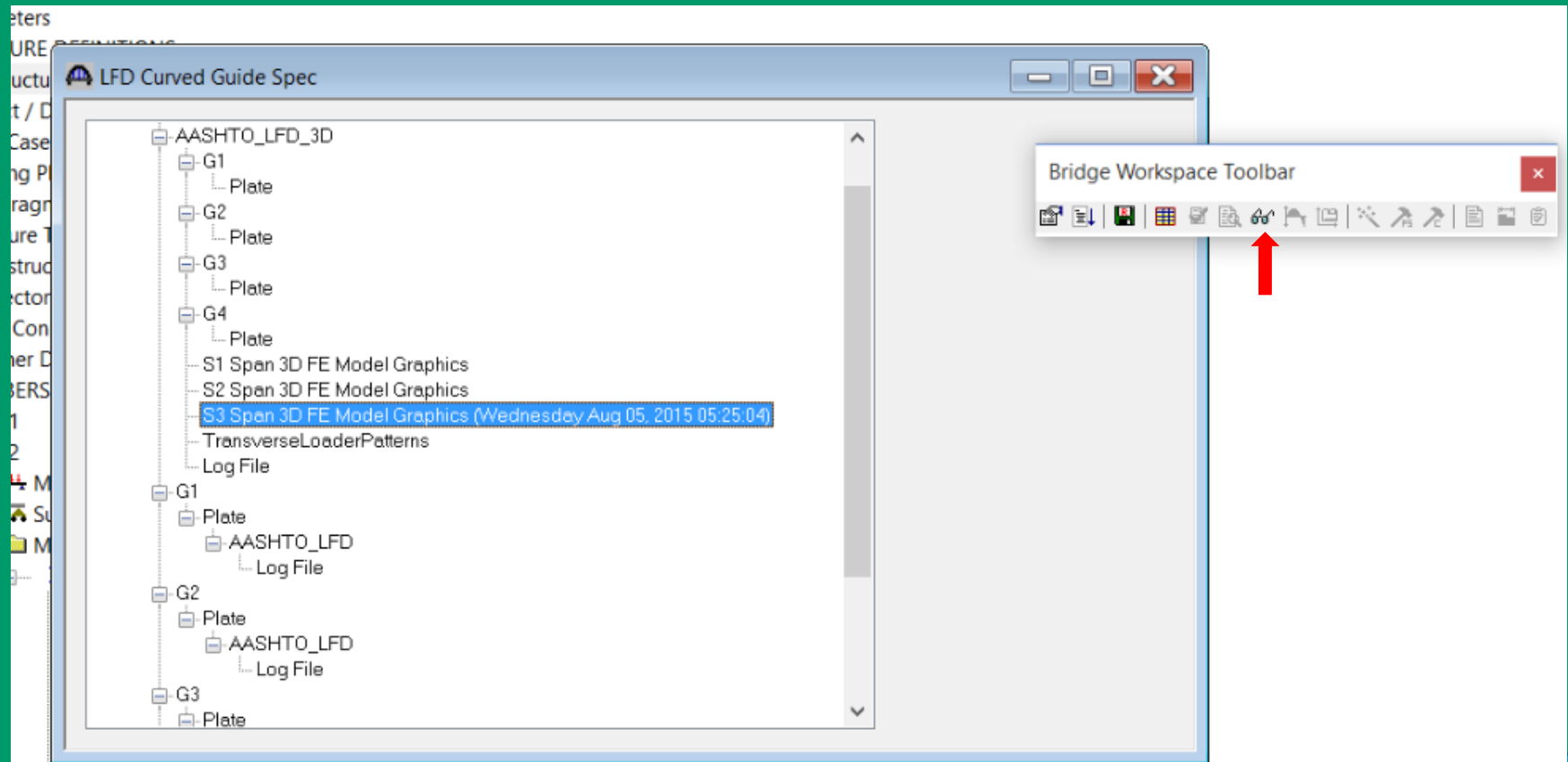
RESU LTS | ALL NXT

Red arrow points to the document icon in the toolbar.

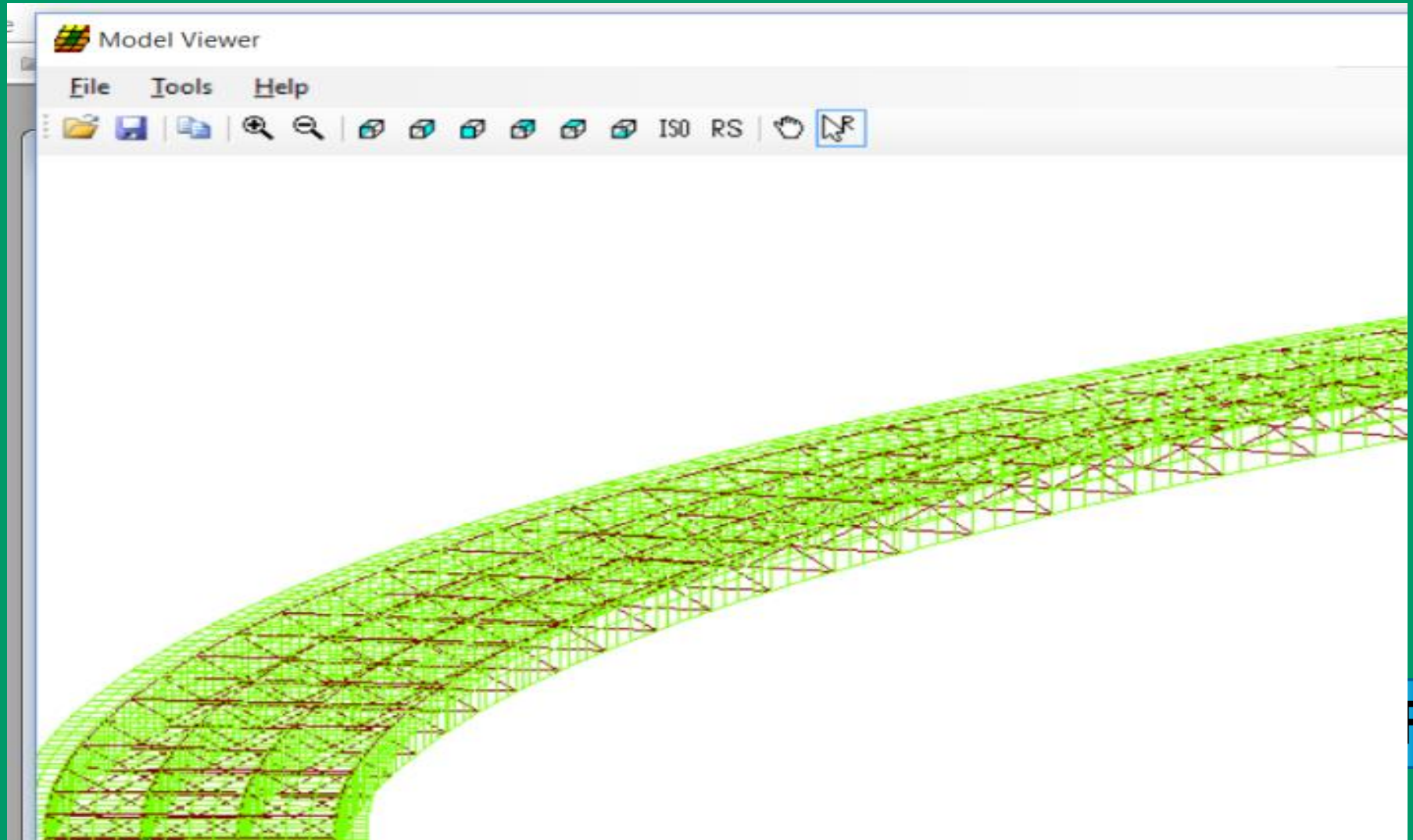




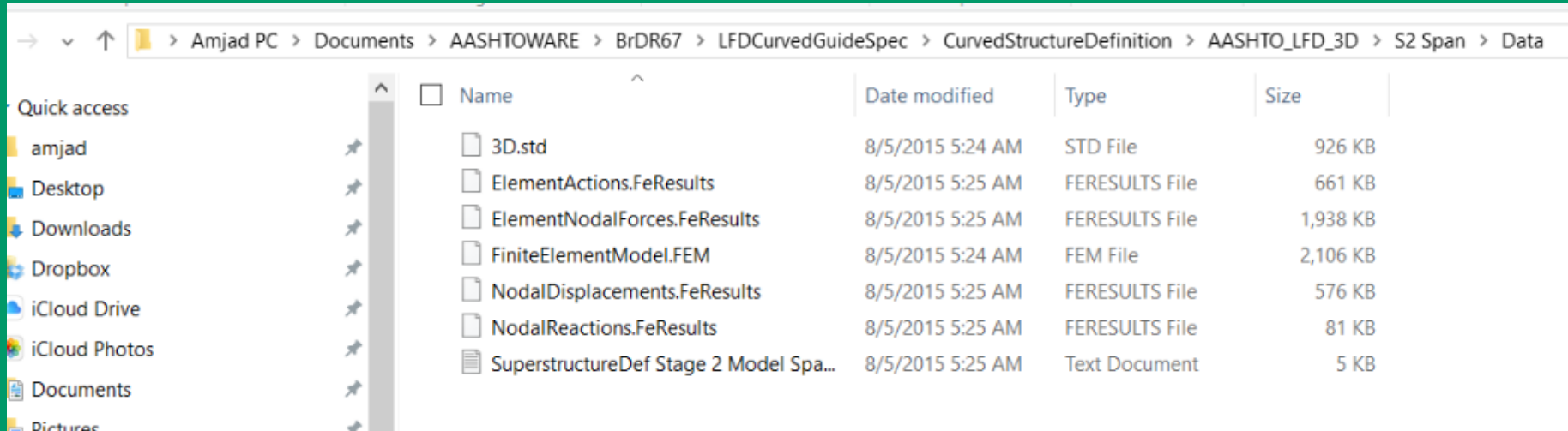
# 3-D ANALYSIS RESULTS



# 3-D ANALYSIS RESULTS



# 3-D ANALYSIS RESULTS









Name	Date modified	Type	Size
3D.std	8/5/2015 5:24 AM	STD File	926 KB
ElementActions.FeResults	8/5/2015 5:25 AM	FERESULTS File	661 KB
ElementNodalForces.FeResults	8/5/2015 5:25 AM	FERESULTS File	1,938 KB
FiniteElementModel.FEM	8/5/2015 5:24 AM	FEM File	2,106 KB
NodalDisplacements.FeResults	8/5/2015 5:25 AM	FERESULTS File	576 KB
NodalReactions.FeResults	8/5/2015 5:25 AM	FERESULTS File	81 KB
SuperstructureDef Stage 2 Model Spa...	8/5/2015 5:25 AM	Text Document	5 KB



# 3-D ANALYSIS RESULTS

Amjad PC > Documents > AASHTOWARE > BrDR67 > LFDCurvedGuideSpec > CurvedStructureDefinition > AASHTO\_LFD\_3D > S3 Span > Data

<input type="checkbox"/>	Name	Date modified	Type	Size
<input type="checkbox"/>	3D.std	8/5/2015 5:25 AM	STD File	934 KB
<input type="checkbox"/>	 ElementActions.FeResults	8/5/2015 12:04 AM	FERESULTS File	695,591 KB
<input type="checkbox"/>	 ElementNodalForces.FeResults	8/5/2015 12:08 AM	FERESULTS File	2,041,862 ...
<input type="checkbox"/>	FiniteElementModel.FEM	8/5/2015 5:25 AM	FEM File	2,223 KB
<input type="checkbox"/>	InfluenceSurfaces.sur	8/5/2015 1:01 AM	SUR File	83,979 KB
<input type="checkbox"/>	 NodalDisplacements.FeResults	8/5/2015 12:03 AM	FERESULTS File	606,051 KB
<input type="checkbox"/>	 NodalReactions.FeResults	8/5/2015 12:03 AM	FERESULTS File	84,321 KB
<input type="checkbox"/>	 TransverseLoaderPatterns.dat	8/5/2015 5:31 AM	Zipped File	29 KB
<input checked="" type="checkbox"/>	 TransverseLoaderPatterns.txt	8/5/2015 5:31 AM	Text Document	33 KB



# Questions?

**Amjad Waheed, P.E.**

**Bridge Management & Rating Engineer**

**Ohio DOT**

**[Amjad.Waheed@dot.ohio.gov](mailto:Amjad.Waheed@dot.ohio.gov)**

**(614) 752-9972**



# IR-70 West of Columbus, Ohio

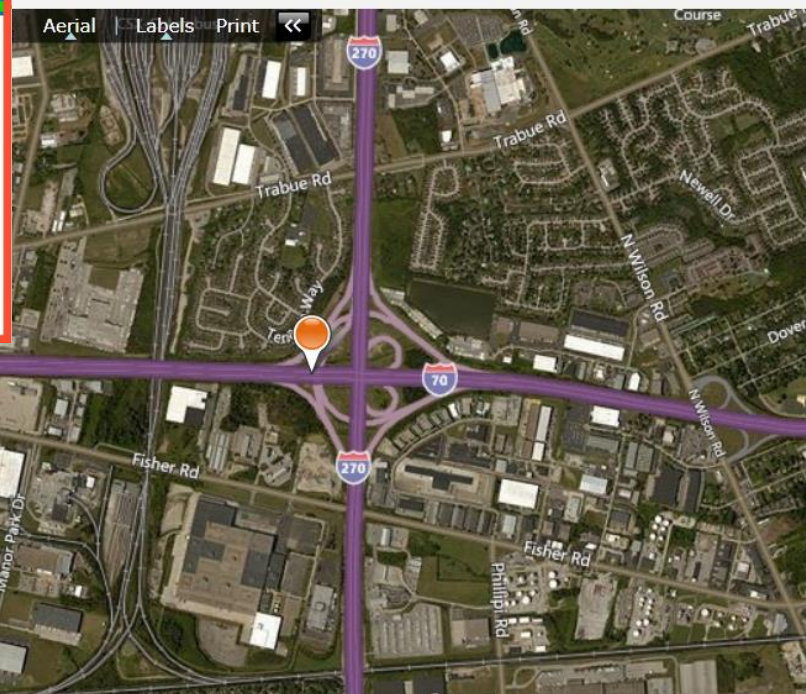
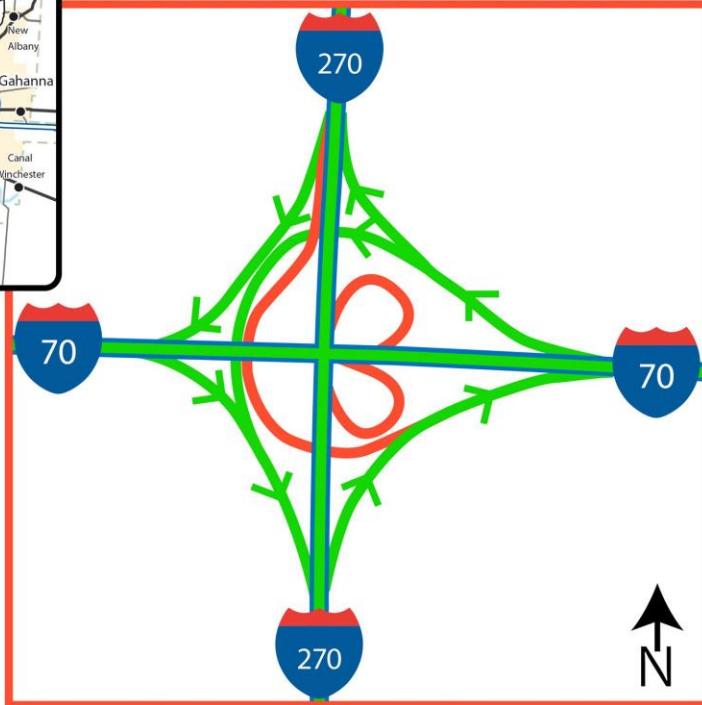


Situation report as of 7-3-15 at 12:00 p.m.

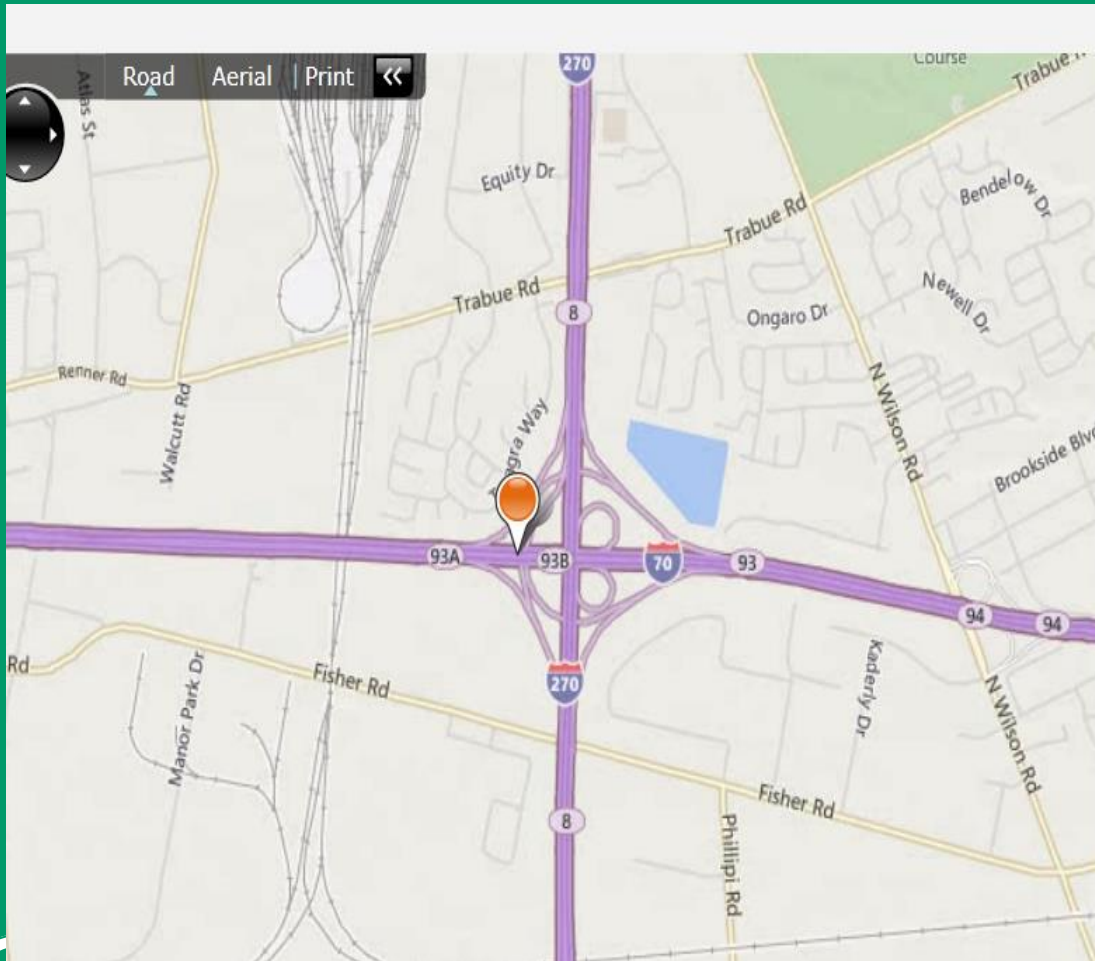
⊗ Location of Crash

— Ramps Closed:  
I-70 EB to I-270 NB  
I-270 NB to I-70 WB  
I-270 SB to I-70 EB

— Open



# IR-70 West of Columbus, Ohio



Information	Street View
<b>Asset Code:</b> 2504146	
<b>Asset Type:</b> Bridge	
<b>(8) Structure Number:</b> 2504146	
<b>(221) Inspection Program Responsibility(A):</b> 1 - Ohio State Transporta	
<b>(21) Maintenance Responsibility:</b> 1 - Ohio State Transportation Depart	
<b>(4) City or Town FIPS:</b> 18000 - COLUMBUS	
<b>(3) County (Parish) Code:</b> 25 - Franklin	
<b>(5D) Inventory Route: Route Number - ROUTE:</b> 00070	
<b>(201) Special Designation:</b> R	
<b>(7) Facility Carried by Structure:</b> I-70 EB	
<b>(16) Latitude: Decimal:</b> 39.976394	
<b>(17) Longitude: Decimal:</b> -83.121669	
<b>(27) Year Built:</b> 1970	
<b>(43A) Structure Type: Material:</b> 1 - Concrete	
<b>(43B) Structure Type: Type:</b> 1 - Slab	
<b>(43C) Main Structure Description:</b> 2 - Continuous	
<b>(6) Feature Intersected:</b> OVER RAMPS TO 70E & 270S	
<b>(54B) Minimum Vertical Underclearance:</b> 17.333	
<b>(53) Minimum Vertical Clearance OVER Bridge Roadway:</b> 99.99	
<b>(41) Structure Open, Posted, or Closed to Traffic:</b> A - OPEN, NO RE	
<b>(63) Method Used to Determine Operating Rating:</b> 6 - Load Factor (L	
<b>(704) Load Rating Date:</b> 7/1/2007	
<b>(734) Ohio Percent Legal:</b> 150	

# IR-70 West of Columbus, Ohio

## July 1, 2015

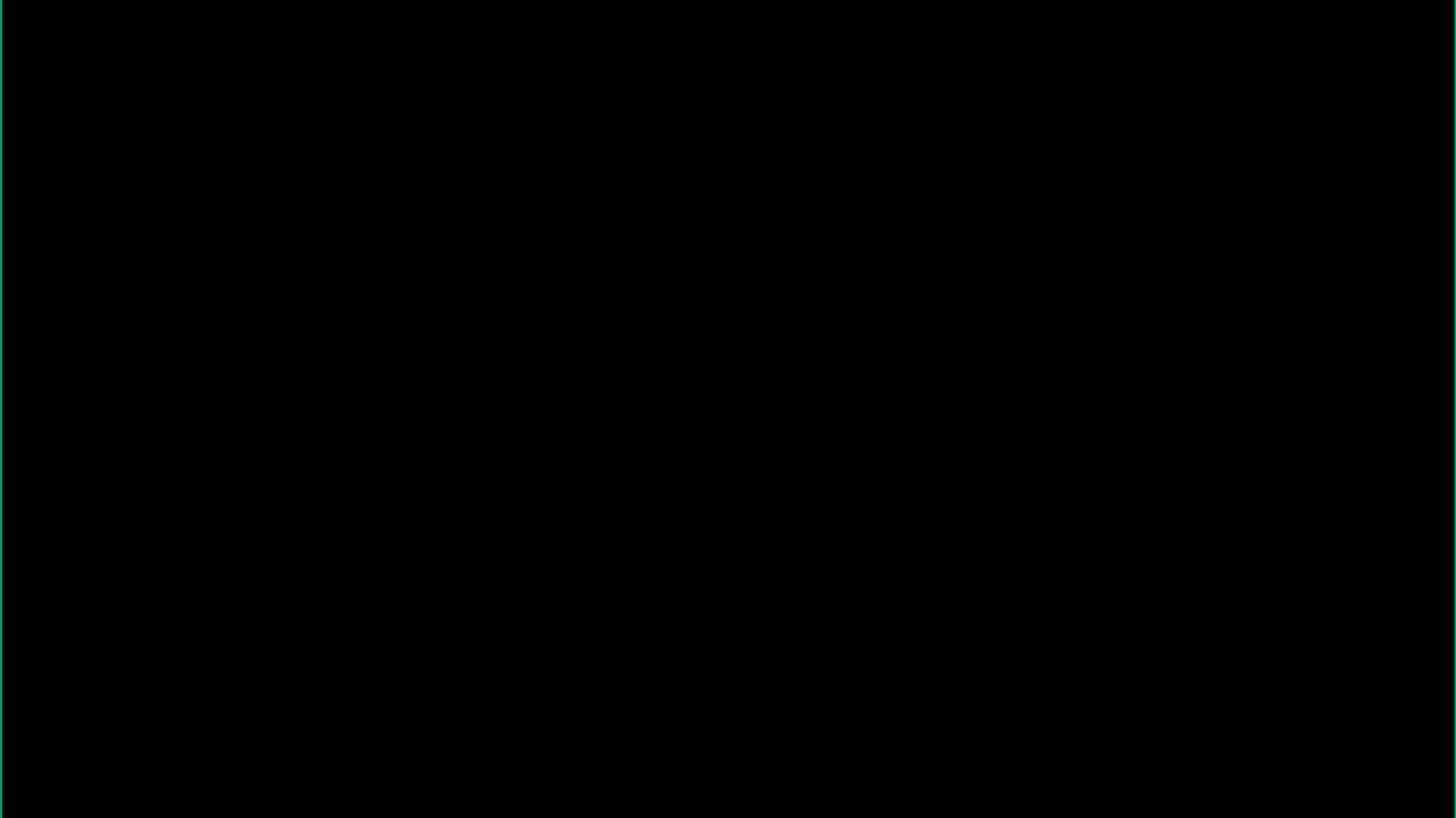
7/1/2015 06:06:25 AM (side) 2015-07-01 06:06:25



R



# IR-70 West of Columbus, Ohio



# IR-70 West of Columbus, Ohio



Setting Results



IR

# IR-70 West of Columbus, Ohio



# IR-70 West of Columbus, Ohio



# IR-70 West of Columbus, Ohio

