

BRIDGE NO. 03322

50440 - NEW BRITAIN
I-84 RAMPS 181&184
over
I-84 and I-84 Ramp 181

Special and Routine Inspection

05/13/2015

Inspected by: TranSystems



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Form: Location

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

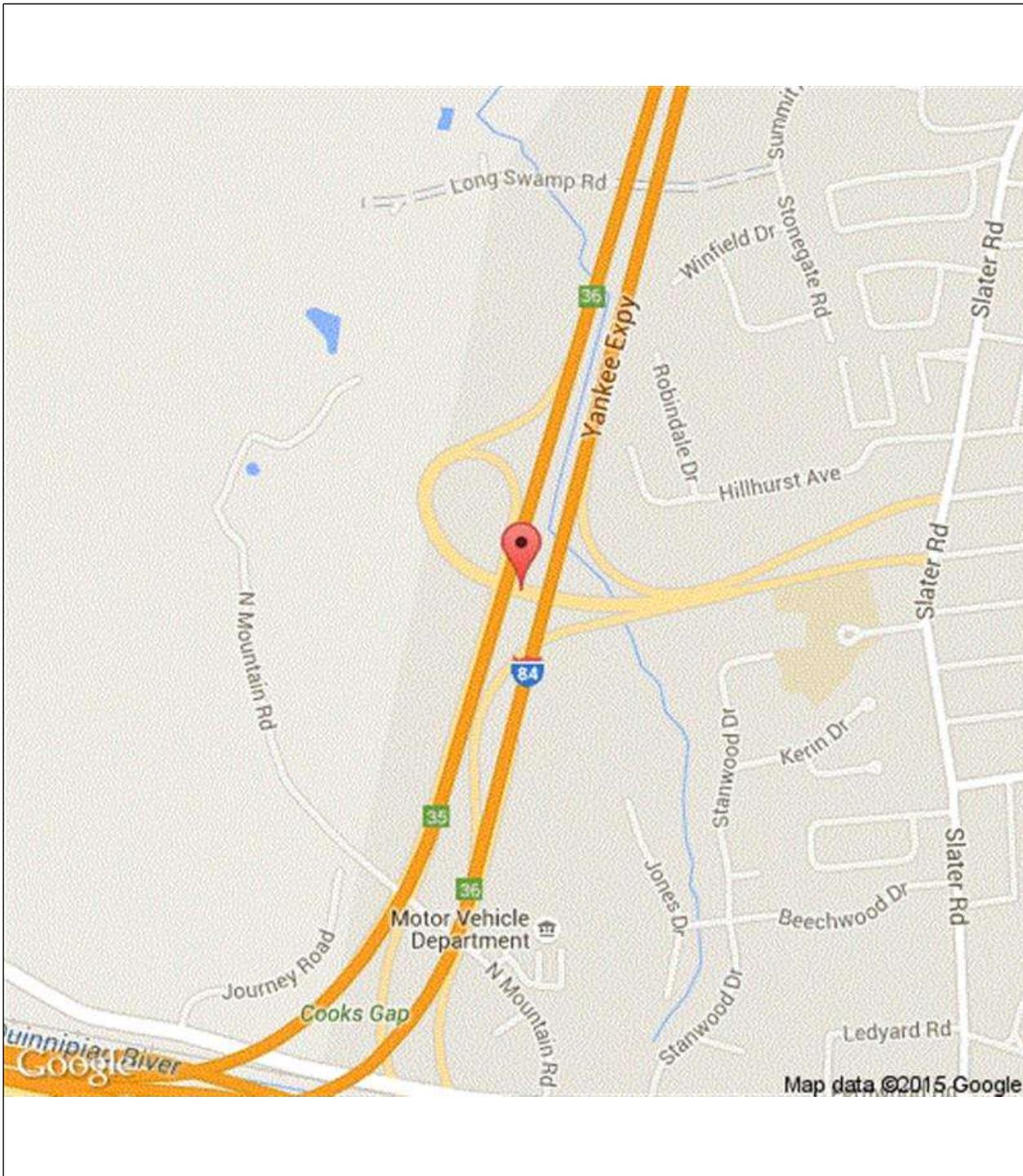
Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS



Location Map # 1

EXECUTIVE SUMMARY

5/11/2015

Bridge No. 03322 carries I-84 Ramps 181 and 184 over I-84 and ramp 181 in New Britain, Connecticut. This 430-foot long steel plate girder bridge has a 53-foot curb-to-curb measurement and was constructed in 1969. According to information on file with the Connecticut Department of Transportation, the Inventory rating for an AASHTO HS20 loading is 59 tons. A new load rating is recommended for this structure.

The bridge was found to be in poor condition this Routine inspection (Overall Rating = 4). The deficiencies found on the bridge are as follows:

Deck (Rating = 6, "Satisfactory")

1. There are random spalls up to 2" deep with exposed rebar, shallow rebar, honeycombing, light scaling and hollow areas up to 2' in diameter. Hollow areas over traffic were in span 2, in bays 1, 2 & 5 and also in span 5, bay 2, up to 3' long x 6" wide. BMM No. 13-539 Item No. 2 was not completed.
2. There are wrought iron weeps in spans 1, 2, and 4 that drain onto the superstructure. BMM No. 11-493 Item No. 4 has not been completed.
3. There are adhesion cracks in the asphaltic plug joints at piers 1 and 4 measuring up to 6' long x 1/8" wide. BMM No 11-493, Item No. 2 and BMM No. 13-539, Item No. 3 have not been completed.

Superstructure (Rating = 4, "Poor")

1. East abutment, girder 1 & 8 bearings have cracked welds between the sole plate and girder bottom flange up to 9 1/2" long. Most of the bearings showed no signs of movement and appear to be frozen at 90° F.
2. Girder bottom flanges have up to 5/16" painted over losses in critical zones, resulting in up to 9% section loss (Span 5, Girder 1); a total of four locations have over 5% bottom flange loss.

Substructure (Rating = 4, "Poor")

1. The east abutment stem is rotated up to 1" over 4', worst at girder 4. East abutment rotation measurements were within 1/16" of previous measurements.
2. The joints between the east abutment stem and the northeast and southeast wingwalls are up to 1" wider at the top than the bottom.
3. The undersides of pier caps have large hollow areas up to 13' x full width and spalls up to 1" deep. Piers 3 and 4 have spalls up to 3' x 2' x 2" deep with exposed rebar and corner spalls up to 6' long x 4" high x 4" deep with exposed rebar. BMM No. 07-241 Item No. 3 was not completed.
4. The concrete pier columns have shallow rebar, large hollow areas, spalls up to 2' x 2.5' x up to 3" deep with exposed rebar. BMM No. 07-241 Item No. 4 was not completed.

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Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS

STRUCTURE INVENTORY & APPRAISAL

INSPECTION

Structurally Deficient Functionally Obsolete
Sufficiency Rating
(90) Inspection Date (91) Frequency
Indepth Insp Proposed next Indepth Year
Deck Survey Date Class
Access Flagman

	Frequency	Date	Type
Fracture	<input type="text"/>	<input type="text"/>	<input type="text"/>
Underwater	<input type="text"/>	<input type="text"/>	<input type="text"/>
Special	<input type="text" value="24"/>	<input type="text" value="05/13/2015"/>	<input type="text"/>

IDENTIFICATION

Bridge Name
Town Code - Name
(5) Inventory Route
(A) Record Type
(B) Signing Prefix
(C) Level of Service
(D) Route Number.
(E) Dir Suffix
(6A) Featured Intersected
(6B) Critical Facility Indicator
(7) Facility Carried
(9) Location
(11) Mile Post Miles
(16) Latitude Deg. Min. Sec.
(17) Longitude Deg. Min. Sec.
(98) Border Bridge
(A) State Code (B) Percent Responsibility %
(C) Border Town Name
(99) Border Bridge Structure No.

STRUCTURE TYPE & MATERIALS

(43) Structure Type, Main
A) Material
B) Design Type
(44) Structure Type, Approach
A) Material
B) Design Type

(45) Number of Spans, Main Unit
(46) Number of Approach Spans
(107) Deck Structure Type
(108) Wearing Surface/Protection Systems

A) Type of Wearing Surface
B) Type of Membrane
C) Type of Deck Protection

Substructure
A) Material
B) Design Type

Paint
Type
Year
Comment

GEOMETRIC DATA

(48) Length of Maximum Span ft.
(49) Structure Length ft.
(50) Curb or Sidewalk Widths
A) Left ft. in. B) Right ft. in.
(51) Bridge Roadway Width Curb to Curb ft. in.
(52) Deck Width, Out to Out ft. in.
(32) Approach Roadway Width ft.

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(33) Bridge Median

Deck Area sq. ft.

(34) Skew Angle deg.

(35) Structure Flared

(10) Inv. Rte. Min. Vert. Clearance ft. in.

(47) Inv. Rte. Total Horiz. Clr. ft. in.

Log Inv. Rte. Total Horiz. Clr. ft. in.

RLog Inv. Rte. Total Horiz. Clr. ft. in.

(53) Min. Vert. Clearance Over Bridge ft. in.

(54) Log-Min. Vert. Underclearance ref. ft. in.

(55) Min. Lat Underclearance on Right ref. ft. in.

(56) Min. Lat Underclearance on Left ft. in.

CONDITION

(58) Deck

(59) Superstructure

(60) Substructure

(61) Channel & Channel Protections

(62) Culverts

(36) Traffic Safety Features

A) Bridge Railings

B) Transitions

C) Approach Guardrail

D) Approach Guardrail Ends

WATERWAY

Drainage Basin Waterway

AGE AND SERVICE

Year Built (106) Year Reconstructed

(42) Type of Service

A) On

B) Under

(28) Number of Lanes

A) On B) Under

(29) Average Daily Traffic

Is Above Half ADT?

(109) Percent Truck %

(30) Years of ADT

(19) Bypass, Detour Length Miles

APPRAISALS

(67) Structural Evaluation

(68) Deck Geometry

(69) Underclearances, Vert. & Horiz.

(71) Waterway Adequacy

(72) Approach Roadway Alignment

(113) Scour Critical

COMMENTS

Rating changed from (4) to (5) by LCC on 7/10/15. High Inventory rating on the steel girders.

9/20/13 - Tipping of east abutment unchanged, however, bearings are frozen and anchor bolts tipping, sole plate welds cracked. Substructure rating lowered to "4". Bridge placed on List "99". R Prescott

The tipping at the east abutment has been noted since the 1997. This appears to be an as-built condition. Inspectors must continue to monitor this condition at the regular inspections every 24 months. The substructure rating will be upgraded "6". Ralph Phillips 11/15/2010

CLASSIFICATION

(112) NBIS Bridge Length

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Inventory Route: NHS

(38) Navigation Control	<input type="text"/>	(104) Highway System	1 - Structure/Route is on NHS
(39) Navigation Vertical Clearance	<input type="text"/> ft.	(26) Functional Class	11 - Urban - Principal Arterial - Interstate
(40) Navigation Horiz. Clr.	<input type="text"/> ft.	(100) Defense Highway	1 - Is on an Interstate STRAHNET route
(111) Pier/Abutment Navigation	<input type="text"/>	(101) Parallel Structure	N - No parallel structure
(116) Vert-Lift Brg Nav Min	<input type="text"/> ft. <input type="text"/> In.	(102) Direction of Traffic	2 - 2-way traffic

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(103) Temporary Structure
 (110) Designated National Network
 (20) Toll
 (21) Maintain
 (22) Owner
 Report Class
 (37) Historical Significance

POSTED SIGNS

Other Posted Sign 1
 Other Posted Sign 2

	Actual	Recomended	
Posted Load Single Unit Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load Semi-Trailer Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 4 Axle Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 3S2 Truck	<input type="text"/>	<input type="text"/>	tons
All Vehicles	<input type="text"/>	<input type="text"/>	tons
Posted Vert. Clearance on Bridge	<input type="text"/> ft.	<input type="text"/> in.	
Posted Vert. Underclearance	<input type="text"/> ft.	<input type="text"/> in.	
Posted Speed Limit on Bridge	<input type="text"/> m.p.h.		

OTHER FEATURES

Fence Required
 Fence Present
 Fence Height
 Fence Material
 Fence Top Type
 Barrel Ladders
 Stand Pipes
 Catwalks
 Moveable Inspection System
 Haunches Present over Roadway
 Utilities

PROPOSED IMPROVEMENTS

(75A) Type of Work Proposed
 (75B) Work Done By
 (76) Length of Structure Improvement ft.
 (94) Bridge Improvement Cost \$
 (95) Roadway Improvement Cost \$
 (96) Total Project Cost \$
 (97) Year of Improvement Estimate
 (114) Future ADT
 (115) Year of Future ADT
 DOT Bridge Program List No
 Project No
 Advertised Date

LOAD RATING & POSTING

(31) Design Load
 (63) Operating Rating Type
 (64) Operating Rating
 (65) Inventory Rating Type
 (66) Inventory Rating
 Evaluation Code
 Year of Evaluation
 (70) Bridge Posting
 (41) Structure Status

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Inventory Route: NHS

INSPECTOR'S SIGNATURES:

1)  Date: 06/01/2015

P.E. SIGNATURE:


PE#24756

Date: 06/03/2015

2)  Date: 06/01/2015

P.E. #

Reviewed By:



Date: 07/09/2015

3) _____ Date:

4) _____ Date:

Form: BRI-25, Rev. 2/15
Inspection type: Special,Routine
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Inventory Route: NHS

INVENTORY ROUTE UNDER STRUCTURE

IDENTIFICATION

Description:

(5) Inventory Route:

(A) Record Type:

(B) Signing Prefix:

(C) Level of Service:

(D) Route No.:

(E) Directional Suffix:

(11) Mile Point:

AGE AND SERVICE

(28B) Number Of Inventory Route Lanes:

(29) Average Daily Traffic:

(109) Percent Truck:

(30) Year Of ADT:

(41) Inv Route Operational Status:

(19) Bypass Detour Length: Miles

GEOMETRIC DATA

(10) Inv. Rte. Min. Vert. Clearance: ft. in.

(47) Log Inv. Rte., Total Horiz. Clr. ft.

(Enter Largest Value of Log or Rlog from below)

Log Inv. Rte., Total Horiz. Clr. ft.
(Permit purposes)

RLog Inv. Rte., Total Horiz. Clr. ft.
(Permit purposes)

Log Min. Vert. Clr. Over Bridge Roadway: ft. in.
(Travelway Only Under Bridge)

RLog Min. Vert. Clr. Over Bridge Roadway: ft. in.
(Travelway Only Under Bridge)

(55) Min. Lat. Underclearance on Right ref. ft. in.

(56) Min. Lat. Underclearance on Left ft. in.

CLASSIFICATION & POSTED SIGN

(26) Functional Class

(100) Defense Highway

(102) Direction of Traffic

(104) Highway System

(110) Designated National Network:

Posted Vert Clr. Under Bridge: ft. in.

COMMENTS

Form: BRI-25, Rev. 2/15
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Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS

INVENTORY ROUTE UNDER STRUCTURE

IDENTIFICATION

Description:

(5) Inventory Route:

(A) Record Type:

(B) Signing Prefix:

(C) Level of Service:

(D) Route No.:

(E) Directional Suffix:

(11) Mile Point:

AGE AND SERVICE

(28B) Number Of Inventory Route Lanes:

(29) Average Daily Traffic:

(109) Percent Truck:

(30) Year Of ADT:

(41) Inv Route Operational Status:

(19) Bypass Detour Length: Miles

GEOMETRIC DATA

(10) Inv. Rte. Min. Vert. Clearance: ft. in.

(47) Log Inv. Rte., Total Horiz. Clr. ft.

(Enter Largest Value of Log or Rlog from below)

Log Inv. Rte., Total Horiz. Clr. ft.

(Permit purposes)

RLog Inv. Rte., Total Horiz. Clr. ft.

(Permit purposes)

Log Min. Vert. Clr. Over Bridge Roadway: ft. in.

(Travelway Only Under Bridge)

RLog Min. Vert. Clr. Over Bridge Roadway: ft. in.

(Travelway Only Under Bridge)

(55) Min. Lat. Underclearance on Right ref. ft. in.

(56) Min. Lat. Underclearance on Left ft. in.

CLASSIFICATION & POSTED SIGN

(26) Functional Class

(100) Defense Highway

(102) Direction of Traffic

(104) Highway System

(110) Designated National Network:

Posted Vert Clr. Under Bridge: ft. in.

COMMENTS

Form: BRI-18, Rev. 1/14
 Inspection type: Special,Routine
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 Inventory Route: NHS

FIELD INSPECTION REPORT

Location:	.6 MI E PLAINVILLE-N.B.TL	Year Built:	1969	Snooper Required: <input type="checkbox"/>
Main Material:	3 - Steel	Year Rebuilt:		Snooper Used: <input type="checkbox"/>
Main Design:	02 - Stringer/Multi-beam or			

Inspectors:

Inspector:	Task:
McKenna, John	BSE - Inspector Rail - Inspector
Popoli, Jon	BSE - Inspector Rail - Inspector

Visits:

Visit Date:	Temp:	Start Time:	End Time:
05/11/2015	80	08:30 AM	02:30 PM
05/12/201	90	09:30 AM	03:00 PM
05/13/201	65	08:30 AM	03:30 PM

58. DECK:

Overall Rating: 6

Rating

Overlay: 6	<p>The bituminous concrete overlay has longitudinal, transverse, and map cracks throughout, up to 3/16" wide. Longitudinal paving seams are open up to 1/2". Span 2, south travel lane has a 1' long x 6" wide x up to 2" deep pothole.</p> <p>See field sheets 8 & 9 and photo 9.</p>
Deck - Str. Condition: 6	<p>The underside of the concrete deck has transverse hairline cracks and hairline map cracking with areas of efflorescence and rust staining. There are random spalls up to 2" deep with exposed rebar, shallow rebars, honeycombing, light scaling and hollow areas up to 2' in diameter. Hollow areas over traffic were found at the following locations:</p> <ul style="list-style-type: none"> - Span 2, bay 2, panel 4: 1.5' x 6" hollow adjacent to a 5' long x 3' wide x 1-1/2" deep spall over I-84 WB left lane. - Span 2, bay 5, panel 3: 1' diameter hollow over I-84 WB right lane. - Span 5 ,bay 2, panel 3: 3' x 6" hollow area over I-84 EB right lane. - Span 2, girder 1 haunch, panel 1: 8' hollow haunch over I-84 ramp solid white line. <p>All hollow areas were intact at time of inspection. BMM No. 13-539 Item No. 2, hollow areas over roadways, has not been completed.</p> <p>Underside of deck deterioration is 4% with a maximum of 7% in Span 1.</p> <p>See field sheets 2-4, 14, 16, 18, 20, & 21 and photos 8 & 10-13.</p>
Curbs: 6	<p>The sloped concrete curbs are monolithic with the parapets and median.</p> <p>Average curb reveals were 4 1/4" at the north curb and 4" at the south curb.</p> <p>See field sheets 8 - 10 and photo 14.</p>
Median: 6	<p>The raised concrete median with back-to-back metal beam rails has light to moderate scaling, hollow areas up to 5 sf, and spalls up to 2.5' x 1' and up to 5" deep. The median railing has minor impact damage throughout. BMM No. 13-539 Item No. 1, missing median rail anchor bolt nut in span 1, has been completed.</p> <p>See field sheets 2, 8, & 9 and photos 9 & 15.</p>
Sidewalks: N	
Parapet: 6	<p>The concrete parapets and monolithic curbs have vertical hairline cracks, scrape marks, and chipping. There are spalls in the north parapet up to 1' diameter x 2" deep. Parapets are misaligned up to 15/16" at the joints, worst at the south parapet, east abutment joint.</p>

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Railing: 6 See field sheets 8-11 and photo 16.
 Two pipe railing have areas of exposed primer and light rust. There are four posts with impact damage at the southwest corner of the bridge. One lower rail is bent in the south side of span 4.
 See field sheets 8 & 9 and photo 16.

Paint: N

Fence: N

Drains: 5 There are four wrought iron weeps that are short in Span 1, 2, and 4 that drain onto the superstructure. BMM No. 11-493 Item No. 4 has not been completed. The previously noted clogged scuppers have been cleared; however, the drain pipe in span 3, bay 1 at pier 2 is still clogged at the hopper. BMM No. 11-493 Item No. 1, clogged scuppers and drain pipes, is partially completed.

See field sheets 3, 4, 8, 9, 14, 16, 18, 20, & 21 and photos 17-19.

Lighting Standard: 7 Lighting standards in Spans 2 & 5 are missing up to all four anchor bolt covers. Span 2 light standard hand hole cover has (1) of (2) screws sheared off. Junction box covers are missing up to 9 of 12 screws, but all covers are secure.

See field sheets 8 & 9.

Utility Type/Size

N | No Utilities present

Construction Joints: N

Expansion Joint: 6 Asphaltic plug joints at pier 1 and 4 have adhesion cracks up to 6' long x 1/8" wide. The west abutment joint is heaved up to 1" in the north shoulder. Evidence of past leakage through the deck joints at all locations. BMM No. 11-493 Item No. 2, adhesion cracks and heaving in the plug joints, has been completed. BMM No. 13-539, Item No. 3, adhesion cracks in the plug joints, has not been completed.

The transverse median joints at the abutments have heavy debris in the joints.

See field sheets 2-4, 8, & 9 and photos 20 & 21.

Haunches Present over travelway? YES

APPROACH CONDITION:

BITUMINOUS PAVEMENT

Overall Rating: 6

Rating

Approach Slab: N

Relief Joints: N

Approach Guide Rail: 6 The three cable guide rail at the northwest approach has two leaning posts and loose cables. The southeast rail also has loose cables and leaning posts. The metal beam rail at the northeast corner has 15' of moderate collision damage and up to 1.5' high of one metal beam rail post is exposed due to erosion (post is secure). The back-to-back metal beam rail at the approach medians has minor impact damage throughout.

See field sheets 8 & 9 and photos 22 & 23.

Approach Pavement: 6 The west approach pavement has longitudinal and transverse cracks that are typically up to 1/4" wide, but up to 1" wide at isolated locations. The east approach pavement has longitudinal, transverse, and map cracks up to 1/2" wide. There is an isolated 2' x 1' x 2" deep settled area in

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the north shoulder of the east approach.

See field sheets 8 & 9 and photo 24.

Approach Embankment: 6 There is minor erosion along all wingwall embankments from roadway runoff. The top of the northeast approach embankment has a 15' x 8' x up to 3' deep area of erosion that exposes 1.5' of one metal beam rail post.

See field sheets 8 & 9.

Traffic Safety Features

Bridge Railings: 0 <42" high concrete barrier.

Transitions: 0 Rub rail not attached at northeast corner.

Approach Guardrails: 0 Steel block-outs.

Approach Guardrail Ends: 1 Continuous with highway rail.

59. SUPERSTRUCTURE:

STEEL MULTI-GIRDER Overall Rating: 5

Rating

Bearing Devices: 4 Sliding bearings at the west abutment have light to moderate rust and bent anchor bolts. Most of the sliding bearings at the east abutment were over-expanded at the time of inspection, resulting in up to 7/16" loss of bearing contact, worst at girder 7. The over-expansion may be due to abutment rotation. There is up to 1/8" impacted rust between the sole and sliding plates and the anchor bolts are bent toward the backwall. Most of the bearings showed no signs of movement and appear to be frozen at 90° F. East abutment, girder 1 & 8 bearings have cracked welds between the sole plate and girder bottom flange up to 9-1/2" long.

Elastomeric bearings have laminated rust on the sole plates and up to 1/4" impacted rust between spacer and/or sole plates. Several elastomeric bearings consist of a large elastomeric pad and a thinner elastomeric pad above, sandwiched between plates. The thinner elastomeric pads have moderate to heavy bulging/curling.

Fixed bearings have up to 1/2" laminated rust, and up to 1/4" impacted rust between sole and sliding plates, between the masonry plates and pedestals, or below the anchor bolt washers.

Random fixed and expansion bearings slightly overhang the pedestals. Pedestal spalls undermine bearings up to 1/2". Random anchor bolt nuts are missing or unseated.

See field sheets 12-14, 16, 18, 20, & 21 and photos 25 & 26.

Stringers: N

Girders: 5 The girders have areas of painted over section loss with light reoccurring rust in the webs and flanges at random locations. Girders over the bearings have painted over pitting losses. Girder bottom flanges have up to 5/16" painted over losses in critical zones, resulting in up to 9% section loss (Span 5, Girder 1); a total of four locations at the fascia girders have over 5% bottom flange loss. Rating downgraded to 4 per CT BIM 10.5 for bottom flange section losses.

Girder 1 and girder 8 at the east abutment have cracked welds between the bottom flange and bearing sole plate. See item 'WELDS-CRACKS' below.

See field sheets 14-21 and photos 27-29.

Rating changed from (4) to (5) by LCC on 7/10/15.
 High Inventory rating on the steel girders.

Floor Beams: N

Trusses - General: N

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Trusses - Portals:	N	
Trusses - Bracing:	N	
Paint:	7	Less than 10% of the painted surfaces have deterioration.
Rust:	5	See above items.
Machinery Movable Span:	N	
Rivets & Bolts:	N	
Welds - Cracks:	6	Diaphragms are missing the bottom horizontal weld at random locations. Bottom flange cover plate end welds (Fatigue Category E) and bottom flange transitions were checked hands on with no noted deficiencies. East abutment, girder 1 bearing, south weld between the girder bottom flange and sole plate has a 9 1/2" long crack. East abutment, girder 8 bearing, north weld between the girder bottom flange and sole plate has a 9" long crack. No changes in crack lengths found this inspection See field sheets 13-21 and photo 26.
Timber Decay:	N	
Concrete Cracking:	N	
Collision Damage:	8	
Member Alignment:	6	Bearings at the east abutment are over-expanded, possibly due to abutment rotation. See above items.
Deflection Under Load:	N	(N) Normal; (E) Excessive.
Vibration Under Load:	N	(N) Normal; (E) Excessive.
Stand Pipes:	N	
Barrel Ladders:	N	
Are Barrel Ladders OSHA Compliant?		NA

60. SUBSTRUCTURE:

Overall Rating:

Rating

Abutments - Stem:	4	The abutment stems have hairline cracks with random efflorescence, popouts, light scale, missing joint fill material, and popouts up to 1" diameter x 1/4" deep. Rating is based on the rotation of the east abutment stem. See "Abutment Settlement" item below. See field sheets 23 & 24 and photo 30.
Abutments - Backwall:	7	The abutment backwalls have random areas of silt stains. See field sheets 23 & 24 and photo 30.
Abutments - Footings:	N	Not visible.
Abutments - Settlement:	4	East abutment rotation measurements were within 1/16" of previous measurements. Per measurements, the east abutment stem is rotated up to 1" over 4' at girder 4. Some of the previous chisel marks were redone at time of inspection. The joints between the east abutment stem and the northeast and southeast wingwalls are up to 1" wider at the top than the bottom (no change noted since last inspection). See field sheet 23-27 and photos 30 & 31.

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 Inventory Route: NHS

Abutments - Wingwalls:	6	The wingwalls have random popouts and spalls in the southeast wingwall at the face inside of the joint with the abutment stem. The tops of the east wingwalls are rotated outward up to 1". The wingwall bases are laterally misaligned with the abutment stems, up to 3/8". No change noted since the last inspection. See field sheets 26 & 27 and photo 31.
Piers/Bents - Caps:	5	The concrete pier caps have cracks up to 1/16" wide and hairline map cracking with random efflorescence and rust. There are large hollow areas up to 13' x full width (underside of Pier 3 between columns 2 & 3) and spalls up to 1" deep. Piers 3 and 4 have spalls up to 3' x 2' x 2" deep with exposed rebar and corner spalls up to 6' long x 4" high x 4" deep with exposed rebar. BMM No. 07-241 Item No. 3 regarding spalls and hollow areas in pier caps, was not completed. Concrete pedestals have random hairline cracks, a few that extend to the anchor bolts, hollow areas, and spalls that undermine bearings up to 1/2" deep (<5% of bearing area loss). See field sheets 4, 28-35 and photos 32 & 33.
Piers/Bents - Pile Bent:	N	
Piers/Bents - Columns:	5	The concrete pier columns have shallow rebars, large hollow areas, spalls up to 2' x 2.5' x up to 2" deep with exposed rebar. There are cracks up to 1/16" wide with efflorescence and rust. BMM No. 07-241 Item No. 4 regarding large spalls in columns, was not completed. See field sheets 28-35 and photo 32.
Piers/Bents - Footings:	N	Not visible.
Piers/Bents - Settlement:	8	None noted.
Erosion - Scour:	6	Erosion: Rated 6 There is minor erosion along all wingwall embankments from roadway runoff. There is minor erosion of the east abutment embankment. There is a 2' diameter x 2" deep area of erosion at the base of pier 4 column 2 from the drain pipe outlet. Scour: Rated N See field sheets 26-35
Concrete Crack - Spall:	5	See above items.
Steel Corrosion:	N	
Paint:	N	
Timber Decay:	N	
Collision Damage:	8	
Debris:	7	There is light debris on the pier caps and abutment seats.

61. CHANNEL AND CHANNEL PROTECTION:

Overall Rating:

Rating

Channel - Scour:	<input type="text"/>
Embankment - Erosion:	<input type="text"/>
Debris:	<input type="text"/>
Vegetation:	<input type="text"/>
Channel Change:	<input type="text"/>
Fender - System:	<input type="text"/>
Spur Dikes and Jetties:	<input type="text"/>

Form: BRI-18, Rev. 1/14
 Inspection type: Special,Routine
 Inspection Date: 05/13/2015
 Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
 Carried: I-84 RAMPS 181&184
 Crossed: I-84 and I-84 Ramp 181
 Inventory Route: NHS

Rip Rap:

62. CULVERTS AND RETAINING WALLS:

Overall Rating:

Rating

Barrel:	<input type="text"/>
Concrete:	<input type="text"/>
Steel:	<input type="text"/>
Timber:	<input type="text"/>
Headwall:	<input type="text"/>
Cutoff Wall:	<input type="text"/>
Debris:	<input type="text"/>
Retaining Wall System:	<input type="text"/>
Footing:	<input type="text"/>

LOAD POSTING:

Rating

Single Unit (Tons):	<input type="text"/>
Semi Trailer (Tons):	<input type="text"/>
4 Axle (Tons):	<input type="text"/>
3S2 (Tons):	<input type="text"/>
All Vechicles:	<input type="text"/>
Advanced Warning:	<input type="text" value="N"/>
Warning At Bridge:	<input type="text"/>
Legibility:	<input type="text" value="N"/>
Visibility:	<input type="text" value="N"/>

VERTICAL CLEARANCE POSTING

Min. Vert Under Clearance:	<input type="text" value="15"/>	Ft	<input type="text" value="9"/>	In	See Clearance Diagram, field sheets 6 & 7.
Posted Clearence Under Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Posted Clearence On Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Advanced Warning:	<input type="text" value="None"/>				
Warning At Bridge:	<input type="text"/>				
Legibility:	<input type="text"/>				
Visibility:	<input type="text"/>				

NOTES / COMMENTS:

Character of Traffic:

Additional Notes:

-Bridge ID is clear and legible.
 -Bridge is labeled from west to east with girder 1 at the north fascia, consistent with previous report and project plans.
 -Trooper and crash truck used for lane closures.
 -Extension ladders and 40' lift used for inspection.

Rating changed from (4) to (5) by LCC on 7/10/15.
 High Inventory rating on the steel girders.

Form: BRI-18, Rev. 1/14
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS

Additional Comments:

Items 2 & 3 on BMM #13-539 have not been completed, see field sheet 2.
Items 3 & 4 on BMM #11-493 have not been completed, see field sheet 3.
Items 2-4 on BMM #07-241 have not been completed, see field sheet 4.

Form: National Bridge
 Inspection type: Special,Routine
 Inspection Date: 05/13/2015
 Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
 Carried: I-84 RAMPS 181&184
 Crossed: I-84 and I-84 Ramp 181
 Inventory Route: NHS

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	Mod.	25538	sq. ft.	24511	996	31	0
1080 - Delamination/Spall/Patched Area		38			28	10	
1090 - Exposed Rebar		38			17	21	
1120 - Efflorescence/Rust Staining		589			589		
1130 - Cracking (RC and Other)		362			362		
107 - Steel Open Girder/Beam	Mod.	3392	ft.	3329	21	42	0
1000 - Corrosion		63			21	42	
205 - Reinforced Concrete Column	Mod.	12	each	2	7	3	0
1080 - Delamination/Spall/Patched Area		4			3	1	
1090 - Exposed Rebar		2				2	
1120 - Efflorescence/Rust Staining		3			3		
1130 - Cracking (RC and Other)		1			1		
215 - Reinforced Concrete Abutment	Mod.	120	ft.	46	14	60	0
1090 - Exposed Rebar		1			1		
1120 - Efflorescence/Rust Staining		4			4		
1130 - Cracking (RC and Other)		9			9		
4000 - Settlement		60				60	
234 - Reinforced Concrete Pier Cap	Mod.	240	ft.	181	43	16	0
1080 - Delamination/Spall/Patched Area		10			5	5	
1090 - Exposed Rebar		14			6	8	
1120 - Efflorescence/Rust Staining		18			18		
1130 - Cracking (RC and Other)		17			14	3	
310 - Elastomeric Bearing	Mod.	24	each	9	15	0	0
1000 - Corrosion		6			6		
2230 - Bulging, Splitting, or Tearing		3			3		
2240 - Loss Bearing Area		6			6		
311 - Movable Bearing	Mod.	16	each	0	8	0	8
1000 - Corrosion		2			2		
1020 - Connection		6			6		
2210 - Movement		8				0	8
313 - Fixed Bearing	Mod.	40	each	9	28	3	0
1000 - Corrosion		29			26	3	
1020 - Connection		2			2		
331 - Reinforced Concrete Bridge Railing	Mod.	860	ft.	732	122	6	0
1080 - Delamination/Spall/Patched Area		6				6	
1130 - Cracking (RC and Other)		110			110		
7000 - Damage		12			12		

Form: BRI-17, Rev. 1/14
 Inspection type: Special,Routine
 Inspection Date: 05/13/2015
 Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
 Carried: I-84 RAMPS 181&184
 Crossed: I-84 and I-84 Ramp 181
 Inventory Route: NHS

JOINT MEASUREMENTS

<u>Inspectors:</u>		<u>Visits:</u>			
Inspector:	Task:	Visit Date:	Temp:	Start Time:	End Time:
McKenna, John	BSE - Inspector Rail - Inspector	05/11/2015	80	08:30 AM	02:30 PM
Popoli, Jon	BSE - Inspector Rail - Inspector	05/12/201	90	09:30 AM	03:00 PM
		05/13/201	65	08:30 AM	03:30 PM

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
W. Abut.	Asphaltic Plug	54					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			70	3.875	4.25		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
Pier 1	Asphaltic Plug	101					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			85	2-1/2	2-1/2		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
Pier 2	Asphaltic Plug	81.5					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			85	2-1/2	2-5/8		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
Pier 3	Asphaltic Plug	0					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			85	2-5/8	3-1/8		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
Pier 4	Asphaltic Plug	81.5					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			85	2-3/4	2-3/4		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments				
E. Abut.	Asphaltic Plug	100					
<input type="checkbox"/> Winter Measurements			<input checked="" type="checkbox"/> Summer Measurements	Differential			
Date	05/20/2013		Date	Actual			
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.)	Right (in.)	Left(in.)	Right (in.)
			85	3	3-1/4		

Note: The 'Effective Span' is the length contributing to expansion at the joint. This should be 0 at fixed joints of single span

Form: BRI-17, Rev. 1/14

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

Reviewer's Comments: Measurements are taken 3" below top of parapet, out to out at chamfer edges (joints are sealed).

Form: BRI-12, Rev. 1/14
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS

FRACTURE CRITICAL MEMBERS / FRACTURE PRONE DETAILS

Inspectors:

Inspector:	Task:
McKenna, John	BSE - Inspector Rail - Inspector
Popoli, Jon	BSE - Inspector Rail - Inspector

Visits:

Visit Date:	Temp:	Start Time:	End Time:
05/11/2015	80	08:30 AM	02:30 PM
05/12/201	90	09:30 AM	03:00 PM
05/13/201	65	08:30 AM	03:30 PM

Fracture Critical Inspection Frequency: Months

Fracture Critical Type Code:

Structure Type: Highway Bridges Year Built: 1969 ADT: 1800 Year of ADT: 2013 % Truck: 9

Access Equipment Needed: 32' ladder

Traffic Control Required: None

Reference to Plans:

MEMBER/DETAIL TYPE # 1

Member/Details Type: M Partial length welded cover plates Fracture Critical: No

Fatigue Category: E Steel Type: A-36 Fatigue Prone: Yes

Description: Girder bottom flange cover plates with flange thickness less than 0.8", span 1.

Inspection Procedure: 100% Hands-on

Condition Comments: No deficiencies noted.

Procedure Followed This Inspection? Yes If No please explain:

Sketches

Inspection type: Special,Routine

Bridge No: 03322

Town: NEW BRITAIN

Inspection Date: 05/13/2015

Carried: I-84 RAMPS 181&184

Inspected by: TranSystems

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

		JOB NO. 170-3224	BRIDGE NO. 03322
		DATE: SEE BELOW	SHEET 1
TIME AT SITE		CREW: SEE BELOW	
DATE: 5/11/15 80°F	CREW: JTP, JPM		
	EQUIPMENT USED: 35' UTILITY LIFT (TSC), 2 TMA (McClain)		
TIME: 8:30AM-2:30PM	POLICE: D. SACKETT (#1042) (NAME/TIME) 8:30AM-2:30PM	FLAGMAN: (NAME/TIME) —	
WORK DONE: Partially inspected spans 1 and 2.			
DATE: 5/12/15 90°F	CREW: JTP, JPM		
	EQUIPMENT USED: 35' UTILITY LIFT (TSC), 2 TMA (McClain)		
TIME: 8:30AM-3:00PM	POLICE: S. Hickey (#1176) (NAME/TIME) 8:30AM-3:00PM	FLAGMAN: (NAME/TIME) —	
WORK DONE: Completed underside of spans 1 and 2. Partially inspected span 5.			
DATE: 5/13/15 65°F	CREW: JTP, JPM		
	EQUIPMENT USED: 35' UTILITY LIFT (TSC), 2 TMA (McClain)		
TIME: 8:30AM-3:00PM	POLICE: S. Campbell (#288) (NAME/TIME) 8:30AM-2:30PM	FLAGMAN: (NAME/TIME) —	
WORK DONE: Completed inspection of underside of spans 3, 4 and 5. Inspected top of Deck. Inspection complete.			
DATE:	CREW:		
	EQUIPMENT USED:		
TIME:	POLICE: (NAME/TIME)	FLAGMAN: (NAME/TIME)	
WORK DONE:			
DATE:	CREW:		
	EQUIPMENT USED:		
TIME:	POLICE: (NAME/TIME)	FLAGMAN: (NAME/TIME)	
WORK DONE:			

Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

subject: BMM No. 13-539 ✓
Bridge No. 03322
I-84 ramps 181 & 184 over I-84 & I-84
ramp 181
New Britain

MEMORANDUM

date: 10-4-13

to: Charles A. Drda
Transportation Maintenance Administrator
Bureau of Engineering
and Highway Operations

from: Richard A. Prescott
Transportation Engineer 3
Bridge Safety and Evaluation
Bureau of Engineering and Construction

Attached are two copies of our most recent inspection report for the subject structure, which indicates the location of the following deficiencies:

- △ MISPLACED → 1. One of the rail base posts in Span 1 of the metal guide rail in the median has a missing nut for the anchor bolt.
- △ NOT DONE → 2. The underside of deck has hollow areas over the travel lanes at the following locations:
 - SPAN 2, BAY 2, PANEL 1: 3'x6" HOLLOW AREA OVER I-84 EB RIGHT LANE. Span 2, girder 1 at panel 1: the haunch along the girder top flange is hollow for 8 feet long (I-84 WB Ramp 181 roadway over the solid white line).
 - △ NOT DONE → • Span 2, Bay 2 at panel 4: 1.5 foot by 6 inch hollow area adjacent to a 5 foot long by 3 foot wide by 1-1/2 deep spall (I-84 WB left lane).
 - △ NOT DONE → • Span 2, Bay 5 at panel 3: 1 foot diameter hollow area (I-84 WB right lane).
- △ NOT DONE → 3. The asphaltic plug joints at Piers 1 and 4 have adhesion cracks for up to 4 feet long by 1/8 inch wide with active leakage noted at the time of inspection.

Please direct persons under your jurisdiction to:

1. Install missing anchor bolt nut (1 EA).
2. Remove the delaminated concrete (LS).
3. Seal the adhesion cracks (± 5 LF).

The above item no. 1 should be considered Priority C and items no. 2 and 3 should be considered Priority D. There may be other deficiencies which are considered routine maintenance and should be corrected.

All repairs shall be performed utilizing appropriate, approved materials and tried and proven methods unless otherwise specified.

If you have any further questions concerning these repairs, please contact me at ext. 2708. Please notify this section when the work has been completed.

Attachments

Michael J. Waite/mjw/rap

cc: Scott A. Hill - Robert P. Zaffetti - Stephen G. Keedy - Richard A. Prescott
Pennoni Associates, Inc.
Team 2

△ 5/13/15 TDC JDU, JTP

3

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

subject: BMM No. ~~11-497~~ 11-493
Bridge No. 03322
I-84 Ramps 181 & 184 over I-84 & I-84
Ramp 181
New Britain

MEMORANDUM

date: 5/13/15

to: Mr. Robert P. Mongillo
Transportation Maintenance Administrator
Bureau of Highway Operations

from: Ralph Phillips
Transportation Supervising Engineer
Bridge Safety and Evaluation
Bureau of Engineering and Construction

Attached are two copies of our most recent inspection report for the subject structure. The following deficiencies were found:

- PARTIALLY COMPLETE → 1. There is one clogged scupper in span 3 and one partially clogged scupper in span 4. The drain pipe at the span 3 scupper is clogged at the bell/hopper, as viewed from below. Refer to inspection report photo nos. 11 and 12.
- Δ APPROX → 2. The asphaltic plug joints have adhesion cracks, approximately 1 to 2 inches wide, and the joints are heaved up to 2 inches in the shoulder areas. The joints are also actively leaking. This was also noted in previous BMM No. 09-495 as stated below Refer to inspection report photo nos. 14 and 16.
- NOT DONE → 3. The concrete haunch of Girder 1 in span 2 is hollow and affects approximately an 8-foot section in panel 1 directly above the solid white line of I-84 WB Ramp roadway. Refer to inspection report photo no. 8.
- NOT DONE → 4. A total of four wrought iron weep pipes are short in spans 1, 2 and 4 that is directly above and may drain onto structural steel elements during times of high wind. This condition was noted in previous BMM No. 03-497 as stated below.

Please direct persons under your jurisdiction to:

- 1. Clean all clogged drainage systems. [2 EA].
- 2. Repair the deck joints. [Approximately 130 LF].
- 3. Remove all loose concrete of the hollow haunch. [Approximately 1/4 CY].
- 4. Extend the weep pipes to below the bottom flange of the Girders. [4 EA].

The above Item Nos. 1, 3 and 4 should be considered Priority C and Item No. 2 should be considered Priority D. There may be other deficiencies, which are considered routine maintenance and should be corrected.

The attached inspection report also notes that the following items were issued under a previous BMM Nos. 03-497, 07-241 and 09-495 dated September 3, 2009 and have not been addressed:

BMM No.	Item
09-495	1 & 2. See items 1 and 2 above. (Priority C & D, respectively)

Δ 5/13/15 TSC JPM, JTP

Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

4

To: Mr. Robert Mongillo
From: Ralph A. Phillips

Page 2 of 2

BMM No.
Bridge No. 03322

REPAIRED Δ

3. The median transverse deck joints (pourable seal) are separated up to 7" long at random locations. (Priority D).

07-241

2. The deck underside in span 2 has an isolated intact hollow area and spalls up to 5 feet x 3 feet x 1.5 inches deep with exposed rebar. (Priority E).

ADDED Δ

NOT DONE Δ

3. Piers 2 and 3 caps have hollow areas up to 13' x full width of the cap typical at the underside and isolated spalls up to 6' x 4" x 4" corner spall with exposed rebar. (Priority E).

NOT DONE Δ

4. Pier 1, column 3 has three spalls up to 2' x 2.5' x 2" deep with exposed rebar and a 2' x 1' hollow area. (Priority E).

03-497

3. See item no. 4 above. (Priority C).

Bridge Safety and Evaluation believes that these repairs are structurally important and should be addressed.

All repairs shall be performed utilizing appropriate, approved materials and tried and proven methods unless otherwise specified.

If you have any questions concerning this matter, please contact me at (860) 594-3159. Please notify this office when the work has been completed.

Attachments

Sowatei K. Lomotey/Michael J. Orłowsky/skl/mjo

cc: Scott A. Hill - Robert P. Zaffetti - Ralph Phillips - Sowatei K. Lomotey - Barak Brako Frempong *BBF*
Baker Engineering, Inc.

Δ 5/13/15 TSC JPM JTP

Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

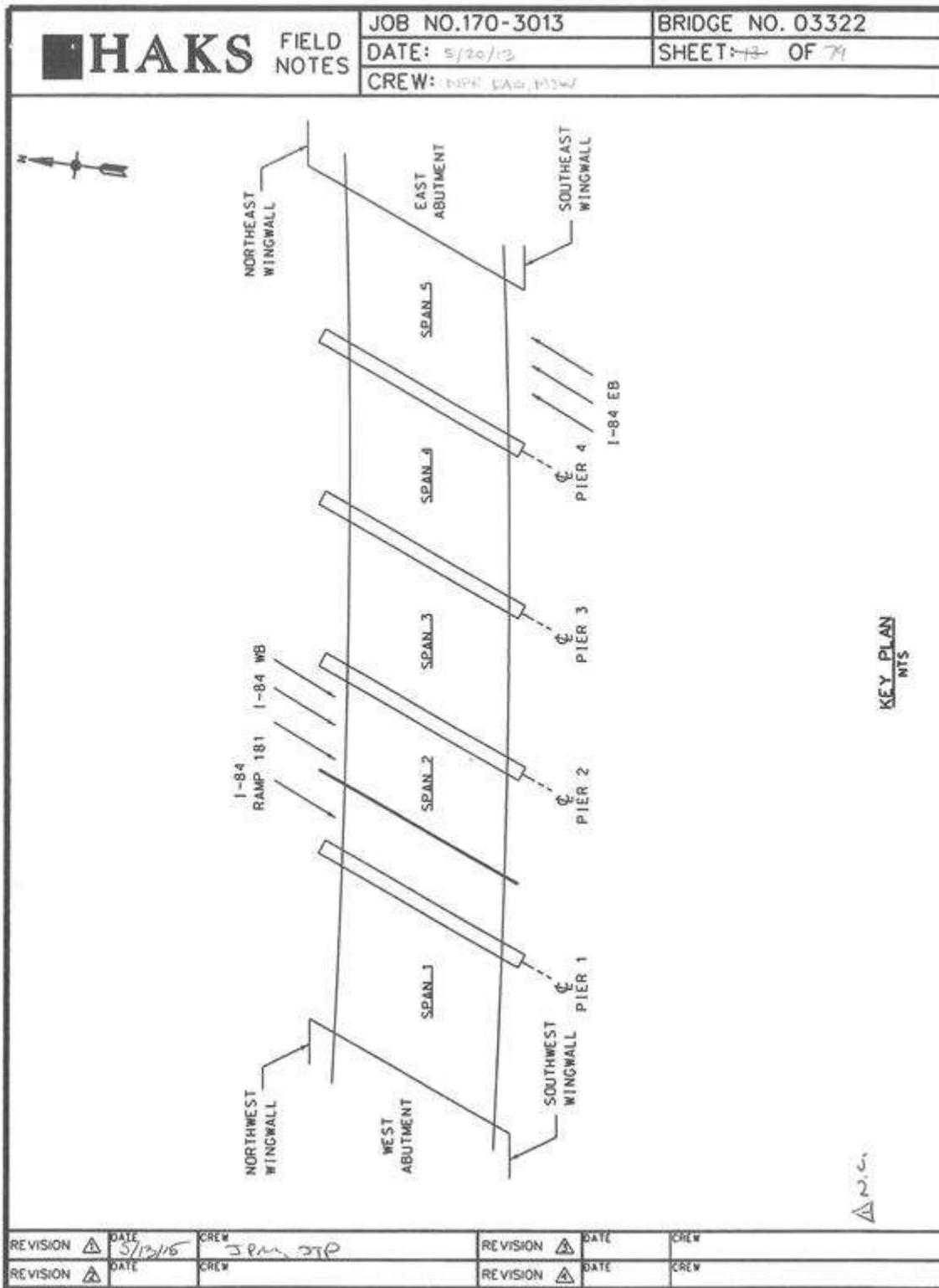
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

5



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

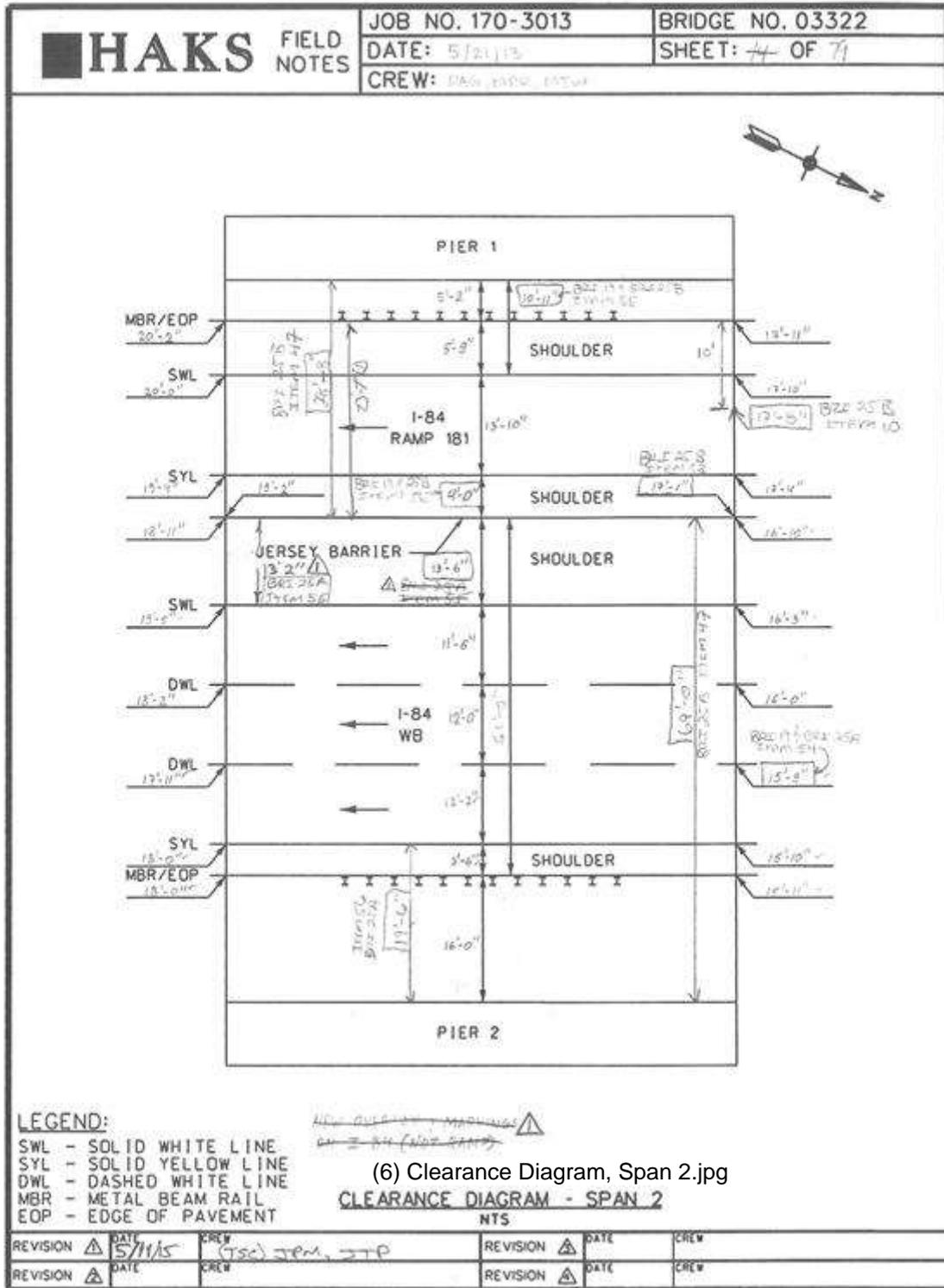
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

6



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

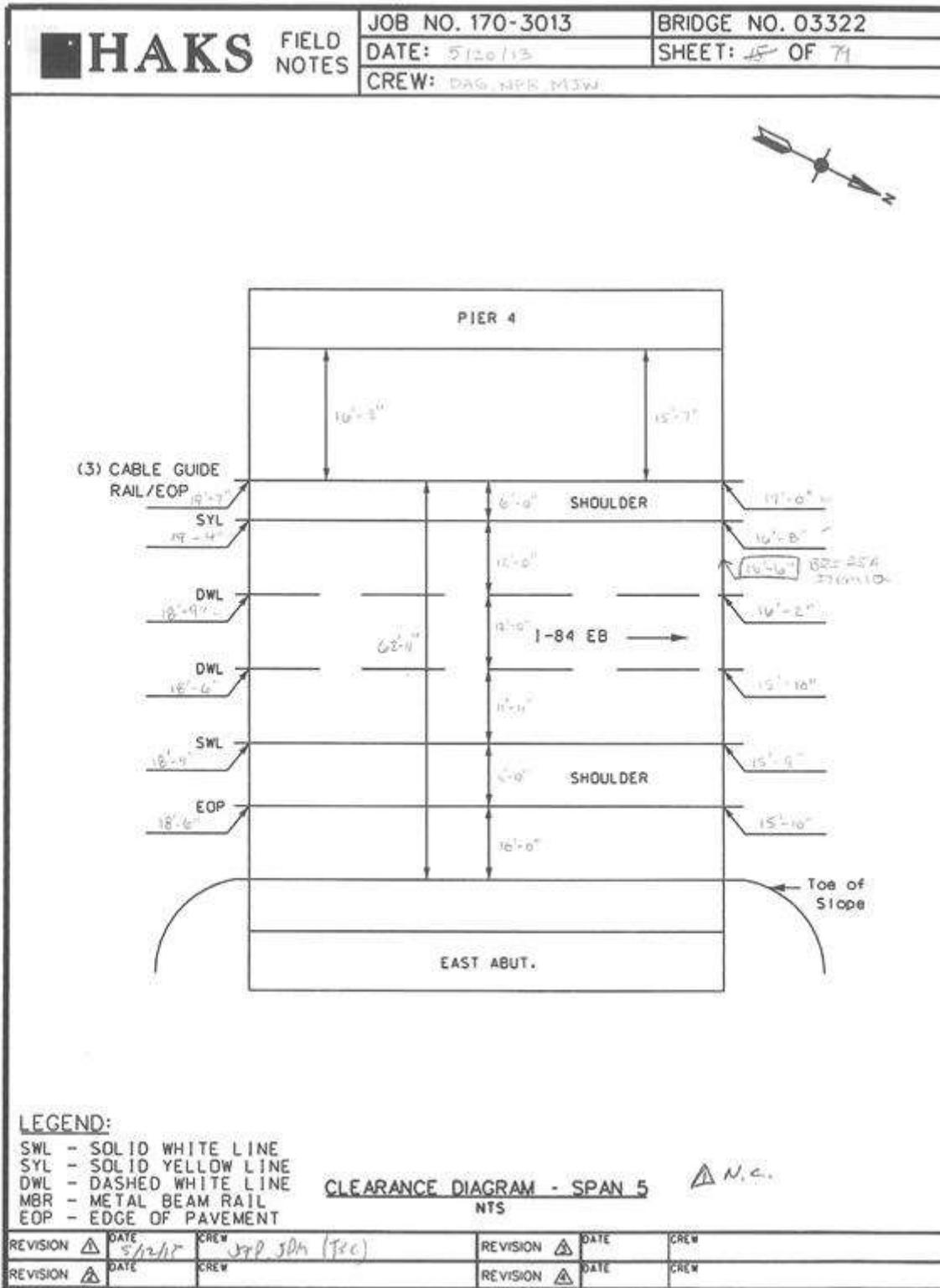
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

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Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

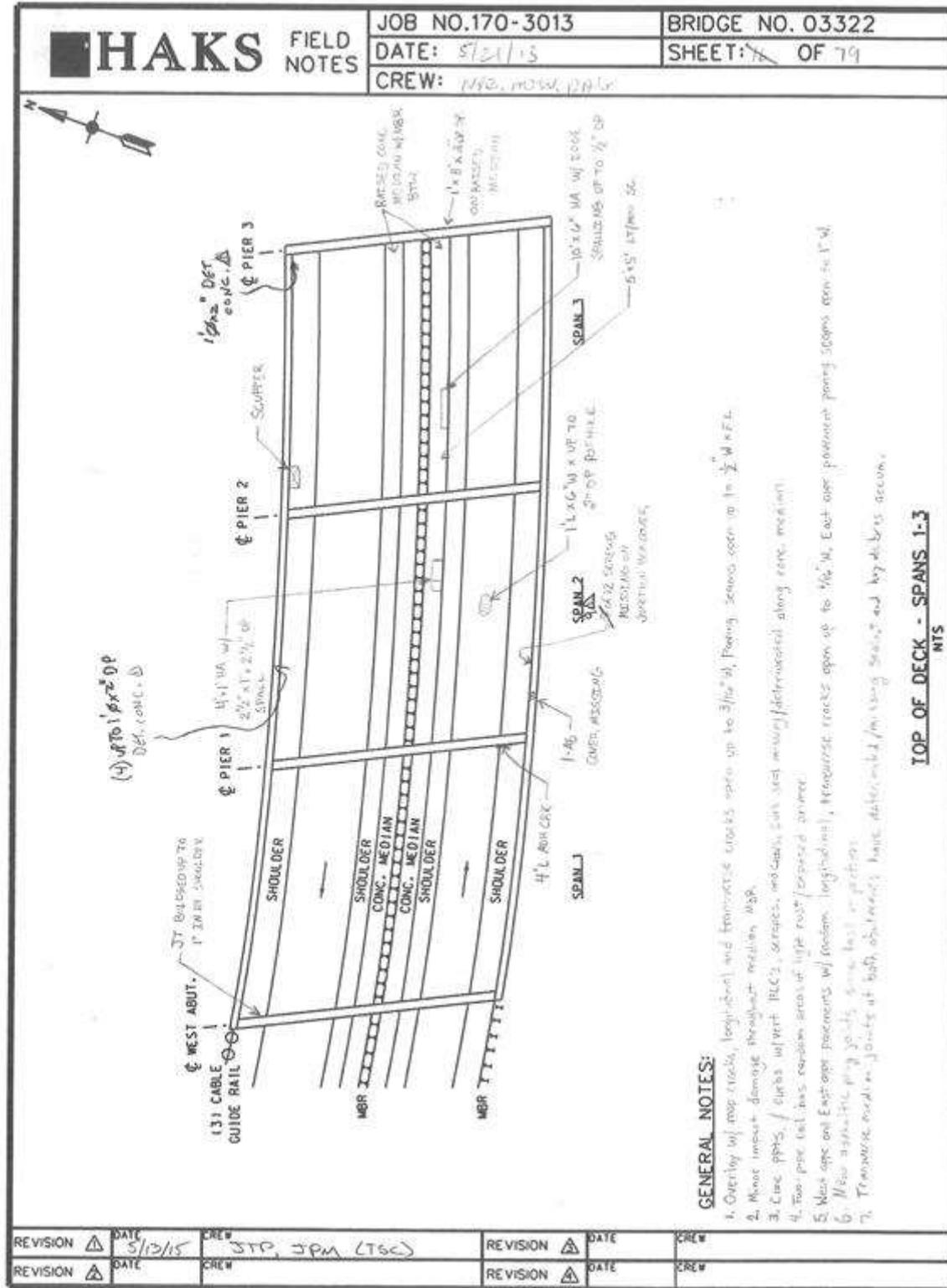
Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

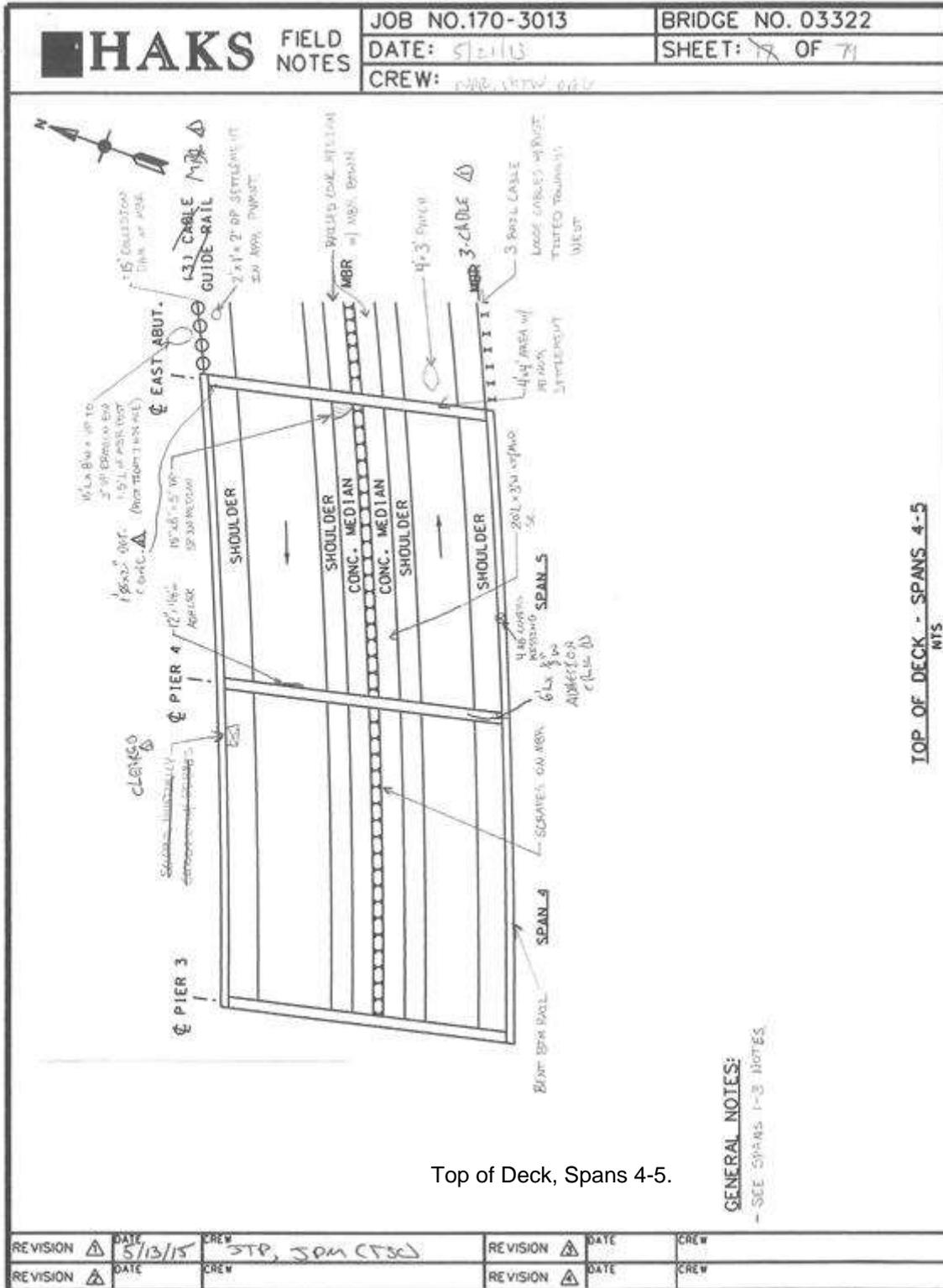
Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

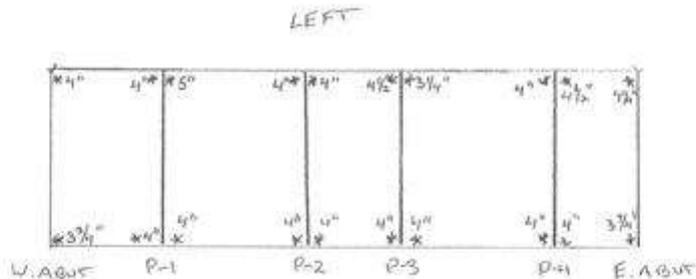
Inventory Route: NHS



Field Notes

PROJECT NO. D712130039 BRIDGE NO. 03322
 DATE 5/13/15 SHEET 10
 CREW JTP, JPM

Plan Sketch:



RIGHT

*CURB REFERENCE

PARAPET JOINT MEASUREMENTS

Location	Winter Measurement < 50° F				Summer Measurement > 50° F				Joint Type
	Left	Right	Temp	Date	Left	Right	Temp	Date	
W. ABUT					3 3/4"	4 1/4"	70°	5/13/15	APS
P1					2 5/8"	2 5/8"			
P2					2 3/4"	2 3/8"			
P3					2 1/4"	3 1/8"			
P4					2 5/8"	2 3/4"			
E. ABUT					2 3/4"	3 1/8"			

- MEASUREMENTS ARE TAKEN 3" BELOW TOP PARAPET, OUT TO OUT @ CHAMFER EDGES. JOINTS ARE SEALED

REVISION <u>1</u>	DATE	CREW	REVISION <u>2</u>	DATE	CREW
REVISION <u>3</u>	DATE	CREW	REVISION <u>4</u>	DATE	CREW

REGULAR INSPECTION X
 Date: 05/13/15

SUMMER / WINTER JOINT MEASUREMENTS
 Summer 20__ Winter 20__

Bridge No.: 03322		I-84 ramps 181 & 184 over I-84 & ramp 181		Form BRI-17, Rev. 9/03		Town: New Britain		Measurements Taken By: J. McKenna			
Date: 05/13/15		5/13/15		5/21/13		5/21/13		Measurements Reviewed By: J. Popoli			
Deck Joint Location	Effect Span ² (ft.)	Current Measurements		Previous Measurements		Differential Movements		Comments	Difference Between Actual & Calc'd Mov't		
		Temp °F	Date	Temp °F	Date	Actual	by Formula		Left (in.)	Right (in.)	
W. Abut.	plug	70	3-14/16	85	4	4	4-4/16	2/16	0	- 3/16	- 1/16
Pier 1	plug	70	2-10/16	85	2-8/16	2-8/16	2-8/16	- 2/16	- 2/16	0	0
Pier 2	plug	70	2-12/16	85	2-8/16	2-10/16	2-10/16	- 4/16	- 4/16	2/16	2/16
Pier 3	plug	70	2-4/16	85	2-10/16	3-2/16	3-2/16	6/16	0	- 6/16	0
Pier 4	plug	70	2-10/16	85	2-12/16	2-12/16	2-12/16	2/16	0	- 4/16	- 2/16
E. Abut.	plug	70	2-12/16	85	3	3	3-4/16	4/16	2/16	- 6/16	- 4/16

(11) BRI-17.jpg

1. The "Deck Joint Type" should be "plug" for Asphaltic Plug joints, "strip" for Strip Seals, "seg." for Segmental Joints, "Finger" for Finger Joints, etc.
2. The "Effective Span" is the length contributing to expansion at the joint. This should be 0 at fixed joints of single span bridges.

Reviewer's Comments: Measurements are taken 3" below top of parapet, out to out at chamfer edges (joints are sealed).

Summer / Winter Joint Measurements: (IF ADDING OR REMOVING, SEND A COPY OF THIS FORM TO SUPERVISOR FOR REVIEW/APPROVAL WITH REASONS FOR CHANGE INDICATED)

ADD TO SUMMER/WINTER LIST SUPERVISOR APPROVAL: _____

REMOVE FROM SUMMER/WINTER LIST MASTER LIST ENTRY: _____

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

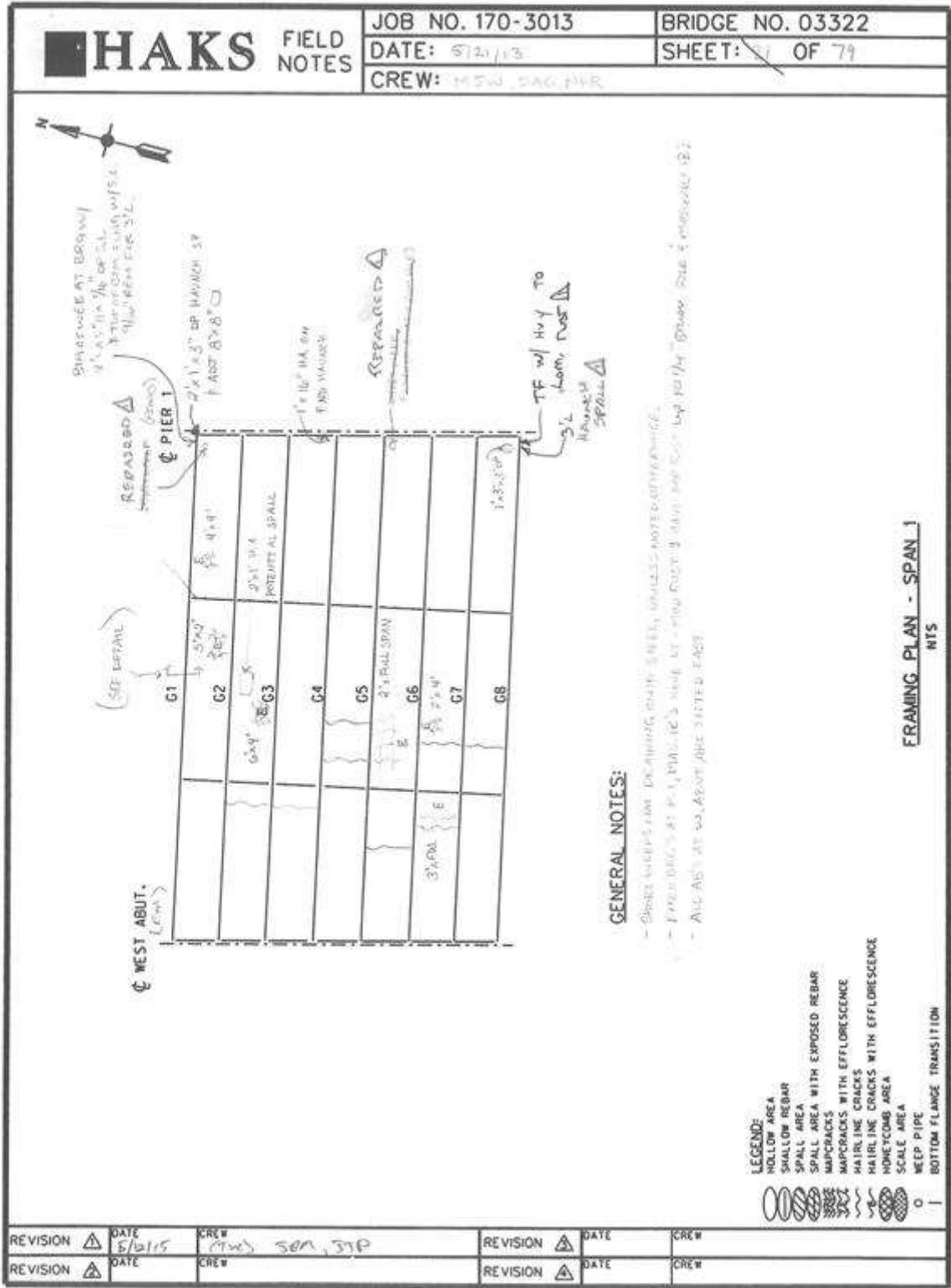
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

14



GENERAL NOTES:

- BASED UPON 2011 DRAWING DATE: 5/13/15, UNLESS NOTED OTHERWISE.
- PIER BEAMS AT P. 1, PIER 12'S SOUTH BY - PING FOOTING (W/ 10' DIA) - 10' DIA. PIER 12'S SOUTH BY - PING FOOTING (W/ 10' DIA) - 10' DIA. PIER 12'S SOUTH BY - PING FOOTING (W/ 10' DIA) - 10' DIA.
- ALL ABUT. AT 50' ABUT. ARE TESTED ENDS.

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAP CRACKS
 - MAP CRACKS WITH EFFLORESCENCE
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - KEEP PIPE
 - BOTTOM FLANGE TRANSITION

REVISION	DATE	CREW	REVISION	DATE	CREW
	5/13/15	(MSW) SDA, JRP			
REVISION	DATE	CREW	REVISION	DATE	CREW

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

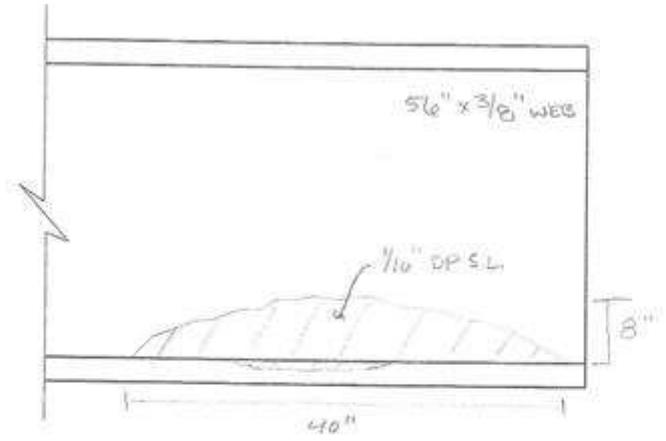
Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

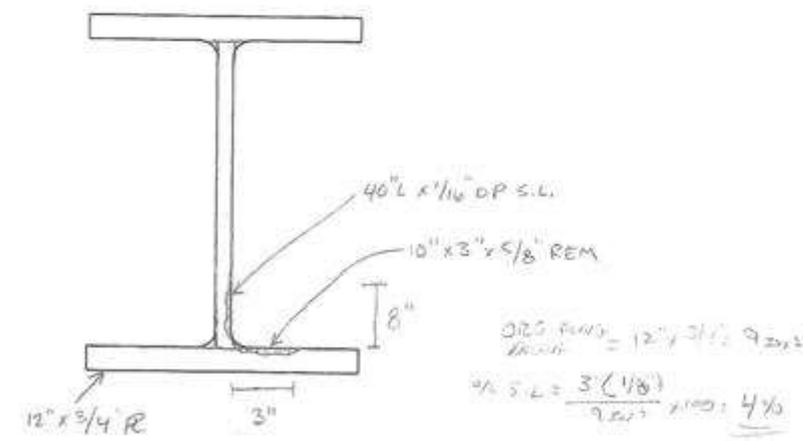
Inventory Route: NHS

15

 HAKS FIELD NOTES	JOB NO. 170-	BRIDGE NO. 03322
	DATE: 5/24/13	SHEET 22/79
	CREW: MSW, DG, NFR	



SOUTH ELEVATION AT MID SPAN

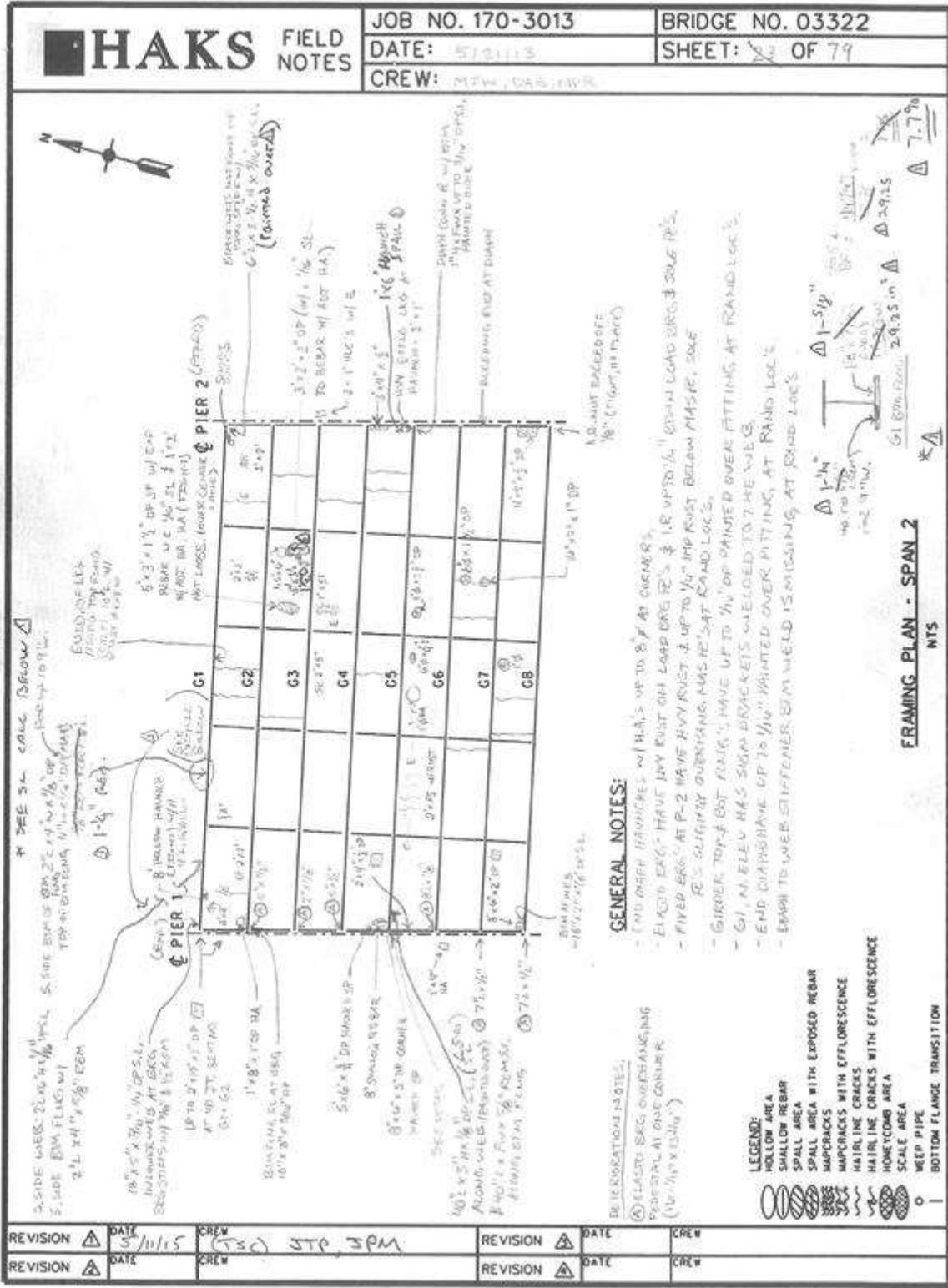


CROSS SECTION, LOOKING EAST

SP-1 SECTION LOSS DETAILS - GIRDER G1

REVISION	Δ	DATE	CREW	REVISION	Δ	DATE	CREW
		5/12/15	DM, JSP (TSC)				
REVISION	Δ	DATE	CREW	REVISION	Δ	DATE	CREW

16



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

(7)

	FIELD NOTES	JOB NO. 170-3012	BRIDGE NO. 03322
		DATE: 5/21/13	SHEET 21/79
		CREW: MIM, DG, NER	

SOUTH ELEVATION AT PIER 1

CROSS SECTION, LOOKING EAST

WEB LOSS FOR SHEAR

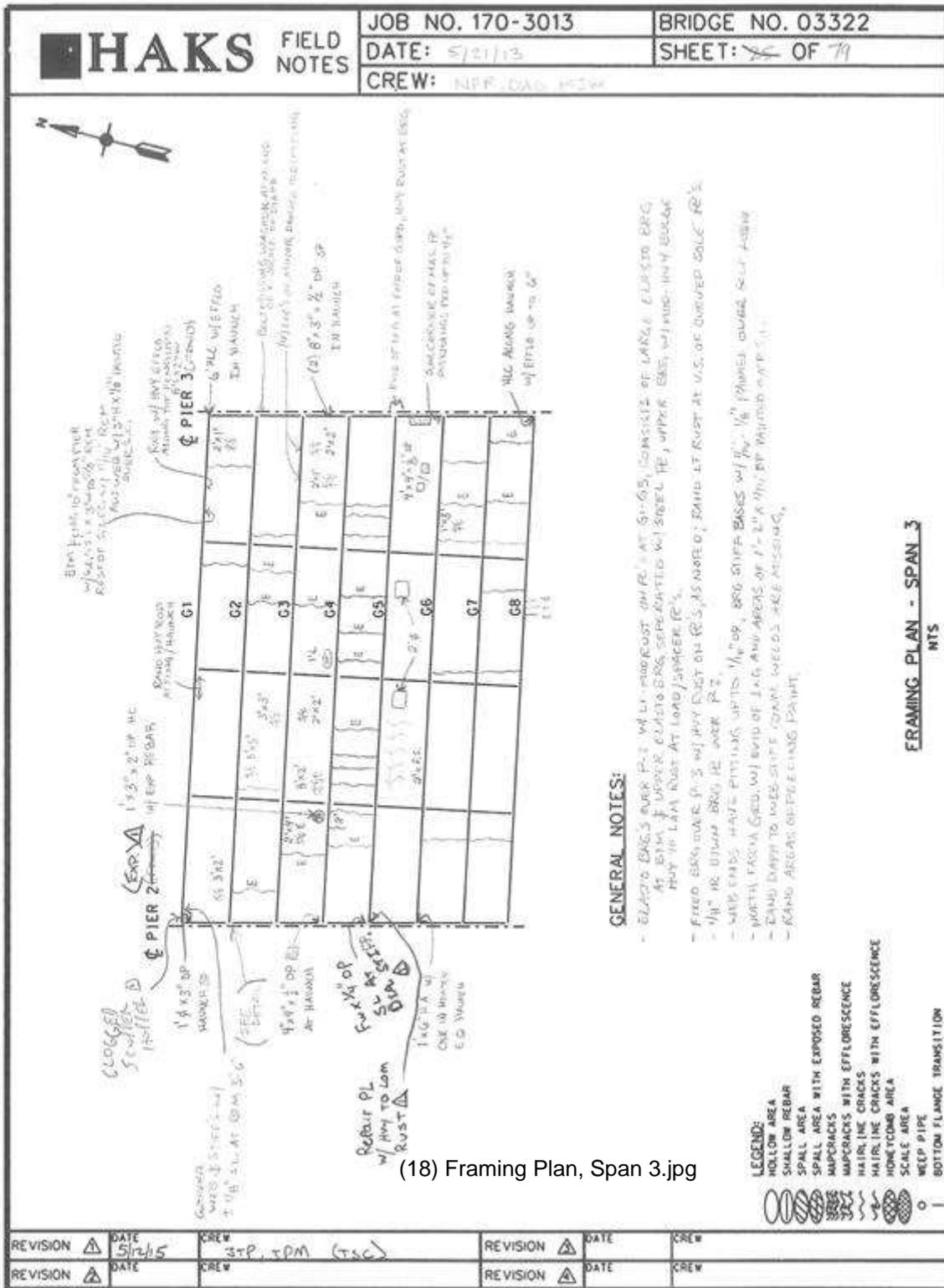
$510 \times 1/16 = 2.1 \text{ in}^2$
 $\frac{3(1/8) + 3(1/8)}{2.1 \text{ in}^2} \times 100 = 3.6\%$

Δ N.C.

SECTION LOSS DETAILS - SPAN 2, GIRDER G5

REVISION Δ	DATE 6/11/15	CREW (TSC) JTP, JAM	REVISION Δ	DATE	CREW
REVISION Δ	DATE	CREW	REVISION Δ	DATE	CREW

18



(18) Framing Plan, Span 3.jpg

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

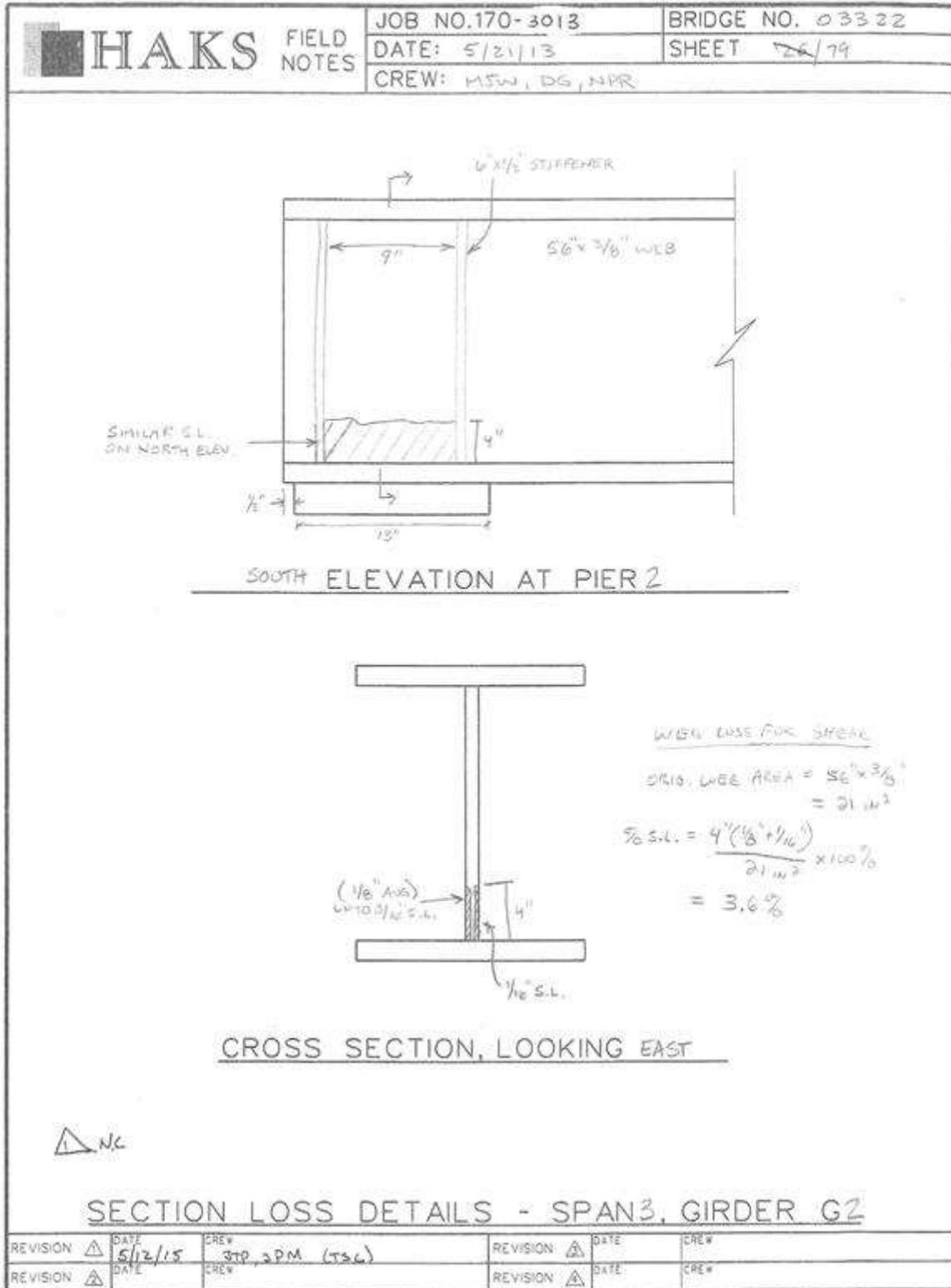
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

19



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

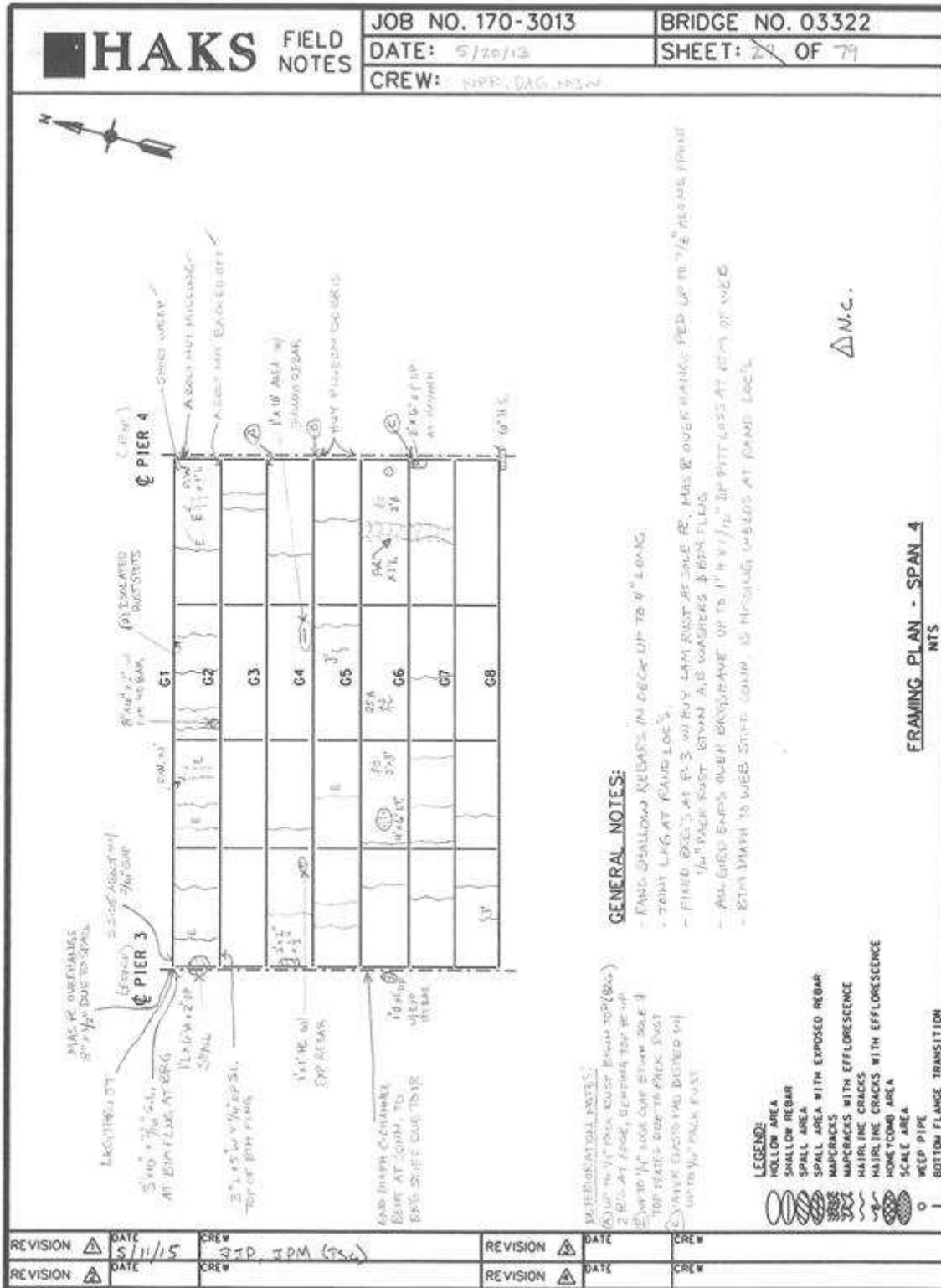
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

20



REVISION	DATE	CREW	REVISION	DATE	CREW
	5/11/15	J.P. JPM (TSC)			

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

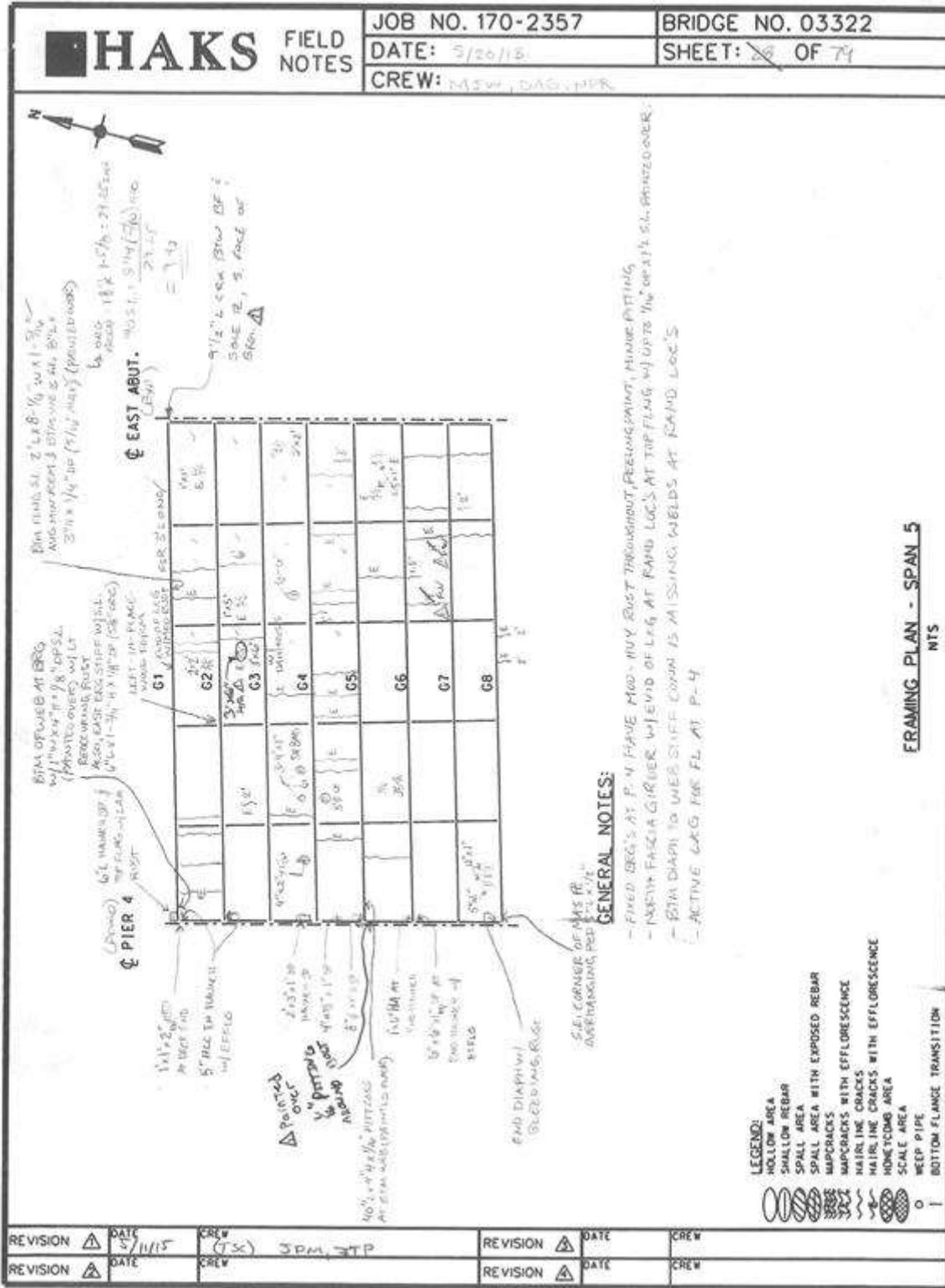
Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS



Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

ZZ

Bridge Number: 03322

Date: 5/13/2015

Prepared by: JMC

Checked by: JTP

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

Deterioration Type	Deterioration by Span-Square Feet										Total
	Span Number										
	1	2	3	4	5	6	7	8	9	10	
Spalled and Delaminated areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:
	Bot: 6	Bot: 52	Bot: 9	Bot: 3	Bot: 6	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 76
Scale (moderate to severe only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks with Efflo. (use 6in. wide x length)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:
		8	57	16	45						Bot: 126
Cracks without Efflo (use 3in wide x length)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:
	14	27	38	49	39						Bot: 167
Map Cracking with Efflo. (use full area)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:
	204	208	8	16	27						Bot: 463
Map Cracking with/out Efflo. (use 50% of area)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:
		7	121	35	32						Bot: 195
Honey combed	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:
											Bot: 0
Total Deterioration	224	302	233	119	149	0	0	0	0	0	1027
Total Span Area (sq. Ft)	3415	6099	4939	4939	6146						25538
% spalled and delaminated Top	0.0%	0.0%	0.0%	0.0%	0.0%						0.0%
% Deterioration on bottom	6.6%	5.0%	4.7%	2.4%	2.4%						4.0%

Notes: 1. Superficial mapcracking not included in deterioration sheet according to chapter 10 in inspection manual.

Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

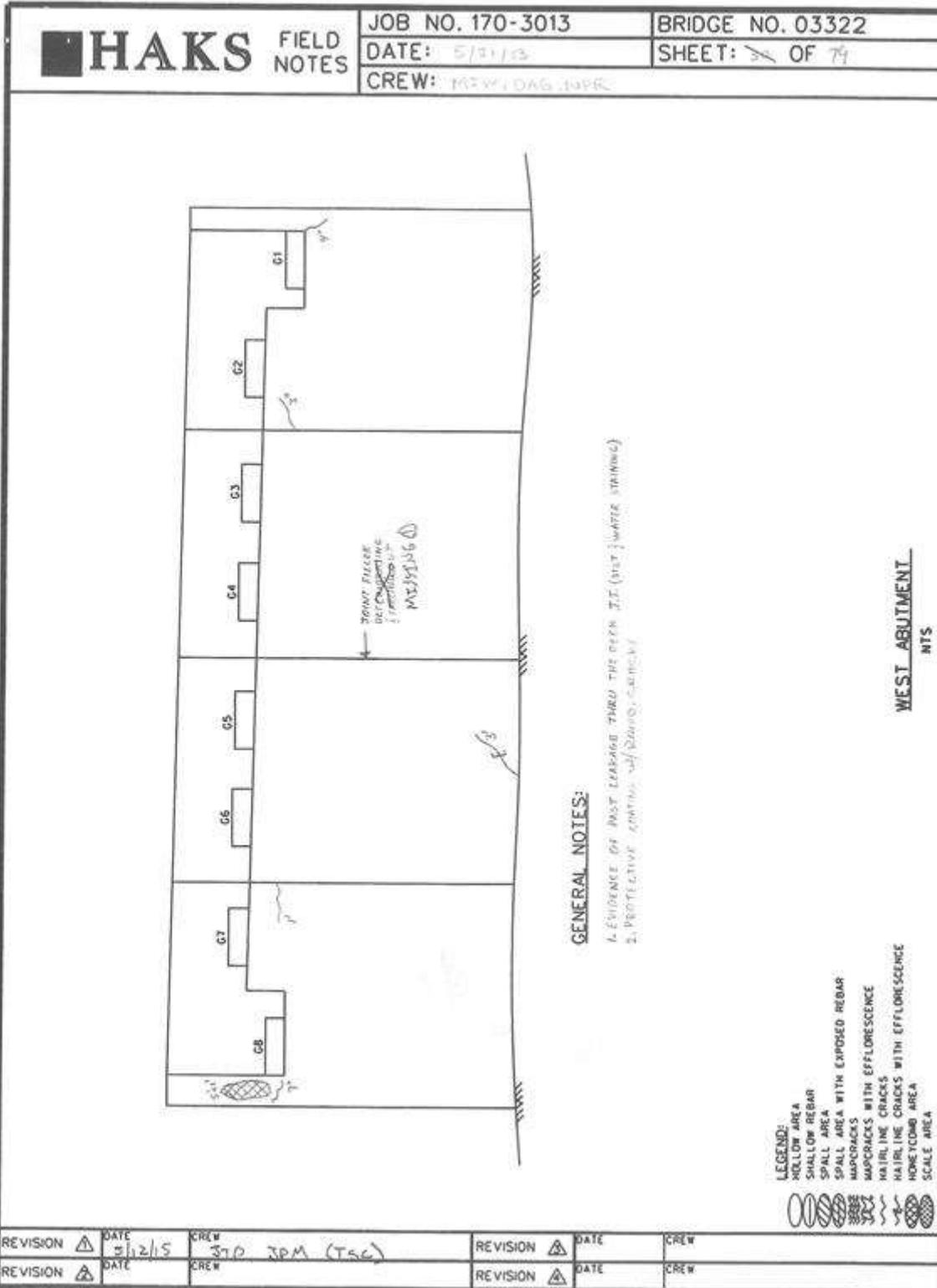
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

23



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

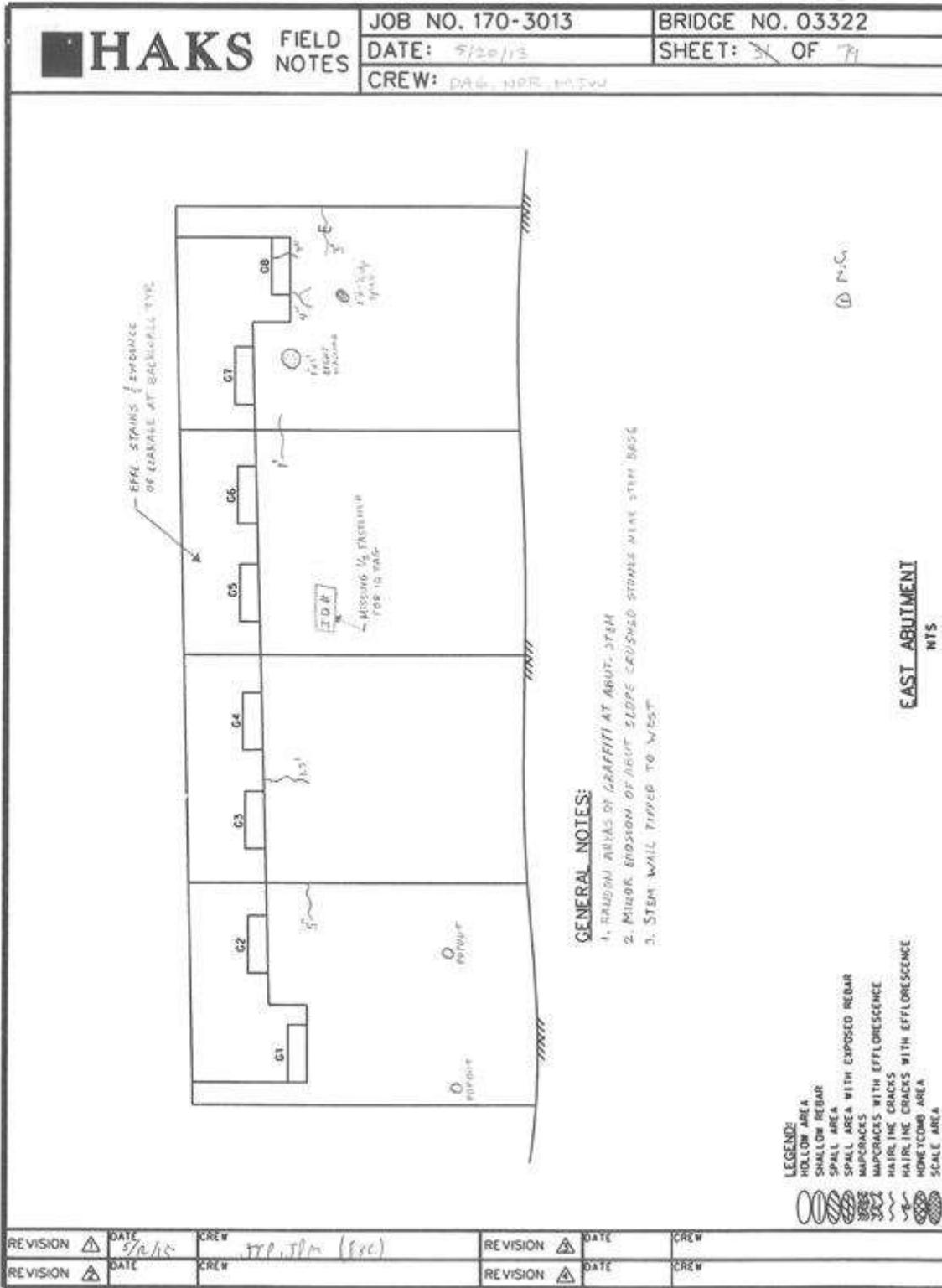
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

24



Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

(25)

	JOB NO. 170-3013	BRIDGE NO. 03322
	DATE: 5/20/13	SHEET: 2 OF 79
	CREW: NPR, DAG, MSW	

SEC. A-A

X = 5' AT G1
 X = 4' AT G2 - G7
 X = 6' AT G8

	G1	G2	G3	G4	G5	G6	G7	G8
2009	15/16"	7/16"	1/16"	15/16"	17/16"	11/16"	5/8"	15/16"
2011	15/16"	5/8"	3/4"	1"	7/8"	11/16"	11/16"	15/16"
2013	17/16"	5/8"	7/8"	1"	15/16"	3/4"	5/8"	15/16"
2015	7/8"	5/8"	13/16"	1"	13/16"	3/4"	5/8"	15/16"

MEASUREMENTS WERE ALL TAKEN AT CURSEL MARKS

EAST ABUTMENT TIPPING
NTS

REVISION	DATE	CREW	REVISION	DATE	CREW
▲	5/22/15	JPR, JEN (RSC)	▲		
▲			▲		

Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

26

	FIELD NOTES	JOB NO. 170-3013	BRIDGE NO. 03322
		DATE: 5/13/15	SHEET: 26 OF 79
		CREW: NPS, DAG, MZV	

SOUTHWEST WINGWALL

NORTHWEST WINGWALL

1. MINOR EROSION ALONG ALL WINGWALLS
 2. MOD. VEG GROWTH ALONG SCORES AND
 MINOR VINE SPRING AT GULL WALL FACE

LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- MAPCRACKS WITH EFFLORESCENCE
- HAIRLINE CRACKS
- HAIRLINE CRACKS WITH EFFLORESCENCE
- HONEYCOMB AREA
- SCALE AREA

GENERAL NOTES:

WINGWALLS
NTS

Δ N.C.

REVISION	Δ	DATE	CREW	REVISION	Δ	DATE	CREW
		5/13/15	NPS, DAG, MZV				
REVISION	Δ	DATE	CREW	REVISION	Δ	DATE	CREW

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

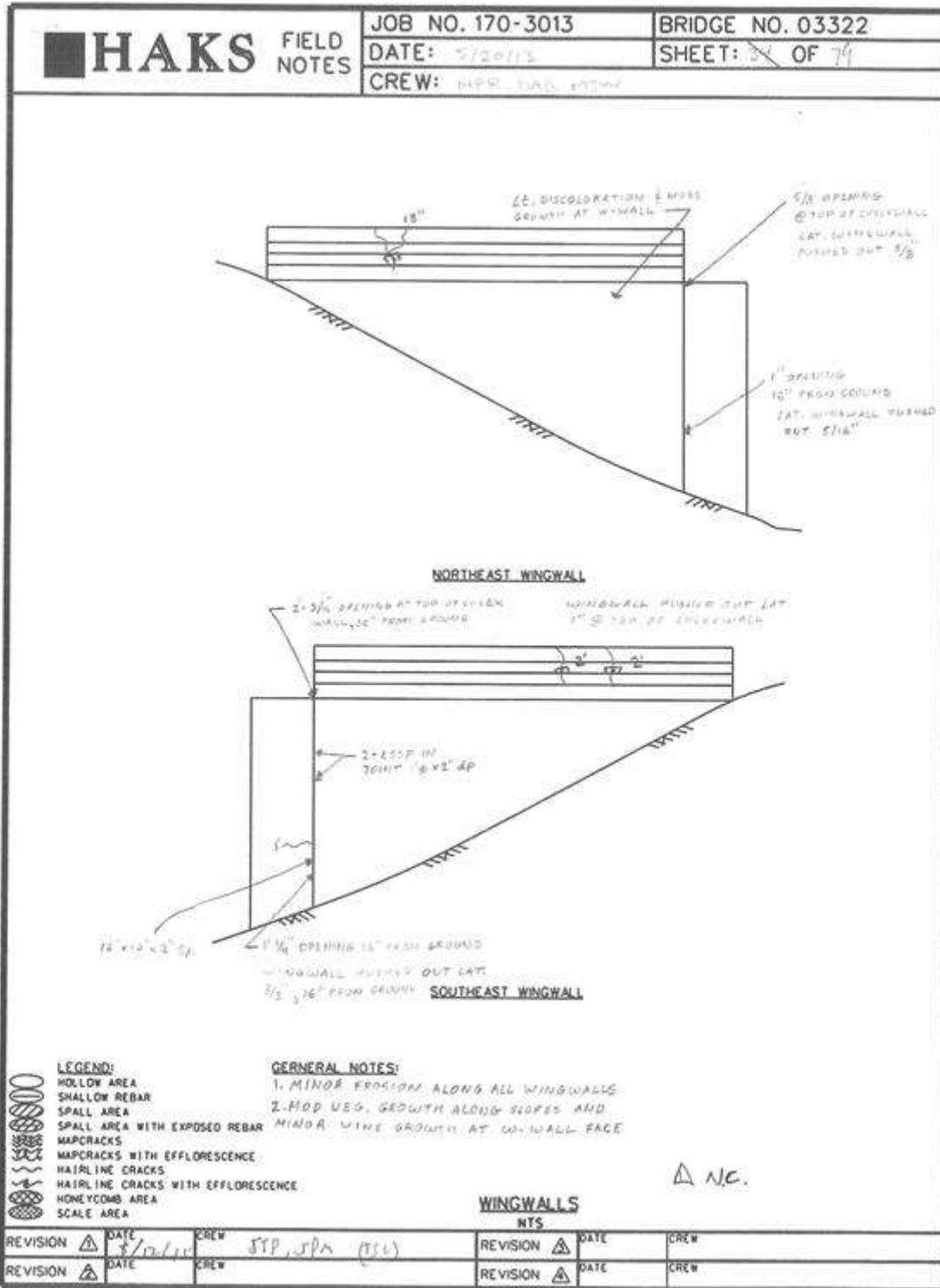
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

27



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

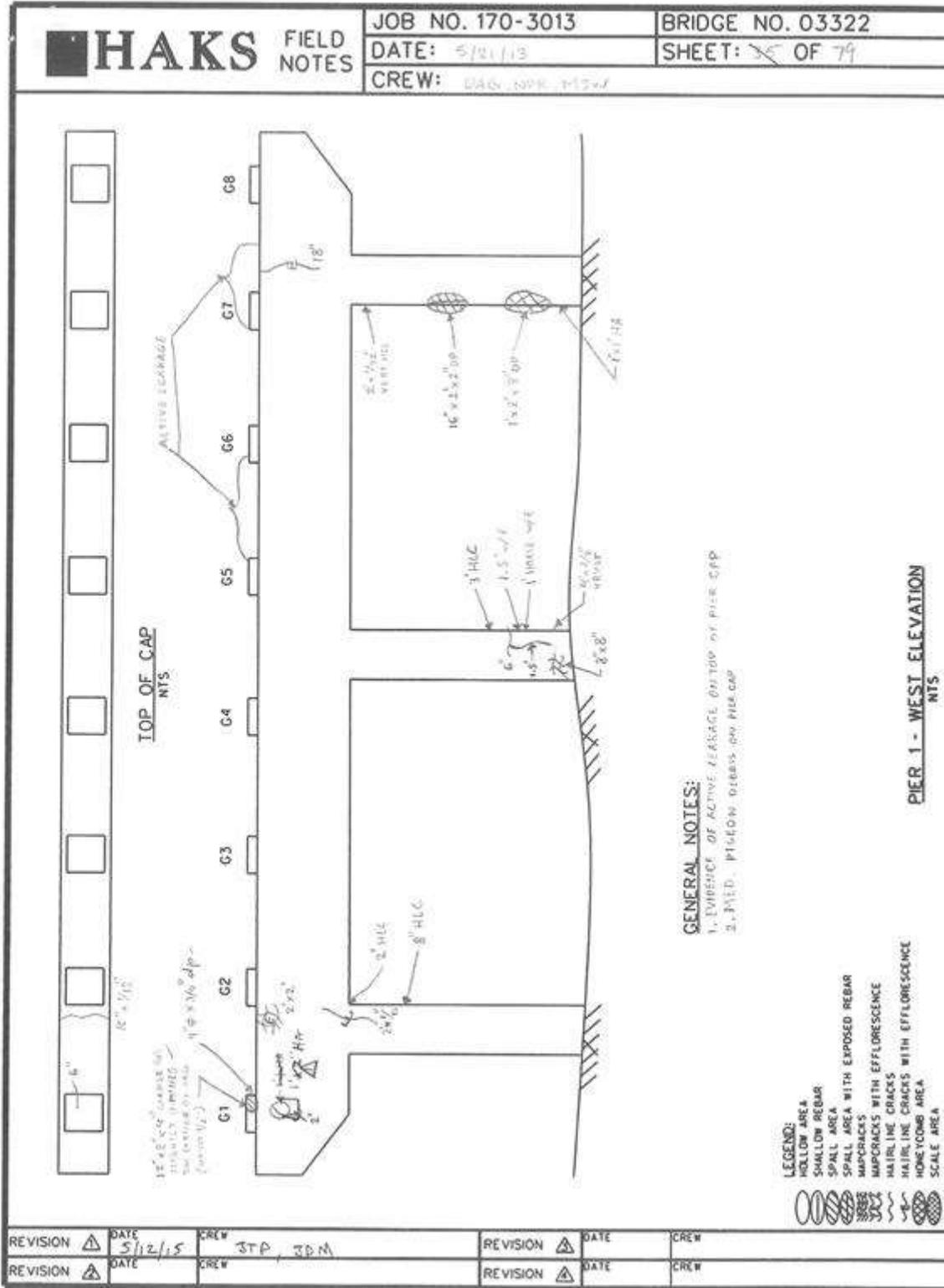
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

28



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

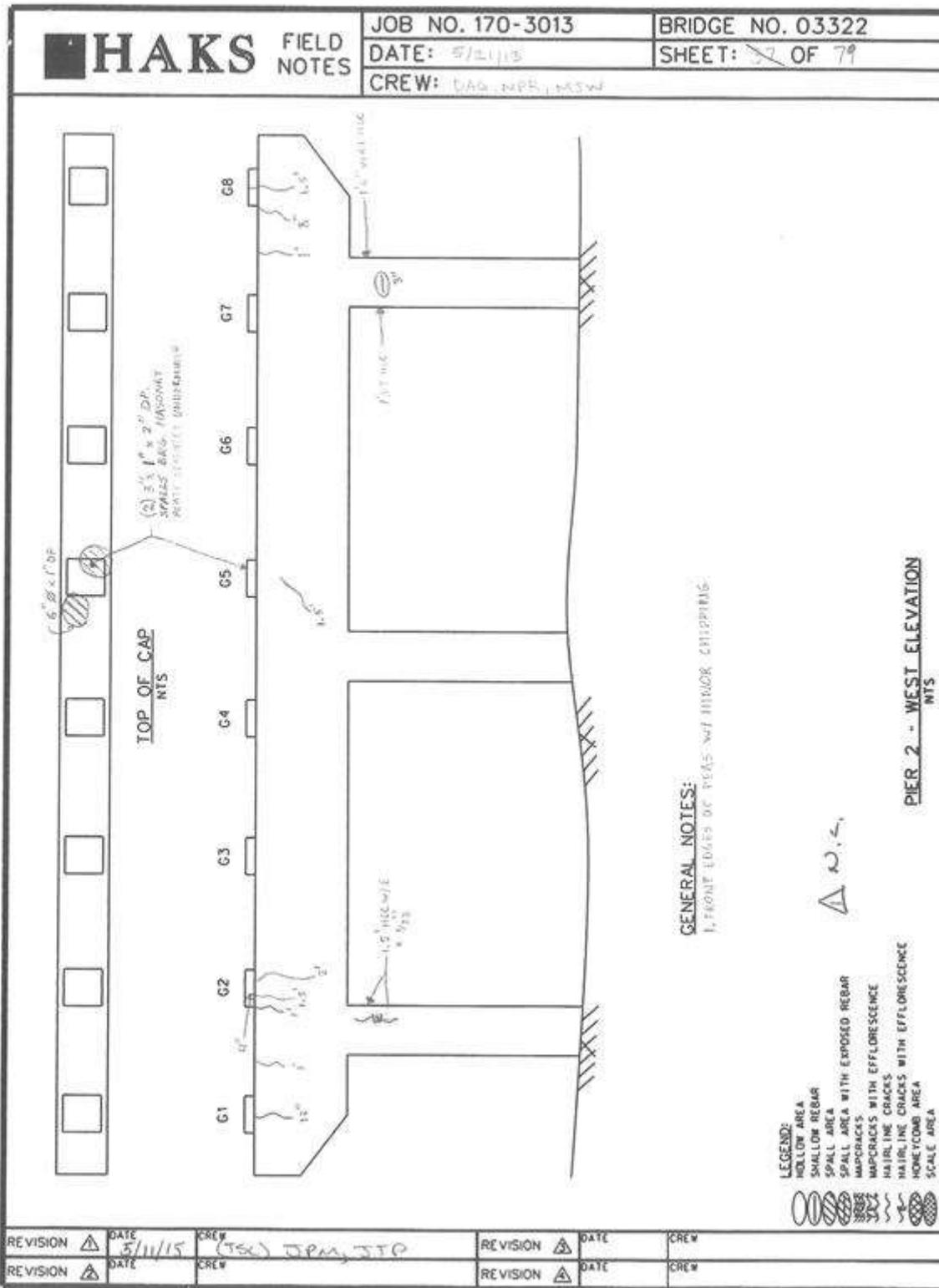
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

30



Sketches

Inspection type: Special,Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

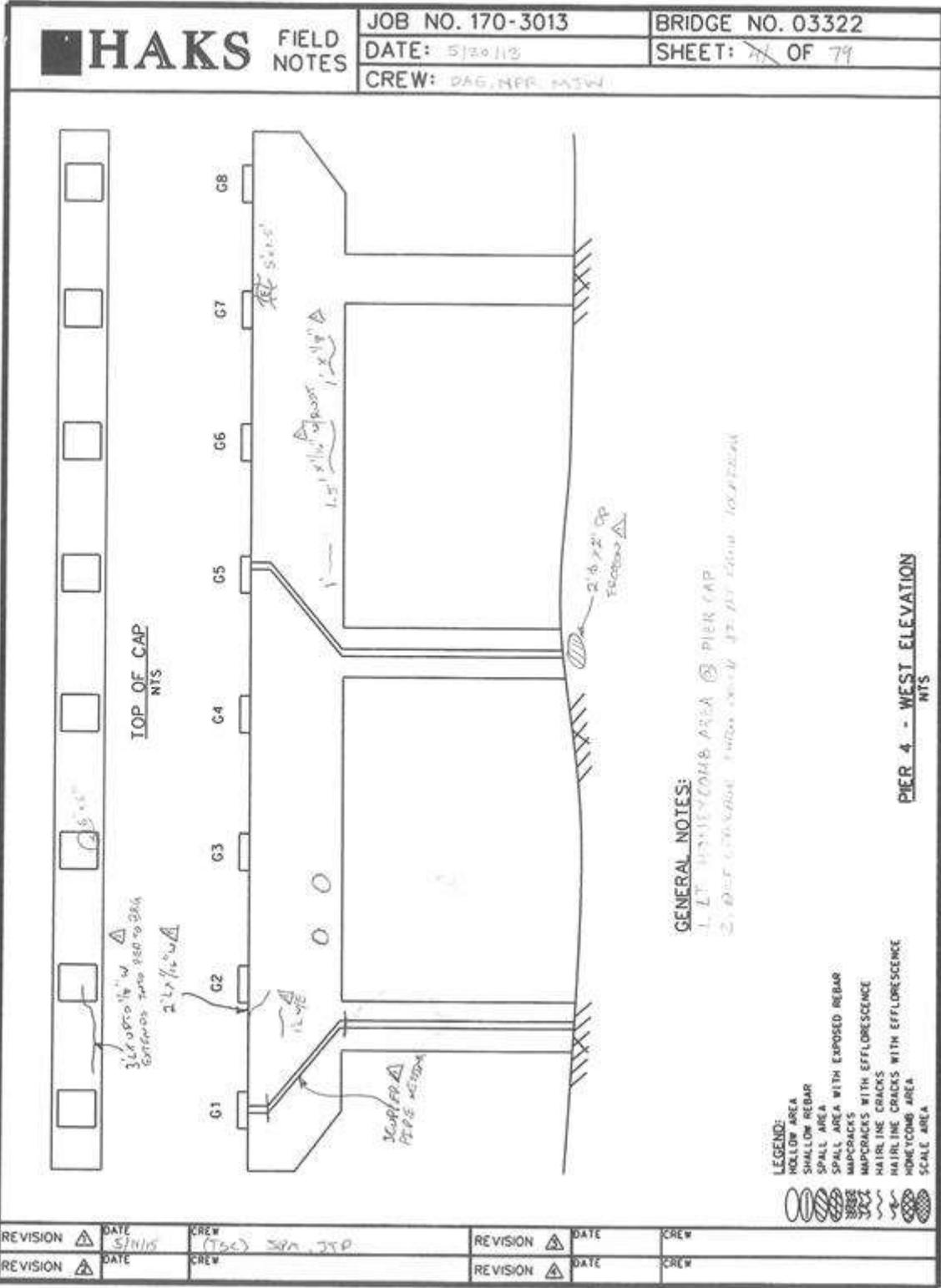
Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

34



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

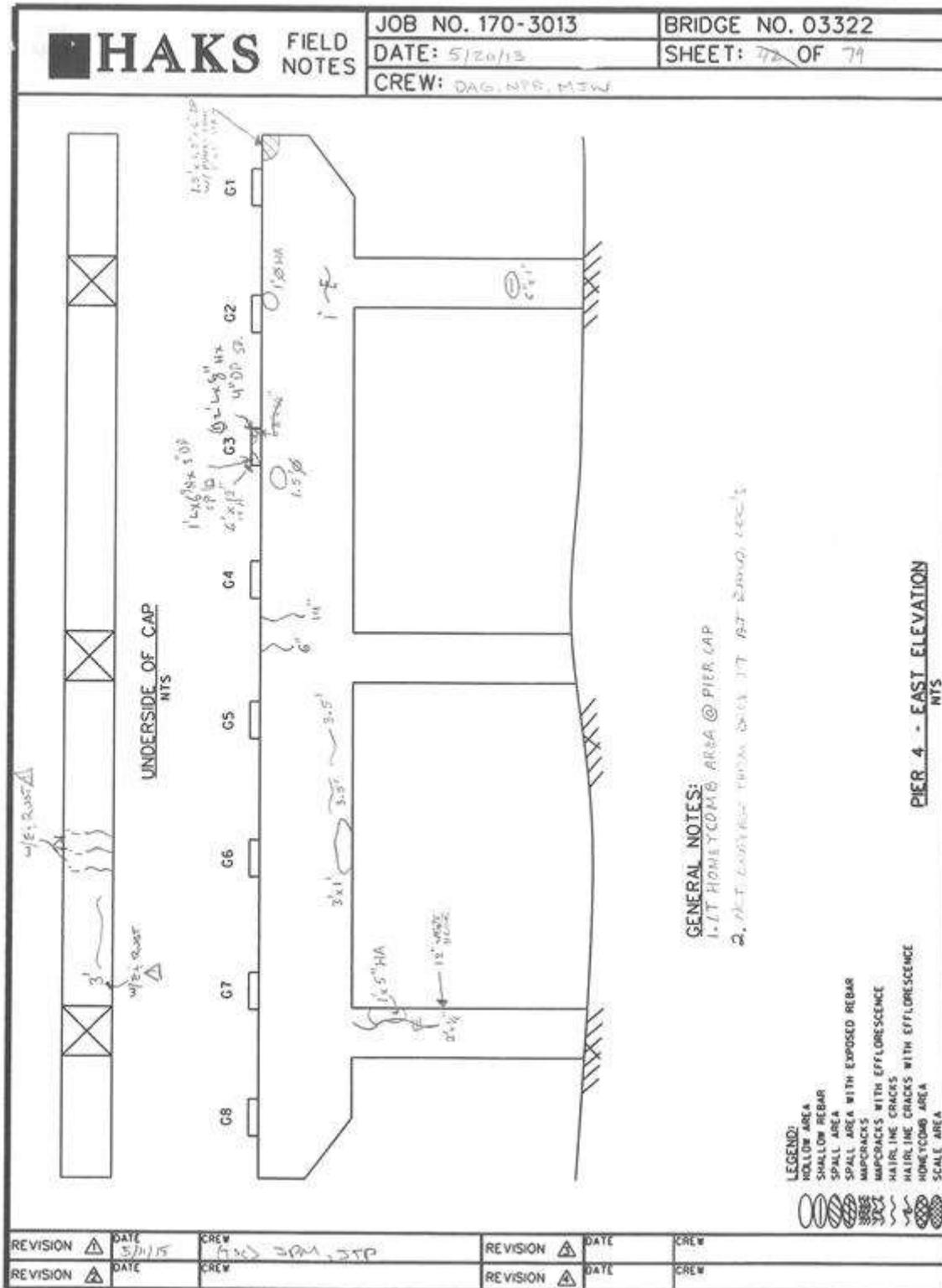
Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS



Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

PHOTO LOG

Form BRI-13, Rev. 9/97

36

Bridge Information System

Image Inventory



Bridge No. 03322 Date: 5/11/15
 Town NEW BRITAIN Photographer: JSM/STP
 Carried / Crossed: I 84 RAMPS 181 & 184 / I 84 & I 84 RAMP 181

Photo #	Image Description
1	SOUTH ELEV OF SPAN 2
2	NORTH ELEV OF SPAN 2
3	PIER 2 EAST ELEV
4	TOP V/S SPAN 2 LOOKING WEST
5	PIER 2 W. ELEV
6	PIER 3 W. ELEV
7	TOP V/S SPAN 3 LOOKING EAST
8	PIER 2 E. ELEV
9	PIER 3 W/S OF CAP. BTW GUS 2 & 3 @ COL 2 LARGE SPALLS LOOKING E
10	PIER 3 W/S OF CAP. BTW COL 2 & 3 @ COL 2 LARGE SPALLS LOOKING W
11	PIER 4 W. ELEV
12	E. ABUT.
13	GS BRG AT PIER 2, SPAN 2
14	PIER 4 W. ELEV @ COL 2 @ 2'4" 22'00" SPAN 2
15	PITTING/SL G1, SPAN 2
16	IRMA, BRG # 13-539 ITEM 2 ^{NOT} DONE, SPAN 2, BAY 5
17	NE W.W.
18	E. ABUT.
19	V/S SPAN 5
20	ED
21	SE W.W.
22	PIER 4, G. CHAN.
23	G1 ORG AT E. ABUT.
24	4 1/2" CRK BTW G1 BRG & SOLE RATE AT E. ABUT.

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

37

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System	
Image Inventory	
Bridge No.	03322
Date:	5/12/15
Town	NEW BRITAIN
Photographer:	JPM/STP
Carried / Crossed:	I-84 RAMP I-84 & RAMPS
Photo #	Image Description
25-26	SPAN 5 GIRDER 2 S. FLEW PANEL 4 32 TO BF I WEB
27	SPAN 5, BAY 2, PANEL 3 3'x6" HA OF RT IN 24 EB
28	PIER 4, END EXPANSION
29	TYP W/S SPAN 5 CONNECTION WEST
30	AS SPAN 5 OF TRANSITION
31	E. ABUT
32	N. FLEW SPAN 5
33	S. FLEW SPAN 5
34	SPAN 2 AT PIER 1 TOP BEARING I TO IS WEB
35	SPAN 2 AT S. FLEW 2ND TYP OFF FROM GIRDER BF I WEB 2
36	SPAN 2 AT S. FLEW 2' HA
37	SPAN 2 AT PIER 1 COVER TO END WELD
38	PIER 1 N. FLEW OF SI PED W/ 1" HA 2" HA 4" OP W/ 1/2" HA
39	SPAN 2 BAY 1 @ PIER 1 WEEP W/ PVC EXPANSION
40	PIER 1 COL 3 LOW SPALLS
41	W. ABUT
42	SW WU
43	NW WU
44	PIER 1 W/S CIVIL COL 2 2'3" LOW SPALL I HA
45	SPAN 2 24 BAY @ PIER 2 BRIDGE END OF TRANSITION
46	SPAN 2 66 DEG AT PIER 1 TOP BRK
47	SPAN 1 AT PIER 1 TOP W/ WAVE RISE
48	63 PED SPALLS, SPAN 5, PIER 4
49	5'x3' SPALL W/ABUT HA SPAN 6, BAY 2 NEAR PIER 2

Sketches

Inspection type: Special, Routine

Inspection Date: 05/13/2015

Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN

Carried: I-84 RAMPS 181&184

Crossed: I-84 and I-84 Ramp 181

Inventory Route: NHS

38

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System	
Image Inventory	
	
Bridge No.	03322
Date:	5/13/15
Town	NEW BRITAIN
Photographer:	JTP
Carried / Crossed:	I-84 RAMP / I-84
Photo #	Image Description
50	SHORT STEEL WEIR PIPE
51	MISSING ANCHOR BOLT NUT G1, SPAN 4, PIER 4
52	1/2" SLUGS SPAN 3 NEAR PIER 3
53	PAINTED OVER SL G2, SPAN 3 AT PIER 3
54	SPAN 2 PIER 1 TO PIER 2 CLOGGED WEIR PIPE
55	REPAIR DL AND 6" SL AT DR. STIFFENER, G5, SPAN 3 AT PIER 2
56	BREAKS FROM EAST APPR.
57	NE APPR RAMP TRANSITION
58	ID
59	EAST ABUT DECK JOINT LOOSENS 3
60	TOD SPAN 5 LOOSENS 5
61	SPAN 5 N. BRIDGE RAMP
62	SPAN 5 MESSIAN RAMP
63	PIER 4 DECK JOINT LOOSENS 2
64	SPAN 4 S. SHOULDER SCUMPER
65	PIER 3 DECK JOINT LOOSENS 5
66	SPAN 3 N. PARADET SPAN
67	PIER 2 DECK JOINT LOOSENS SOUTH
68	SPAN 2 N. PARADET -/ SPAN ARMORS
69	PIER 1 DECK JOINT LOOSENS 3 NO NOT 076
70	N APPR FROM BRIDGE
71	W ABUT DECK JOINT LOOSENS 6
72	NW APPR RAMP
73	W MESSIAN RAMP TRANSITION

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 1

Bridge ID.

Photo Taken: 05/13/2015



Photo Number: 2

North elevation of span 2.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 3

South elevation of span 5.

Photo Taken: 05/13/2015



Photo Number: 4

Bridge from west approach.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 5

West approach from bridge.

Photo Taken: 05/13/2015



Photo Number: 6

Bridge from east approach.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 7

East approach from bridge.

Photo Taken: 05/13/2015



Photo Number: 8

Typical underside of deck and superstructure of span 3.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 9

Top of deck in span 5, looking south.

Photo Taken: 05/13/2015



Photo Number: 10

Span 2 in bay 5 underside of deck with 1' diameter hollow area. BMM #13-539 Item # 2 has not been completed.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 11

Photo Taken: 05/13/2015

Span 5 in bay 2, panel 3 there is a 3' wide x 6" long hollow area over the I-84 EB right lane. A new BMM has been issued for this condition.



Photo Number: 12

Photo Taken: 05/13/2015

The south haunch for girder 1 in span 2 has an 8' long hollow area. BMM #13-539 Item # 2 was not completed.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 13

Photo Taken: 05/13/2015

Span 2 in bay 2 near pier 2 has a 5' x 3' x 1-1/2" deep spall with adjacent hollow areas.



Photo Number: 14

Photo Taken: 05/13/2015

North parapet and curb in span 2. Note the sign anchors in the parapet.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 15

Photo Taken: 05/13/2015

Missing anchor bolt nuts at the median railing has been installed. BMM # 13-539 Item # 1 has been completed.



Photo Number: 16

Photo Taken: 05/13/2015

South parapet and rail in span 4 with impact damage to the rail.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 17

Photo Taken: 05/13/2015

Span 4 scupper in the north shoulder.



Photo Number: 18

Photo Taken: 05/13/2015

Clogged scupper in bay 1 of span 3 at pier 2. BMM # 11-493 Item # 1 was not completed.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 19

Photo Taken: 05/13/2015

Short steel weep pipe in bay 1 of span 2 at pier 2. BMM # 11-493 Item # 4 has not been completed.



Photo Number: 20

Photo Taken: 05/13/2015

West abutment deck joint, looking south. BMM # 11-493 Item # 2 has been completed.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 21

Photo Taken: 05/13/2015

Pier 4 deck joint, looking south. BMM # 13-539 Item # 3 has not been completed.



Photo Number: 22

Photo Taken: 05/13/2015

Northwest approach rail.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 23

Northeast approach rail.

Photo Taken: 05/13/2015



Photo Number: 24

East approach pavement.

Photo Taken: 05/13/2015



Photo Number: 25

Girder 5 fixed bearing in span 2 at pier 2.

Photo Taken: 05/13/2015



Photo Number: 26

9-1/2" long crack in sole plate at girder 1 bearing at the east abutment

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 27

Photo Taken: 05/13/2015

South elevation of girder 1 in span 5 with 2' long x 8 1/4" wide x 1 5/16" remaining section loss in bottom flange.



Photo Number: 28

Photo Taken: 05/13/2015

Girder 1 section loss in span 2 with 1 1/4" remaining in the bottom flange.



Photo Number: 29

Photo Taken: 05/13/2015

Girder 1 bottom flange in span 3 near pier 3 with 1/8" deep section loss.



Photo Number: 30

Photo Taken: 05/13/2015

East abutment.

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 31

Southwest wingwall.

Photo Taken: 05/13/2015



Photo Number: 32

Pier 4 west elevation.

Photo Taken: 05/13/2015

Form: Asset Photos
Inspection type: Special,Routine
Inspection Date: 05/13/2015
Inspected by: TranSystems

Bridge No: 03322

Town: NEW BRITAIN
Carried: I-84 RAMPS 181&184
Crossed: I-84 and I-84 Ramp 181
Inventory Route: NHS



Photo Number: 33

Photo Taken: 05/13/2015

Pier 3 underside of cap between columns 2 and 3 with a 3' x 2' x 2" deep spall and adjacent hollow areas. BMM # 07-241 Item # 4 was not completed.



Photo Number: 34

Photo Taken: 05/13/2015

Pier 1, column 3, large spalls up to 1' x 2' x 3" deep. BMM # 07-241 Item # 4 was not completed.