

STRUCTURES INSPECTION FIELD REPORT

ROUTINE & SPECIAL MEMBER INSPECTION

2-DIST
01

B.I.N.
0EF

BR. DEPT. NO.
A-13-024

CITY/TOWN ASHFIELD	8-STRUCTURE NO. A13024-0EF-MUN-NBI	11-Kilo. POINT 000.000	41-STATUS P:POSTED	90-ROUTINE INSP. DATE MAR 21, 2025
07-FACILITY CARRIED HWY WILLIAMSBURG	MEMORIAL NAME/LOCAL NAME	27-YR BUILT 1938	106-YR REBUILT 0000	YR REHAB'D (NON 106) 0000
06-FEATURES INTERSECTED WATER CREAMERY BROOK	26-FUNCTIONAL CLASS Major Collector	DIST. BRIDGE INSPECTION ENGINEER <i>Michael P. McCabe</i> M.P.E. McCabe		
43-STRUCTURE TYPE 302 : Steel Stringer/Girder	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER T. Franciosa <i>[Signature]</i>	PROJ MGR Michael Baker Intl Inc <i>[Signature]</i>
107-DECK TYPE 1 : Concrete Cast-in-Place	WEATHER Cloudy	TEMP. (air) 0°C	TEAM MEMBERS M. MAZZU	

ITEM 58	6	
DECK		DEF
1. Wearing Surface	7	-
2. Deck Condition	6	M-P
3. Stay in Place Forms	N	-
4. Curbs	6	M-P
5. Median	N	-
6. Sidewalks	N	-
7. Parapets	N	-
8. Railing	6	M-P
9. Anti Missile Fence	N	-
10. Drainage System	N	-
11. Lighting Standards	N	-
12. Utilities	N	-
13. Deck Joints	N	-
14.	N	-
15.	N	-
16.	N	-
CURB REVEAL (In millimeters)	E 0	W 0

APPROACHES		DEF
a. Appr. pavement condition	7	-
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge)	(Y/N)	N
		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59	4	
SUPERSTRUCTURE		DEF
1. Stringers	N	-
2. Floorbeams	N	-
3. Floor System Bracing	N	-
4. Girders or Beams	4	S-A
5. Trusses - General	N	-
a. Upper Chords	N	-
b. Lower Chords	N	-
c. Web Members	N	-
d. Lateral Bracing	N	-
e. Sway Bracings	N	-
f. Portals	N	-
g. End Posts	N	-
6. Pin & Hangers	N	-
7. Conn Plt's, Gussets & Angles	7	-
8. Cover Plates	N	-
9. Bearing Devices	4	S-A
10. Diaphragms/Cross Frames	7	-
11. Rivets & Bolts	7	-
12. Welds	N	-
13. Member Alignment	6	M-P
14. Paint/Coating	4	S-P
15.	N	-

Year Painted	X
COLLISION DAMAGE: Please explain None (X) Minor () Moderate () Severe ()	
LOAD DEFLECTION: Please explain None () Minor (X) Moderate () Severe ()	
LOAD VIBRATION: Please explain None () Minor (X) Moderate () Severe ()	

Any Fracture Critical Member: (Y/N)	N
Any Cracks: (Y/N)	N

ITEM 60	6			
SUBSTRUCTURE		DEF		
1. Abutments	Dive	Cur	6	
a. Pedestals	N	4		S-A
b. Bridge Seats	N	7		-
c. Backwalls	N	6		M-P
d. Breastwalls	N	6		M-P
e. Wingwalls	N	7		-
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	6		-
k. Settlement	N	6		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

UNDERMINING (Y/N) If YES please explain	N
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COLLISION DAMAGE: None (X) Minor () Moderate () Severe ()
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SCOUR: Please explain None () Minor (X) Moderate () Severe ()
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I-60 (Dive Report):	N	I-60 (This Report):	6
93B-U/W (DIVE) Insp	00/00/0000		

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

CITY/TOWN ASHFIELD	B.I.N. 0EF	BR. DEPT. NO. A-13-024	8.-STRUCTURE NO. A13024-0EF-MUN-NBI	INSPECTION DATE MAR 21, 2025
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ITEM 61 6

CHANNEL & CHANNEL PROTECTION

	Dive	Cur	DEF
1.Channel Scour	N	6	M-P
2.Embankment Erosion	N	6	M-P
3.Debris	N	5	M-P
4.Vegetation	N	7	-
5.Utilities	N	N	-
6.Rip-Rap/Slope Protection	N	7	-
7.Aggradation	N	7	-
8.Fender System	N	N	-

STREAM FLOW VELOCITY:
Tidal () High () Moderate (X) Low () None ()

ITEM 61 (Dive Report): N ITEM 61 (This Report): 6

93b-U/W INSP. DATE:

ITEM 36 TRAFFIC SAFETY

	36	COND	DEF
A. Bridge Railing	0	6	M-P
B. Transitions	0	7	-
C. Approach Guardrail	0	7	-
D. Approach Guardrail Ends	0	6	M-P

WEIGHT POSTING Not Applicable

	H	3	3S2	Single
Actual Posting	11	13	21	N
Recommended Posting	11	13	21	N

Waived Date: EJDMT Date:

At bridge		Other Advance	
N	S	N	S
Y	NR	Y	Y
7	5	8	8
		8	7

Signs In Place (Y=Yes, N=No, NR=Not Required)
Legibility/Visibility

CLEARANCE POSTING

Not X

	E		W		meter
	ft	in	ft	in	
Actual Field Measurement		0		0	
Posted Clearance		0		0	

At bridge		Advance	
E	W	E	W

Signs In Place (Y=Yes, N=No, NR=Not Required)
Legibility/Visibility

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	N	N
Ladder	Y	Y
Boat	N	N
Waders	Y	Y
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	N	N
RR Flagger	N	N
Police	N	N
Other:		
	N	N

TOTAL HOURS 71

PLANS (Y/N): Y

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:
Hand-on, Visual, D-Meter

RATING

Rating Report (Y/N): Y

Date:

Inspection data at time of existing rating
I 58: 7 I 59: 7 I 60: 7 Date :03/07/2003

Recommend for Rating or Rerating (Y/N): Y

If YES please give priority:
HIGH (X) MEDIUM () LOW ()

REASON: Section loss, bearing area reduction, additional asphalt dead load

CONDITION RATING GUIDE (For Items 58, 59, 60 and 61)

CODE	CONDITION	DEFECTS
N	NOT APPLICABLE	
G 9	EXCELLENT	Excellent condition.
G 8	VERY GOOD	No problem noted.
G 7	GOOD	Some minor problems.
F 6	SATISFACTORY	Structural elements show some minor deterioration.
F 5	FAIR	All primary structural elements are sound but may have minor section loss, cracking, spalling or scour.
P 4	POOR	Advanced section loss, deterioration, spalling or scour.
P 3	SERIOUS	Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
C 2	CRITICAL	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
C 1	"IMMINENT" FAILURE	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service.
0	FAILED	Out of service - beyond corrective action.

DEFICIENCY REPORTING GUIDE

DEFICIENCY: A defect in a structure that requires corrective action.

CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

URGENCY OF REPAIR:

I = Immediate- [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

A = ASAP- [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize- [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

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107-DECK TYPE 1 : Concrete Cast-in-Place		WEATHER Cloudy	TEMP. (air) 0°C	TEAM MEMBERS M. MAZZU		

WEIGHT POSTING		<i>Not Applicable</i>		At bridge		Advance		PLANS (Y/N): <input checked="" type="checkbox"/> Y	
		H	3	3S2	Single	N	S	N	S
Actual Posting		<input type="text" value="11"/>	<input type="text" value="13"/>	<input type="text" value="21"/>	<input type="text" value="N"/>	<input checked="" type="text" value="Y"/>	<input type="text" value="NR"/>	<input checked="" type="text" value="Y"/>	<input type="text" value="Y"/>
Recommended Posting		<input type="text" value="11"/>	<input type="text" value="13"/>	<input type="text" value="21"/>	<input type="text" value="N"/>	<input type="text" value="7"/>	<input type="text" value="5"/>	<input type="text" value="8"/>	<input type="text" value="8"/>
Waived Date: <input type="text" value="00/00/0000"/>		EJDMT Date: <input type="text" value="00/00/0000"/>		Signs In Place (Y=Yes, N=No, NR=Not Required)		Legibility/Visibility		(V.C.R.) (Y/N): <input type="checkbox"/> N	
								TAPES#: _____	

RATING

Rating Report (Y/N): **Y** Date: Recommend for Rating or Rerating (Y/N): **Y** If YES please give priority: HIGH () MEDIUM () LOW ()

Inspection data at time of existing rating
I 58: 7 I 59: 7 I 60: 7 I 62: - Date :03/07/2003

REASON: **Section loss, bearing area reduction, additional asphalt dead load**

SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 59.4 - Girders or Beams	N		See remarks in comments section.	6	4				S-A
B	Item 59.9 - Bearing Devices	N		See remarks in comments section.	5	4				S-A
C										
D										
E										

List of field tests performed:
Hand-on, Visual, D-Meter

	I-58	I-59	I-60	I-62
(Overall Previous Condition)	<input type="text" value="6"/>	<input type="text" value="6"/>	<input type="text" value="6"/>	<input type="text" value="-"/>
(Overall Current Condition)	<input type="text" value="6"/>	<input type="text" value="4"/>	<input type="text" value="6"/>	<input type="text" value="-"/>

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REMARKS

BRIDGE ORIENTATION

BIN 0EF is oriented from south to north and the elevations are west to east. Creamery Brook flows from west to east. The orientation is consistent with the plans, previous inspection and 2004 Rating report.

GENERAL REMARKS

Structure A-13-024 (0EF) carries Williamsburg Road over Creamery Brook in the Town of Ashfield (**Sketch 1**). The bridge is a simple single-span structure comprised of six (6) steel beams supporting a reinforced concrete deck overlaid with an asphalt wearing surface. The underside of deck between the beams is designated as Bay 1 through 5 from west to east, with the overhangs designated as the West and East Overhangs. The beams are designated as Beam 1 through 6, from west to east. The diaphragms are designated as Diaphragm 1 through 5, from south to north. Note: diaphragm orientation and layout differ from shown on the 1938 plans. The substructure consists of two (2) reinforced concrete abutments labeled South Abutment and North Abutment (**Sketch 2 and Photos 1-8**).

WEIGHT POSTING

The bridge has a posted weight restriction for 11 tons on two axles, 13 tons on three axles and 21 tons on five axles. There is an At-Bridge weight posting sign at the North Approach and an Advance weight posting at the North and South Approach (**Photos 9-11**). The At-Bridge weight posting sign at the North Approach has been repaired since the previous Routine Inspection (3/10/23).

WORK ACCESS

The underside of the deck, superstructure and substructure elements were inspected during daytime hours on foot. Waders and a 16' ladder were utilized to inspect the underside.

CHANNEL PROFILES

Channel profile measurements were taken at 1/4 points on the upstream and downstream fascia of the bridge from the top of the rail base to the ground (**Chart 1**).

ITEM 58 - DECK

Item 58.2 - Deck Condition

The deck has scattered transverse hairline and mapcracks, with and without efflorescence. There are isolated diagonal hairline cracks with efflorescence and stalactites. There are isolated delaminations and spalls with exposed rebar. There are scattered spalls, some with exposed rebar and mapcracks up to full length of the deck overhangs. There are isolated gaps between the underside of deck and beams at beam top flanges or backwalls at the abutments. See the following for specific locations and conditions.

- West Overhang to Beam 3 at South Abutment: Deck not in contact with beam top flanges for up to 10'-0" long.
- Bays 1 and 2 between Diaphragms 1 and 3: Several diagonal hairline cracks with efflorescence and stalactites (**Photo 12**).
- Bay 2 between Diaphragms 1 and 2: 5" long x 3" wide x 1/2" deep spall with exposed rebar and 4" long x 8" wide delamination.
- Bay 1 near North Abutment: 1'-0" long x 2'-4" wide delamination with a 5" diameter x 1" deep spall with exposed rebar.
- Bay 1 adjacent to Beam 1 near North Abutment: Three (3) up to 2'-0" long x 7" wide x 1" deep spalls with exposed rebar.

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REMARKS

- Bay 2 along Beam 2: Evidence of leakage and efflorescence.
- Bays 3-5 at North Abutment: Up to 1/2" high gap between the deck and backwall.

Item 58.4 - Curbs

The wearing surface is paved flush with the curbs. Typically, the curbs are hidden by debris build up along the edge of the roadway. The east curb near midspan has a full width spall with exposed rebar (**Photo 13**).

Item 58.8 - Railing

The railings typically have scattered areas of peeling paint with light rust throughout. There are scattered tipped posts and isolated missing anchor bolt nuts. There are isolated spalls, some with exposed rebar, at the rail bases. The previously noted bent or disconnected rails have been repaired since the last Routine Inspection (3/10/23). See the following for specific locations and conditions.

West Railing

- First five posts from the south: Tipped to the south.
- Rail base at third post from north: 3'-2" long x 8" high x 3" deep spall with exposed rebar that extends 5" onto the west face (**Photo 14**).

East Railing

- Rail base fascia near center: 2'-0" long x 6" high x 2" deep spall.
- First and second post from north: West anchor bolt nut missing.
- Second post from the north: Tipped to the north.

APPROACHES

Approaches a - Appr. pavement condition

There are up to 1/4" wide x up to full length transverse cracks in the North and South Approaches at the abutments (**Photo 15**).

ITEM 59 - SUPERSTRUCTURE

Item 59.4 - Girders or Beams

The beams have scattered areas light rust throughout and isolated locations of heavy rust.

DEF = S-A:

The beam ends have isolated locations of up to 100% section loss. There are isolated beam top flanges that are not in contact with the underside of deck.

See the following for specific locations and conditions.

Beam 1

- Moderate to heavy rust up to full length.

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REMARKS

- West Face of lower web at South Abutment: 1'-6" long x 1-1/2" high x 1/16" section loss (0.42 remaining) **(Photo 16)**.
- Top flange at South Abutment: 10'-0" long x 2" high gap between top flange and deck **(Photo 16)**.

Beam 2

- Top flange at South Abutment: 5'-6" long x 1-1/4" high gap between top flange and deck.
- Near mid-span: 5'-0" long area of minor section loss.
- Web and bottom flange at North Abutment: Section loss **(Sketch 3 and Photo 17)**.

Beam 6

- Web base at South Abutment: 3'-0" long x 4" high x 1/8" section loss (0.35 remaining).
- Web and bottom flange at North Abutment: Section loss **(Sketch 4 and Photo 18)**.
- Top flange at North Abutment: 6'-0" long x 1/4" high gap between top flange and deck.

Item 59.7 - Conn Plt's, Gussets & Angles

The connections plates have minor rust.

Item 59.9 - Bearing Devices

DEF S-A:

The bearing have up to heavy rust with isolated section loss up to 1/16" deep and pack rust up to 1/2" thick. Isolated bearings have missing or sheared off anchor bolts and up to 100% section loss to anchor bolt nuts. Several bearings are up to 100% undermined. There is an isolated bearing that is over expanded at 32 degrees F.

See the following for specific locations and conditions.

South Abutment (Sketch 5)

- Bearing 1: West anchor bolt nut with 100% section loss, east anchor bolt sheared off. Bearing assembly with up to 1/16" section loss. Bearing area 100% undermined **(Photo 19)**.
- Bearing 2: Both anchor bolts sheared. Bearing area 100% undermined **(Photo 20)**.
- Bearing 3: Both anchor bolts sheared. Up to 1/2" thick pack rust between sole plate and masonry plate. Bearing area 50% undermined.
- Bearing 4: Bearing undermined 20%.
- Bearing 5: Bearing undermined 20%.
- Bearing 6: Sole plate over-expanded 1/2" beyond masonry plate at 32 degrees F. West anchor bolt nut with 100% section loss.

North Abutment

CITY/TOWN ASHFIELD	B.I.N. 0EF	BR. DEPT. NO. A-13-024	8.-STRUCTURE NO. A13024-0EF-MUN-NBI	INSPECTION DATE MAR 21, 2025
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REMARKS

- Bearings 1, 2 and 5: Bearing with heavy rust and up to 1/16" section loss.
- Bearings 1 and 6: East anchor bolt nut with 100% section loss.
- Bearing 2: Bearing undermined 6%.
- Bearings 3 and 4: Up to 1/2" thick pack rust between sole plate and masonry plate.
- Bearing 5: East anchor bolt missing.

See **Item 60.1.a - Pedestals** for additional comments.

Item 59.10 - Diaphragms/Cross Frames

The diaphragms typically have scattered areas of light to moderate rust throughout. There is up to heavy rust at Diaphragm 2 in Bay 1.

Item 59.11 - Rivets & Bolts

The connections have minor rust.

Item 59.13 - Member Alignment

Beams 1 and 2 at the South Abutment, and Beam 6 at the North Abutment have separated from the deck. See **Items 59.4 - Girders or Beams**, **Item 59.9 - Bearings Devices** and **60.1.a - Pedestals** for additional comments.

Beams 3 - 6 have slight negative chamber.

Item 59.14 - Paint/Coating

There is typically scattered freckled rust throughout the superstructure with isolated locations of failed paint and up to 100% section loss to isolated beams.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments

Item 60.1.a - Pedestals

DEF = S/A:

The pedestals at the South Abutment are typically spalled with punky concrete up to full width x up to full length (Sketch 5 and Photos 19-20).

The pedestals at the North Abutment are starting to crack and spall with an isolated location that is spalled up to 6%.

Item 60.1.b - Bridge Seats

There is typically light accumulation of debris throughout the bridge seats at both abutments and heavy accumulation (up to 6 inches high below the overhangs). There is nesting bird debris in Bay 2 at the South Abutment.

Item 60.1.c - Backwalls

There are vertical cracks up to 5/8" wide with displacement at the construction joints and isolated honeycomb areas. See the following for locations and conditions.

South Backwall

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REMARKS

- Behind Beam 3: 1/8" wide x full height vertical crack.
- Bay 3, over the construction joint: Up to 1" wide x full height vertical crack. At the top of the crack, the west end of the backwall, is displaced 1/2" to the north.

North Backwall

- Bay 1: 8" long x 5" high x 3/4" deep honeycomb area.
- Bay 3, over the construction joint: 5/8" wide x full height vertical crack with an adjacent 3'-6" long x up to 2'-0" high x up to 1" deep honeycomb area (**Photo 21**).

Item 60.1.d - Breastwalls

There are isolated diagonal hairline cracks at the top near the cheekwalls with efflorescence. There are scattered short vertical hairline cracks throughout the top of each breastwall and abrasion at the waterline. An isolated construction joint is misaligned and leaning. See the following for locations and conditions.

South Breastwall

- At the water line: Full length x 2'-0" high x up to 2" deep abrasion.
- At the bottom of the construction joint: 1'-6" diameter x 5" deep spall.
- At the construction joint: Open 1/2" at the bottom and 3/4" at the top.
- West section of the breastwall: Leans 1/4" toward the stream for 3' high at the top.

North Breastwall

- At the east half of the water line: 13'-0" wide x 7" high x up to 1" deep abrasion.

Item 60.1.e - Wingwalls

There is abrasion 3'-0" long x 2'-0" high and a 6" long hairline crack with efflorescence at the Southwest Wingwall.

There is scale 2'-0" long x 8" wide x 2" deep at the toe and at the top of the Southeast and Southwest Wingwalls.

Item 60.1.h - Footings

The footings are hidden by design.

Item 60.1.j - Scour

There is a 1'-0" long x up to 4" high exposed sheet pile at the southwest corner.

Item 60.1.k - Settlement

See **Items 60.1.c - Backwalls** and **60.1.d - Breastwalls** for additional comments.

SubStructure Scour Notes

See **Item 60.1.j - Scour**.

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REMARKS

ITEM 61 - CHANNEL AND CHANNEL PROTECTION

Item 61.1 - Channel Scour

There is a 5'-0" long x 5'-0" wide x 5" deep scour hole at the Southwest Wingwall (**Chart 1**).

Item 61.2 - Embankment Erosion

The Southeast Embankment has 2'-0" high x up to 3'-0" deep erosion with undermining.

The Northwest Embankment has 5'-0" high erosion with undercutting of trees.

The Northwest Embankment has minor erosion with exposed tree roots. Several of the trees are leaning towards the brook.

Item 61.3 - Debris

The downed trees in the upstream channel noted in the previous Routine Inspection (3/10/23) are no longer present. There are isolated trees in the downstream channel (**Photo 22**).

TRAFFIC SAFETY

Item 36a - Bridge Railing

The bridge railings consist of two steel pipe rails, mounted through steel I-posts bolted to the reinforced concrete rail bases. See **Item 58.8 - Railing** for additional comments.

Item 36b - Transitions

The transitions consist of nested steel W-beam panels, with steel terminal ends at the bridge railing, and mounted on timber posts with timber blockouts, spaced at 3'.

All panels are rusted.

All four guardrail transitions have 100% section loss up to 1'-4" long x 5" wide.

Item 36c - Approach Guardrail

The approach guardrails consist of single steel W-beam panels, mounted on timber posts with timber blockouts, spaced at 6'. The timber posts are spaced at 12' over the paved road drains in the South Approach.

All panels are rusted.

The timber blockouts at the approaches are typically rotated. One (1) timber blockout is disconnected from the guardrail at the southwest and southeast approach (**Photo 23**).

Item 36d - Approach Guardrail Ends

All guardrails have buried ends, not swept away from traffic.

All panels are rusted.

Sketch / Chart / Photo Log

- Sketch 1 : Location Map.
- Sketch 2 : Framing Plan.
- Sketch 3 : Beam 2 at North Abutment, West Face.
- Sketch 4 : Beam 6 at North Abutment, East Face.

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REMARKS

- Sketch 5 : Bearings 1 - 5, South Abutment.
- Chart 1 : Channel Profile
- Photo 1 : West Elevation, looking east.
- Photo 2 : East Elevation, looking west.
- Photo 3 : Bridge from South Approach, looking north
- Photo 4 : South Approach from bridge, looking south.
- Photo 5 : Bridge from North Approach, looking south.
- Photo 6 : North Approach from bridge, looking north.
- Photo 7 : Typical Wearing surface, looking northeast.
- Photo 8 : Typical Underside, looking north.
- Photo 9 : South Approach Advance Weight Posting.
- Photo 10 : North Approach At-Bridge Posting Sign.
- Photo 11 : North Approach Advance Weight Posting.
- Photo 12 : Underside of deck at Diaphragm 2 in Bay 1 and 2 with diagonal hairline crack with efflorescence.
- Photo 13 : East Curb Line at mid-span with spall and exposed rebar. Note: wearing surface paved flush with curb line.
- Photo 14 : West Bridge Railing at 3rd post from north with spall and exposed rebar.
- Photo 15 : Transverse crack in Approach Pavement at North Abutment.
- Photo 16 : Beam 1 West Face at South Abutment with section loss. Note: separation between deck and top flange and 100% loss to concrete pedestal.
- Photo 17 : Beam 2, East Face, at North Abutment.
- Photo 18 : Beam 6, East Face, at North Abutment with advanced section loss.
- Photo 19 : Bearing 1, East Face, at South Abutment pedestal spall with punky concrete.
- Photo 20 : Bearing 2, West Face, at South Abutment with pedestal spall and sheared anchor bolt.
- Photo 21 : North Abutment, Backwall, below Bay 3 with full height wide crack.
- Photo 22 : Isolated tree, downstream, looking east.
- Photo 23 : Southwest Approach Guardrail 2nd post from Bridge with rotated block disconnected from approach guardrail.

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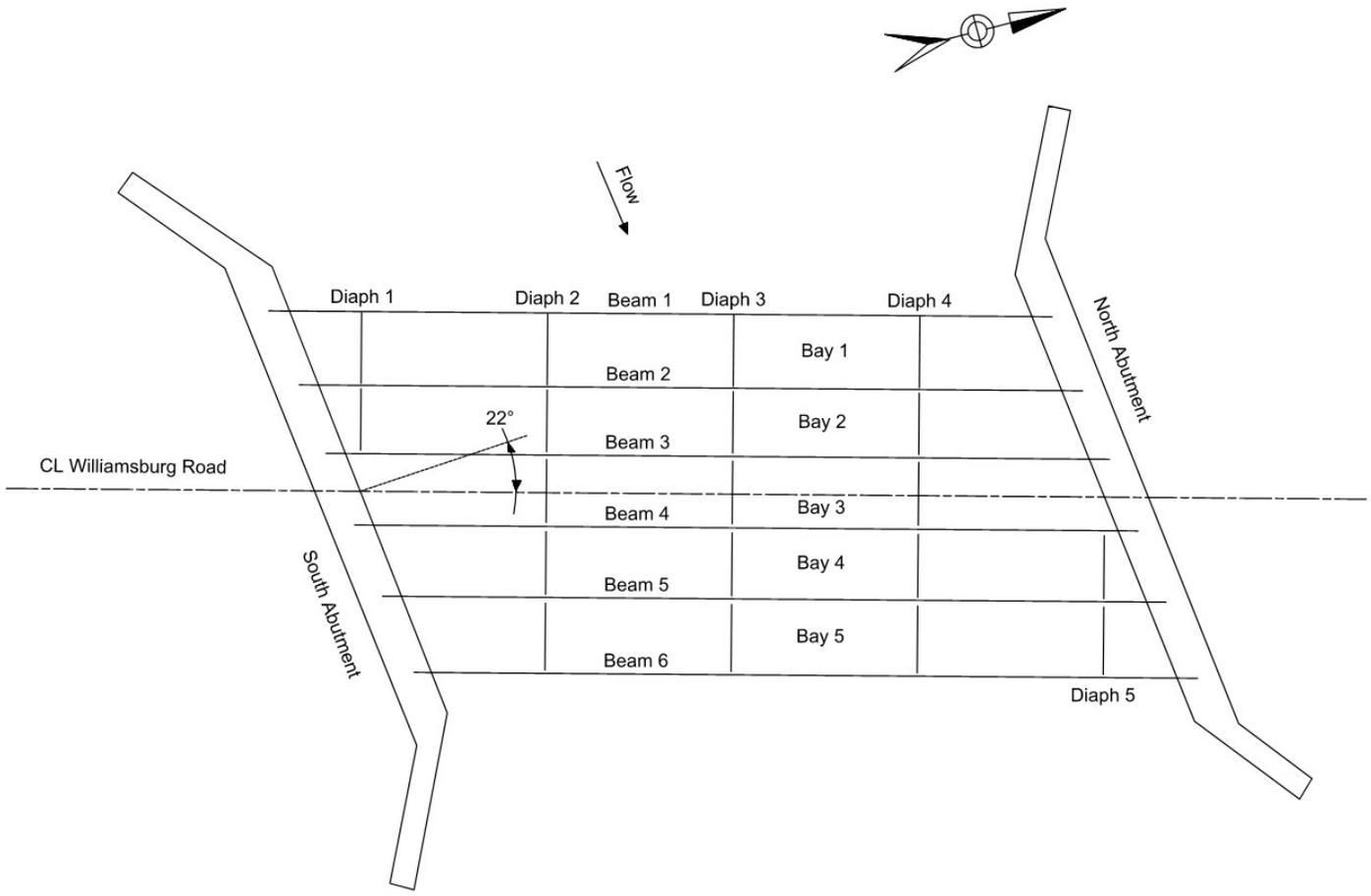
SKETCHES



Sketch 1: Location Map.

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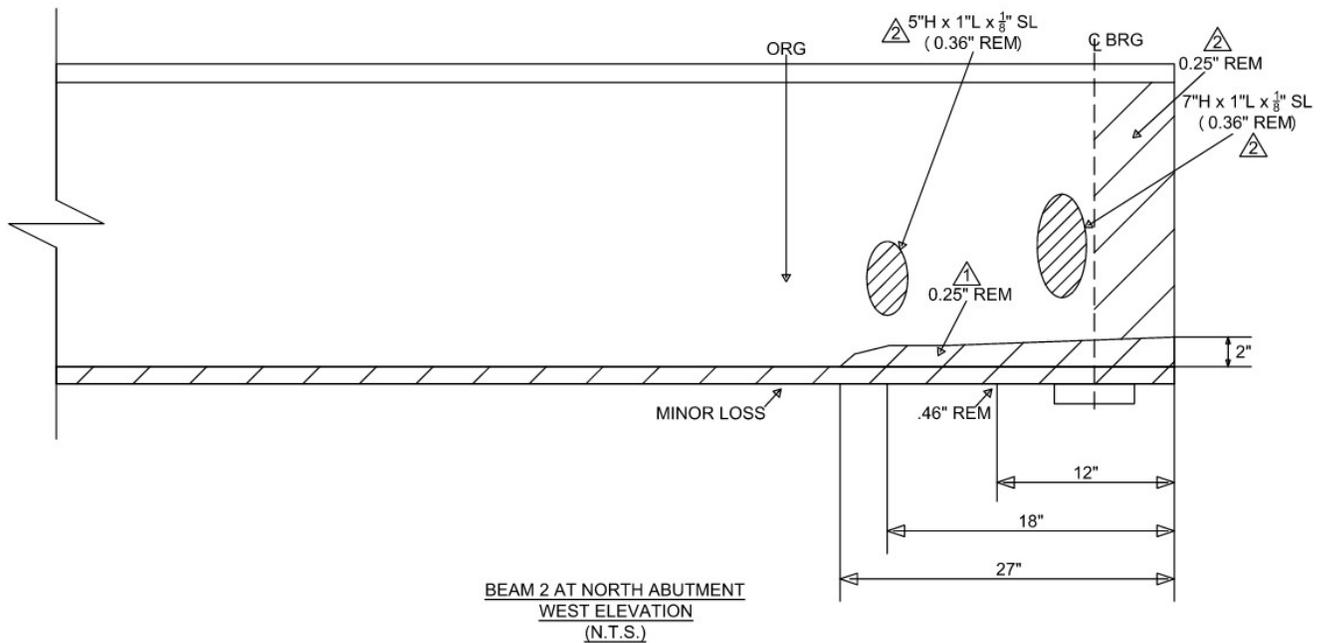
SKETCHES



Sketch 2: Framing Plan.

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SKETCHES



LEGEND:

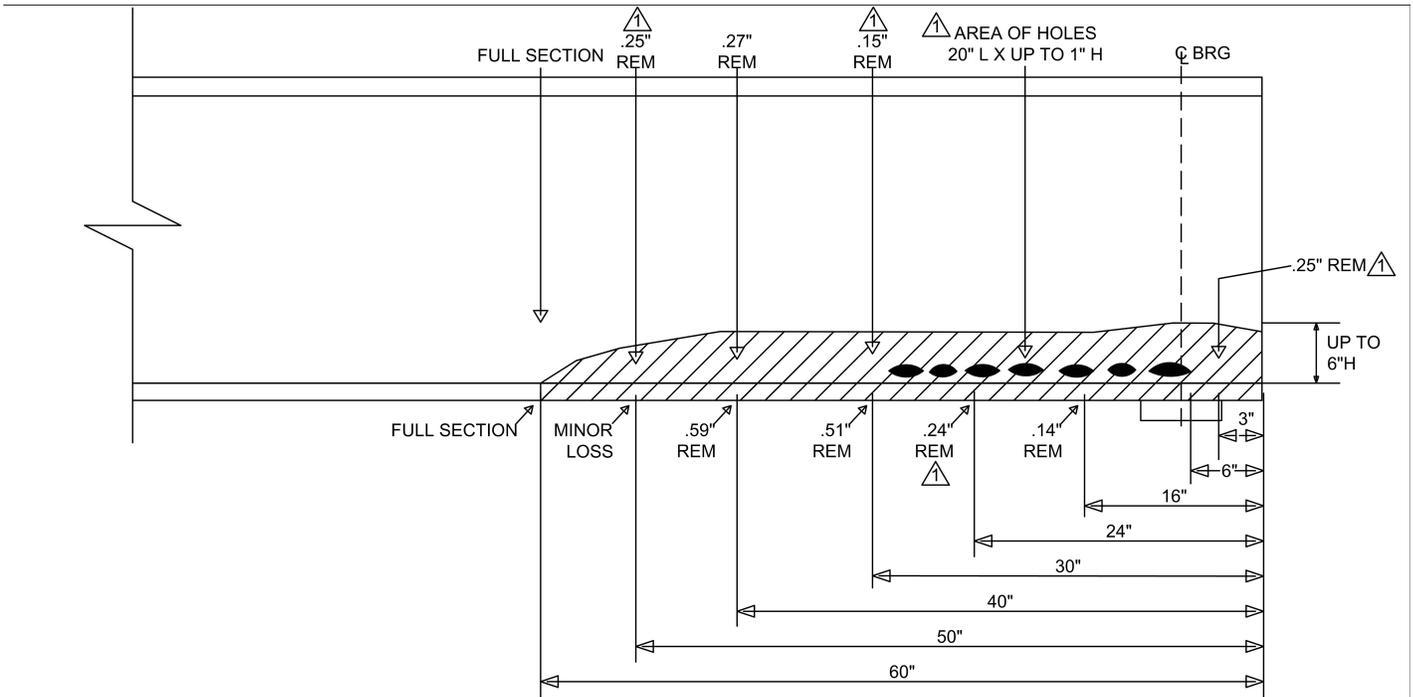
- 100% Section Loss
- Section Loss > $\frac{1}{16}$ "
- Indicates a change in condition from previous inspection
- Indicates a new condition not previously noted

AS-BUILT PER 1938 PLANS
 ORG. SECTION = 27" WF 91
 ORG. FLANGE = 0.712"
 ORG. WEB = 0.483"

Sketch 3: Beam 2 at North Abutment, West Face.

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SKETCHES



BEAM 6 AT NORTH ABUTMENT
EAST ELEVATION
(N.T.S.)

LEGEND:

- 100% Section Loss
- Section Loss > 1/16"
- △ Indicates a change in condition from previous inspection
- △ Indicates a new condition not previously noted

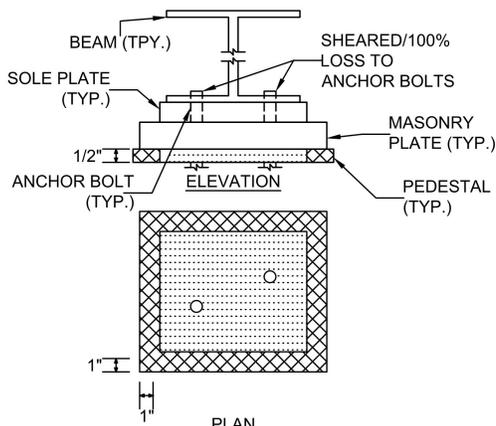
AS-BUILT PER 1938 PLANS

ORG. SECTION = 27" WF 91
ORG. FLANGE = 0.712"
ORG. WEB = 0.483"

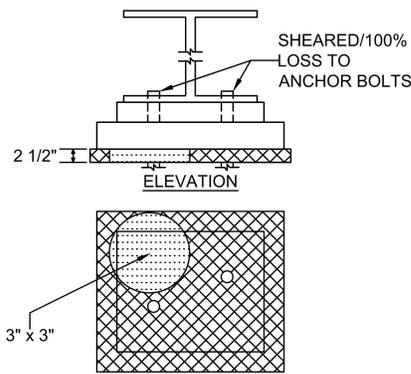
Sketch 4: Beam 6 at North Abutment, East Face.

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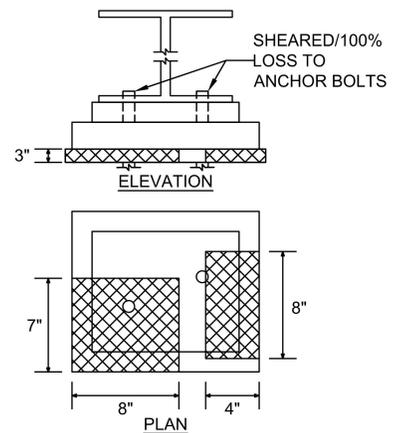
SKETCHES



PLAN
BEARING 1
SOUTH ABUTMENT (FIXED)



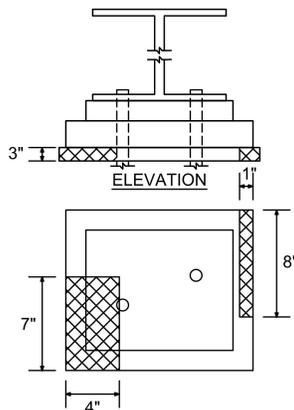
PLAN
BEARING 2
SOUTH ABUTMENT (FIXED)



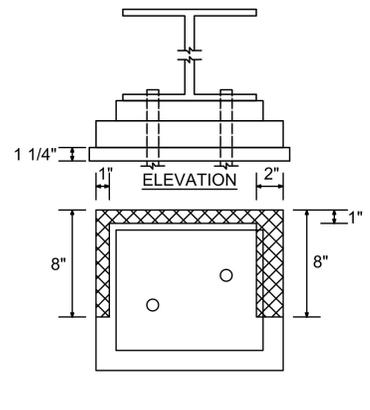
PLAN
BEARING 3
SOUTH ABUTMENT (FIXED)

BEARINGS WITH BEARING AREA LOSS

AS-BUILT PER 1938 PLANS
SOLE PLT: 9" x 1 1/2" x 11", WELDED TO BEAM
MASONRY PLT: 12" x 2" x 1'-2"
3/8" ANCHOR BOLTS, 2'-4" L
4" HOOK



PLAN
BEARING 4
SOUTH ABUTMENT (FIXED)



PLAN
BEARING 5
SOUTH ABUTMENT (FIXED)

LEGEND:

- Spall
- Punky Concrete
- Indicates a change in condition from previous inspection
- Indicates a new condition not previously noted

Sketch 5: Bearings 1 - 5, South Abutment.

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CHARTS

BIN 0EF - Channel Profile Readings												
	West Fascia						East Fascia					
DATE	N. Abut.	1/4 span	1/2 span	3/4 span	S. Abut.	FB	N. Abut.	1/4 span	1/2 span	3/4 span	S. Abut.	FB
	12' - 0"	16' - 0"	17' - 1"	16' - 0"	15' - 10"	16' - 0"	14' - 6"	14' - 0"	16' - 2"	16' - 0"	15' - 2"	16' - 0"

NOTES:

- * All readings in decimal feet.
- * All readings taken from streambed to top of railbase.
- * Measurement with N/A noted were obstructed due to stream being partially frozen over at the time of inspection.

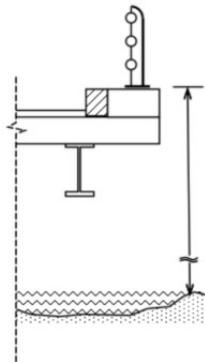


Chart 1: Channel Profile

CITY/TOWN ASHFIELD	B.I.N. 0EF	BR. DEPT. NO. A-13-024	8.-STRUCTURE NO. A13024-0EF-MUN-NBI	INSPECTION DATE MAR 21, 2025
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PHOTOS

Photo 1: West Elevation, looking east.



Photo 2: East Elevation, looking west.

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PHOTOS

Photo 3: Bridge from South Approach, looking north



Photo 4: South Approach from bridge, looking south.

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PHOTOS

Photo 5: Bridge from North Approach, looking south.



Photo 6: North Approach from bridge, looking north.

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PHOTOS

Photo 7: Typical Wearing surface, looking northeast.



Photo 8: Typical Underside, looking north.

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PHOTOS

Photo 9: South Approach Advance Weight Posting.



Photo 10: North Approach At-Bridge Posting Sign.

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PHOTOS

Photo 11: North Approach Advance Weight Posting.



Photo 12: Underside of deck at Diaphragm 2 in Bay 1 and 2 with diagonal hairline crack with efflorescence.

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PHOTOS

Photo 13: East Curb Line at mid-span with spall and exposed rebar. Note: wearing surface paved flush with curb line.



Photo 14: West Bridge Railing at 3rd post from north with spall and exposed rebar.

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PHOTOS

Photo 15: Transverse crack in Approach Pavement at North Abutment.



Photo 16: Beam 1 West Face at South Abutment with section loss. Note: separation between deck and top flange and 100% loss to concrete pedestal.

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PHOTOS

Photo 17: Beam 2, East Face, at North Abutment.



Photo 18: Beam 6, East Face, at North Abutment with advanced section loss.

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PHOTOS

Photo 19: Bearing 1, East Face, at South Abutment pedestal spall with punky concrete.



Photo 20: Bearing 2, West Face, at South Abutment with pedestal spall and sheared anchor bolt.

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PHOTOS

Photo 21: North Abutment, Backwall, below Bay 3 with full height wide crack.



Photo 22: Isolated tree, downstream, looking east.

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PHOTOS

Photo 23: Southwest Approach Guardrail 2nd post from Bridge with rotated block disconnected from approach guardrail.