Structure No. 0 0707

Newfield Avenue

over

Route 15 {Merritt Parkway}

Stamford

Route 15 - Mile Point 11.34

Routine & Special Inspections
on
9-Mar-11

Inspected By Team No. 8

For Area No. 8

TEAM:	Forwarded to T.E. 3: D PAWLIKOWSKI	Date: 4 18 11
T.E. 3:	Reviewed By T.E. 3: D PAWLIKOWSKI	Date: 4 18 11
	BMM Required	NO
	Town Structure	NO
	Rating <= 5 {Item Nos. 58, 59, 60, 61 or 62}	NO
	Forwarded to Supervisor:	Date:
	Forwarded to "To Be Copied Drawer" ✓	Date: 5 4 11
	Date BRI-19 Entered 4 18 11	
SUPERVISOR:	Reviewed By Supervisor	Date:
Support:	Date Copies Made: 5/26/11	BMM No. TRANS
	Scanned By:	Date: 6/1/11 PDF Box No.:

NBIS: Yes

Last Inspection Date: September 17, 2008

State of Connecticut - Department of Transportation
Bureau of Engineering & Construction - Bridge Safety & Evaluation

Bridge No.: 0 0707 **Town:** Stamford

Location: Newfield Avenue over Route 15 {Merritt Parkway}

Inspection Date: March 9, 2011

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Bridge Number **00707**

Inspected By: FERRARA & HOLDRIDGE

Sufficiency Rating 61.44
Previous Inspection Date 9/17/2008

BS&E Received ☐ Data Entry By: DP
Copies Made ☐ Data Entry Date: 4/18/11

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET_____ OF_____ (INSP. REPORT)

90) Inspection Date 03/09/11 Inspection Team 808 91) Frequency 24 Class: 02
Indepth Insp 7/25/2006 Deck Survey 1/1/1900 12: Access 0 Flagman 0

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:				
Uwater:				
Special:	F	24	8	9/17/2008 3 9 11

RED FLAG

IDENTIFICATION

Bridge Name
Town Name STAMFORD Town Code 73070
5) Inventory Route:
A) Record Type 1 D) Route Number 00000
B) Signing Prefix 5 City Street E) Directional Suffix 0 NA
C) Level of Service 0 None of the bel
6) Feature Intersected ROUTE 15
7) Facility Carried: NEWFIELD AVENUE
9) Location RT 15 U/NEWFIELD AVENUE
1.2 MI S OF ROUTE 106
11) Milepoint 13.24 Miles 3.940
16) Latitude 41deg 6 min .00 sec deg min . sec
17) Longitude 73deg 32 min 6.00 sec deg min . sec
98) Border Bridge:
A) State Code B) Percent Responsibility %
C) Border Town Name
99) Border Bridge Structure No

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:
A) Material 1 Concrete B) Design Type 7 Frame (except frame culverts)
44) Structure Type, Approach:
A) Material 0 Other B) Design Type 0 Other
45) Number of Spans, Main Unit 1
46) Number of Approach Spans 0
107) Deck Structure Type 1 Concrete Cast-in-Place
108) Wearing Surface/Protective System:
A) Type of Wearing Surface 6 Bituminous
B) Type of Membrane 2 Preformed Fabric SHEET
C) Type of Deck Protection 1 Epoxy Coated Reinforcing

AGE AND SERVICE

27) Year Built 1937 106) Year Reconstructed 1995
42) Type of Service:
A) On 1 Highway B) Under 1 HIGHWAY
28) Number of Lanes:
A) On 2 B) Under 4
29) Average Daily Traffic 9360 9548 Half ADT?: No
109) Percent Truck 3%
30) Year of ADT 2009 2011
19) Bypass, Detour Length 2miles

GEOMETRIC DATA

48) Length of Max Span 62ft 62.19 FT
49) Structure Length 71ft 62.19 FT 62
50) Curb or Sidewalk Widths:
A) Left 0.6ft B) Right 0.6ft
51) Brg Rdwy width,curb-curb 30.1ft 30.00 FT 30.0 ft
52) Deck Width, Out-Out 35.0ft 35.00 FT ft
32) Approach Roadway Width 28ft ft
33) Bridge Median 0 No Median
62.19 FT x 35.00 FT Deck Area 2485 sqft 2176.75 SF 2177 sqft
34) Skew Angle 4deg 4°-30'-00" 5
35) Structure Flared 0
10)Inv. Rte. Min. Vert Clearance 99ft 99in ft in
47) Log Inv. Rte. Total Horiz Clr.: 30.1ft 30.00 FT 30.0 ft
47) RLog Inv. Rte. Total Horiz. Clr.: ft ft
53) Min Vert Clearance Over Bridge 99ft 99in ft in
54) Min Vert Under Clearance H Ref 13ft 11in Ref ft in
55) Min Lat Under Clearance on Right H Ref 3.5ft Ref ft
56) Min Lat Under Clearance on Left 1.0ft OPEN 99.9 ft

BRIDGE COMMENTS

~~Item 29 & 30- Estimated ADT for 2009 (last unestimated ADT of 9000 from 2005 Srtamford ADT map) rdj 3/18/09~~

STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRI-19 REV 10/00

SHEET_____ OF_____

Bridge Number	00707	NBIS Length
Town Name	STAMFORD	Yes 71
Facility Carried	NEWFIELD AVENUE	
Feature Crossed	ROUTE 15	

Inspected By: Ferrara & Holdridge

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	0	Off System
26) Functional Class	16	Urban Minor Arterial
100) Defense Highway	0	Route is not a STRAHNET Route
101) Parallel Structure	N	No parallel structure exists
102) Direction of Traffic	2	2-way traffic
103) Temporary Structure		
110) Designated National Network	0	Not on national network
20) Toll	3	On Free Road
21) Maintain	1	State Highway Agency
22) Owner	1	State Highway Agency
Report Class	S	STATE
37) Historical Significance	1	On National Register

WATERWAY

DrainageBasinCode	
38) Navigation Control	
39) Navigation Vert Clr.	
40) Navigation Horiz Clr.	
116) Vert-Lift Brg Nav Min	
111) Pier Abutment Protection	

PROPOSED IMPROVEMENTS

75A) Type of Work Proposed		
75B) Work Done By		
76) Length of Struct. Improvement	ft	ft
94) Bridge Improvement Cost	$	
95) Roadway Improvement Cost	$	
96) Total Project Cost	$	
97) Year of Improvement Cost Est.		
114) Future ADT		115) Year Future ADT

List No. PR Project No. 0135-0270 Advertised 12/2/2009

POSTED SIGNS & UTILITIES

Other Posted Signs 1				
Other Posted Signs 2				
Actual P.L. Single Unit Truck	tons	Actual P.L. 4Axle Truck	tons	
Rec. P.L. Single Unit Truck	tons	Rec. P.L. 4Axle Truck	tons	
Actual P.L. Semi-TrailerTruck	tons	Actual P.L. 3S2 Truck	tons	
Rec. P.L. Semi-TrailerTruck	tons	Rec. P.L. 3S2 Truck	tons	
Rec. P.L. All Vehicles	tons	Actual P.L. All Vehicles	tons	
Posted Vert Clearance On Bridge	ft in		ft	In
Posted Vert UnderClearance	ft in		ft	In
Posted Speed Limit	25 mph			mph
Utility				U
Utility	2 Water			

UNKNOWN

BLANK

LOAD RATING AND POSTING

31) Design Load	5	Evaluation Code	L
63) Operating Rating Type	1	Year of Evaluation	2001
64) Operating Rating	99.0	70) Bridge Posting	5
65) Inventory Rating Type	1	41) Structure Status	A
66) Inventory Rating	65.0	Open, no restriction	A

CONDITION

	Rating	By
58) Deck	7	AF
59) Superstructure	5	6 AF
60) Substructure	7	AF
61) Channel & Chan. Protection	N	N AF
62) Culverts	N	N AF

APPRAISALS

	Rating	By
67) Structure Evaluation	5	6 [illegible]
68) Deck Geometry	3	3 MH
69) Under Clear Vert & Horiz	3	3 MH
71) Waterway Adequacy	N	N MH
72) Approach Rdwy Alignment	6	6 MH
113) Scour Critical		

Items 58 Thru 72 Checked By: [signature]

36) Traffic Safety Features:

A) Bridge Railings	0
B) Transitions	0
C) Approach Guardrail	0
D) Approach Guardrail End	0

OTHER FEATURES

Fence Required	No	Y	
Fence Present	No		
Fence Height	0.0 ft	ft	
Fence Type			
Fence Material			
Fence Top Type			

Barrel Ladder	No
Stand Pipes	No
Cat Walks	No
Movable Inspection System	No
Loose Concrete Checked?	Yes

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2016
Senior	Ron Jantzen
Supervisor	Joseph Kozlowsk

2015

REVIEWED BY: [signature] LT#RI-0 0845 Date 4/3/11

BRIDGE NUMBER	TOWN NAME	NBIS BRG LGTH	
00707	STAMFORD	Yes	71
FACILITY CARRIED	FEATURE CROSSED		
NEWFIELD AVENUE	ROUTE 15		

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
DIVISION OF BRIDGE SAFETY EVALUATION

INVENTORY ROUTE UNDER STRUCTURE EVALUATION

FORM BRI-25 REV 10/00

INSPECTED BY: FERRARA
HOLDRIDGE 3/9/11

REVIEWED BY: DP DATE: 4/18/11

SHEET_____ OF_____ (INSP. REPORT)

IDENTIFICATION

DESCRIPTION:

5) INVENTORY ROUTE:

A) RECORD TYPE	2	
B) ROUTE SIGNING PREFIX	3	State Highway
C) DESIGNATED LEVEL OF SERVICE	1	Mainline
D) ROUTE NO.	00015	
11) MILE POINT (INV.RTE)	11.34	

CLASSIFICATION

26) INV. RTE. FUNCT CLASSIFICATION	12	Urban Principal Arterial -
100) DEFENSE HIGHWAY DESIGNATION	0	Route is not a STRAHNE
** 102) DIRECTION OF TRAFFIC	2	2-way traffic
104) HIGHWAY SYSTEM OF INV. ROUTE	1	On System
110) DESIGNATED NATIONAL NETWORK		ON NATIONAL NETWORK /

AGE & SERVICE

+ 28B) NUMBER OF INV.ROUTE LANES	4	
* 29) ADT (INV. RTE)	66900	66000
* 109) TRUCK ADT % (INV.RTE)	0	01
* 30) YEAR OF ADT (INV. RTE)	2007	2009
* 41) INV ROUTE OPERATIONAL STATUS	R	Posted for other load-ca R
19) BYPASS DETOUR LENGTH	3	Miles

POSTED SIGNS

+ POSTED VERT. CLR UNDER BRIDGE 13ft 4in 00ft 00in

COMMENTS:

~~RT 15 is Logged North. Min.UTCL.N.B is 14'-00. Min.UTCL.SB is 13'-11.~~

GEOMETRIC DATA

+ 10) INV. RTE. MIN. VERT. CLEARANCE	15 ft 5 in	ROUTE 15 NB
+ 47) LOG INV. RTE. TOTAL HORIZ CLR.	27.8 ft 27.75 ft	ROUTE 15 NB
+ 47) RLOG INV. RTE. TOTAL HORIZ CLR.	28.5 ft 28.50 ft	ROUTE 15 SB
✓ + LOG MIN VERT CLR OVER INV ROUTE	13 ft 4 in	ROUTE 15 NB
✓ + RLOG MIN VERT CLR OVER INV ROUTE	13 ft 5 in	ROUTE 15 SB
+ 55) MIN LAT UNDERCLR ON RIGHT	H 3.5 ft	ROUTE 15 SB
+ 56) MIN LAT UNDERCLR ON LEFT OPEN	1 ft	99.9 ft

* FILL OUT ON EVERY INSPECTION 29, 109, 30, 41

\+ VERIFY EVERY INSPECTION 28B, 10, 47, 53, 55, 56 & POSTED VERT CLEARANCE UNDER THE BRIDGE

** MUST BE FILLED OUT OR VERIFIED ON THE FIRST INSPECTION MADE BASED ON THE NEW FHWA GUIDE 102

Abutment Stem Work Sheet

Bridge No.: 0 0707
Town: Stamford
Facility Carried\Feature Intersected: Newfield Avenue over Route 15 {Merritt Parkway}

Abutment Stem No. or Nos.: Abutment Nos. 1 & 2

Abutment Stem Design Type: Full Height\Closed Abutments

Abutment Stem Material Type: Concrete

Abutment Stem Foundation Type: Spread Footings Founded on Soil

Item No. 113 Scour Critical: - N - Bridge Not Over Waterway

Tidal: Yes or No **Rip Rap:** Yes or No

Exposed Footing: Yes or No

Footing Undermining: Yes or No

Sheet Piles - Timber or Steel: Yes or No

Bed Rock: Yes or No **Concrete Apron:** Yes or No

Abutment Stem - In Water or Out of Water - At Normal Stage:

Normal Stage - The water stage prevailing during the greater part of the year.

Comments: Bridge Plans - Project No. 180 - 07 - Year 1936

Prepared By: David Pawlikowski, P.E.
CTDOT - Bridge Safety

Date: April 8, 2011

Connecticut Department of Transportation

Bridge Inspection Report BRI-18

Bridge #: 00707 **Inspection Date: 03/09/2011**

Inspection Type:	Routine	**Previous Inspection Date:**	9/17/2008	**Snooper Required:**	No
Inspection Performed By:	Team 8	**Feature Carried:**	NEWFIELD AVENUE	**Snooper Used:**	No
Town:	STAMFORD	**Feature Intersected:**	ROUTE 15	**Year Built:**	1937
Location:	RT 15 U/NEWFIELD AVENUE	**Main Design:**	Frame (except frame culverts)	**Year Rebuilt:**	1995
Main Material:	Concrete				

Visits

Visit Date:	Temp:	Start Time:	End Time:
3/9/2011	40	9:00:00 AM	2:20:00 PM

Inspectors:

Inspector:	Task:
A. Ferrara	Lead Inspector
D. Pawlikowski	Senior Engineer
M. Holdridge	Inspector

DECK: Concrete Rigid Frame: Rating based on the condition of the bituminous overlay

Inspected west to east.

Overall Rating: 7

	Rating	
OVERLAY:	7	Bituminous Concrete Wearing Surface with Sheet Membrane Waterproofing: Several random transverse and longitudinal cracks open up to approximately 3/8 inch. Several random areas of map cracks. Numerous areas of bituminous concrete raveling.
DECK-STR. CONDITION:	N	The overall rating of item # 58 is based on the condition of the wearing surface per chapter 10.1 of the Ct. Bridge inspector's manual.
CURBS:	7	Numerous random vertical and transverse hairline cracks with and without efflorescence. Several random small surface spalls. Numerous areas of light scale and several random areas medium scale. {1] Isolated large surface spall, approximately 12 inches by 8 inches by 2

		inches deep, located approximately 10 ½ feet from East of the Deck Joint {Northeast Approach Curb}. Curb Reveal at Mid-Span of the R.C. Rigid Frame. South Curb ± 5 ½ inches. North Curb ± 5 inches.
MEDIAN:	N	-
SIDEWALKS:	N	-
PARAPET:	7	Railbases: Numerous random vertical and transverse hairline cracks with and without efflorescence. Numerous areas of light scale and several random areas medium scale. {1} Isolated large surface spall, approximately 12 inches by 12 inches by 3 inches deep, with wood inclusion located on the north side of the south railbase near the west leg of the R.C. Rigid Frame. Parapets\Pylons\Precast Ornaments: Several random vertical, transverse and horizontal hairline cracks with and without efflorescence. Several random small surface spalls. Numerous areas of light scale and several random areas medium scale. Concrete Rub Finish exhibits several random areas of hairline crack with and without efflorescence; and numerous random areas of peeling and flaking.
RAILING:	N	-
PAINT:	N	-
FENCE:	N	-
DRAINS:	N	-
LIGHTING STANDARD:	N	-
UTILITIES TYPE/SIZE:	N	{6} 4 inch diameter Fiberglass Ducts {unknown} located in the R.C. Rigid Frame Arch under the West Bound Lane of Newfield Avenue; not visible.
CONSTR JOINTS:	7	R.C. Rigid Frame Intrados Longitudinal Construction Joint exhibits several random "D" hairline cracks.
EXPANSION JOINTS:	5	Bituminous Concrete Sawed and Sealed. East expansion joint exhibits several random "D" cracks. Areas of map cracks and bituminous concrete spalled areas located adjacent to and along the expansion joint. West expansion joint is installed in the wrong location; transverse crack extending the full width of roadway, open up to approximately 1 inch. Several random "D" cracks. Areas of map cracks and bituminous concrete spalled areas located adjacent to and along the transverse crack.

59. SUPERSTRUCTURE:	Superstructure is in satisfactory condition.	Overall Rating:	6

	Rating	
BEARING DEVICES:	N	-
STRINGERS:	N	-
GIRDERS:	6	R.C. Rigid Frame with Epoxy Coated Rebar. R.C. Rigid Frame Intrados {Underside} Numerous random transverse hairline cracks. Crack width varies from approximately 0.001 inch to 0.013 inch. Crack length varies from approximately 3 inches to 25 feet 4 inches; by appearance transverse hairline cracks follow the rebar chairs. Transverse Crack Monitoring: Location "A" – Crack Width 0.013 inch – Crack Length 15 feet 00 inches Location "B" – Crack Width 0.013 inch – Crack Length 15 feet 6 inches Location "C" – Crack Width 0.005 inch – Crack Length 17 feet 11 inches Location "D" – Crack Width 0.010 inch – Crack Length 25 feet 4 inches Random transverse hairline cracks located in the intrados extent vertically into the end face of the R.C. Rigid Frame. Vertical crack width is approximately 0.001 inch. Vertical crack height varies up to approximately 41 inches. Several random short longitudinal hairline cracks located the R.C. Rigid Frame Spring Line; crack length varies up to approximately 42 inches. {1} Isolated diagonal hairline crack located at the West Frame Leg spring line and near the south side of the structure {southwest corner}. Longitudinal Construction Joint exhibits several random "D" hairline cracks.
FLOOR BEAMS:	N	-
TRUSSES-GENERAL:	N	-
TRUSSES-PORTALS:	N	-
TRUSSES-BRACING:	N	-
PAINT:	N	-
RUST:	N	-
MACHINERY MOV SPAN:	N	-
RIVETS & BOLTS:	N	-
WELDS - CRACKS:	N	-
TIMBER DECAY:	N	-
CONCRETE CRACKING:	6	See above items..
COLLISION DAMAGE:	8	-

MEMBER ALIGNMENT:	8	-
DEFLECT. 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:	Substructure is in good condition.	**Overall Rating:**	7

	Rating	
ABUTMENTS-STEM:	7	R.C. Rigid Frame Legs: Several isolated vertical and horizontal hairline cracks. Several random areas of light scale. A few small surface spalls and map hairline cracks
ABUTMENTS-BACKWALL:	N	-
ABUTMENTS-FOOTINGS:	6	Footings\Curbs exhibits: Several random vertical and transverse hairline cracks. Numerous areas of light scale. Several random areas of medium scale and small surface spalls. Several random areas of snow plow damage {minor scrapes}.
ABUTMENTS-SETTLEMENT:	8	-
ABUTMENTS-WINGWALLS:	7	Wingwalls exhibits several random vertical hairline cracks with and with efflorescence. Small surface spalls and areas of map hairline cracks with and without efflorescence. Pylons exhibit several random horizontal hairline cracks with and with efflorescence. Small surface spalls and areas of map hairline cracks with and without efflorescence.
PIERS/BENTS-CAPS:	N	-
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	N	-
PIERS/BENTS-FOOTING:	N	-
PIERS/BENTS-	N	-

SETTLMT:		
EROSION-SCOUR:	N	
CONCRETE CRACK-SPALL:	7	See above items.
STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION DAMAGE:	8	-
DEBRIS:	N	-

61. CHANNEL & CHANNEL PROTECTION: -

Overall Rating: N

62. CULVERTS & RETAINING WALL: -

Overall Rating: N

65. APPROACH CONDITION

Overall Rating: 6

	Rating	
APPROACH SLAB:	N	
RELIEF JOINTS:	N	-
APPROACH GUIDE RAIL:	7	Metal Beam Rail Type R-B with Steel Offset Brackets: Metal beam rail exhibits several random areas of scrapes and minor dents. Anchor bolt nuts located on the transitions between the parapets and approach guide rail exhibits moderate to heavy laminar rust with negligible section loss.
APPROACH PAVEMENT:	6	Bituminous concrete approach pavement exhibits: Several random transverse and longitudinal cracks open up to approximately 1/2 inch. Several random areas of map cracks. Numerous areas of bituminous concrete raveling. Several random areas of bituminous concrete patched areas.

APPROACH EMBANKMENT:	8	-

TRAFFIC SAFETY FEATURES

	Rating
BRIDGE RAILINGS:	Last Inspection: 0 Current: -
TRANSITIONS:	Last Inspection: 0 Current: -
APPROACH GUARDRAILS:	Last Inspection: 0 Current: -
APPR. GUARDRAIL ENDS:	Last Inspection: 0 Current: -

66. LOAD POSTING

	- Posted Loading -	
SINGLE UNIT (TONS):	Last Inspection: - Current: -	-
SEMI TRAILER (TONS):	Last Inspection: - Current: -	-
4 AXLE (TONS):	Last Inspection: - Current: -	-
3S2 (TONS):	Last Inspection: - Current: -	-
ADVANCE WARNING (Y/N):	-	-
LEGIBILITY:	-	-
VISIBILITY/LOCATION:	-	-

67.

MISCELLANEOUS

	Rating	
MIN. VERT. UNDERCLEARANCE:	Last Inspection: 13' 11" Current: -' -"	-
POSTED CLR. UNDER BRIDGE:	Last Inspection: -' -" Current: -' -"	-
POSTED CLR. ON BRIDGE:	Last Inspection: -' -" Current: -' -"	-
ADVANCED WARNING (YES/NO):	No	-
SPEED LIMIT (IF ANY):	Last Inspection: 25 Current: -	-
CHARACTER OF TRAFIC:		Light to moderate traffic.

ADDITIONAL NOTES:

Bridge identification number is clear and legible.

The bridge is logged from west to east, which is consistent with the previous inspection report.

Traffic protection was provided by New Canaan Maintenance Garage.

ADDITIONAL COMMENTS:

Inspectors' Signatures:

1) Andrew Ferrara Date: 4/18/11

2) [signature] Date: 4/18/11

3) [signature] Date: 4/18/11

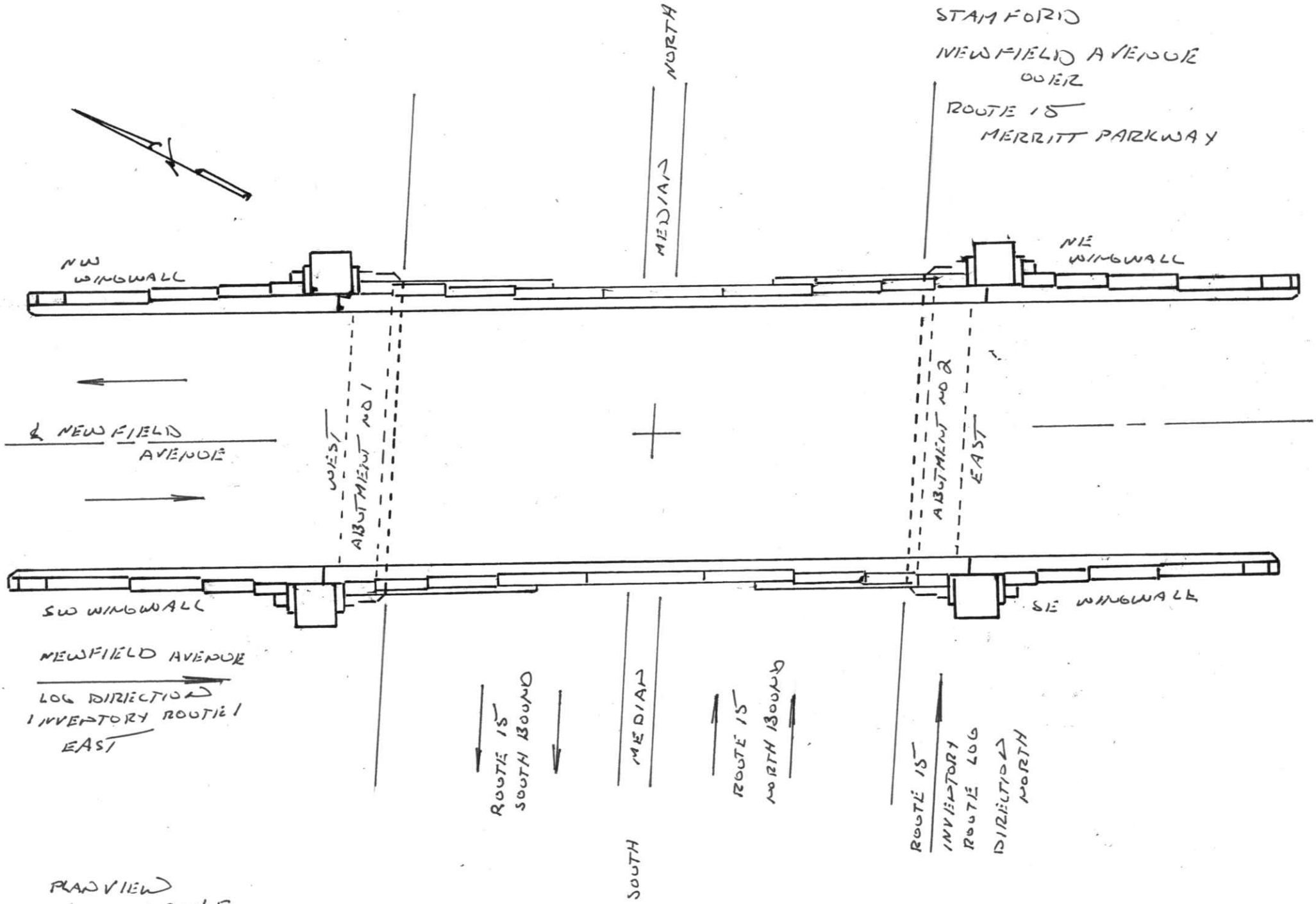
4) Date: ----/----/-----

P.E. Signature: [signature] Date: 4/18/11

P.E. #: 20847 Date: 4/18/11

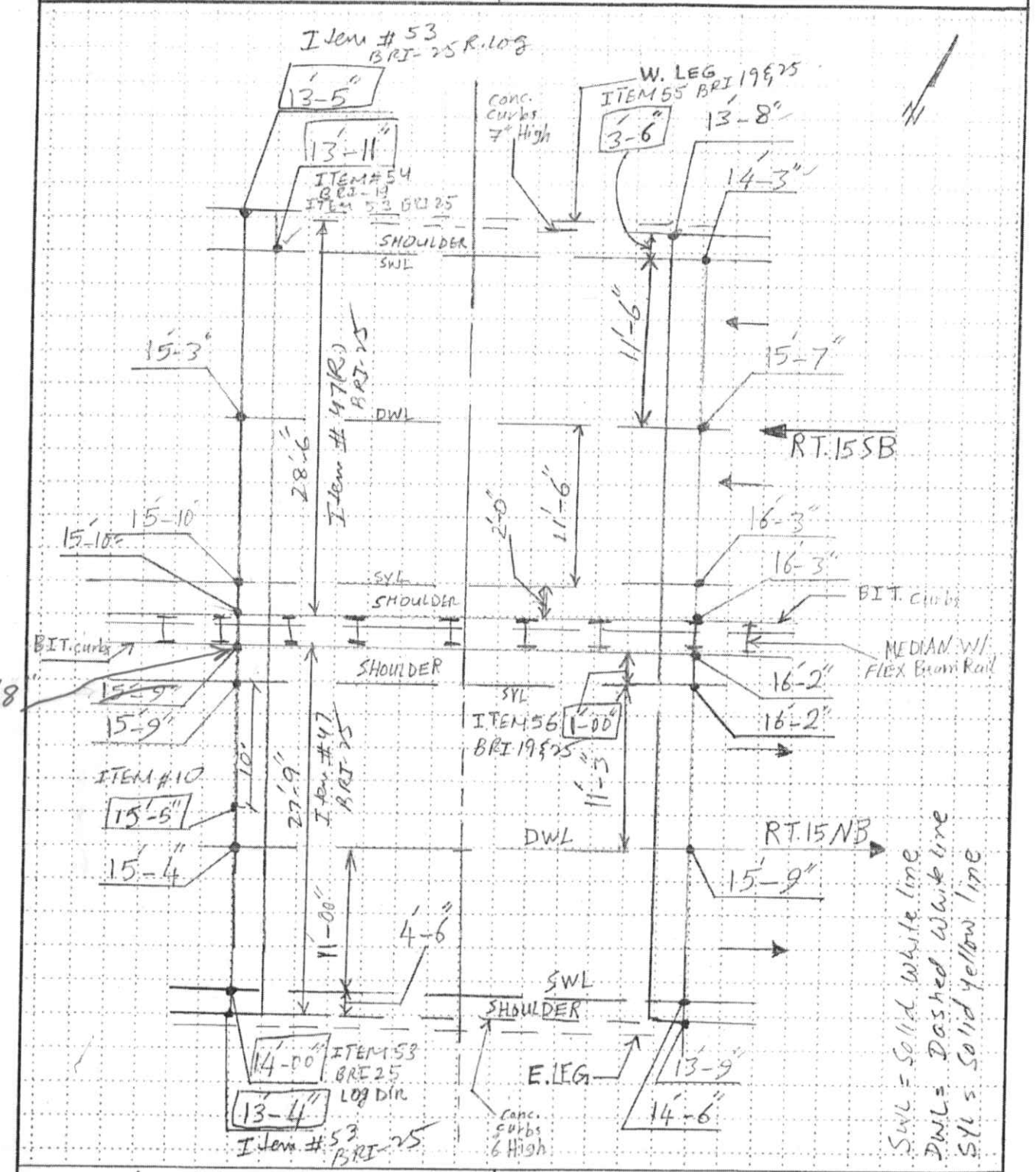
Reviewed by: conndot Date: 4/18/11

BRIDGE NO 00707
STAMFORD
NEWFIELD AVENUE
OVER
ROUTE 15
MERRITT PARKWAY



PLAN VIEW
NOT TO SCALE

AI Engineers, Inc.	JOB NO. 170-2357	BRIDGE NO: 00707
	DATE: 7/26/06	SHEET ~~2 OF 10~~
FIELD NOTES	2RI, BNS	
DESCRIPTION: RTE 15 C/EMBANKE		

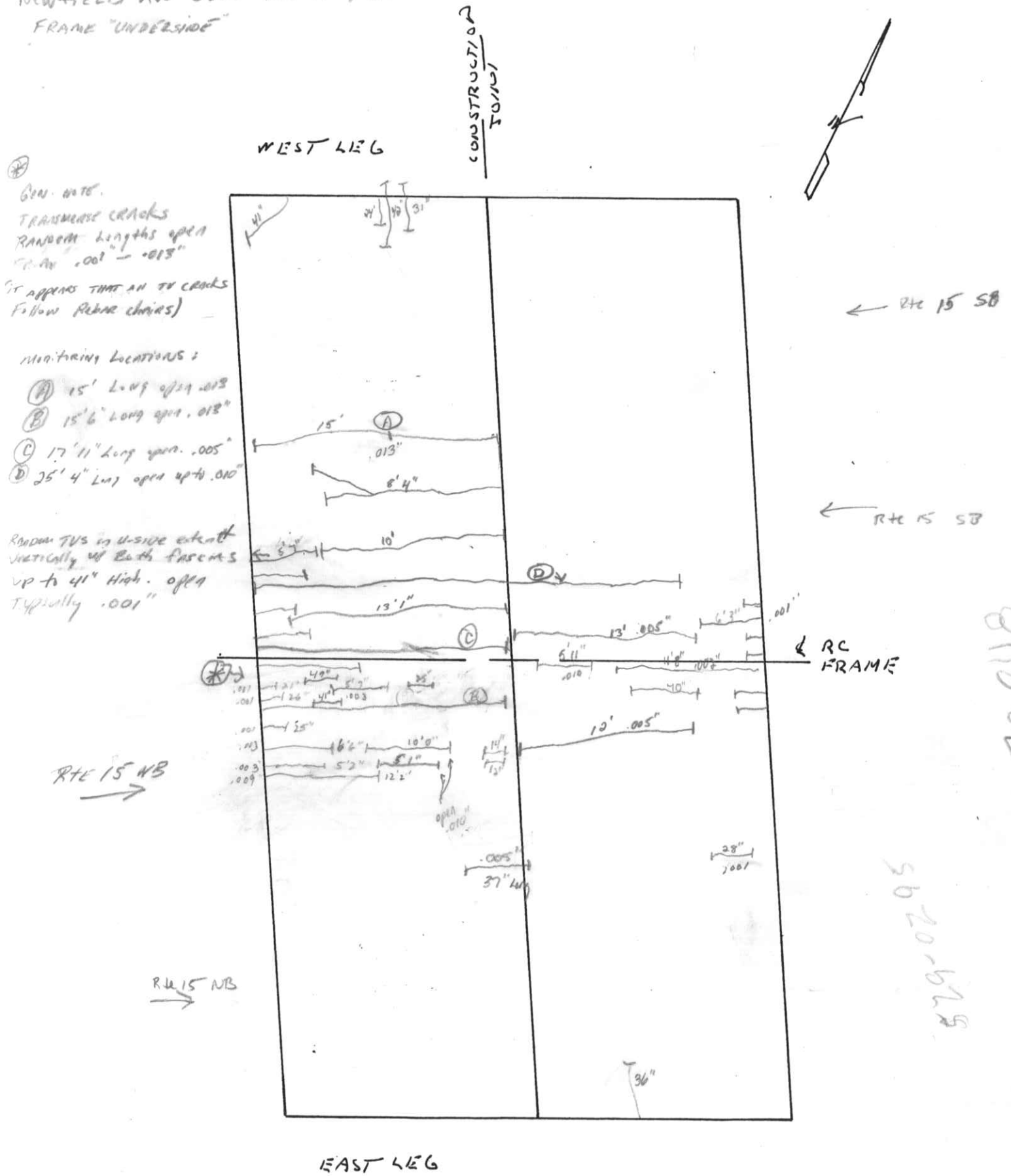


Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	9/17/08	TM5		2	3/9/11	TM8	SEE CHANGE

3/9/11 #00707

NEWFIELD AVE OVER RTE 15, STAMFORD

FRAME "UNDERSIDE"



(*) GEN. NOTE.
TRANSVERSE CRACKS
RANDOM Lengths open
FROM .001" – .013"
(IT APPEARS THAT ALL TV CRACKS
Follow Rebar chairs)

Monitoring Locations:

(A) 15' Long open .013
(B) 15'6" Long open .013"
(C) 17'11" Long open .005"
(D) 25'4" Long open up to .010"

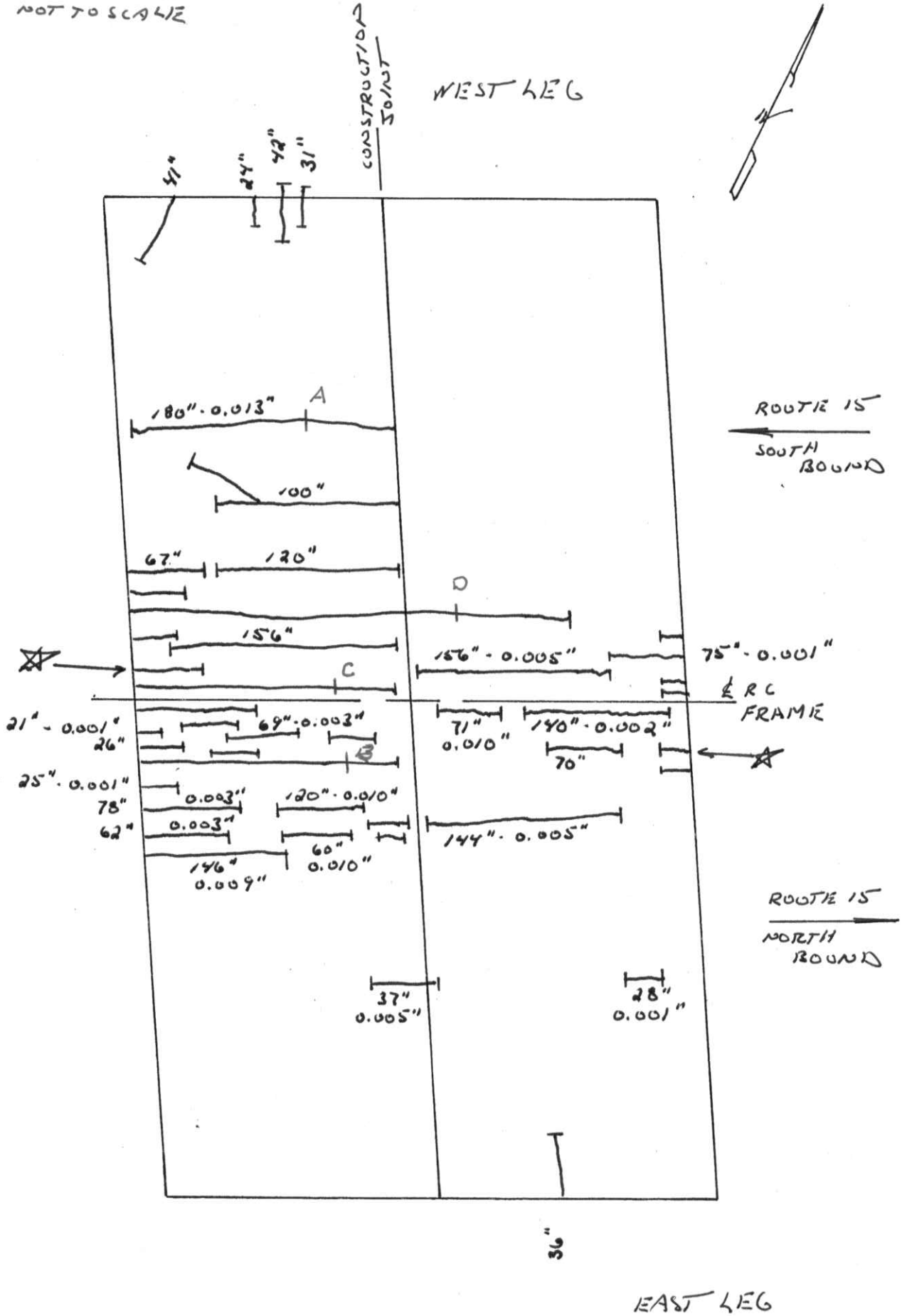
Random TVS in U-side extent
vertically up Both fascias
up to 41" High. open
Typically .001"

70,848

579-0295

RC FRAME - INTRADOS MARCH 9, 2011

PLAN VIEW
NOT TO SCALE



BRIDGE NO. 0 0707 - STAMFORD - NEWFIELD AVENUE OVER ROUTE 15

BRIDGE NO. 00707 - STAMFORD - NEWFIELD AVENUE OVER ROUTE 15

RC FRAME - INTRADOS - NOTES

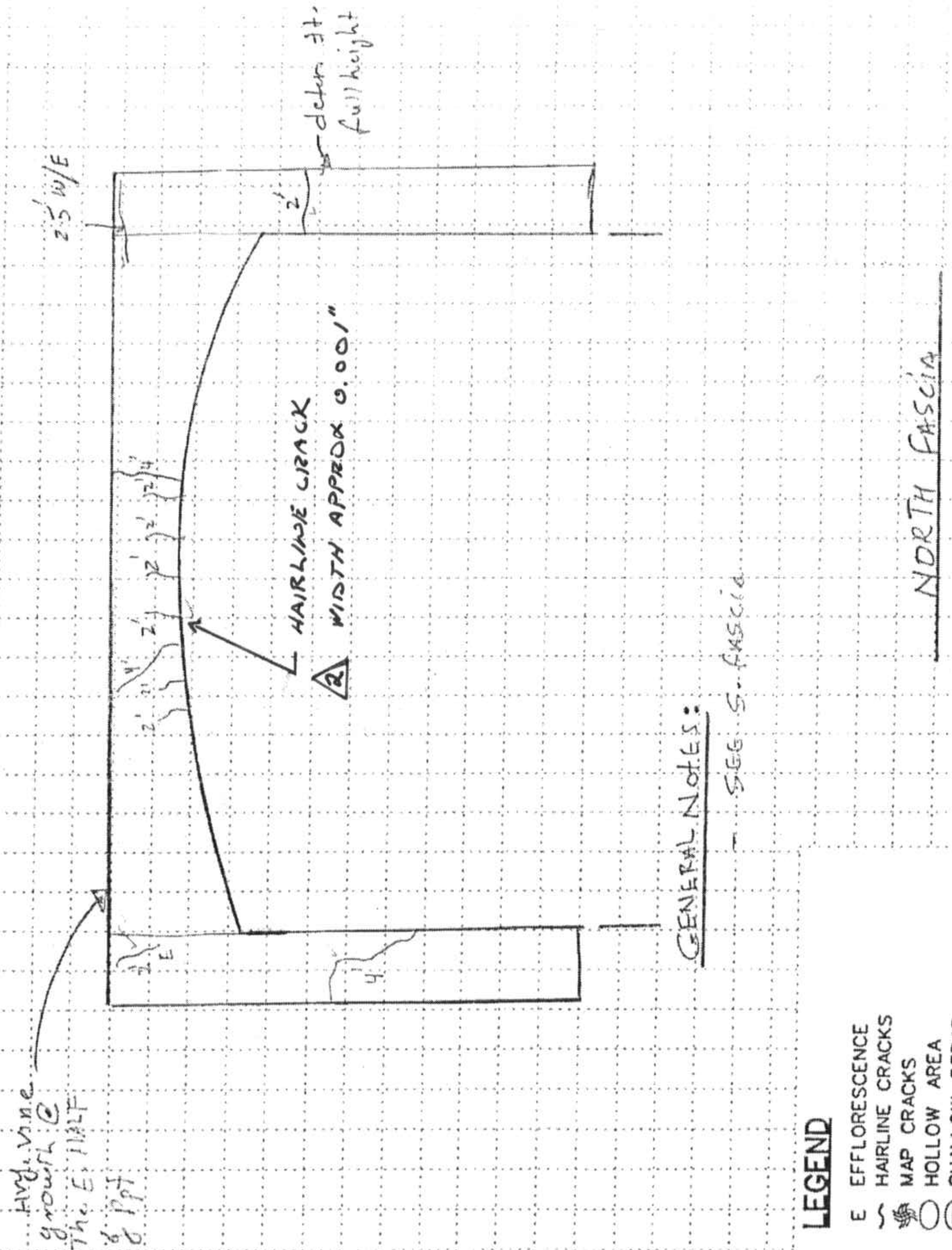
INTRADOS MONITORING POINTS

LOCATION	3.9.11 CRACK WIDTH	3.9.11 CRACK LENGTH	CRACK WIDTH	CRACK LENGTH	CRACK WIDTH	CRACK LENGTH
A	0.013"	15'-00"				
B	0.013"	15'-6"				
C	0.005"	17'-11"				
D	0.010"	25'-4"				

NOTES: TRANSVERSE HAIRLINE CRACKS - RANDOM LENGTHS - OPEN APPROX 0.001" to 0.013"
BY APPEARANCE TRANSVERSE HAIRLINE CRACKS FOLLOW REBAR CHAIRS

☆ - RANDOM TRANSVERSE HAIRLINE CRACKS LOCATED IN THE INTRADOS EXTENT VERTICALLY INTO THE RC RIGID FRAME END FACE - VERTICAL HAIRLINE CRACKS ARE UP TO APPROX 41 inches HIGH & OPEN APPROX 0.001"

AI Engineers, Inc.	JOB NO. 170-2357	BRIDGE NO: 00707
	DATE: 7/27/06	SHEET
FIELD NOTES	CREW: BNS, ZRT	
DESCRIPTION: SUPERSTRUCTURE		

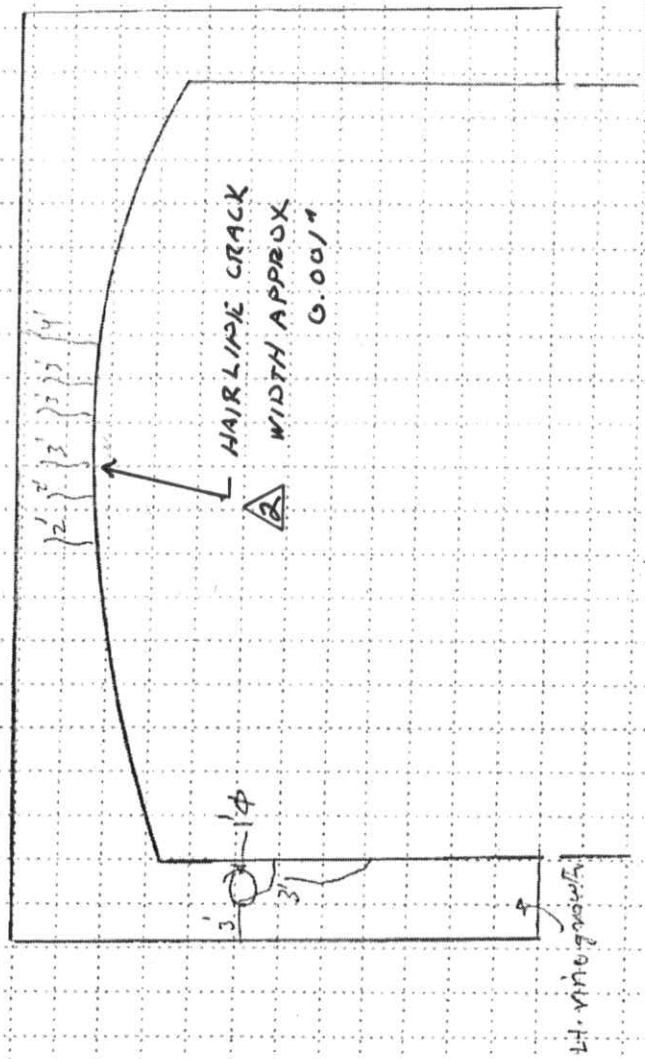


LEGEND

- E EFFLORESCENCE
- HAIRLINE CRACKS
- MAP CRACKS
- HOLLOW AREA
- SHALLOW REBAR
- SCALE AREA
- SPALL AREA
- SPALL AREA w/EXPOSED REBAR
- HONEY COMBING

Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	9-17-08	TMS					
2	3.9.11	TM 8	CTDOT				

AI Engineers, Inc.	JOB NO. 170-2357	BRIDGE NO: 00707
	DATE: 7/26/06	SHEET
FIELD NOTES	CREW: BNS, ZRT	
DESCRIPTION: SUPERSTRUCTURE		



General Notes:

- Random VT. Hairline cracks w/ Effl. @ exterior side of conc. Rt. Rail Base Typ.

SOUTH FASCIA

LEGEND

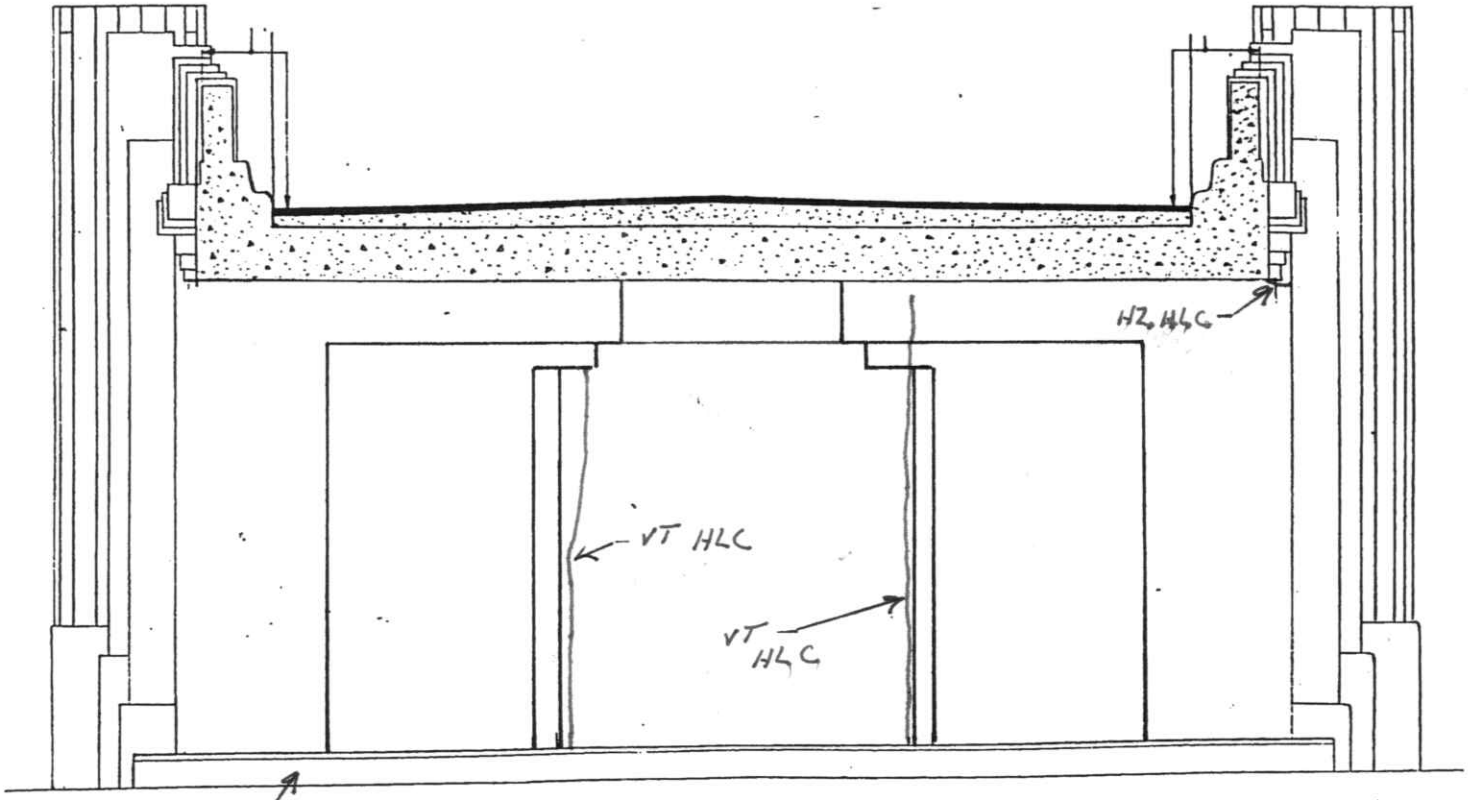
- E EFFLORESCENCE
- HAIRLINE CRACKS
- MAP CRACKS
- HOLLOW AREA
- SHALLOW REBAR
- SCALE AREA
- SPALL AREA
- SPALL AREA w/EXPOSED REBAR
- HONEY COMBING

Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	9-17-08	TMS					
2	3.9.11	TM 8	CTDOT				

BRIDGE NO 0 0 707 - STAMFORD - NEWFIELD AVENUE OVER ROUTE 15

MARCH 9, 2011

RC FRAME LEG - AREAS OF LIGHT SCALE & SMALL SURFACE SPALLS



CURB - VERTICAL & TRANSVERSE HAIRLINE CRACKS
AREAS OF LIGHT SCALE & SMALL SURFACE SPALLS

EAST RC FRAME LEG

ELEVATION VIEW

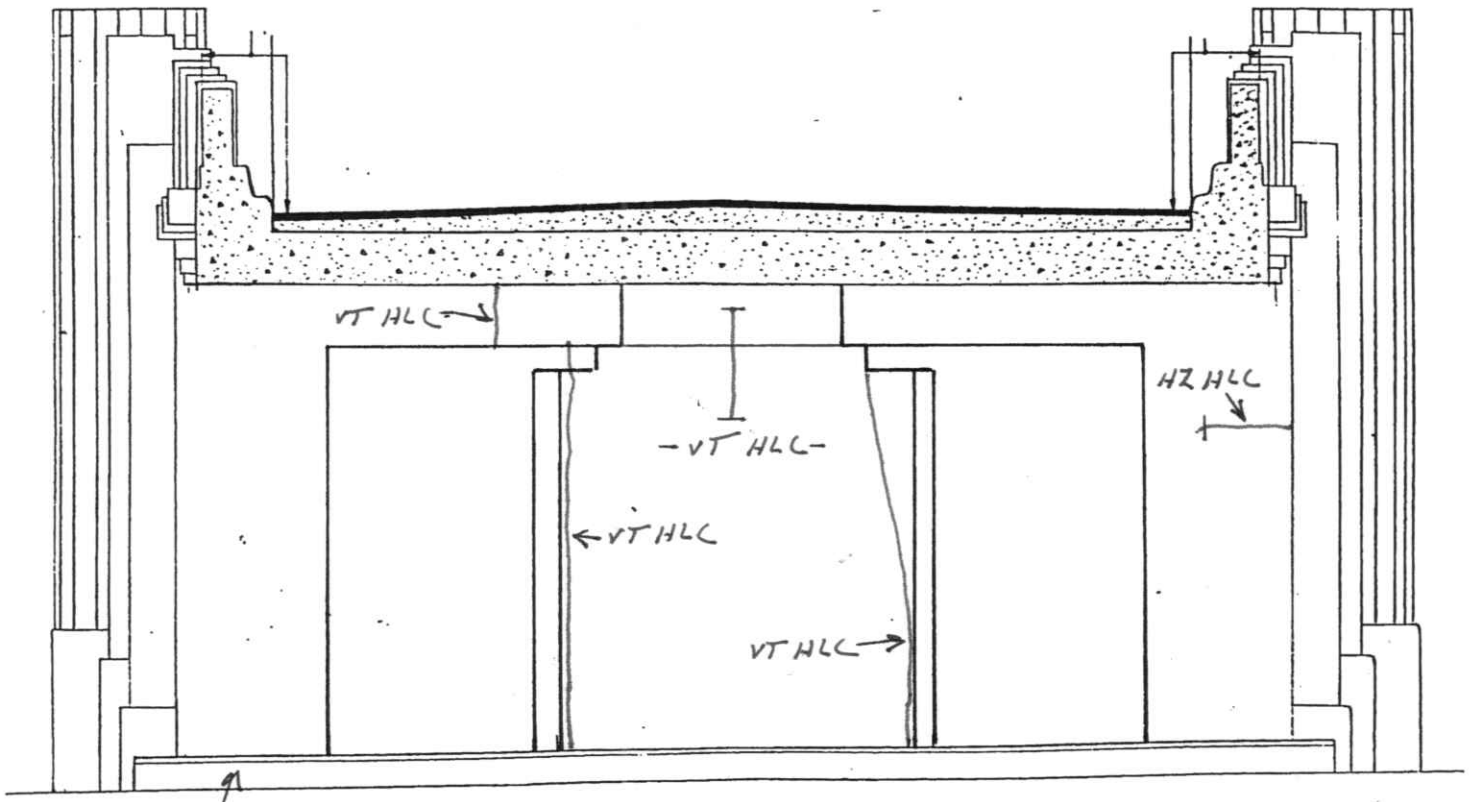
NOT TO SCALE

PREPARED BY: D PAWLIKOWSKI PE - CT DOT - BRIDGE SAFETY 4 8 11

BRIDGE NO 00707 - STAMFORD - NEWFIELD AVENUE OVER ROUTE 15

MARCH 9, 2011

RC FRAM LEG - AREAS OF LIGHT SCALE & SMALL SURFACE SPALLS



CURB - VERTICAL & TRANSVERSE HAIRLINE CRACKS
AREAS OF LIGHT SCALE & SMALL SURFACE SPALLS

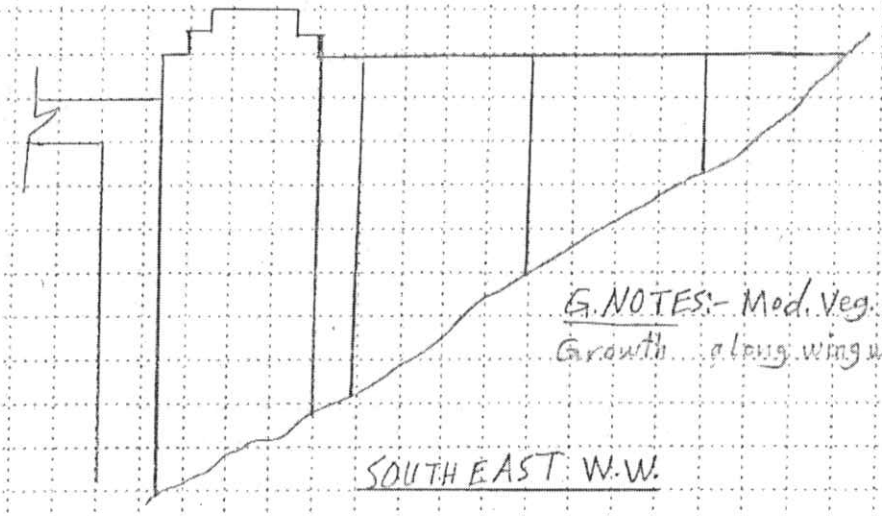
WEST RC FRAME LEG

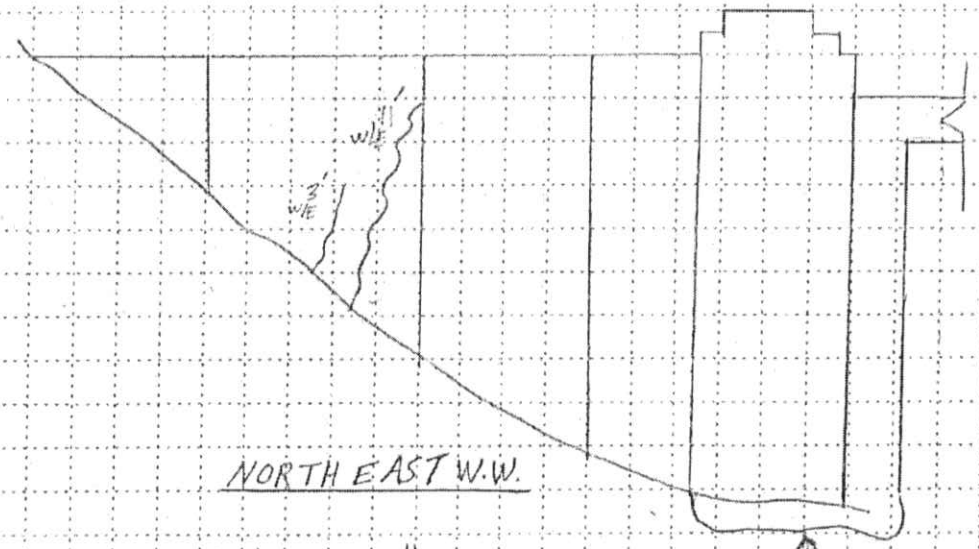
ELEVATION VIEW

NOT TO SCALE

PREPARED BY: D PAWLIKOWSKI PE - CTDOT - BRIDGE SAFETY - 4/8/11

AI Engineers, Inc.	JOB NO. 170-2357	BRIDGE NO: 00707
	DATE: 7/27/06	SHEET
FIELD NOTES	ZRI, BNS	
DESCRIPTION: SUBSTRUCTURE		



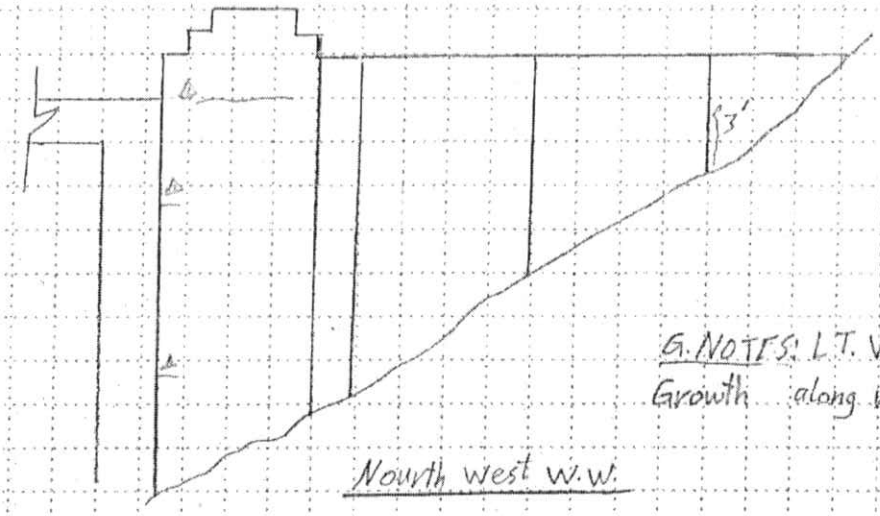


LEGEND

- E EFFLORESCENCE
- HAIRLINE CRACKS
- MAP CRACKS
- HOLLOW AREA
- SHALLOW REBAR
- SCALE AREA
- SPALL AREA
- SPALL AREA w/EXPOSED REBAR
- HONEY COMBING

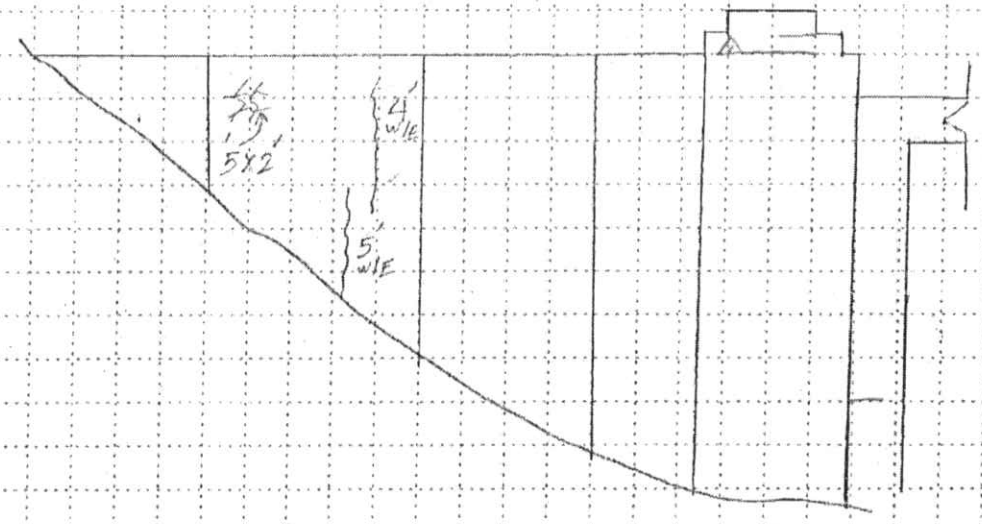
Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	9-17-08	TM5					
	3.9.11	TM 8	CTDOT				

AI Engineers, Inc.	JOB NO. 170-2357	BRIDGE NO: 00707
	DATE: 7/26/06	SHEET
FIELD NOTES	ZRL, BNS	
DESCRIPTION: SUBSTRUCTURE		



G. NOTES: LT. Veg. & vine Growth along wingwall

North west W.W.



South West W.W.

G. NOTES: -
LT. Veg. & Vine Growth along wing wall

LEGEND
- E EFFLORESCENCE
- HAIRLINE CRACKS
- MAP CRACKS
- HOLLOW AREA
- SHALLOW REBAR
- SCALE AREA
- SPALL AREA
- SPALL AREA w/EXPOSED REBAR
- HONEY COMBING

Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	9-17-08	TM5					
	3.9.11	TM8	CTSOT				

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 00707 | Agency ID: 00707 | Sufficiency Rating: 72.0

IDENTIFICATION

State 1: 09 Connecticut | Struc Num 8: 00707
Facility Carried 7: NEWFIELD AVENUE | Location 9: 1.2 MI S OF ROUTE 106
Rte.(On/Under)5A: Route On Structure | Rte. Signing Prefix 5B: 5 City Street
Level of Service 5C: 0 None of the below | Rte. Number 5D: 00000
Directional Suffix 5E: 0 N/A (NBI) | % Responsibility : 0
SHD District 2: 03 | County Code 3: Fairfield
Place Code 4: STAMFORD | Mile Post 11: 3.440 mi
Feature Intersected 6: ROUTE 15
Latitude 16: 41d 06' 54" | Longitude 17: 073d 32' 06"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99: NA

INSPECTION

Frequency 91: 24 months | Inspection Date 90: 3/9/2011 | Next Inspection: 03/09/2013
FC Frequency 92A: NA | FC Inspection Date 93A: NA | Next FC Inspection: NA
UW Frequency 92B: NA | UW Inspection Date 93B: NA | Next UW Inspection: NA
SI Frequency 92C: 24 months | SI Date 93C: 3/9/2011 | Next SI: 3/9/2013
Element Frequency: 24 months | Element Inspection Date: 03/09/2011 | Next Elem. Insp. Due: 03/09/2013

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy | Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic | Temporary Structure 103: Unknown (NBI)
Highway System 104: 0 Not on NHS | NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road | Functional Class 26: 16 Urban Minor Arterial
Historical Significance 37: 1 Br on Natl Reg Hist Pl
Owner 22: 01 State Highway Agency
Custodian 21: 01 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 | Number of Spans Main Unit 45: 1
Main Span Material/Design 43A/B:
1 Concrete | 07 Frame
Deck Type 107: 1 Concrete-Cast-in-Place
Wearing Surface 108A: 6 Bituminous
Membrane 108B: 2 Preformed Fabric
Deck Protection 108C: 1 Epoxy Coated Reinforci

CONDITION

Deck 58: 7 Good | Super 59: 6 Satisfactory | Sub 60: 7 Good
Culvert 62: N N/A (NBI) | Channel/Channel Protection 61: N N/A (NBI)

LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor | Operating Rating Method 63: 1 LF Load Factor
Inventory Rating 66: HS36.1 | Operating Rating 64: HS61.2
Design Load 31: 5 MS 18 (HS 20) | Posting 70: 5 At/Above Legal Loads
Posting status 41: A Open, no restriction

AGE AND SERVICE

Year Built 27: 1937 | Year Reconstructed 106: 1995
Type of Service on 42A: 1 Highway
Type of Service under 42B: 1 Highway
Lanes on 28A: 2 | Lanes Under 28B: 4 | Detour Length 19: 2.0 mi
ADT 29: 9,548 | Truck ADT 109: 3 % | Year of ADT 30: 2011

APPRAISAL

Bridge Rail 36A: 0 Substandard | Approach Rail 36C: 0 Substandard
Transition 36B: 0 Substandard | Approach Rail Ends 36D: 0 Substandard
Str. Evaluation 67: 6 | Deck Geometry 68: 3 Intolerable - Correct
Underclearance, Vertical and Horizontal 69: 3 Intolerable - Correct
Waterway Adequacy 71: N Not applicable | Approach Alignment 72: 6 Equal Min Criteria
Scour Critical 113: N Not Over Waterway

GEOMETRIC DATA

Length Max Span 48: 62.2 ft | Structure Length 49: 62.2 ft
Curb/Sdwlk Wdth L 50A: 0.6 ft | Curb/Sidewalk Width R 50B: 0.6 ft
Width Curb to Curb 51: 30.0 ft | Width Out to Out 52: 35.0 ft
Approach Roadway Width 32: 28.0 ft (w/ shoulders) | Median 33: 0 No median
Deck Area: 2,176.7 sq. ft
Skew 34: 5.00 ° | Structure Flared 35: 0 No flare
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct
Minimum Vertical Underclearance 54B: 13.9 ft
Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct
Minimum Lateral Undrclearance R 55: 3.5 ft
Minimum Lateral Undrclearance L 56: 327.8 ft

PROPOSED IMPROVEMENTS

Bridge Cost 94: $ 1,000 | Type of Work 75: 38 Other Structural
Roadway Cost 95: $ 1,000 | Length of Improvment 76: 0.3 ft
Total Cost 96: $ 2,000 | Future ADT 114: 2,800
Year of Cost Estimate 97: 2000 | Year of Future ADT 115: 2019

NAVIGATION DATA

Navigation Control 38: N NA-no waterway
Vertical Clearance 39: 0.0 ft | Horizontal Clearance 40: 0.0 ft
Pier Protection 111: Unknown (NBI) | Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT0	144/3	R/Conc Arch	(LF)	55	73 %	40	27 %	15	0 %	0	0 %	0	0 %	0
UNIT0	215/3	R/Conc Abutment	(LF)	110	98 %	108	2 %	2	0 %	0	0 %	0	0 %	0
UNIT0	301/3	Pourable Joint Seal	(LF)	60	100 %	60	0 %	0	0 %	0	0 %	0	0 %	0
UNIT0	331/3	Conc Bridge Railing	(LF)	292	100 %	292	0 %	0	0 %	0	0 %	0	0 %	0

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 1:
View east.

Photo # 2:
Approach metal beam rail, eastbound.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 3:
South parapet.

Photo # 4:
South parapet.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 5:
West approach wearing surface.

Photo # 6:
Transverse crack at the west deck end.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 7:
Eastbound wearing surface.

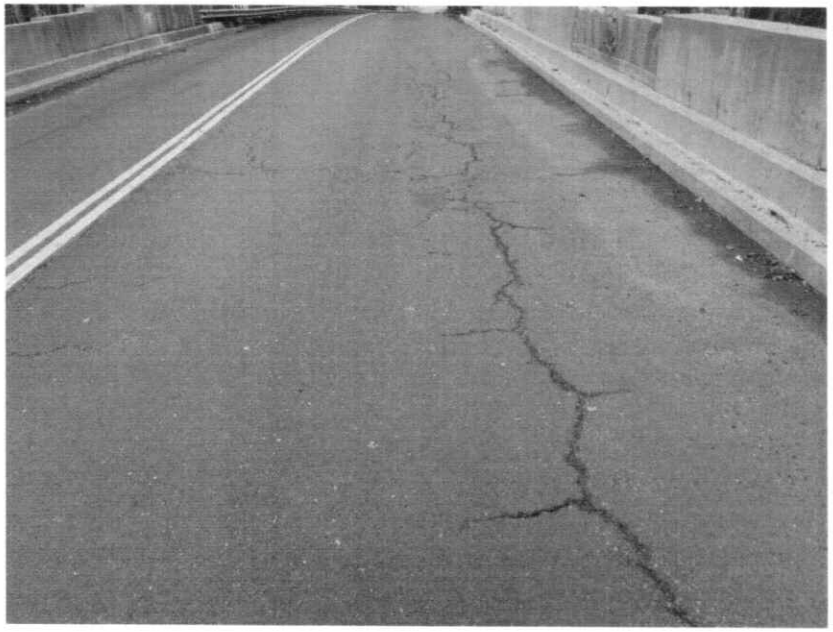


Photo # 8:
Westbound wearing surface.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 9:
Transverse cracks at the east deck end.

Photo # 10:
View west.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

Photo # 11:
Approach metal beam rail, westbound.

Photo # 12:
North parapet.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

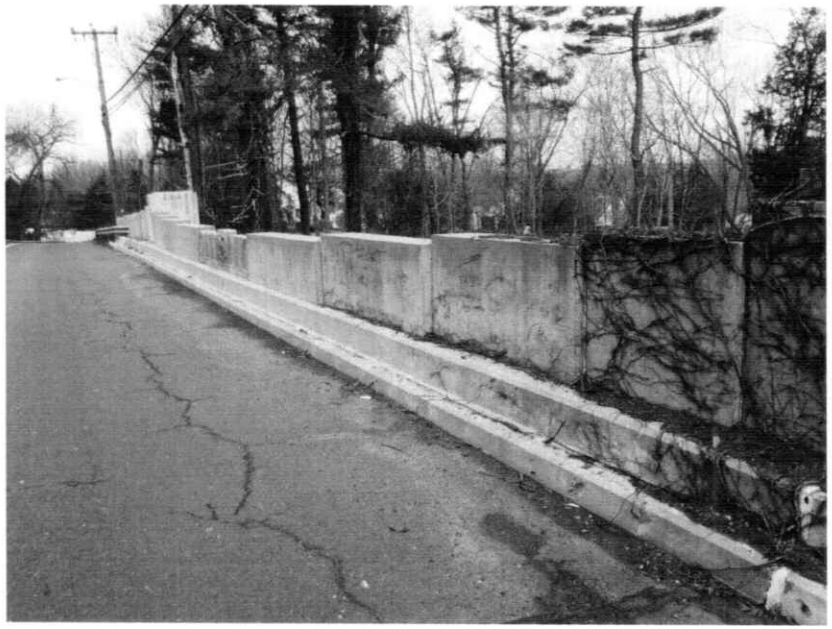


Photo # 13:
North parapet.

Photo # 14:
East approach wearing surface.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

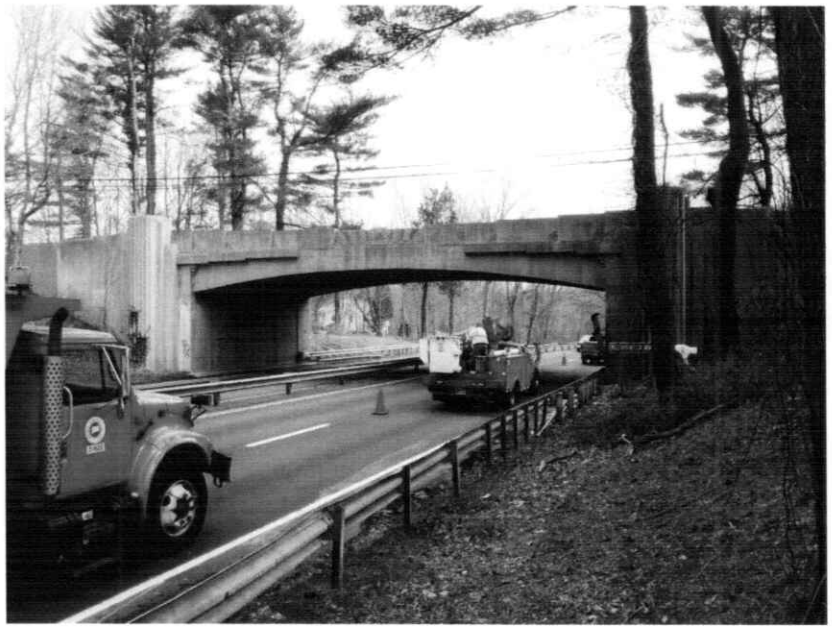


Photo # 15:
South elevation.

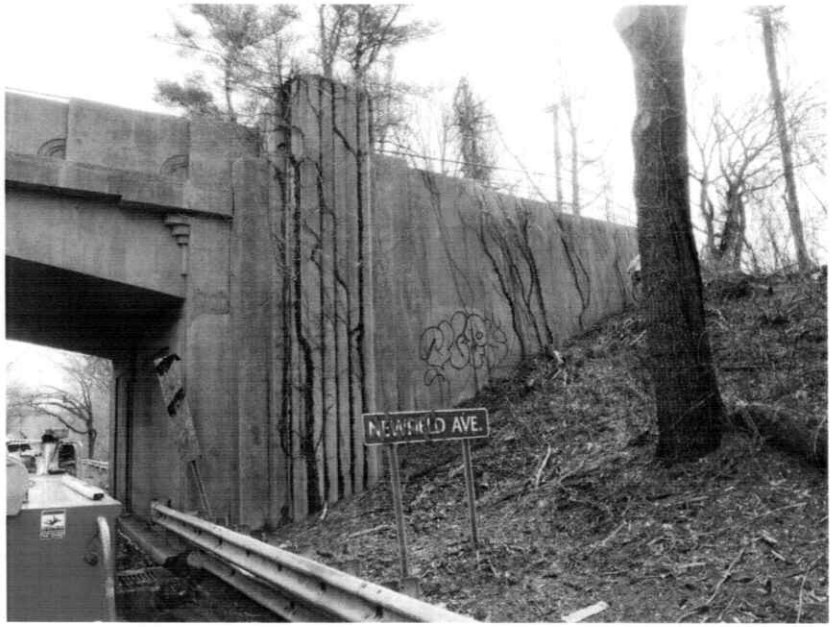


Photo # 16:
Southeast wingwall.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

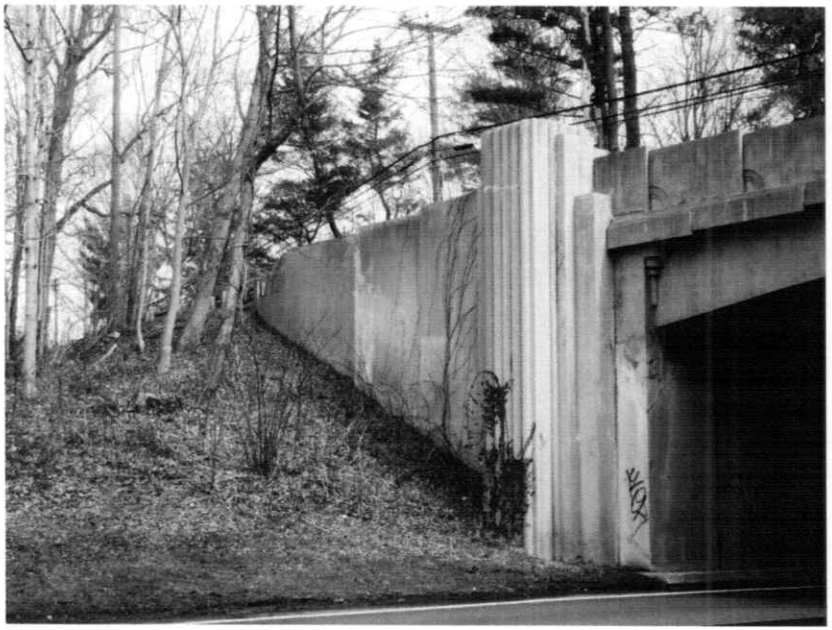


Photo # 17:
Southwest wingwall.

Photo # 18:
North elevation.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

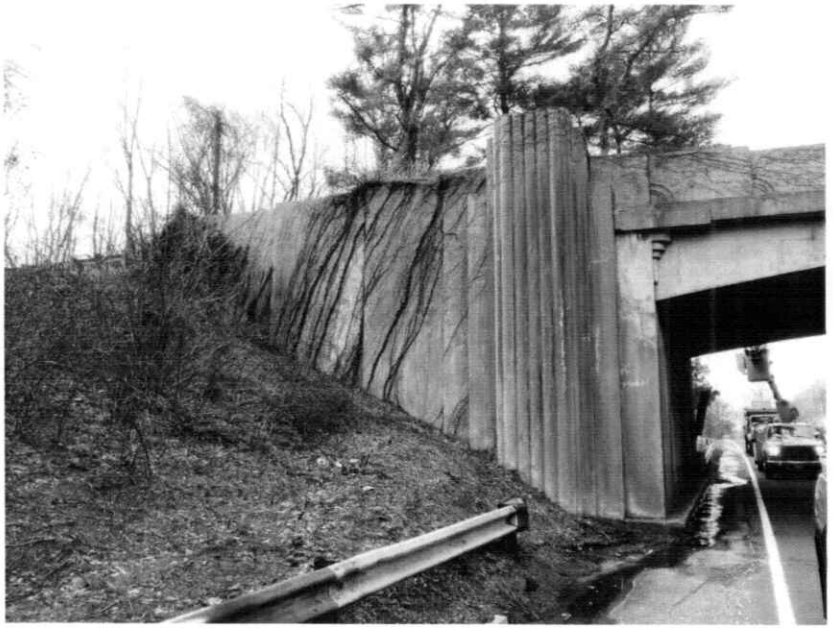


Photo # 19:
Northeast wingwall.

Photo # 20:
Northwest wingwall.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

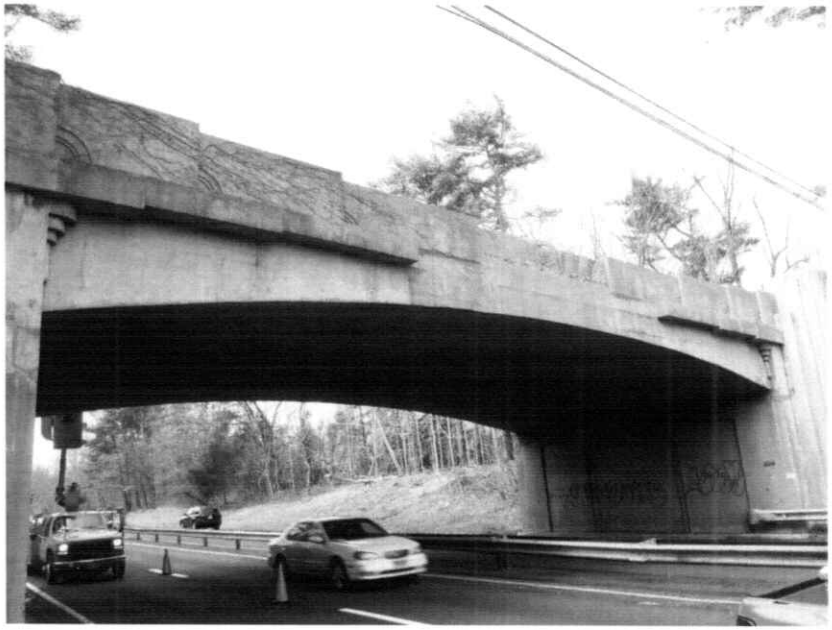


Photo # 21:
North fascia.

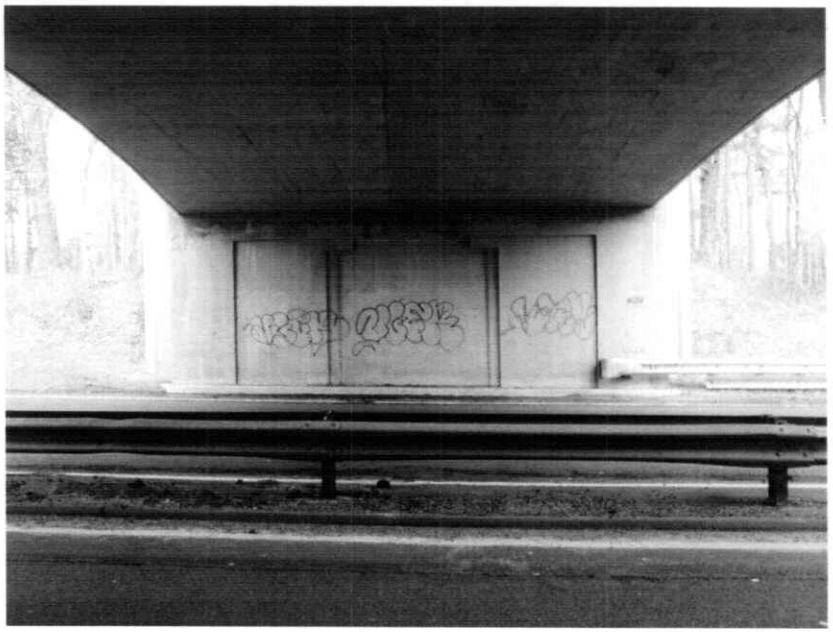


Photo # 22:
West frame leg/abutment.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

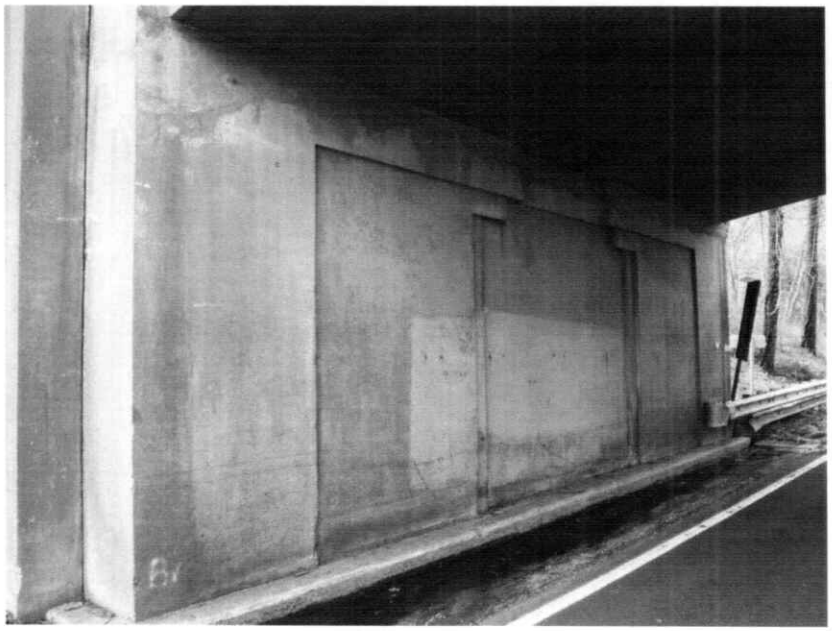


Photo # 23:
East frame leg/abutment.

Photo # 24:
General underside photo.

Bridge No.	00707	**Inspected by:**	Andrew Ferrara
Town:	Stamford	**Inspected by:**	Mike Holdridge
Feature Carried:	Newfield Avenue	**Date Inspected:**	03/09/2011
Feature Crossed:	Rte-15	**Project No.:**	

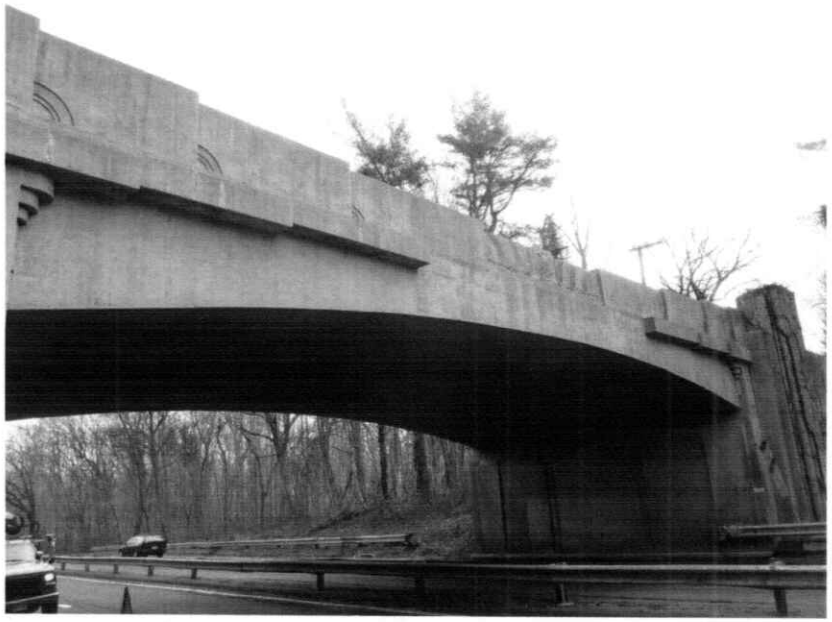


Photo # 25:
South fascia.

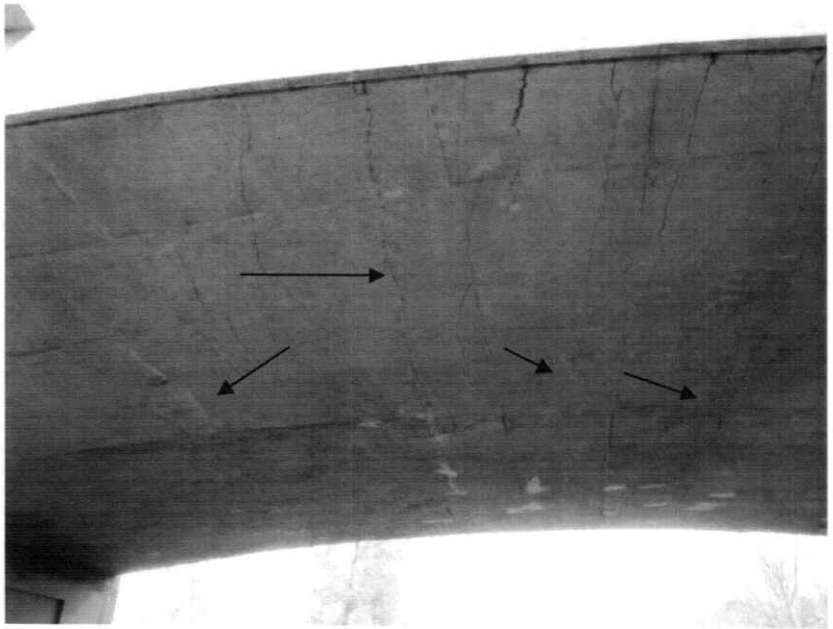


Photo # 26:
Overview of transverse cracks being monitored on underside.