

**SHILOH BRIDGE
TYLER COUNTY, WEST VIRGINIA
STATE PROJECT S348-14/4-0.27
FEDERAL PROJECT BR-0144(003)D**



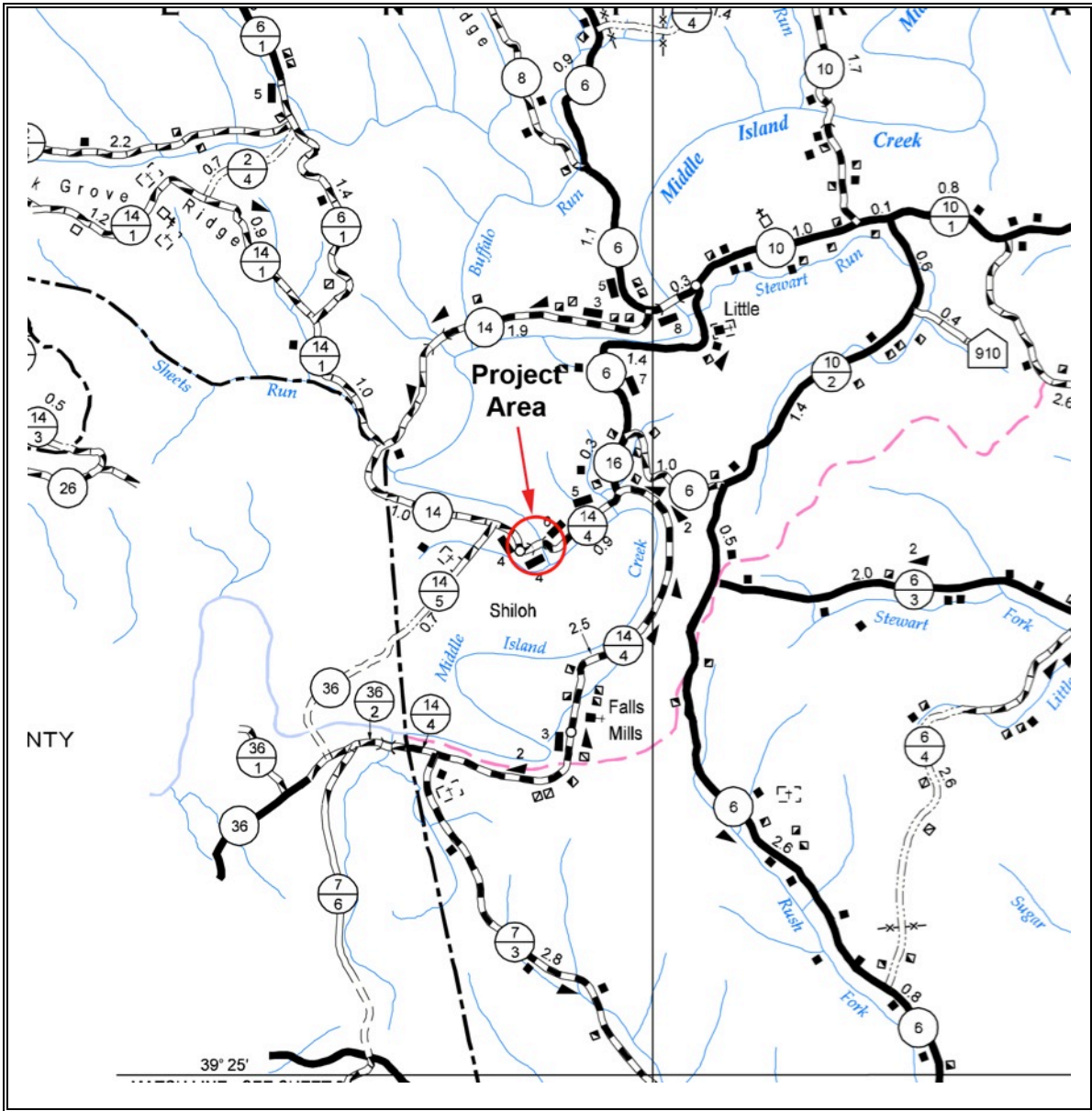
STATE LEVEL HISTORIC DOCUMENTATION

MAY 2014



**West Virginia
Department of Transportation
Division of Highways
Engineering Division
Environmental Section
(304) 558-3236**

HIGHWAY MAP



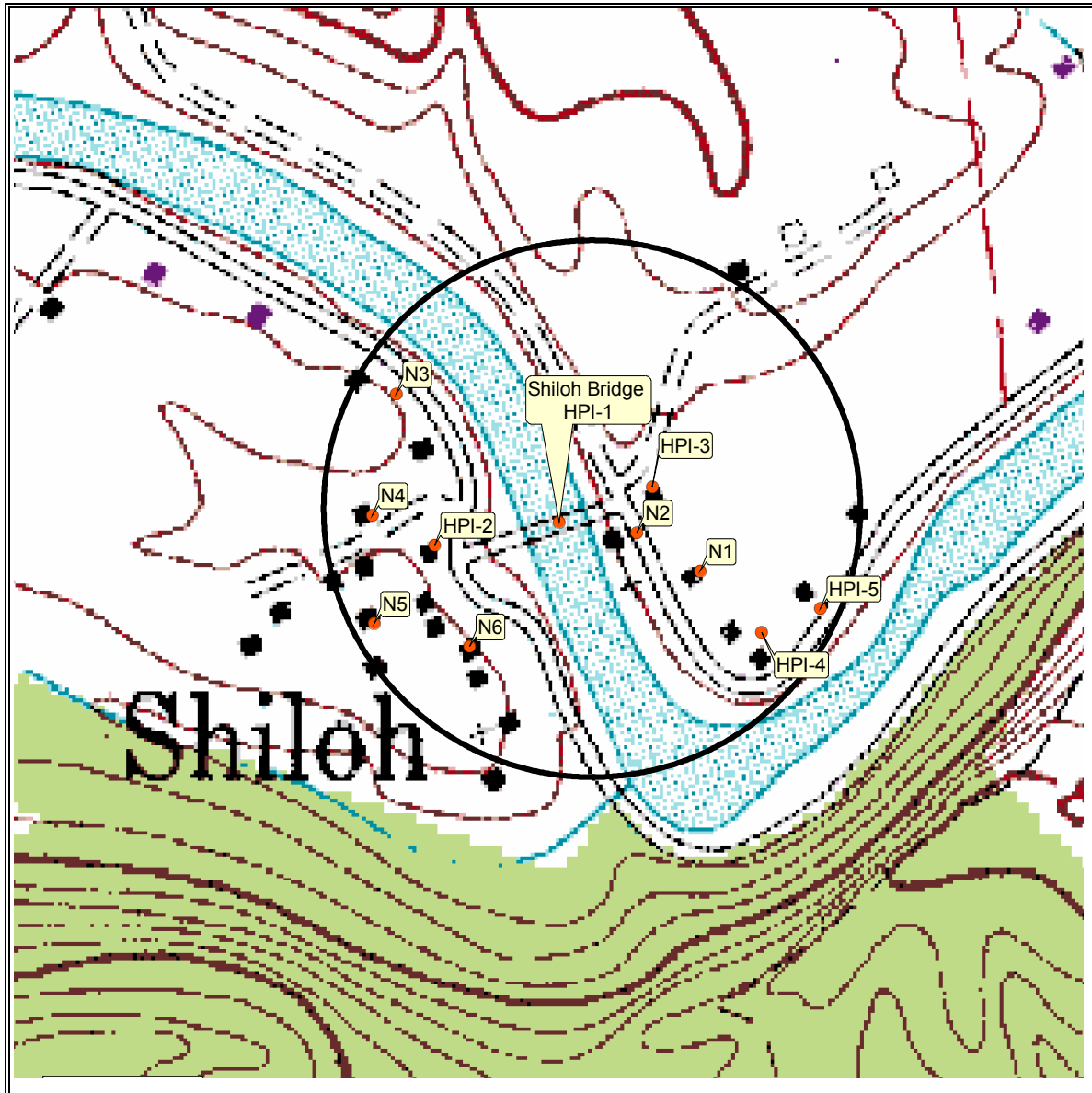
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Shiloh Bridge Replacement Tyler County

State Project S248-14/4-0.27
Federal Project BR-0144(008)E

TOPOGRAPHIC MAP
Ben's Run USGS 7½' Topographic Quadrangle



Shiloh Bridge Replacement
Tyler County
State Project S248-14/4-0.27
Federal Project BR-0144(008)E

STATE MAP



Shiloh Bridge Replacement
Tyler County
State Project S248-14/4-0.27
Federal Project BR-0144(008)E

STATE LEVEL HISTORIC DOCUMENTATION
SHILOH BRIDGE

Location: Tyler County Route 14/4 over Middle Island Creek
Tyler County
West Virginia

USGS Ben's Run Quadrangle

Date of Construction: 1898

Builder: Benjamin Pipes

Present Owner: West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard, Building 5, Room A-110
Charleston, WV 25305

Present Use: Transportation

Significance: Shiloh Bridge is eligible for the National Register of Historic Places under Criterion C for design. The bridge is locally significant as an example of a wrought iron Pratt through-truss. Although the bridge is heavily corroded and the condition is poor, the integrity of materials and design still conveys the design concepts employed in construction of the bridge.

Project Information: This bridge is being replaced in order to provide a bridge crossing over Middle Island Creek at this location that meets current condition rating and design standards. The existing structure is rated in poor condition due to significant deterioration and has a posted weight limit of 3 tons. The documentation was undertaken in May 2014 in accordance with a Memorandum of Agreement between the West Virginia Department of Transportation and West Virginia State Historic Preservation Office. These measures are required prior to removal of this National Register-eligible structure.

Courtney Fint Zimmerman, Architectural Historian
Aurora Research Associates, LLC
1436 Graham Road, Silver Lake, OH 44224

on behalf of:
West Virginia Division of Highways
Charleston, WV
May 2014

HISTORY OF SHILOH BRIDGE AND THE COMMUNITY OF SHILOH

The Shiloh Truss was built in 1898 according to WVDOH records and is a two-span wrought iron pin-connected Pratt through-truss. The bridge is supported by two cut stone full-height abutments and one solid cut stone pier. The overall length of the structure is 244'-06" and the roadway width is 15'-02". The bridge has a wooden deck and no curbs or sidewalks.

Tyler County is located along the Ohio River just south of the northern panhandle of West Virginia. It was formed in 1814 from Ohio County and named for John Tyler, father of president John Tyler. The county's largest towns are Middlebourne, the county seat, and Sistersville on the Ohio River.

The first settlers of European descent arrived in the area in 1792. Henry Jolley established a ferry by 1800 across the Ohio River at what is now Sistersville. Charles Wells founded the town of Wells Landing at this location in 1802 and the Wells family became a prominent local family, opening the Wells Hotel in 1895. Wells Landing was later named Sistersville after Charles Wells' two daughters.¹ The town was an economic center for the surrounding area due to its location on the river; other early businesses included a tannery, mills and general store.²

Development in Tyler County and surrounding northwestern West Virginia was greatly stimulated in the 1890s with the discovery of oil and gas. Drillers and others associated with the industry rushed to the area; the population of Sistersville increased from 1,000 to 7,000 between 1890 and 1900.³ The county's first weekly paper, which had been established in 1885 as the *Tyler Democrat*, became the *Daily Oil Review* in 1895, illustrating just how important the industry had become. The oil and gas industry was tapering off by 1910 and the population never quite recovered. Today Tyler County is largely rural, but the economic development effects of the recent second shale oil and gas boom can be seen in the increased traffic and hotel business from gas workers.

The community of Shiloh is located about 8 miles southeast of the town of Friendly and the Ohio River, and about 10 miles west of Middlebourne, the county seat. Shiloh was a

¹ Ken Sullivan, *West Virginia Encyclopedia*, 722.

² *History of Tyler County, Vol. 1*, 11.

³ Sullivan.

small community of early settlers on Middle Island Creek and included a gristmill prior to 1850. Shiloh was a busy little town in the late 19th century with a number of businesses including several mills, a blacksmith, and general stores. There was also a four-story woolen mill constructed in 1865 that operated until about 1904, when it closed due to lack of transportation to get the products to market. Other local institutions included a school, several churches, a doctor, a town newspaper, a community brass band and the Odd Fellows and Grand Army of the Republic fraternal organizations.⁴

The current Shiloh truss bridge was built in 1898, according to WVDOH bridge inspection report estimates, and replaced a wooden pontoon pedestrian bridge that had been built in 1894. According to county histories, Ben Pipes built the current bridge in 1900. The 1900 and 1910 Censuses list a Benjamin Pipes born in 1870 living in Meade District, just south of Union District and Shiloh, with an occupation of merchant.⁵ Pipes had moved to Canton, Ohio by 1920 and had the occupation of bus driver in the 1920 U.S. Census. He died in 1927. His obituary noted that he was a county commissioner for three years and built a number of bridges and culverts with George F. Watson and later T.O. Johnson.⁶

George F. Watson was born in Tyler County in 1872. According to his World War I draft registration card, Watson worked as a contractor in stone, cement and brick work.⁷ U.S. Census data also lists occupations of stone cutter and bridge/road contractor for Watson. Theodore O. Johnson was born in 1883 and was a carpenter.⁸ Based on the date of construction of Shiloh Bridge, if Pipes worked with a partner it would have been Watson, as Johnson was only 17 years old in 1900.

No further information could be found regarding Benjamin Pipes. It is not known how he became involved in the bridge construction industry. A substantial number of wrought iron and steel truss bridges built in the late 19th century were available through catalog

⁴ *History of Tyler County, Vol. 2, 12.*

⁵ Ancestry.com. *1910 United States Federal Census* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2006.

⁶ Connie Maxwell Taylor, "My Family Genealogy: Pipes Obituaries," <http://www.angelfire.com/in/cjt/pipesobits.html>

⁷ Ancestry.com. *U.S., World War I Draft Registration Cards, 1917-1918* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.

⁸ Ancestry.com. *U.S., World War I Draft Registration Cards, 1917-1918* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.

order and shipped as kits all over the country. It is possible that Pipes became skilled at erecting these types of bridges. No markings or plaques of any kind are found on the bridge.

Shiloh became known after a children's book of the same name was written in 1991 by Phyllis Reynolds Naylor. The book tells the fictional story of a boy named Marty Preston who finds an abused beagle in Shiloh, whom he names after the town. The book won the Newbery Medal for children's literature and mentions the Shiloh truss bridge and other places in the community.

BIBLIOGRAPHY

- Ancestry.com. *1880-1920 United States Federal Census* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2006.
- Ancestry.com. *U.S., World War I Draft Registration Cards, 1917-1918* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.
- Sullivan, Ken, ed. *West Virginia Encyclopedia*. Charleston: West Virginia Humanities Council, 2006.
- Taylor, Connie Maxwell. "My Family Genealogy: Pipes Obituaries." Personal website. <http://www.angelfire.com/in/cjt/pipesobits.html>. Accessed June 24, 2013.
- Tyler County Heritage and Historical Society. *History of Tyler County West Virginia to 1984*. Marcelline, Missouri: Walsworth Publishing Company, 1984.
- Tyler County Heritage and Historical Society. *History of Tyler County West Virginia, Volume 2*. Marcelline, Missouri: Walsworth Publishing Company, 2005.
- West Virginia Division of Highways Planning and Research Division. "Bridge Replacement Study: Shiloh Bridge." Manuscript on file, West Virginia Division of Highways, Charleston, WV. 1999.
- West Virginia Division of Highways. "Shiloh Bridge Inspection Report: Inventory Inspection." Manuscript on file, West Virginia Division of Highways, Charleston, WV. 1990.
- West Virginia Division of Highways. "Shiloh Bridge Inspection Report: Fourth In-Depth Periodic Inspection." Manuscript on file, West Virginia Division of Highways, Charleston, WV. 2008.
- West Virginia Division of Highways. "Shiloh Bridge Inspection Report: Interim Inspection to Supplement Fourth In-Depth Periodic Inspection." Manuscript on file, West Virginia Division of Highways, Charleston, WV. 2011.
- United States Geological Survey. Ben's Run 7.5' Minute Series Topographic Quadrangle, Washington, D.C. 1976.
- West Virginia Division of Culture and History. Archaeological and County Inventory files. State Historic Preservation Office, WV Division of Culture and History, Charleston.

STATE LEVEL HISTORIC DOCUMENTATION
INDEX TO PHOTOGRAPHS

Shiloh Bridge
Tyler County Route 14/4
Middle Island Creek
Tyler County, West Virginia

Photographer: Courtney Fint Zimmerman
Date: May 25, 2013
Filename prefix: WV_TylerCounty_ShilohBridge_00xx

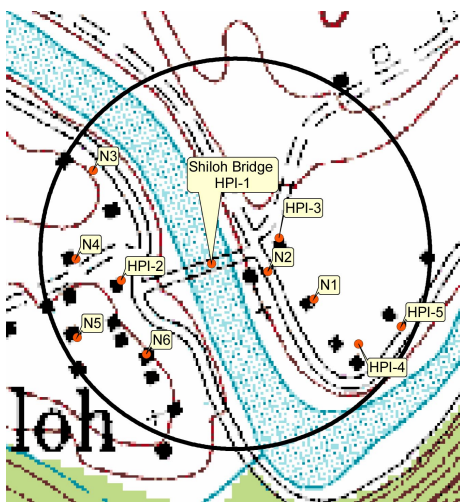
Photo	Description
1	Overall view of bridge from east bank, downstream side
2	Eastern span, downstream side
3	Western portal
4	Eastern portal
5	Western approach and general setting
6	Western abutment
7	Pier and deck substructure of western span
8	Deck substructure of western span
9	Bridge railing detail
10	Detail of pin connection on lower chord near western end
11	Detail of connection of upper chord to end post at western portal
12	Detail of connection of lower chord and vertical post
13	Upstream side of pier
14	Downstream side of pier
15	Detail of V-lacing on vertical post
16	Detail of riveting on end post at eastern portal
17	Detail of buckling on vertical post
18	Pin connected bearing at eastern abutment
19	Detail of connection at lower chord and vertical post with tension rods
20	Detail of threaded tension rods
21	Detail of V-lacing on end post at western portal
22	Overall view through truss from eastern portal
23	View of eastern span from east bank, upstream side

Internal Rating: _____



WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address Tyler County Route 14/4 Milepost 0.27	Common/Historic Name/Both <input type="checkbox"/> Common <input checked="" type="checkbox"/> Historic <input type="checkbox"/> Both Shiloh Truss Bridge	Field Survey # 1	Site # (SHPO Only) TY
Town or Community Shiloh	County Tyler	Negative No.	NR Listed Date NR No.
Architect/Builder Ben Pipes	Date of Construction 1898 <input type="checkbox"/> Circa	Style (SHPO Only)	
Exterior Siding / Materials Metal	Roofing Material	Foundation Stone - Ashlar	
Property Use or Function Transportation	UTM Zone 17N NAD 1983 Easting 499077 Northing 4367427		
Survey Organization & Date Aurora Research Associates LLC WVDOH 05/25/2013	Quadrangle Name Ben's Run		
	Part of What Survey / FR# WVDOH Shiloh Bridge Replacement		



Site No.

Name: Shiloh Truss Bridge

Survey #: TY

Survey/FR#: WVDOH Shiloh Bridge

Present Owners West Virginia Division of Highways	Owners' Mailing Address Building 5 Room 110 1900 Kanawha Blvd East Charleston, WV 25305
Describe Setting Acres <input type="checkbox"/> Artifacts Present Shiloh Bridge crosses Middle Island Creek in the rural community of Shiloh. There are scattered residences in the area. The surrounding landscape is mountainous and forested.	
Description of Buildings or Site (Original and Present) Shiloh Bridge is a simple two-span wrought iron pin-connected Pratt through truss supported by two full height stone ashlar abutments and one solid stone ashlar pier. The overall length of the structure is 244'-6" and the roadway width is 15'-2".	Stories Front Bays
Alterations <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Additions <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Describe all Outbuildings	
Statement of Significance See continuation sheet.	
Bibliographical References See continuation sheet.	
Form Prepared By: Name/Organization: Courtney Fint Zimmerman Address: 1436 Graham Road Silver Lake, OH 44224 Phone #: 304-685-7410	
Date: 05/25/2013 Aurora Research Associates, LLC	

WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

Name: Shiloh Truss Bridge
Survey #: TY
Survey/FR#: WVDOH Shiloh Bridge

Statement of Significance

The community of Shiloh is located about 8 miles southeast of the town of Friendly and the Ohio River, and about 10 miles west of Middlebourne, the county seat. Shiloh was a small community of early settlers on Middle Island Creek and included a gristmill prior to 1850. Shiloh was a busy little town in the late 19th century with a number of businesses including several mills, a blacksmith, and general stores. There was also a four-story woolen mill constructed in 1865 that operated until about 1904, when it closed due to lack of transportation to get the products to market. Other local institutions included a school, several churches, a doctor, a town newspaper, a community brass band and the Odd Fellows and Grand Army of the Republic fraternal organizations.

The current Shiloh truss bridge was built in 1898 and replaced a wooden pontoon pedestrian bridge that had been built in 1894. According to county histories, the current bridge was built by Ben Pipes. The 1900 and 1910 Censuses list a Benjamin Pipes born in 1870 living in Meade District, just south of Union District and Shiloh, with an occupation of merchant. Pipes had moved to Canton, Ohio by 1920 and had the occupation of bus driver in the 1920 U.S. Census. He died in 1927. His obituary noted that he was a county commissioner for three years and built a number of bridges and culverts with George F. Watson and later T.O. Johnson.

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No further information could be found regarding Benjamin Pipes. It is not known how he became involved in the bridge construction industry. A substantial number of wrought iron and steel truss bridges built in the late 19th century were available through catalog order and shipped as kits all over the country. It is possible that Pipes became skilled at erecting these types of bridges.

Shiloh became known after a children's book of the same name was written in 1991 by Phyllis Reynolds Naylor. The book tells the fictional story of a boy named Marty Preston who finds an abused beagle in Shiloh, whom he names after the town. The book won the Newbery Medal for children's literature and mentions the Shiloh truss bridge and other real places in the community.

Shiloh Bridge is eligible for the National Register of Historic Places under Criterion C for design. The bridge is locally significant as an example of a wrought iron Pratt through-truss. Although the bridge is heavily corroded and the condition is poor, the integrity of materials and design still conveys the design concepts employed in construction of the bridge. No significant links were found to historical events or persons, and the bridge does not have potential to yield important historical information. The bridge is not eligible under Criterion A, B or D.

Bibliography

- Ancestry.com. *1880-1920 United States Federal Census* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2006.
- Ancestry.com. *U.S., World War I Draft Registration Cards, 1917-1918* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.
- Sullivan, Ken, ed. *West Virginia Encyclopedia*. Charleston: West Virginia Humanities Council, 2006.
- Taylor, Connie Maxwell. "My Family Genealogy: Pipes Obituaries." Personal website. <http://www.angelfire.com/in/cjt/pipesobits.html>. Accessed June 24, 2013.
- Tyler County Heritage and Historical Society. *History of Tyler County West Virginia to 1984*. Marceline, Missouri: Walsworth Publishing Company, 1984.
- Tyler County Heritage and Historical Society. *History of Tyler County West Virginia, Volume 2*. Marceline, Missouri: Walsworth Publishing Company, 2005.
- West Virginia Division of Highways Planning and Research Division. "Bridge Replacement Study: Shiloh Bridge." Manuscript on file, West Virginia Division of Highways, Charleston, WV. 1999

By: BP

Date: 9/8/90

Ckd By: KK

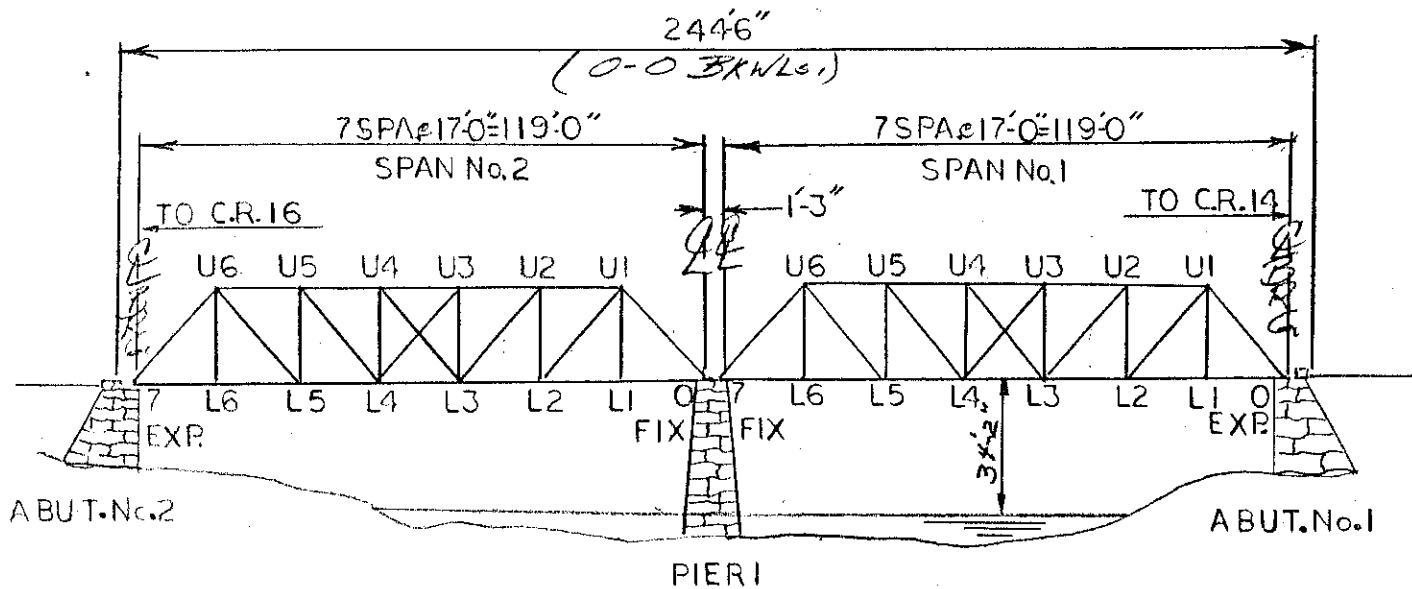
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Bridge No.: 48-14/4-0.27

Sheet 8 of 61

UPSTREAM ELEVATION

SSTT, BUILT-1898(EST), NO SKEW



Rev Date:

Rev Date:

Rev Date:

Rev Date:

Rev Date:

Rev Date:

By:

By:

By:

By:

By:

By:

By: *BP*

Date: *9/8/90*

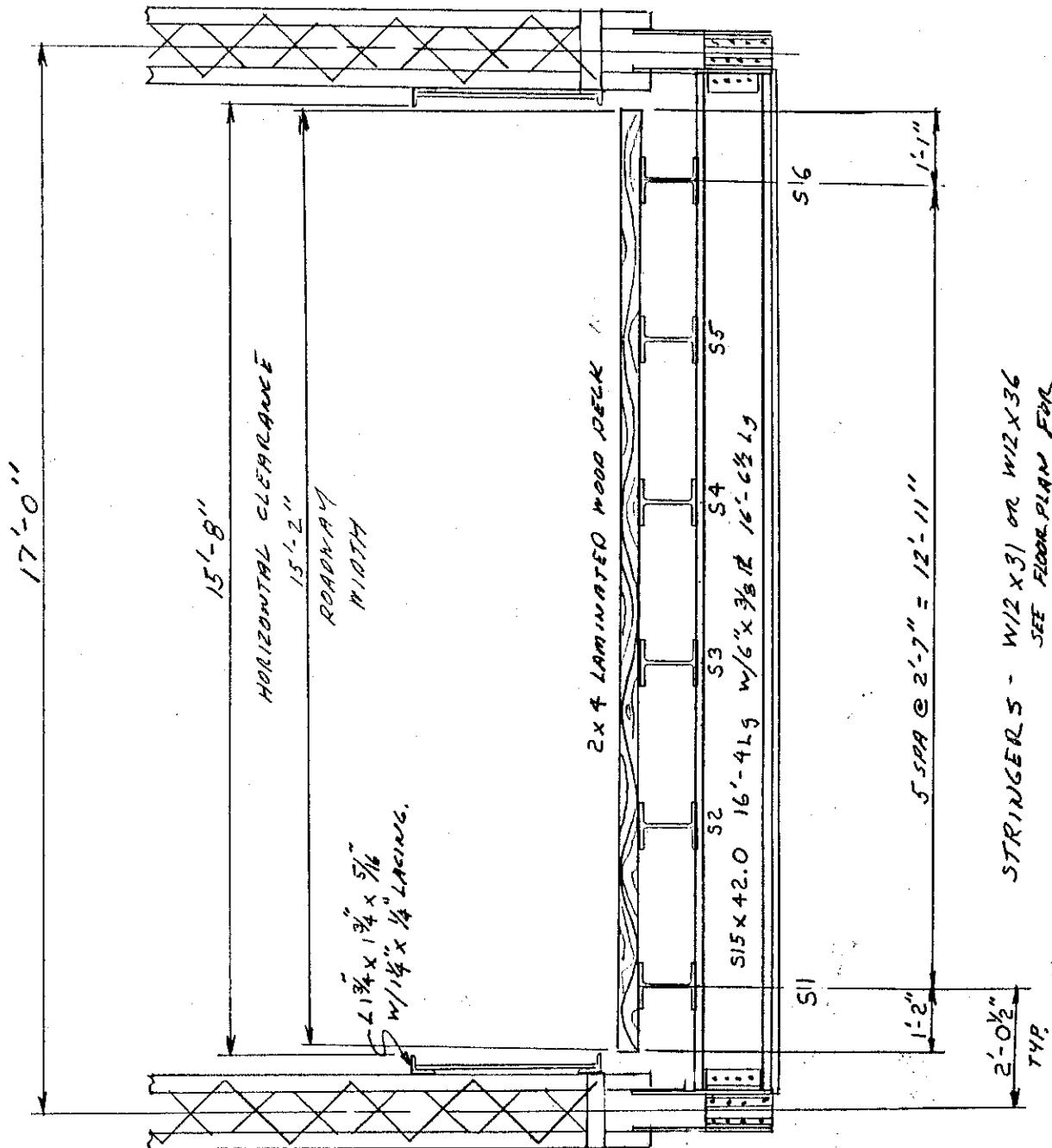
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Date: *9/8/90*

Bridge No.: *48-14/4-0.27*

Sheet *9* of *61*

SECTION THRU DECK LOOKING EAST TOWARD ABUT. NO. 2 TYP SPAN NO. 1 & NO. 2



STRINGERS - W12 X 31 OR W12 X 36 SEE FLOOR PLAN FOR LOCATIONS

Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

By: *BP*

Date: *7/6/90*

Ckd By: *RR*

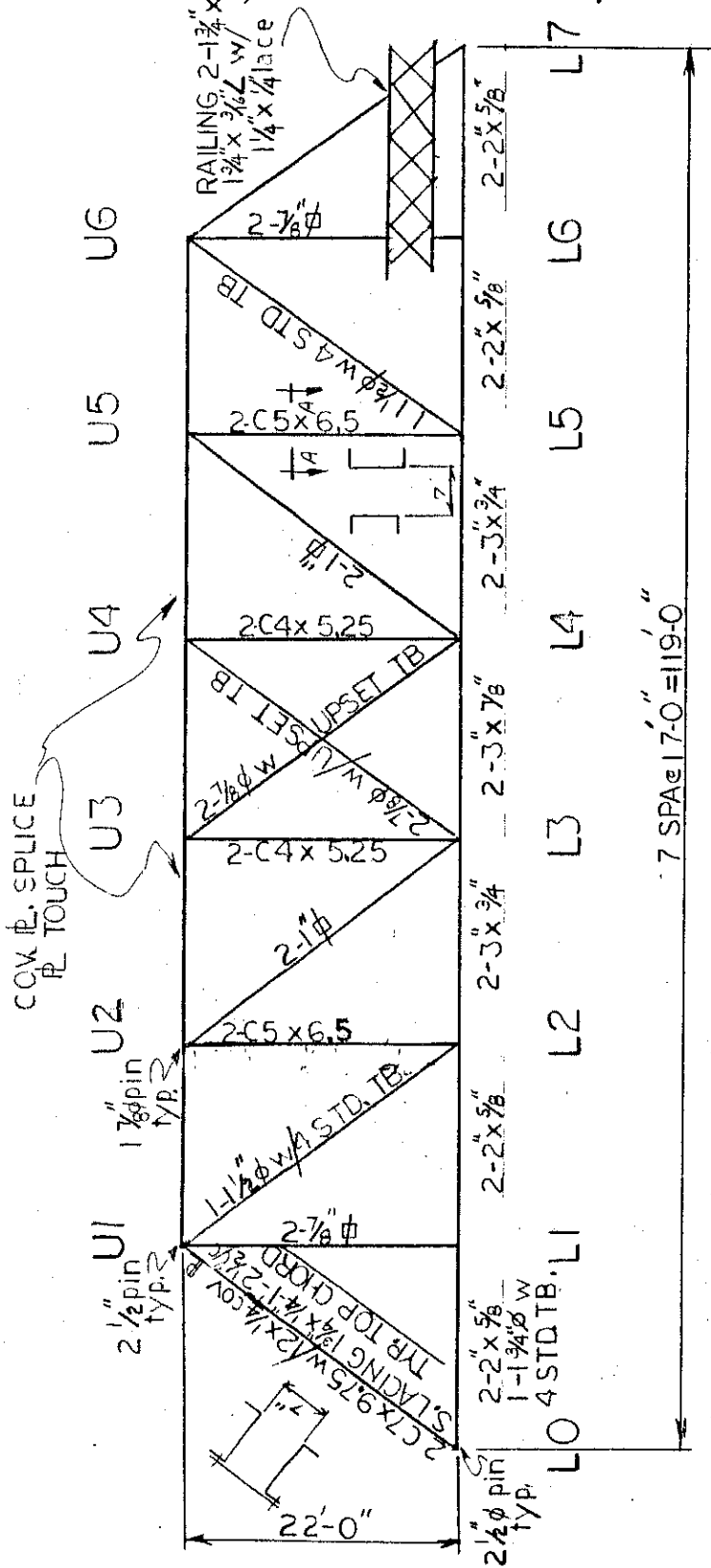
Date: *9/6/90*

Bridge No.: *48-194-0-27*

Sheet 10 of 61

TRUSS NOMENCLATURE
SPAN No. 1 U.S. SIDE
LOOKING U.S.

BUILT 1898 EST



Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

STRUCTURES DIVISION

GENERAL SKETCH SHEET

By: RR

Date: 9-6-90

Ckd By: RP

Date: 9-6-90

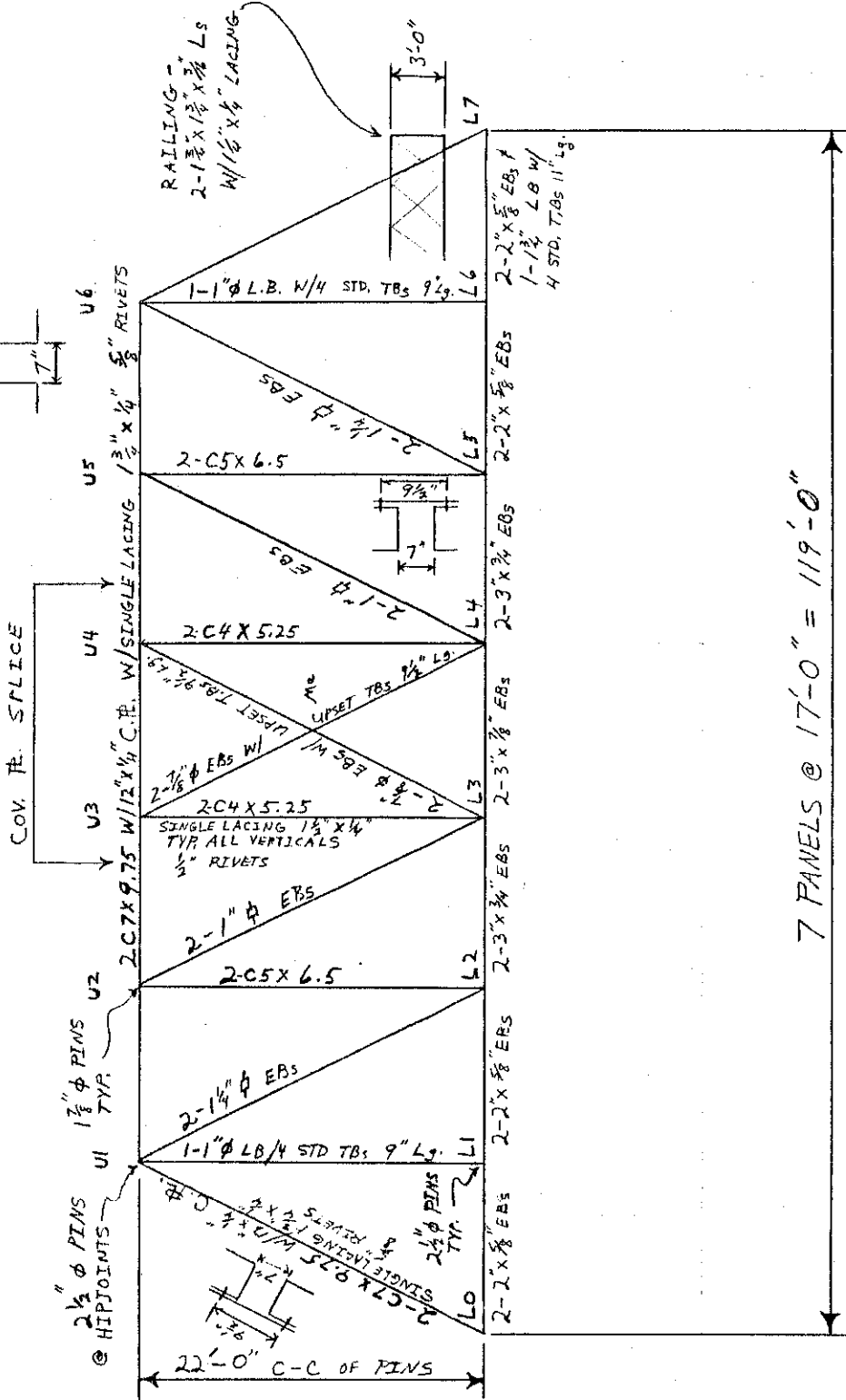
Bridge No.: 48-144 - 0.27

Sheet 11 of 61

TRUSS NOMENCLATURE

(SPAN NO.1 DOWNSTREAM)

YEAR BUILT: 1898 (EST.)



TOP CHORD, ENDPOST, & VERTICAL LATTICE STRAPS ARE 1' X 2 1/2" C-C

SPLICES TOUCH, HIP JOINTS DON'T

Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

By: PR

Date: 9-6-90

Ckd By: BP

Date: 9-6-90

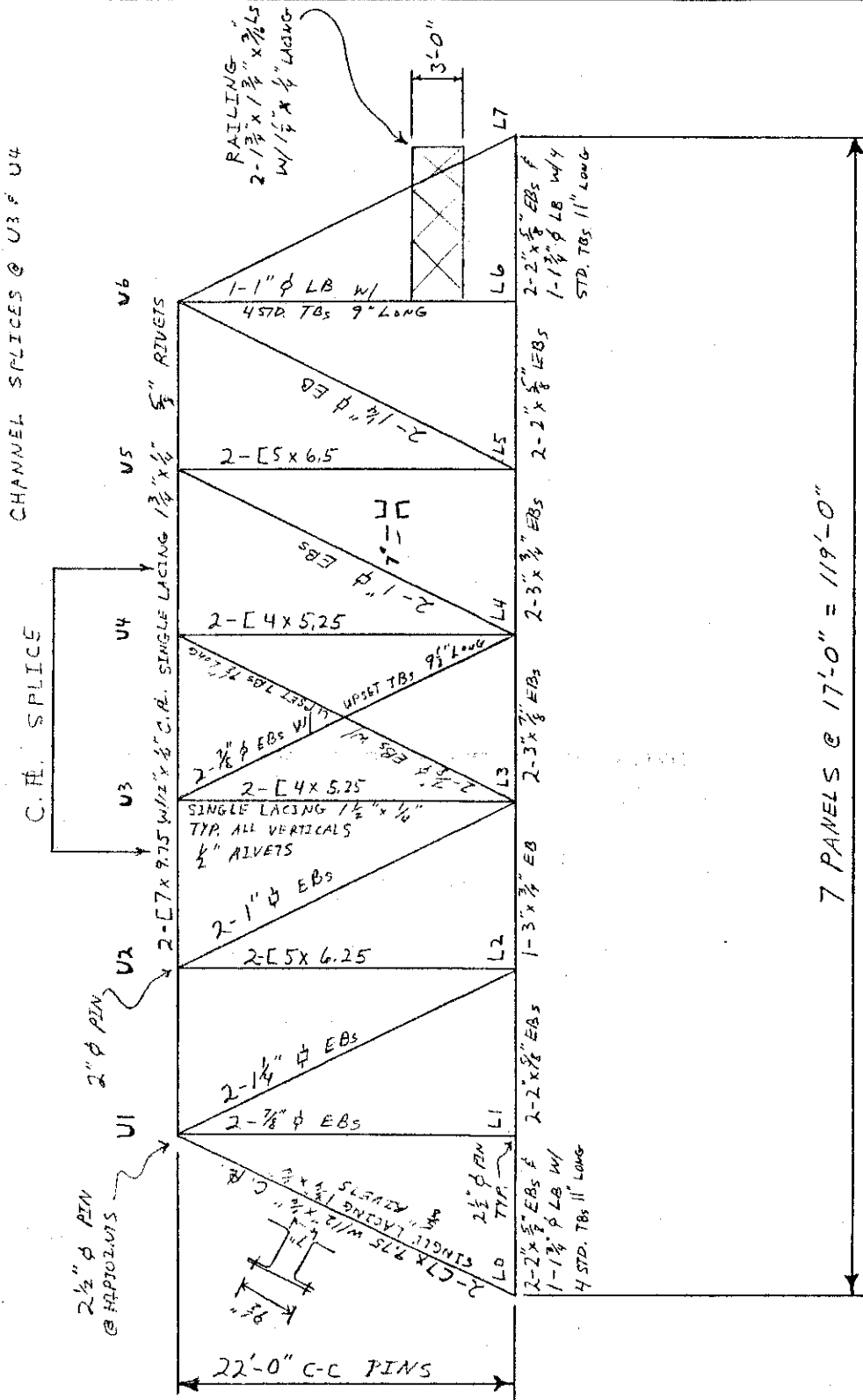
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Sheet 12 of 61

TRUSS NOMENCLATURE

(SPAN NO. 2 UPSTREAM)

YEAR BUILT: 1898 (EST.)



TOP CHORD, ENDPOSTS, & VERTICAL
 POST LATTICE BARS ARE 1'-2 1/2" C-C
 SPLICES TOUCH, HIPOINTS DON'T

Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

By: *RR*

Date: *9-6-90*

Ckd By: *JP*

Date: *9-6-90*

Bridge No.: *48-144-0.27*

Sheet *13* of *61*

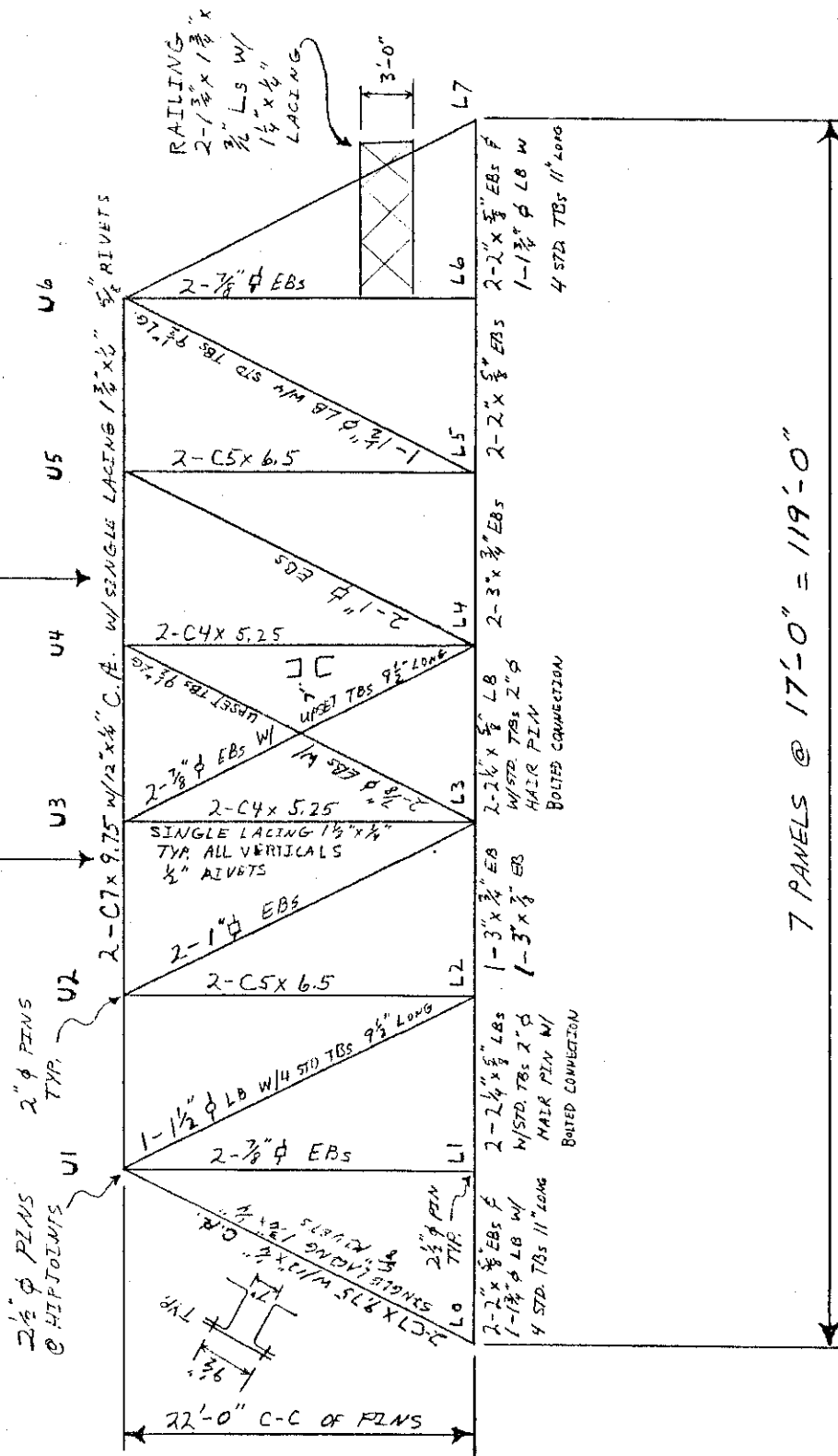
TRUSS NOMENCLATURE

(SPAY NO. 2 DOWNSTREAM)

CHANNEL SPLICES @ U3 & U4

C.P.E. SPLICES

YEAR BUILT: 1892 (EST)



Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: RR
CHECKED: DB
ORGANIZATION: 06-98

DATE: 9/7/90
DATE: 9-7-90

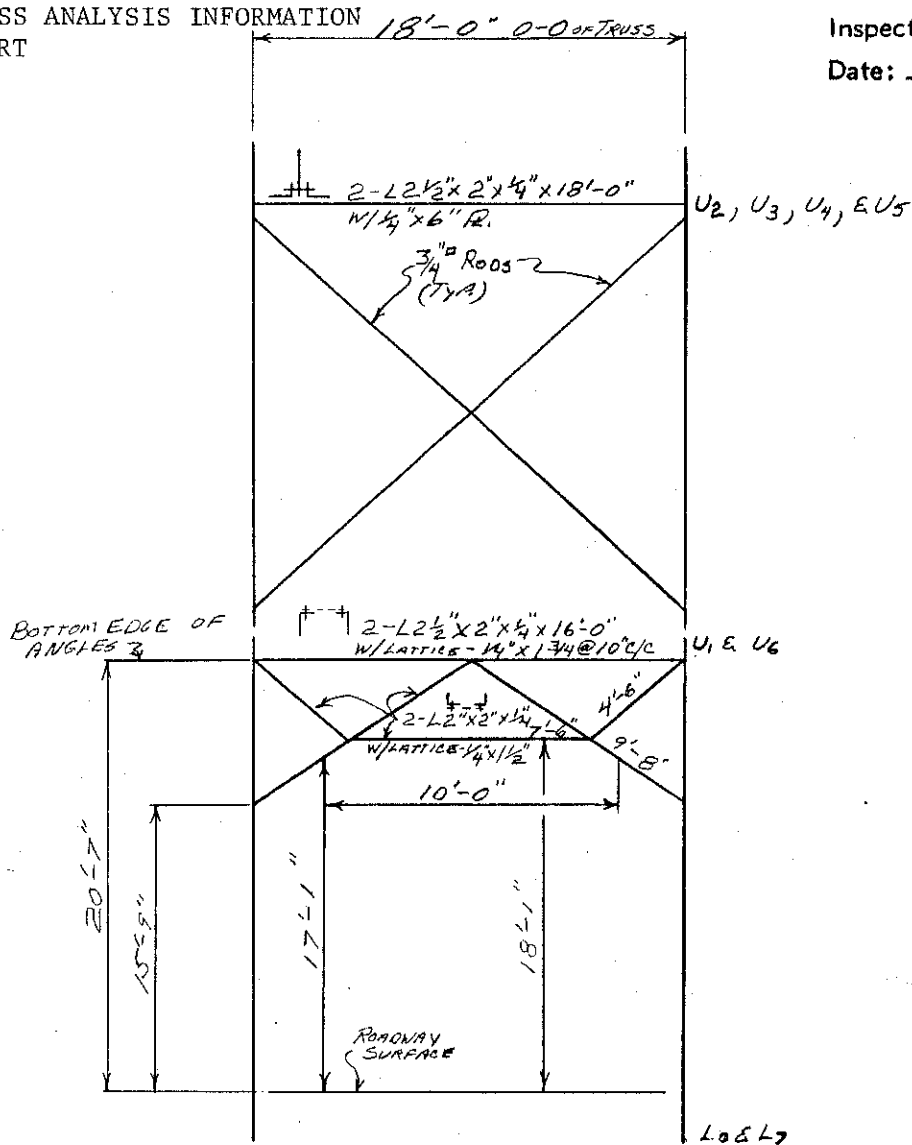
SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK

BRIDGE NO. 18-19-0127
COUNTY TYLER
DISTRICT SIX

SHEET
14
OF
61

STRESS ANALYSIS INFORMATION REPORT

Inspected by: *J. B. ...*
Date: *10/1/90*



PORTAL & TOP CHORD BRACING
SPAN NO. 1 & NO. 2

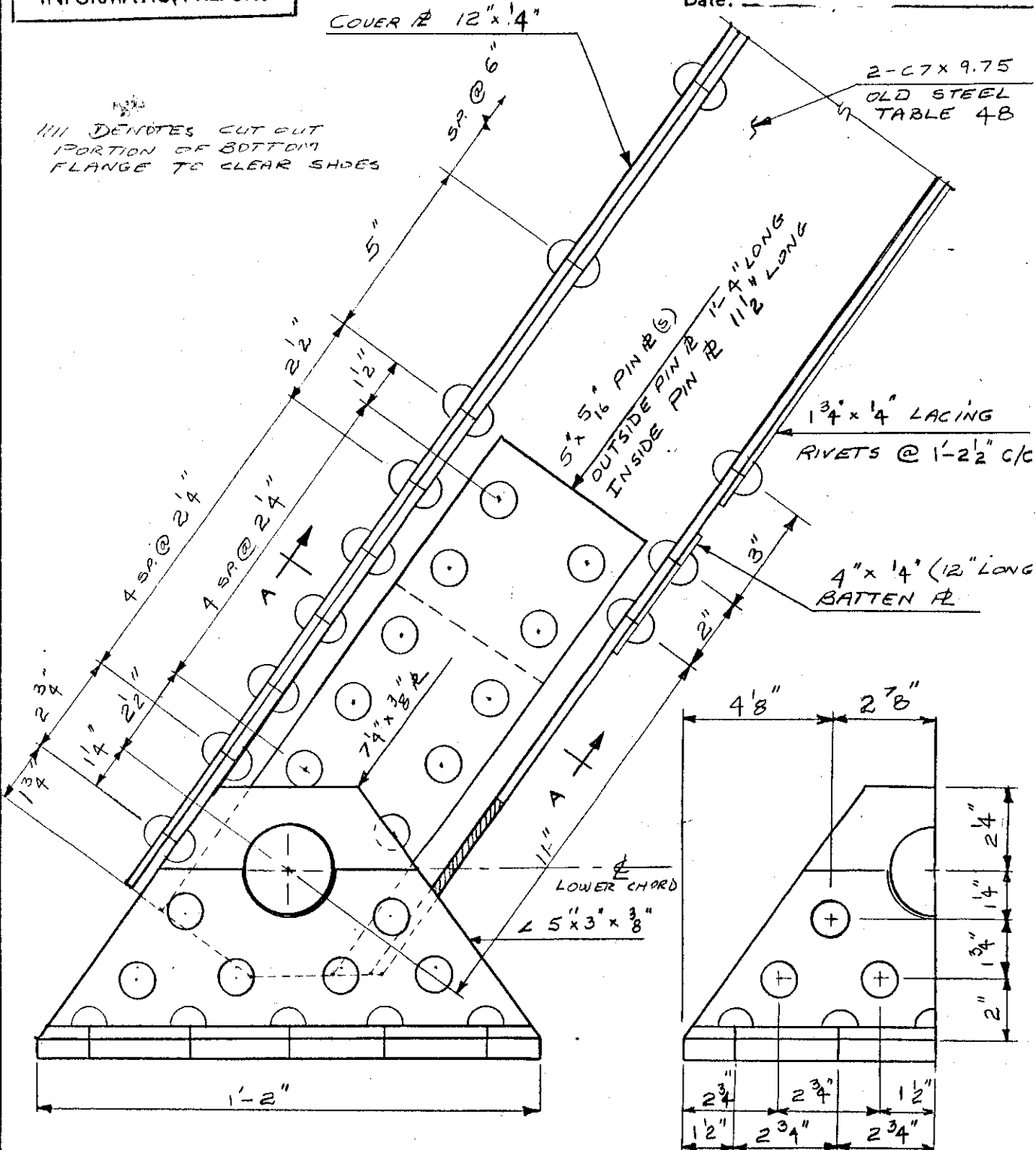
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DRB CHECKED: BP ORGANIZATION: 0698	DATE: 9/7/90 DATE: 9/7/90	SHILOH BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. 48-14-027 COUNTY TYLER DISTRICT 5A	SHEET 15 OF 6
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**STRESS ANALYSIS
&
INFORMATION REPORT**

Inspected by: *Dr. B...*
 Date: _____



END POST DETAIL @ L6 & L7
 SHEET 1 OF 2

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS
STRUCTURES DIVISION

BY: *D.B.*
CHECKED: *RR*
ORGANIZATION:

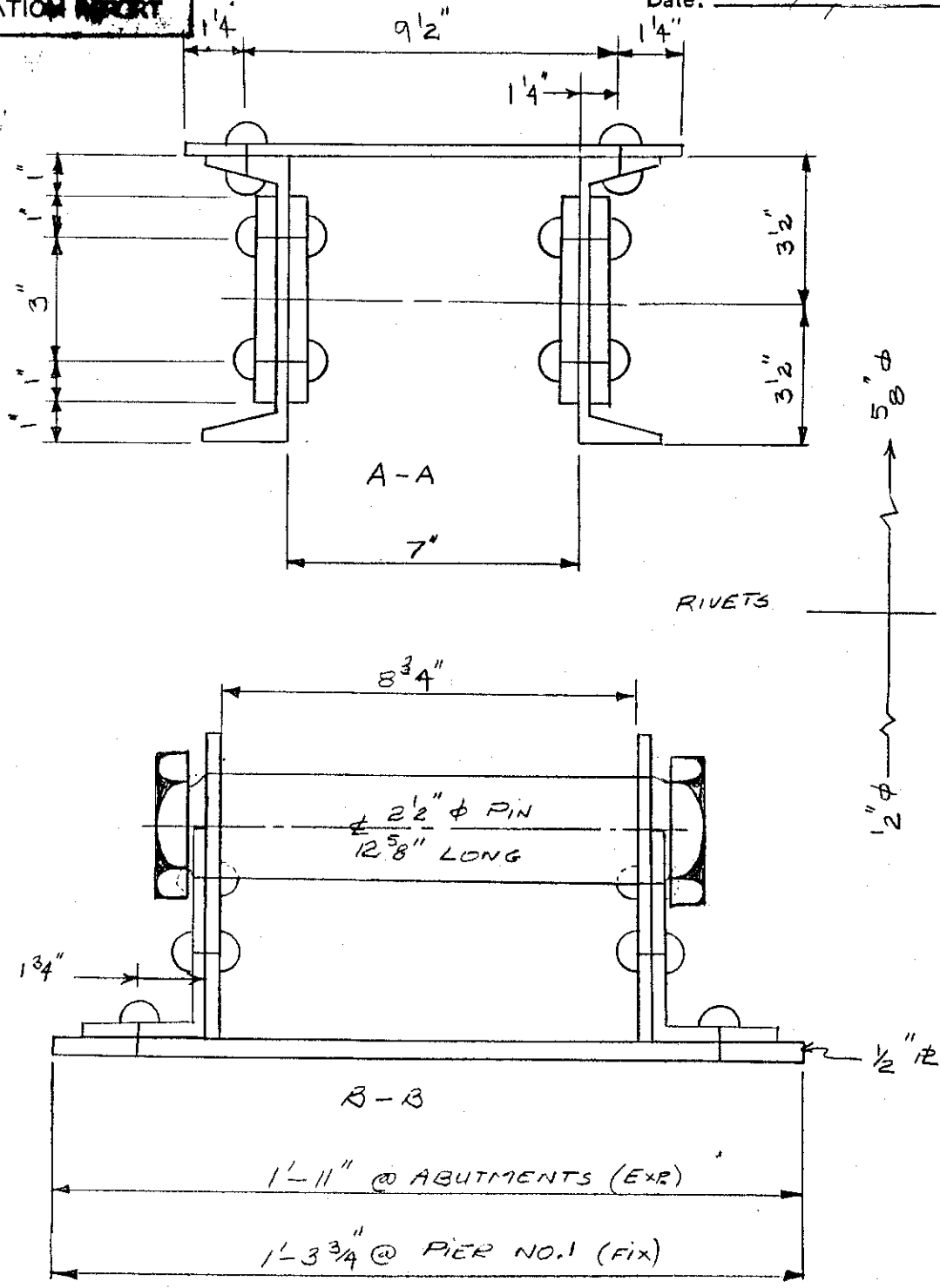
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OVER
DATE: *9/7/90* *MIDDLE ISLAND CREEK*

BRIDGE NO. *48-19/4-027*
COUNTY *TYLER*
DISTRICT *SIX*

SHEET
16
OF
61

**STRESS ANALYSIS
&
INFORMATION REPORT**

Inspected by: *D. B. ...*
Date: *...*



ROLLER NEST
+ BEARING IR @ ABUTMENTS
NOT SHOWN

END POST DETAIL @ LO & L7
SHEET 2 OF 2

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: *D.B.*
CHECKED: *RR*
ORGANIZATION:

DATE: *9/7/90*
DATE: *9/7/90*

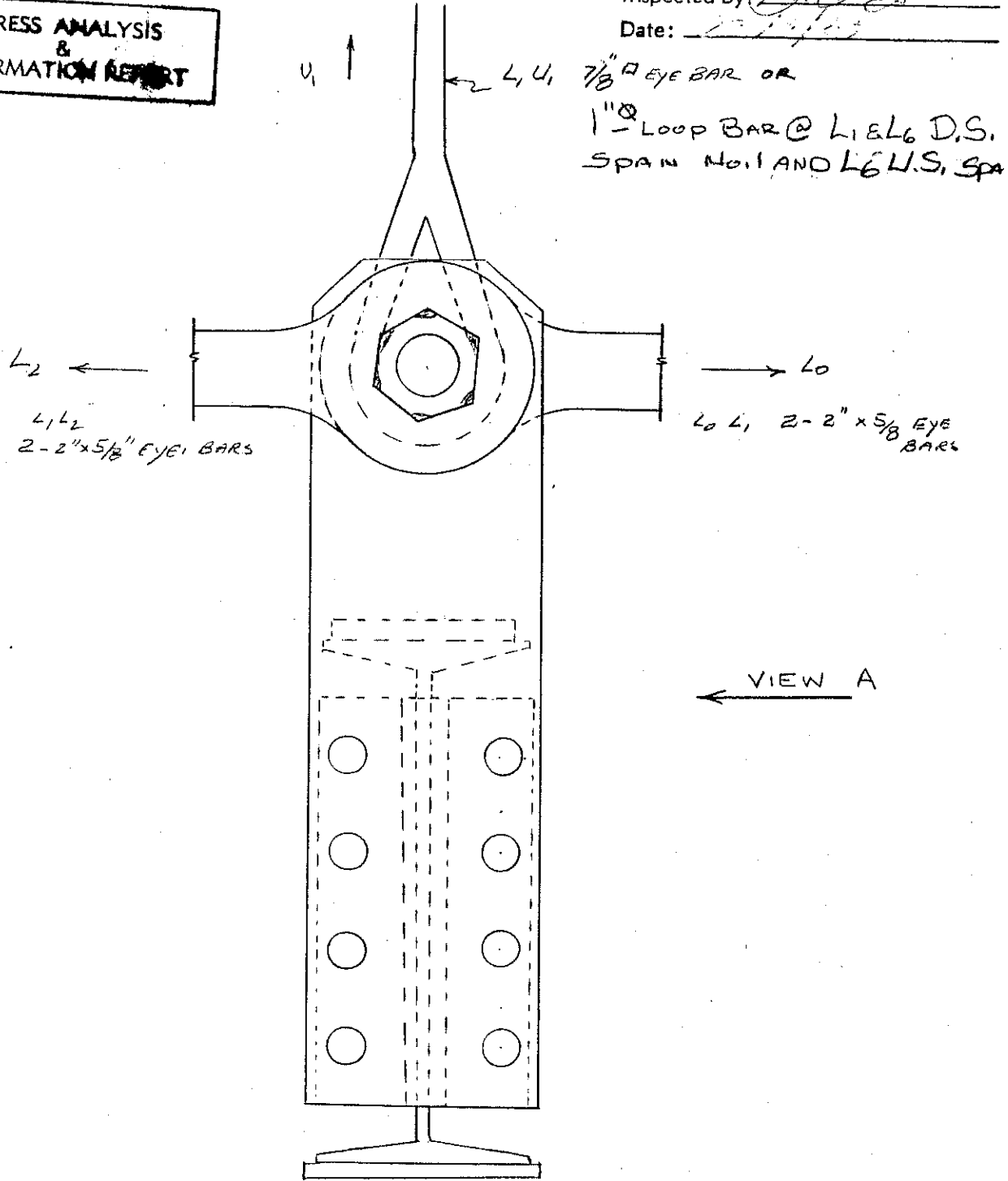
*SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK*

BRIDGE NO. *48-1A-0.27*
COUNTY *TYLER*
DISTRICT *SIX*

SHEET
17
OF *60*

Inspected by: *[Signature]*
Date: *[Date]*

**STRESS ANALYSIS
&
INFORMATION REPORT**



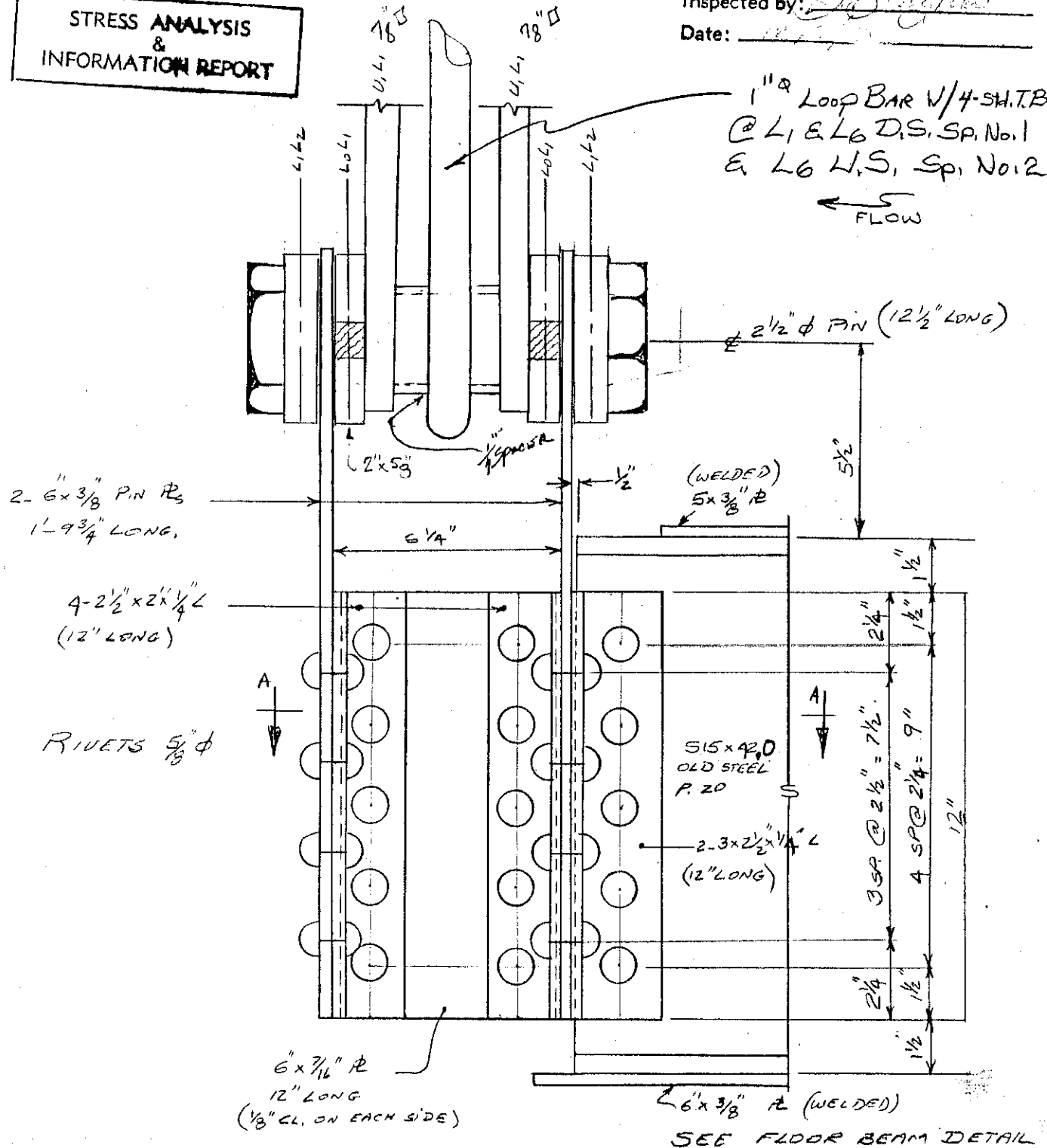
HANGER DETAIL
 L_1 & L_6
SPANS No. 1 & No. 2

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS
STRUCTURES DIVISION

BY: <u>D.B.</u>	DATE: <u>9/7/90</u>	<u>SHILOH BRIDGE</u> <u>OVER</u> <u>MIDDLE ISLAND CREEK</u>	BRIDGE NO. <u>48-14-0.27</u>	SHEET
CHECKED: <u>RR</u>	DATE: <u>9/7/90</u>		COUNTY <u>TYLER</u>	<u>18</u>
ORGANIZATION: <u>0698</u>			DISTRICT <u>Six</u>	OF <u>6</u>

Inspected by: [Signature]
Date: 11/1/90

**STRESS ANALYSIS
&
INFORMATION REPORT**



VIEW "A"
HANGER DETAIL

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: D.B.
CHECKED: RR
ORGANIZATION:

DATE: 9/7/90
DATE: 9/7/90

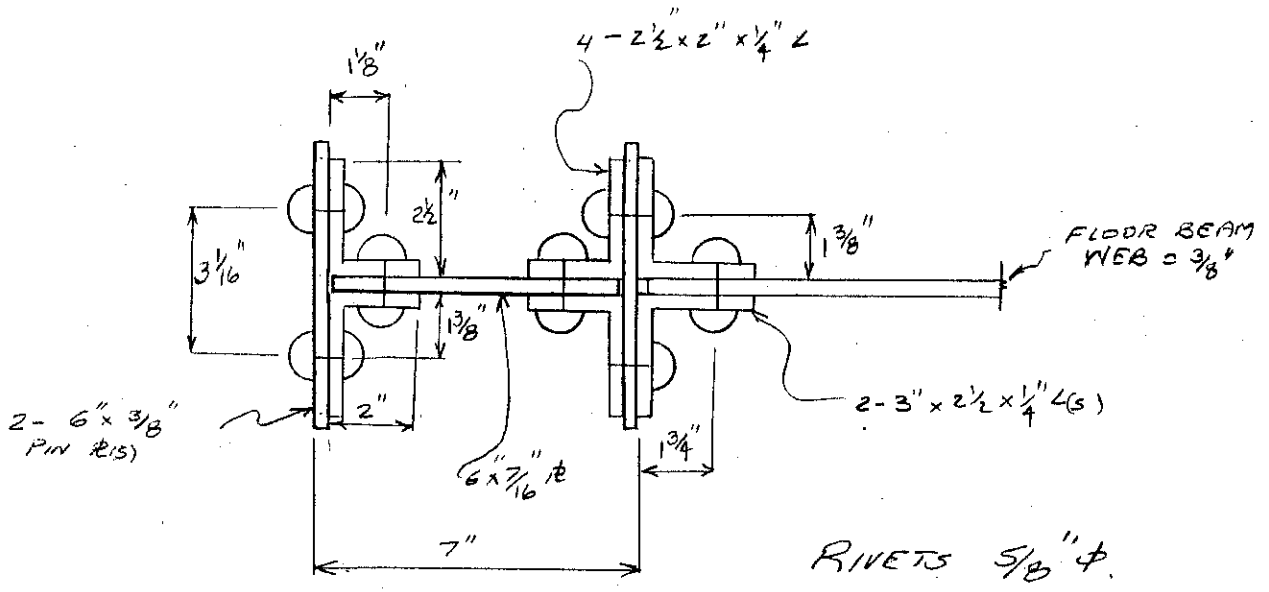
SHILOH BRIDGE OVER
MIDDLE ISLAND CREEK

BRIDGE NO. 48-19-0.27
COUNTY TYLER
DISTRICT Six

SHEET
19
OF 61

Inspected by: [Signature]
Date: 11/19/83

STRESS ANALYSIS
&
INFORMATION REPORT



A-A

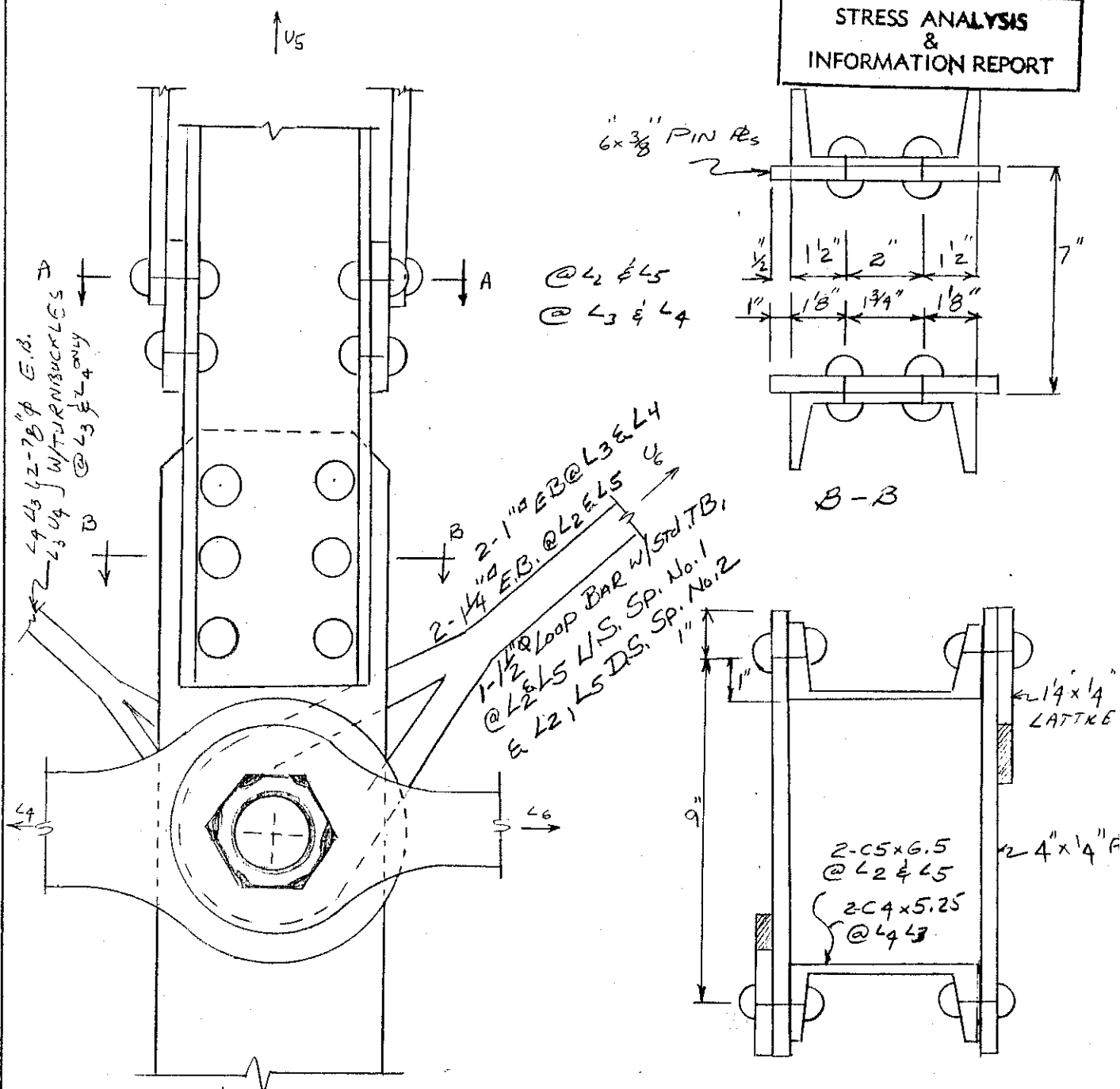
FLOOR BEAM DETAIL

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

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CHECKED: RR	DATE: 9/7/90		COUNTY TYLER	
ORGANIZATION:			DISTRICT SIX	

Inspected by: *[Signature]*
Date: **12/1/02**



CONNECTION DETAIL A-A

L ₂ & L ₅ SPAN No. 1 & No. 2
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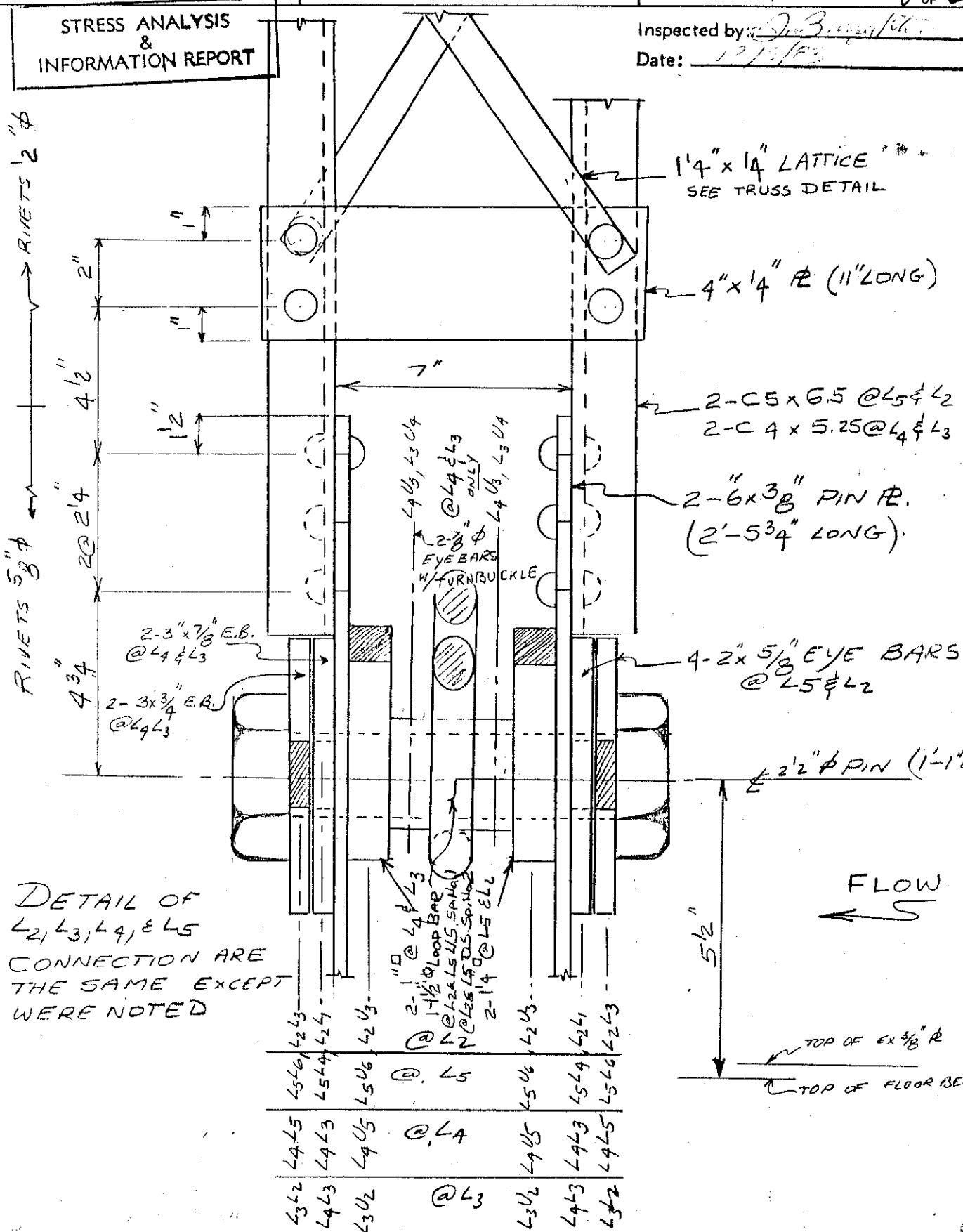
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STRUCTURES DIVISION

BY: D.B.	DATE: 9/7/90	SHILOH BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. 18 - 1A - 0.27	SHEET
CHECKED: RR	DATE: 9/7/90		COUNTY TYLER	21
ORGANIZATION: 06-93			DISTRICT SIX	OF 6

**STRESS ANALYSIS
&
INFORMATION REPORT**

Inspected by: D. B. [Signature]
Date: 12/13/92



DETAIL OF
L2, L3, L4, & L5
CONNECTION ARE
THE SAME EXCEPT
WERE NOTED

L3L2	L4L3	L3U2	@ L3	L3U2	L4L3	L3L2
L4L5	L4L3	L4U5	@ L4	L4U5	L4L3	L4L5
L5L6	L5L4	L5U6	@ L5	L5U6	L5L4	L5L6

FLOW
←

5 1/2"
TOP OF 6x3/8" R
TOP OF FLOOR BEAM

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DB
CHECKED: RR
ORGANIZATION: 06-98

DATE: 9/7/90
DATE: 9/7/90

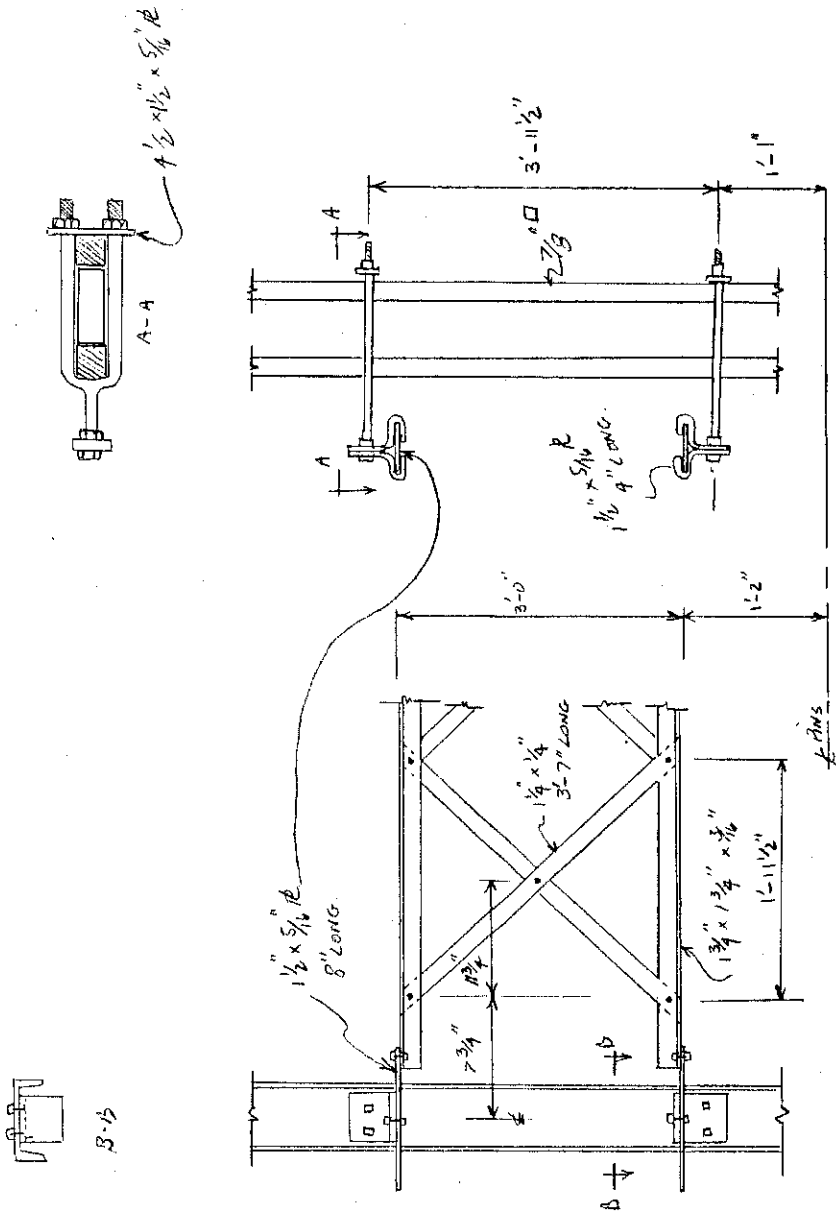
SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK

BRIDGE NO. 98-19-0.27
COUNTY TYLER
DISTRICT Six

SHEET
22
OF 6

Inspected by: [Signature]
Date: [Signature]

**STRESS ANALYSIS
&
INFORMATION REPORT**



ELEVATION VIEW OF
HANGER GUARDRAIL CONNECTION

INSIDE VIEW OF GUARDRAIL
@ VERTICAL POST
SIMILAR @ END POST

GUARD RAIL DETAIL

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: D.B.
CHECKED: RR
ORGANIZATION: 06-98

DATE: 9/7/90
DATE: 9/7/90

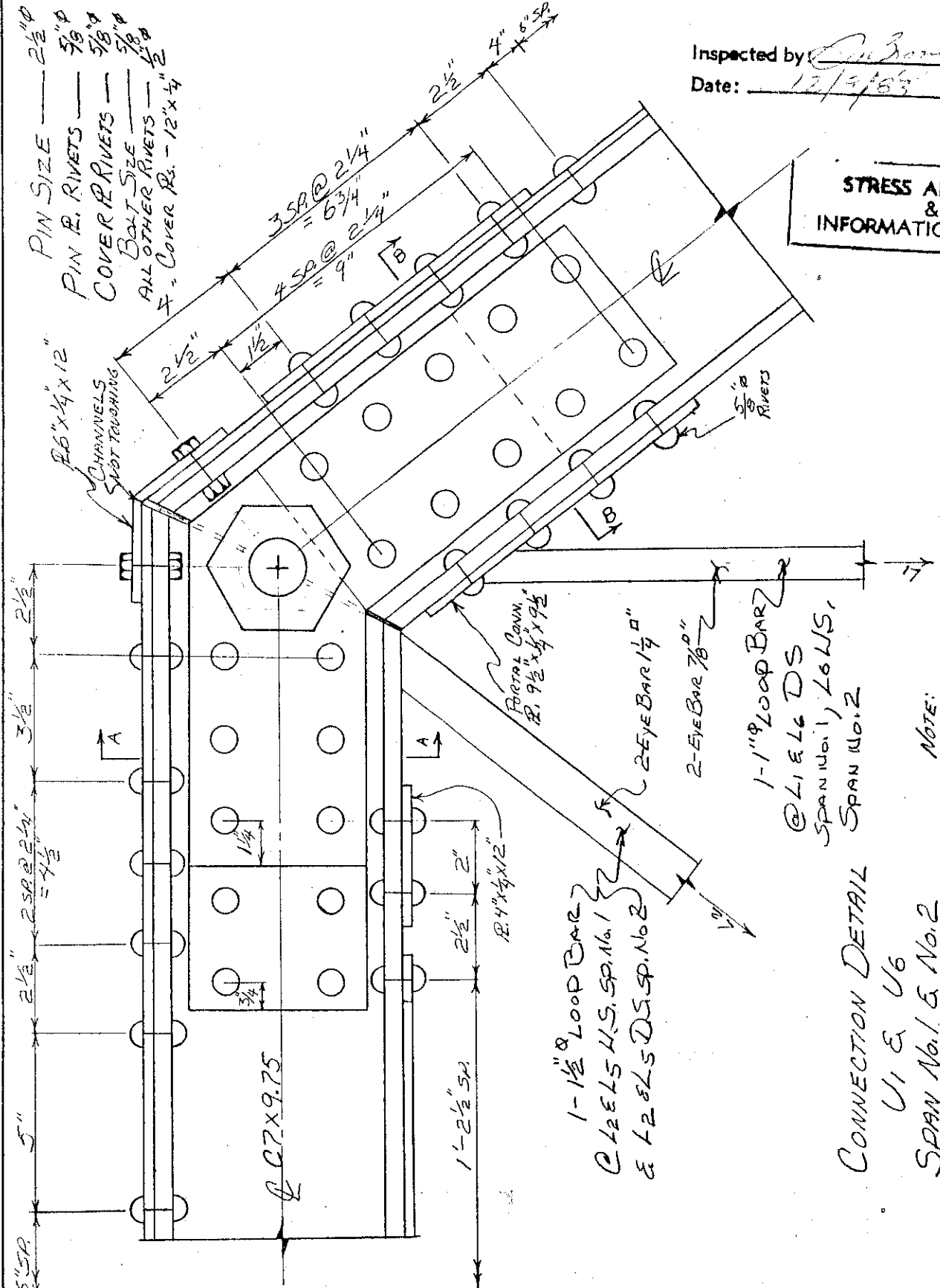
SHILOH BRIDGE
OVER
MIDDLE BLANCK CREEK

BRIDGE NO. 48-14/4-02
COUNTY TYLER
DISTRICT SIX

SHEET
23
OF
61

Inspected by [Signature]
Date: 12/3/83

**STRESS ANALYSIS
&
INFORMATION REPORT**



CONNECTION DETAIL
U1 & U6
SPAN No. 1 & No. 2
(VIEW FROM & ROADWAY)
SHEET 1 OF 2

NOTE:
SEE SHEET 2 OF 2
FOR SECTIONS A-A & B-B

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: D.B.
CHECKED: RR
ORGANIZATION:

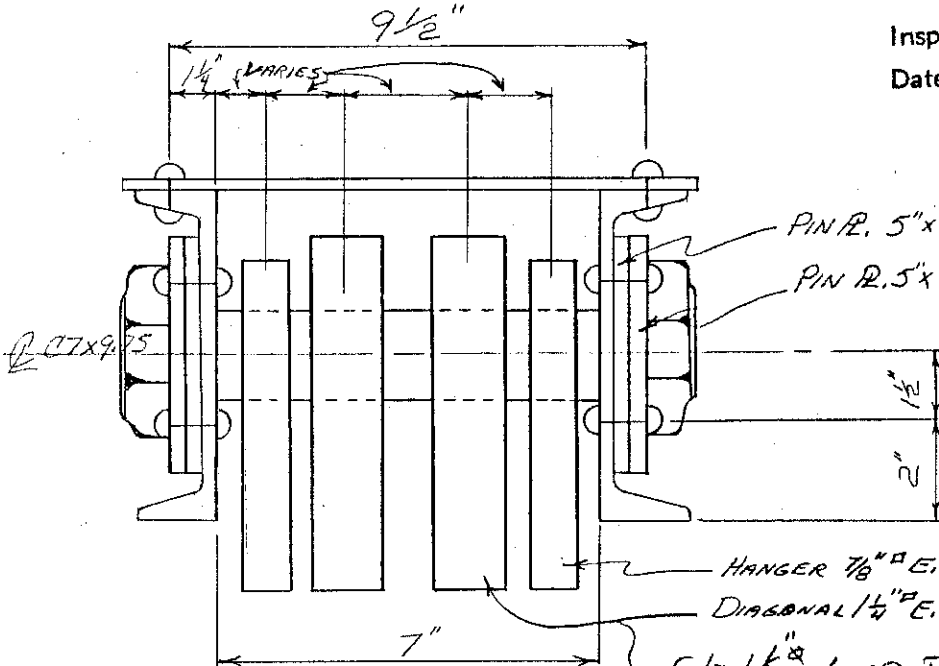
DATE: 9/7/90
DATE: 9/7/90

SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK

BRIDGE NO. 48-14-027
COUNTY TYLER
DISTRICT SIX

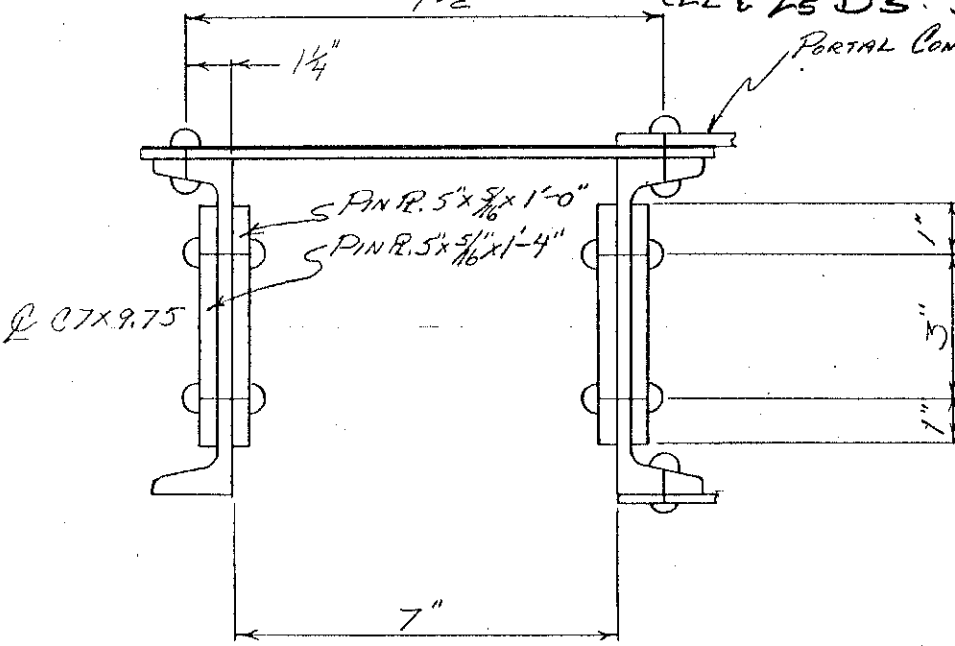
SHEET
24
of 61

Inspected by: J. S. [Signature]
Date: 12/3/83



STRESS ANALYSIS
&
INFORMATION REPORT

1-1/2" LOOP BAR
L2 & L5 U.S. SPAN No. 1
L2 & L5 D.S. SP. No. 2
PORTAL Conn. R.

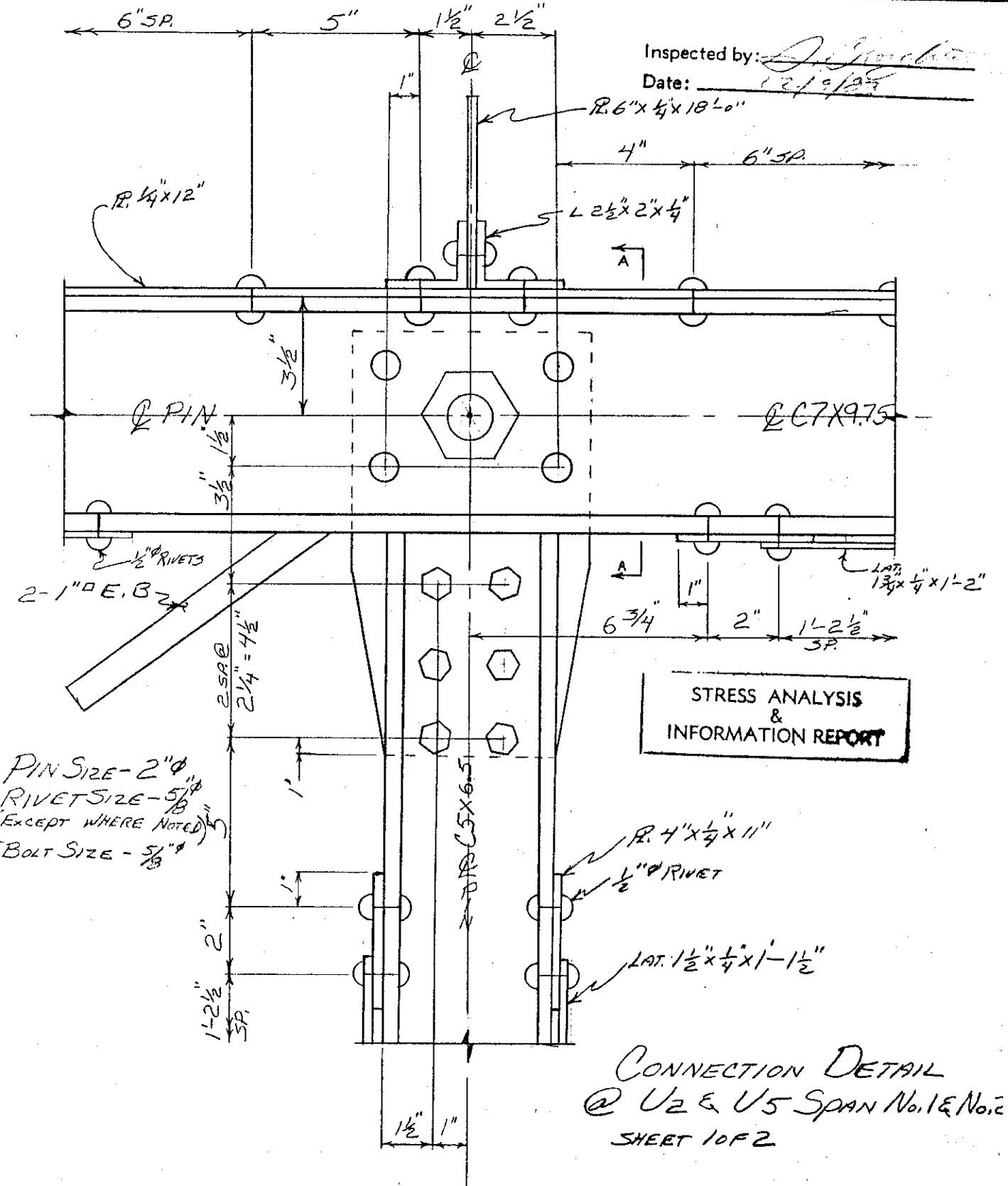


SECTIONAL CONNECTION
DETAILS @ U1 & U6
SPAN No. 1 & No. 2
SHEET 2 OF 2

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: <i>DRB</i> CHECKED: <i>RR</i> ORGANIZATION: <i>OW-98</i>	DATE: <i>9/7/90</i> DATE: <i>9/7/90</i>	SHILOM BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. <i>18-14-027</i> COUNTY <i>TYLER</i> DISTRICT <i>SIX</i>	SHEET <i>25</i> OF <i>61</i>
--	--	---	---	---------------------------------------



CONNECTION DETAIL
@ U2 & U5 SPAN No. 1 & No. 2
SHEET 1 OF 2

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

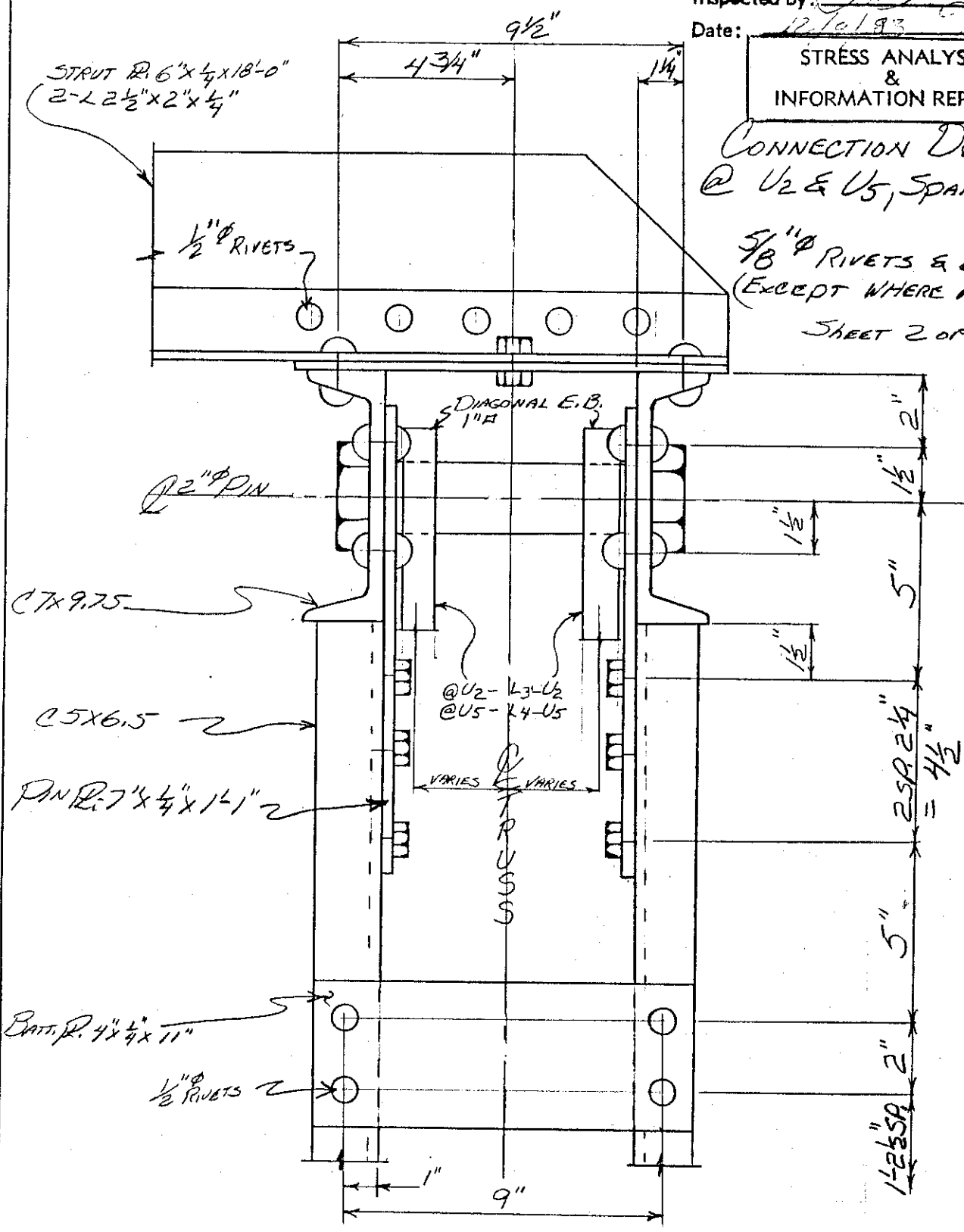
STRUCTURES DIVISION

BY: <i>DB</i> CHECKED: <i>RR</i> ORGANIZATION: <i>06-99</i>	DATE: <i>9/7/90</i> DATE: <i>9/7/90</i>	<i>SHILOH BRIDGE</i> <i>OVER</i> <i>MIDDLE ISLAND CREEK</i>	BRIDGE NO. <i>18-14-0.27</i> COUNTY <i>TYLER</i> DISTRICT <i>SIX</i>	SHEET <i>26</i> OF <i>6</i>
---	--	---	--	--------------------------------------

Inspected by: *A. B. [Signature]*
 Date: *12/6/93*

STRESS ANALYSIS
&
INFORMATION REPORT

CONNECTION DETAIL
 @ U2 & U5, SPAN No. 1
 & No. 2
 5/8" ϕ RIVETS & BOLTS
 (EXCEPT WHERE NOTED)
 SHEET 2 OF 2

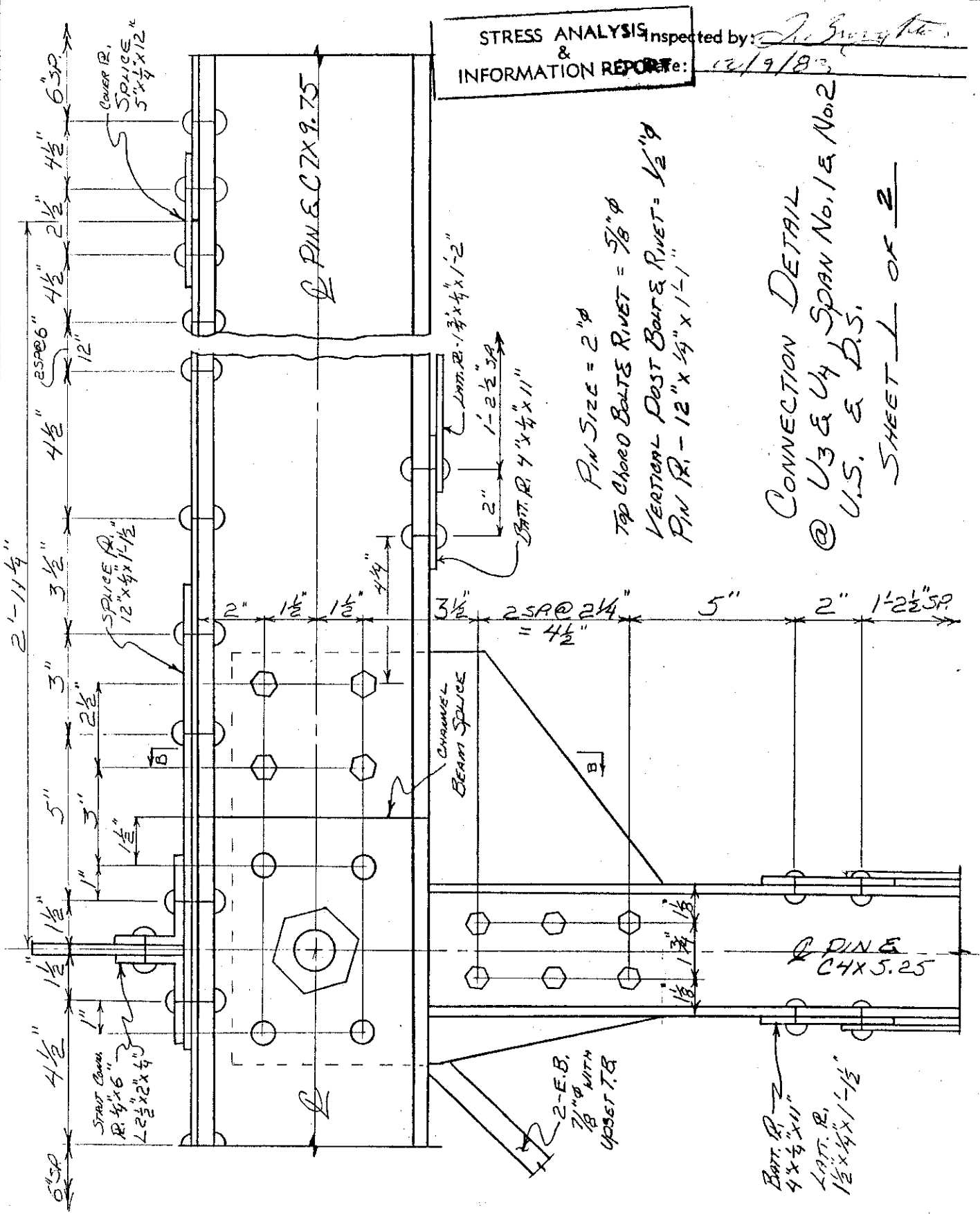


SECTION A-A

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: D.B.	DATE: 9/7/90	SHILOH BRIDGE OVER MIDDLE ISLAND CK.	BRIDGE NO. 48-14-027	SHEET 27
CHECKED: RR	DATE: 9/7/90		COUNTY TYLER	OF 61
ORGANIZATION: 06-99			DISTRICT SIX	



THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

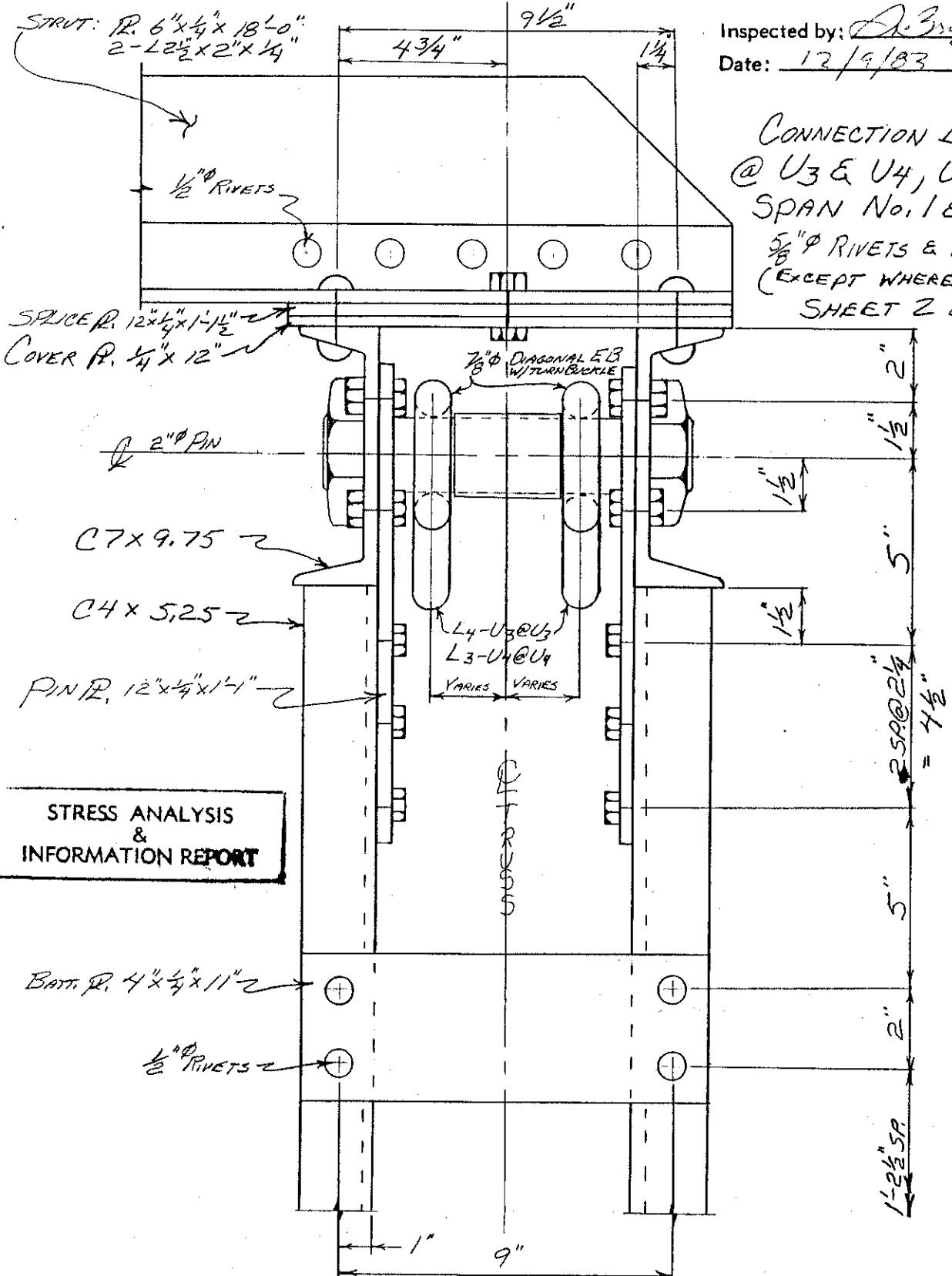
BY: DJB. DATE: 9/7/90
CHECKED: RR DATE: 9/7/90
ORGANIZATION: 06-98

SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK

BRIDGE NO. 48-14-027
COUNTY TYLER
DISTRICT SIX

SHEET 28
OF 61

Inspected by: D. Broughton
Date: 12/9/83



CONNECTION DETAIL
@ U3 & U4, U.S. & D.S.
SPAN No. 1 & No. 2
 $5\frac{1}{8} \phi$ RIVETS & BOLTS
(EXCEPT WHERE NOTED)
SHEET 2 OF 2

SECTION B-B

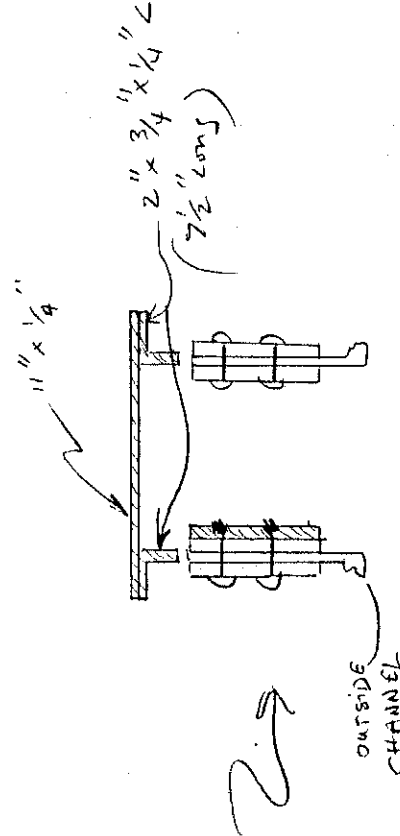
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: <i>DB</i>	DATE: <i>9/7/90</i>	<i>SMITH BRIDGE OVER MIDDLE ISLAND CREEK</i>	BRIDGE NO. <i>48-14-0.27</i>	SHEET
CHECKED: <i>RR</i>	DATE: <i>9/7/90</i>		COUNTY <i>TYLER</i>	<i>29</i>
ORGANIZATION: <i>06-98</i>			DISTRICT <i>SIX</i>	OF <i>61</i>

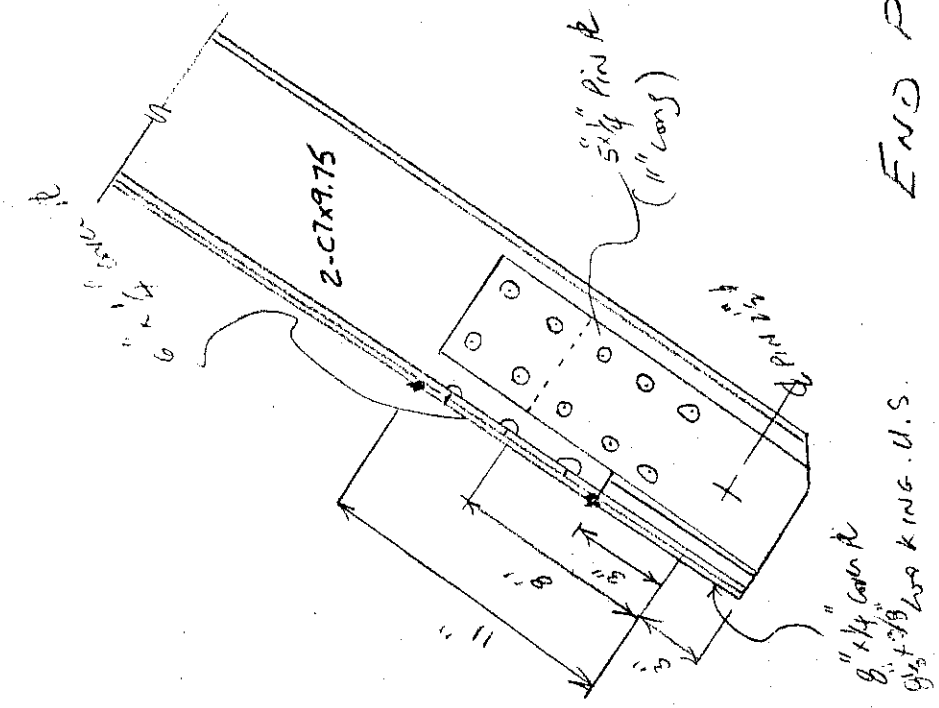
STRESS ANALYSIS INFORMATION REPORT

Inspected by: *[Signature]*
 Date: *10/9/93*



/// DENOTES REPAIR
 ALL REPAIRS ARE WELDED

END POST REPAIR @ LO U.S.
 SPAN NO. 1



THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DB
CHECKED: RR
ORGANIZATION: OG-98

DATE: 9/7/90
DATE: 9/7/90

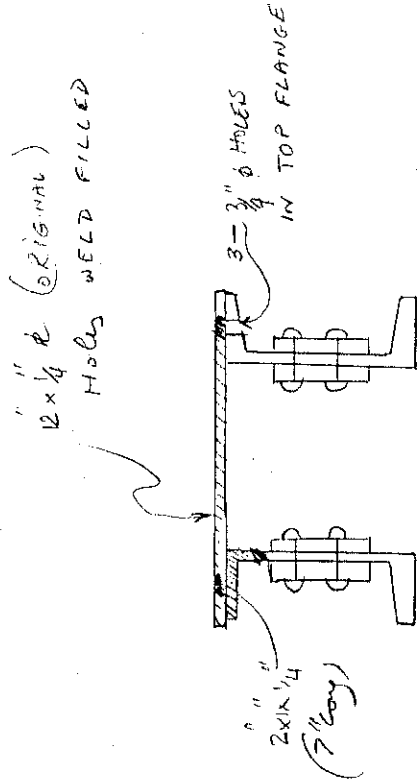
SHILOH BRIDGE
OVER
MIDDLE ISLAND
CREEK

BRIDGE NO. 48-L4 - 0.27
COUNTY TYLER
DISTRICT SIX

SHEET
30
OF
61

STRESS ANALYSIS INFORMATION REPORT

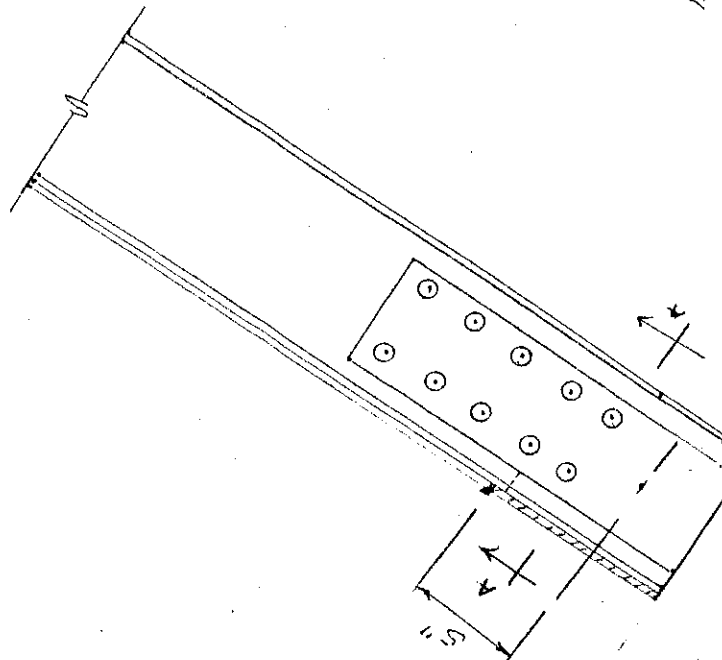
Inspected by: [Signature]
Date: 12/19/93



SECTION A-A

III REPAIR
ALL REPAIRS ARE WELDED

END POST REPAIR @ L7 US
SPAN NO. 1



LOOKING D.S.

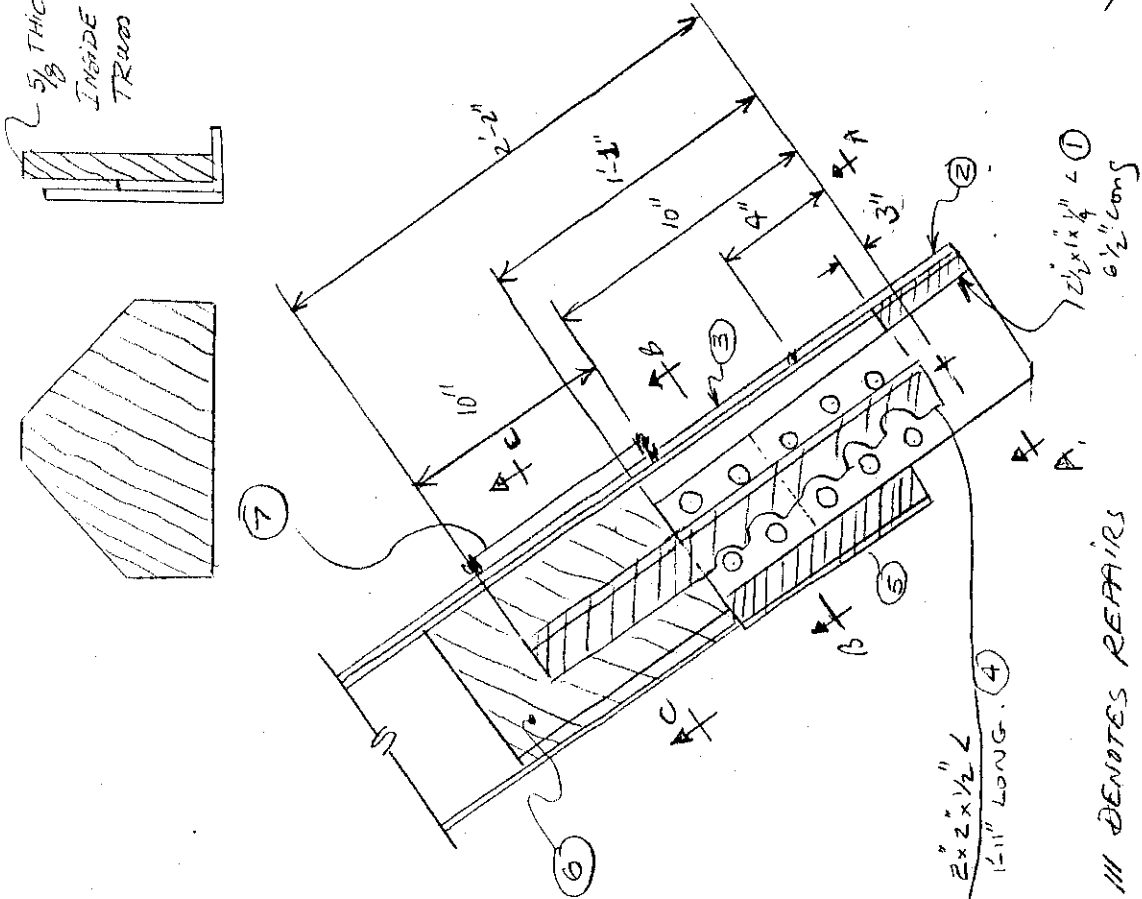
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS
STRUCTURES DIVISION

BY: <u>D.B.</u>	DATE: <u>9/7/90</u>	<u>SHILOH BRIDGE</u>	BRIDGE NO. <u>48-14-0.27</u>	SHEET
CHECKED: <u>RR</u>	DATE: <u>9/7/90</u>	<u>OVER</u>	COUNTY <u>TYLER</u>	<u>31</u>
ORGANIZATION: <u>06-98</u>		<u>MIDDLE ISLAND CREEK</u>	DISTRICT <u>SIX</u>	OF <u>61</u>

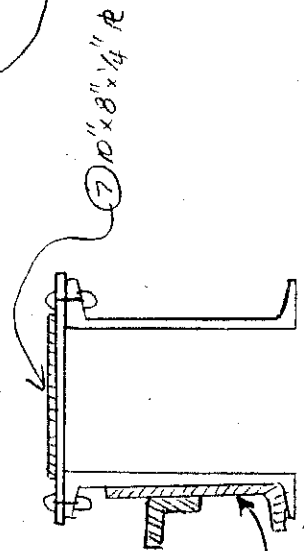
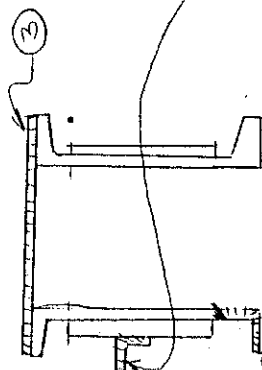
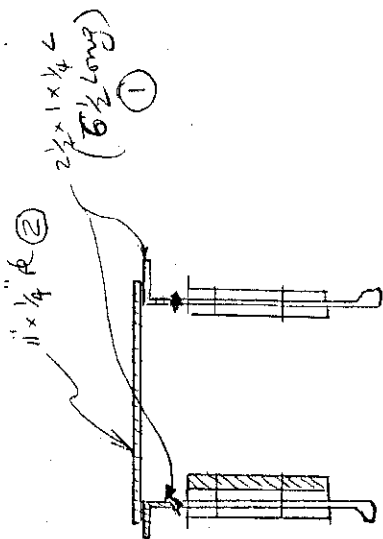
STRESS ANALYSIS INFORMATION REPORT

Inspected by: [Signature]
Date: 12/19/93

5/8 THICK & SHADE
INSIDE OF
TRUSS ONLY



/// DENOTES REPAIRS
ALL REPAIRS ARE WELDED
END POST REPAIR @
LO DIS, SPAN NO. 1
LOOKING D.S.



5/8 x 2 x 1/4 L (ACTUALLY SECTION OF CHANNEL)

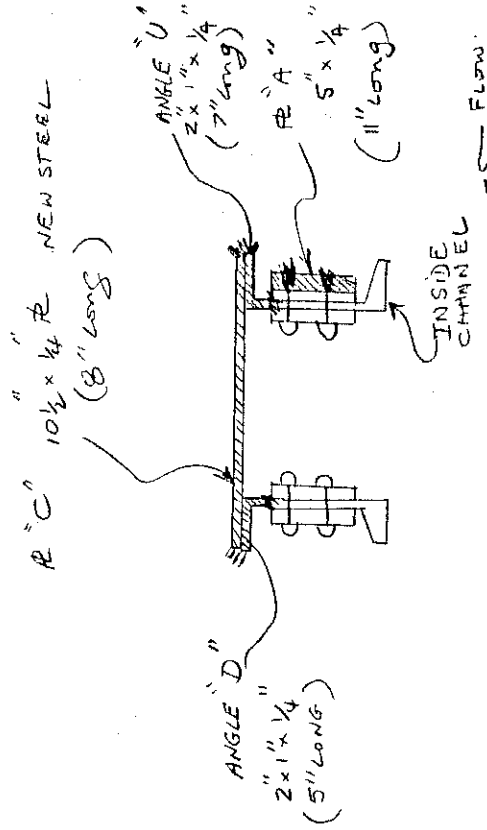
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

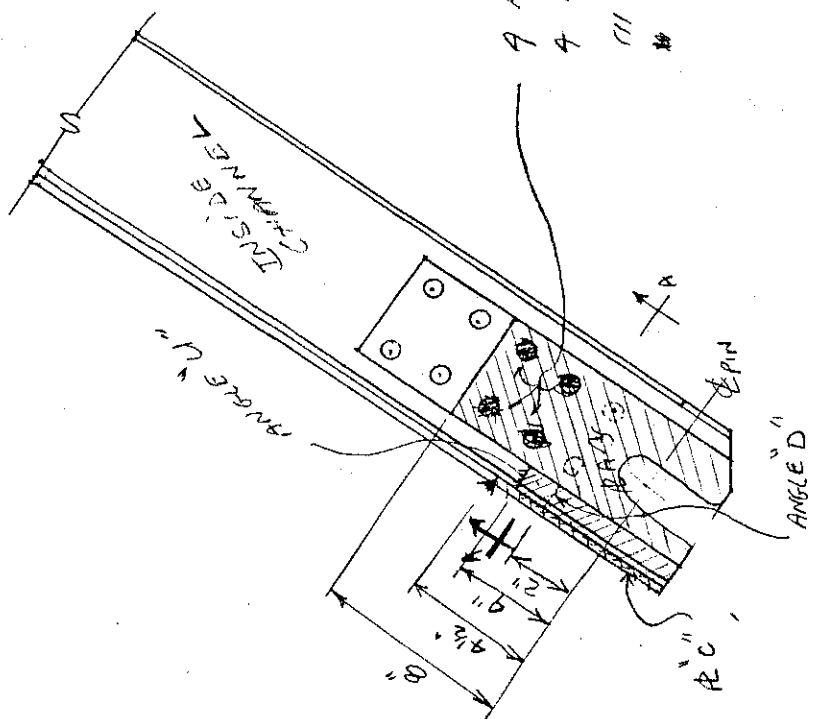
BY: <u>DTB</u> CHECKED: <u>RR</u> ORGANIZATION: <u>OG-98</u>	DATE: <u>9/7/90</u> DATE: <u>9/7/90</u>	SHILOH BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. <u>48-14-0.27</u> COUNTY <u>TYLER</u> DISTRICT <u>SIX</u>	SHEET <u>32</u> OF <u>61</u>
--	--	--	--	------------------------------------

STRESS ANALYSIS INFORMATION REPORT

Inspected by: J. Brong, JR.
 Date: 12/4/83



- A RIVET HEADS REMOVED. SECTION A-A
- A HOLE IN R "A" ARE WELD FILLED
- III DENOTES REPAIRS.
- IV ALL REPAIRS WELDED.



END POST REPAIR @
 ELEVATION VIEW LOOKING D.S. L7 D.S. SPAN NO.1

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DB
CHECKED: RR
ORGANIZATION: 0698

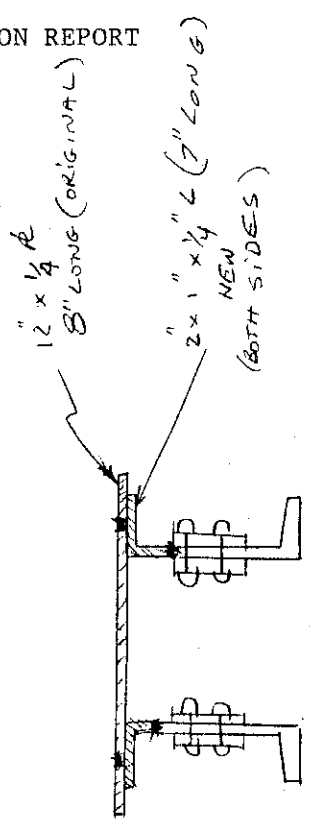
DATE: 9/7/90
DATE: 9/7/90

SHILOH BRIDGE
OVER MIDDLE ISLAND
CREEK

BRIDGE NO. 48-19-027
COUNTY TYLER
DISTRICT SIX

SHEET
33
OF 61

STRESS ANALYSIS INFORMATION REPORT



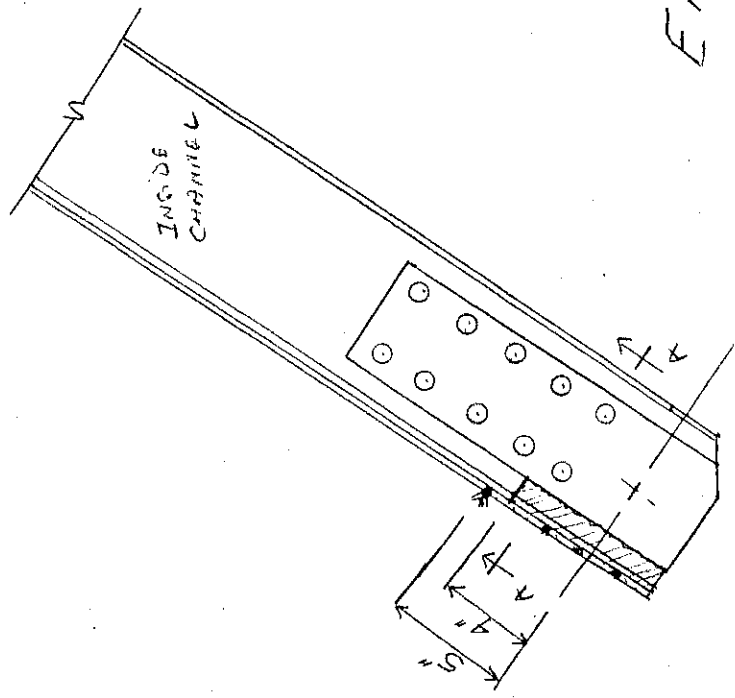
ALL HOLES IN
COVER PLATE ARE WELD
FILLED

SECTION A-A

||||| INDICATES REPAIR
ALL REPAIRS WELDED.

Inspected by: D. Brown
Date: 10/9/83

END POST REPAIR @ 60 U.S.
SPAN NO. 2



ELEVATION VIEW
LOOKING U.S.

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: *DIB*
CHECKED: *RR*
ORGANIZATION: *06-98*

DATE: *9/7/90*
DATE: *9/7/90*

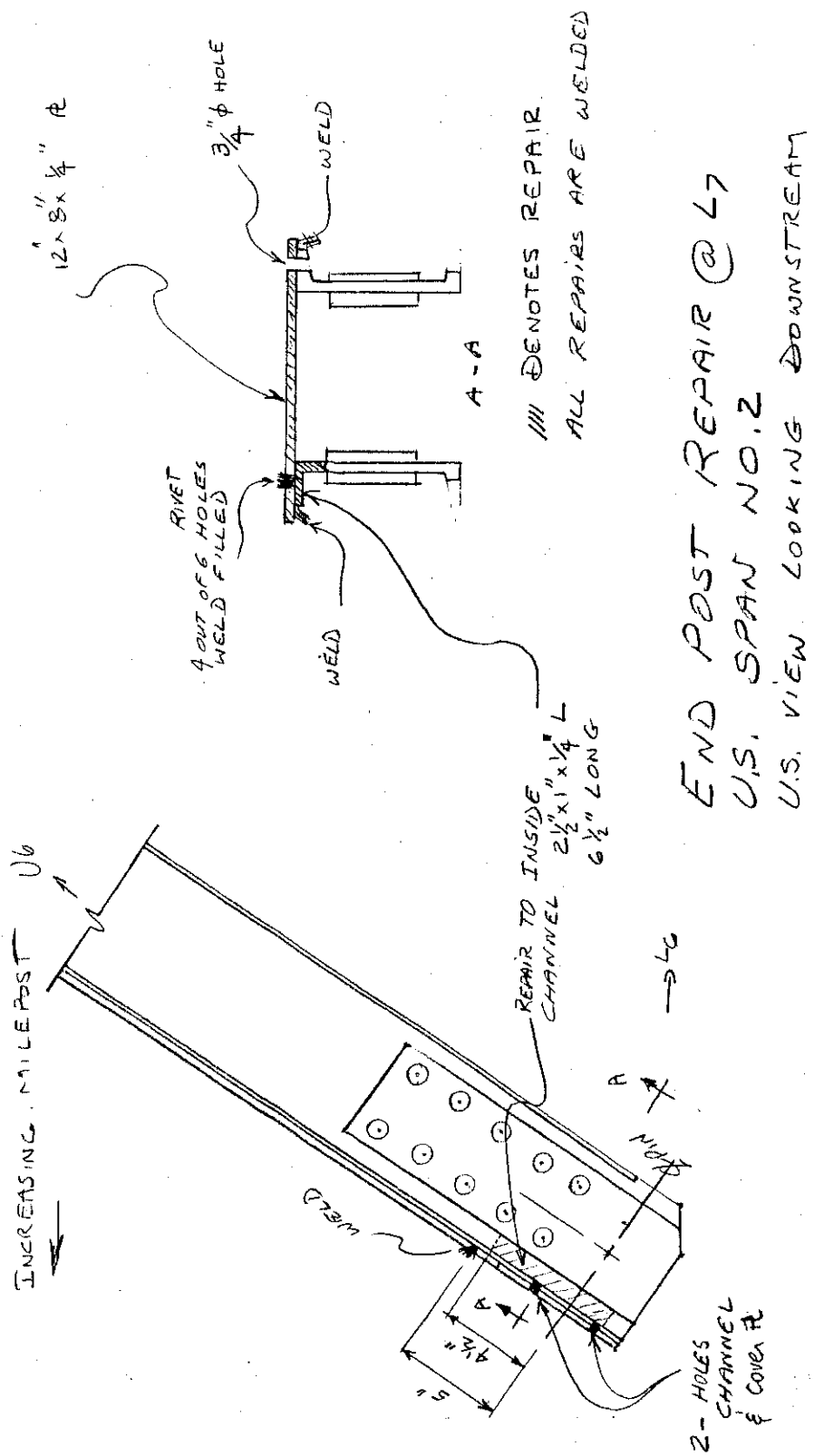
SHILOH BRIDGE
OVER
MIDDLE ISLAND CREEK

BRIDGE NO. *AB-14-0.27*
COUNTY *TYLER*
DISTRICT *SIX*

SHEET
34
OF *61*

STRESS ANALYSIS INFORMATION REPORT

Inspected by: *D. D. [Signature]*
Date: *12/9/83*



END POST REPAIR @ U7
U.S. SPAN NO. 2
U.S. VIEW LOOKING DOWNSTREAM

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: D.B.
 CHECKED: RR
 ORGANIZATION: 0698

DATE: 9/7/90
 DATE: 9/7/90

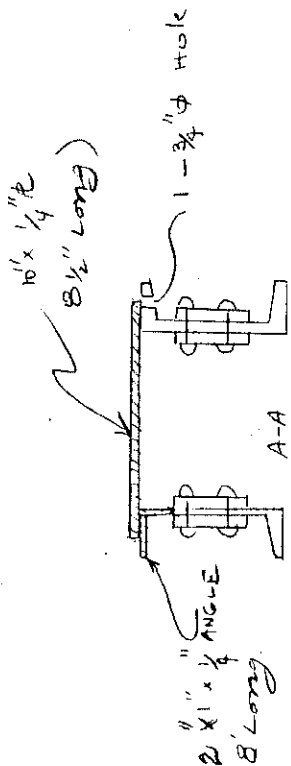
SHILOH BRIDGE OVER
 MIDDLE ISLAND
 CREEK

BRIDGE NO. 48-18-0.27
 COUNTY TYLER
 DISTRICT SIX

SHEET
35
 OF
61

STRESS ANALYSIS INFORMATION REPORT

Inspected by: D. B. [Signature]
 Date: 12/9/83

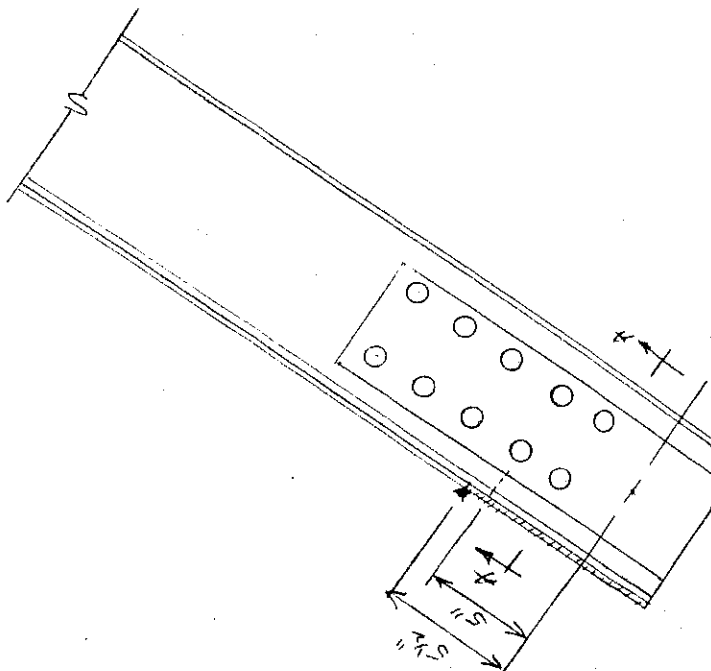


Flow: FLOW

" DENOTES REPAIR

ALL REPAIRS WELDED

L₀ REPAIR D.S.
 SPAN NO. 2



LOOKING U.S.

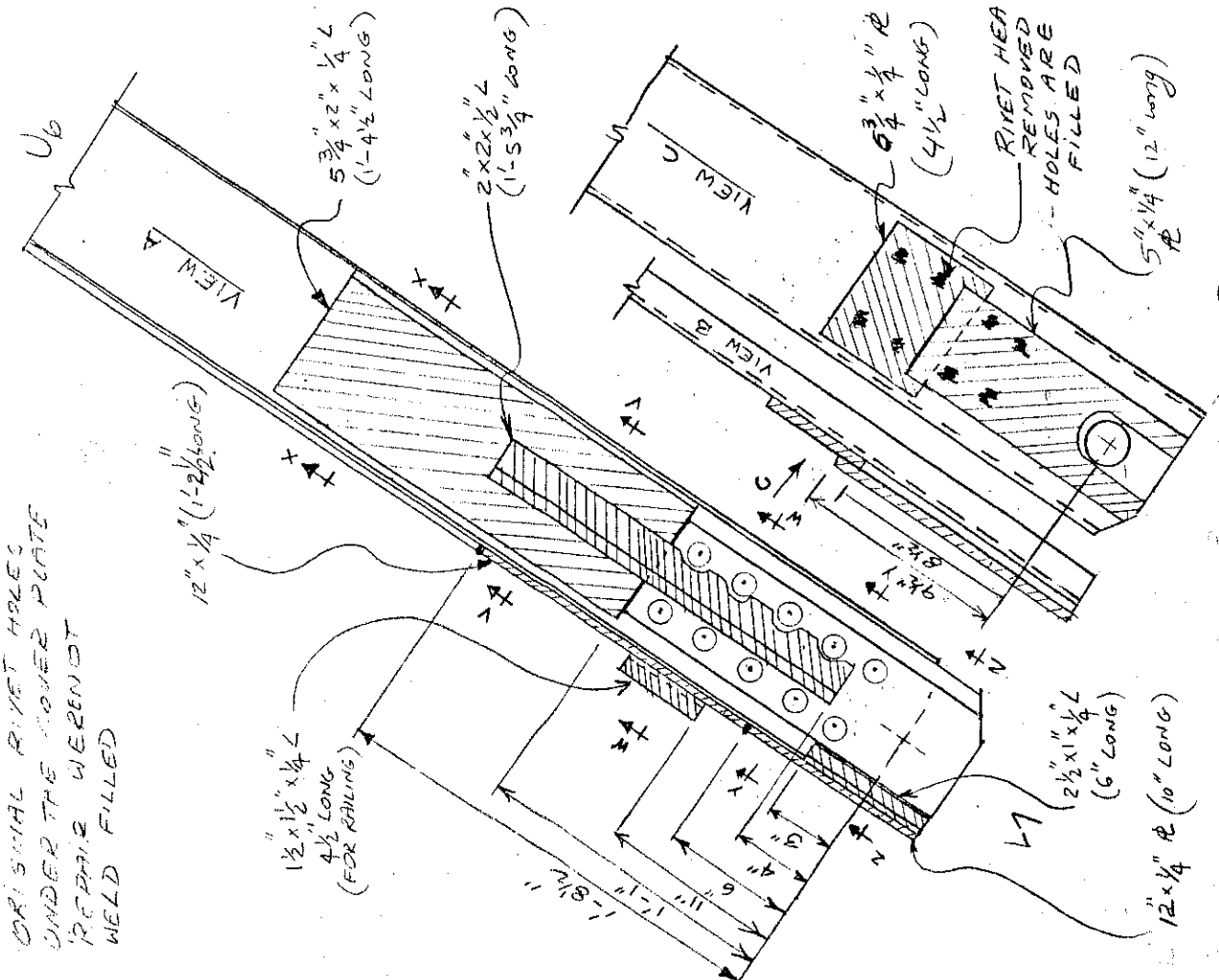
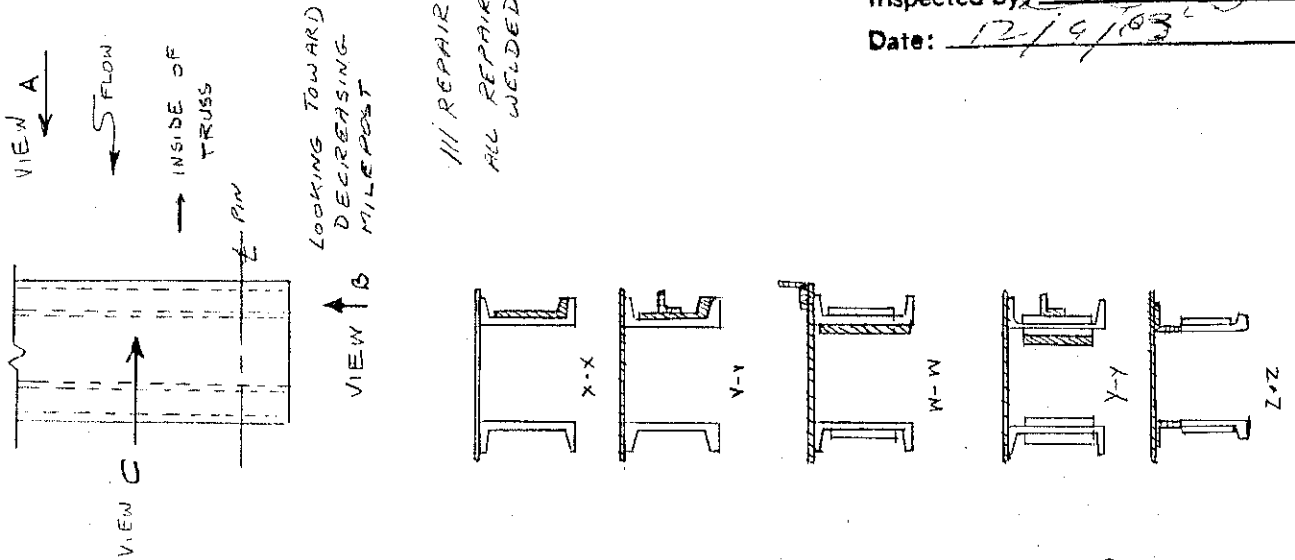
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DB	DATE: 9/7/90	SHILOH BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. 48-1A-0.27 COUNTY TYLER DISTRICT SIX	SHEET 36 OF 61
CHECKED: RR	DATE: 9/7/90			
ORGANIZATION: 06-98				

STRESS ANALYSIS INFORMATION REPORT

Inspected by: *[Signature]*
Date: *12/9/83*



L7 REPAIR D.S. SPAN NO. 2

By: BP

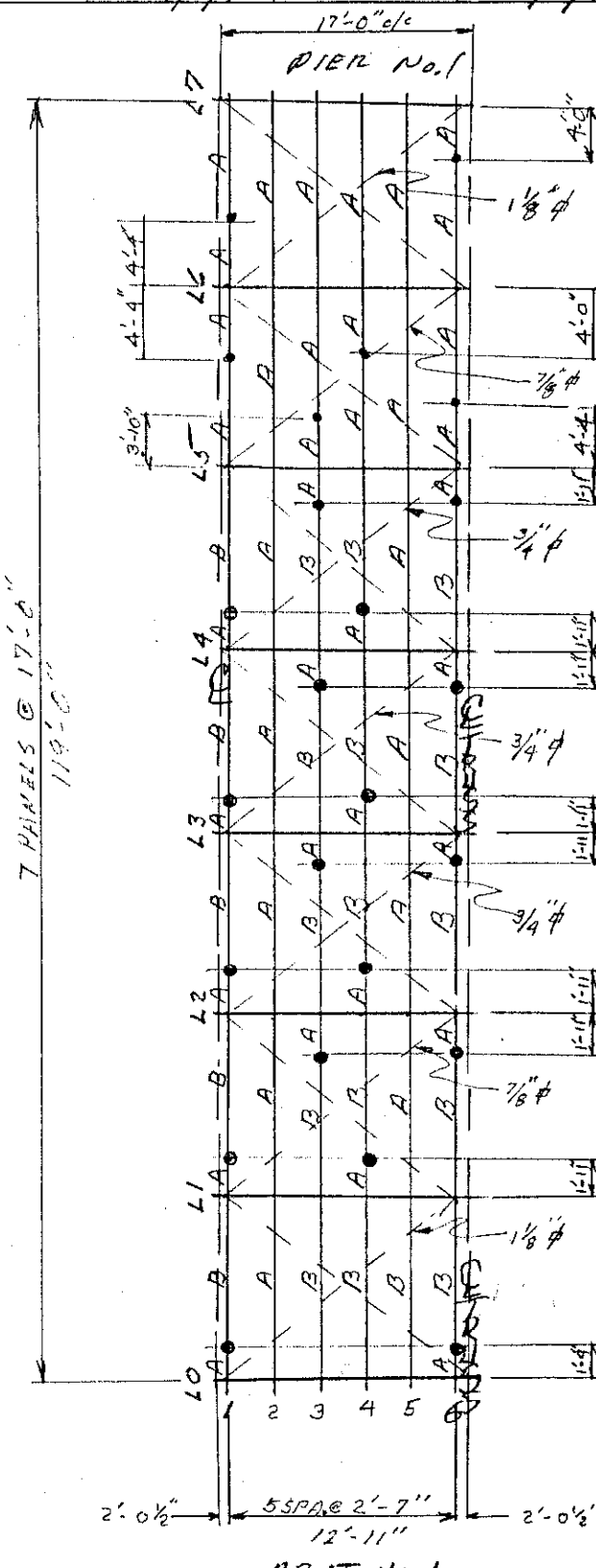
Date: 9/6/90

Ckd By: RR

Date: 9/6/90

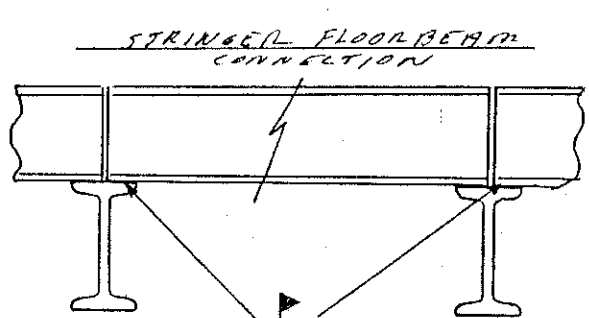
Bridge No.: 48-14/4-0.27

Sheet 37 of 61

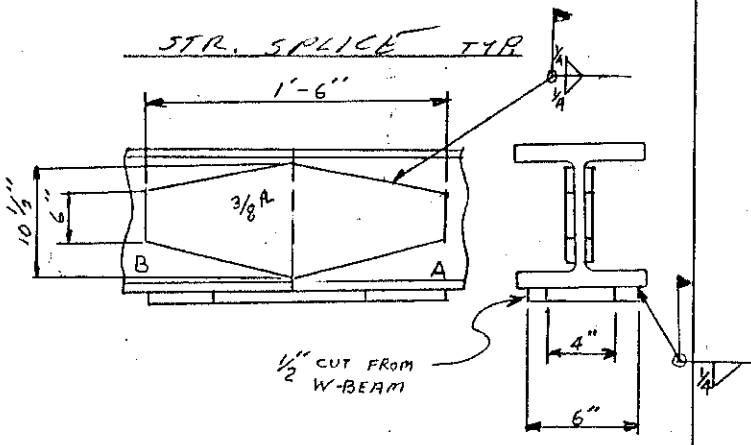


FLOOR PLAN FOR SPAN NO 1

A DENOTES W12x31
B DENOTES W12x36



ONE END WELDED ONE END FREE TO EXPAND TYP



Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

By: *BJP*

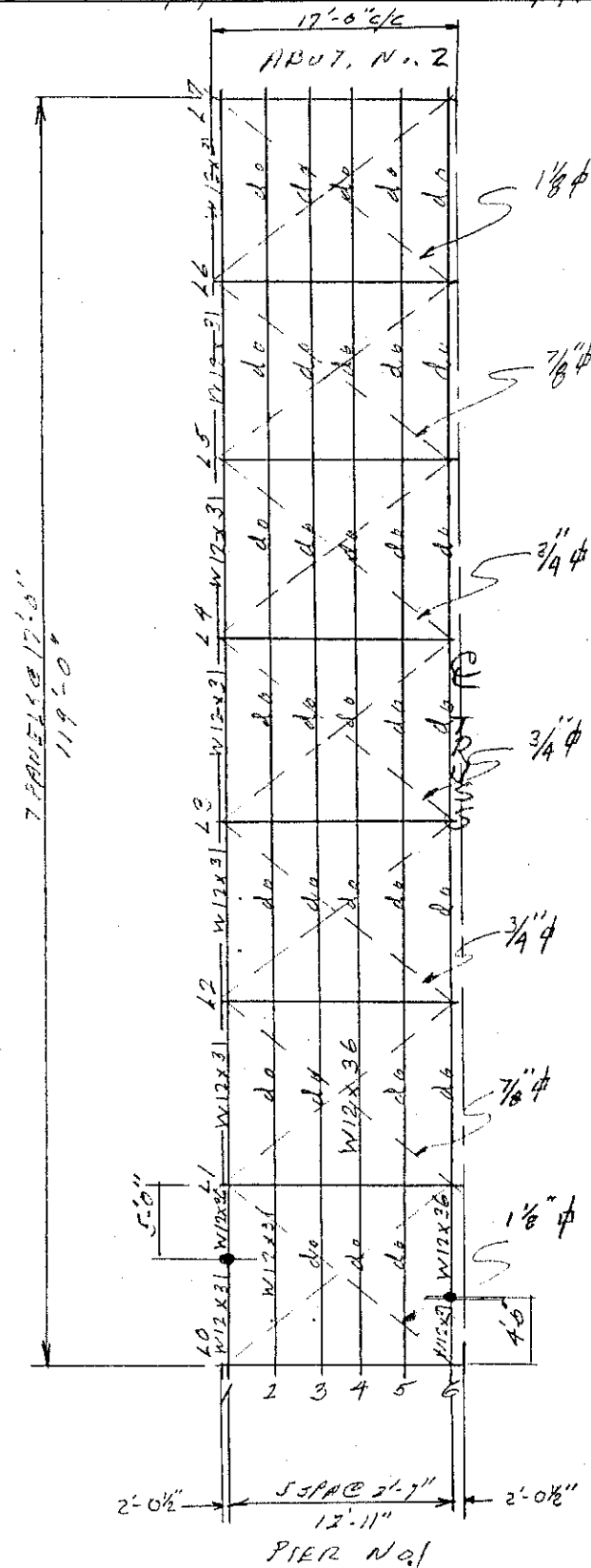
Date: *9/6/90*

Ckd By: *RR*

Date: *9/8/90*

Bridge No.: *48-14/4-0.27*

Sheet *38* of *61*



FLOOR PLAN LAYOUT
SPAN No. 2

SEE FLOOR PLAN SPAN 1
FOR STR FLOOR BEAM
CONNECTION AND SPLICE
PLATE DETAIL

FLOW
→

LATERAL SIZES
TYP FOR SPAN 1

Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:	Rev Date:
By:	By:	By:	By:	By:	By:

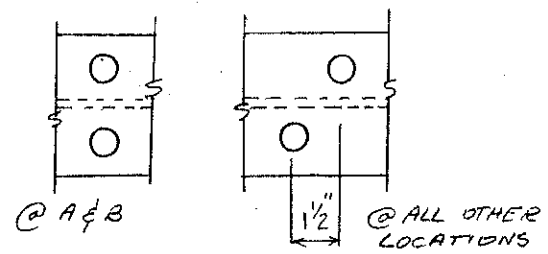
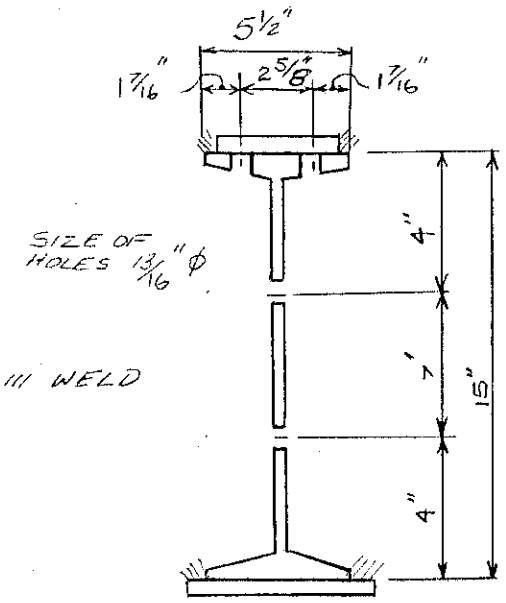
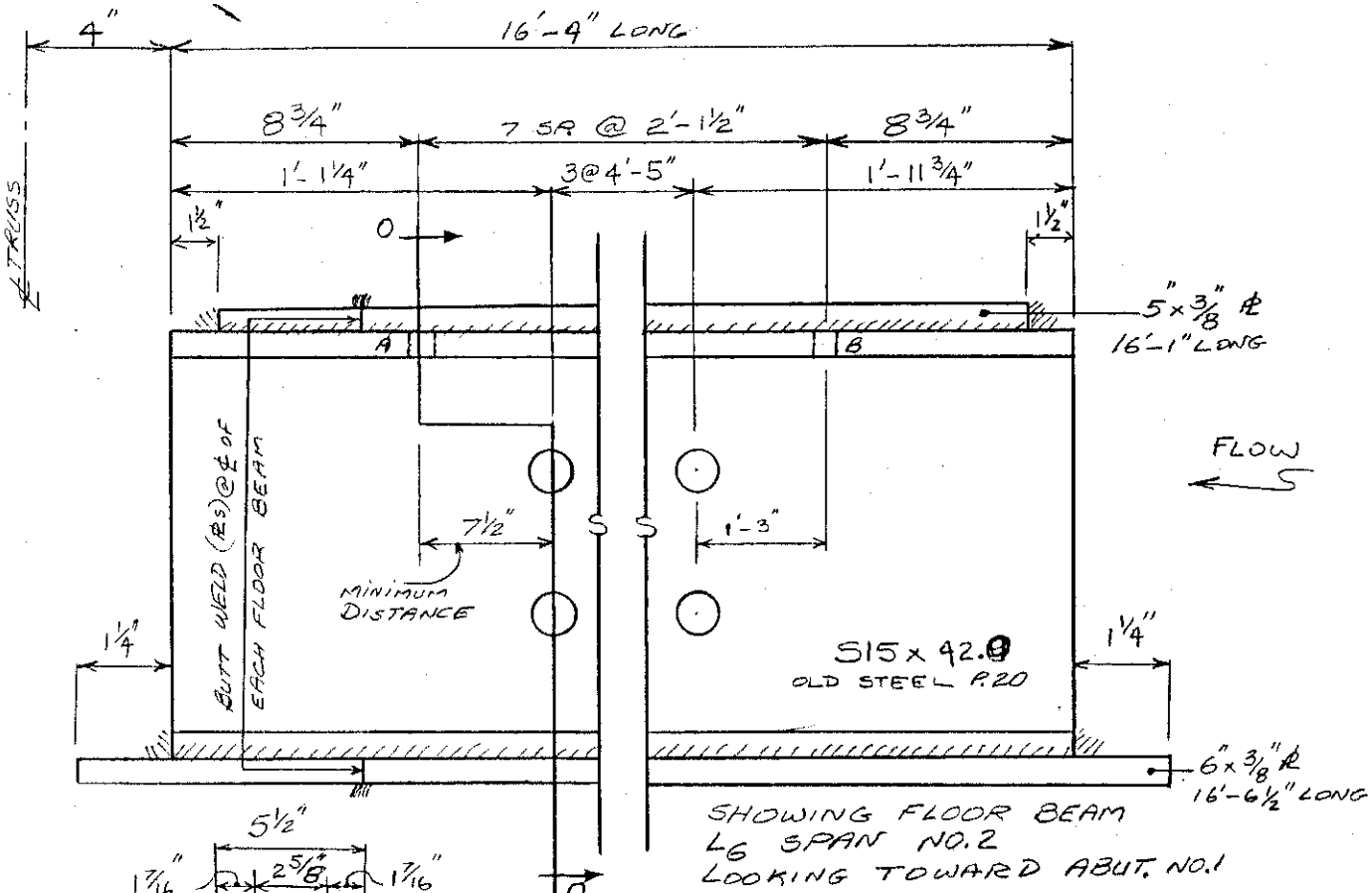
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: DB CHECKED: RR ORGANIZATION: 06-98	DATE: 9/7/90 DATE: 9/7/90	SHILOH BRIDGE OVER MIDDLE ISLAND CREEK	BRIDGE NO. 48-14-0.27 COUNTY TYLER DISTRICT SIX	SHEET 39 OF 61
---	--	---	--	---------------------------------------

STRESS ANALYSIS INFORMATION REPORT

Inspected by: *J. Baughman*
 Date: *12/9/83*



TOP VIEW OF HOLES IN THE TOP FLANGE

* ALL FLOOR BEAMS ARE THE SAME @ SPANS NO.1 & NO.2. "HOLES IN THE WEB EXIST @ L6 SPAN NO.2 ONLY"

* LATERAL CONNECTION HOLE NOT SHOWN

0-0 FLOOR BEAM DETAIL (SPANS NO.1 & NO.2)

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: *DB*
 CHECKED: *RR*
 ORGANIZATION: 06-98

DATE: 9/7/90
 DATE: 9/7/90

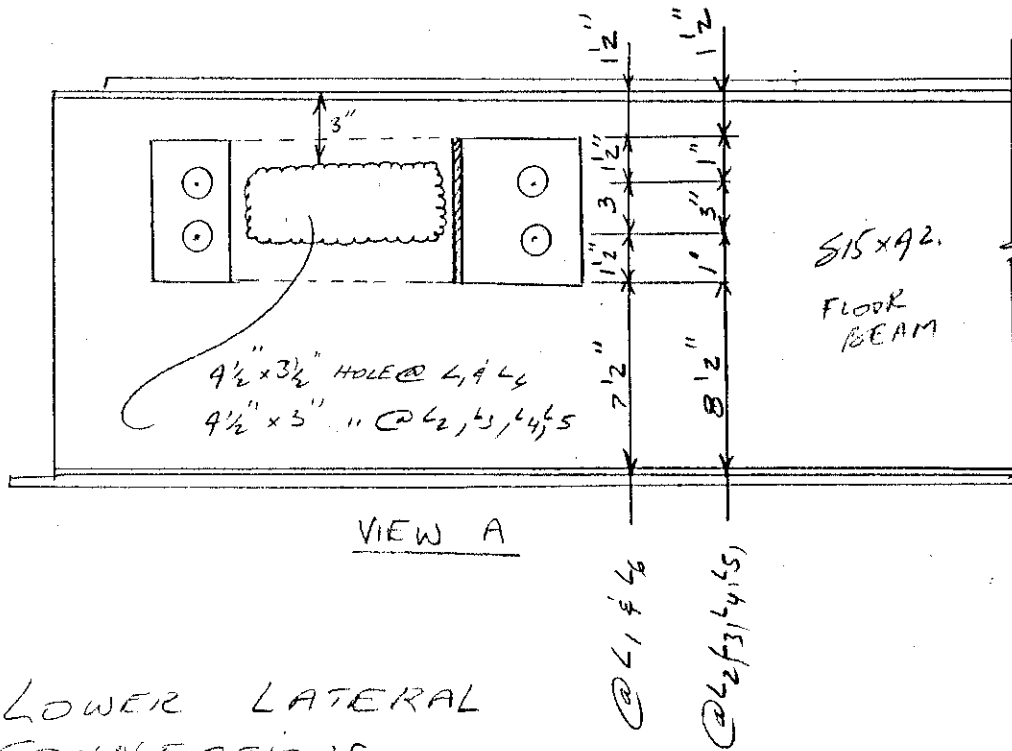
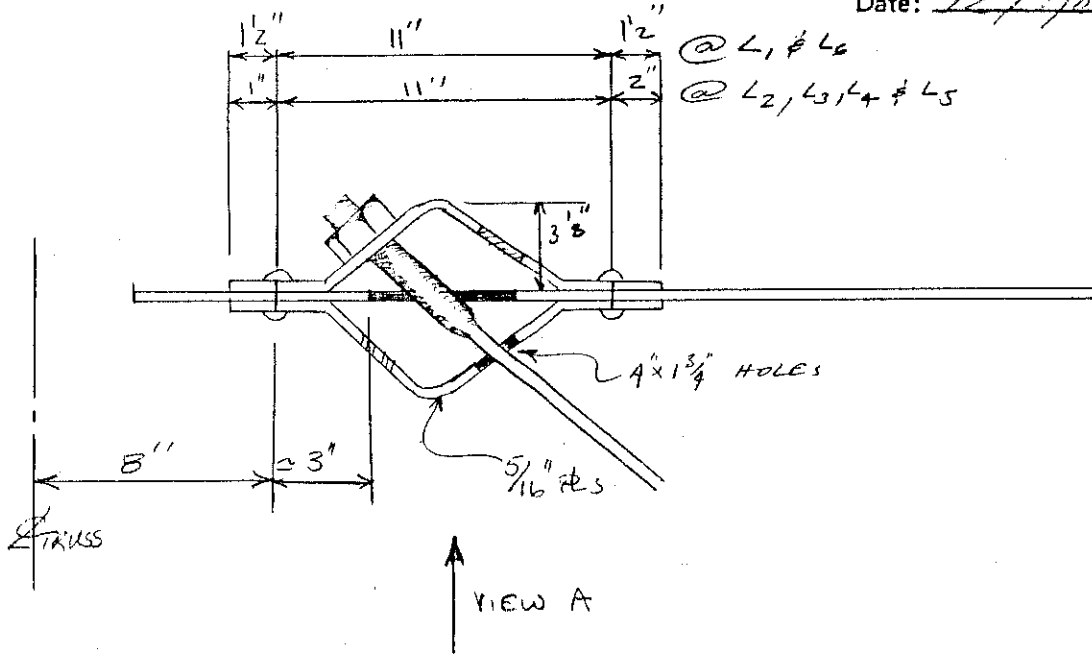
SHILOH BRIDGE
 OVER MIDDLE ISLAND
 CREEK

BRIDGE NO. 48-17-0.27
 COUNTY TYLER
 DISTRICT SIX

SHEET
40
 OF
64

STRESS ANALYSIS INFORMATION REPORT

Inspected by: *J. B. ...*
 Date: *12/19/83*



LOWER LATERAL
 CONNECTIONS

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

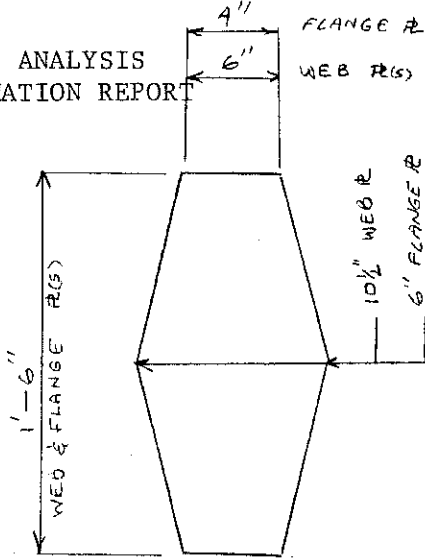
BY: *DIB.*
CHECKED: *RR*
ORGANIZATION:

DATE: *9/7/90* *SHILOH BRIDGE*
DATE: *9/7/90* *OVER MIDDLE ISLAND*
CREEK

BRIDGE NO. *98-14-0.27*
COUNTY *TYLER*
DISTRICT *Six*

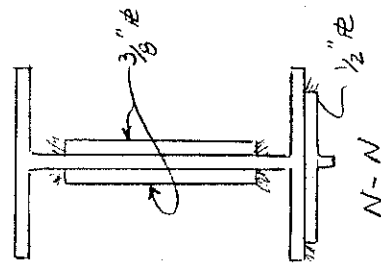
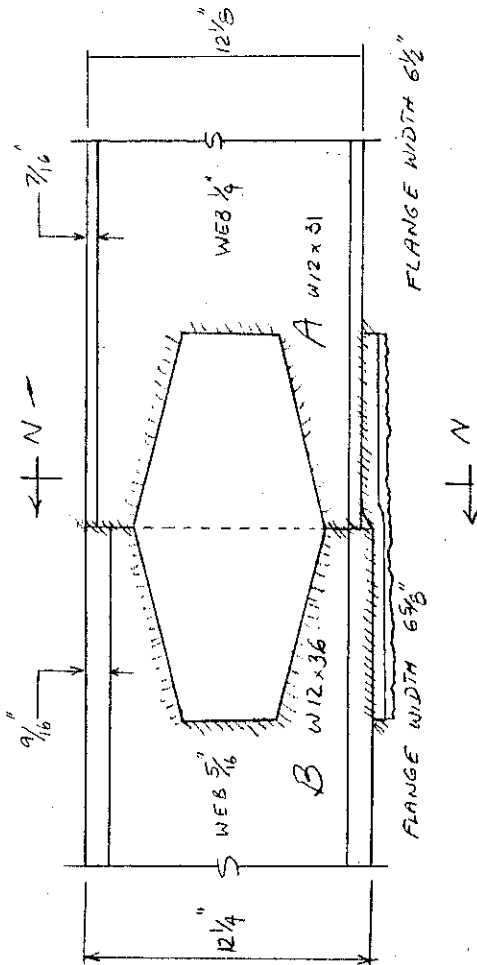
SHEET *41*
OF *61*

STRESS ANALYSIS
INFORMATION REPORT



PLATES ARE THE
SAME @ ALL SPLICES
1/4" FILLET WELD

Inspected by: *D. B. ...*
Date: *12/19/93*



STRINGER SPLICE
SEE FLOOR PLAN FOR LOCATIONS

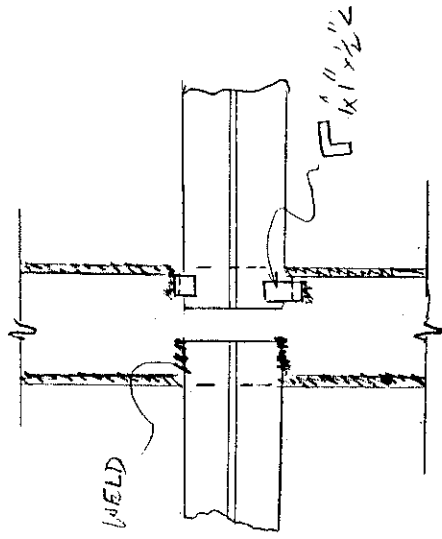
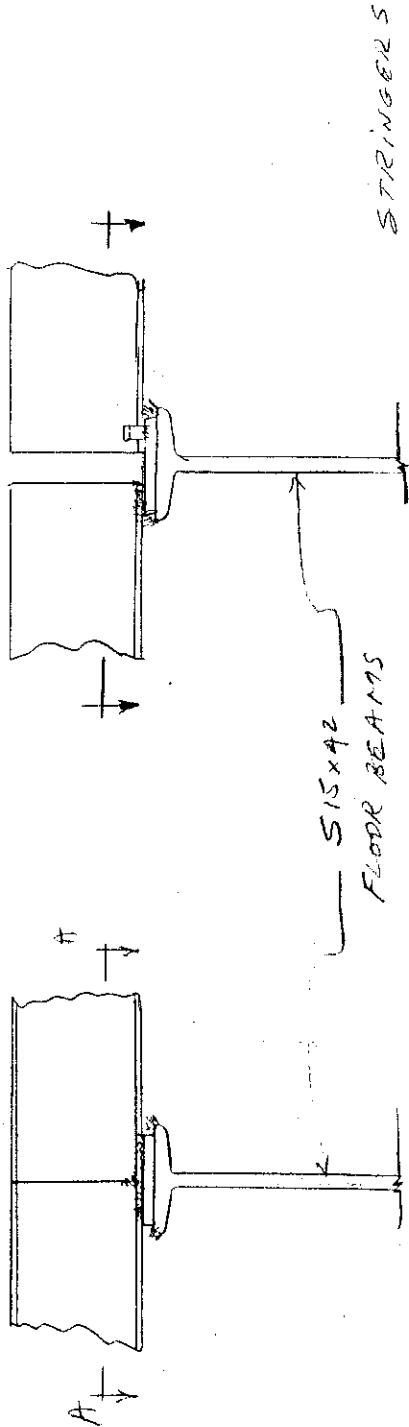
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

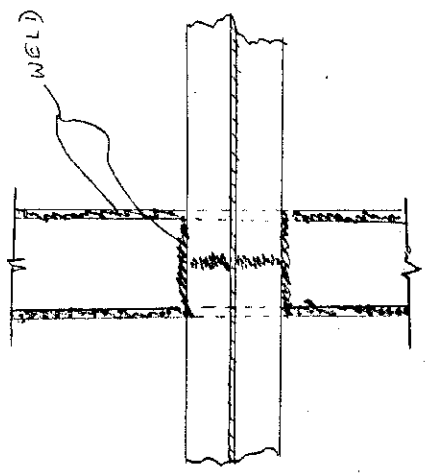
BY: <u>DB</u>	DATE: <u>9/7/90</u>	SHILOH BRIDGE	BRIDGE NO. <u>98-1A-0.2)</u>	SHEET
CHECKED: <u>RR</u>	DATE: <u>9/7/90</u>	OVER MIDDLE ISLAND	COUNTY <u>TYLER</u>	<u>42</u>
ORGANIZATION: <u>06-98</u>		CREEK	DISTRICT <u>SIX</u>	OF <u>61</u>

STRESS ANALYSIS INFORMATION REPORT

Inspected by: A. [Signature]
Date: 12/4/92



STRINGER BEARING
@ ALL OTHER FLOOR
BEAMS SPANS 1 & 2



STRINGER BRG
@ L1 SPAN 1 ONLY

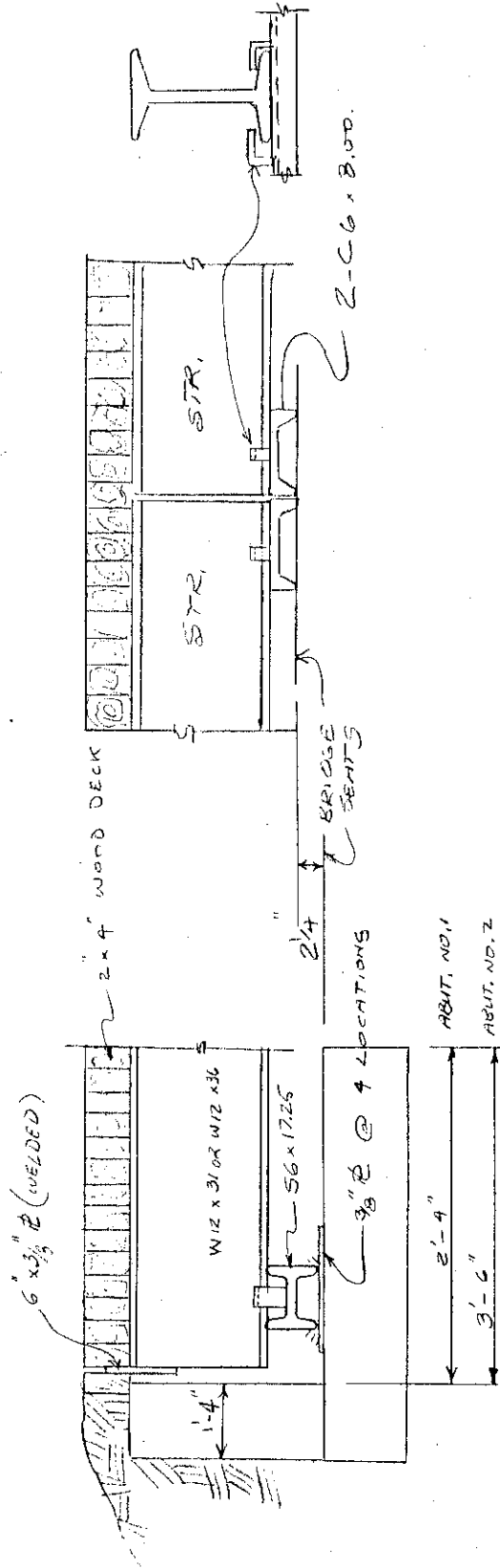
THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS

STRUCTURES DIVISION

BY: <u>D.T.B</u>	DATE: <u>9/7/90</u>	<u>SHILOH BRIDGE</u> <u>OVER MIDDLE ISLAND</u> <u>CREEK</u>	BRIDGE NO. <u>48-1A-0.2</u>	SHEET
CHECKED: <u>RR</u>	DATE: <u>9/7/90</u>		COUNTY <u>TYLER</u>	<u>43</u>
ORGANIZATION: <u>DOT</u>			DISTRICT <u>81X</u>	OF <u>61</u>

STRESS ANALYSIS INFORMATION REPORT

Inspected by: [Signature]
Date: 12/9/83



ABUTMENTS
PIER NO. 1

STRINGER DETAIL
@ THE SUBSTRUCTURE UNITS.
SPANS 14' 2"