

CULVERT Tn.of Long Lake
State of Wisconsin/Department of Transportation
E-B-57-69

NO.

C- 19-1

PROJECT ID

LOCATION: STREAM

Long Lake Outlet

SECTION **17** TOWN **39^N** RANGE **15^E**

HIGHWAY NO.

STH 139

FEDERAL PROJECT

NO. OF OPENINGS

1

CLEAR SPAN AT RIGHT ANGLES

7'-0"

CLEAR HEIGHT

7'-0"

STATION

926 + 70

LOADING

HS20

ANGLE OF SKEW

H. F.

LENGTH OF BARREL

192'-6"

INLET OPENING, TYPE

C (Mod)

DISCHARGE OPENING,
TYPE

B (Mod)

MAX. DEPTH OF FILL

32'-0"

HYDRAULIC DATE: DESIGN **Q**

(100) 175 c.f.s.

DRAINAGE

AREA

13 sq. mi.

LIST OF DRAWINGS

X55051 - X55054

SURVEY RECEIVED

Sept. 1975

PLANS COMPLETED

Jan. 1976

BUILT

1976

COMMENTS

Reel C110



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Inspection Report for C-19-001

STH 139 over Long Lake Outlet
Aug 29,2016



Type	Prior	Frequency (mos)	Performed
Routine	09-02-14	48	X

Latitude	45°51'40.00"N	Owner	STATE HIGHWAY DEPT
Longitude	88°39'13.30"W	Maintainer	STATE HIGHWAY DEPT

Time Log		Team members	
Hours	Minutes		
0	35		

Inspector	Name	Number	Signature	Date
	Gehrig, Brock	7006	<i>Brock Gehrig</i>	08-31-16
			E-signed by Brock Gehrig(dotbag)	

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

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Identification & Location

Feature On: STH 139	Section Town Range: S17 T39N R15E	Structure Number: C-19-001
Feature Under: Long Lake Outlet	County: FLORENCE	
Location 200 feet S OF B-19-4	Municipality: LONG LAKE	Structure Name:

Geometry

measurements in feet, except where noted

Approach Roadway Width: 40	Bridge Roadway Width: 24.0	Total Length: 193.0
Culvert Barrel Length: 70.0	Culvert Width: 7.0	Culvert Height: 7.0

Traffic

Lanes	ADT	ADT year	Traffic Pattern
On 2	1000	2015	TWO WAY TRAFFIC

Capacity

Load Rating

Inventory rating:	Overburden depth (in): 132.0	Last rating date:	Controlling:
Operating rating:	Deck surface material:	Re-rate for capacity (Y/N):	Control location:
Posting:	Re-rate notes:		

Hydraulic

Classification

Scour Critical Code(113):	Q100 (ft3/sec):	
High water elevation (ft):	Velocity (ft/sec):	Sufficiency #:

Span(s)

Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	CONCRETE	BOX CULVERT		7.0	Y

Clearance

Item	File Measurement (ft)	File Date	New Measurement (ft)
Highway Min Vertical On Cardinal			
Horizontal On Cardinal			

Construction History

Year	Work Performed	FOS id
1976	NEW STRUCTURE	0000-00-00

Maintenance Items

Item	Priority	Recommended by	Status	Status change
Misc - Repair / Replace Utilities or Signs	MEDIUM	Petersen, Dale (4506)	APPROVED	09/02/14
Add B/W culvert markers to ends of box.				

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Structure No.: **C-19-001**

Elements

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State			
						1	2	3	4
X	241		Reinforced Concrete Culvert	LF	193	147	41	5	0
		1130	Cracking (RC) random cracks with leakage and effl. 5 ceiling crks leaching, effl w/ rust stains.	LF		0	41	5	0

Assessments

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State			
						1	2	3	4
X	9030		Signs - Object Markers culvert markers missing	EA	2	0	0	0	2
X	9045		Slope Protection- Riprap	EA	2	0	2	0	0
X	9248		Culvert End Treatment Concrete aprons w/wings. SW wing replaced with riprap, NW wing tipped 1 inch	EA	2	1	0	1	0
X	9325		Roadway Over Structure Asphalt	EA	1	1	0	0	0

NBI Ratings

	File	New
Deck	N	N
Superstructure	N	N
Substructure	N	N
Culvert	6	6
Channel	8	8
Waterway	8	8

Structure Specific Notes

Inspection Specific Notes

7 X 7 RCBC

Inspector Site-Specific Safety Considerations

Structure Inspection Procedures

Special Requirements

	Chk	Hours	Cost	Comments
Other Access Equipment	X			Waders

**Underwater Probe Form
C-19-001**

General Site Conditions - Scour

none

General Site Conditions - Embankment Erosion/Conditions

good

Substructure Notes

Unit	Max Water Depth(ft)	Mode	Notes
Cardinal	1.0	Wade	
Non Cardinal	1.0	Wade	

Routine
Document Comment/Description

SW



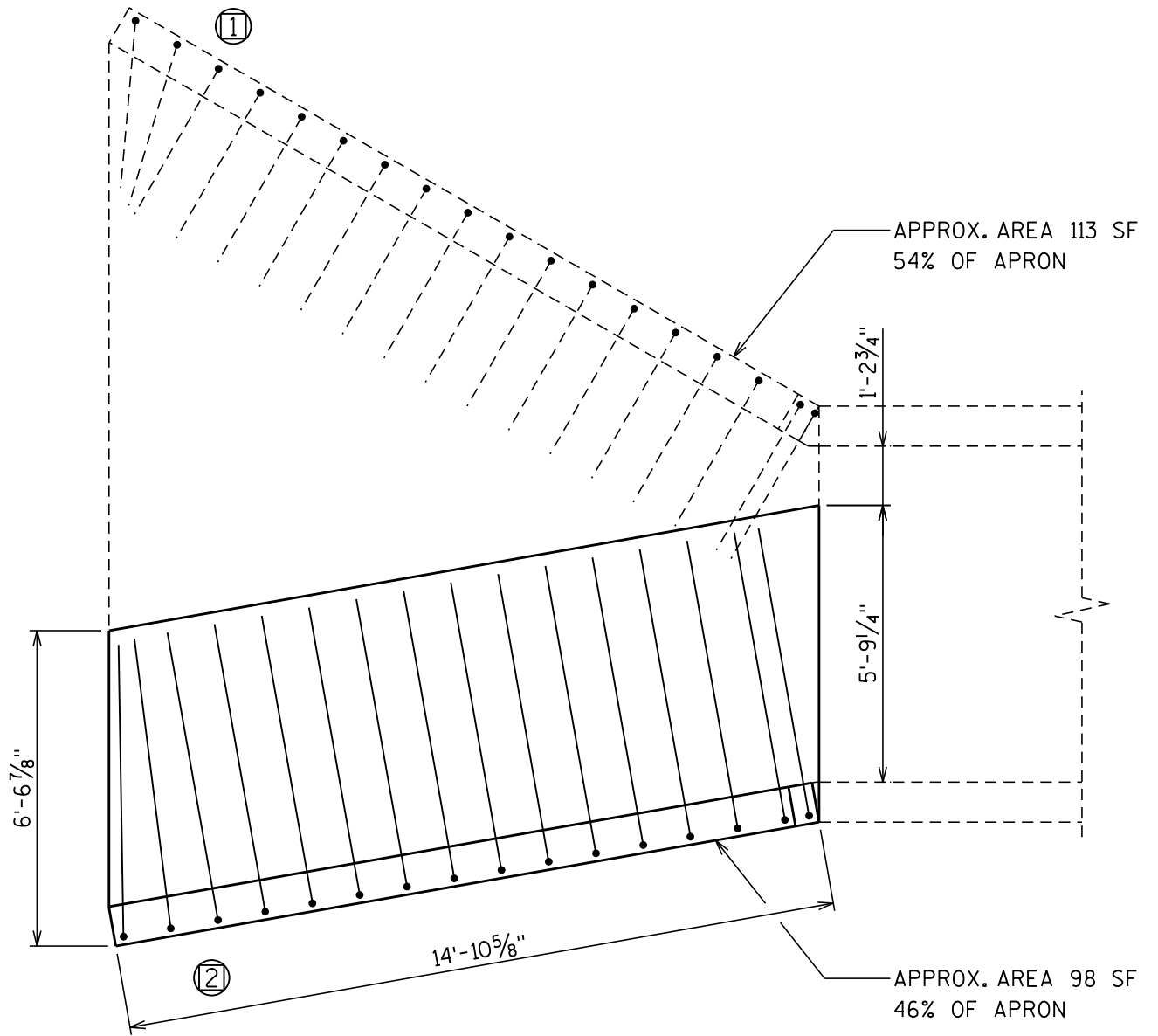
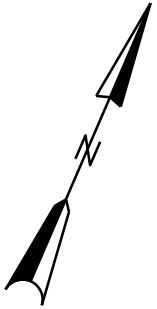
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Document Comment/Description



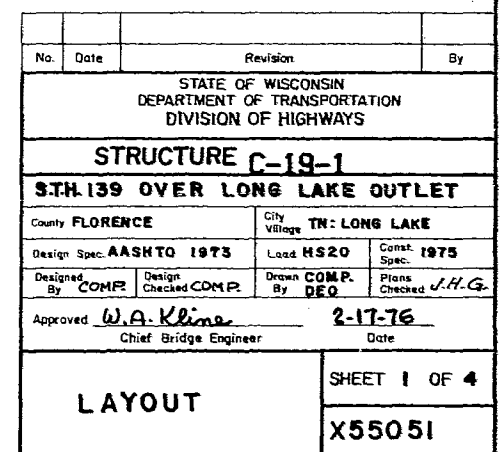
Routine
Document Comment/Description



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C-19-1 APRON WING REPLACEMENT



PROJECT I.D. 9110-1-71	SHEET NUMBER 7.11	TOTAL SHEETS 7
FEDERAL PROJECT DESIGNATION		

ABBREVIATIONS
F — Fine M — Medium C — Coarse
Ws — Weathered So — Sound

MATERIAL SYMBOLS		
Topsoil	Silt	Sandstone
Sand	Peat	Limestone
Gravel	Clay	Igneous Rock

LEGEND OF PROBING
Probing No.
Sta.
Elevation
95/6=95 Blows for 6" Penetration
Probing taken with a 350# wt. Falling 18" on a 2" O. D. Point.
Refusal 95/6

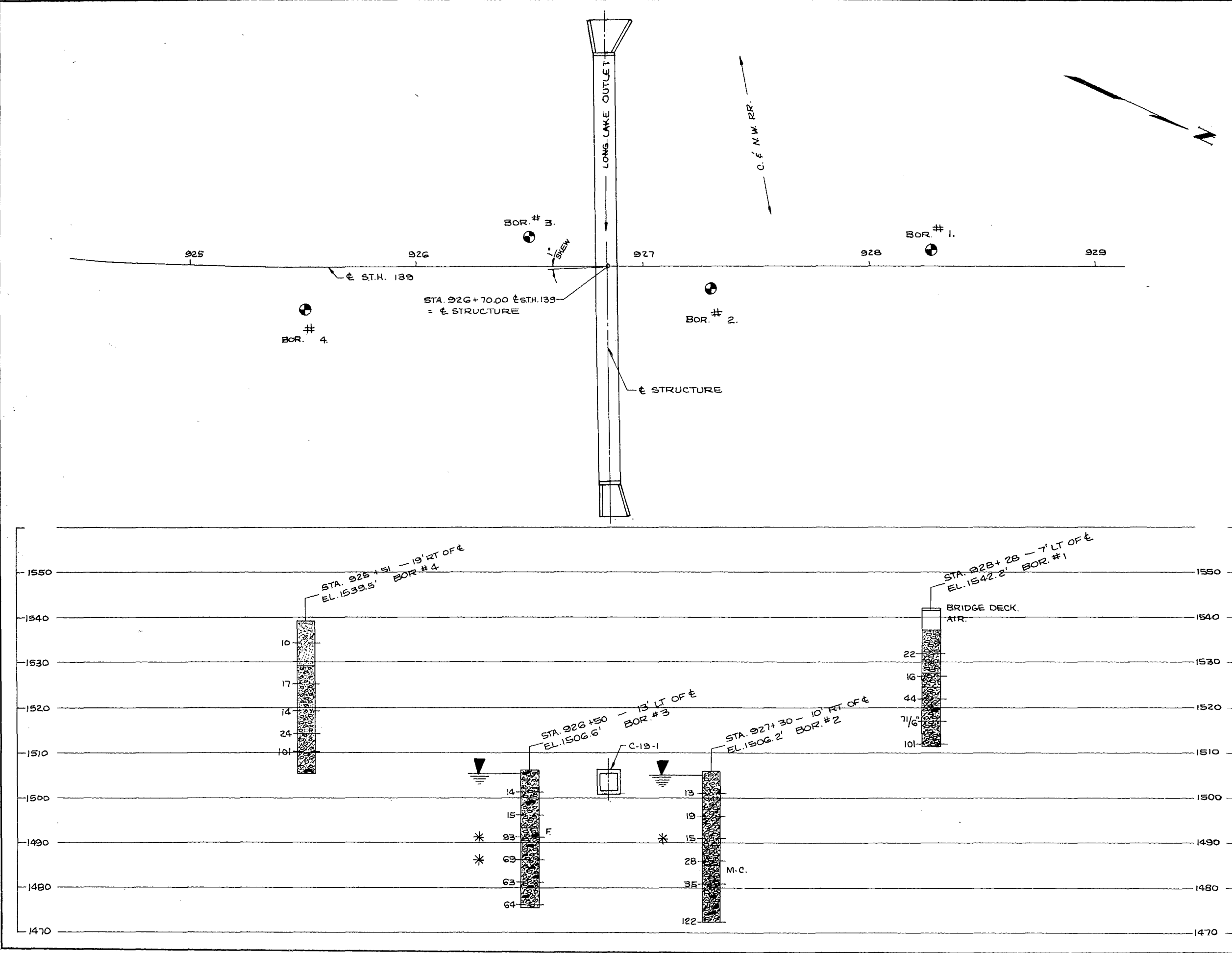
LEGEND OF BORING
Boring No.
Sta.
Elev.
Unconfined Strength — 7.7
Blows Per Ft. Using 140# Wt. Falling 30"
Wash Sample
Shelby Tube — S. T.
Ground Water Elevation
No Ground Water Observed Above This Elevation
Sandy Gravel
F.
Boulders or Cobbles
Sand
Silty Clay
So
Limestone

Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O. D. x 1.4" I. D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

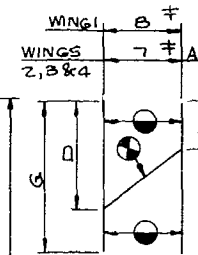
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE C-19-1			
Const. Spec.	1975	Drawn By	DES
		Plans Checked	J.H.G.
SUBSURFACE EXPLORATION		SHEET 2 OF 4 X 55052	



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE C-19-I			
Const. Spec.	1975	Drawn By	DEO
		Plote Checked	J.H.G.
DETAILS		SHEET 3 OF 4	
		X55053	



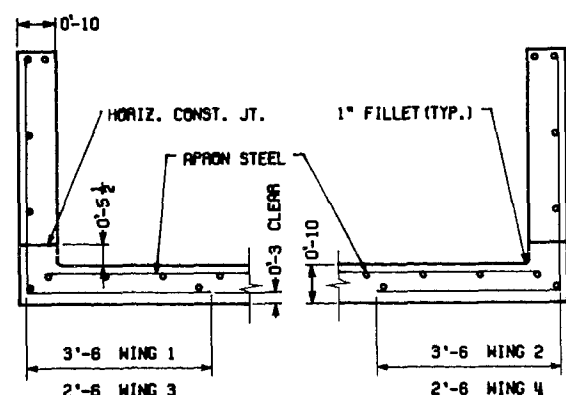
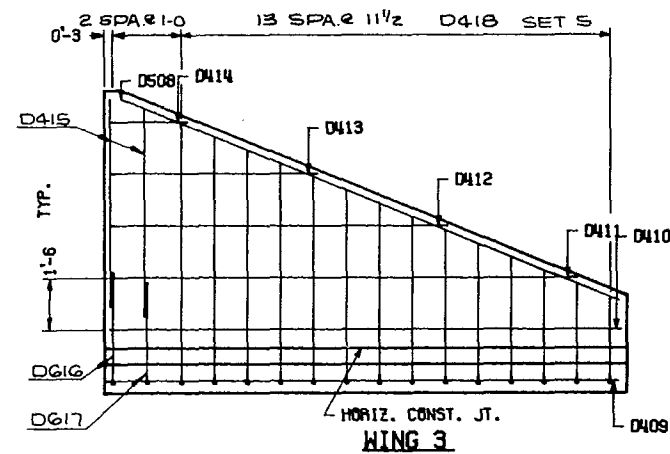
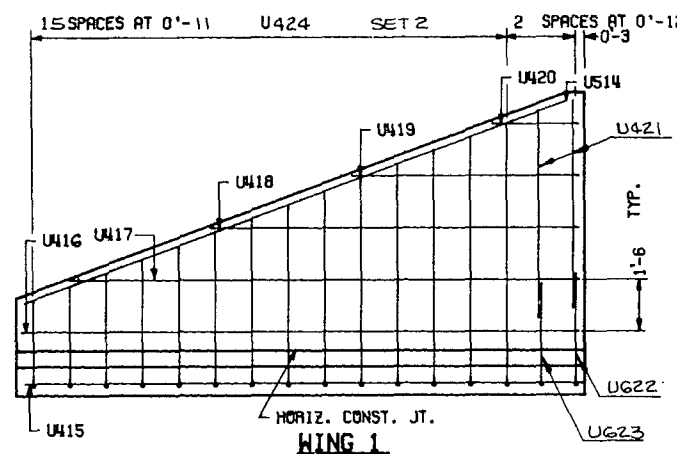
CUT BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS. BARS ON EACH SIDE OF CUT CONSTITUTE ONE SET.

● CUT, BUNDLE & MARK BARS
WITH BAR & SET NO.'S. BENT
BARS IN CUTTING DIAGRAM
SHALL BENT AFTER CUTTING.

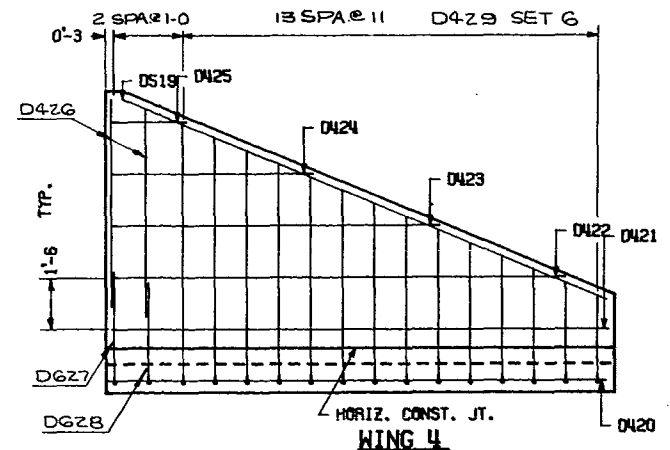
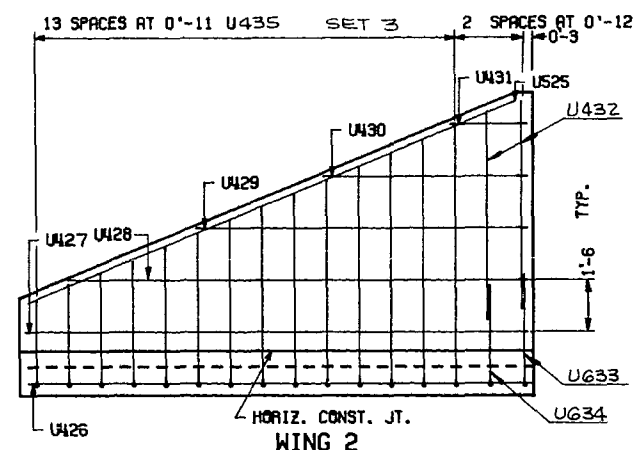
‡ NUMBER OF BARS BEFORE CUTTING.

BAR MARK	D	F	G	SETS REQD
U403 SET 1	13-2	8-8	27-1	1
U424 SET 2	8-3	5-10	16-10	1
U435 SET 3	8-3	5-10	16-10	1
D403 SET 4	9-10	8-2	19-11	1
D418 SET 5	7-3	4-10	14-10	1
D429 SET 6	7-3	4-10	14-10	1

CUTTING DIAGRAM



SECTION THRU WINGS
AT RIGHT ANGLES TO WING WALLS



THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A
"L" SHAPED BAR.

MARK	NUMBER REQ'D.	LENGTH	BENT	CUTTING DIAGRAM	LOCATION
B601	784	7-3	2-3	NO	BODY - CORNERS
B602	756	4-9	2-3	NO	" - "
B403	196	2-0	NO	NO	" - DOWELS
B404	182	27-2	NO	NO	" - LONGITUDINAL
B405	28	27-2	NO	NO	" - BOTTOM-LONGIT.
B606	287	7-10	NO	NO	" - " - TRANS.
B407	196	7-0	NO	NO	" - SIDE VERTICAL
B608	273	7-10	NO	NO	" - TOP TRANS.
B409	49	27-2	NO	NO	" - " LONGIT.
B410	4	8-3	NO	NO	" - HEADER
B311	22	3-0	#	NO	" - "
B512	182	4-0	NO	NO	" - LONGIT. CONST. JT.

2 @ B601 AT 1'-0"

14 B403 AT 2'-0"

14 B407 AT 2'-0"

27 B602 AT 1'-0"

B409

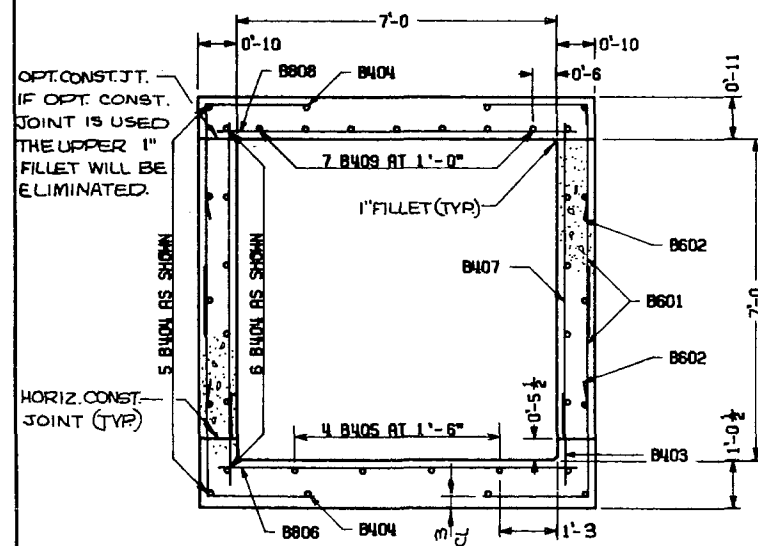
B405

B404

3 @ B608 AT 8 1/2"

41 B606 AT 8"

USE IDENTICAL STEEL IN OTHER PANELS.
APRON AND HEADER ARE NOT SHOWN.



ALL LONGITUDINAL BARS ARE B404 UNLESS SHOWN OR NOTED OTHERWISE.

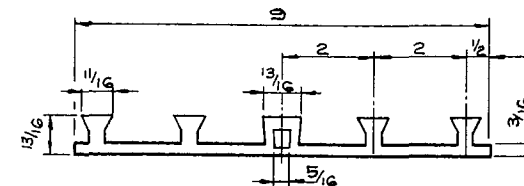
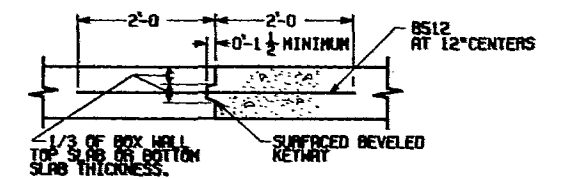


Diagram showing a cross-section of a top header. Dimensions include 1'-0" for the top width, 0'-6" for the top thickness, 4" for the bottom thickness, and 0'-6" for the bottom width. Material specifications are BUIO and B911 at 9" centers. A note indicates: BEVEL TO EXTEND BETWEEN INSIDE FACES OF BOX WALLS. BEVEL INLET END ONLY.

SECTION THRU TOP HEADER



VERTICAL CONSTRUCTION JOINT

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE C-19-1			
Const. Spec.	1975	Drawn By	COMP. DED.
		Plans Checked	<i>J.H.G.</i>
DETAILS		SHEET 4 OF 4	
		X55054	