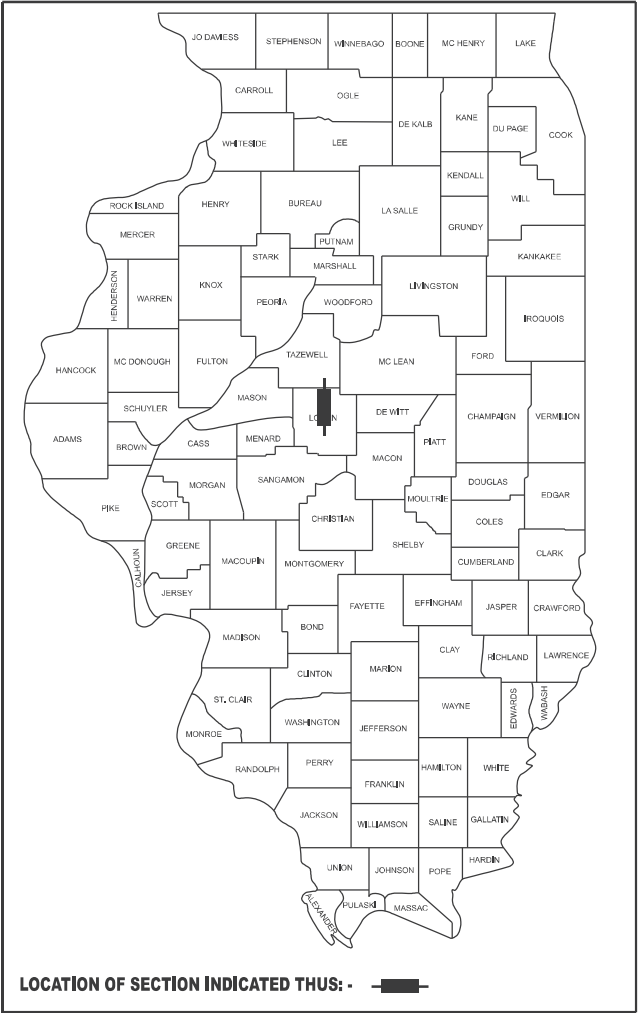


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3)-3	LOGAN	6*	1
		ILLINOIS	CONTRACT NO. 72974	

* 6 + 1 = 7 TOTAL SHEETS

D-96-045-25



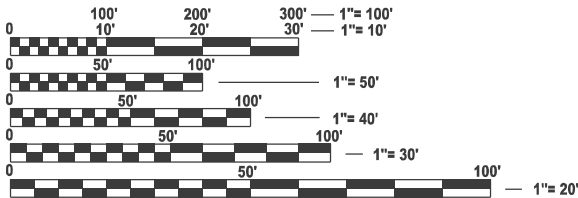
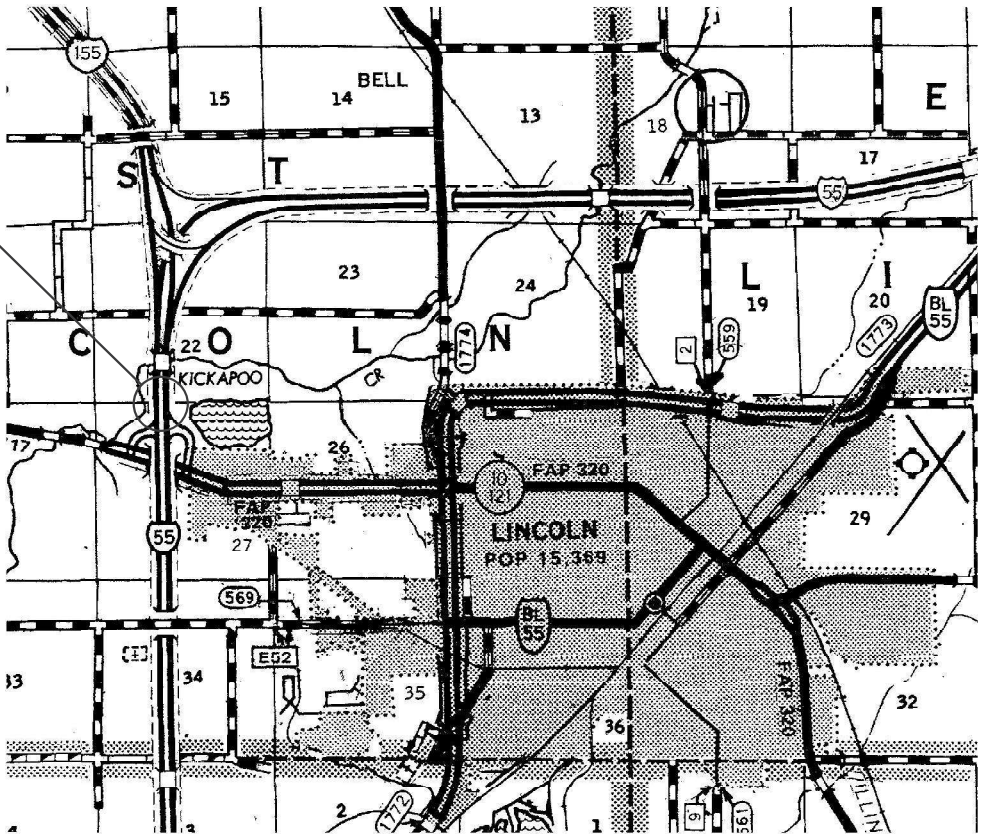
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED
HIGHWAY PLANS

FAI ROUTE 55 (I-55)
SECTION (54-3)I-3
PROJECT (STATE ONLY)
CULVERT REPAIR
LOGAN COUNTY
C-96-081-25



PROJECT LOCATION:
SN 054-7102
I-55 OVER DITCH
0.4 MI N IL 10



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: BRANDON DUDLEY - (217) 785-9290
PROJECT MANAGER

CONTRACT NO. 72974

GROSS LENGTH = XX FT. = XX MILE
NET LENGTH = XX FT. = XX MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 20, 2025
Lora Remy REGIONAL ENGINEER

August 15, 2025
Scott A. Etkin ENGINEER OF DESIGN AND ENVIRONMENT

August 15, 2025
Chadley DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

1	COVER SHEET
2	INDEX, STANDARDS, GENERAL NOTES, SIGNATURES, & SCHEDULES
3	SUMMARY OF QUANTITIES
4	LOCATION MAP & PLAN
5-6	BRIDGE PLANS, SN 054-7102

HIGHWAY STANDARDS

000001-08
001001-02
001006
701101-05
701106-02
701901-10

GENERAL NOTES:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINED

June 12,

20

25



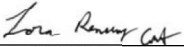
ENGINEER OF OPERATIONS

EXAMINED

June 12,

20

25



ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED

June 12,

20

25



ENGINEER OF PROGRAM DEVELOPMENT

MODEL: index [Sheet]
FILE NAME: c:\p\work\pwt\tdudley\mld1095526\72974 plansheet.dgn

	USER NAME = brandon.dudley	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, & SIGNATURES		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -				55	(54-3)I-3	LOGAN	6	2
		CHECKED -	REVISED -				CONTRACT NO. 72974				
	PLOT DATE = 5/9/2025	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
				SCALE:		SHEET 1	OF 1	SHEETS	STA.	TO STA.	

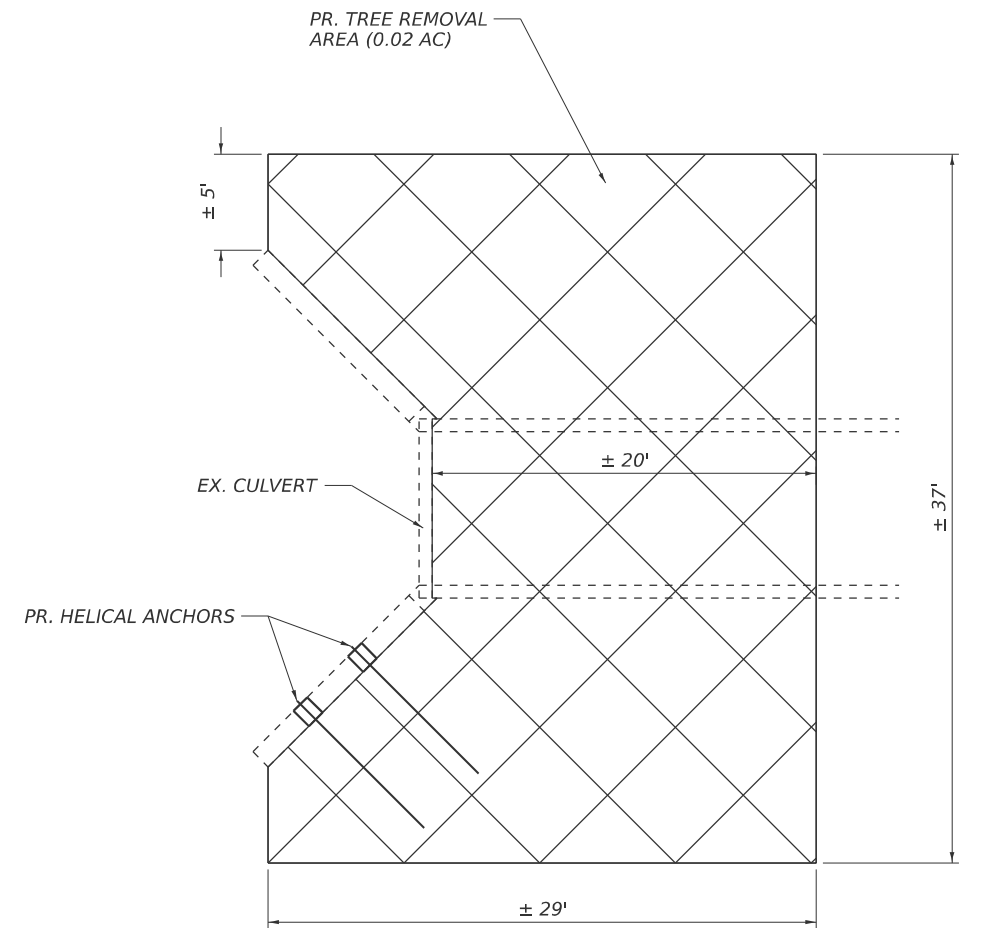
MODEL: SOQ (Sheet)

[illegible]

REV - MS

FILE NAME:	USER NAME = brandon.dudley	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						55	(54-3)I-3	LOGAN	6	3
		CHECKED -	REVISED -						CONTRACT NO. 72974				
	PLOT DATE = 5/9/2025	DATE -	REVISED -		SCALE:	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

An aerial photograph of a complex highway interchange. Highway 55 runs vertically through the center. Highway 10 runs horizontally across the bottom left. Highway 121 runs horizontally across the bottom right. The interchange features several large, curved ramps. A black circle is drawn on the northbound side of Highway 55, near the top of the frame. The surrounding area includes dense forest, a body of water labeled 'Kickapoo Creek', and a building labeled 'Hampton Inn Lincoln'.



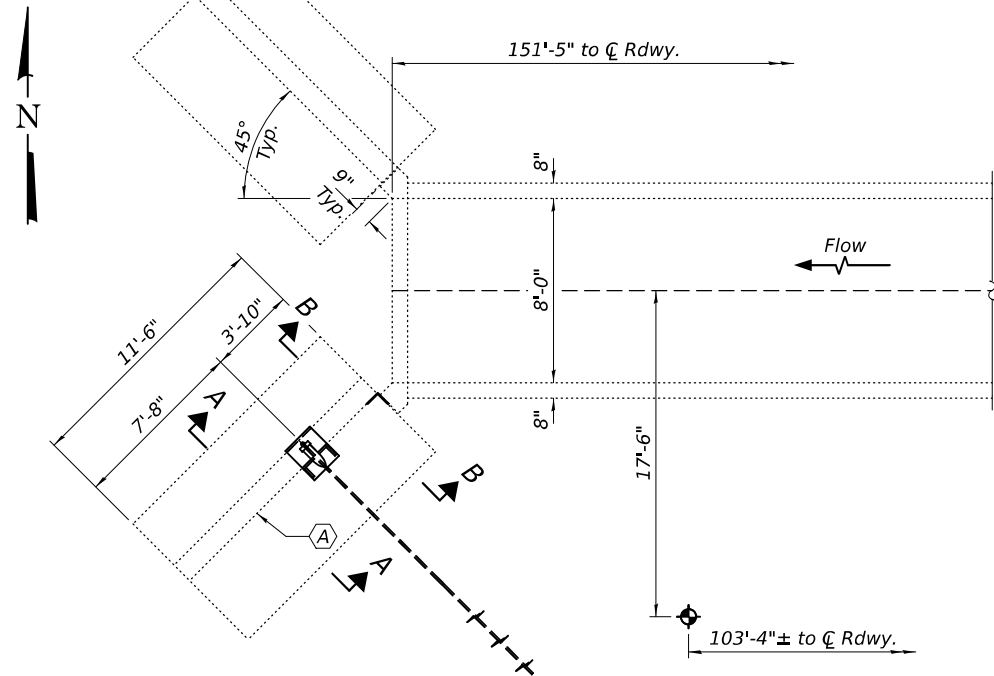
PLAN

LOCATION MAP

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3)I-3	LOGAN	6	4
CONTRACT NO. 72974				
ILLINOIS		FED. AID PROJECT		

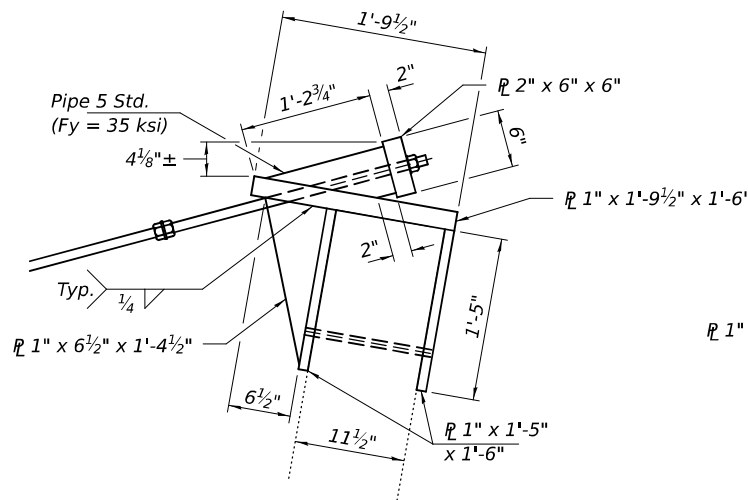
MODEL: plan [Sheet]
FILE NAME: c:\pw_work\pwidth\dudleyb\m\1099526\72974_plansheet.dgn

MODEL: 01
FILE NAME: p:\dot-pw\Bentley.com\FWIDOT\Documents\OBM Projects\0547102\CADDData\Structures\0547102.dgn
8/14/2025 3:09:34 PM

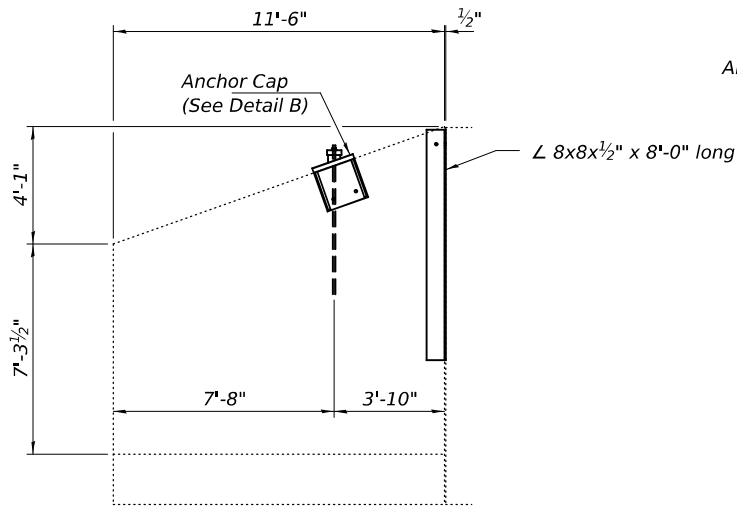


PARTIAL PLAN

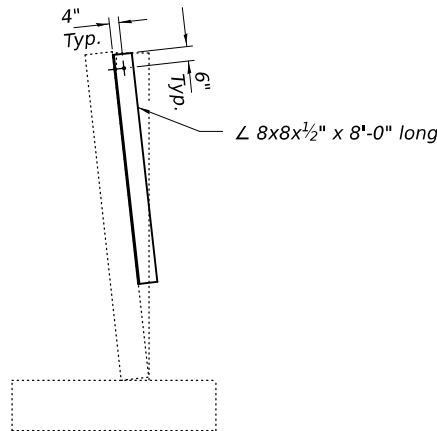
(A) - Straighten existing wingwall using Helical Ground Anchors.



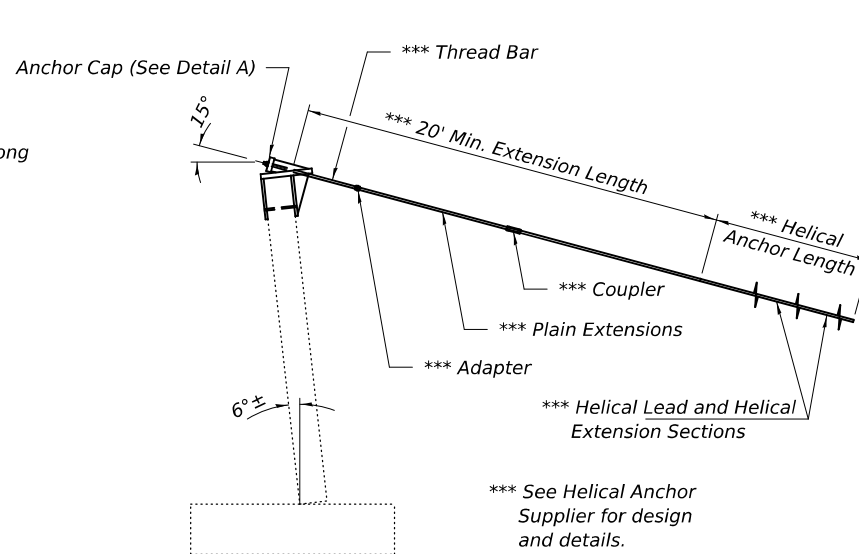
DETAIL "A"



ELEVATION
(Inside Face)



SEC B-B



SEC A-A

GENERAL NOTES

- All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- Plan dimensions and details relative to the existing structure have been taken from existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Strutural Steel".
- Helical Anchor shall be designed by manufacturer. (See Special Provisions).
 - The Contractor shall submit design calculations and shop drawing for the proposed Helical Ground Anchor to the Engineer for review and approval.
 - Helical anchor design load (Service) = 18.0 K/Anchor.
 - All anchor components shall be galvanized according to Article 509.05 of the Standard Specifications.
 - Cost of steel plates, washers, and nuts included in the cost of Helical Ground Anchors.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Helical Gound Anchor	Each	1
Structural Steel Repair	Pound	220

DESIGN STRESSES
fy = 35 ksi (Pipes)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
I-55 OVER DITCH
SN 054-7102

SHEET 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(54-3)I-3	LOGAN	6	5
CONTRACT NO. 72974				
ILLINOIS FED. AID PROJECT				



Expires: November 30, 2026

DESIGNED -	Jeffrey S. Burke
CHECKED -	Chris A. Loeh
DRAWN -	daburdell
CHECKED -	JSB CAL

EXAMINED	
PASSED	

DATE -	AUGUST 14, 2025
REVISED -	
REVISED -	

MODEL: 02
FILE NAME: p:\dot-pw\Bentley.com\FWIDOT\Documents\DOT O ces\Bureau of Bridges and Structures\OBM Projects\0547102\CADDData\Structures\0547102.dgn



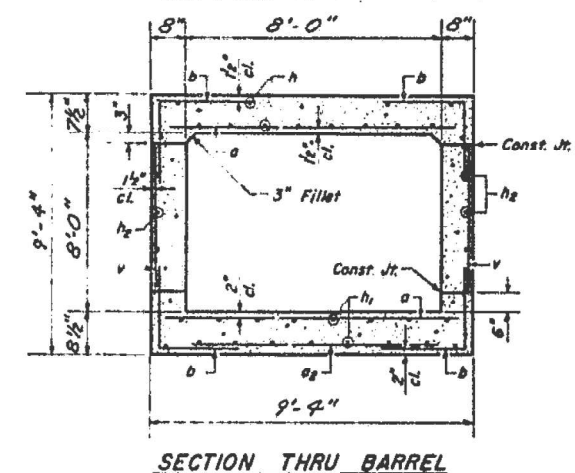
SOIL BORING LOG

4
Page 1 of 1
Date 6-4-2012

ROUTE I-55 DESCRIPTION Overhead Sign Structure LOGGED BY BJS
SECTION D6 Overhead Sign Replace LOCATION 1/4 Mile North of Exit 126 on I-55 S.B.
COUNTY Logan STRUCTURE NO. 6S054I055L126.2 (Exist) X (Prop.)
BORING NO. 6S054I055L126.2 DRILLING METHOD 3 1/4" HSA HAMMER TYPE 140 LB Automatic

Station Sta. 365+40.5	ELEV	DEPTH	BLOW	UCS	MOIST	Surface Water Elev. n/a (ft.)	ELEV	DEPTH	BLOW	UCS	MOIST
Offset 103.3 LL	V	T	W	S	Qu	I	V	T	W	S	Qu
Ground Surface Elev. 562.56 (ft.)		H	S					H	S		
	(ft.)	(ft.)	/6"	(tsf)	(%)	SOIL DESCRIPTION	(ft.)	(ft.)	/6"	(tsf)	(%)
Asphalt (12")						Silty, Trace Organics	17.5	0			
561.56								1	1.14	29.9	
Fill: Gray, Moist, Clay, Silty, with Gravel								3	B		
		2.5									
						543.06					
Fill: Gray mottled Medium Gray, Moist, Clay, Sandy, Silty, Trace Gravel			2			Gray, Wet, Sand, with Gravel, Clayey, with Clay Seam, Fine to Coarse	20	1			
			3	1.76	16.8			1		28.6	
		5	5	B							
Fill: Gray, Moist, Clay, Sandy, Silty, Trace Gravel, over Yellow Brown mottled Gray, Moist, Sandy Loam, Trace Gravel			4			Light Brown, with Gravel, Clayey, Fine to Coarse	22.5	2			
			6	1.56	11.5			2		13.4	
			12	B				5			
Fill: Gray mottled Yellow Brown, Moist, Clay, and Clay, Sandy, Silty, Trace Gravel, over Yellow Brown, Moist, Sand, Gravelly, Silty		7.5	2			Yellow Brown, with Gravel, Clayey, Fine to Coarse	25	5			
			7	3.03	12.1			5		13.6	
			24	B				7			
Fill: Yellow Brown, Dry, Sand, with Gravel, Silty		10	5			Trace Gravel, Fine to Medium	27.5	5			
			12		8.1			7		17.7	
			11					10			
Fill: Gray, Moist, Clay		12.5	2								
550.06			4	2.97	20.2	Fine to Medium	30	4			
Gray mottled Yellow Brown, Moist, Clay, Silty, with Sand, Trace Organics (Alluvium)			6	B				8		19.7	
								12			
Gray, Silty, Trace Sand, with Organics		15	2			Fine to Coarse	32.5	5			
			3	2.28	31.2			8			
			6	B				9		24.9	
						End of Boring @ 33½ Ft.	529.06				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)
BBS 137 (9/05)



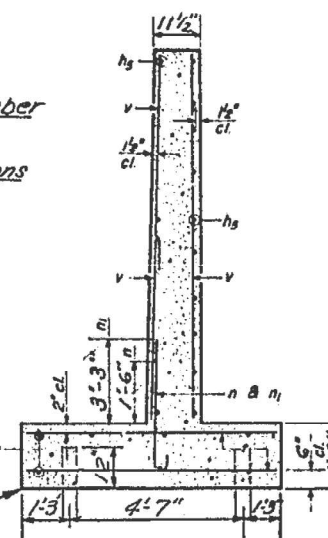
SECTION THRU BARREL

BILL OF MATERIAL

Bar	No.	Size	Length
a	786	#7	9'-0"
a ₂	76	#4	5'-3"
b	1768	#6	5'-0"
d	48	#4	5'-6"
h	108	#5	33'-9"
h ₁	162	#5	33'-9"
h ₂	144	#5	33'-9"
h ₄	4	#6	9'-0"
h ₅	60	#4	11'-3"
n	44	#5	3'-3"
n ₁	48	#7	5'-3"
r	96	#5	6'-10"
v	442	#5	7'-0"
v ₁	24	#5	7'-0"
v ₂	24	#5	9'-3"
v ₃	8	#4	7'-0"
v ₄	8	#4	9'-6"
w	32	#5	11'-3"
Class X Concrete		Cu. Yds.	293.8
Reinforcement Bars		Lbs.	48,720
Timber Piles		Ln. Ft.	432

Class X Concrete	Cu. Yds.	293.8
Reinforcement Bars	Lbs.	43,700
Timber Piles	Ln. Ft.	432

Pile Data:
Type 12" Creosoted Timber
Estm. Length = 18'
Capacity = 15 Tons
Number - 24



SECTION A-A

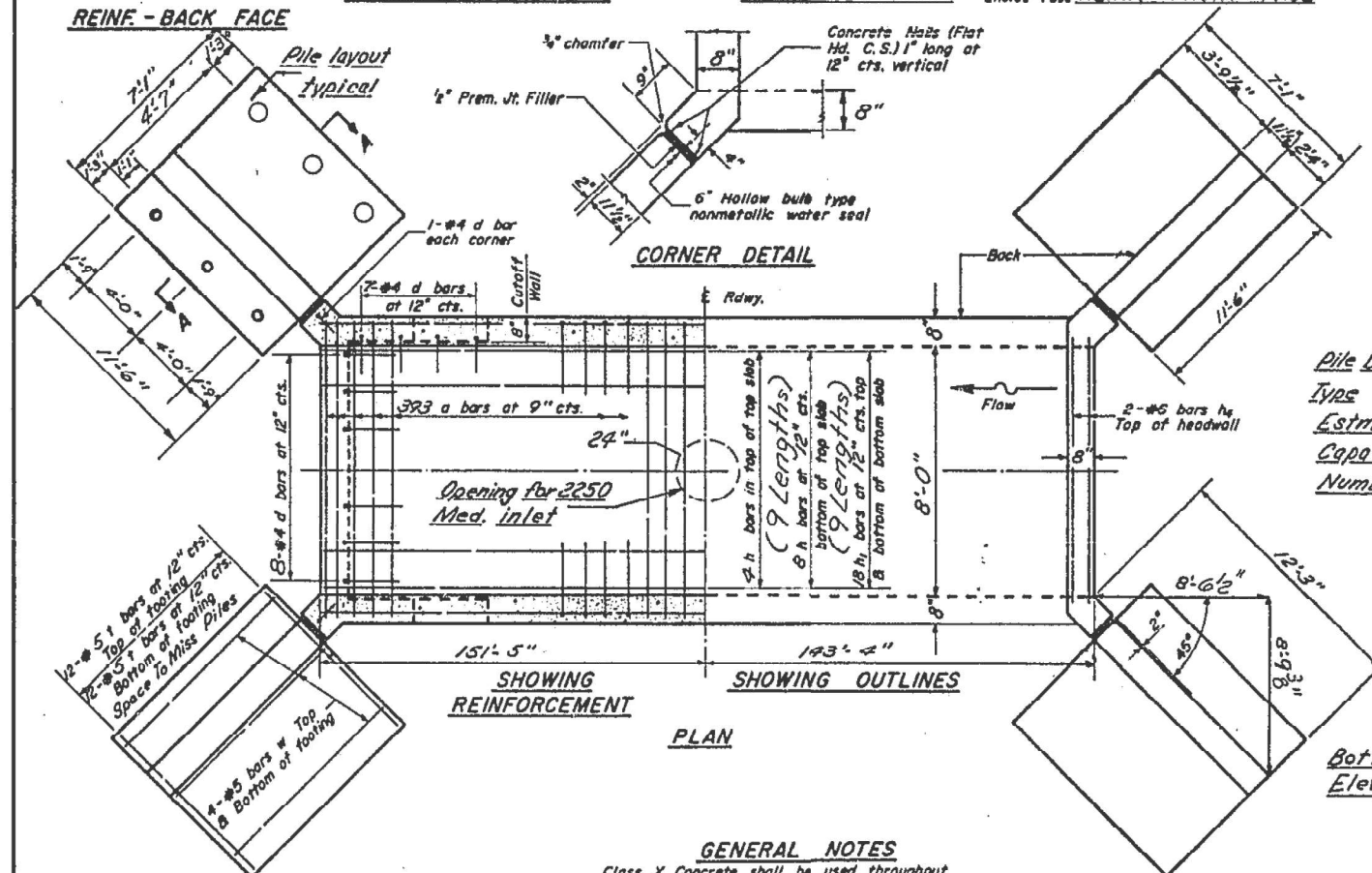
Max. Soil Pressure
under ftg. = 2900 P.S.F.

fs = 20,000 psi.
fc = 1400 psi. Barrel
fc = 1000 psi. Wings
vc = 90 psi Barrel
vc = 75 psi Footing
n = 10

LOADING HS20-44

8'x8' R.C. Box CULVERT
STA. 365+23 F.A.I. 55
SEC. 54-3, LOGAN COUNTY

LOADING HS20-44



GENERAL NOTES

GENERAL NOTES
Class X Concrete shall be used throughout.
Exposed edges shall be beveled 1/4".
For backfilling and embankment use Sd's Spec's.
All pipes shall be lapped 2 diameters unless otherwise specified.
The top of the culvert, the backs of the sidewalls above the lower construction joint and backs of the wings above the tops of the footings shall be waterproofed in accordance with Art. 503.11 of the Sd's Spec's.
Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.

DESIGNED <u>A.Z.</u>	EXAMINED _____
CHECKED _____	PASSED _____ DESIGNED BY PROJECT AND TACTIC STRUCTURE
DRAWN _____	APPROVED _____ DESIGNED BY DESIGN
CHECKED _____	_____ DESIGNED BY DESIGN