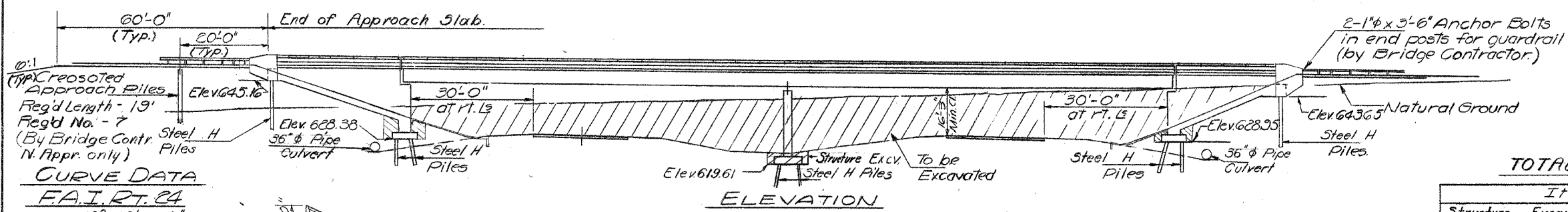


B.M. #107-Orange Painted X Top of East Headwall  
17' Lt. Sta. 584+54 Elev. 636.307

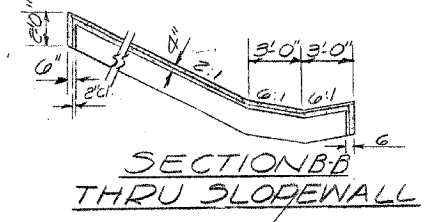
STATE OF ILLINOIS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A.L. 24	44-2HB-1	JOHNSON	127	21
SHEET NO. 1				
21 SHEETS				
FED. ROAD DIST. NO. 7				
ILLINOIS				
FED. AID PROJECT				
F.A.L. REL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24	*	**	189	149
STA. TO STA.				
FED. ROAD DIST. NO.				
ILLINOIS				
FED. AID PROJECT				
* XI-2,442,3,4RS BSMARTFY04-4				
* WILLIAMSON/JOHNSON				
CONTRACT NO. 98758				



**CURVE DATA**

**FAI RT. 24**  
 $\Delta = 18^\circ 12' 02''$   
 $D = 00^\circ 30' 00''$   
 $R = 11,459.156'$   
 $T = 1835.55'$   
 $L = 3040.111'$   
 $E = 146.07'$   
 P.I. Sta. 213+20.29  
 S.E. = 0.015' per ft.  
 S.E. Attained:  
 Sta. 193+59.44 to Sta. 195+59.44  
 S.E. Removed:  
 Sta. 230+66.21 to Sta. 232+66.21

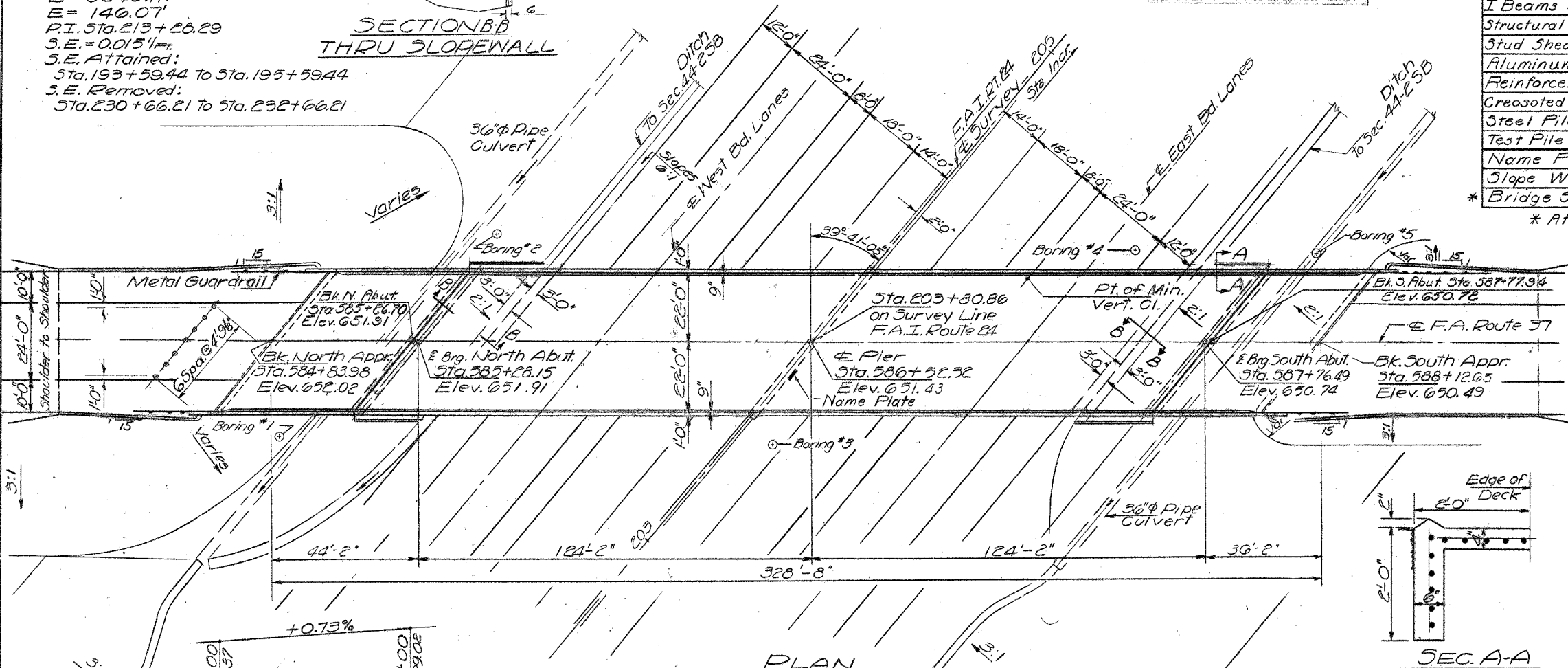


FOR INFORMATION ONLY:  
 THIS SHEET IS FROM THE ORIGINAL PLANS AND IS TO BE USED FOR REFERENCE ONLY.

**TOTAL BILL OF MATERIALS**

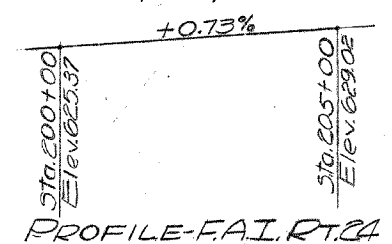
Item	Unit	Suppl.	Sub.	Total
Structure Excavation	Cu. Yd.		370	370
Protective Coat.	Sq. Yd.	1820		1820
Class X Concrete.	Cu. Yd.	493.9	412.9	906.8
Furnishing & Erecting P.P.C.	Lin. Ft.	292		292
I Beams 36"				
Structural Steel	L.S.	0.3		0.3
Stud Shear Connectors.	Each.	2700		2700
Aluminum Failing	Lin. Ft.	644		644
Reinforcement Bars.	Lbs.	132620	45350	177970
Crested Piles Up to 20'	Lin. Ft.		133	133
Steel Piles 10 BP-42	Lin. Ft.		2434	2434
Test Pile Steel 10BP-42	Each		3	3
Name Plates	Each		1	1
Slope Wall 4"	Sq. Yd.		330	330
* Bridge Seat Sealer	L.S.		L.S.	L.S.

\* At Abutments only.

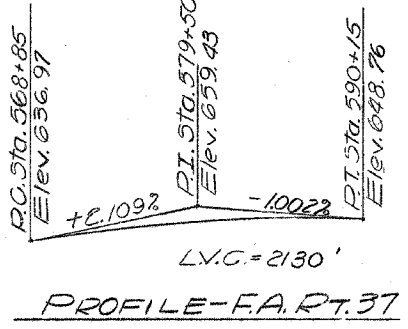


**GENERAL NOTES**  
 Fasteners shall be high strength bolts. Bolts 7/8", open holes 1 1/8", unless otherwise noted.  
 Calculated weight of Structural Steel = 409,350 Lbs.  
 The Basic Lead Jilico Chromate paint system shall be used for shop and field painting of Structural Steel.

The contractor shall drive three steel test piles in a permanent location. One each at N. Abutment, Pier, and S. Abutment and Pier as directed by the Engineer before ordering the remainder of piles.



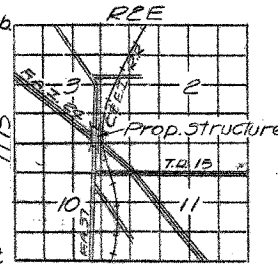
STATION 203+80.86  
 BUILT 19 BY  
 STATE OF ILLINOIS  
 FAI RT. 24, SEC. 44-2HB-1  
 PROJ. 1-14-24-12212  
 LOADING HS 20  
 NAME R  
 Std. 2113-1



**DESIGN STRESSES**

**FIELD UNITS**  
 $f_c = 1200$  psi. Deck Slab  
 $f_c = 1400$  psi. Curb, Parapet, Sub.  
 $f_s = 20,000$  psi. Reinf.  
 $f_s = 20,000$  psi. Struct.  
 $f_c = 75$  psi. Ftgs.  
 $n = 10$

**PRECAST PRESTRESSED UNITS**  
 $f_c = 5000$  psi.  
 $f_{ci} = 4000$  psi.  
 $f_s = 248,000$  psi. Strands  
 $f_{si} = 173,600$  psi. Strands  
 Allowable Future W.S. 25 Lbs/Sq.Ft.  
 Allowable & Defl. 1000 Composite  
 LOADING HS 20-44



SN 044-0031  
**GENERAL PLAN & ELEVATION**  
 FAI RT. 24, SEC. 44-2HB-1  
 JOHNSON COUNTY  
 STA. 203 + 80.86

DESIGNED R. A. Mathur  
 CHECKED Suresh T. Desai  
 DRAWN RKM  
 CHECKED S.D.

APRIL 24 1970  
 EXAMINED [Signature]  
 PASSED [Signature]  
 APPROVED [Signature]