

068-0051

Sheet No. 1  
of 20 Sheets

FAI-55	68-118-1	MONTGOMERY	128	36
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**GENERAL NOTES-**

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts 3/4", open holes 1 1/8", unless otherwise noted.

Calculated weight of structure steel = 1,052,750 lbs.

The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the web flange for a distance equal to one-fourth the span length from pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

The Contractor shall drive one concrete test pile at Bent Cap #1 & #2, and of the Pier, all in a permanent location, as directed by the Engineer before ordering the remainder of piles.

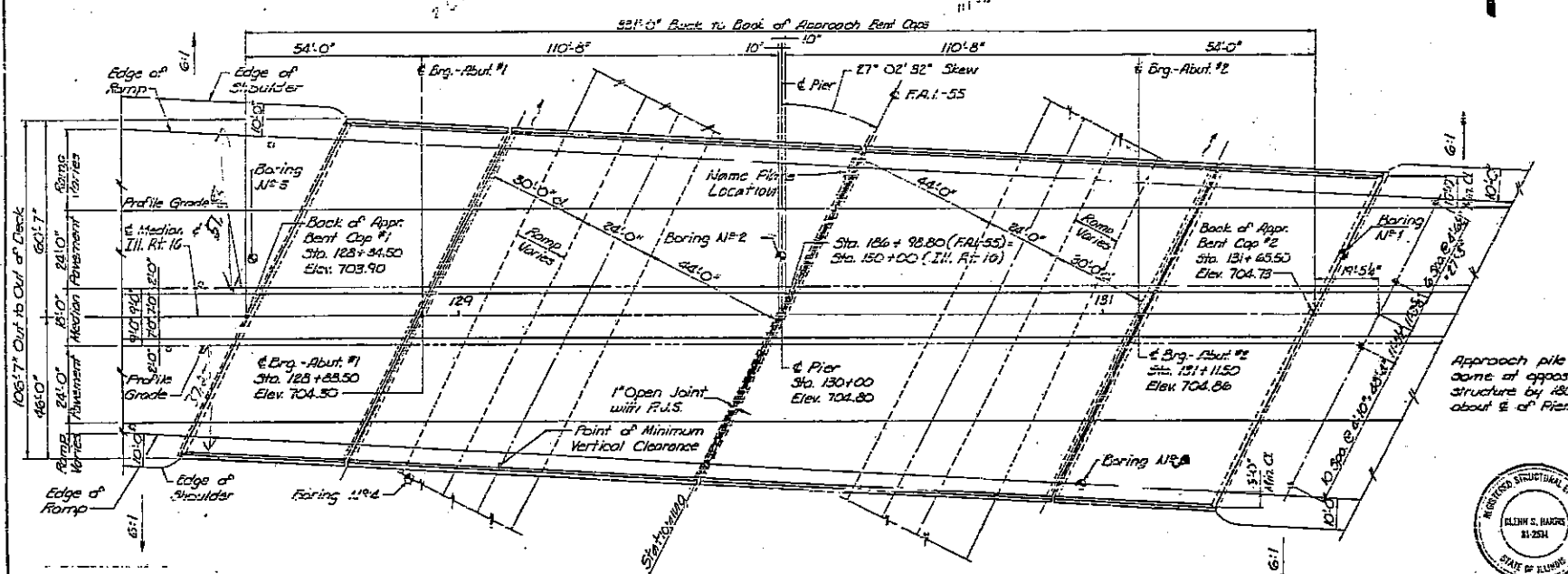
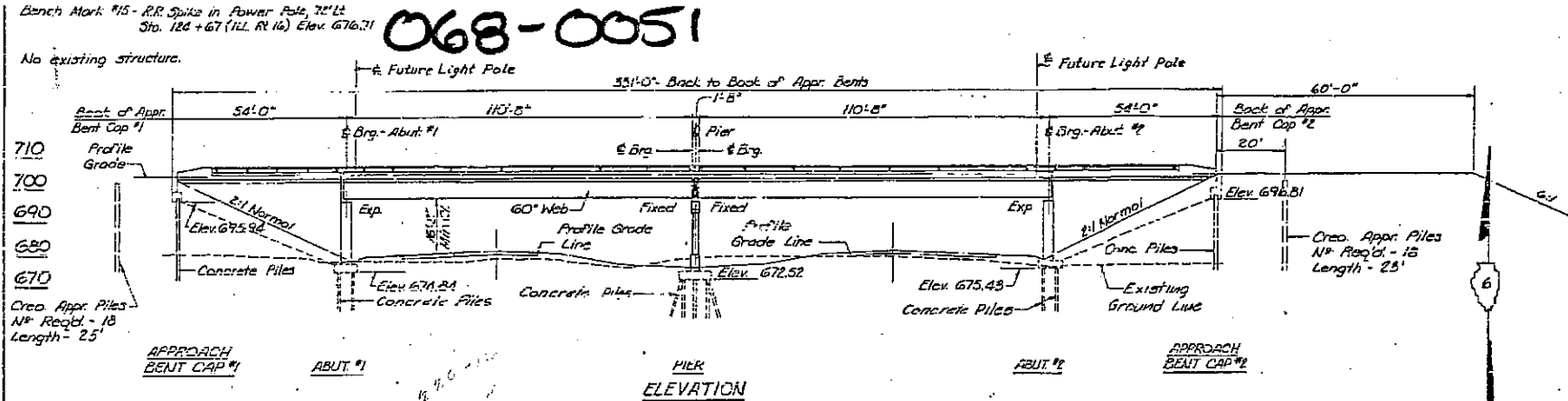
Concrete piles of Bent Caps shall be driven in holes prepared through the embankment in accordance with Article 513.09 (c) of the Standard Specifications.

An alternate strand pattern using Extra High Strength Pre-stressing Strand (E70ksi) is permitted.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The concrete rail section above the mandatory construction joint at the top of the slab, shall be constructed of Class X concrete, except the aggregates shall conform to the requirements of Nonrail Concrete.

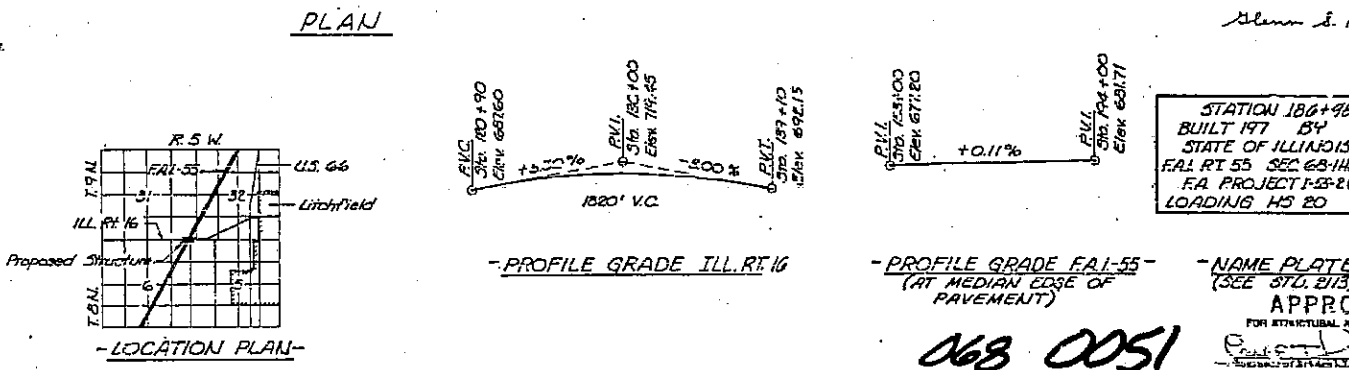
Anchor bolts shall be set before bolting cross frames over supports.



**-DESIGN LOADING-**  
Live HS 20-44 AASHTO 1993 Specifications.  
Dead load includes 25% of roadway for future wearing surface.

**-DESIGN STRESSES-**  
f<sub>c</sub> = 1400 psi Substructure and Parapet  
f<sub>c</sub> = 1200 psi Deck Slab  
f<sub>s</sub> = 75 psi Footings  
f<sub>s</sub> = 20,000 psi Reinforcing Steel  
f<sub>s</sub> = 20,000 psi Structural Steel (A-36)  
n = 10  
Live Load Deflection:  
1/200 for composite construction

**-PRESTRESSED BEAMS-**  
f<sub>c</sub> = 5000 psi  
f<sub>ti</sub> = 4000 psi  
f<sub>ts</sub> = 245,000 psi  
f<sub>ty</sub> = 173,000 psi



Glenn S. Harris

STATION 126+92.80  
BUILT 197 BY  
STATE OF ILLINOIS  
FAI RT 55 SEC 68-118-1  
FA PROJECT 1-55-2(97)  
LOADING HS 20

TOTAL BILL OF MATERIAL				
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL
Structure Excavation	cu. yds.	640	680	680
Precast Prestressed I-Beams	lin. ft.	1824	1824	1824
Class X Concrete	cu. yds.	1121.2	1121.2	1121.2
Structural Steel	L.S.	L.S.	L.S.	L.S.
Steel Beam Connectors	ea.	4028	4028	4028
Aluminum Railrod	lin. ft.	544	544	544
Reinforcement Bars	lbs.	271,160	271,160	271,160
Grouted Piles (20.1' to 38')	lin. ft.	864	864	864
Concrete Piles	lin. ft.	5255	5255	5255
Protective Coat	sq. yds.	2855	2855	2855
Test Piles (Concrete)	ea.	5	5	5
Performed Joint Sealer	lin. ft.	320	320	320
Name Plate	ea.	1	1	1

REVISIONS		GENERAL PLAN AND ELEVATION	
1	REVISED	STATE OF ILLINOIS	DEPT. OF PUBLIC WORKS AND BUILDINGS
2	REVISED	DIVISION OF HIGHWAYS	
3	REVISED	ILL. RT. 16 OVER FAI-55	
4	REVISED	FAI-55 SEC 68-118-1 PROJECT	
5	REVISED	STR. 150 100 (ILL. RT. 16) MONTGOMERY	
6	REVISED	HOMER L. CHARSTAIN & ASSOCIATES	
7	REVISED	CONSULTING ENGINEERS	
8	REVISED	OCCASION, ILLINOIS	

C-96-012-06  
EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY  
(NOT TO SCALE)