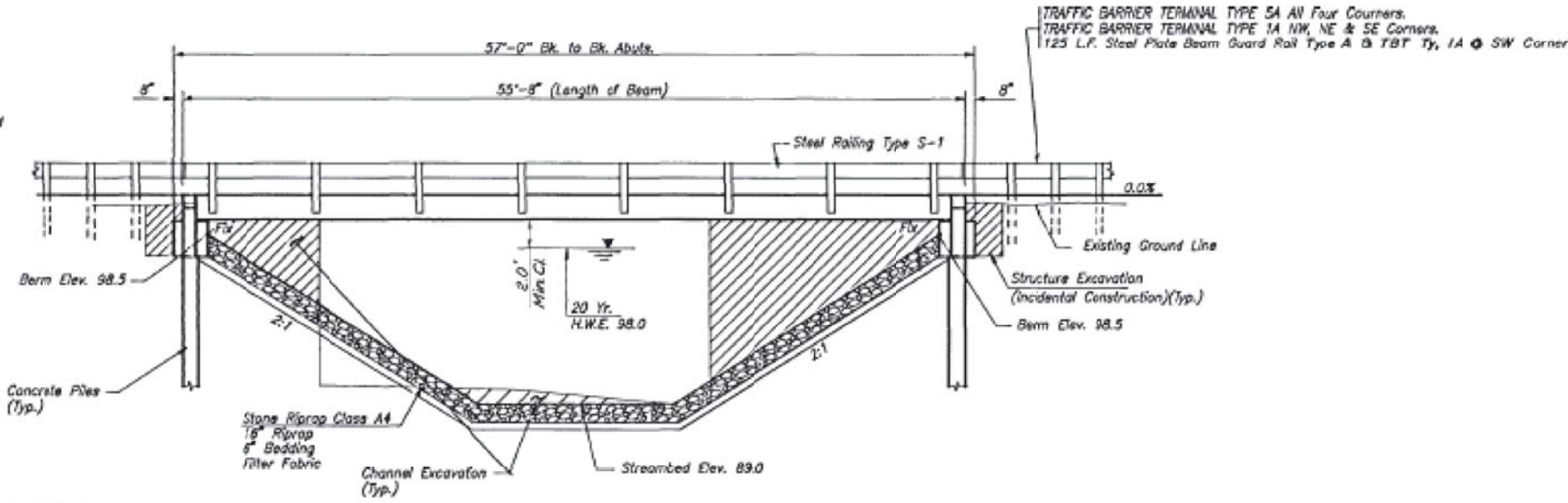
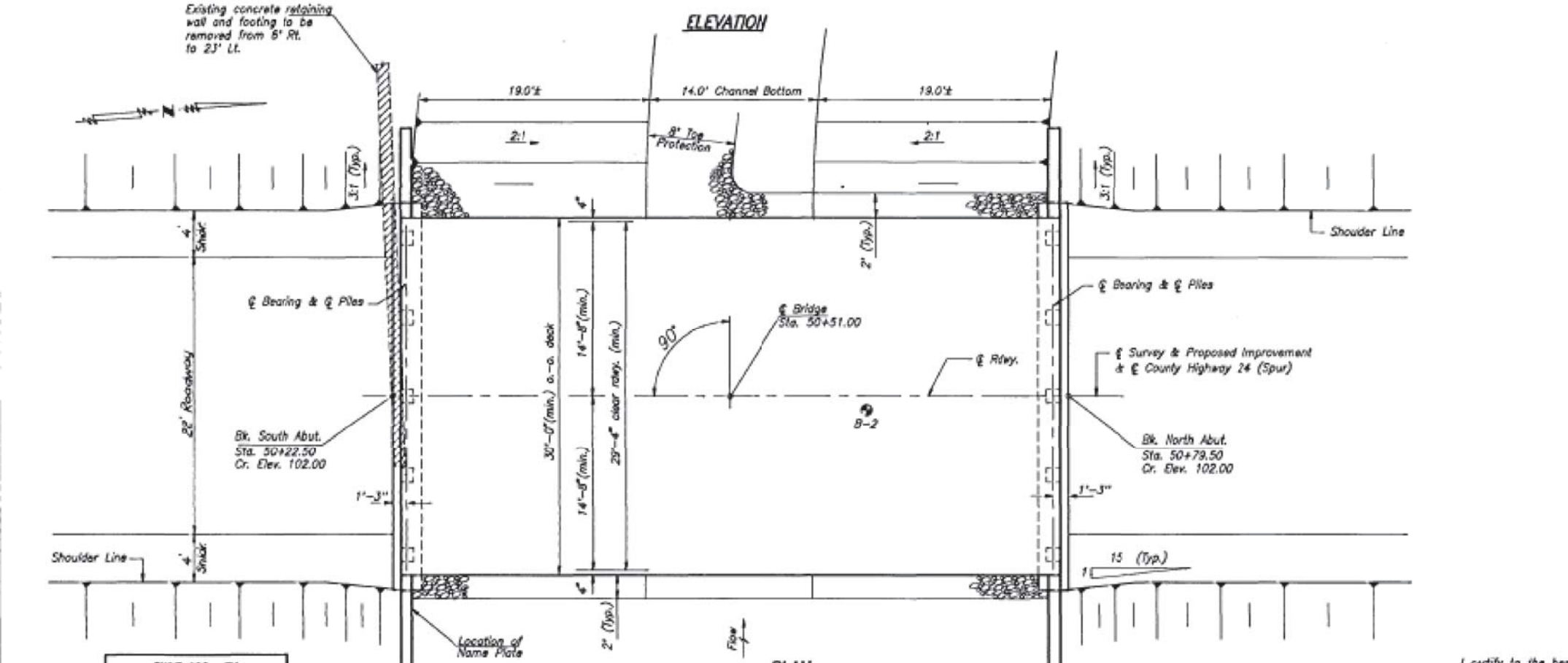


B.M. #1 - R.R. Spike E. Side P.P. at S.W. Corner, Elev. 101.59
 B.M. #2 - R.R. Spike W. Side P.P. on E. Side Road N. Drive to first house North of Br., Elev. 101.17
 Existing Structure - One Span Reinforced Concrete Slab on Closed Concrete Abutments, 32.4' a.-a. of deck, 29.6' fc.-fc. of Abutments, Concrete Retaining Wall at Southwest Corner.
 Proposed Structure & portion of Retaining Wall to be removed by Contractor. No Salvage.
 Existing Structure No. 053-3044



GENERAL NOTES
 Class X Concrete shall be used throughout.
 All reinforcement bars shall be lapped as shown on the plans.
 The Standard Specifications adopted by the Department of Transportation July 1, 1988 shall apply to this work.
 One concrete test pile shall be driven in a permanent location in South Abutment as directed by the Engineer before ordering the remainder of the piles.
 Abutment piles shall be driven a minimum 10 feet into undisturbed earth.



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			300
Removal of Existing Structures	Each			1
Class X Concrete	Cu. Yd.		18.1	18.1
Precast Prestr. Conc. Deck Beams (21" Depth)	Sq. Ft.	1670		1670
Reinforcement Bars	Pound		1910	1910
Furnishing Concrete Piles	Lin. Ft.		272	272
Driving Concrete Piles	Lin. Ft.		272	272
Test Pile, Concrete	Each		1	1
Name Plates	Each		1	1
Steel Railing, Type S-1	Lin. Ft.	112		112
Stone Riprap Class A4	Sq. Yd.			213
Filter Fabric for use with Riprap	Sq. Yd.			213

This structure has been designed to be stable for scour conditions in accordance with the FHWA Technical Advisory - T 5140.23, "Evaluating Scour at Bridges" and Hydraulic Engineering Circular 18 - "Evaluating Scour at Bridges."

BUILT 199, BY
 LIVINGSTON COUNTY
 COUNTY HIGHWAY 24 (SPUR)
 SECTION 90-00133-01-BR
 LOADING HS20
 STR. NO. 053-3450

LETTERING FOR NAME PLATE
 SEE STANDARD 211J

DESIGN STRESSES

SUPERSTRUCTURE	SUBSTRUCTURE
$f'_c = 5,000$ p.s.i.	$f'_c = 3,500$ p.s.i.
$f'_s = 4,000$ p.s.i.	$f'_s = 1,400$ p.s.i.
$f'_s = 270,000$ p.s.i. (strand)	$f'_s = 24,000$ p.s.i. (reinf.)
$f'_s = 189,000$ p.s.i. (strand)	$n = 3$
$f_y = 80,000$ p.s.i. (reinf.)	
Loading HS 20-44	

Design stresses provide for future wearing surface of 25 pcf.

WATERWAY INFORMATION

Drainage Area.....	7.8 sq. mi.
Present Opening.....	228 sq. ft.
Required Opening.....	288 sq. ft.
Proposed Opening.....	288 sq. ft.
Design Discharge(20 Yr.).....	1100 cfs
Created Head.....	< 0.5 ft.
100 Yr. Discharge.....	1580 cfs
Created Head.....	< 1.0 ft.

I certify to the best of my knowledge, information and belief, this bridge design is structurally adequate for the Design Loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current AASHTO Standard Specifications for Highway Bridges.



Robert E. Hites
 Who's Structural
 No. 2675
 (expires 11/30/94)

GENERAL PLAN AND ELEVATION
 COUNTY HIGHWAY 24 (SPUR)
 SECTION 90-00133-01-BR
 LIVINGSTON COUNTY
 STATION 50+51

suby, ogeby and bartolozzi
 1123 West 1st Street, Springfield, Illinois 62764

DATE	3-9-94	JOB NO.	89-61	SHEET NO.	6 of 16
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