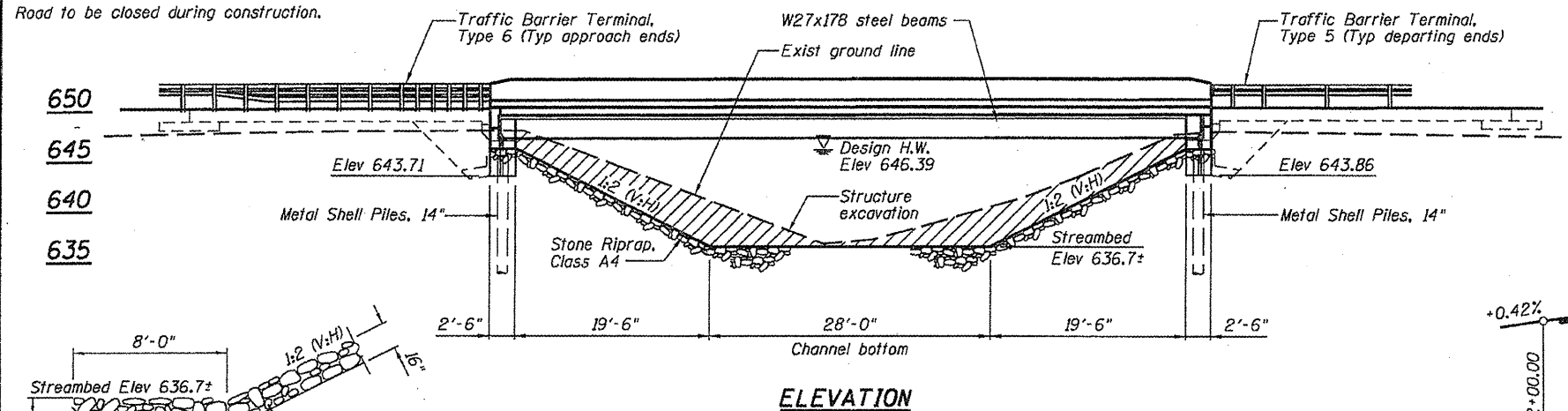


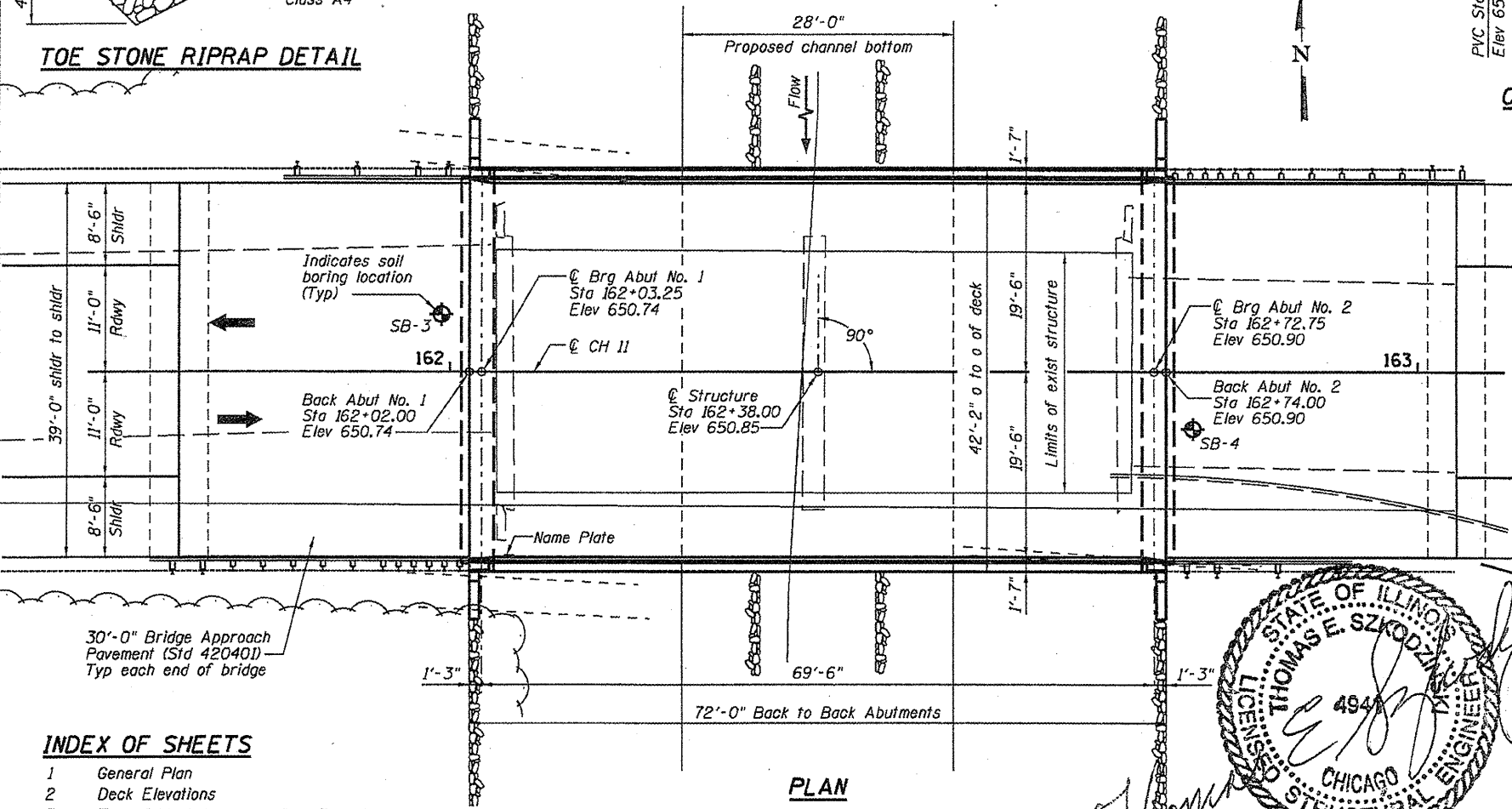
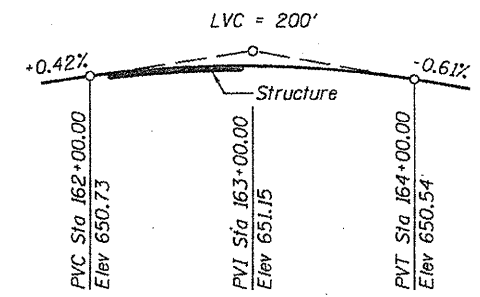
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	e	DOUGLAS	279	60

Existing Structure:  
67' long x 27' wide two span PPC deck beams  
on timber pile bent abutments and metal shell  
piling at the pier.  
Road to be closed during construction.



**BUILT 20 BY**  
DOUGLAS COUNTY  
SECTION 99-00080-00-RP  
STA 162+38.00  
LOADING HS 20  
STRUCTURE NO. 021-4548

**NAME PLATE**  
See Std. 515001



**DESIGN STRESSES**  
**FIELD UNITS**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 50,000 psi (M270 Grade 50W)

**DESIGN SPECIFICATIONS**  
2002 AASHTO Bridge Design Specifications  
17th Edition

**LOADING HS 20**  
Allow 50#/sq. ft. for future wearing surface.

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = A  
Bedrock Acceleration Coefficient (A) = 0.04  
Site Coefficient (S) = 1.0

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.			122
Concrete Structures	Cu. Yd.		31	31
Concrete Superstructure	Cu. Yd.	117		117
Bridge Deck Grooving	Sq. Yd.	296		296
Protective Coat	Sq. Yd.	373		373
Furnishing and Erecting Structural Steel	L. Sum	1		1
Furnishing Metal Pile Shells 14"x 0.250	Foot		533	533
Driving Piles	Foot		533	533
Test Pile Metal Shells	Each		1	1
Pipe Underdrains for Structures, 4"	Foot			106
Reinforcement Bars, Epoxy Coated	Pound	26,190	3800	29,990
Porous Granular Embankment (Special)	Ton			78
Stone Riprap, Class A	Sq. Yd.			675
Bar Splicers	Each	78		78
Anchor Bolt 1" φ	Each		20	20
Name Plates	Each	1		1
Stud Shear Connectors	Each	1575		1575
Channel Excavation	Cu. Yd.			135
Bridge Approach Pavement	Sq. Yd.			260

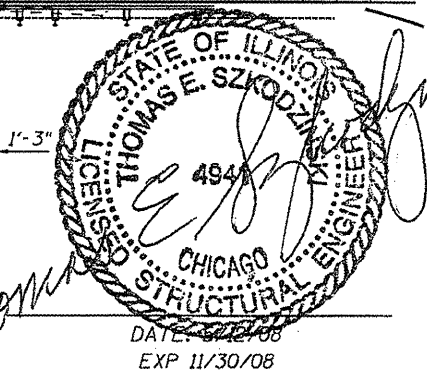
**INDEX OF SHEETS**

- 1 General Plan
- 2 Deck Elevations
- 3 Top of West Approach Slab Elevations
- 4 Top of East Approach Slab Elevations
- 5 Framing Plan And Details
- 6 Miscellaneous Details
- 7 Deck Plan And Cross Section
- 8 Superstructure Details
- 9 Abutment No. 1 Details
- 10 Abutment No. 2 Details
- 11 Metal Shell Pile Details
- 12 Bar Splicer Assembly Details
- 13 Cantilever Forming Brackets

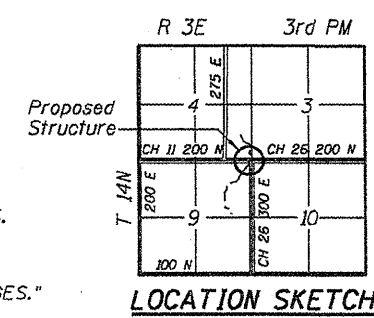
**WATERWAY INFORMATION AT 70' UPSTREAM**

Drainage Area = 20.48 sq mi Low Grade Elev. 648.84 @ Sta. 156+68.49

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	30	1778	309	463	646.39	0.49	0.19	646.88	646.58
Base	100	2263	309	491	646.80	0.85	0.29	647.65	647.09
Max. Calc.	500	2862	309	519	647.22	1.24	0.42	648.46	647.64



I CERTIFY THAT 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."



**CH 11 (FA 666) OVER BIG SLOUGH**

**GENERAL PLAN**

REVISIONS		SECTION 99-00080-00-RP		CH 11 (FAS 666)		DRAWN BY	DATE
1	JMB 05/08	DOUGLAS	SN 021-4548	DOUGLAS COUNTY		R KING	01/08
2						JMB	01/08
3							
4							
5							
6							
7							
8							
9							
10							

**HOMER L. CHASTAIN & ASSOCIATES, LLP**  
CONSULTING ENGINEERS  
164-00197

DECATUR CHICAGO  
6170 425-8444 (773) 714-0050  
ROCKFORD  
(815) 489-0050

PROJECT NO. 5149  
SHEET NO.