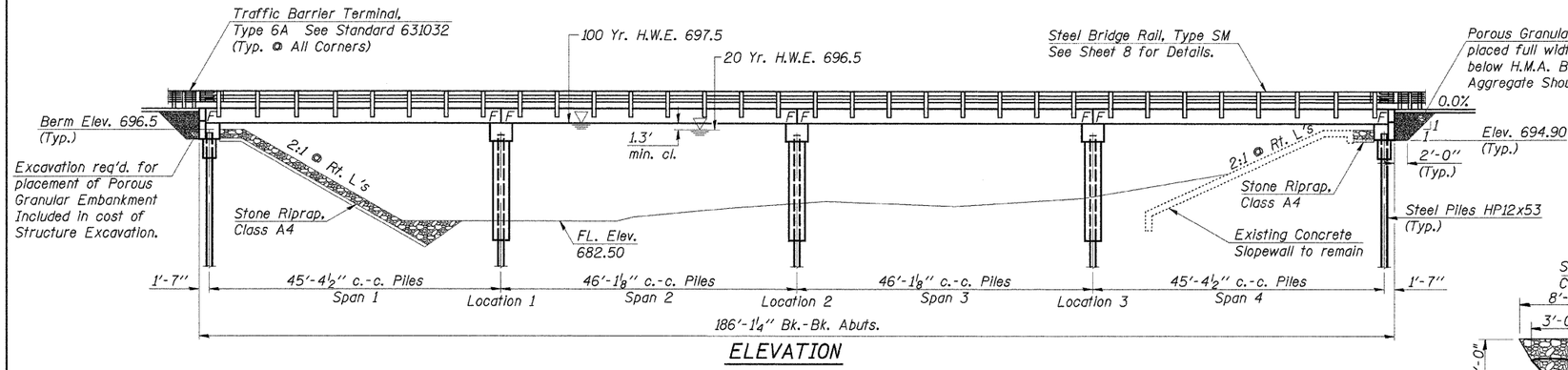
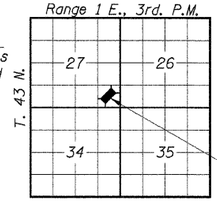
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1045 CH 11	07-00421 -00-BR	WINNEBAGO	18	5
	ILLINOIS			

CONTRACT NO. 85451



ELEVATION



LOCATION PLAN

GENERAL NOTES

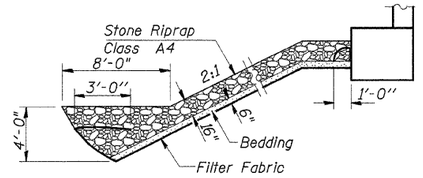
See Proposal Booklet for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.

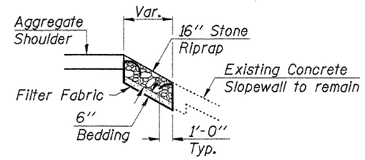
The Contractor shall drive one Steel HP12x53 test pile in a permanent location at each abutment and at Pier 2 as directed by the Engineer, before ordering the remainder of piles.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

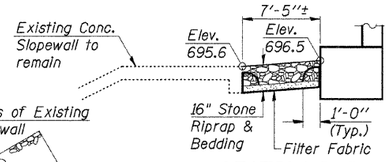
All exposed portions of abutments, wingwalls, and piers shall receive a rubbed finish in accordance with Article 503.15(b) of the Standard Specifications. Cost to be included in cost of Concrete Structures.



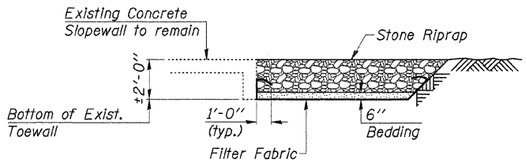
SECTION A-A



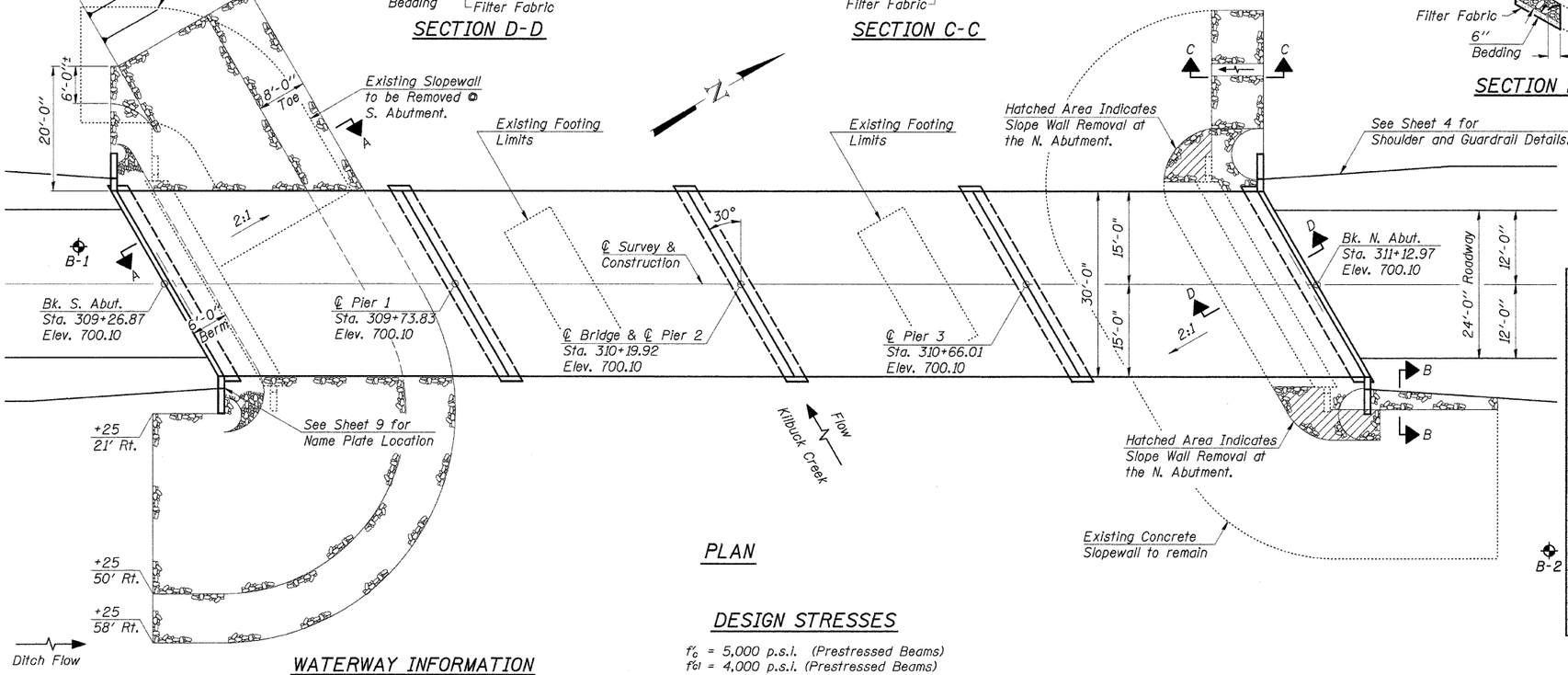
SECTION B-B



SECTION D-D



SECTION C-C



PLAN

LETTERING FOR NAME PLATE

See Std. 515001

KILBUCK CREEK
BUILT 200_ BY
WINNEBAGO COUNTY
SEC. 07-00421-00-BR
F.A.S. RT. 1045 STA. 310+19.92
F.A. PROJ. BRS-1045( )
STR. NO. 101-3069 LOADING HS20

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	5,520		5,520
Concrete Structures	Cu. Yd.		199.3	199.3
Reinforcement Bars	Pound		15,360	15,360
Steel Bridge Rail, Type SM	Foot	369		369
Name Plates	Each		1	1
Portland Cement Mortar Fairing Course	Foot	1,656		1,656
Waterproofing Membrane System	Sq. Yd.	629		629
Hot-Mix Asphalt Surface Course Mix "C", N50	Ton	57		57
Furnishing Steel Piles HP12x53	Foot		2,188	2,188
Driving Piles	Foot		2,188	2,188
Test Pile Steel HP12x53	Each		3	3
Stone Riprap, Class A4	Ton		426	426
Filter Fabric	Sq. Yd.		640	640
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Underwater Structure Excavation Protection - Location 3	Each		1	1
Structure Excavation	Cu. Yd.		97	97
Concrete Encasement	Cu. Yd.		3.5	3.5
Slope Wall Removal	Sq. Yd.		152	152
Porous Granular Embankment	Ton		105	105

WATERWAY INFORMATION

Drainage Area	140.1 Sq. Mi.
Existing Opening (20 Yr.)	994 Sq. Ft.
Required Opening (20 Yr.)	1,289 Sq. Ft.
Proposed Opening (20 Yr.)	1,289 Sq. Ft.
Design Discharge (20 Yr.)	7,000 C.F.S.
Created Head (20 Yr.)	0.3 Ft.
100 Year Discharge	9,560 C.F.S.
100 Yr. Created Head	0.9 Ft.

DESIGNED	A.R.K.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	J.A.M. & A.R.K.

DESIGN STRESSES

f'_c = 5,000 p.s.i. (Prestressed Beams)
f'_{ci} = 4,000 p.s.i. (Prestressed Beams)
f_c = 1,400 p.s.i. (Concrete)
f_s = 270,000 p.s.i. (Prestressed Strands)
f_{si} = 201,960 p.s.i. (Prestressed Strands)
f_s = 24,000 p.s.i. (Reinf. Bars -- Field Units)
f_y = 60,000 p.s.i. (Reinf. Bars -- Field Units)
n = 9 (Concrete)
LOADING HS20-44
Allow 50#/Sq. Ft. for future wearing surface.
Design Specifications: 2002 AASHTO

"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 requirements of the current 'AASHTO Standard Specifications for Highway Bridges'".

John A. Morris 2-4-09
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/10)

LICENSED STRUCTURAL ENGINEER
JOHN A. MORRIS
NO. 81-4277
STATE OF ILLINOIS

GENERAL PLAN & ELEVATION

SECTION 07-00421-00-BR
F.A.S. ROUTE 1045 - C.H. 11
WINNEBAGO COUNTY
STA. 310+19.92

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FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.: 46466
FILE: 46466PE.DGN
DATE: 02/03/09