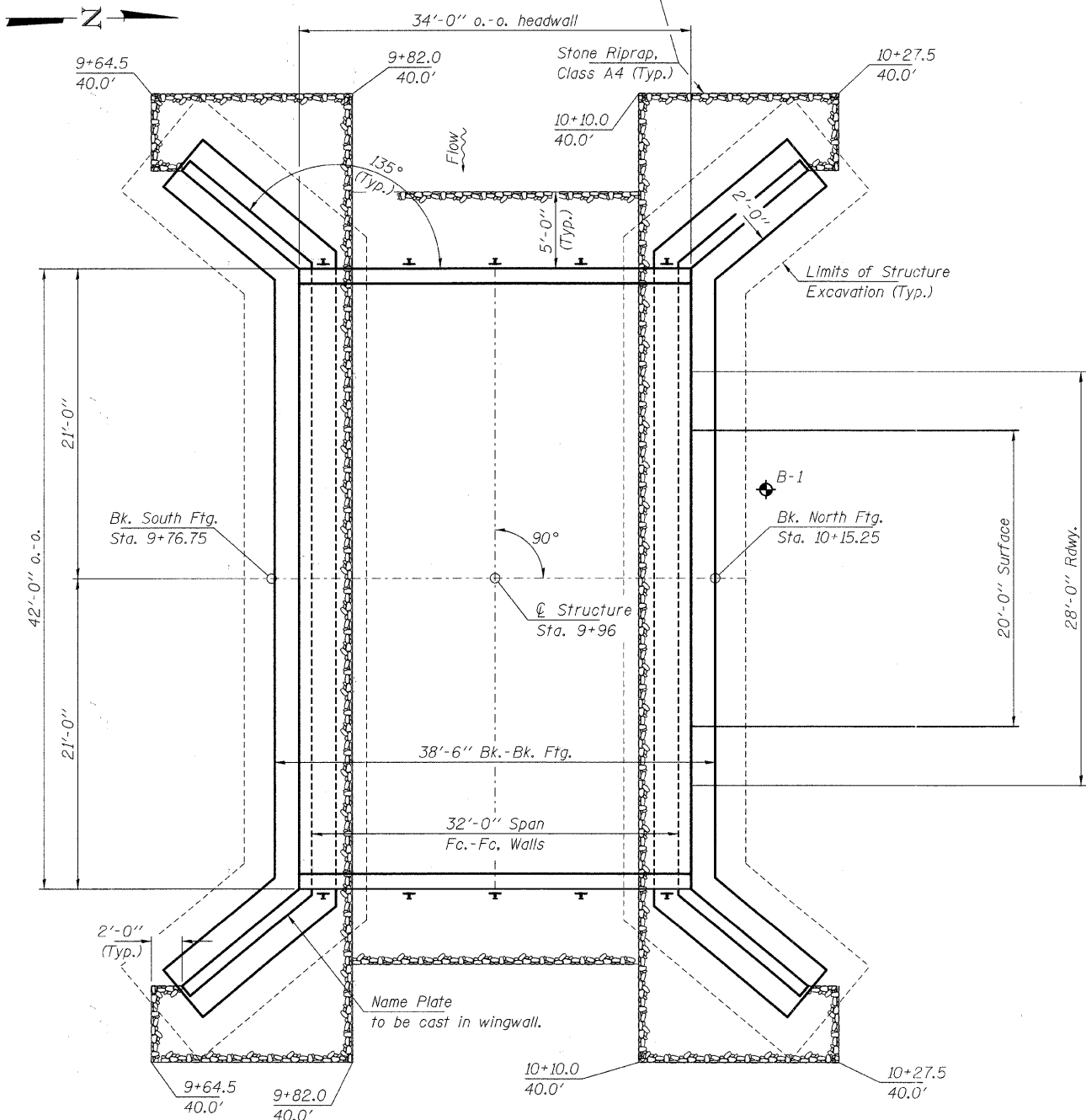


ELEVATION



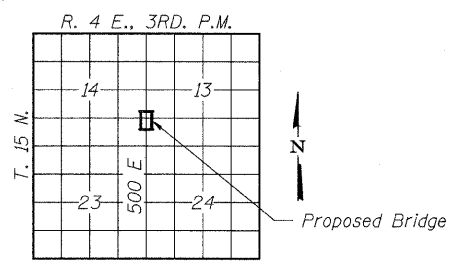
PLAN

GENERAL NOTES

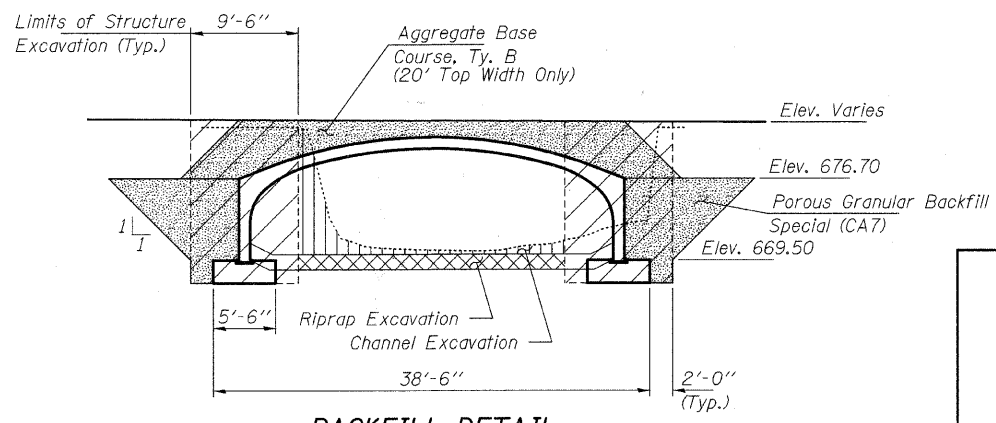
For backfilling procedures see Special Provisions and Backfill Detail. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions. It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included in the Three Sided Precast Concrete Structure. The precast concrete bridge system shall match the style, dimensions and hydraulic opening as shown herein or shall receive approval from the Engineer before use. The Contractor shall salvage the existing steel beams and stockpile onsite for County use. The foundation design is based on the following maximum reactions applied at the top of the footing/pedestal wall: $V_{ult} = 25.4$ k/ft; $H_{ult} = 7.6$ k/ft. The Contractor shall verify that the selected structure meets these design parameters. If the design parameters are exceeded, a complete foundation design with calculations, details, and the required seals shall be submitted for review and approval.

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Superstructure
3. Steel Railing, Type S-1
4. Footing Details
5. Borings



LOCATION SKETCH



BACKFILL DETAIL

Backfill Detail showing limits of pay quantity. Porous Granular Backfill, Special shall extend the full width of the structure to wingwalls. The Contractor shall place cohesive clay material at each end of the Wings to act as a barrier to erosion of the backfill material.

STRINGTOWN BRANCH
BUILT 200_ BY
MOULTRIE COUNTY
SEC. 07-00066-00-BR
C.H. 9 / F.A.S. 554
STR. NO. 070-3032
LOADING HL-93

NAME PLATE
See Std. 515001

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Ftg.	N. Ftg.
	667.5	667.5

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural		Head - Ft.		Headwater El.	
				Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	20	999	190	205	678.2	0.2	0.1	678.4	678.3
Base	100	1521	210	215	678.9	0.7	0.7	679.6	679.6
Max. Calc.	500	2077	230	215	679.4	1.2	1.6	680.6	681.0

Drainage Area = 4.6 Sq. Mi. Existing Low Grade Elev. 679.5 @ Sta. 10+00 Proposed Low Grade Elev. 679.0 @ Sta. 9+95
10 Year Velocity through Existing Bridge = 4.5 fps 10 Year Velocity through Proposed Bridge = 4.1 fps

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.2

DESIGN STRESSES

$f'_c = 3,500$ psi (Footings)
 $f_y = 60,000$ psi (Reinf.)

DESIGN STRESSES

2010 AASHTO LRFD Bridge Design Specifications

I certify that to the best of my knowledge, information and belief, this footing 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 LRFD Specifications."

Steven Meggison 2/17/2012
ILLINOIS STRUCTURAL NO. 081-6064 Expires 11-30-2012



TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Channel Excavation	Cu. Yd.	120
Porous Granular Backfill, Special	Cu. Yd.	270
Concrete Structures	Cu. Yd.	44.2
Reinforcement Bars	Pound	4,010
Steel Railing, Type S1	Foot	64
Name Plates, Special	Each	1
Stone Riprap, Class A4	Ton	225
Three Sided Precast Structure (32'x10')	Foot	42
Cofferdam Excavation	Cu. Yd.	510
Aggregate Base Course, Type B	Ton	175
Removal of Existing Structures	Each	1
Filter Fabric	Sq. Yd.	290
Cofferdam (Type 2) (Location-1)	Each	1
Cofferdam (Type 2) (Location-2)	Each	1