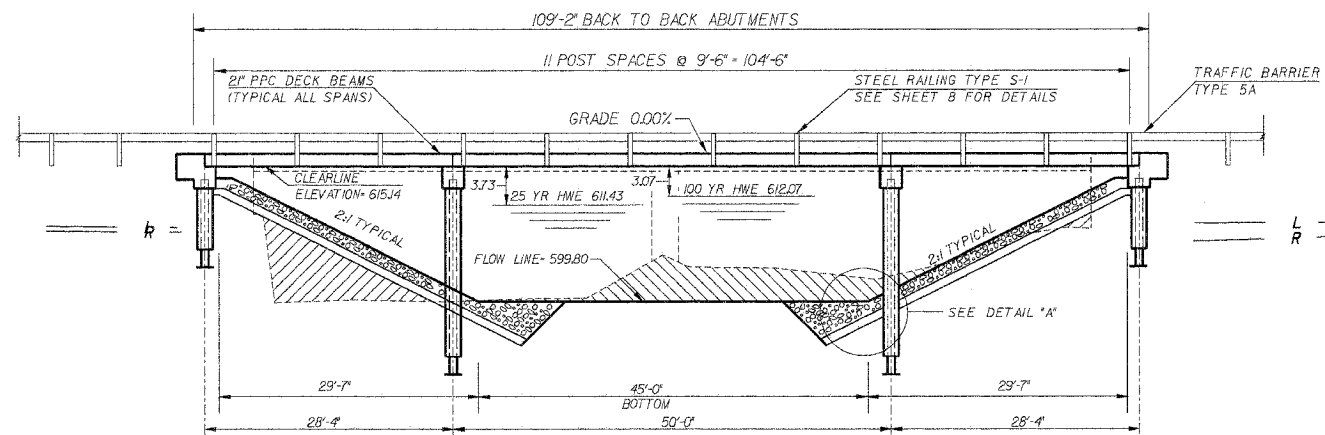


DESIGN STRESSES

$f'_c = 5,000$ P.S.I. (PRESTRESSED BEAMS)
 $f'_{cl} = 4,300$ P.S.I. (PRESTRESSED BEAM END SPANS)
 $f'_{cl} = 4,700$ P.S.I. (PRESTRESSED BEAMS)
 $f'_c = 3,500$ P.S.I. (CONCRETE STRUCTURES)
 $f'_s = 270,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_{sl} = 189,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_y = 60,000$ P.S.I. (REINFORCEMENT BARS)

LOADING HS 20-44 DESIGN SPECS. 1996 AASHTO AND 1997 THROUGH 2002 INTERIMS

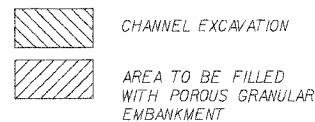


WATERWAY INFORMATION

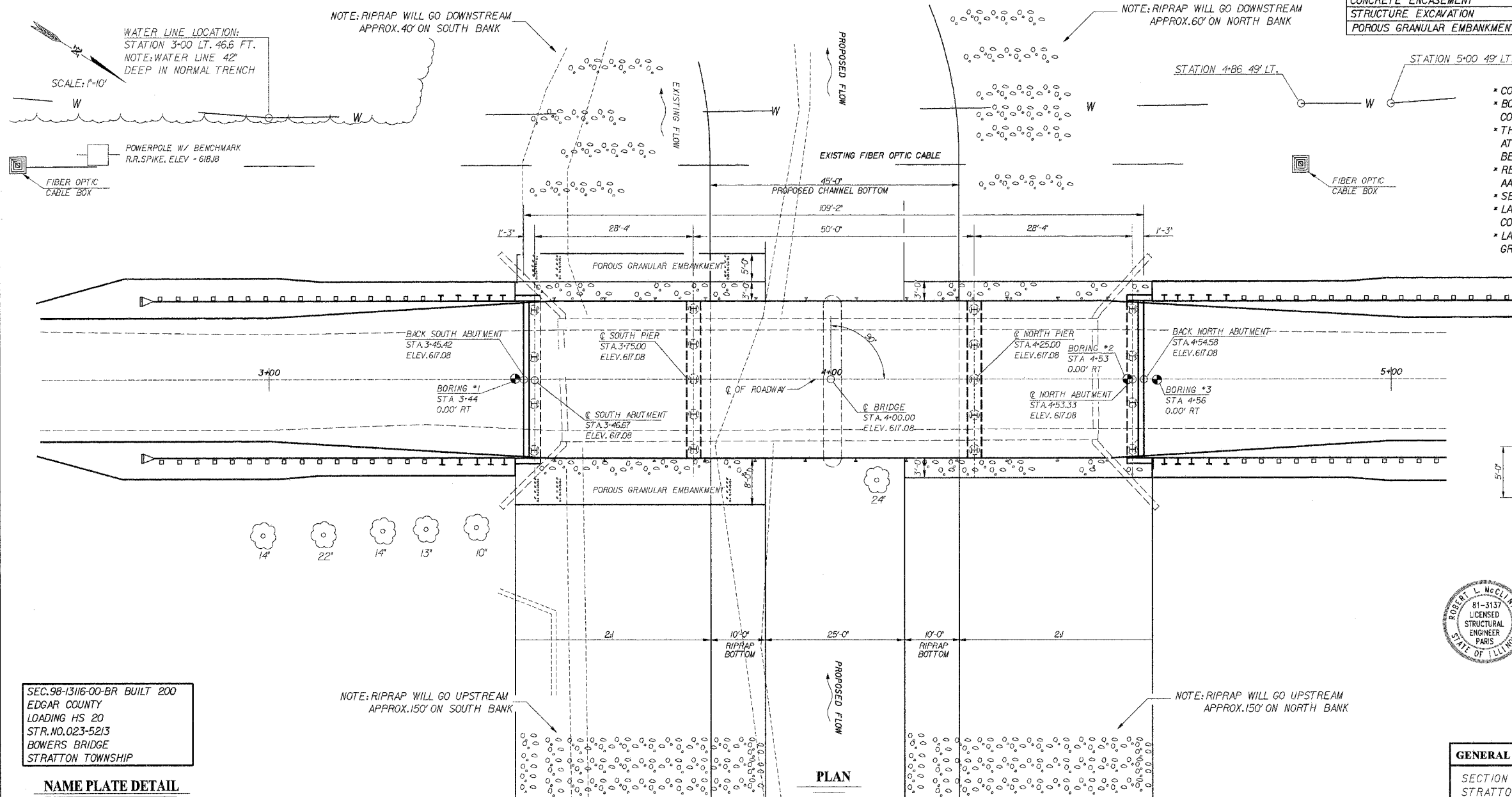
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT. H.W.E.		HEAD - FOOT		HEADWATER EL.	
			EXISTING	PROP.	EXISTING	PROP.	EXIST.	PROP.	EXIST.	PROP.
DESIGN	25	2884	751	758	611.43	0.53	0.50	611.96	611.93	
BASE	100	3782	811	855	612.08	0.81	0.77	612.90	612.86	

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
PRECAST PRESTRESSED CONCRETE DECK BEAMS (2' DEPTH)	SQ. FT.	3015		3015
CONCRETE STRUCTURES	CU. YD.		40J	40J
REINFORCEMENT BARS	POUND		3970	3970
STEEL RAILING, TYPE S-1	FOOT	224		224
NAME PLATES	EACH		1	1
FURNISHING STEEL PILES, HP 10x57	FOOT		548	548
TEST PILE STEEL, HP 10x57	EACH		2	2
DRIVING STEEL PILES	FOOT		548	548
STONE RIPRAP, CLASS A-5	TON		1900	1900
CHANNEL EXCAVATION	CU. YD.		1308	1308
CONCRETE ENCASUREMENT	CU. YD.		15.4	15.4
STRUCTURE EXCAVATION	CU. YD.		84.3	84.3
POROUS GRANULAR EMBANKMENT	TON		279	279

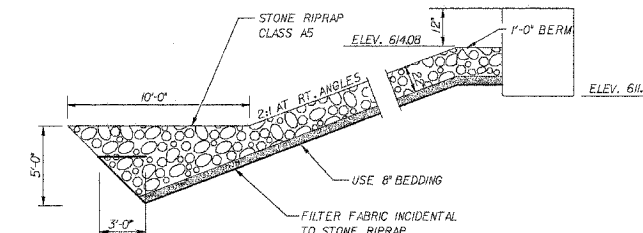


ELEVATION



GENERAL NOTES

- CONCRETE STRUCTURES SHALL BE USED IN THE ABUTMENTS AND PIERS.
- BORING DATA IS SHOWN ONLY AS A GUIDE TO BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL DRIVE ONE TEST PILE IN A PERMANENT LOCATION AT THE NORTH ABUTMENT AND PIER AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60.
- SEE SPECIAL PROVISION FOR POROUS GRANULAR MATERIAL.
- LAYOUT OF RIPRAP MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
- LAYOUT OF THE SLOPE PROTECTION SYSTEM MAY BE VARIED TO SUIT GROUND CONDITIONS IN THE FIELD, AS DIRECTED BY THE ENGINEER.



DETAIL "A"



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 plan. The design is an economical one for the style of structure and complies with requirements of the current A.A.S.H.T.O. Standard Specifications for Highway Bridges.

Robert L. McClintock Date: 2-01-05
 Robert L. McClintock, IL S.E. #3137
 LICENSE EXPIRES 11-30-06

SEC. 98-13116-00-BR BUILT 200
 EDGAR COUNTY
 LOADING HS 20
 STR. NO. 023-5213
 BOWERS BRIDGE
 STRATTON TOWNSHIP

NAME PLATE DETAIL
 SEE STANDARD 515001

GENERAL PLAN AND ELEVATION		McCLINTOCK CIVIL ENGINEERING SERVICE 404 SHAW AVENUE, PARIS, IL 61944 PHONE (217) 466-6110	
SECTION 98-13116-00-BR STRATTON TOWNSHIP EDGAR COUNTY	DRN TLC GK, RLMc APPR.	DATE 1/13/05 SCALE 1/10	SHEET 3 OF 11 JOB NO. 3137-500-00