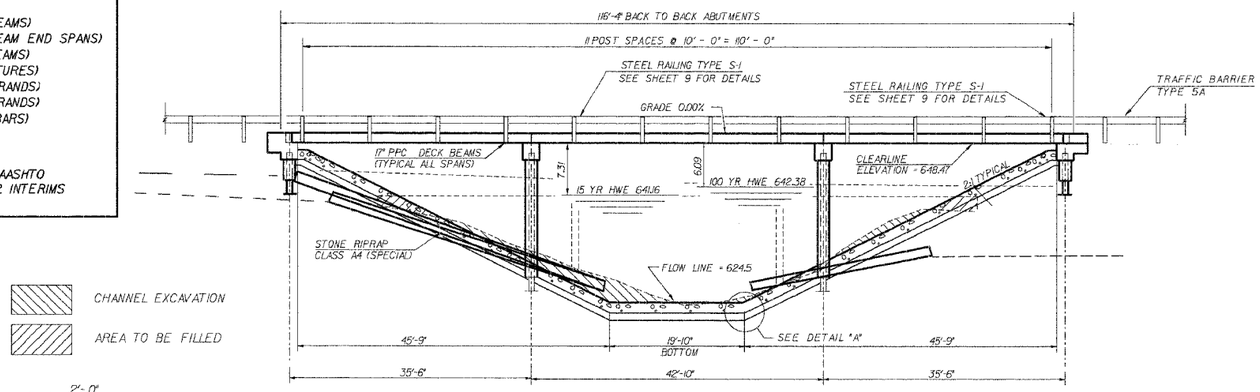
DESIGN STRESSES

f'c =	5,000	P.S.I. (PRESTRESSED BEAMS)
f'ci =	4,300	P.S.I. (PRESTRESSED BEAM END SPANS)
f'ci =	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'si =	189,000	P.S.I. (PRESTRESSED STRANDS)
f'y =	60,000	P.S.I. (REINFORCEMENT BARS)

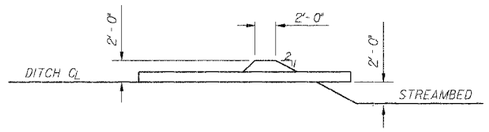
LOADING HS 20-44 DESIGN SPECS.1996 AASHTO AND 1997 THROUGH 2002 INTERIMS



ELEVATION

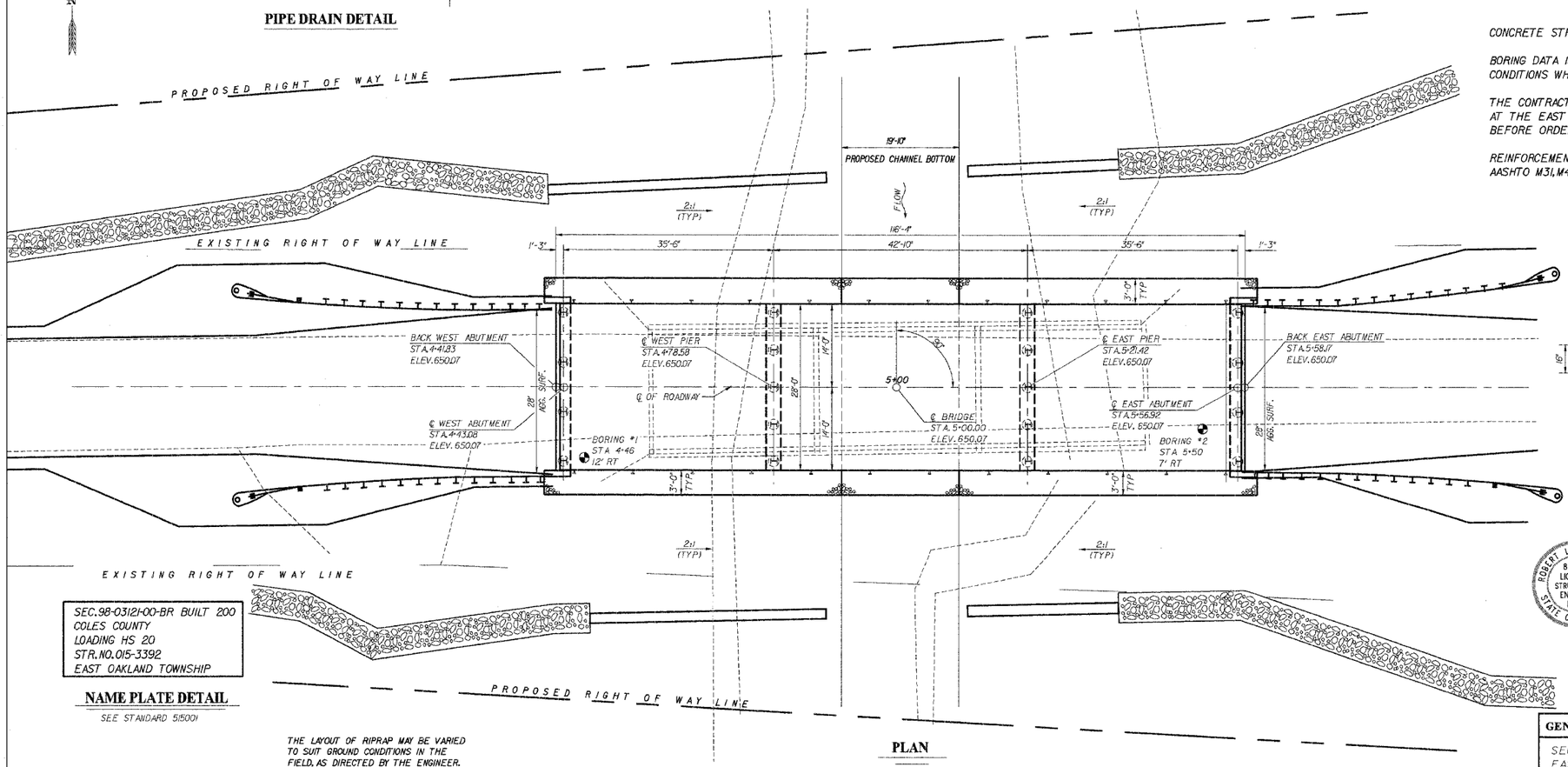
CHANNEL EXCAVATION

AREA TO BE FILLED



PIPE DRAIN DETAIL

N



PLAN

SEC.98-03121-00-BR BUILT 2001
COLES COUNTY
LOADING HS 20
STR.NO.015-3392
EAST OAKLAND TOWNSHIP

NAME PLATE DETAIL

SEE STANDARD 515001

THE LAYOUT OF RIPRAP MAY BE VARIED TO SUIT GROUND CONDITIONS IN THE FIELD, AS DIRECTED BY THE ENGINEER.

WATERWAY INFORMAION

DRAINAGE AREA = 27.19 MI.			LOW GRADE ELEV. 650.07 AT STATION 5+00						
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ.FT.		NAT. H.W.E.	HEAD - FOOT		HEADWATER EL.	
			EXISTING	PROP	EXISTING	EXIST.	PROP.	EXIST.	PROP.
DESIGN	15	2486	722	846	641.16	0.08	0.02	641.24	641.18
BASE	100	3859	792*	951	642.38	0.30	0.09	642.68	642.47

* INCLUDES OVER THE ROAD FLOW

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ.FT.	3215		3215
CONCRETE STRUCTURES	CU.YD.		31.5	31.5
REINFORCEMENT BARS	POUND		7470	7470
STEEL RAILING, TYPE S-1	FOOT	230		230
NAME PLATES	EACH	1		1
FURNISHING STEEL PILES, HP 10x57	FOOT		673	673
TEST PILE STEEL, HP 10x57	EACH		2	2
DRIVING STEEL PILES	FOOT		673	673
STONE RIPRAP, CLASS A-4 (SPECIAL)	SQ.YD.		460	460
CHANNEL EXCAVATION	CU.YD.		472	472
CONCRETE ENCASEMENT	CU.YD.		49.2	49.2

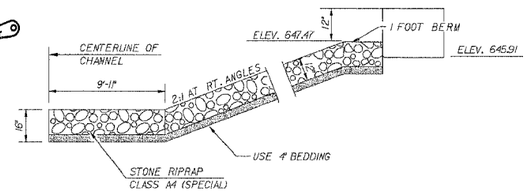
GENERAL NOTES

CONCRETE STRUCTURES SHALL BE USED IN THE ABUTMENTS AND PIERS.

BORING DATA IS SHOWN ONLY AS A GUIDE TO BIDDERS IN ESTIMATES SOIL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.

THE CONTRACTOR SHALL DRIVE ONE TEST PILE IN A PERMANENT LOCATION AT THE EAST 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.



DETAIL "A"

ROBERT L. McCLINTOCK 81-3137 LICENSED STRUCTURAL ENGINEER PARIS STATE OF ILLINOIS

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: 10-30-02

Robert L. McClintock I.L. S.E. #3137
LICENSE EXPIRES 11-30-04

GENERAL PLAN AND ELEVATION	McCLINTOCK CIVIL ENGINEERING SERVICE 404 SHAW AVENUE, PARIS, IL. 61944 PHONE (217) 466-6110	
SEC. 98-03121-00-BR EAST OAKLAND TOWNSHIP COLES COUNTY	DRN R.T. DATE 7/09/02 CK. SCALE 1:10 APPR.	SHEET 4 OF 15 JOB NO. 3137-454-99

\\450 UPDATES\general plans.dgn 10/23/02 03:45:02 PM