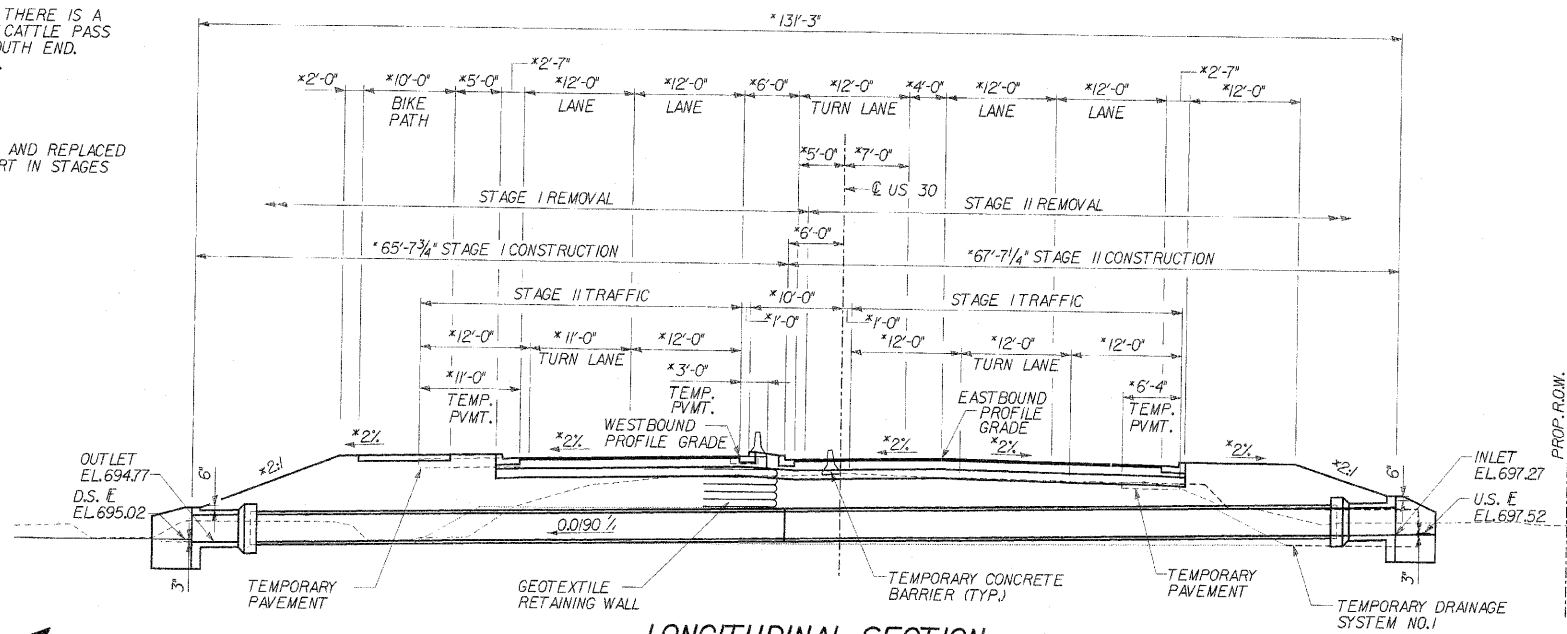


BENCH MARK: BM 221
STA. 255+54.48, 33.62' LT., EL. 703.555
RAILROAD SPIKE IN SOUTH FACE OF SECOND
POWER POLE WEST OF HICKORY CREEK PRESERVE
ENTRANCE, NORTH SIDE OF ROUTE 30.

EXISTING STRUCTURE:
VARIES, STARTING AT THE NORTH END THERE IS A
48" Ø R.C.P. ATTACHED TO A 4'-0" X 7'-0" CATTLE PASS
ATTACHED TO A 48" Ø R.C.P. AT THE SOUTH END.
APPROXIMATE TOTAL LENGTH OF 90'-0".

NO SALVAGE.
PROPOSED IMPROVEMENTS:
EXISTING STRUCTURE TO BE REMOVED AND REPLACED
WITH A TRIPLE 3'-0" X 3'-0" BOX CULVERT IN STAGES
MAINTAINING TWO LANES OF TRAFFIC.



STATION 256+75.00
BUILT BY
STATE OF ILLINOIS
FAP 353 SECT. 12 & 13 WRS-3
LOADING HS20
STR. NO. 099-C014

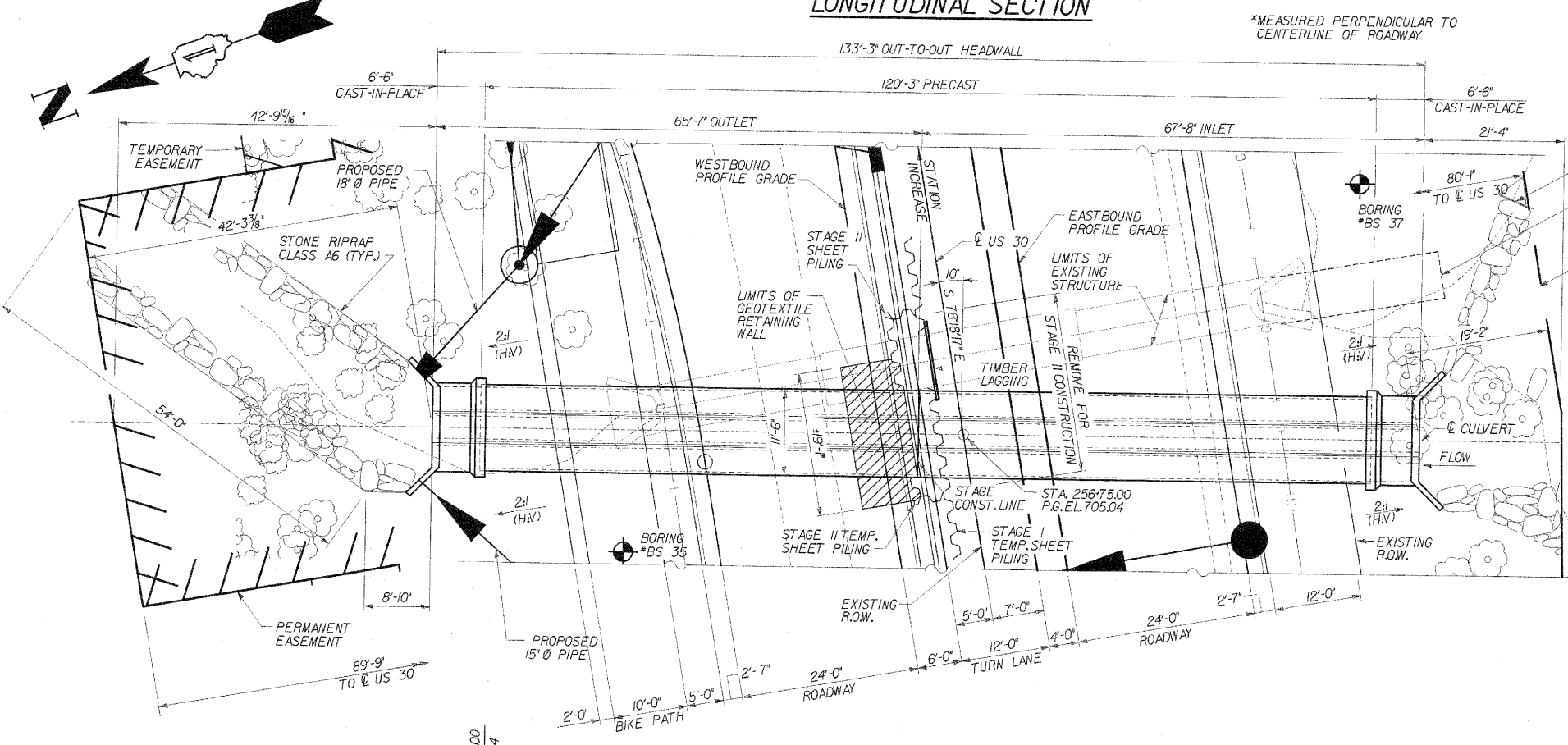
NAME PLATE
NOTE: SEE STANDARD DRAWING S15001
FOR NAME PLATE DETAILS.

DESIGN SPECIFICATIONS
AASHTO 2002 SPECIFICATIONS
LOADING HS20-44
ALLOW 50²/SQ.FT. FOR FUTURE WEARING SURFACE.
DESIGN STRESSES
FIELD UNITS
f_c = 3,500 PSI
f_y = 60,000 PSI (REINFORCEMENT)
PRECAST UNITS
f_c = 5,000 PSI
f_y = 60,000 PSI (REINFORCEMENT)

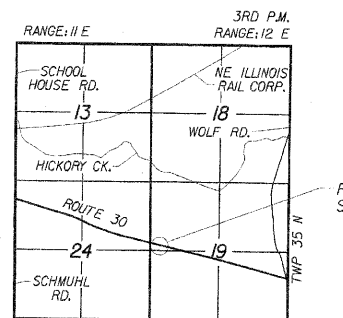
TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STONE RIPRAP, CLASS A6	TON	200
FILTER FABRIC	SQ.YD.	170
REMOVAL OF EXISTING STRUCTURES NO. 4	EACH	1
REINFORCEMENT BARS	POUND	2,479
TEMPORARY SHEET PILING	SQ.FT.	1,102
NAME PLATES	EACH	1
CONCRETE BOX CULVERTS	CU. YD.	17.0
PRECAST CONCRETE BOX CULVERT 3' x 3'	FOOT	360.8
GEOTEXTILE RETAINING WALL	SQ.FT.	95
TEMPORARY DRAINAGE SYSTEM NO. 1	FOOT	25

- GENERAL NOTES**
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.
 - CAST-IN-PLACE BARREL SHALL BE POURED MONOLITHICALLY WITH WING WALLS.
 - EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER.
 - IN ACCORDANCE WITH ARTICLE 540.04 OF THE STANDARD SPECIFICATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREE OF WATER. THE METHOD OF WATER DIVERSION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND THE COST SHALL BE INCLUDED WITH "REMOVAL OF EXISTING STRUCTURES NO. 4." CLEAN FILL (GRANULAR) MATERIAL WILL ONLY BE ALLOWED.
 - THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M259 (DESIGN FILL HEIGHT= 6'-0").
 - THE CONTRACTOR SHALL PREPARE IN-STREAM WORK PLANS (ALL COFFERDAMS, WORK PADS, AND EROSION AND SEDIMENT CONTROL, ETC.) AND SUBMIT TO THE ENGINEER AND THE U.S. ARMY CORP OF ENGINEERS FOR REVIEW AND APPROVAL. THE CONTRACTOR SHOULD EXPECT TO HAVE TO ATTEND MEETINGS AT THE USACE OFFICE TO DISCUSS THEIR WORK PLAN IN ORDER TO SECURE THEIR PERMIT. THE COST OF ALL IN-STREAM WORK ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



WAYNE A. TRICK
REGISTERED STRUCTURAL ENGINEER
08-005429
STATE OF ILLINOIS
Wagoner, Ill. 7-6-10
April 11-30-10



DESIGNED	CDS
CHECKED	ASP
DRAWN	EvH
CHECKED	CDS

PROFILE GRADE
@ P.G. WBD. & EBD.

WATERWAY INFORMATION

FLOOD	FREQ. YR.	DISCHARGE C.F.S.	WATERWAY OPENING		NATURAL H.W.E.		CREATED HEAD		HEADWATER ELEVATION	
			EXISTING (square Feet)	PROPOSED (square Feet)	EXISTING U/S Face	PROPOSED U/S Face	EXISTING (feet)	PROPOSED (feet)	EXISTING	PROPOSED
DESIGN	10	78	8.58	16.50	698.82	699.35	0.20	0.20	699.02	699.55
BASE	50	123	9.34	18.19	699.01	699.54	1.29	0.19	700.30	699.73
MAX. CALC.	100	141	9.62	18.82	699.08	699.61	1.78	0.30	700.86	699.91
OVERTOPPING	500	186	10.22	20.17	699.23	699.76	2.94	0.72	702.17	700.48

DRAINAGE AREA (SQ.MI) - 0.11
LOW GRADE ELEV. (FEET) EXIST = 703.33 @ STA. 257+33
PROPOSED = 704.40 @ STA. 258+35
MAX. RECORDED H.W.E. =

DLZ 85 W. Algonquin Rd. Ste. 220
Arlington Heights IL 60005
DLZ Illinois, Inc.

CULVERT 'D'
GENERAL PLAN
U.S. ROUTE 30 (LINCOLN HIGHWAY)
F.A.P. 353 (U.S. 30)
SECTION 12 & 13 WRS-3
STATION 256+75.00
WILL COUNTY
STRUCTURE NUMBER 099-C014

REVISIONS

NAME	DATE