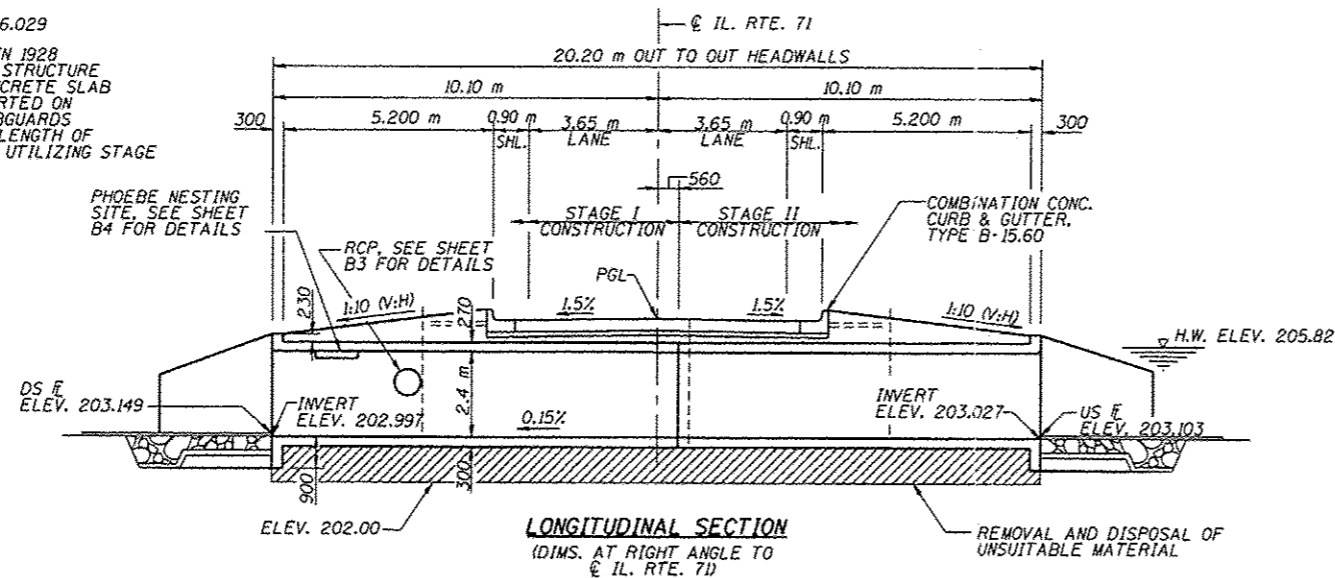


BENCHMARK:
CHISELED "□" ON N.E. WING WALL ELEV. 206.029

EXISTING STRUCTURE: S.N. 078-0030 BUILT IN 1928 UNDER SECTION 120-B OF SBI RTE. 69. THE STRUCTURE IS A SINGLE SPAN, 393 mm REINFORCED CONCRETE SLAB STRUCTURE WITH CLOSED ABUTMENTS SUPPORTED ON TIMBER PILES. 12.1 m FACE TO FACE OF HUBGUARDS (12.8 m OUT TO OUT) WITH A BACK TO BACK LENGTH OF 6.7 m. ONE WAY TRAFFIC TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION.

NO SALVAGE.



STATION 12+530.00
BUILT BY
STATE OF ILLINOIS
F.A.P. ROUTE 619 - SEC. 120 BR
LOADING MSIB
STR. NO. 078-2007

NAME PLATE
SEE STD. 515001

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
619	120 BR, CR	PUTNAM	77	42

FED. ROAD DIST. NO.	ELLNOS	FED. AID PROJECT

SHEET B1 OF B6
CONTRACT NO. 68740

GENERAL NOTES

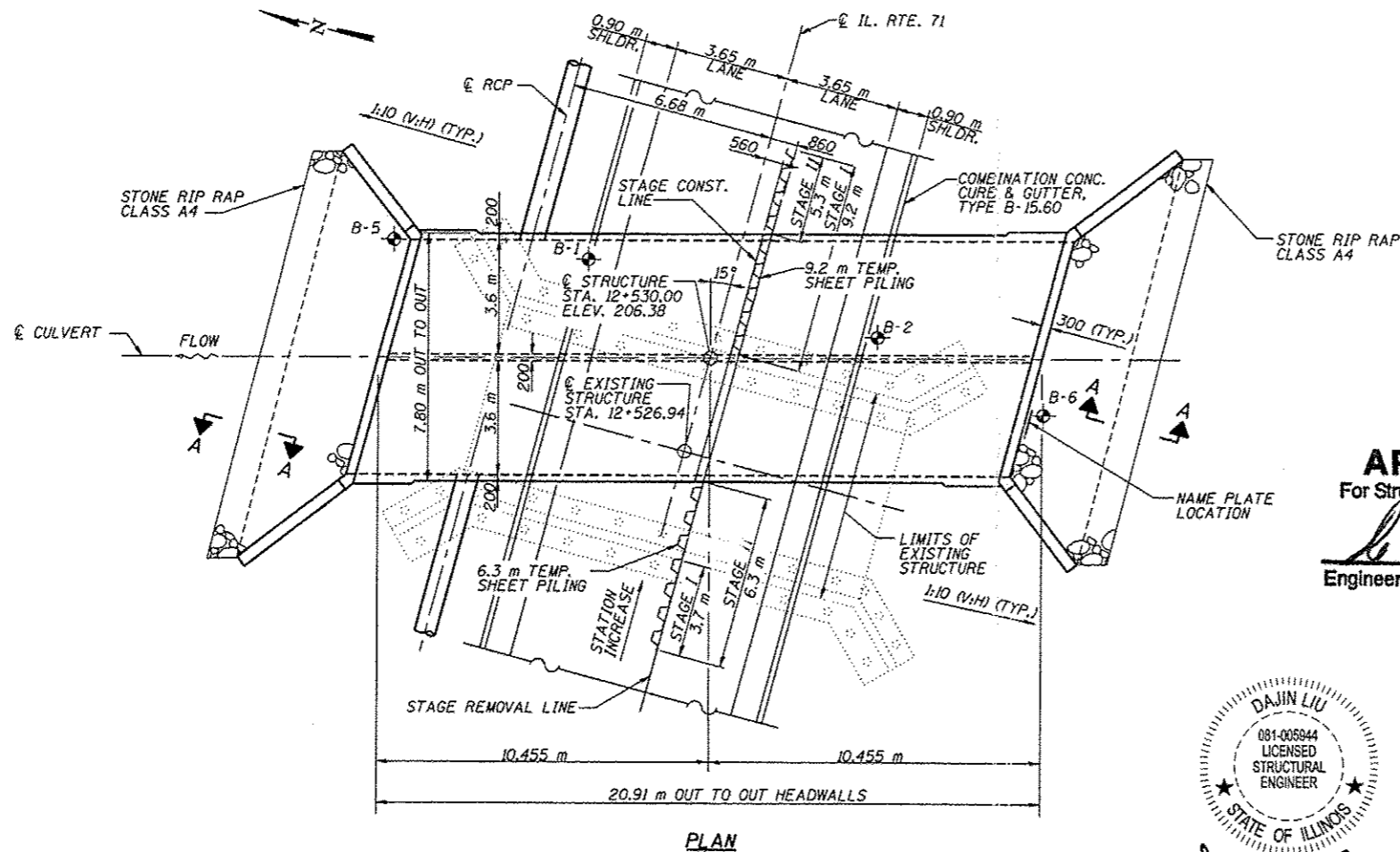
1. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
2. LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
3. ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT AS NOTED.
4. A PRECAST BOX CULVERT ALTERNATE WILL NOT BE ALLOWED AT THIS SITE.
5. FOR BACKFILLING AND EMBANKMENT, SEE STANDARD SPECIFICATIONS.
6. EXPOSED EDGES SHALL HAVE STANDARD 20 mm CHAMFER, UNLESS OTHERWISE NOTED.
7. EXCAVATION BEHIND EXISTING ABUTMENT WALLS SHALL BE PERFORMED TO BALANCE FRONT AND BACK SOIL PRESSURE BEFORE REMOVING THE EXISTING SUPERSTRUCTURE. THE CONTRACTOR SHALL SAWCUT THE UPPER PORTION OF THE EXISTING ABUTMENT AT STAGE I REMOVAL TO ENSURE THE REMAINING PORTION WILL NOT BE PREMATURELY DAMAGED.

INDEX OF SHEETS

- B1 GENERAL PLAN AND ELEVATION
- B2 CONSTRUCTION STAGING
- B3 CULVERT PLAN
- B4 SECTIONS AND DETAILS
- B5 BAR SPLICER ASSEMBLY DETAILS
- B6 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- 48 SOIL BORINGS - 1 OF 2
- 49 SOIL BORINGS - 2 OF 2

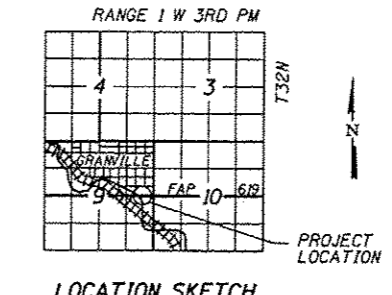
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
NAME PLATES	EACH	1
STONE RIPRAP, CLASS A4	m ²	80
FILTER FABRIC	m ²	125
REINFORCEMENT BARS, EPOXY COATED	kg	16,290
TEMPORARY SHEET PILING	m ²	174
CONCRETE BOX CULVERTS	m ³	149.8
BAR SPLICERS	EACH	114
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	m ³	145
POROUS GRANULAR EMBANKMENT	m ³	145



APPROVED
For Structural Adequacy Only
Devin Liu
Engineer of Bridges & Structures

DAJIN LIU
081-005944
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS
Devin Liu
DAJIN LIU, P.E., S.E.
NO. 081-005944
EXP. DATE 11/30/2014



LOADING MSIB
Allow 2.4 kN/m² for future wearing surface.
DESIGN SPECIFICATIONS
1996 AASHTO with 1997, 1998 & 1999 Interims

DESIGN STRESSES
FIELD UNITS
f_c = 24 MPa
f_y = 420 MPa (Reinforcement)

WATERWAY INFORMATION

Drainage Area = 8.26 km² Low Grade Elev. 206.337 Sta. 12+530.0

Flood	Freq. Yr.	Q m ³ /s	Opening m ²		Nat. H.W.E.	Head - m		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	30.4	13.6	15.6	205.61	0.384	0.210	206.00	205.82
Base	100	34.8	13.6	15.6	205.68	0.518	0.311	206.20	206.00
Overtopping	100	34.4/42.4	13.6	15.6	205.68	0.518	0.567	206.20	206.25
Max. Calc.	500	45.3	13.6	15.6	205.82	0.527	0.482	206.35	206.31

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 71 OVER DRAINAGE DITCH
F.A.P. RT. 619 - SECTION 120 BR
PUTNAM COUNTY
STATION 12+530
STRUCTURE NO. 078-2007
DATE: April 22, 2014
DESIGNED BY: MV
CHECKED BY: SG
DRAWN BY: KDS
CHECKED BY: MY
TranSystems

