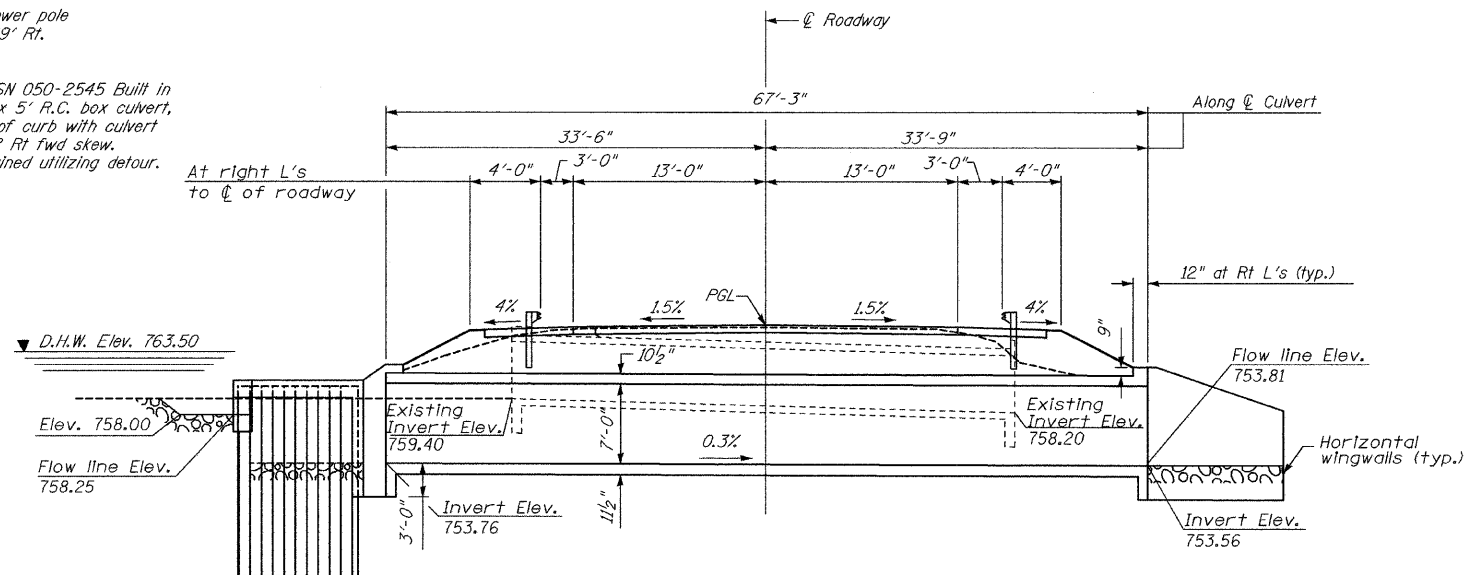


Benchmark: 80d Spike in field entrance
Sta. 1175+04.97, 21.18' Rt.
Elev. = 768.19

Rail Road Spike in power pole
Sta. 1176+06.35, 31.49' Rt.
Elev. = 763.41

Existing Structures: SN 050-2545 Built in
1924 as a double 7' x 5' R.C. box culvert,
30'-8" face to face of curb with culvert
length of 46'-3", 45° Rt fwd skew.
Traffic will be maintained utilizing detour.

No salvage.



LONGITUDINAL SECTION

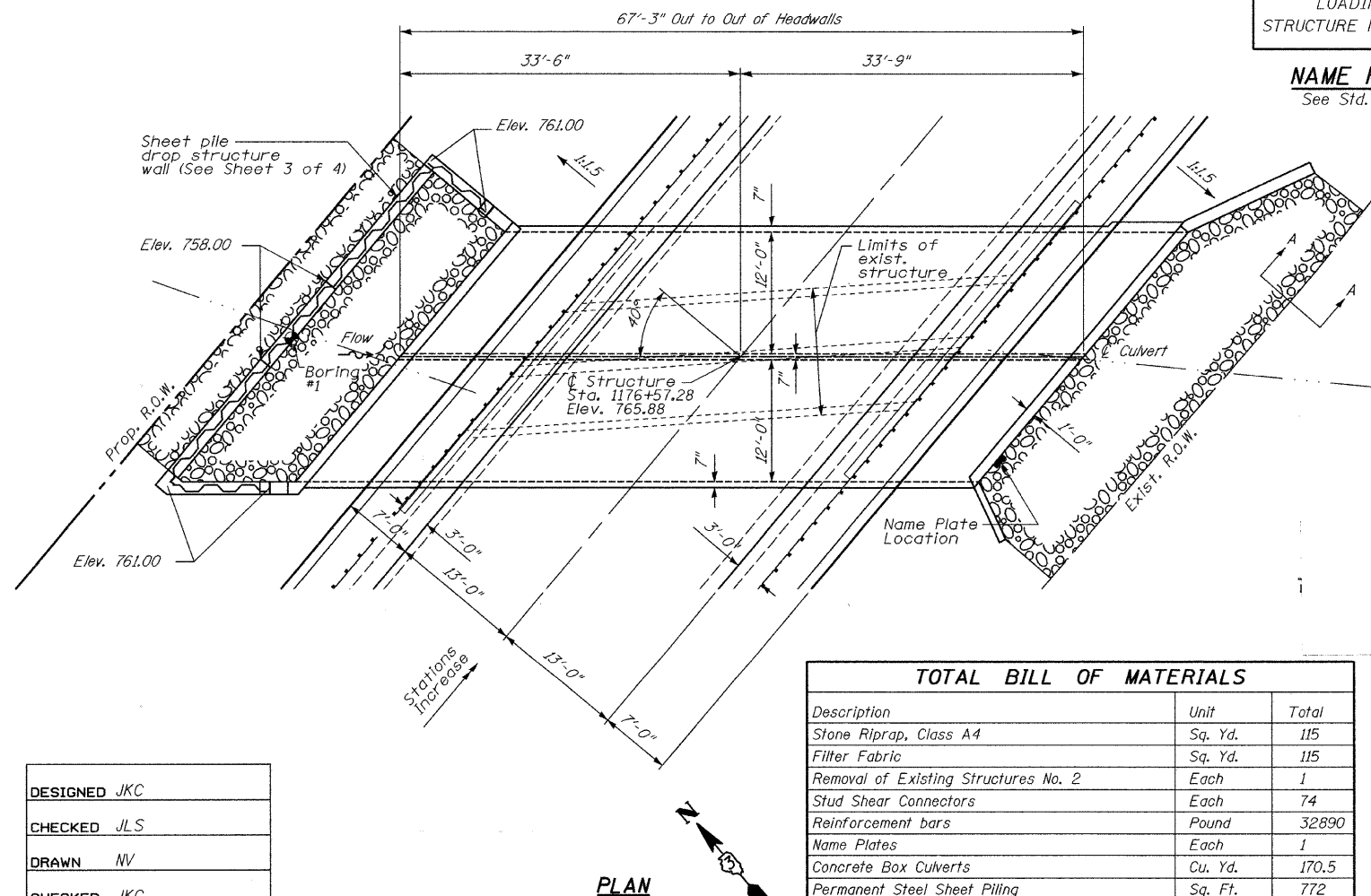
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	D.S. Invert	U.S. Invert
	750.56	750.76

Boring #2

STATION 1176+57.28
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. 587 SEC.(22) I & I-1
LOADING HS20
STRUCTURE NO. 050-2052

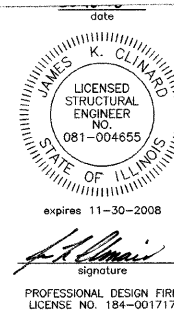
NAME PLATE
See Std. 515001



PLAN

TOTAL BILL OF MATERIALS

Description	Unit	Total
Stone Riprap, Class A4	Sq. Yd.	115
Filter Fabric	Sq. Yd.	115
Removal of Existing Structures No. 2	Each	1
Stud Shear Connectors	Each	74
Reinforcement bars	Pound	32890
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	170.5
Permanent Steel Sheet Piling	Sq. Ft.	772



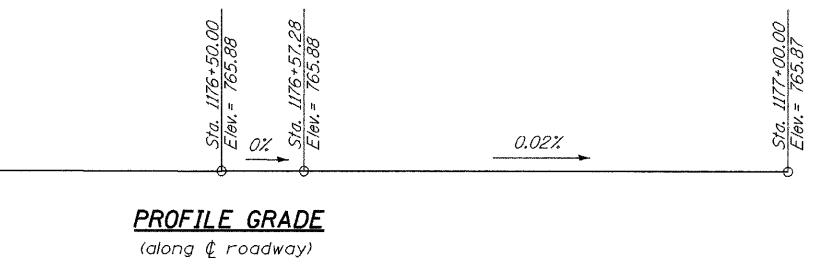
CHAMLIN & ASSOCIATES
PERU ILLINOIS MORRIS

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 38,500 psi (permanent sheet piling)



PROFILE GRADE
(along centerline of roadway)

WATERWAY INFORMATION

Drainage Area = 1.50 Sq. Mi.		Exist. Low Grade El. 765.68 @ Sta. 1177+00		Prop. Low grade El. 765.87 @ Sta. 1177+00					
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		NAT. H.W.E.	Head - Ft.		Headwater El.	
			Exist. **	Prop. **		Exist.	Prop.	Exist.	Prop.
	10	573	44	168	762.5	1.8	0.3	764.3	762.8
Design	50	980	57	168	763.5	1.3	0.8	764.8	764.3
Base	100	1169	70	168	764.5	1.2	0.7	765.7	765.2
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1644	70	168	764.9	1.1	0.7	766.0	765.6

10-year velocity through exist. struct. = 10.9 fps
** Gross opening: 70 sq. ft.(exist.) 168 sq. ft.(prop.)

10-year velocity through prop. struct. = 3.4 fps

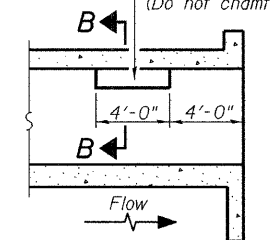
INDEX OF CULVERT PLANS

- General Plan & Elevation
- Culvert Details
- Drop Structure Details
- Soil Borings

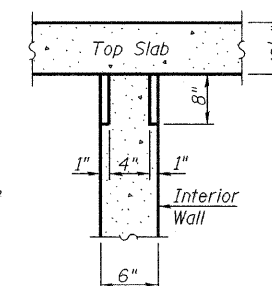
GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Precast alternate is not allowed.
- The contractor is advised that the existing box culvert is in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the culvert when developing construction procedures for the removal and replacement of the culvert.

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).

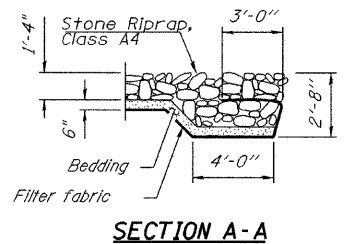


LONGITUDINAL SECTION

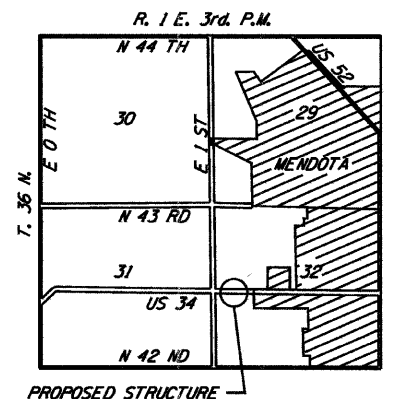


SECTION B-B

PHOEBE NESTING
SITE DETAILS
(Downstream End Only)



SECTION A-A



PROPOSED STRUCTURE -
LOCATION SKETCH

GENERAL PLAN & ELEVATION
US 34 OVER
TRIBUTARY TO MENDOTA CREEK
FAP 587 - SECTION (22) I & I-1
LASALLE COUNTY
STA. 1176+57.28
SN 050-2052

DESIGNED JKC
CHECKED JLS
DRAWN NV
CHECKED JKC

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	587	(22) I & I-1	LASALLE	31	18
4 SHEETS	SN 050-2052		CONTRACT NO. 66835		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					