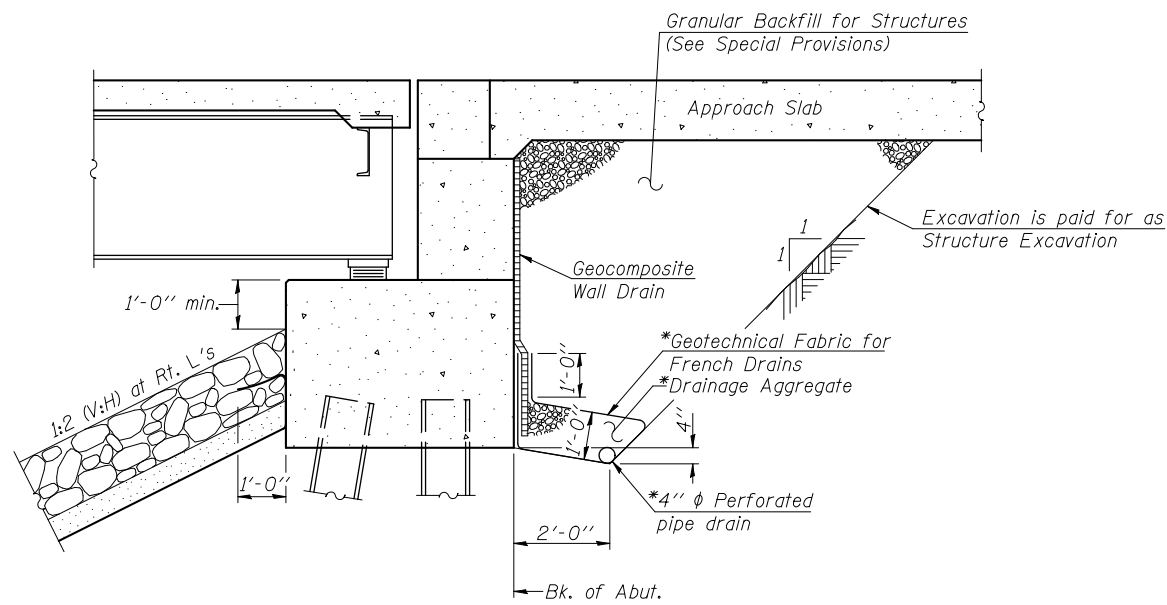


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 7706	23(B-1)	LOGAN	179	86
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract #72789

SHEET NO. 2
52 SHEETS

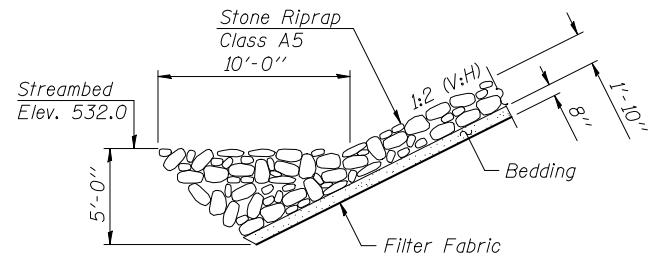


**SECTION THRU PILE SUPPORTED
STUB ABUTMENT**
(Horiz. dim. @ Rt. L's)

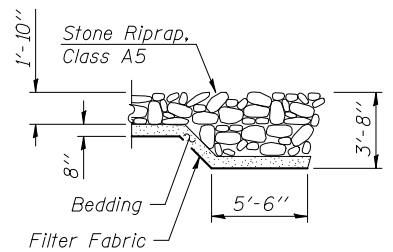
*Included in the cost of Pipe Underdrains for Structures.
(See Special Provisions)

Note:

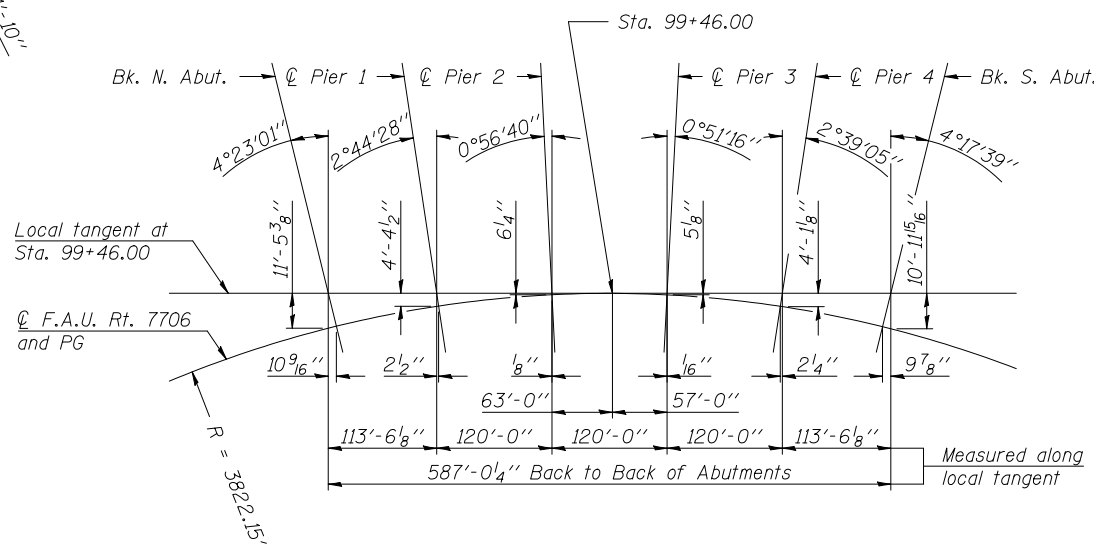
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION A-A



SECTION B-B



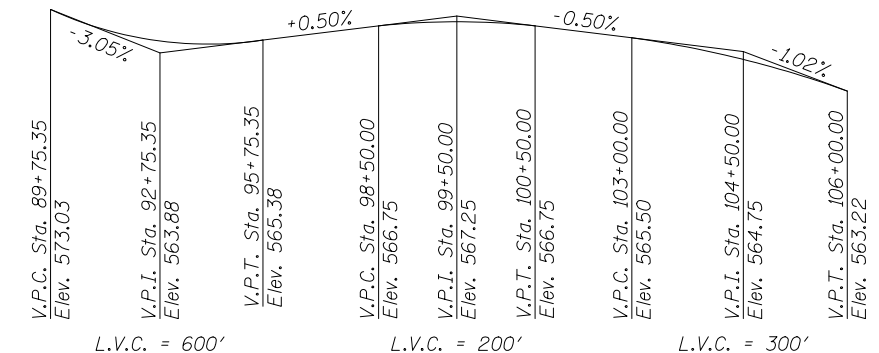
OFFSET SKETCH

CURVE DATA

$\Delta = 43^\circ 36' 42''$
 $D = 1^\circ 29' 57''$
 $T = 1,529.20'$
 $L = 2,909.30'$
 $E = 294.56'$
 $R = 3,822.15'$
 $S.E. = 2.8\%$
 $P.C. = \text{Sta. } 75+86.64$
 $P.T. = \text{Sta. } 104+95.94$
 $P.I. = \text{Sta. } 91+15.84$

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		5,175	5,175
Filter Fabric	Sq. Yd.		6,426	6,426
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		362	362
Floor Drains	Each	9		9
Concrete Structures	Cu. Yd.		1,022.9	1,022.9
Concrete Superstructure	Cu. Yd.	1,750.3		1,750.3
Bridge Deck Grooving	Sq. Yd.	5,975		5,975
Concrete Encasement	Cu. Yd.		11.9	11.9
Protective Coat	Sq. Yd.	6,636		6,636
Furnishing and Erecting Structural Steel	L Sum	1		1
Stud Shear Connectors	Each	15,264		15,264
Reinforcement Bars	Pound		102,580	102,580
Reinforcement Bars, Epoxy Coated	Pound	489,100	171,340	660,440
Bar Splicers	Each		1,822	1,822
Furnishing Steel Piles HP12x53	Foot		1,408	1,408
Driving Piles	Foot		1,408	1,408
Test Pile Steel HP12x53	Each		2	2
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		291.4	291.4
Drilled Shaft in Rock	Cu. Yd.		302.1	302.1
Preformed Joint Strip Seal	Foot	92		92
Finger Plate Expansion Joint, 3"	Foot	86		86
Fabric Reinforced Elastomeric Trough	Foot	90		90
Elastomeric Bearing Assembly, Type II	Each	12		12
Elastomeric Bearing Assembly, Type III	Each	12		12
Anchor Bolts, 1"	Each	48		48
Anchor Bolts, 1 1/4"	Each	96		96
Concrete Sealer	Sq. Ft.		1,974	1,974
Geocomposite Wall Drain	Sq. Yd.		155	155
Drainage Scuppers, DS-II	Each	6		6
Pipe Underdrains for Structures 4"	Foot		260	260
High Load Multi-Rotational Bearings, Guided Expansion, 400k	Each	36		36
Granular Backfill for Structures	Cu. Yd.		335	335



PROFILE GRADE
(Along \hat{C} F.A.U. Rt. 7760)

WATERWAY INFORMATION

Drainage Area = 854.0 Sq. Mi. Low Grade Elev. 560.6 ft. @ Sta. 113+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.
Design	10	16,898	7,974	6,800	553.7	0.5	0.5	554.2	554.2
Base	50	25,296	9,819	8,252	556.4	0.7	0.7	557.1	557.1
Overtopping	100	28,844	10,501	8,789	557.4	0.7	0.8	558.1	558.2
Max. Calc.	500	37,275	11,684	9,451	559.0	1.2	1.4	560.2	560.4

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	S. Abut.
	556.6	521.0	522.0	522.0	519.0	556.7

DESIGNED	JJD
CHECKED	EML
DRAWN	JJD
CHECKED	EML

**HORNER &
SHIFRIN, INC.
ENGINEERS**

GENERAL DATA
BL-55 OVER SALT CREEK
F.A.U. ROUTE 7706 - SECTION 23(B-1)
LOGAN COUNTY
STATION 99+46.00
STRUCTURE NO. 054-0512