

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1458	03-00125-01-GE	FULTON	49	11
FED. AID PROJECT NO. RS-1458(102)				
FED. ROAD DIST. NO.		ILLINOIS		

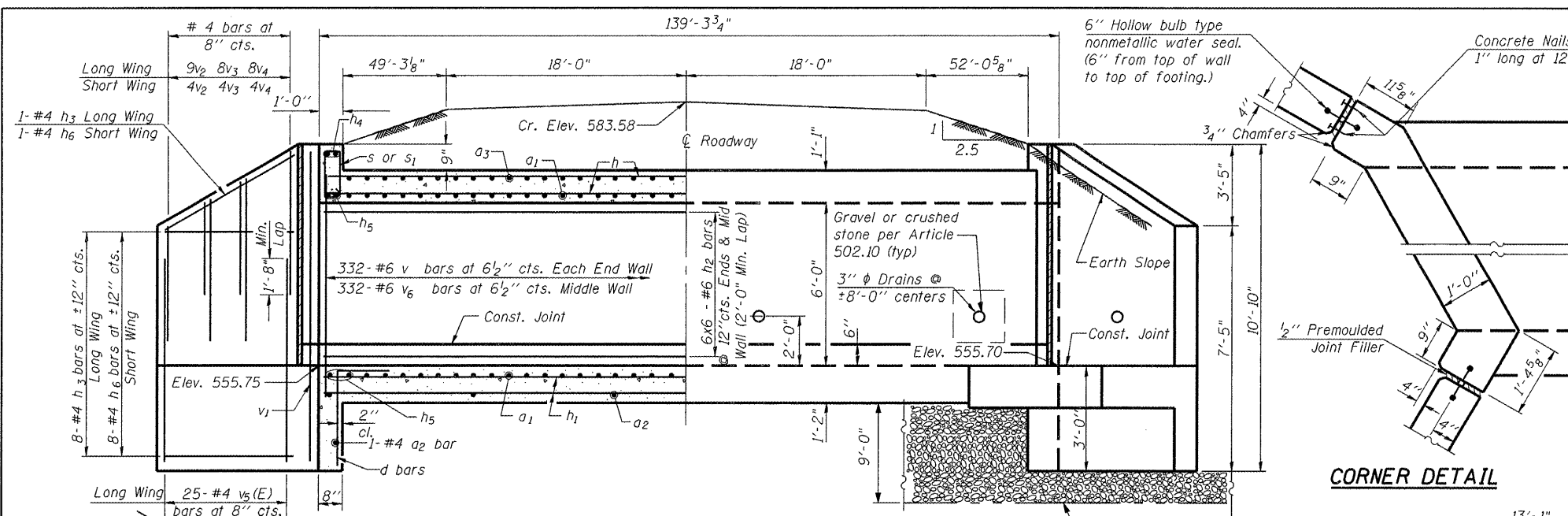
WATERWAY INFORMATION TABLE

Route: FAS 1458 Exist. S.N.: N/A Computed: GBM Date: 11/16/2005
 Section: 03-00125-03-GE Prop. S.N.: N/A Checked: Date:
 County: Fulton Waterway: Buckheart Cr.

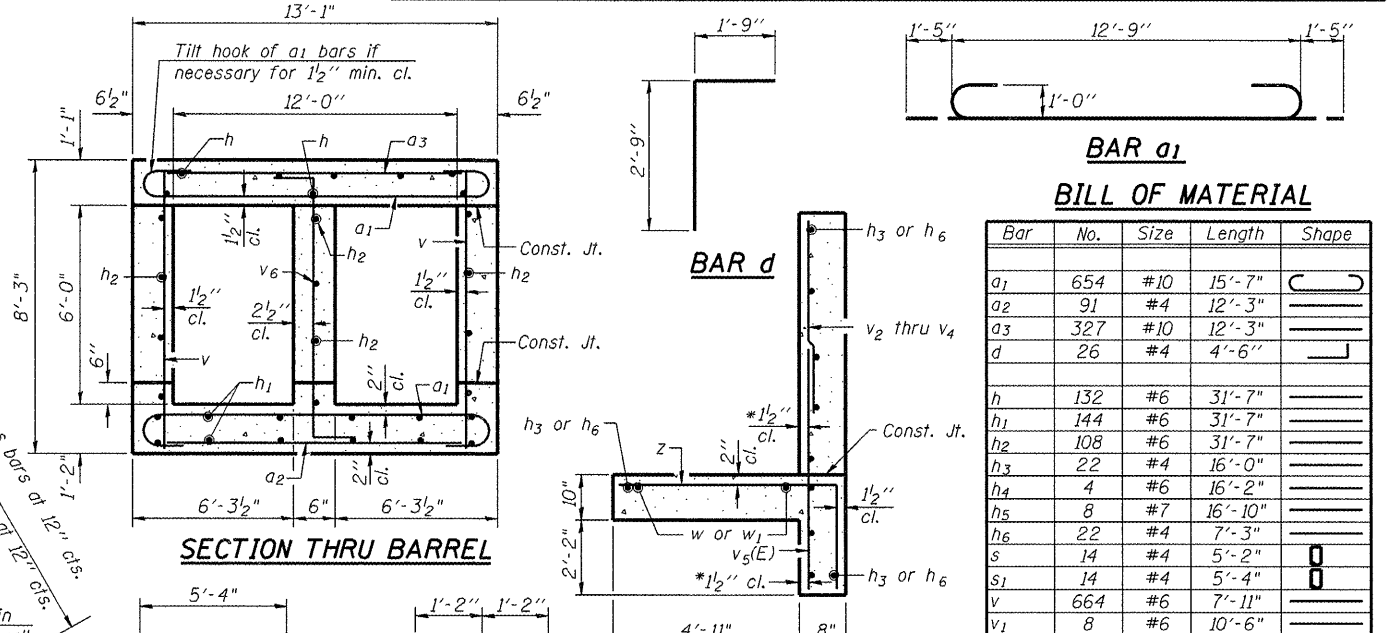
Drainage Area =	3.3 sq. mi.	Existing Low Grade Elevation =	556.75 ft. @ Sta 51+00				
Proposed Low Grade Elevation =	583.46 ft. @ Sta 51+00						
Flood Year	Frequency	Discharge (c.f.s.)	Waterway Opening (sq.ft.)	Natural H.W.E.	Head (ft.) Existing	Headwater Elev. Existing	Proposed
10	10	810	50	567.87*	0.0	567.87	567.87
Design	20	1063	50	573.81*	0.0	573.81	580.62
Base	50						

DATUM:
 ALL-TIME H.W.E. & DATE: Unknown, but due to upstream dam failure
SCOPE OF WORK:

EXISTING STRUCTURE	PROPOSED STRUCTURE
TYPE: Double 96" Corrugated Culvert	TYPE: Double 5'-9"x6'-0" Concrete Box Culvert
LENGTH: 42'	LENGTH: 179'-3"
SPANS: Single	SPANS: Double
LOW BEAM: N/A	LOW BEAM: N/A
SKEW: 0°	SKEW: 39°



CORNER DETAIL



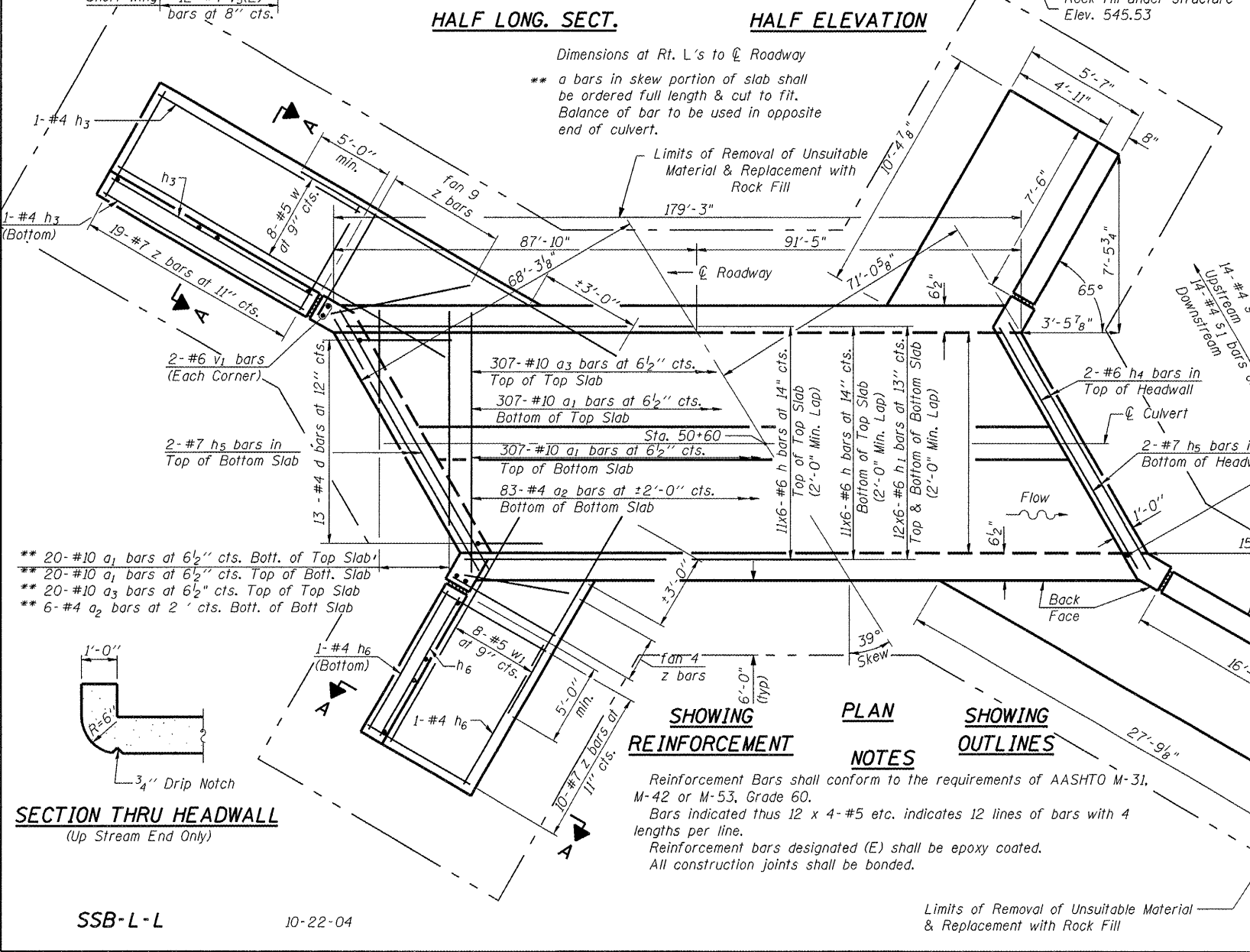
BAR a1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	654	#10	15'-7"	C
a2	91	#4	12'-3"	—
a3	327	#10	12'-3"	—
d	26	#4	4'-6"	J
h	132	#6	31'-7"	—
h1	144	#6	31'-7"	—
h2	108	#6	31'-7"	—
h3	22	#4	16'-0"	—
h4	4	#6	16'-2"	—
h5	8	#7	16'-10"	—
h6	22	#4	7'-3"	—
s	14	#4	5'-2"	—
s1	14	#4	5'-4"	—
v	664	#6	7'-11"	—
v1	8	#6	10'-6"	—
v2	26	#4	7'-6"	—
v3	24	#4	6'-4"	—
v4	24	#4	5'-3"	—
v5(E)	74	#4	4'-9"	—
v6	332	#6	9'-10"	—
w	16	#5	20'-3"	—
w1	16	#5	11'-11"	—
z	84	#7	8'-0"	—
Concrete Box Culverts				Cu. Yd. 282.3
Reinforcement Bars, Epoxy Coated				Pound 235
Reinforcement Bars				Pound 96,095

SECTION A-A
 * v bars shall not be placed more than 1 1/2" cl. from back face of wingwall.

DESIGN STRESSES
 fy = 60,000 psi
 f'c = 3,500 psi
 Max. Soil Pressure under footing = 2974 psf

LOADING HS 20-44 & ALT.



SHOWING REINFORCEMENT

PLAN NOTES

SHOWING OUTLINES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 Reinforcement bars designated (E) shall be epoxy coated.
 All construction joints shall be bonded.

Limits of Removal of Unsuitable Material & Replacement with Rock Fill

SECTION THRU HEADWALL
 (Up Stream End Only)

NOTE: PRECAST OPTION WILL NOT BE ALLOWED

REVISIONS	
NAME	DATE

DOUBLE 5'-9" x 6'-0" BOX CULVERT STA 50+71

DESIGNED BY: GBM
 CHECKED BY: BEC
 DATE 04/21/06

DRAWN BY: LAD
 CHECKED BY: GBM