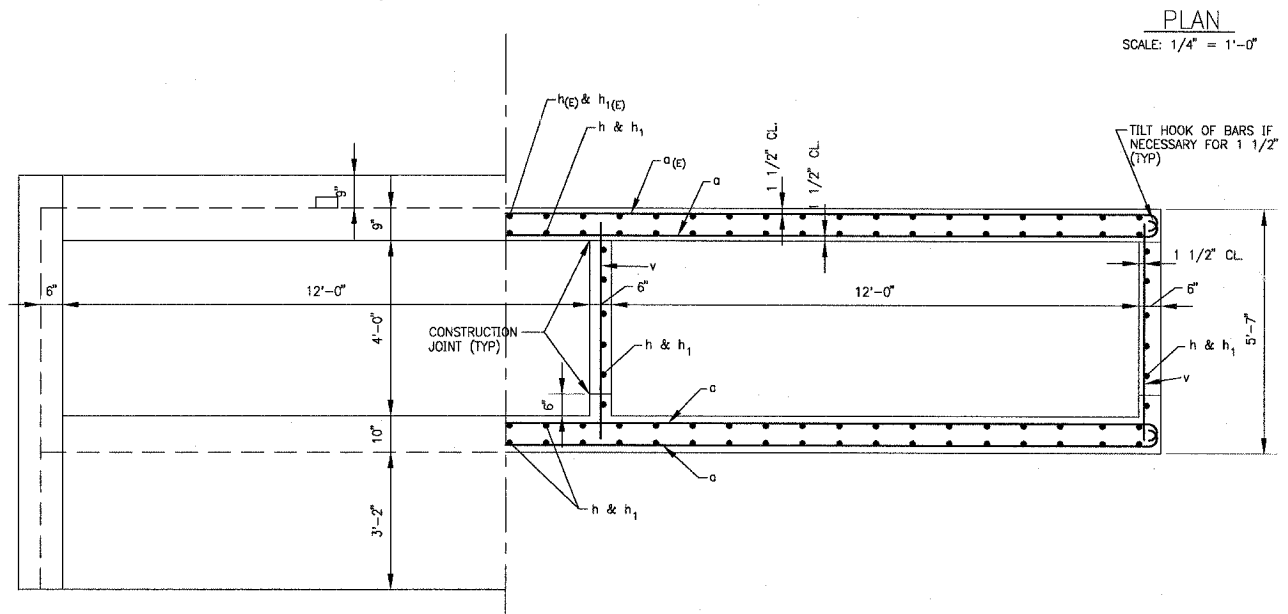
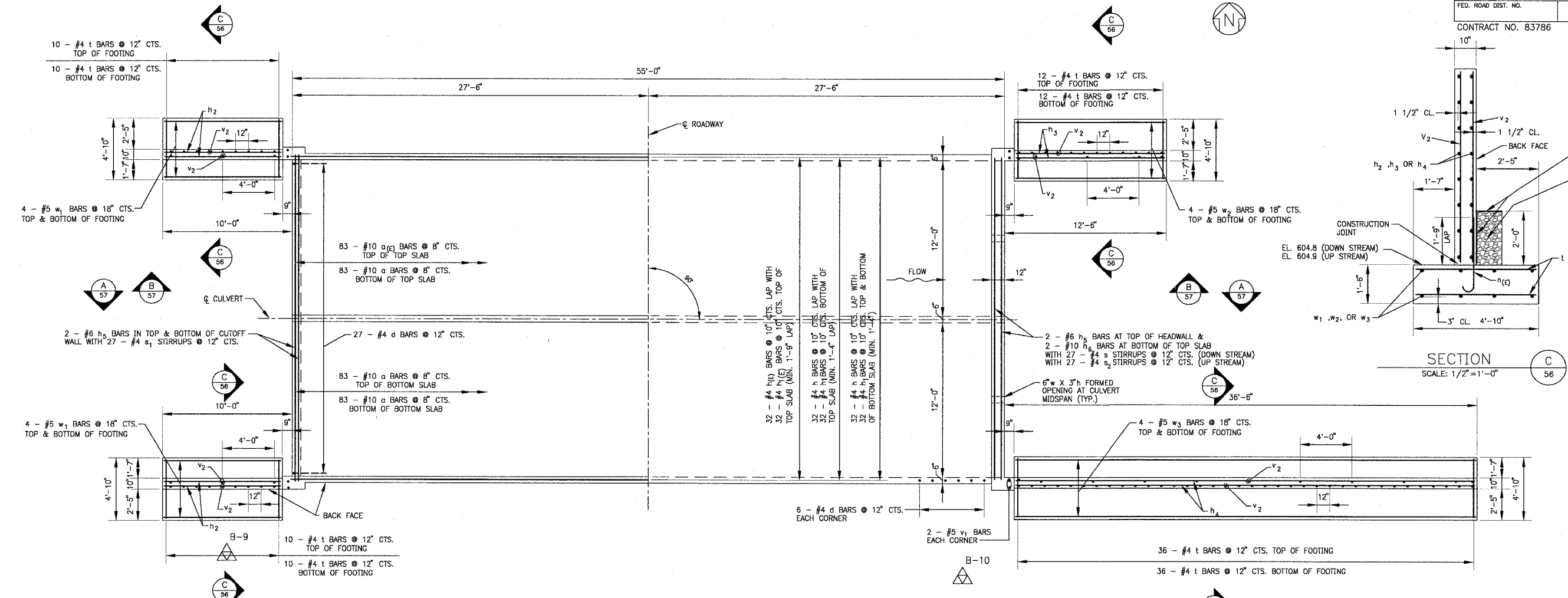


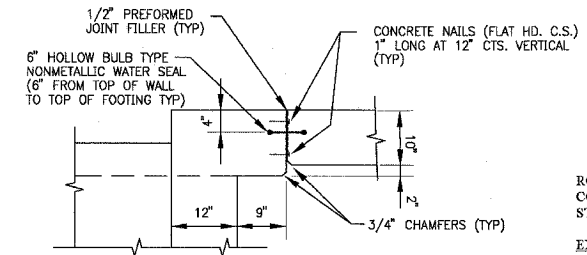
CONTRACT NO. 83786



PLAN
SCALE: 1/4" = 1'-0"

PARTIAL END ELEVATION
SCALE: 1/2" = 1'-0"

PARTIAL SECTION THRU BARREL
(WINGWALL AND CUT OFF WALL NOT SHOWN)
SCALE: 1/2" = 1'-0"



CORNER DETAIL
SCALE: 3/4" = 1'-0"

CONSTRUCTION SPECIFICATIONS
PERFORM WORK IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2004 AND INSERTED SPECIAL PROVISIONS UPDATED MAY 6, 2004.

DESIGN STRESSES

$f_y = 60,000$ P.S.I.
 $f_c = 3,500$ P.S.I.
ALLOWABLE NET SOIL BEARING PRESSURE = 2,500 P.S.F. MINIMUM

LOADING HS20-44
ALLOW 50 LB/SF FOR FUTURE WEARING SURFACE

NOTES:

- SEE GENERAL NOTES ON SHEET 58
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

WATERWAY INFORMATION TABLE (based on IDOT datum)
(Major Culvert Crossing No. 2 - Private Driveway Crossing)

ROUTE: U.S. Route 52 SECTION: PRIVATE DRIVEWAY (FEMA Sec. 10025)
COUNTY: WILL COUNTY
STREAM NAME: HAMMEL CREEK

EXISTING CONDITIONS		PROPOSED CONDITIONS	
STRUCTURE TYPE:	BOX CULVERT	STRUCTURE TYPE:	TWIN BOX CULVERTS
APPROXIMATE SIZE:	8 Feet x 5 Feet	APPROXIMATE SIZE:	2-12 Feet x 4.0 Feet
LOW CHORD ELEV.:	N/A	LOW CHORD ELEV.:	N/A
UPSTREAM INVERT ELEV.:	607.3	UPSTREAM INVERT ELEV.:	607.3
DOWNSTREAM ELEV.:	607.2	DOWNSTREAM ELEV.:	607.2

Drainage Area = 1.9 Square Miles	Existing Low Grade Elev. = 613.8	At STA 36+66, offset 77 Feet left							
	Proposed Low Grade Elev. = 613.8								
Max. Recorded H.W.E. = 618.0									
Flood	Frequency	Discharge (cfs)	Waterway Opening (sq.ft.)		Natural H.W.E. ¹	Created Head		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10-year	249	40.8 sq.ft.	118 sq.ft.	612.3	0.0	0.00	612.2	611.9
DESIGN	50-year	445	40.8 sq.ft.	137 sq.ft.	613.1	1.0	0.00	614.1	612.7
BASE	100-year	550	40.8 sq.ft.	142 sq.ft.	613.3	1.0	0.00	614.3	613.1
	500-year	875	40.8 sq.ft.	168 sq.ft.	614.4	0.3	0.00	614.7	614.2
OVERTOPPING	40-year	400	40.8 sq.ft.	-----	N/A	N/A	N/A	613.8	613.8

- Determined by removing the existing culverts from the Existing HEC-2 Analysis.
- Datum Correlation: Baxter & Woodman survey data adjusted by -0.12 feet to match FEMA reference mark datum.
- If there is overtopping the area above the roadway elevation is added to the waterway opening because the Natural HWE is above the roadway elevation.

CONSULTANTS: BAXTER & WOODMAN, INC.
 STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. 001-00131 - EXPIRES 2/20/2005

CONSULTANTS	REV. NO.	DATE	DESCRIPTION
	1	12-21-04	PER IDOT REVIEW
	2	4-5-05	

DRAWING FILE: BOXCLV.DWG PLOTTED BY: DEK 16/DEC/04 10:19

BAXTER & WOODMAN
Consulting Engineers

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Mokena, Illinois 708.478.2090
DeKalb, Illinois 815.787.3111
Grayslake, Illinois 847.223.5088
Rockford, Illinois 815.489.1551

VILLAGE OF SHOREWOOD, ILLINOIS
U.S. ROUTE 52 IMPROVEMENTS

HAMMEL CREEK
BOX CULVERT @ STA. 36+74
PLAN AND DETAILS

DESIGNED BY	SCALE
BAB	AS NOTED
DRAWN BY	PROJECT NO.
DEK	010665
CHECKED BY	SHEET NO.
MHY	
DATE	
10-05-04	

56 OF 85
Revised 4-5-05