

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:
1. SEE GENERAL NOTES ON SHEET 58
2. BARS INDICATED THUS 12 x 4 - #5 ETC. INDICATES 12 LINES OF BARS WITH 4 LENGTHS PER LINE.

1. Datum Correlation: Baxter & Woodman survey data adjusted by -0.12 feet to match FEMA reference mark datum.
(Major Culvert Crossing No. 3 - STA 24+17)

ROUTE: U.S. Route 52 SECTION: COUNTY: WILL COUNTY
STREAM NAME: N/A

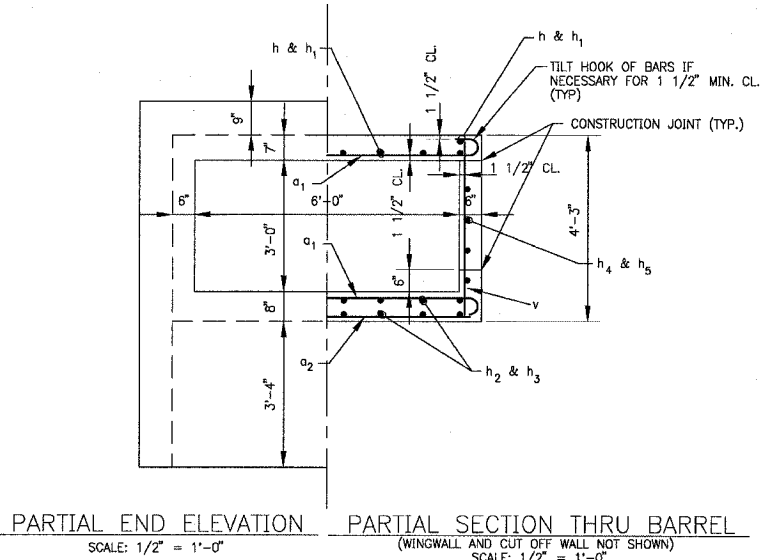
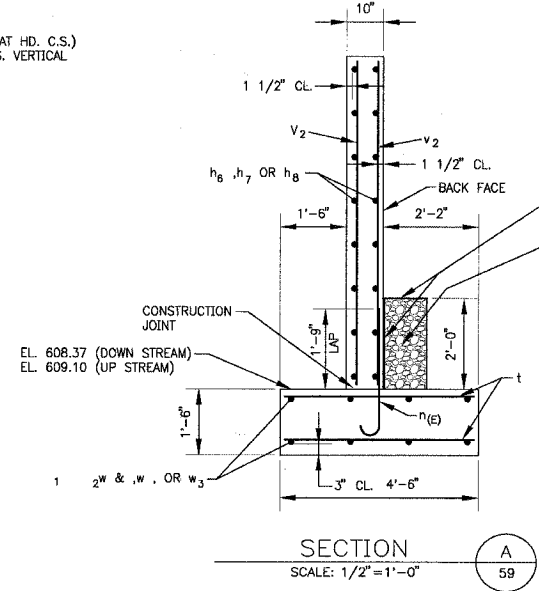
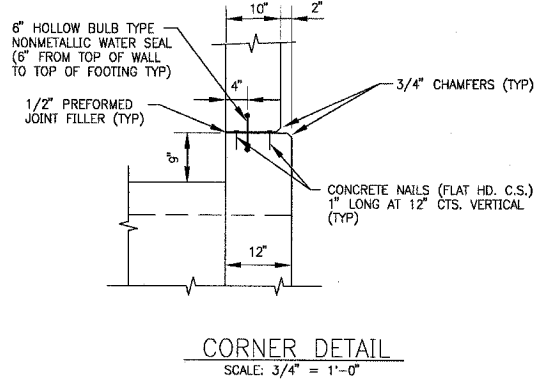
EXISTING CONDITIONS (STA 24+63)
STRUCTURE TYPE: BOX CULVERT
APPROXIMATE SIZE: 24-inch x 18-inch
LOW CHORD ELEV.: N/A
UPSTREAM INVERT ELEV.: 611.5
DOWNSTREAM INV ELEV.: 611.0

PROPOSED CONDITIONS (STA 24+17)
STRUCTURE TYPE: BOX CULVERT
APPROXIMATE SIZE: 6.0 Feet x 3.0 Feet
LOW CHORD ELEV.: N/A
UPSTREAM INVERT ELEV.: 611.5
DOWNSTREAM INV ELEV.: 610.8

Drainage Area = 84.2 acres
Ex. Low Grade Elev. = 616.31 At STA 25+00
Prop. Low Grade Elev. = 616.51 At STA 25+00
Max. Recorded H.W.E. = 619.0 (Hammel Creek High Water)

Flood	Frequency	Discharge (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E. ¹ 24+63	Created Head		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10-year	46	3.0 sq. ft.	18.0 sq. ft.	613.9	2.8	2.2	616.7	616.1
DESIGN	50-year	66	3.0 sq. ft.	18.0 sq. ft.	614.5	2.3	1.8	616.8	616.3
BASE	100-year	75	3.0 sq. ft.	18.0 sq. ft.	614.7	2.1	1.8	616.8	616.5
OVERTOPPING	>100-year	132	3.0 sq. ft.	---	---	---	---	616.3	616.6

2. Determined by extending a straight line from the tailwater elevations to the upstream invert of the culvert.



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

DRAWING FILE: BOXCULV-2.DWG
PLOTTED BY: DEK 16/DEC/04 10:27

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 Crystal Lake, Illinois 847.223.6088
 Rockford, Illinois 815.488.1551

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

U.S. RTE. 52
BOX CULVERT @ STA. 24+13.62
PLAN AND DETAILS

DESIGNED BY: BAB
 DRAWN BY: DEK
 CHECKED BY: MHY
 DATE: 10-05-04

SCALE: AS NOTED
 PROJECT NO.: 010665
 SHEET NO.: 59 OF 85

Revised 4-5-05