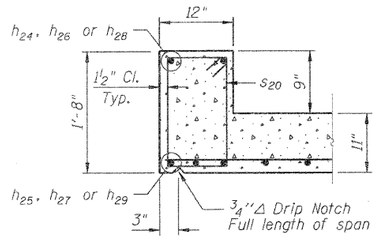
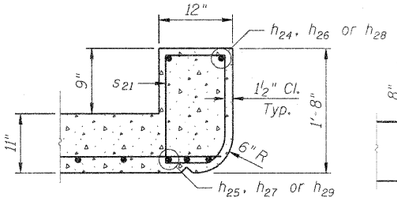
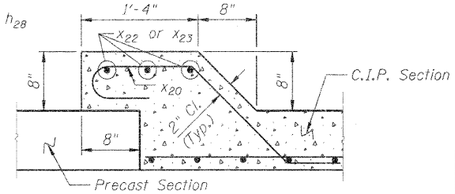


DOWNSTREAM



UPSTREAM

HEADWALL DETAILS

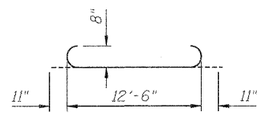


PRECAST TO CAST-IN-PLACE CONNECTION COLLAR

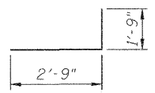
STATION 1008+74.53
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 303 SEC. 129K-1
LOADING HS20-44
STRUCTURE NO. 101-2051

NAME PLATE

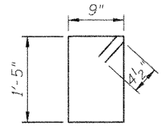
See Std. 515001



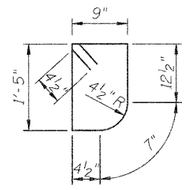
BAR a_{20}



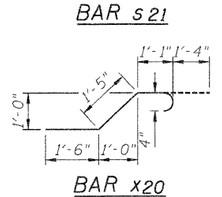
BAR d_{20}



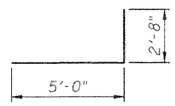
BAR s_{20}



BAR s_{21}



BAR x_{20}

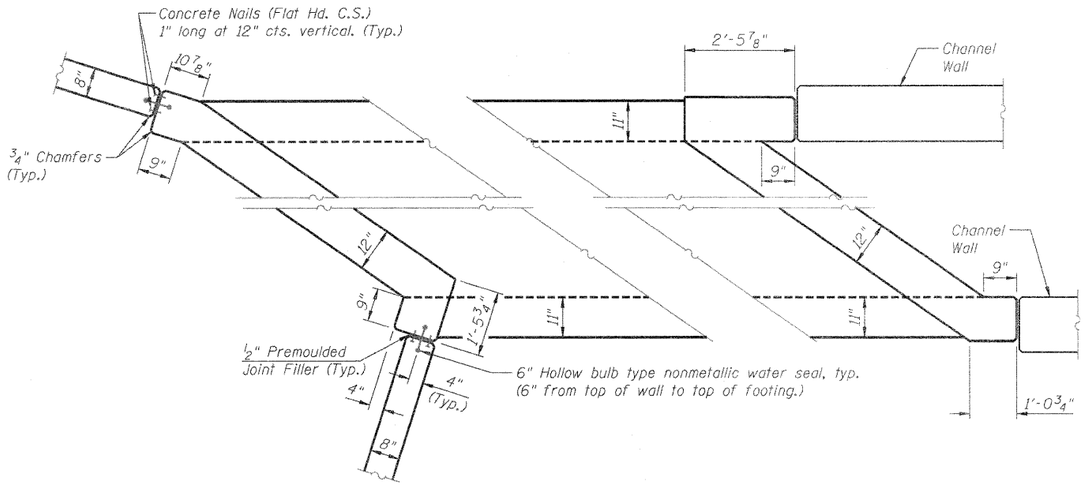


BAR z_{20}

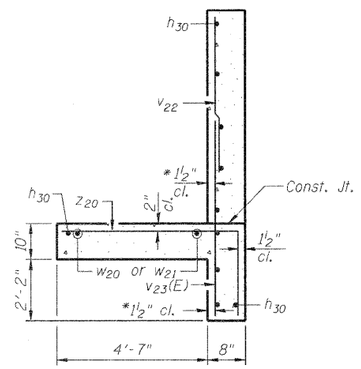
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{20}	270	#8	14'-4"	
a_{21}	48	#4	12'-6"	
d_{20}	76	#4	4'-6"	
h_{20}	45	#7	30'-0"	
h_{21}	78	#5	30'-0"	
h_{22}	42	#7	7'-3"	
h_{23}	42	#7	22'-10"	
h_{24}	4	#6	22'-0"	
h_{25}	12	#7	22'-0"	
h_{26}	4	#6	22'-6"	
h_{27}	12	#7	22'-6"	
h_{28}	4	#6	21'-1"	
h_{29}	12	#7	21'-1"	
h_{30}	17	#4	29'-0"	
h_{31}	18	#4	22'-0"	
s_{20}	65	#4	5'-1"	
s_{21}	65	#4	4'-11"	
v_{20}	258	#4	7'-6"	
v_{21}	8	#5	10'-4"	
v_{22}	60	#4	8'-11"	
$v_{23(E)}$	60	#4	5'-4"	
w_{20}	7	#5	33'-7"	
w_{21}	7	#5	36'-0"	
x_{20}	204	#4	5'-4"	
x_{21}	12	#4	8'-10"	
x_{22}	24	#4	13'-5"	
x_{23}	12	#4	12'-6"	
z_{20}	95	#6	7'-8"	

Item	Unit	Quantity
Concrete Box Culverts	Cu. Yd.	162.1
Reinforcement Bars	Pound	26,230
Reinforcement Bars (Epoxy Coated)	Pound	220



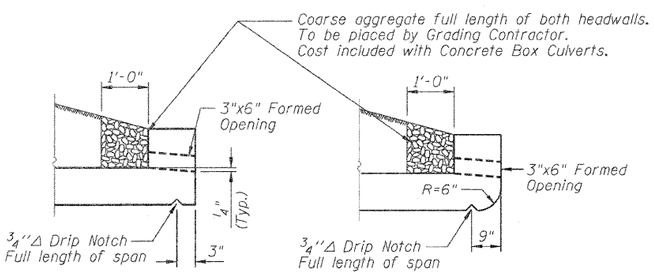
CORNER DETAILS



SECTION THRU WINGWALL

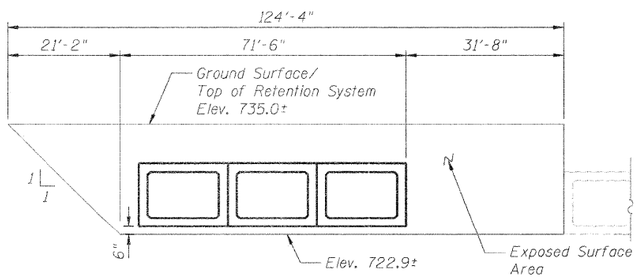
* v bars shall not be placed more than $1\frac{1}{2}$" cl. from back face of wingwall.

Max. Soil Pressure under footing = 2,609 psf



AT DOWNSTREAM END AT UPSTREAM END

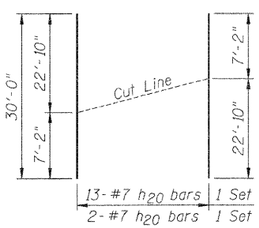
DRAIN DETAIL



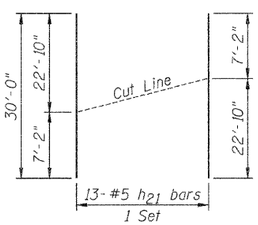
TEMPORARY SOIL RETENTION SYSTEM

Horizontal dimensions are along skew
Slope 1:1 is perpendicular to culvert

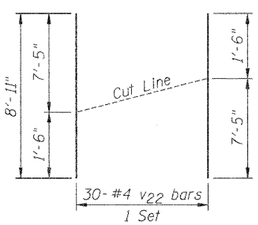
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



BAR h_{20} CUT DIAGRAM



BAR h_{21} CUT DIAGRAM



BAR v_{22} CUT DIAGRAM

FILE NAME = ...\D264987-2051-004-CulvertDetails.dgn	USER NAME = SAW	DESIGNED - JLA	REVISED -
		CHECKED - PMM	REVISED -
	PLOT SCALE = 0:2.0000 '/ IN.	DRAWN - SAW	REVISED -
	PLOT DATE = 11/1/2010	CHECKED - JLA	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
IL 173 OVER WILLOW CREEK TRIBUTARY
SHEET NO. 4 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	129K-1	WINNEBAGO	40±	275
	S.N. 101-2051	CONTRACT NO. 64987		
	ILLINOIS FED. AID PROJECT			