

WALL INFORMATION										
WALL	STATION RANGE	BASE ELEVATION	MIN. TOP ELEVATION	MAX. TOP ELEVATION	DIMENSIONS				REINFORCING INFO	
					a	b	c	e	A	B
"A"	10+00 - 10+40	1272.00	1280.00	1280.00	3'-0"	1'-6 1/2"	8'-0"	8'-0"	#7 @ 12"	#8 @ 12"
"A"	10+40 - 10+80	1266.50	1280.00	1280.00	4'-0"	1'-11 1/2"	10'-0"	13'-6"	#7 @ 12"	#8 @ 12"
"B"	10+00 - 10+48.50	1269.50	1285.00	1285.00	4'-0"	2'-1 1/2"	12'-0"	15'-6"	#8 @ 12"	#9 @ 12"
"E"	10+00 - 10+38.64	1264.00	1284.00	1287.30	5'-0"	2'-9 1/4"	14'-0"	23'-3 5/8"*	#7 @ 6"	#7 @ 6"
"E"	10+38.64 - 13+27.66	1264.00	1284.00	1284.00	5'-0"	2'-6"	14'-0"	20'-0"	#7 @ 6"	#7 @ 6"
"E"	13+27.66 - 14+17.66	1266.00	1284.00	1284.00	5'-0"	2'-4"	13'-0"	18'-0"	#7 @ 6"	#7 @ 6"
"E"	14+17.66 - 15+07.66	1268.50	1284.00	1284.00	4'-0"	2'-1 1/2"	12'-0"	15'-6"	#8 @ 12"	#9 @ 12"
"E"	15+07.66 - 15+97.66	1271.00	1284.00	1284.00	4'-0"	1'-11"	10'-0"	13'-0"	#7 @ 12"	#8 @ 12"
"E"	15+97.66 - 17+39.68	1274.50	1284.00	1284.00	3'-0"	1'-7 1/2"	8'-0"	9'-6"	#7 @ 12"	#8 @ 12"
"F"	10+00 - 11+25.57	1281.00	1293.50	1293.50	4'-0"	1'-10 1/2"	10'-0"	12'-6"	#7 @ 12"	#8 @ 12"
"H"	10+00 - 10+16	1281.00	1288.40	1296.40	4'-0"	2'-1 3/8"	12'-0"	15'-4 3/4"*	#8 @ 12"	#9 @ 12"
"I"	11+12 - 11+26	1281.00	1291.73	1296.40	4'-0"	2'-1 3/8"	12'-0"	15'-4 3/4"*	#8 @ 12"	#9 @ 12"
"J"	10+00 - 10+24	1281.00	1296.40	1296.40	4'-0"	2'-1 3/8"	12'-0"	15'-4 3/4"	#8 @ 12"	#9 @ 12"
"K"	10+00 - 10+25	1283.00	1296.40	1296.40	4'-0"	1'-11 3/8"	10'-0"	13'-4 3/4"	#7 @ 12"	#8 @ 12"
"K"	10+25 - 10+50.75	1288.00	1296.40	1296.40	3'-0"	1'-6 3/8"	8'-0"	8'-4 3/4"	#7 @ 12"	#8 @ 12"
"L"	10+00 - 11+17.87	1265.00	1277.00	1281.09	4'-0"	2'-2"	12'-0"	16'-1"*	#8 @ 12"	#9 @ 12"
"M"	10+00 - 10+26	1275.00	1278.67	1285.72	3'-0"	1'-8 3/4"	8'-0"	10'-8 5/8"*	#7 @ 12"	#8 @ 12"
"M"	10+26 - 11+31.45	1275.00	1281.13	1284.72	3'-0"	1'-7 3/4"	8'-0"	9'-8 5/8"*	#7 @ 12"	#8 @ 12"

* Maximum dimensions shown for variable height wall sections

NOTES:

1. For Wall "C" and "D" information see sheet 108-109.
2. For Wall "L" and "M" information see sheet 115.
3. For Walls "N", "O", and "P" information and quantities see sheet 47-48. Walls "N", "O", and "P" shall be drystack quarry block only.
2. For concrete masonry coating and surface treatment information see sheet 46.
5. Retaining Wall "G" does not exist.

GENERAL NOTES

DESIGN SPECIFICATION:
AASHTO LRFD Specifications for Highway Bridges, 2007 Edition with appropriate interim specifications.

CONSTRUCTION SPECIFICATIONS:
Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction, 2007 and Special Provisions.

DESIGN LOADING:
Live Load
Equivalent Fluid Pressure
Surcharge Load of 200 p.s.f.
 $K_a = 0.35$ $\gamma_s = 110$ p.c.f.

UNIT STRESSES:
Concrete (Grade 4.0)(AE) $f'_c = 4$ ksi
Reinforcing Steel (Grade 60) $f_y = 60$ ksi

CONCRETE: All concrete shall be Concrete (Grade 4.0). Bevel all exposed edges of concrete with a 3/4" triangular molding, except as otherwise noted on the plans. Exposed surfaces, except recessed grooves, shall be given a rubbed surface. Construction joints are optional with the contractor, but if used, shall be made only at the locations shown, or at the locations approved by the Engineer. All concrete shall be considered *subsidiary* to wall bid items.

REINFORCING SHOP DRAWINGS: The shop drawings for all wall reinforcing shall be reviewed by the Engineer prior to casting the concrete.

EPOXY COATED REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars, unless otherwise noted. All the reinforcing steel shall conform to the requirements of ASTM A615 Grade 60. Support reinforcing as shown on the sheet "SUPPORTS AND SPACERS FOR REINFORCING STEEL". Install reinforcing supports per the latest edition of the CRSI "Manual of Standard Practice". All epoxy coated reinforcing steel shall be considered *subsidiary* to wall bid items.

EXCAVATION: All cantilevered retaining wall excavation shall be class III excavation and shall be considered *subsidiary* to the wall bid items.

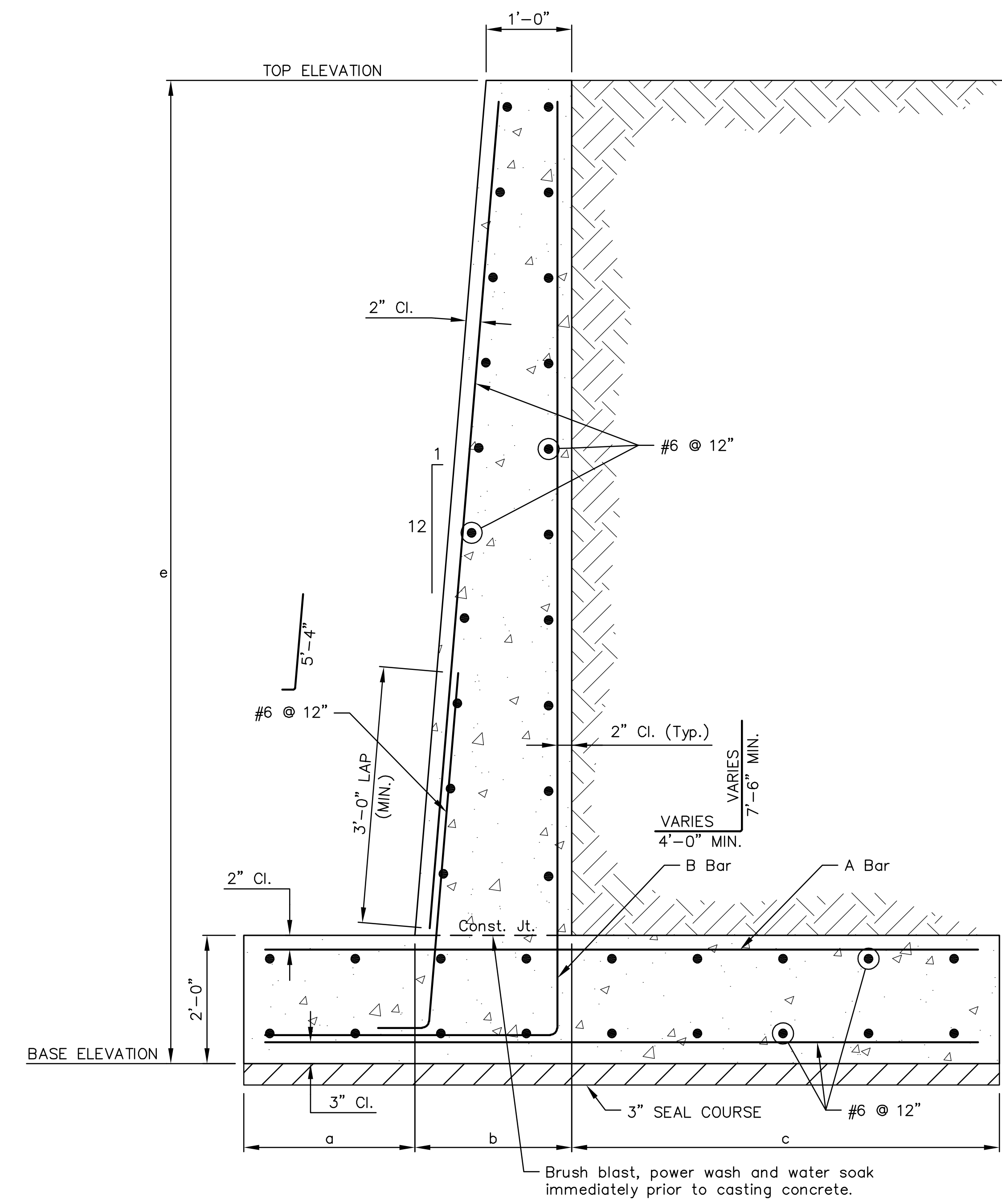
WALL DRAINAGE: Strip drains, perforated, non-perforated polyethylene tubing, filter fabric, and any other wall drainage items shall be considered *subsidiary* to the unit price bid for each wall.

GEOLOGIC INFORMATION: Boring logs are in the file of the consultant and are available for inspection by interested and/or qualified bidders.

PROFILES: Profiles are along face of wall at wall top.

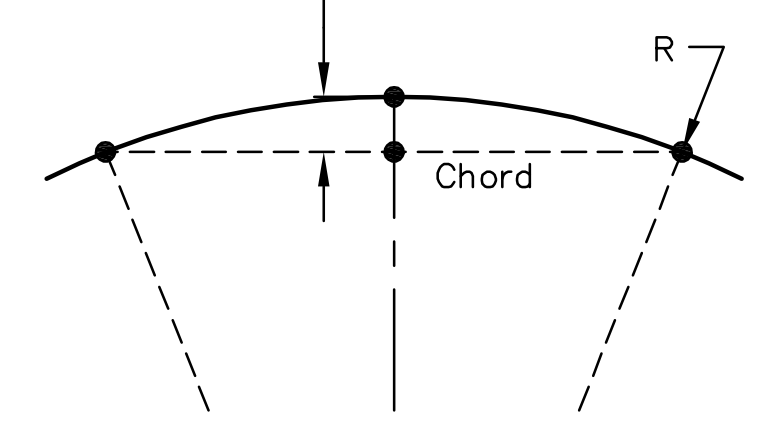
PRECAST CONCRETE WALL SUBSTITUTION: Cast-in-place concrete retaining walls may be substituted with pre-cast concrete retaining walls as provided in the Special Supplemental Specifications.

3" CONCRETE SEAL COURSE: 3" Seal Course for walls shall be considered *subsidiary* to wall bid items.



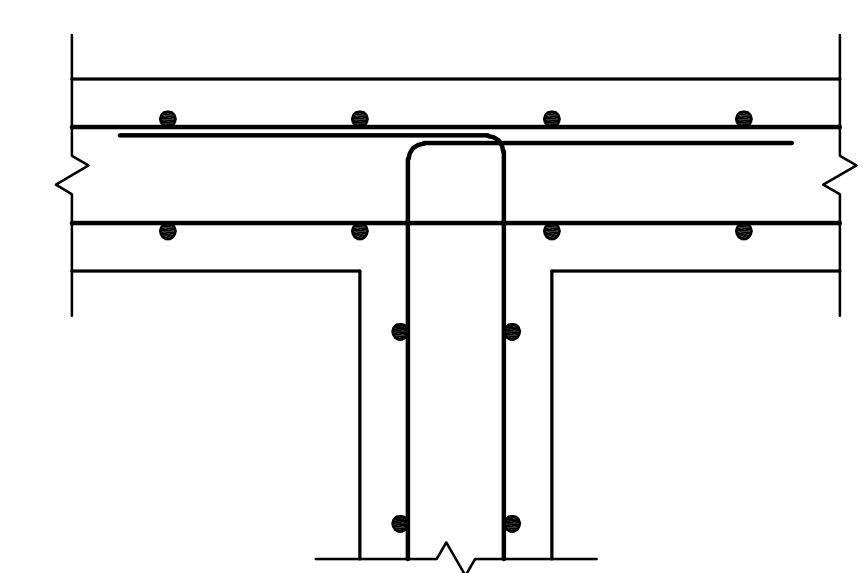
WALL DIAGRAM

Middle Ordinate = 2 3/4" (Max.)



CURVED WALL NOTE

Curved retaining walls shall be cast-in-place continuously, but may be formed in segments. Segments shall be a maximum of 7'-6" in length, and the middle ordinate of the segmented curve shall be no larger than two and three quarters inches (2 3/4")



TYPICAL WALL INTERSECTION

**LINCOLN STREET BRIDGE AND
DAM IMPROVEMENTS OVER
ARKANSAS RIVER**

**CIP
RETAINING
WALL
DETAILS**
SHEET TITLE
472-84883
PROJECT NUMBER

JRA
DESIGN BY
PJD
DRAWN BY
KJS
CHECKED BY

ISSUED
1/24/2011
REVISED

SHEET NO.
36 of 169