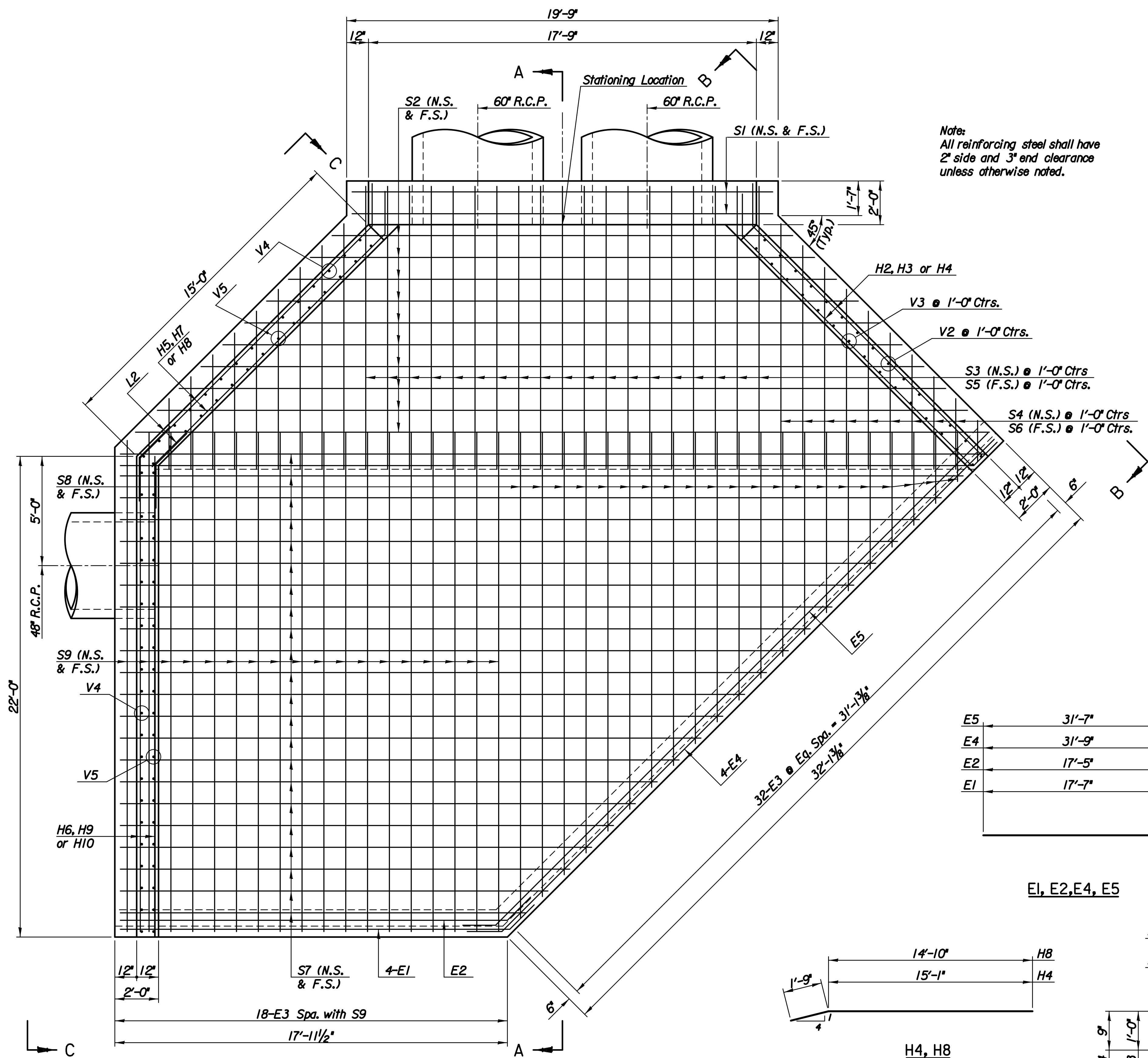
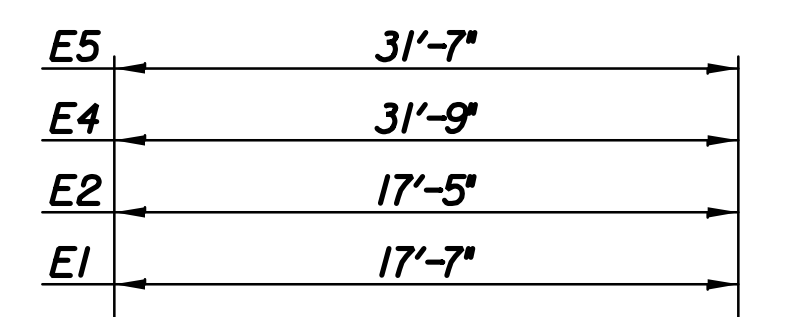
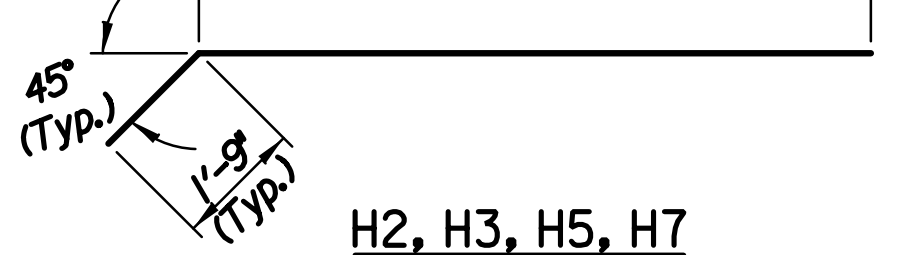
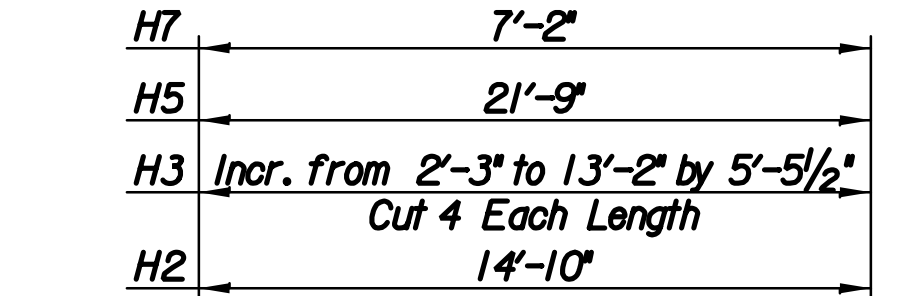
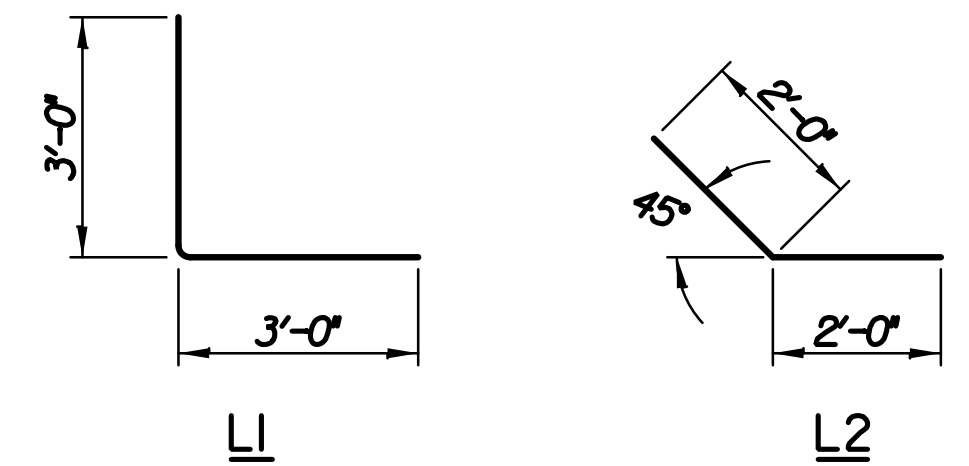
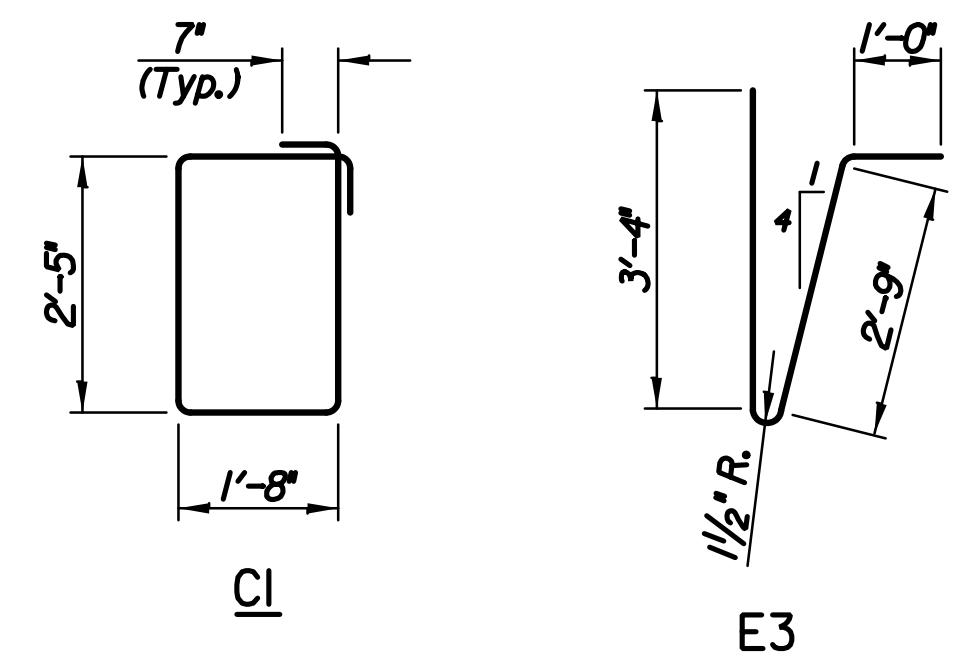


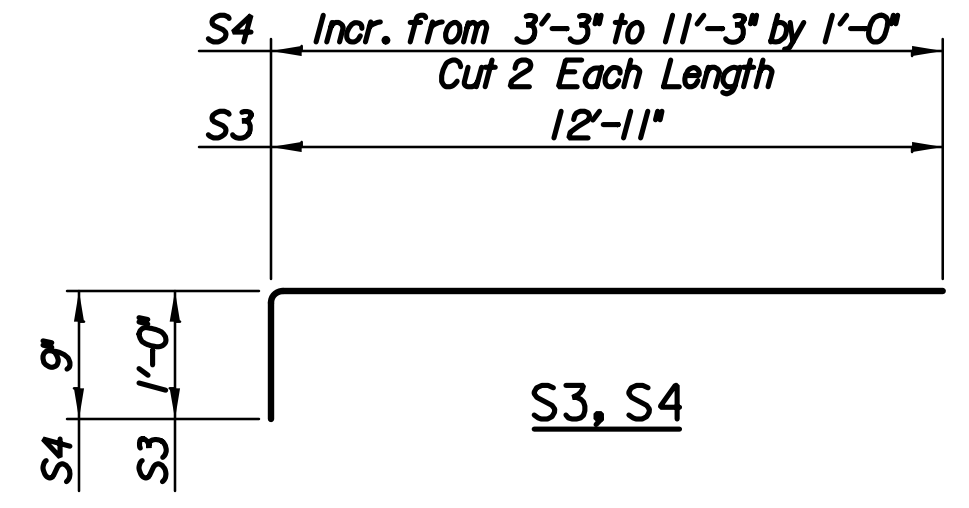
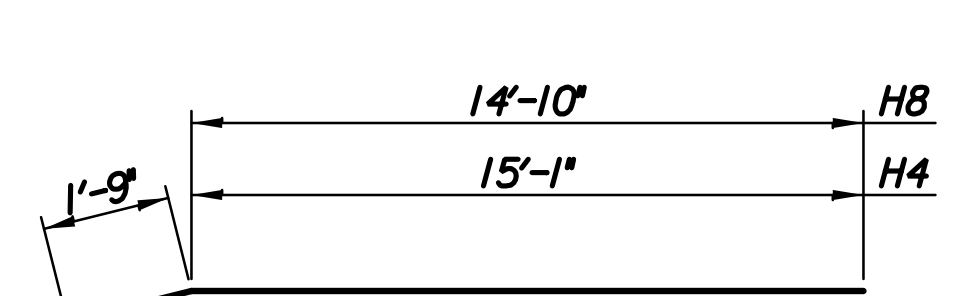
Plotted By : wil 5-13-2017  
 Drawing Name : U:\Wichita-Civil\2015\15956\000\Trans\Bridges\DKL\_Proj\sect\2-60 Headwall Plan.dgn



**Note:**  
 All reinforcing steel shall have  
 2" side and 3" end clearance  
 unless otherwise noted.



- V4 or V5 Incr. from 5'-7" to 7'-10" by 3/4" Cut 1 Each Length
- V2 or V3 Incr. from 5'-1" to 7'-8" by 2 3/16" ± Cut 1 Each Length
- S8 Incr. from 2'-3" to 22'-3" by 1'-0" Cut 2 Each Length
- S7 Incr. from 18'-7" to 39'-7" by 1'-0" Cut 2 Each Length
- S6 Incr. from 3'-3" to 11'-3" by 1'-0" Cut 2 Each Length
- S2 Incr. from 21'-0" to 39'-0" by 2'-0" Cut 2 Each Length



**PLAN**

**BENDING DIAGRAMS**  
 All dimensions are cut to out  
 of bars unless otherwise noted.

BILL OF MATERIALS							
REINFORCING STEEL							
Straight Bars			Bent Bars				
Mark	No.	Size	Length	Mark	No.	Size	Length
H1	6	*4	19'-3"	C1	18	*4	9'-4"
H6	12	*4	21'-9"	E1	4	*4	19'-1"
H9	2	*4	8'-9"	E2	1	*4	18'-11"
H10	2	*6	21'-10"	E3	50	*4	7'-6"
S1	4	*6	19'-3"	E4	4	*4	33'-3"
S2	20	*6	*	E5	1	*4	33'-1"
S5	19	*5	12'-11"	H2	10	*4	16'-7"
S6	18	*5	*	H3	6	*4	*
S7	44	*5	*	H4	2	*6	16'-10"
S8	42	*5	*	H5	14	*4	23'-6"
S9	36	*5	22'-10"	H7	2	*4	8'-11"
V1	18	*5	8'-8"	H8	2	*6	16'-7"
V2	15	*6	*	L1	47	*6	6'-0"
V3	15	*4	*	L2	21	*4	4'-0"
V4	37	*6	*				
V5	37	*4	*				
V6	18	*5	3'-0"				
X1	16	*6	6'-10"	S3	19	*5	13'-11"
X2	8	*6	5'-8"	S4	18	*5	*

**\*\* SUMMARY OF QUANTITIES**

Item	Quantity	Unit
Concrete	63.7	C.Y.
Reinforcing Steel	7575	Lbs.

\*\* For Information Only

**CONCRETE HEADWALL NOTES**

**CONCRETE:** Bevel all exposed edges with a 3/4" triangular molding or finish with an approved edging tool. Concrete shall have a minimum 28 day compressive strength of 4000 p.s.i.

**REINFORCING STEEL:** All dimensions relative to reinforcing steel are to centerline of bar unless otherwise noted. All reinforcing steel shall conform to A.S.T.M. 615 Gr. 60.

A deduction in concrete quantities has been made for the pipe opening. The "Concrete Headwall" shall be paid for at the unit price bid per each in place including concrete, reinforcing steel, and all other miscellaneous materials, labor, tools, equipment and incidentals necessary to complete the work. Quantities shown are for information only.

No.	Revision	By	Date
TYLER ROAD BETWEEN MAPLE AND CENTRAL PAVING AND INCIDENTAL IMPROVEMENTS <b>CONCRETE HEADWALL DETAILS</b> 1 of 2 GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 472-85282			
		PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com	
Designed by	M.S.N.	Job No.	31-15956-000
Drawn by	W.L.L.	Date	JULY 2017
			Sht. 34 of 96