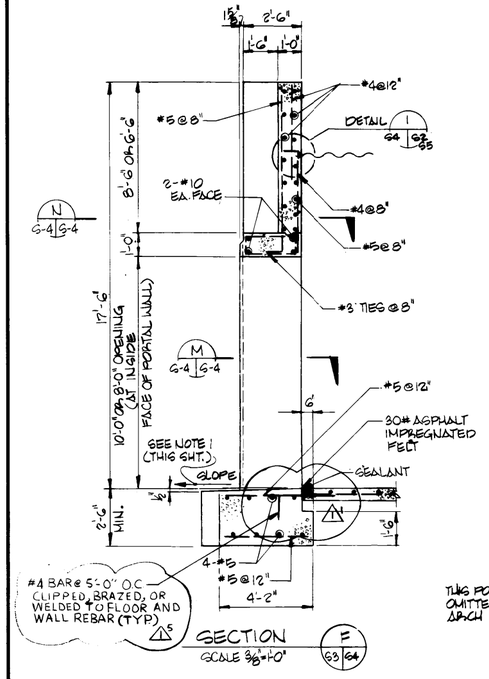
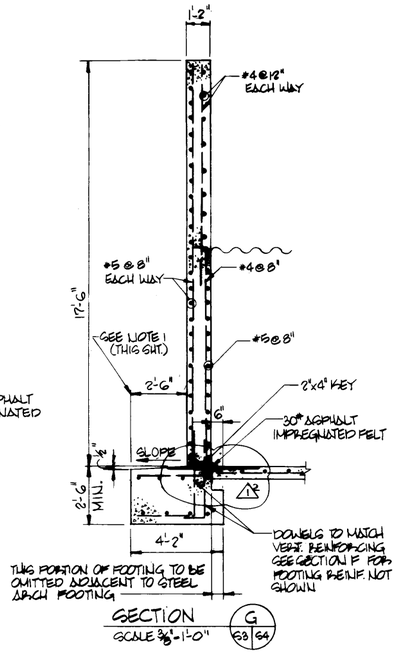
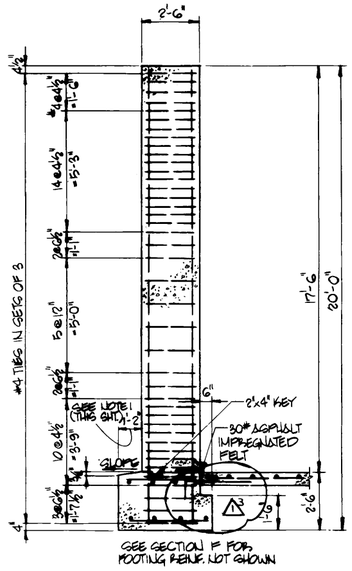


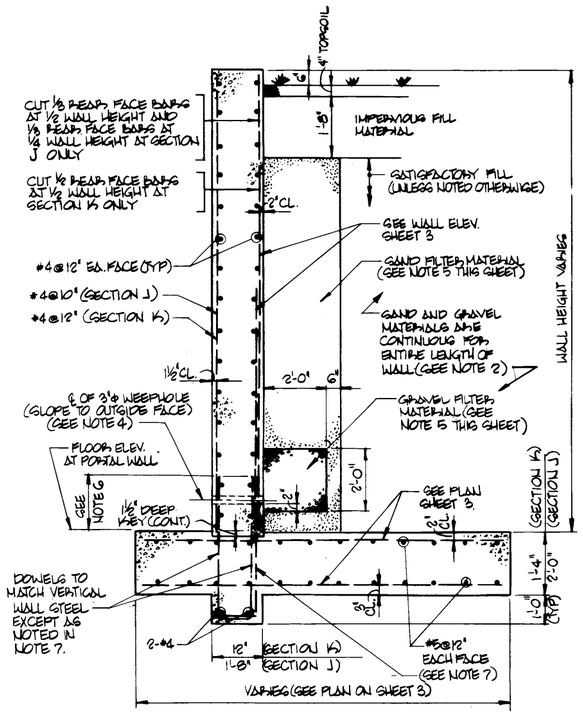
SECTION F
SCALE 3/8"=1'-0"



SECTION G
SCALE 3/8"=1'-0"



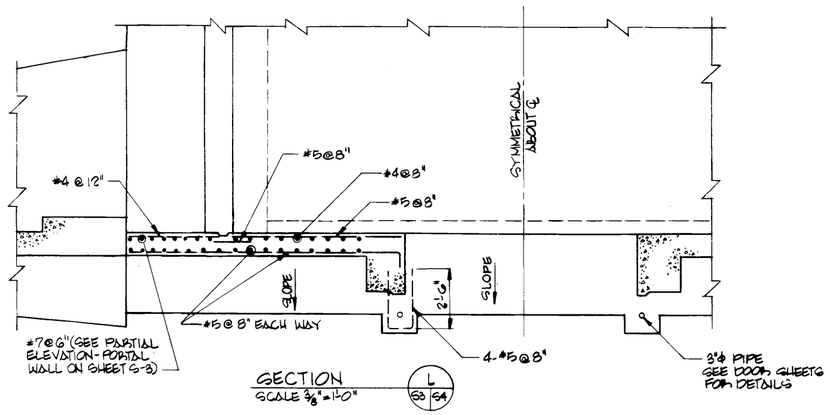
SECTION H
SCALE 3/8"=1'-0"



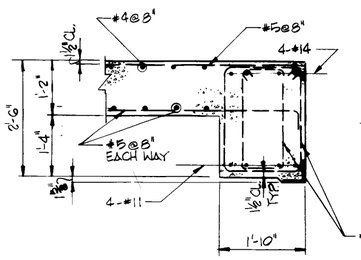
SECTION J K
SCALE 1/2"=1'-0"

NOTES:

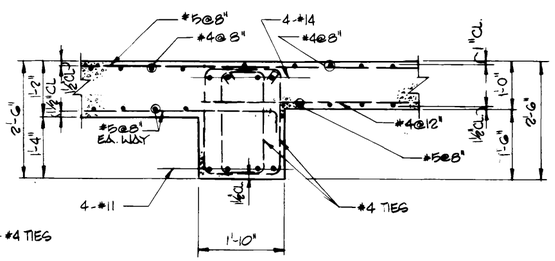
1. TOP OF MAGAZINE PORTAL FOOTING TO HAVE A SLOPE TO PROVIDE FOR DRAINAGE AWAY FROM DOOR. DO NOT EXTEND DOCK OR RAMP OVER TOP OF PORTAL WALL FOOTING.
2. THE SAND AND GRAVEL DRAINAGE SYSTEM SHOWN IN SECTIONS J AND K SHOULD BE TERMINATED AT THE POINT WHERE THE HEADWALL HEIGHT IS INSUFFICIENT TO MAINTAIN THE 1'-8" IMPERVIOUS FILL MATERIAL COVER OVER AT LEAST 6" OF SAND FILTER MATERIAL. PAST THIS POINT, AN ADDITIONAL 6" OF SAND FILTER MATERIAL SHOULD BE ADDED TO THE END OF THE GRAVEL FILTER, IN ORDER TO "CLOSE IN" THE END OF THE GRAVEL FILTER MATERIAL.
3. AS AN OPTION, DEPENDING ON SITE-SPECIFIC CONDITIONS, THE WEEPHOLES THROUGH THE PORTAL WALL, SHOWN IN SECTIONS J AND K, MAY BE REPLACED WITH PERFORATED PIPE DRAIN RUNNING LATERALLY BEHIND THE PORTAL WALL AND CONNECTED TO THE PERIMETER FOOTING DRAIN FOR THE MAGAZINES. CONSTRUCTION SHOULD BE SIMILAR TO THE OPTIONAL HEAD WALL DRAINAGE DETAILS SHOWN ON SHEET G-1.
4. ELEVATION OF WEEPHOLES WILL BE ADJUSTED AS REQUIRED BY SITE CONDITIONS TO PROVIDE INVERT ELEVATIONS ON THE OUTSIDE FACE OF THE PORTAL WALL OF 3" TO 4" ABOVE FINISHED GRADE.
5. AS AN OPTION, THE SAND AND GRAVEL FILTER DRAINAGE SYSTEM FOR THE HEAD AND WING WALLS MAY BE REPLACED BY ANY OF A NUMBER OF DRAINAGE COMPOSITE SYSTEMS THAT USE A FILTER FABRIC BONDED TO A DRAINAGE MAT. THIS OPTION DOES NOT APPLY TO THE ARCH. IN ALL APPLICATIONS, THE DRAINAGE COMPOSITE IS PLACED SO THAT THE MORE PERMEABLE DRAINAGE MATERIAL IS NEXT TO THE STRUCTURE AND THE LESS PERMEABLE FILTER MATERIAL IS NEXT TO THE EARTH FILL. CARE MUST BE TAKEN DURING CONCRETE WORK TO CHAMFER SHARP CORNERS WHICH WOULD BE LIKELY TO DAMAGE THE DRAINAGE COMPOSITE.
6. LAP SPLICE LENGTH FOR REINFORCING SHALL BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318).
7. EXTEND THE SHORTEST LENGTHS OF THE #7 AND #8 BARS AT SECTIONS J AND K INTO THE FOUNDATION. ELIMINATE MATCHING DOWELS AT THESE LOCATIONS. THE SHORTEST LENGTH BARS AT SECTION J ARE CUT AT 1/4 THE WALL HEIGHT. THE SHORTEST LENGTH BARS AT SECTION K ARE CUT AT 1/2 THE WALL HEIGHT.



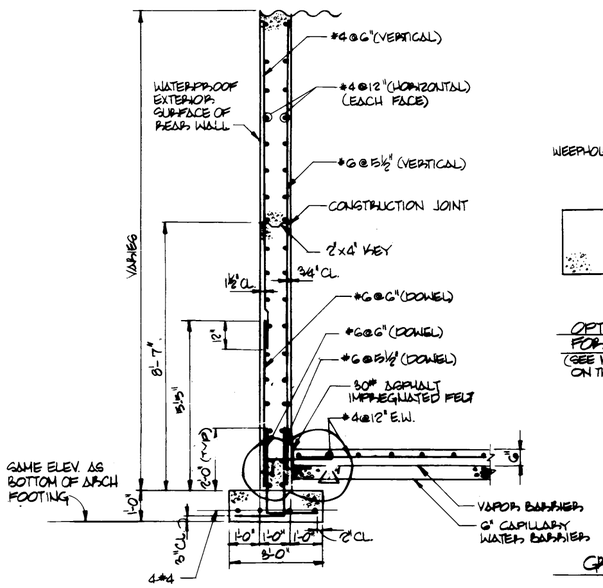
SECTION L
SCALE 3/8"=1'-0"



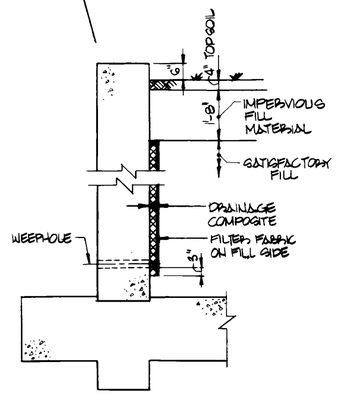
SECTION M
SCALE 3/4"=1'-0"



SECTION N
SCALE 3/4"=1'-0"



SECTION O
SCALE 1/2"=1'-0"
(HEAD WALL DRAINAGE SYSTEM OMITTED SEE SHEET G-1 FOR DETAILS)



OPTIONAL DRAINAGE DETAIL FOR SECTION J & K
(SEE NOTE 5 ON THIS SHEET)

GRAPHIC SCALES:

1½"=1'-0"
½"=1'-0"
¾"=1'-0"
3/8"=1'-0"

Symbol	Description	Date	Approved
	GENERAL REVISION FOR LIGHTNING PROTECTION	11JUN98	(J.A.W.)

Revisions

U.S. ARMY ENGINEER DIVISION, HUNTSVILLE
CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA

Site adapt A/E :

US Army Corps of Engineers

MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED

PORTAL AND REAR WALL SECTIONS

Dwn. by : RDP	Ckd. by : CMB		
Reviewed by : Robert H. Williams	Date :	Sheet reference number : S-4	Design file no. : 30089
Approved by : Russell Rogers	Drawing code : STD 421-80-01		Rev.
			Sheet 5 of 11

G-4