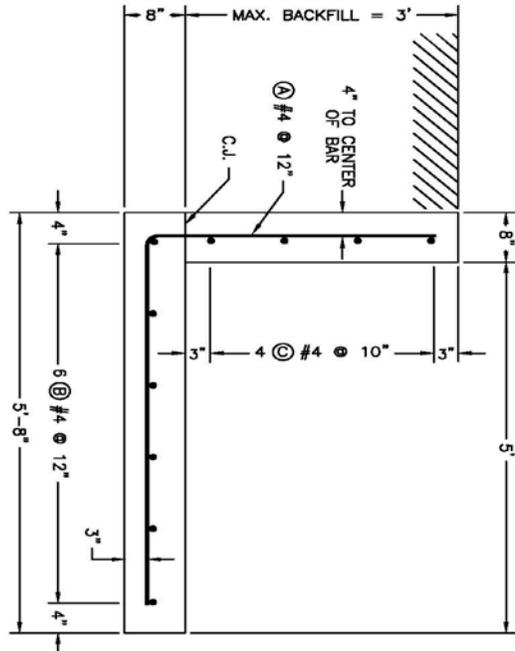
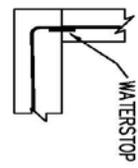


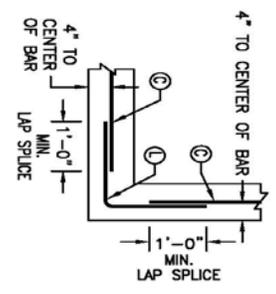
PA-019C 3' high, 8" L-wall (with surcharge)
Standard Drawings Folder



C.L. = CONSTRUCTION JOINT
LIQUID-TIGHT JOINT — YES — NO
LIQUID-TIGHT JOINT OPTIONS
1) NON-METALLIC WATERSTOP (PVC)
2) HYDROPHILIC WATERSTOP



CONSTRUCTION JOINT OPTIONS
1. IF SLAB AND WALL ARE POURED SEPARATELY, THE SLAB SURFACE MUST BE THOROUGHLY CLEANED WITH WATER AND A WIRE BRUSH. THE SURFACE OF THE JOINT SHALL BE KEPT MOST FOR AT LEAST 1 HOUR PRIOR TO PLACEMENT OF NEW CONCRETE.
2. THE SLAB AND WALL MAY BE POURED AT THE SAME TIME ELIMINATING THE NEED FOR A CONSTRUCTION JOINT.



SLAB CORNER DETAILS
RESTRAINING SLAB OPTIONS SEE PA-023
SEE PA-024

GENERAL DESIGN NOTES:
• DRAINAGE SHALL BE AWAY FROM THE WALL.
• THE MINIMUM WIDTH OF THE BACKFILL AGAINST THE WALL SHALL BE EQUAL TO OR GREATER THAN THE BACKFILL HEIGHT.
• MAXIMUM FOOTING CONTACT PRESSURE IS 505 psf/ft.

DESIGN STRENGTHS - WORKING STRESS DESIGN
• CONCRETE $f_c = 4,000$ psi • STEEL $f_s = 20,000$ psi (GRADE 40)

WALL DESIGN LOADING - 313 STANDARD - LATERAL EARTH PRESSURE VALUES, SEE SECTION IV OF THE FIELD OFFICE TECHNICAL GUIDE.
• MAINTURE LOAD INSIDE = 65 psf/ft.
• SOL BACKFILL LOAD OUTSIDE = 60 psf/ft.
• SURCHARGE LOAD = 120 psf.
• SOL BACKFILL DENSITY = 110 pcf.
• WATER TABLE MUST BE BELOW THE FOOTING ELEVATION

WALL RESTRAINT REQUIREMENTS:
• 5" THICK SLAB, SAFETY FACTOR AGAINST SLIDING 1.5 MIN.

BACKFILL HEIGHT (OUTSIDE LOAD)	SLAB LENGTH NO INSIDE LOAD	SLAB LENGTH FULL INSIDE LOAD
3 FEET	27 FEET	NO SLAB
2 FEET	12 FEET	NO SLAB
1 FOOT	NO SLAB	NO SLAB
0 FEET	NO SLAB	NO SLAB

THIS STANDARDIZED DESIGN MUST BE ADAPTED TO THE SPECIFIC SITE. IT WAS DEVELOPED IN COOPERATION WITH THE WISCONSIN DEPARTMENT OF AGRICULTURAL, TRADE AND CONSUMER PROTECTION. THE DESIGN FOLDER IS FILED AT THE NRCS STATE OFFICE, 8030 EXCELSIOR DRIVE, MAISON, WI. 53717-2906

(ADAPTED FROM WI-532, APRIL 2005)

STEEL SCHEDULE

MARK	SIZE	QUAN	TYPE	R	S	LENGTH	TOTAL LENGTH
A	4	2	3'-2"	5'-0"	8'-2"		
B	4		SIR				
C	4		SIR				
L	4	2	2'-0"	2'-0"	4'-0"		

#4 BARS, TOTAL LENGTH



ESTIMATED QUANTITIES
CONCRETE (0.214 CU.YDS./LINEAL FT.) _____ CU.YDS.
STEEL #4 (0.688 LBS./FT.) _____ LBS.

• CONCRETE SHALL MEET PA 313 OR 561 SPECIFICATION REQUIREMENTS.
• SUBSTITUTION OF GRADE 60 BARS IS PERMITTED.
• MINIMUM SPICE LENGTH FOR MARK @ AND @ BARS IS 12"
• STEEL QUANTITY DOES NOT INCLUDE SPICE LENGTHS.

TOTAL LENGTH OF WALL _____ FT.

NOTES:
1. DIMENSIONS ARE TO THE REINFORCING BAR SURFACE UNLESS OTHERWISE NOTED.
2. BACKFILL OF 2 FEET IS RECOMMENDED FOR FROST PROTECTION.



_____ COUNTY, PENNSYLVANIA
3' HIGH, 8" L-WALL (W/SURCHARGE)

Designed by _____
Drawn by TJA
Checked by _____
Approved by _____
Date: 06/23/05

PA-019C
06/17/05 12:00
PA-019C