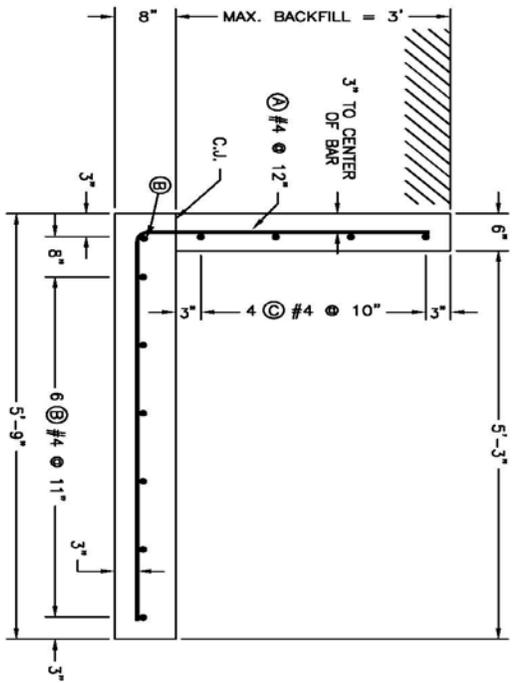
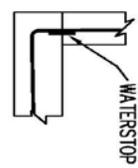


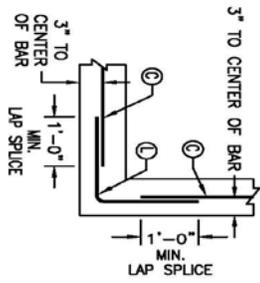
PA-019A 3' high, 6" L-wall (with surcharge)  
Standard Drawings Folder



C.I. = 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 MOIST 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.



WALL CORNER DETAIL (PLAN VIEW)

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 480 psf/ft.

DESIGN STRENGTHS: WORKING STRESS DESIGN  
 CONCRETE  $f'_c = 4,000$  psi • STEEL  $f_s = 20,000$  psi (GRADE 40)

WALL DESIGN LOADINGS: 313 STANDARD - LATERAL EARTH PRESSURE VALUES, SEE SECTION IV OF THE FIELD OFFICE TECHNICAL GUIDE.  
 • MAINTURE LOAD INSIDE = 65 psf/ft.  
 • SOIL BACKFILL LOAD OUTSIDE = 60 psf/ft.  
 • SURCHARGE LOAD = 120 psf.  
 • SOIL 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	NO SLAB	NO SLAB
2 FEET	13 FEET	NO SLAB
1 FOOT	NO SLAB	NO SLAB
0 FEET	NO SLAB	NO SLAB

ESTIMATED QUANTITIES  
 CONCRETE (0.1975 CU.YDS./LIN.FT.) \_\_\_\_\_ CU.YDS.  
 STEEL #4 (0.668 LBS./FT.) \_\_\_\_\_ LBS.

- CONCRETE SHALL MEET PA 313 OR S61 SPECIFICATION REQUIREMENTS.  
 - SUBSTITUTION OF GRADE 60 BARS IS PERMITTED.  
 - MINIMUM SPICE LENGTH FOR MARK (A) AND (C) BARS IS 12"  
 - STEEL QUANTITY DOES NOT INCLUDE SPICE LENGTHS.

STEEL SCHEDULE

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

#4 BARS, TOTAL LENGTH \_\_\_\_\_ FT.

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

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, MADISON, WI. 53717-2906

(ADAPTED FROM WI-530, APRIL 2005)

Designed \_\_\_\_\_ Date 8/28/05  
 Draw TJA  
 Checked \_\_\_\_\_  
 Approved by \_\_\_\_\_

\_\_\_\_\_ COUNTY, PENNSYLVANIA  
 3' HIGH, 6" L-WALL (W/SURCHARGE)



Form No. PA-019A  
 08/27/05 1287  
 PA-019A