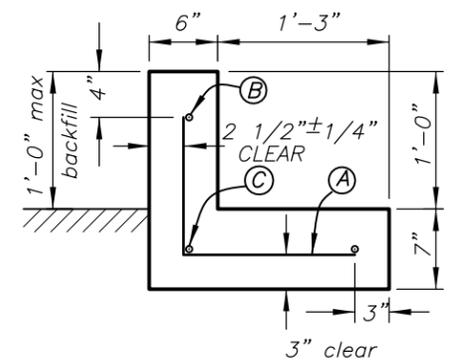


PLAN 1 Surcharge = 100 psf			
CONDITIONS OF USE: Backfill = 0 to 1 feet		DESIGN VALUES: Manure = 60 psf/ft EFP Earth = 60 psf/ft EFP	
MARK A	MARK B	MARK C	MARK LD
#4 @ 12" b = 1'-0"	1-#4 @ 12"	3-#4 @ 10.5"	1-#4 @ 12"
c = 1'-9"			
L = 2'-9"			

L = Length



PLAN 2 No Surcharge			
CONDITIONS OF USE: Backfill = 0 to 1 feet		DESIGN VALUES: Manure = 60 psf/ft EFP Earth = 75 psf/ft EFP	
MARK A	MARK B	MARK C	MARK LD
#4 @ 12" b = 1'-0"	1-#4 @ 12"	2-#4 @ 15"	1-#4 @ 12"
c = 1'-3"			
L = 2'-3"			

MARK	SIZE	QUANTITY	TYPE	b	c	LENGTH	TOTAL LENGTH
A	#4		21	1'-0"			
B	#4		1				
C	#4		1				
D	#4		21	2'-6"	2'-6"	5'-0"	

Splices in Mark B and C bars are 15" min.
#4 bars, total length = _____ ft X 0.668 lbs/ft = _____ lbs

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.

Estimated Quantities

Concrete _____ cu yds *
Reinforcing steel _____ lbs. or ft.
* Concrete quantity - 0.067 cy/ft for Plan 1
- 0.056 cy/ft for Plan 2

Notes:

1. Drainage shall be away from the wall.
2. The maximum backfill is recommended for frost protection.
3. Backfill shall be sloped away from the wall.
4. For additional details, see MO Construction Specification 313A.

Minimum Material Strength Requirements:

Concrete $f_c = 3500$ psi
Steel $f_s = 40000$ psi

Wall Design Loading:

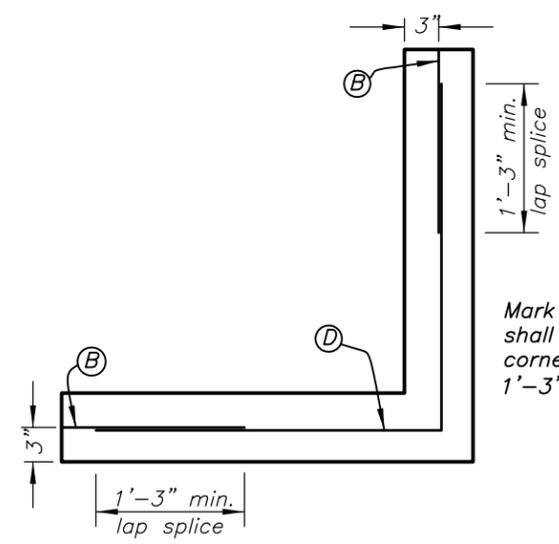
Minimum backfill height = 0 in.
Maximum backfill height = 1'-0"
Manure load inside = 60 psf/ft.
Soil backfill outside loading = 60 psf/ft with 100 psf horizontal surcharge or 75 psf/ft. with no surcharge.
Backfill soil weight = 100 pcf

Floor Design:

Maximum footing contact pressure = 300 psf
Water table must be below the footing elevation.

Wall Restraint:

Walls must be restrained with a floor slab when backfilled.
(5" Thick slab assumed)
PLAN 1 - 10 feet minimum unrestrained slab length.
PLAN 2 - 2 feet minimum unrestrained slab length.



Corner Detail (Plan View)

DRAFT
NOT FOR
CONSTRUCTION

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