INPUT DATA FOR JOB PLAN 23.1

Fill in the information identified in the blocks that are highlighted. This information will be populated onto the Job Plan.

Producer: _____

¼ Section: SE

Section: _____

Township: _____

Range: _____

County: Ziebach

Drawing No: _____

Sheet #: _____ of Sheet#: _____

DESIGNERS INFORMATION:

Designed By: _____ Design Date: _____

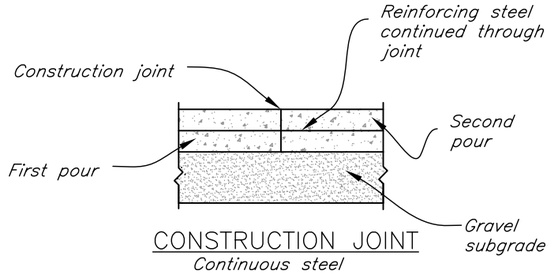
Drawn By: _____ Drawn Date: _____

Checked By: _____ Check Date: _____

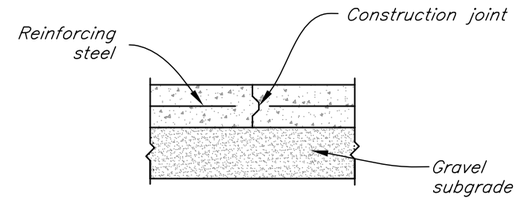
Estimated Steel Reinforcement Quantity		
Bars	Quantity (lin ft)	Quantity (lb)
#4 Bars		

Estimated Concrete Quantities		
Item	Concrete Quantity (cu yd)	Gravel Subgrade Quantity (cu yd)

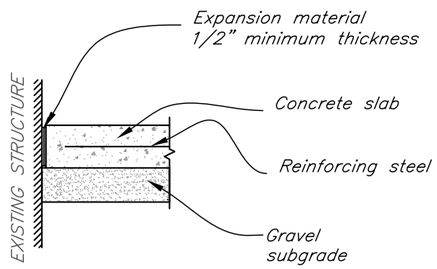
Concrete Slab Thickness: 6" Slab



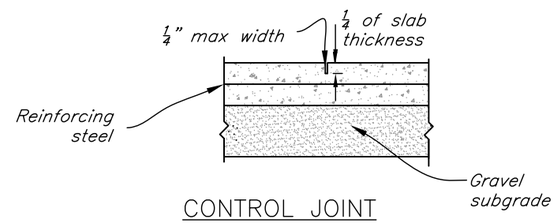
CONSTRUCTION JOINT
Continuous steel



CONSTRUCTION JOINT
Keyway



ISOLATION JOINT
For use against buildings, structures, or existing concrete



CONTROL JOINT

GENERAL CONCRETE NOTES

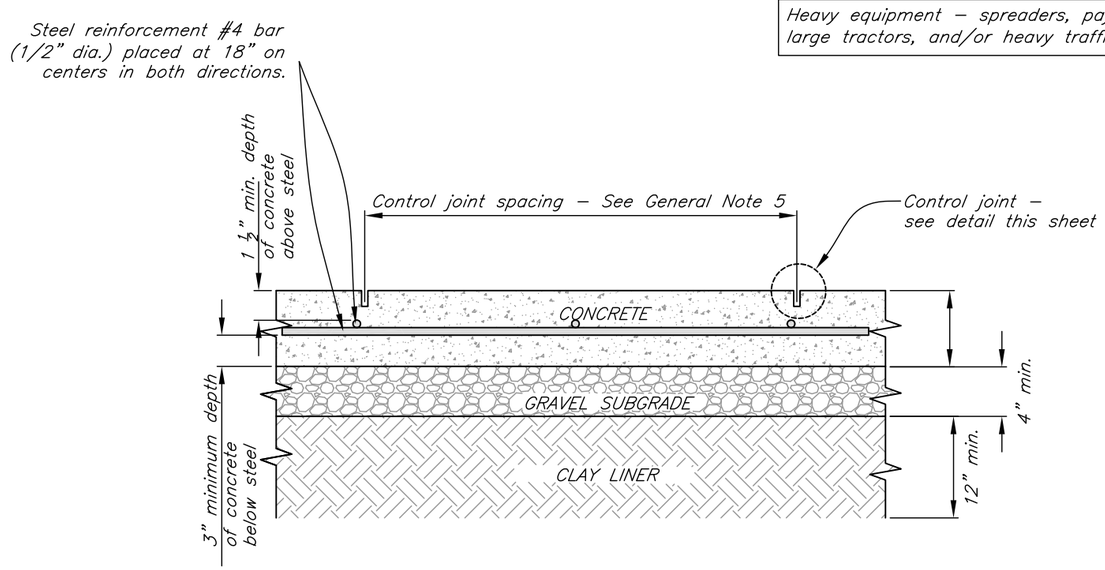
1. Curbs may be added to flatwork to allow easier manure handling.
2. All concrete must meet requirements of construction specification SD–12A – Concrete. The concrete mix shall be a 4,000 psi mix. Concrete mix design shall be approved by NRCS prior to any concrete pours.
3. Concrete reinforcement shall be inspected by an NRCS representative prior to being covered by a concrete pour.
4. All concrete shall have a granular subgrade placed directly below the concrete. The concrete subgrade shall consist of sand or gravel material.
5. Control joints shall be cut or formed in flatwork at 20' intervals.
6. Flatwork concrete shall have reinforcement steel (#4 bars) placed at 18" on center spacing. See details this sheet.
7. All water line or other pipe penetrations shall be made watertight with waterstops or by hand compaction of the clay liner around the pipes.
8. A grooved concrete surface is recommended in places of high cattle traffic to provide traction.
9. Construction joints shall be keyway or dowel type or shall have reinforcement installed continuously through the joint to prevent vertical movement.
10. A minimum 12" thick compacted clay liner shall be installed below the concrete in accordance with SD Construction Specification SD–7A. The liner shall be compacted to 95% of Standard Proctor and the moisture content of the Class A fill shall be maintained between optimum moisture +2% to optimum moisture +4% or to moisture and density requirements as specified in Construction Specification 7A – Earthfill Class A. Post–construction testing of the liner is required as outlined in the specifications and the testing results shall be submitted to NRCS as soon as they are available.
11. Splices of reinforcement bars shall be greater than 15" in length.
12. Tack welding of reinforcement is not permitted.

Estimated Steel Reinforcement Quantity		
Bars	Quantity (lin ft)	Quantity (lb)
#4 Bars		

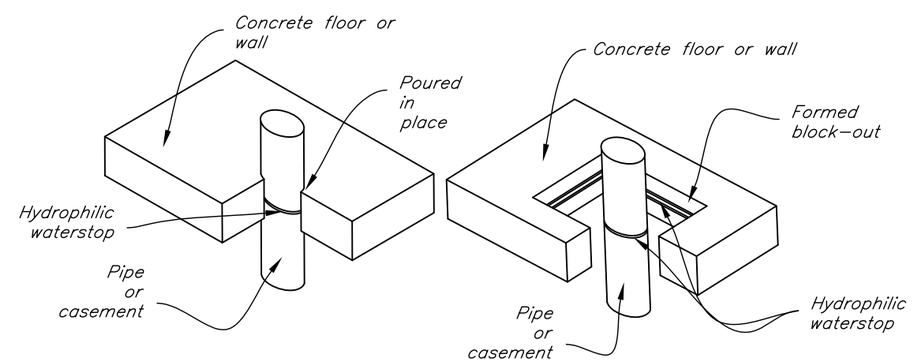
Note: Steel reinforcement quantity does not include splices.

Guidelines for Concrete Thickness	
Loading	Recommended Thickness
Medium equipment – small tractors w/loaders, skidsteers, and/or low traffic areas	5"
Heavy equipment – spreaders, payloaders, trucks, large tractors, and/or heavy traffic areas	6"

Estimated Concrete Quantities		
Item	Concrete Quantity (cu yd)	Gravel Subgrade Quantity (cu yd)



TYPICAL CONCRETE FLATWORK



PIPE PENETRATIONS

JOB PLAN 23.1 05/2012

REVISIONS		
DATE	APPROVED	TITLE
05/29/12	Jay B. Cobb	SCE – SD

Designed
Drawn
Checked
Approved
Date

County, SD

CONCRETE SLAB WITH CLAY LINER FOR SOLID MANURE STORAGE

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. 23–1.dwg

Drawing No.

Sheet of