INPUT DATA FOR JOB PLAN 23.2

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: _____

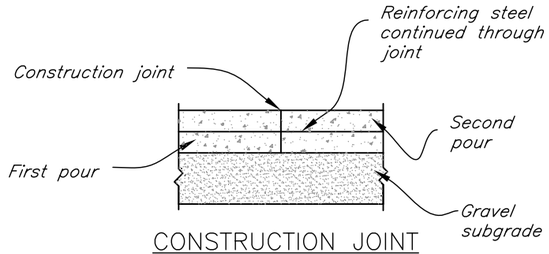
Drawn By: _____ Drawn Date: _____

Checked By: _____ Check Date: _____

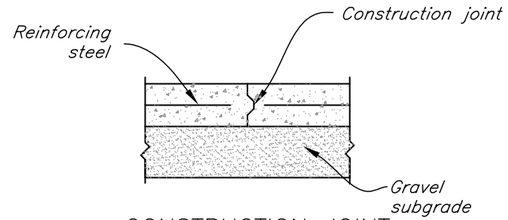
Estimated Steel Reinforcement Quantity		
Bars	Quantity (lin ft)	Quantity (lb)
#4 Bars		

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

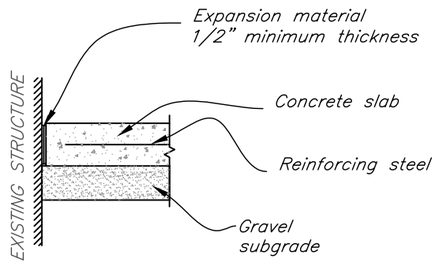
Concrete Slab Thickness: 6" Slab



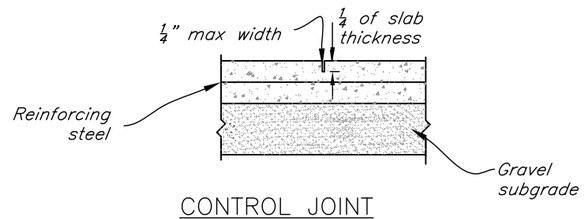
CONSTRUCTION JOINT
Continuous steel



CONSTRUCTION JOINT
Keyway



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



CONTROL JOINT

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 an concrete pours.
3. Concrete reinforcement shall be inspected by an NRCS representative prior to any concrete pours.
4. All concrete shall have a 4" thick subgrade placed directly below the concrete. The concrete subgrade shall consist of sand or gravel.
5. Control joints shall be cut or formed in flatwork at 20' maximum intervals.
6. Flatwork concrete shall have reinforcement steel (#4 bars) placed at 18" on center spacing. See details this sheet.
7. A grooved concrete surface is recommended in places of high cattle traffic to provide traction.
8. Construction joints shall be keyway or dowel type or shall have reinforcement installed continuously through the joint.
9. The floor shall be underlain by a synthetic liner is installed in accordance with Construction Specification SD–97 – Flexible Membrane Liner. The liner shall have a 12" earthen layer directly above it. All manufacturer's recommendations shall be followed during installation of the liner.
10. Any joints or connections in the liner shall be seamed in accordance with manufacturers recommendations. Seams shall be tested as outlined in Construction Specification SD–97,
11. Waterline penetrations through the synthetic liner shall be made watertight through the use of pipe boots as shown on this sheet or by other methods as recommended by the liner manufacturer and/or installer.
12. Splices of reinforcement bars shall be greater than 15" in length.
13. Tack welding of reinforcement is not permitted.

Estimated Steel Reinforcement Quantity

Bars	Quantity (lin ft)	Quantity (lb)
#4 Bars		

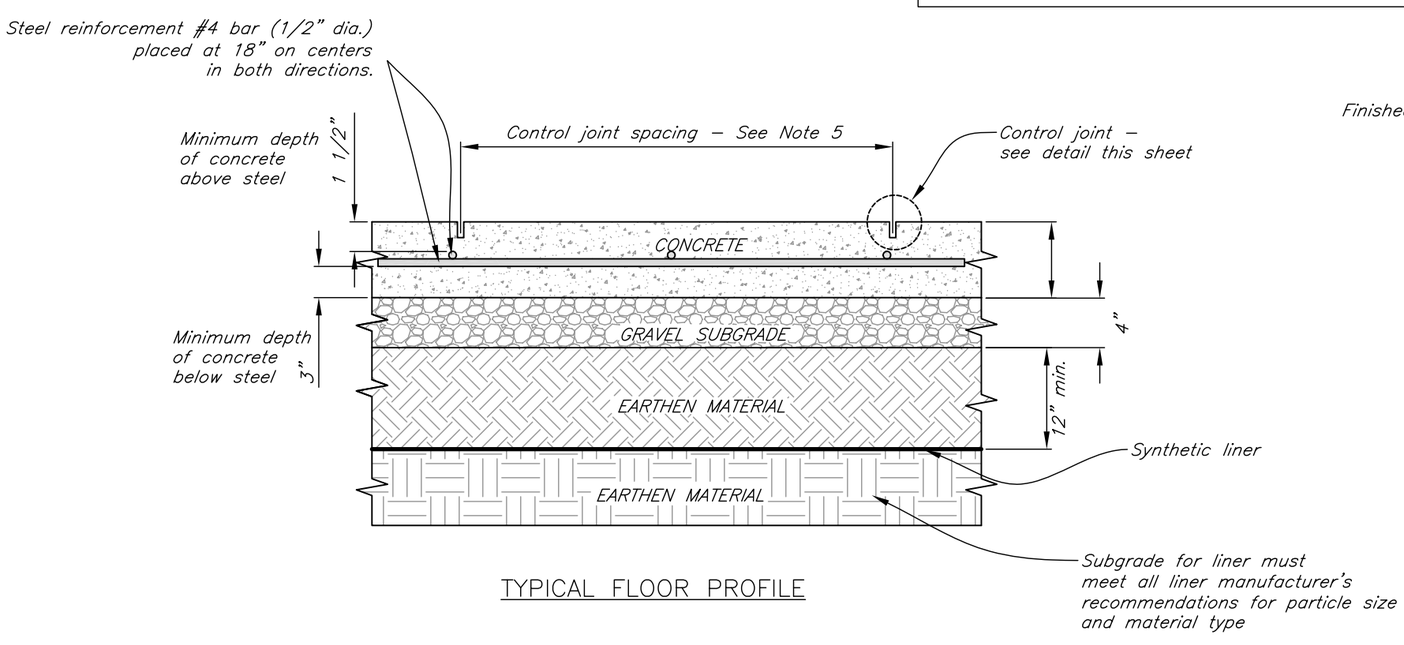
Note: Steel reinforcement quantity does not include splices.

Estimated Concrete Quantities

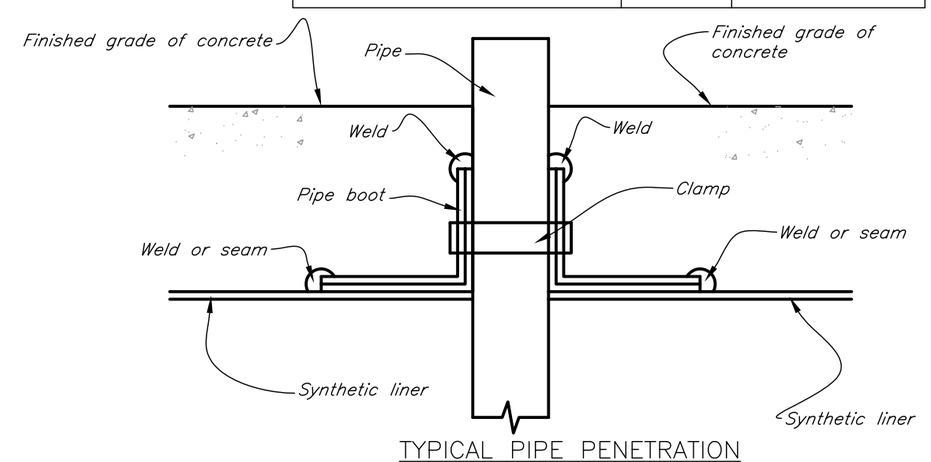
Item	Concrete Quantity (cu yd)	Gravel Subgrade Quantity (cu yd)

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"



TYPICAL FLOOR PROFILE



TYPICAL PIPE PENETRATION
(follow all liner manufacturer's recommendations)

JOB PLAN 23.2 05/2012

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

Date
Designed
Drawn
Checked
Approved
County, SD

CONCRETE SLAB WITH SYNTHETIC LINER FOR SOLID MANURE STORAGE

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No. 23–2.dwg

Drawing No.

Sheet of