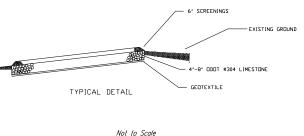
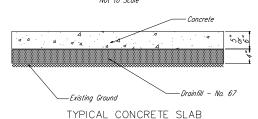
#### TECHNICAL ASSISTANCE

Contact the SWCD for design assistance. Staff will visit any Fairfield County property upon request to provide technical assistance on proper manure storage, disposal, and paddock management. Other practices that are often needed in conjunction with a heavy use pad are: roof run off, diversion, access road, fencing, and manure facilities.









## FOR FURTHER ASSISTANCE

Contact the Fairfield SWCD/ NRCS office at 740-653-8154 or 740-653-5320 for design assistance or pasture grazing management questions.



### Mission Statement:

The mission of the Fairfield SWCD is to be progressive natural resource advocates by assisting the public with conservation choices.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities.

# All-Weather Horse Paddocks



## Fairfield Soil & Water Conservation District

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www.fairfieldswcd.org

#### WHAT IS AN ALL-WEATHER PADDOCK

All-weather paddocks (corrals) are small, nonirrigated, non-grazable holding pens or exercise lots, often adjacent to horse stalls. They are made of a combination of geotextile material and limestone. The combination of these products creates a surface area which stays relatively dry and mud free. All-weather paddocks help protect soil and water resources by reducing the erosion and transportation of sediment into rivers and streams which often result from heavy use areas during rainy weather.

#### **DEFINITION & PURPOSE**

The heavy use area protection standard defines the pad as protecting areas used heavily for livestock feeding and watering, loafing, exercising, or temporary confinement by surfacing with suitable materials. They are designed for a 10year minimum functional service life when maintained appropriately. See Natural Resources Conservation Service (NRCS) Standard 561 for more details.

All-weather horse paddocks allow horse owners to reduce sediment erosion on their property which protects local water resources while improving the overall health and integrity of their own horse pastures and exercise areas. Not only are allweather horse pads environmentally friendly, they are aesthetically pleasing and are relatively simple and inexpensive to install.

The paddocks also allow for rotation of pastures to enable establishment of more mature and dense vegetation, which aids in reducing mud, erosion, and sedimentation.



#### LOCATION

Pads should be located outside floodplains, a minimum of 50' from neighboring properties, not within 1000' of a public water supply well, not within 50' of owner's well, etc. Pads are to be graded for positive drainage. Grades between 1% and 2% are recommended. All run off should be diverted away from the paddock area. Roof runoff from barns, arenas, and other buildings should be placed in gutters and downspouts directed away from the paddock area. Fencing may be needed to restrict animal access or for confinement purposes. The pad should be located as far away from a water body or watercourse as possible. Consideration should be given to fencing that is highly visible and will not pose a safety hazard to the horse(s). Minimum height should be 60" to deter most horses from jumping over it. Minimum height from the ground shall be no lower than 6".

#### <u>SIZING</u>

The recommended pad dimensions range from 40'x40' for one horse to 60'x60' for multiple horses assuming that the horses are stabled the majority of the time and brought to the pad for periodic exercise and training. If horses are on the pad for long periods, the size needs to be increased. Feeding on the pad is not recommended unless excess feedstock is removed from the surface. Accumulated manure or waste hay will soften the pad. Because horses don't always get along, be sure to consider the number of horses which will be placed in the given area. A round pen may be desired over a square pen to avoid horses being cornered by other horses. If more exercise is desired for the horse(s), a longer and narrower pad should be considered.



#### SURFACE MATERIALS

The sub grade shall be reasonably uniform and well compacted. Aggregate pads consist of geotextile, overlain with compacted 304 limestone (4" to 6" if horse access only or 8" for vehicular traffic), then 6" of compacted #9 or #10 limestone screenings. The final surface shall be smooth which can be accomplished with a drum roller. It should be wetted down prior to horse exposure; roller compaction after wetting will result in a more durable surface. Compact by tracking over the entire surface with a minimum of 4 passes of the roller or rubber tired equipment having a 4000 lb minimum wheel load. Water may be necessary to properly compact the screenings. Nonwoven geotextile shall be used with a minimum 24" overlap. See NRCS Geotextile Specification for more details on appropriate strength requirements. Geotextile must be buried in the soil on the edges of the pad. Horses have a tendency to rip at the fabric if it is exposed.

If you choose to use concrete, the slab should be 5" thick with control joints.

#### <u>COST</u>

Average cost = approximately \$1.50 per square foot of pad (includes excavation of topsoil/organic material, fabric, stone, seed, mulch and labor). This is just an estimate, excavation will vary with each pad. We recommend that you obtain multiple estimates.

#### MAINTENANCE

The pad shall be designed and maintained to minimize foot/hoof damage. Periodic inspections, especially after a significant storm event, are needed to identify necessary repairs. The facility should be cleaned often enough that accumulated manure will not run off the pad. If it needs to be cleaned more than three times per year, concrete is recommended. The screening surface is considered to be sacrificial. Once the base material is exposed, the screenings need to be replaced. The area outside of the pad should be maintained for stability. If the number of horses increases, the pad size may need to also.