

Storm Water Pollution Prevention Plan
For
Dakota Lemonds
3/1/2022

Description:

This plan is for 3.97 acres of a row crop field for the evacuation of two (2) pit 100 feet by 300 feet by 8ft deep for the construction of two 3600 head hog barn and the surrounding area to store removed soil. The drainage will flow 17500 feet through woods from first outfall before entering misc. tributary of trainer creek. After excavation two (2) 100ft. by 300ft hog barn will be built. When the barns are finished the area will be graded to no more than 2% and sown in grasses. The soil is expected to be silt loam, which presents dissolved solid problems in runoff. Fabric fencing and the ground cover will provide control of this problem.

After concrete is finished dirt will be moved back around walls for final grading before being stabilized and sown in grass.

The SWPPP and NOC will be located at the entrance of worksite.

There are no industrial discharges on site.

No chemicals or other waste materials will be stored on site.

There will be no onsite waste disposal or septic system.

There is no off site material storage.

Preexisting vegetative ground cover will not be disturbed more than 14 days prior to earth disturbance.

Endangered species should not be affected due to the fact that there is no likely presence of threatened or endangered species in a one mile radius and no threatened or endangered species downstream. There are no exceptional waters that this site could impact.

Sequence:

1. Install standard silt fence along downhill exterior of perimeter of worksite and along area of access rd that will be built up near pond. Build entrance/exit off henry midway rd. sow and stabilize when complete and widen and rock access rd. to construction site. Level and place rock to construct parking area on west side of site.
2. Once silt fence has been put in place begin earthwork by stripping and stockpiling topsoil for later use. Use removed soil to build up road at the pond. Begin cutting the slope on the northwest corner down and bringing soil to the south side of worksite to be used as fill dirt after pits are excavated.
3. Any disturbed area that goes 14 days without activity will be temporarily stabilized with seed and straw.
4. Once site grading is completed immediately stabilize all disturbed areas.

5. All slopes are anticipated to be less than 3:1 any slope steeper than this should be stabilized with A-1 Rip Rap.
6. Stabilize unimproved area with perennial grasses or another approved method from the Tennessee erosion and Sediment Control Handbook.
7. E.P.S.C. measures should remain in place until all other dirt work is completed. Once site is completely stabilized the installed E.P.S.C. measures can be removed.

Temporary and final stabilization

Any area that has been stabilized on the site that may be disturbed later must be seeded and mulched operations conclude in that area. Measures for stabilization should be put into place as quickly as possible on portions of the site where construction has temporarily or permanently concluded. Stabilization should take place within 14 days on any part of the construction site where work has temporarily or permanently ceased. Temporary stabilization is not required if site work will begin back in less than 14 days. Permanent stabilization with perennial vegetation or another permanent stable non eroding surface can replace any temporary stabilization method as soon as practicable. Permanent stabilization is to take place after soil is distributed around barns and put to correct grade and rock is added to drip line of the barns and grass is sown. Once access rd. is widened in designated areas that will be stabilized as it will have no further alteration needed the remainder of construction.

Runoff Problems:

Fabric Fencing will be placed within 75 ft of the work area before the earth disturbance begins. This fencing will be placed along the south and southeast slopes of the worksite. An on demand inventory system will be used and will prevent the development of an onsite runoff problem from storage areas. Gravel will be added to an existing field road off Henry Midway rd. after widening of the road which will be the access to the site. Road improvements and widening will not change direction of flow.

A parking area will be built with rock and gravel. Most traffic limited to dry times because of weight problems. Construction equipment will be on site until work is completed then moved to other work sites which will limit off site tracking of soils, all other traffic will be personal cars of workers and expected to park on graveled areas.

The area will be sloped 1% to provide drainage and eliminate the need to dewater. Drainage from the work area will become sheet runoff and follow the path of site runoff through the fabric fence and groundcover.

Water accumulated in excavated pits will be removed through filed tile to be released inside the sites sediment control structures.

All litter, debris, and chemicals will be removed and placed in secure locations before any anticipated storm event. Equipment will be fueled in designated maintenance location where spillage of fuel can be removed immediately. Contaminated soil should be placed on plastic and covered to prevent contact with stormwater.

Sediments that have migrated off site will be removed to minimize impact to surface waters.

Structures:

Fabric fencing will be placed in a 4 inch trench 6 inches wide, 3 inches of fabric will be placed on the trench floor and the trench backfilled and tamped to insure stability, posts will then be placed at 6 foot intervals and the fabric attached. Existing groundcover below the fabric fence will be left in place.

All accumulated sediments will be removed by hand when they reach 50% capacity of the silt fencing before the next rainfall event and before no longer than 7 days.

All repairs to sediment control structures will be carried out before the next rainfall event and before no longer than 7 days.

Permittee is responsible for implementation and upkeep of control measures.

Any fill dirt used in the project will be coming from site.

Post Construction Storm Water Control:

When completed there will be two (2) 100 feet by 300 feet hog barns. After final grading all remaining disturbed areas adjacent to the barns will be sown in grass and the drip line of the building will be rocked with 1.5 inch or larger stone to control erosion. All areas within the site where soil is taken from to build up the pad will be sown in grasses when the work is finished. There should be no net change in the quality of runoff from the site.

Using the rational method the runoff coefficient is:

$$Q=CiA$$

$$C:0.21$$

$$I: 0.156 \text{ inch/hour}$$

$$A: 3.97$$

$$Q= 0.1300572\text{ft}^3/\text{s (cfs)}$$

Soil removed during construction that was stockpiled on site will be redistributed around the barn

Inspection:

Inspections will be conducted twice weekly by Adam Walters or another qualified tosh employee on Mondays and Thursdays then after any rainfall that produces runoff. Onsite workers will be instructed by owner- developer to remove any accumulated soils whenever they present a danger of collapsing the fence and make repairs if there is any damage.

Revisions:

Any revisions to this plan will be incorporated as needed. If material changes are made to structures or barns, design copies will be forwarded to the Jackson FO of the TN DWPC.

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury."

Andrew Ferguson

2-28-2022

Sign

Date

"I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities onsite are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury

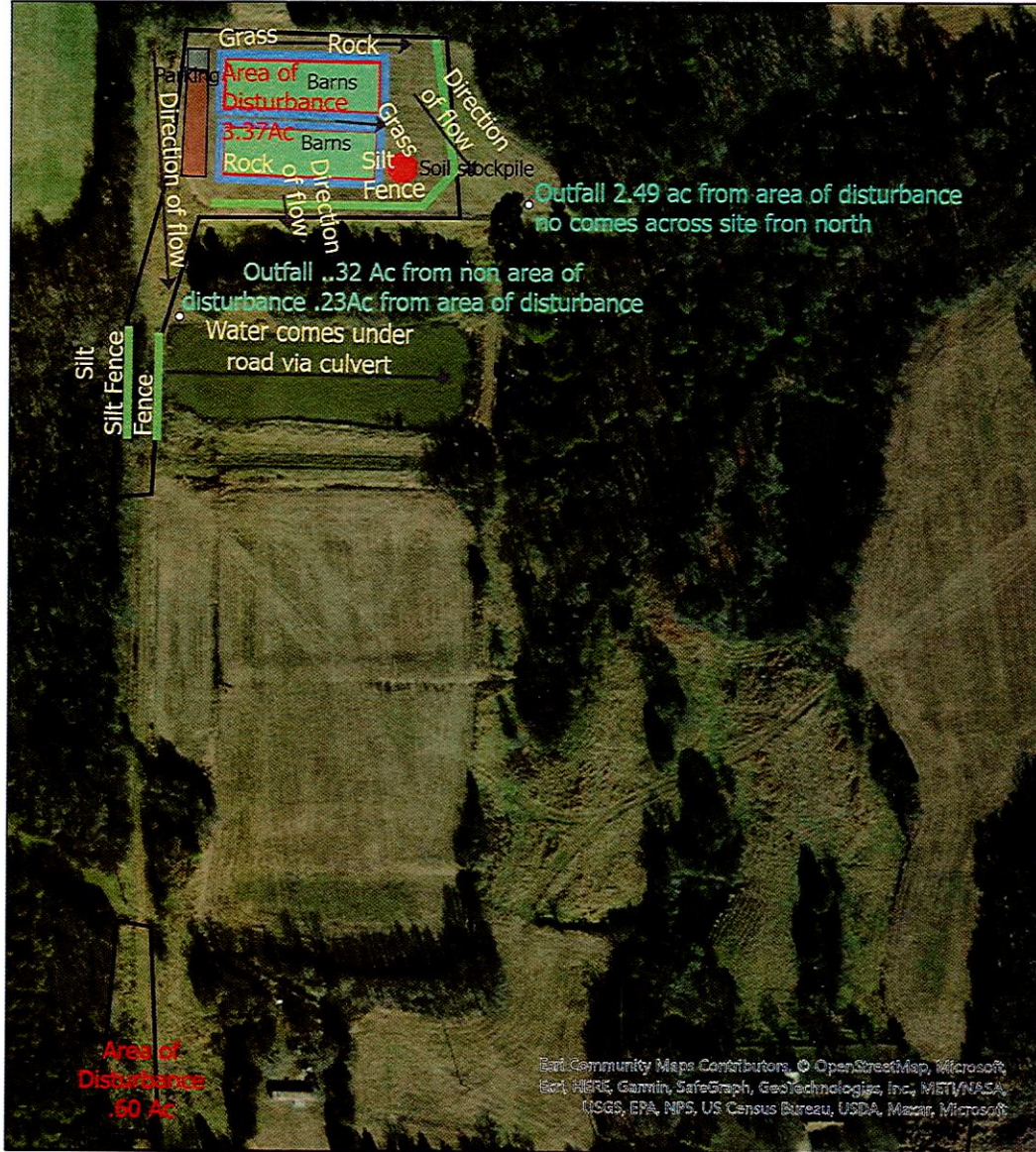
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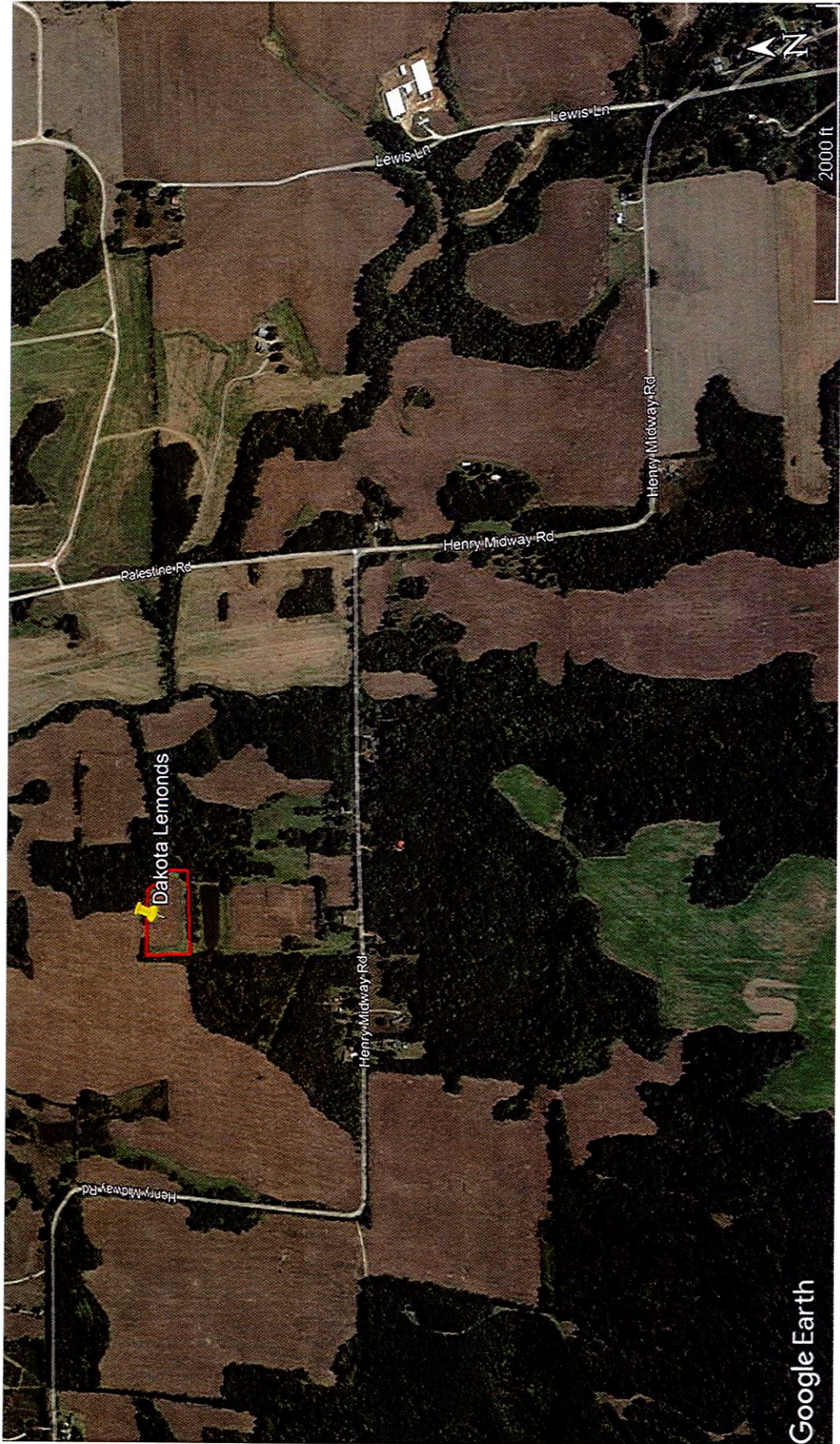
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Sign

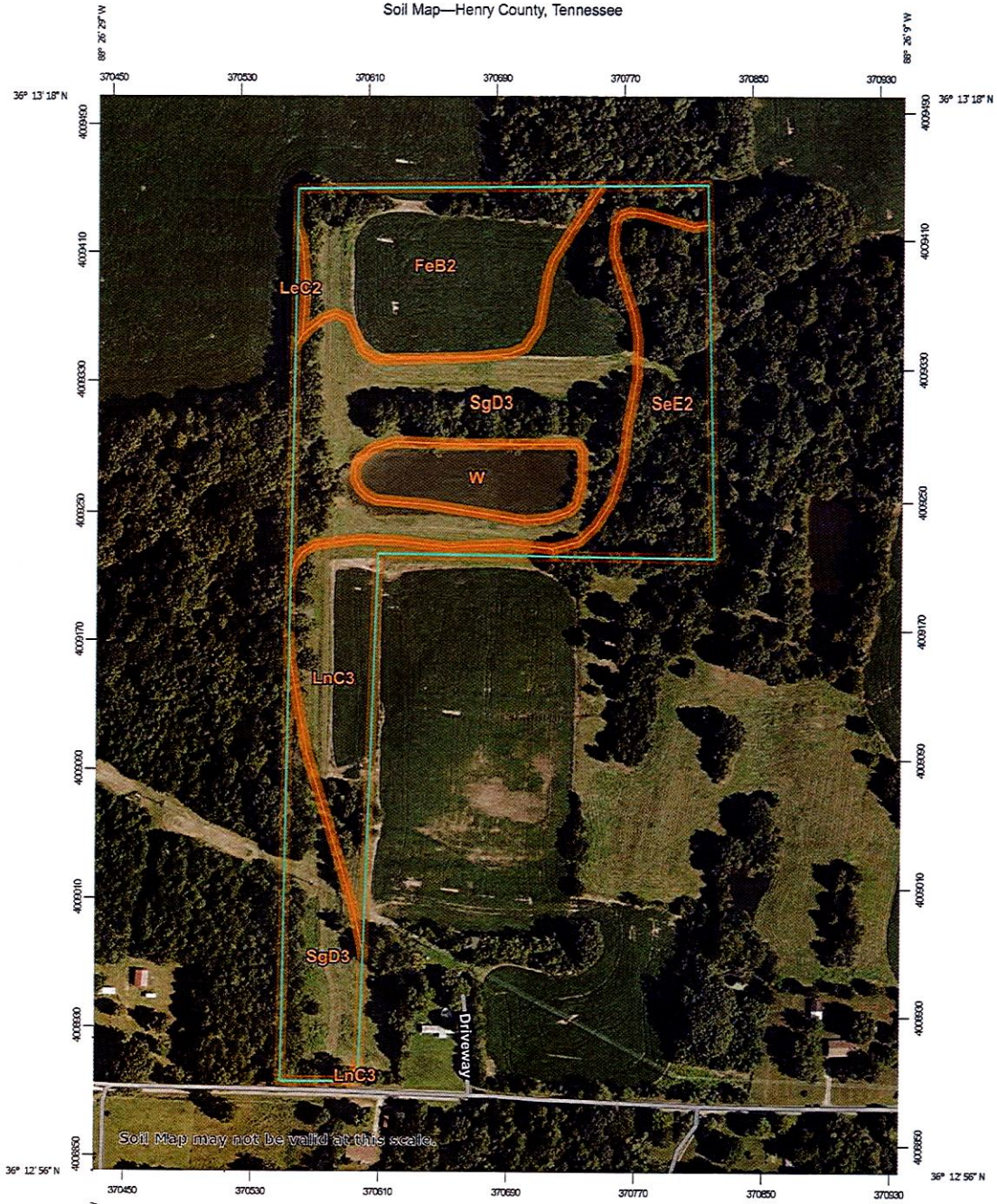
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Aerial Map





Soil Map—Henry County, Tennessee







































Map Scale: 1:3,250 if printed on A portrait (8.5" x 11") sheet.

0 45 90 180 270 Meters

0 150 300 600 900 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND		MAP INFORMATION
<p>Area of Interest (AOI)</p> <ul style="list-style-type: none">  Area of Interest (AOI) <p>Soils</p> <ul style="list-style-type: none">  Soil Map Unit Polygons  Soil Map Unit Lines  Soil Map Unit Points <p>Special Point Features</p> <ul style="list-style-type: none">  Blowout  Borrow Pit  Clay Spot  Closed Depression  Gravel Pit  Gravelly Spot  Landfill  Lava Flow  Marsh or swamp  Mine or Quarry  Miscellaneous Water  Perennial Water  Rock Outcrop  Saline Spot  Sandy Spot  Severely Eroded Spot  Sinkhole  Slide or Slip  Sodic Spot 	<ul style="list-style-type: none">  Spoil Area  Stony Spot  Very Stony Spot  Wet Spot  Other  Special Line Features <p>Water Features</p> <ul style="list-style-type: none">  Streams and Canals <p>Transportation</p> <ul style="list-style-type: none">  Rails  Interstate Highways  US Routes  Major Roads  Local Roads <p>Background</p> <ul style="list-style-type: none">  Aerial Photography 	<p>The soil surveys that comprise your AOI were mapped at 1:12,000.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> </div> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Henry County, Tennessee Survey Area Data: Version 17, Sep 10, 2021</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Aug 21, 2019—Sep 4, 2019</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FeB2	Feliciana silt loam, 2 to 5 percent slopes, moderately eroded, northern phase	4.0	21.0%
LeC2	Lexington silt loam, 5 to 8 percent slopes, moderately eroded	0.1	0.4%
LnC3	Lexington silty clay loam, 5 to 8 percent slopes, severely eroded	2.4	12.6%
SeE2	Smithdale loam, 12 to 25 percent slopes, eroded	3.0	15.7%
SgD3	Smithdale-Lexington complex, 8 to 12 percent slopes, severely eroded	8.1	42.8%
W	Water	1.4	7.5%
Totals for Area of Interest		18.8	100.0%