Soil Erosion Permit Information

Soil Erosion and Sedimentation Control – General Standards: any earth changes shall be conducted in a manner which will effectively reduce accelerated soil erosion and off-site sedimentation.

Limitation of exposure of disturbed land. All earth changes shall be designed, constructed and completed in a manner which shall limit the exposed area of any disturbed land for the shortest possible period of time.

Removal of sediment from runoff water. Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth change.

Limitation of water flow. A temporary or permanent facility designed and constructed for the conveyance of water around, through or from the earth change area shall be designed to limit the water flow to a non-erosive velocity.

Final grading and stabilization. A person shall install temporary soil erosion and sedimentation control measures before or upon commencement of the earth-change activity and shall maintain the measures on a daily basis. A person shall remove temporary soil erosion and sedimentation control measures after permanent soil erosion control measures are in place and the area is stabilized. A person shall stabilize the area with permanent soil erosion control measures under approved standards and specifications per approved earth change plan.

Completion of permanent erosion control measures. A person shall complete permanent soil erosion control measures for all slopes, channels, ditches, or any disturbed land area within 5 calendar days after final grading or the final earth change has been completed. If it is not possible to permanently stabilize a disturbed area after an earth change has been completed or if significant earth change activity ceases, then a person shall maintain temporary soil erosion and sedimentation control measures until permanent soil erosion control measures are in place and the area is stabilized.

Soil Erosion and Sedimentation Control Plans and Specifications - Required Information: Plans and specifications accompanying the grading/soil erosion and sedimentation control permit application shall contain, but not be limited to, the following data:

1. A map or maps at a scale of not more than 200 feet to the inch. The map shall include a legal description and site location sketch that includes the proximity of any proposed earth change to lakes or streams; predominant land features; and contour intervals or slope description.

2. A soil investigation report, soils survey or written description of the soil types of the exposed land area contemplated for the earth change.

3. Details for the proposed earth change, including all of the following:

    a. A timing schedule indicating the anticipated starting and completion dates of the development sequence and the time of exposure of each area prior to the completion of effective erosion and sediment control measures;

    b. The location and description for installing and removing all proposed temporary soil erosion and sedimentation control measures;

    c. A description and the location of the physical limits of each proposed earth change with the pre-construction topography;

    d. The elevations, dimensions, location, extent and slope of all proposed earth changes, including building and driveway grades;

    e. A description and the location of all proposed permanent soil erosion and sedimentation control measures;

    f. Plans of all drainage provisions and dewatering facilities; and

    g. A program proposal for the continued maintenance of all permanent soil erosion and sediment control measures that remain after project completion, including the designation of the person responsible for the maintenance. Maintenance responsibilities shall become a part of any sales or exchange agreement for the land on which the permanent soil erosion control measures are located.

SESC Plan Requirements

Pursuant to Rule 1703 promulgated under Part 91, all SESC plans must contain, at a minimum, the following information:

1. Map (plan) with a scaled drawing of not more than 200 feet to the inch (or as required by the county or municipal enforcing agency) that includes:

    a. A site location sketch;
    b. The proximity of the proposed earth change to lakes and streams;
    c. Predominant land features; and
    d. Contour intervals or slope description.

2. A soils survey or written description of the soils of the anticipated exposed land area.

3. Details of the proposed earth change, including:

    a. A description and the location of the physical limits of each proposed earth change;
    b. A description and the location of all existing and proposed on-site drainage and dewatering facilities;
    c. The timing and sequence of each proposed earth change;
    d. The location and description for installing and removing all proposed temporary SESC measures;
    e. A description and the location of all proposed permanent SESC measures;
    f. A program proposal for the continued maintenance of all permanent SESC measures, including the person responsible for the maintenance.

4. Any other information required by the Part 91 agency that has jurisdiction over the project.

Developing a SESC Plan

After conducting the on-site field investigation and reviewing all possible information sources, it is time to develop the SESC plan. Rule 1703 promulgated under Part 91 serves as our guide to develop and effective SESC plan.

1. Site location map, legal description of property, and scaled map showing property boundaries (Figure 4-8).

Figure 4-8: Location Map

2. The proximity of the earth change to lakes, streams, wetlands and other predominant land features (Figure 4-9).

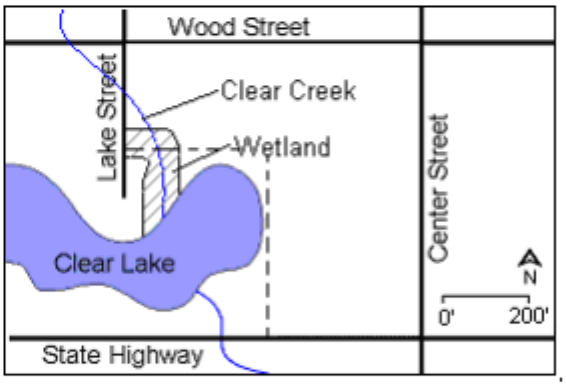


Figure 4-9

3. Description of on-site soils (Figure 4-10).

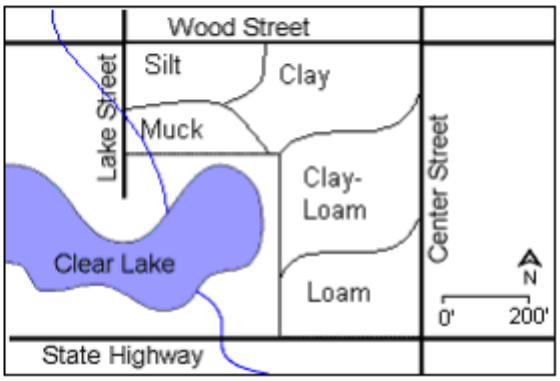


Figure 4-10

4. Existing and proposed elevations or slope description (Figures 4-11A and 4-11B).

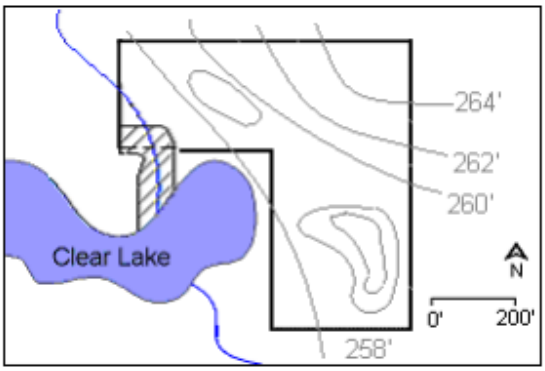
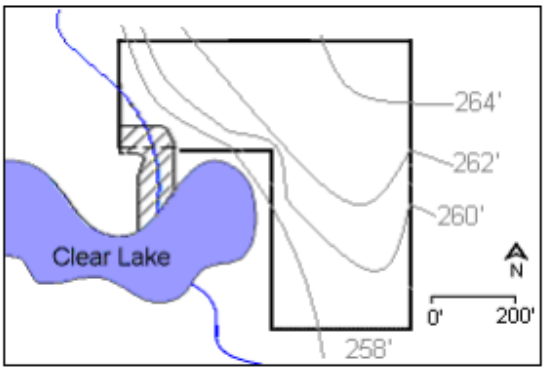


Figure 4-11A (existing)



Figures 4-11B (proposed)

5. Physical limits of the earth change (Figure 4-12).

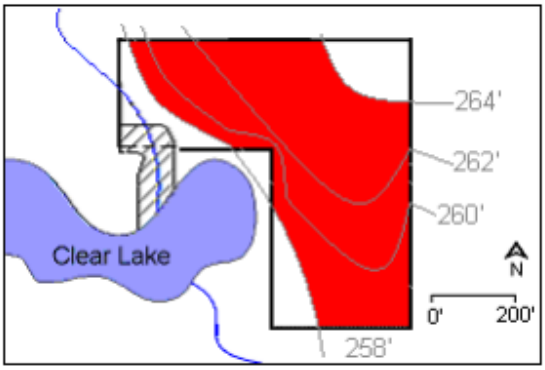


Figure 5-12

6. A description of existing and proposed drainage and dewatering facilities.

7. Timing and sequencing of earth change activities and implementation of SESC measures. (Figure 4-13; also see Appendix 4A or 4B.)

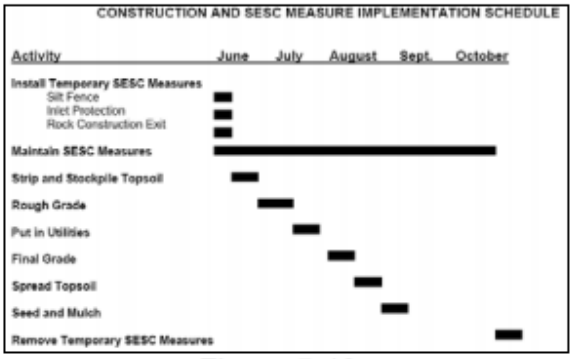


Figure 5-13

8. Description and location of all proposed temporary (Figure 4-14) and permanent SESC control measures.

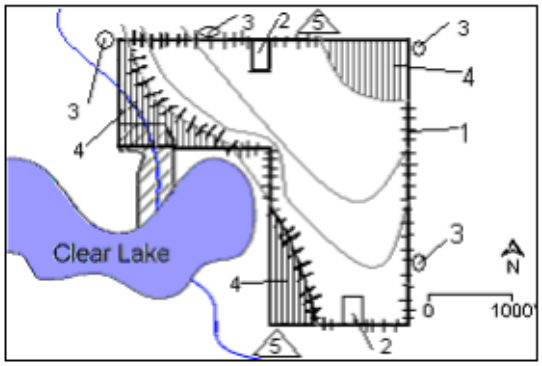
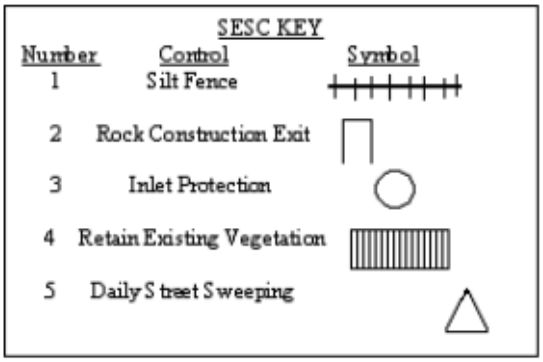


Figure 5-14

9. Proposal for continued maintenance of all permanent SESC measures.



(Key for Figure 4-14)

The location of all control measures should be identified on the SESC plan. If the material list specifies 200 feet of silt fence, the placement of the silt fence should be delineated on the plans. Similarly, if check dams are required in a roadside ditch, the relative locations of those check dams should be identified on the plan. Each control measure should be labeled on the plan, i.e., silt fence, check dam, etc. or identified by a symbol or code number such as found in the MDMB's "SESC Keying System" (Figure 4-15) or the MDOT's "Applicable SESC Measures" (Figure 4-16). Both documents assign a number and symbol to each SESC measure. The SESC plan must indicate which of the keying systems is being used.

Figure 4-15

Figure 4-16

Another option is for the plan developer to create his or her own legend, such as the one depicted in Figure 4-14 above, using symbols or numbers to depict various control measures. If this option is used, the plan developer must also include details on how to install or maintain the specified SESC measures (Figure 4-17). If the the MDTMB or MDOT manuals are used, installation details are provided for each of the suggested control measures.

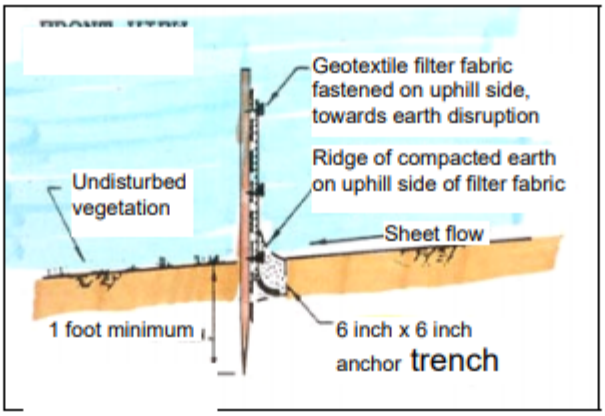
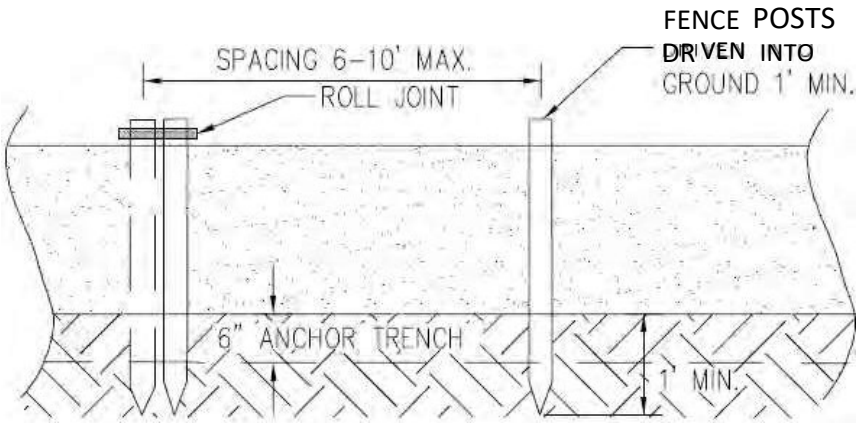
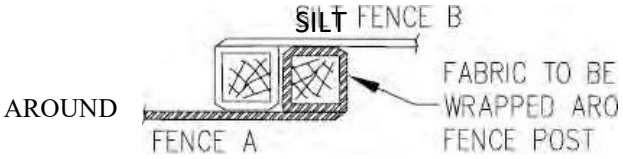


Figure 4-17

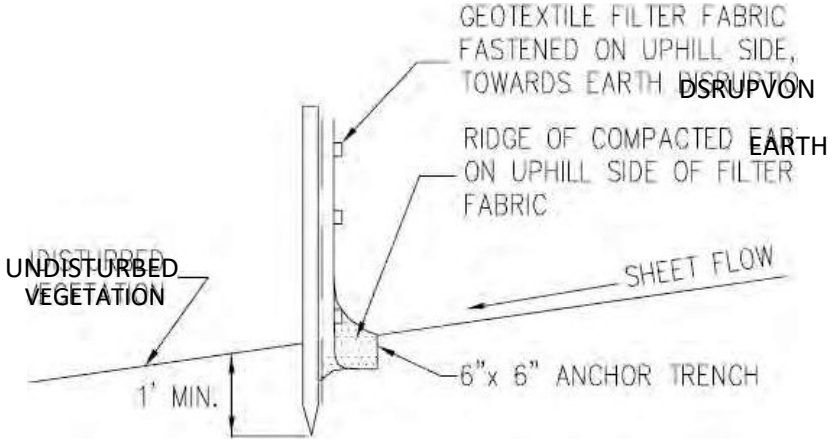




AROUND

SILT

ROLL JOINTS



Source: State of Michigan, Department Of Management and Budget, SESC Guidebook

TIMING & SEQUENCE TABLE*

Landowner: _____ Start Date: _____

Project/Address: _____ End Date: _____

Construction Sequence	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Construction Activities												
Strip & Stockpile												
Rough Grading												
Building Construction												
Final Grade												
Other:												
Other:												
Temporary SESC Measures												
Silt Fence												
Gravel Access Road												
Erosion Control Blankets												
Inlet Protection (storm drain)												
Sediment Basin(s)												
Temporary Seeding												
Buffer Strip(s)												
Other:												
Other:												
Other:												
Permanent SESC Measures												
Storm Water Basin(s)												
Seeding/Mulch/Landscaping Type:												
Pavement/Gravel Material Type:												
Rip-Rap Type:												
Other:												
Other:												

Briefly describe the maintenance plan for each temporary and permanent SESC measure.

Measure	Responsible Party	Maintenance Plan
Silt Fence		
Catch Basins/inlet Protection		
Street Sweeping		
Seeding/Mulch		

Storm Ponds/Sediment Basins		
Other:		
Other:		
Comments/Notes of Interest:		

*Additional sheets will be needed if project will span multiple years.

App template approved by MDEQ 8/28/2018