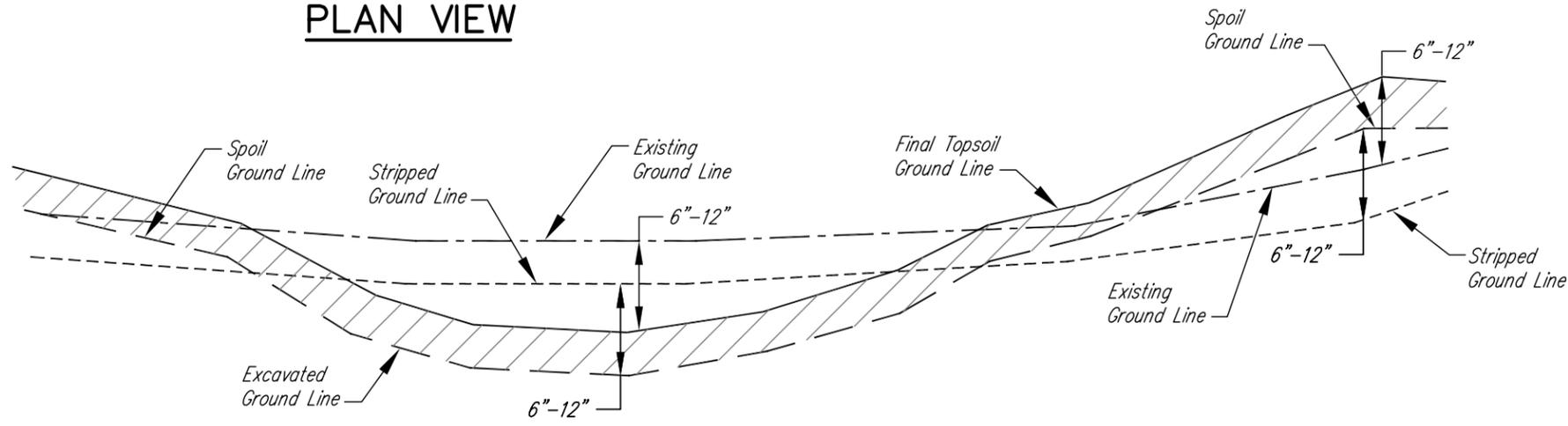


PLAN VIEW



TYPICAL CROSS SECTION

CONSTRUCTION NOTES

1. Customize shapes to fit existing landscape conditions. Design excavated and spoil areas to be irregular in shape (see plan view and typical cross section).
2. The minimum topsoil stripping depth shall be _____ inches. For organic soils, the minimum topsoil stripping depth shall be 6 inches.
3. The area to be in excavation shall be _____ percent of the total project area. The maximum excavation depth shall be 12 inches.
4. The area to be in spoil shall be _____ percent of the total project area. The maximum spoil height shall be 12 inches.
5. Construct _____ excavations per acre. Excavations shall be between _____ and _____ square feet.
6. Construct _____ spoil areas per acre. Spoil areas shall be between _____ and _____ square feet.
7. The minimum spread topsoil thickness shall be _____ inches. For organic soils, the minimum spread topsoil thickness shall be 6 inches.
8. 75% of slopes shall be 6 horizontal to 1 vertical or flatter.
9. The final graded disturbed areas shall be left rough. A well tilled seedbed is not desired.

CONSTRUCTION SEQUENCE

1. Remove topsoil and sod from excavation and spoil areas. Stockpile topsoil and sod on areas not in the planned excavation and spoil areas.
2. Excavate and place spoil materials as shown on the typical cross section.
3. Replace the topsoil, including the sod, over the excavation and spoil areas. Do not disturb insitu topsoil below stockpile.
4. Plant vegetation as specified.
5. Perform tile breaks and construct ditch plugs as specified. This step may be delayed to allow vegetative establishment.

DESIGN GUIDANCE

1. This practice applies where ponding within excavations is expected to occur for at least 14 consecutive days during the growing season. The ponding may be from groundwater or surface water sources. For regulated wetlands, all spoil areas must meet the three wetland criteria.
2. The excavated area should be from 5% to 30% of the total project area.
3. The spoil area should be from 5% to 30% of the total project area.
4. The amount of stripped and excavated area is dependent on disturbance history and existing topography. Generally, areas with a longer disturbance history will have larger portions of leveled ground. These areas will require more shaping for microtopography than those with defined drainage patterns, and/or a shorter disturbance history. Lower spoil areas may be required where coarser soils are present.
5. Capillary fringe elevation shall be designed to be within 12 inches of the spoil area ground surface for at least 14 consecutive days during the growing season. See table below for capillary rise.

USDA Textural Classification	Estimated Range in Thickness of Capillary Fringe (in.) (cm)	
Coarse Sand	0.4-2.8	1-7
Sand	0.4-3.6	1-9
Fine Sand	1.2-4.0	3-10
Very Fine Sand	1.6-4.8	4-12
Loamy Coarse Sand	2.0-5.6	5-14
Loamy Very Fine Sand	4.0-8.0	10-20
Coarse Sandy Loam	3.2-7.2	8-16
Sandy Loam	4.0-8.0	10-20
Very Fine Sandy Loam	6.2-10.2	16-26
Loam	8.0-12.0	20-30
Silt Loam	10.0-16.0	25-40
Silt	14.0-20.0	35-50
Sandy Clay Loam	8.0-12.0	20-30
Clay Loam	10.0-14.0	25-35
Silty Clay Loam	14.0-22.0	35-55
Sandy Clay	8.0-12.0	20-30
Silty Clay	16.0-24.0	40-60
Clay	10.0-16.0	25-40
Muck	14.0-20.0	35-50

Not to Scale

MICHIGAN ENGINEERING STANDARD DRAWING

FILE NAME MI-858-B 7-11.dwg

STANDARD DWG. NO. MI-858-B

DATE 7-11 SHEET 1 OF 1

This standard drawing may only be used where it is part of site-specific construction drawings approved by a person authorized through federal or state law to approve engineering drawings. Generic approval of this standard drawing by NRCS noted in the lower left hand corner is NOT an endorsement of its use at a specific site.

Date _____
 Designed _____
 Drawn _____
 Checked _____
 Approved _____

MICROTOPOGRAPHY FOR WETLAND RESTORATION

Co., Michigan
 Township, T. -R., Sec.



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