



City of Greater Sudbury

Top Soil Removal and Site Alteration By-law

Presentation to: City Council's Priorities Committee

January 21, 2009

Top Soil Removal Historical Background

City Council Resolution 2006-541 dated February 22, 2006 Establishing Top Soil Committee

- Examine Council's process, provisions, secondary plans, zoning, Official Plan with respect to top soil preservation, fill placement and grading of lands.
- Prepare by-law if appropriate.
- Members: Councillors Bradley, Thompson and Dupuis.
 - First meeting March 16, 2006
 - Second meeting April 10, 2006
 - Third meeting June 26, 2006 (public meeting producers)
 - Fourth meeting July 25, 2006 (Public meeting agricultural community)
 - Election – November, 2006
- April 4, 2007 – Council established “Agricultural & Top Soil Advisory Committee”.

Top Soil Removal

Provincial & Local Historical By-law Background

- 1982 – Regional Municipality of Sudbury considered by-law – given 2 readings, not passed.
- 1992 – Town of Valley East passed By-law 92-21 to protect & conserve top soil within the Town of Valley East.
- Towns of Rayside-Balfour & Walden considered passing By-laws several times in the 1980's and 1990's but did not.
- Top Soil Preservation Act 1977 replaced by relevant sections in the 2001 Municipal Act effective January 1, 2003 (further changes in 2007).

The new Act assured that the request powers for regulating & enforcement are now in place.

Top Soil Removal Public Meeting Input Sessions Summary

Industry (June 26, 2006)

- Generally not adverse to regulation of their industry,
- Questions with respect to existing Valley East permit holders and grandfathering existing operations,
- Costs for permitting will be passed on to consumers,
- City of Greater Sudbury one of their largest customers,
- Some producers indicated that penalization of those producers not rehabilitating land must be done,
- Producers suggest 2 inch Top Soil minimum to be left behind for rehabilitation.

Top Soil Removal Public Meeting Input Sessions Summary

Agricultural Community Public Input **(July 25, 2006)**

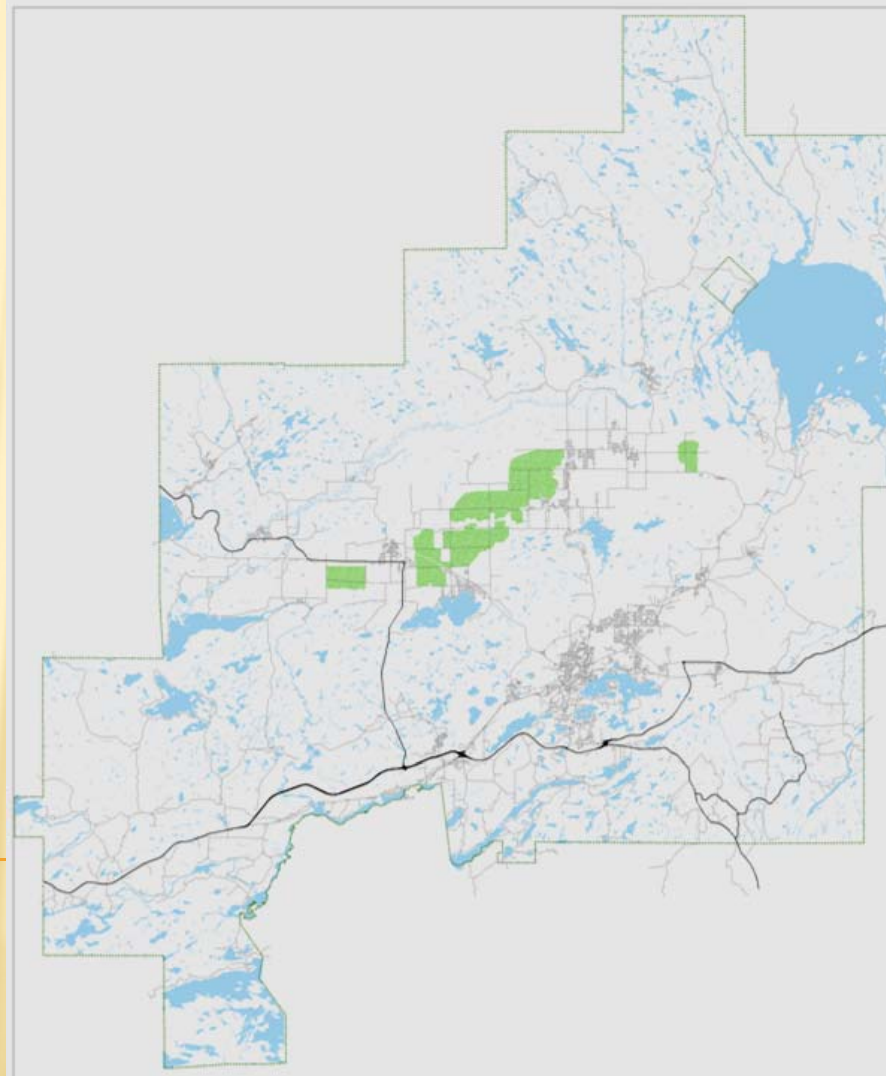
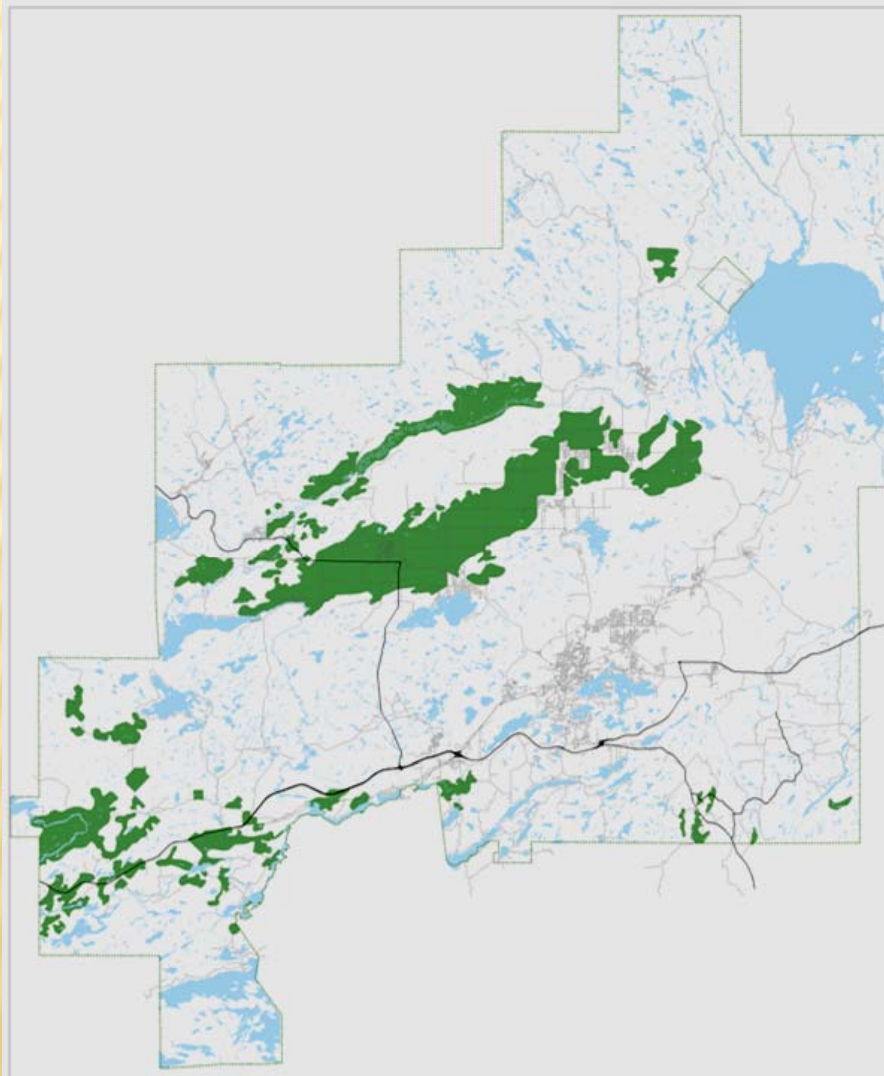
- Dust control most predominant complaint,
- Protect the farm community & land,
- Land must be rehabilitated once stripped,
- Buffer zones required from these operations,
- Storm water drainage problems in stripped areas needs addressing.

Top Soil By-law

Impacting Parameters

- New Official Plan now in effect (April 10, 2008)
- Agricultural reserve boundaries modified
 - Reduced significantly from 70,000 hectares to approximately 13,500 hectares
- Retain and protect prime agricultural land
 - Provincially mandated,
 - Council's Healthy Communities Cabinet – establishes food security as a priority,
 - Staff recommendation: Moratorium on top soil removal in Agricultural Reserve.

Top Soil By-law



City of Greater Sudbury: Topsoil Removal By-law

Top Soil Removal Communities Survey/Consulted for Input On Top Soil By-law

Ottawa
Barrie
Innisfil
Caledon

Region of Niagara
Nepean
Brampton

Milton
Kanata
Gloucester

- Most, especially Ottawa, have maintained their by-laws passed under the Top Soil Preservation Act.
- Some have passed new top soil by-laws in 2004 and beyond under the new Municipal Act which came into effect in January, 2003.

Top Soil Removal

Complaints Against Top Soil Removal Sites

- Flooding,
- Erosion,
- Poor water quality receiving streams,
- Degradation of agricultural resource,
- Damage to significant natural areas,
- Damage to environment & infrastructure roads, buildings, storm management systems.

Top Soil Removal

Exemptions From By-law (Municipal Act 2001 – Section 142)

- Normal agricultural practice,
- Sod farms,
- Stripping of top soil by greenhouse operations,
- Nurseries for horticultural products,
- Aggregate Resources Act (pits & quarries),
- Environmental Protection Act (waste disposal sites),
- Planning Act functions (site plan control, subdivision development),
- Ontario Building Code,
- Nickel District Conservation Authority work,
- Municipal infrastructure work (roads, ditches, municipal drains).

City of Greater Sudbury: Top Soil Removal & Site Alteration By-law

Top Soil Removal

Where Permitted & Appeals

- Moratorium on top soil removal in New Official Plan Agricultural Reserve,
- Permits required for all areas outside Agricultural Reserve including all rural and former pre-Official Plan Agricultural Reserve areas,
- Valley East by-law repealed and no grandfather clause for permits – removals to be held to new by-law standards,
- Appeals to decisions under the by-law will be heard by “Hearings Committee of Council”.

Top Soil Removal

Top Soil Removal Permit Fees

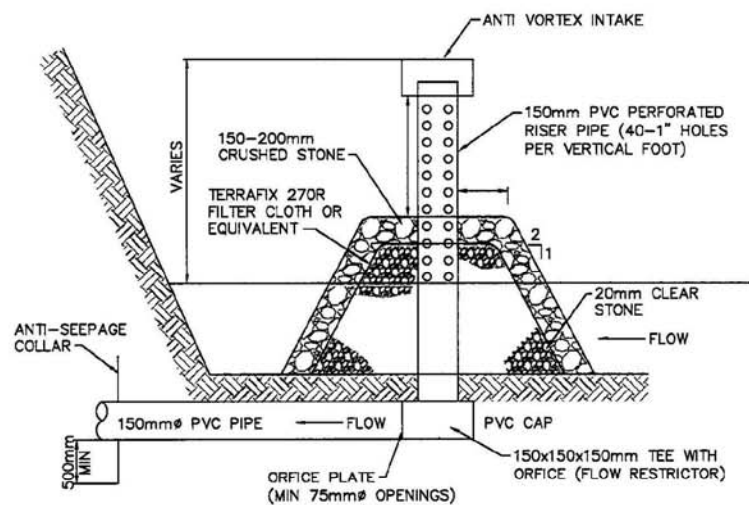
- Two-part fee structure,
- Permit (process) non-refundable (\$10/hectare) minimum fee \$500,
- Environmental protection security fee (rehabilitation) deposit refundable (\$500/hectare).

Top Soil Removal Applicants' Responsibilities

- Applicant to provide a “Control Plan” by a Professional Engineer on removal of materials in an orderly fashion (including location and dimensions of temporary soil stock pile).
- Protection of surrounding environment to be detailed for:
 - Storm water systems
 - Water resources (streams/lakes/rivers)
 - Roads
 - Utility corridors
 - Adjacent properties (erosion & sedimentation control measures:

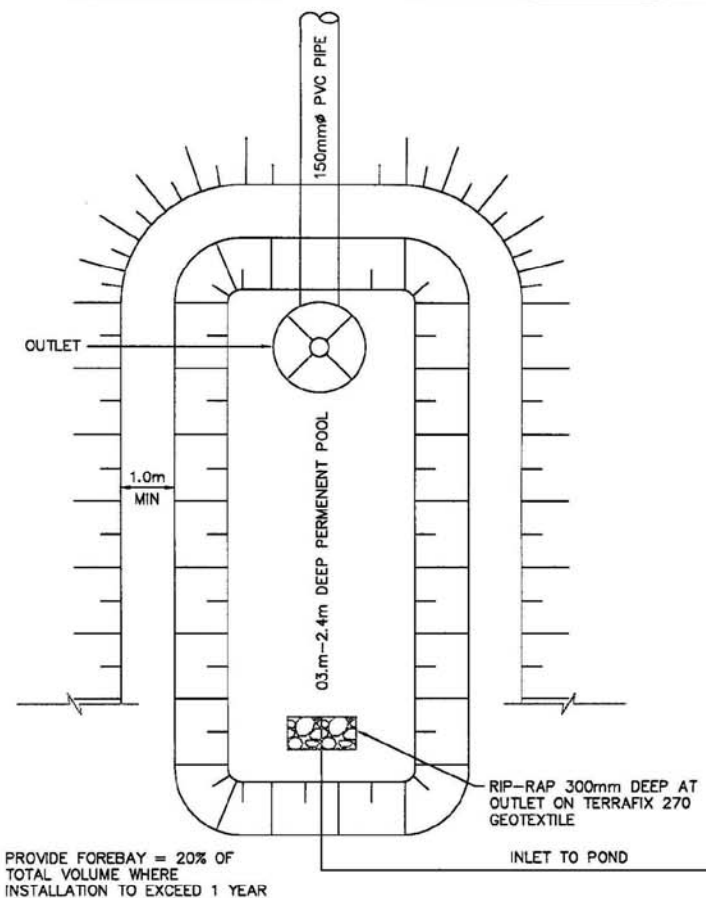
Siltation screens	Sediment ponds
Buffering natural/manmade	Entrance/exit controls

)
- Rehabilitation Plan – including existing soils profile and geotechnical consultant's input.



NOTES

1. POND BERMS TO BE CONSTRUCTED USING IMPERVIOUS MATERIAL COMPACTED TO 95% S.P.D. AND INSPECTED BY A PROFESSIONAL ENGINEER.
2. A 1.5m HIGH BARRIER FENCE SHALL BE ERECTED ALONG PERIMETER OF SEDIMENT BASIN. WARNING SIGNS SHALL BE ATTACHED TO THE FENCING STATING THE AREA IS OFF LIMITS TO THE GENERAL PUBLIC AND ADVISING THAT THE BASIN IS USED FOR SEDIMENT CONTROL PURPOSES AND THAT THE SUBJECT AREA IS SUBJECT TO FLASH FLOODING.
3. THE BASIN IS TO BE CONSTRUCTED ON THE BASIS OF A MIN. LENGTH OF WIDTH RATIO OF 4 TO 1.
4. APPROPRIATE PESTICIDE AND LAYCIDE CONTROLS SHOULD BE MAINTAINED TO CONTROL MOSQUITO BREEDING.



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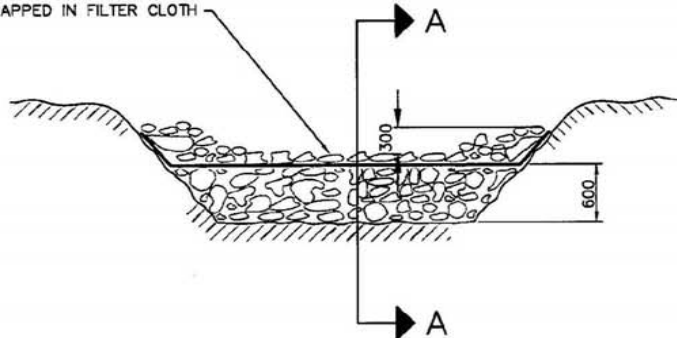
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TEMPORARY SEDIMENT BASIN AND OUTLET DETAILS

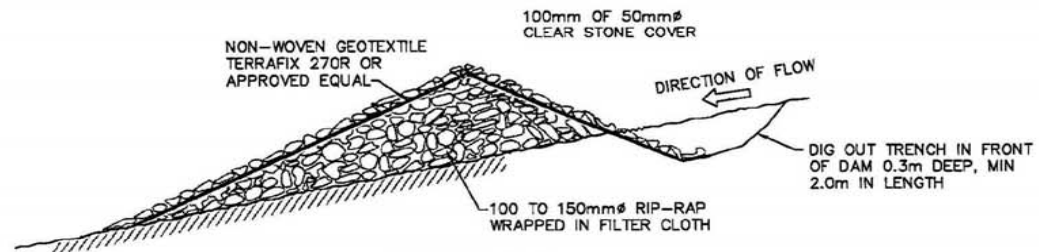
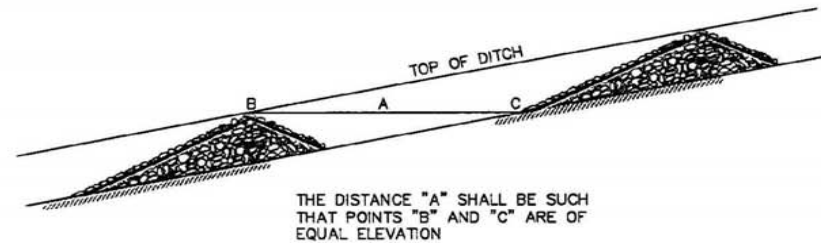
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APP'D	1 of 1

100 TO 150mm OF RIP-RAP
WRAPPED IN FILTER CLOTH



NOTES

1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO $\frac{1}{2}$ THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.



SECTION A-A

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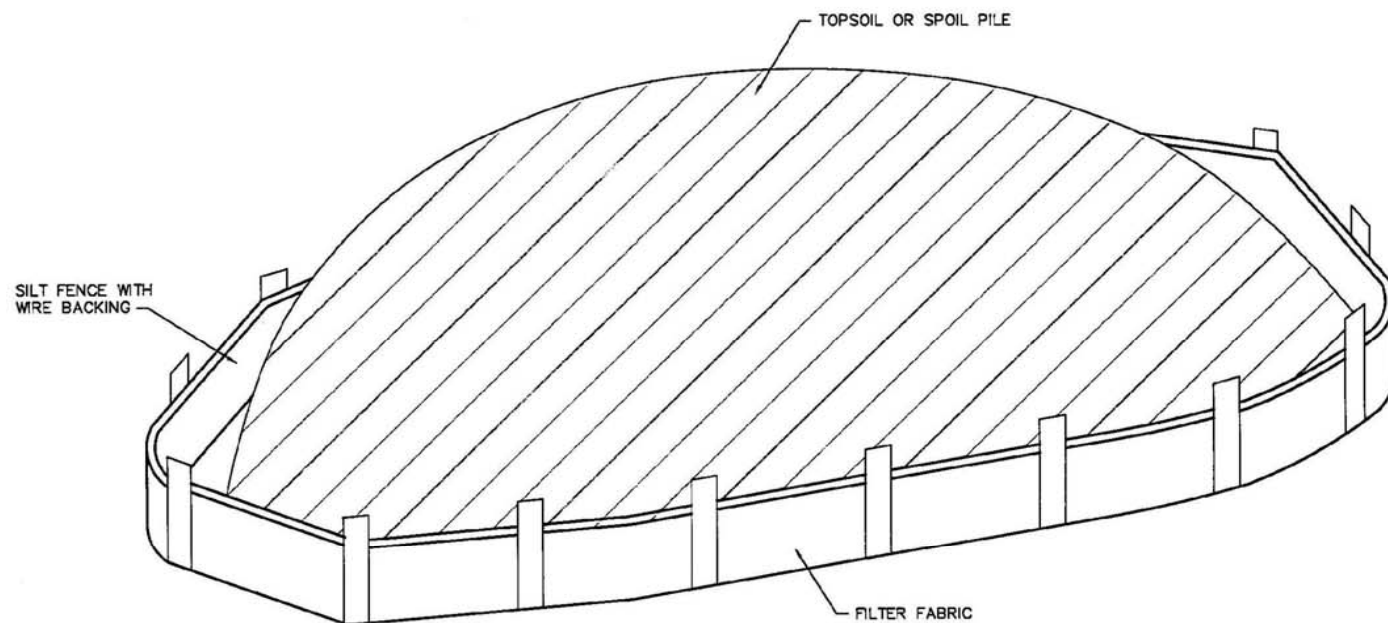
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GRANULAR EROSION CONTROL DEVICE OR CHANNEL LOW POINT PROTECTION

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APP'D	1 of 1



NOTES

1. PILES CONTAINING MORE THAN 100 CUBIC METRES OF TOPSOIL OR SPOIL SHALL BE LOCATED A MINIMUM OF 15 METRES FROM A ROADWAY OR CHANNEL.
2. PILES LEFT IN PLACE FOR MORE THAN 60 DAYS SHALL BE STABILIZED WITH A TARP, MULCH, VEGETATIVE COVER OR OTHER ACCEPTABLE MEANS.

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SPOIL PILE SILTATION CONTROL

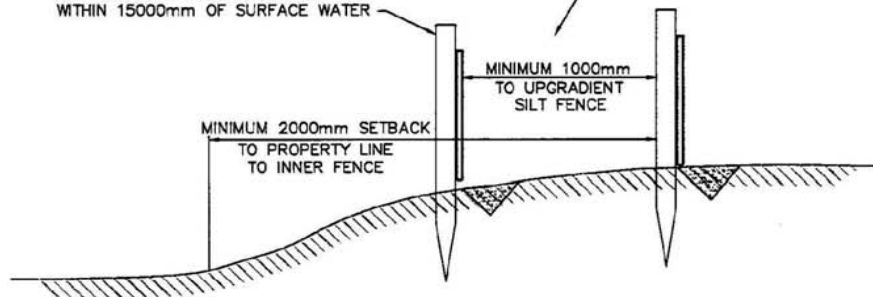
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APP'D			1 of 1

PRIMARY SILT FENCE MAY BE WITHIN 1000mm OF PROPERTY LINE UNLESS PROPERTY LINE IS WITHIN 15000mm OF SURFACE WATER

LEAVE SUFFICIENT ROOM TO CLEAN OUT ACCUMULATED SILTATION

MINIMUM 1000mm TO UPGRADIENT SILT FENCE

MINIMUM 2000mm SETBACK TO PROPERTY LINE TO INNER FENCE

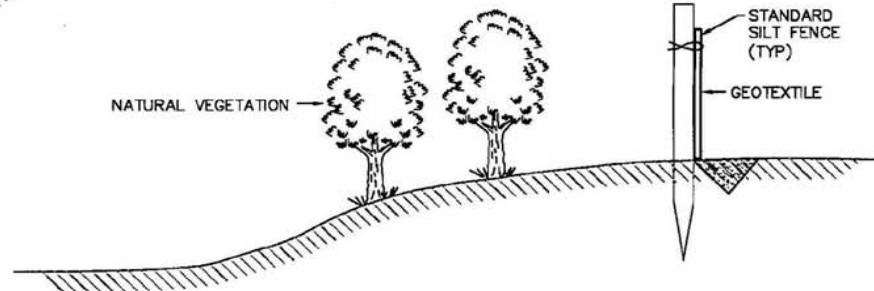


NON-VEGETATIVE BUFFER STRIP

MINIMUM 3000mm SETBACK FROM PROPERTY LINE OR 1500mm FROM SURFACE WATER

NATURAL VEGETATION

STANDARD SILT FENCE (TYP)
GEOTEXTILE



VEGETATIVE BUFFER STRIP

NOTES

1. SILT CONTROL FENCE SHOULD BE ALIGNED WITH COUTOURS FOR SHEET OVERLAND FLOW.
2. SILT/SEDIMENT CONTROL FENCE IS TO BE LOCATED IN AREAS OF LOW SEDIMENT YIELD ON SLOPES THAT CONFORM TO MTO DRAINAGE MANUAL VOLUME 2 "CHART F4-3C TOPOGRAPHIC FACTOR" IS BASED ON SLOPE LENGTH AND GRADIENT.
3. SILT/SEDIMENT CONTROL FENCE SHALL BE INSTALLED WITH FILTER MEDIA FABRIC TOED INTO THE SOIL. A MIN OF 100mm BY EITHER STATIC PLUNGING OR TRENCH METHODS WITH COMPACTION OF TRENCH MATERIAL MEETING 95% STANDARD PROCTOR DENSITY.
4. STEEL "T" BAR POSTS ARE TO BE SPACED MAX 2500mm ON CENTER.
5. FROZEN GROUND CONDITIONS REQUIRE FILTER FABRIC TO BE BACKFILLED IN TRENCH WITH CLEAR STONE.
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
7. GEOTEXTILE FABRIC TO BE COMPRISED OF WOVEN OR NON-WOVEN U.V. STABILIZED MATERIAL. FABRIC TO BE FOLDED OVER TOP OF FENCE MIN 300mm AND WIRE FASTENED.

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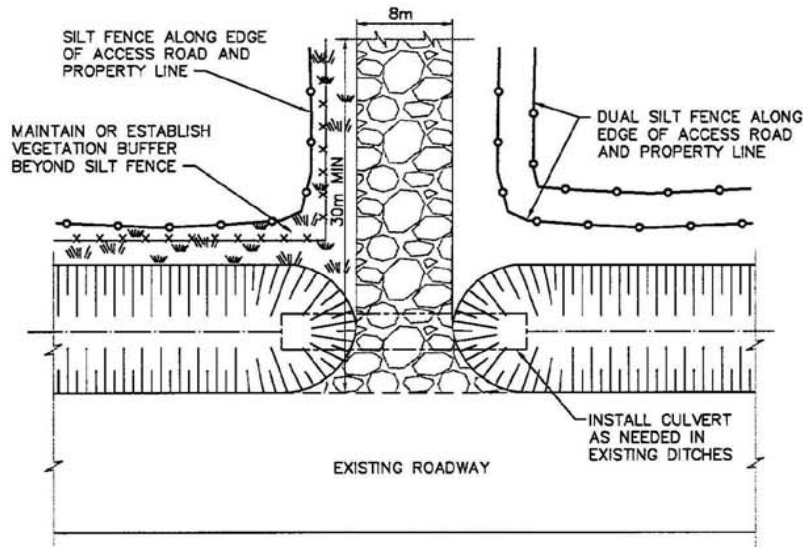
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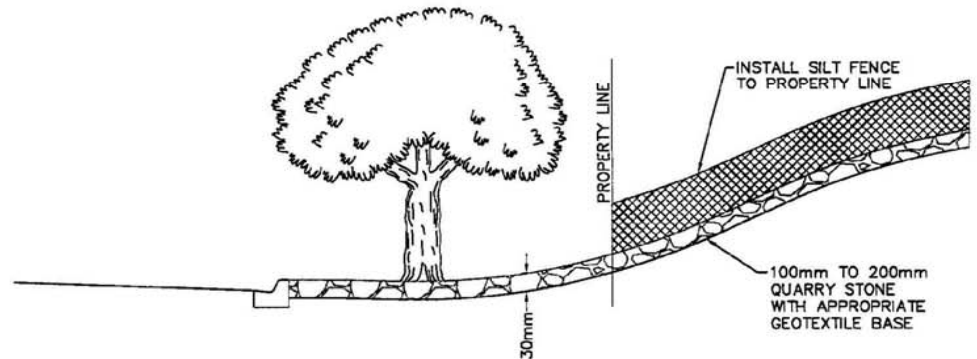
BUFFER STRIPS

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APP'D	1 of 1



NOTES

1. PURPOSE OF CONSTRUCTION MAT IS TO MINIMIZE TRANSPORTATION OF SEDIMENT ONTO ROADWAYS.
2. CONSTRUCTION MAT IS TO BE INSTALLED AS THE FIRST STEP IN THE SITE ALTERATION PROCESS.
3. CONSTRUCTION MATS ARE REQUIRED WHERE PAVED ROADS ARE WITHIN 300m OF THE SITE.



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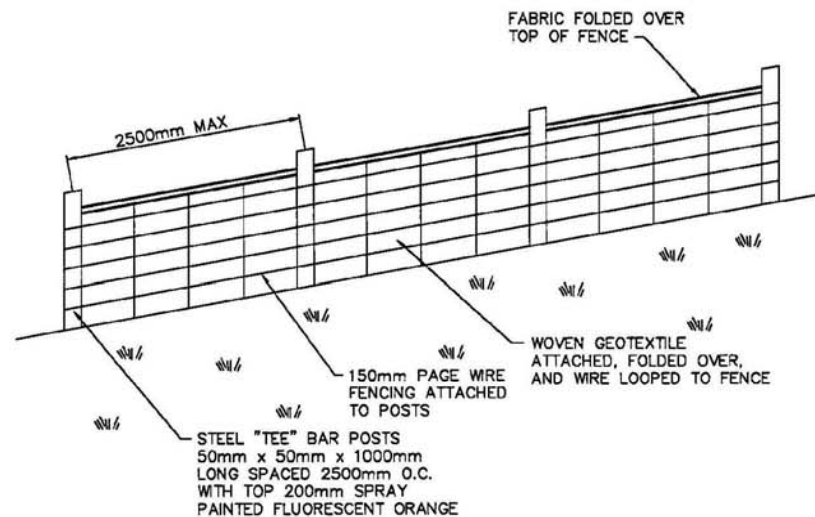
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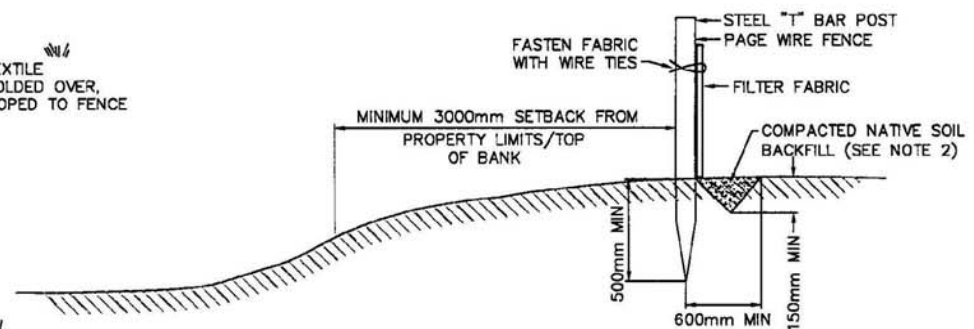
CONSTRUCTION ENTRANCE MAT

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APP'D	1 of 1



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SILTATION CONTROL FENCE

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APP'D	1 of 1

Top Soil Removal

Permits

- Permits issued expire one calendar year from issuance with a one year extension at \$250,
- Owner responsible for implementation of Control Plan and provide weekly reports from Design Professional,
- Revocation for non-compliance to Control Plan.

Top Soil Removal

Enforcement

- Via By-law Enforcement,
- Individual (\$10,000-\$25,000) & Corporation \$50,000-\$100,000),
- Officer & directors of corporation held accountable under the new Ontario Municipal Act,
- Municipality may order rehabilitation of site & costs recovered through taxes and/or use of Environmental Protection Security Fee

Top Soil Removal Next Steps

- Public Meeting in February, 2009.
- Re-presentation for final decision by the Priorities Committee in March, 2009.