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Construction Schedule/Narrative

- The development contains 32 lots on 123.8 Acres, to be serviced by individual wells and public sewer.
- Construction will commence on or about the Spring of 2011 and be substantially completed by the Spring 2012.
- Contractor will be assigned the responsibility for implementing the Erosion and Sediment Control Plan. This responsibility includes the installation and maintenance of erosion control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan and notifying the Town of Hebron or the proper Town Agency of any transfer of this responsibility. The owner shall be responsible for conveying a copy of the Erosion and Sediment Control Plan if the title to the land is transferred.
- Prior to any activity, a preconstruction meeting shall be held on site with all appropriate town staff, project engineer, and site contractor.
- Construction of Spring Hill Lane and associated drainage, sewer lines, & utilities to be completed as Phase I.
- Construction of Starling Way and associated drainage, sewer lines, & utilities to be completed as Phase I.
- The construction of the common drive and associated drainage, sewer lines & utilities to be completed as Phase III.

Grading & Seeding Applications

- All graded or disturbed areas, including slopes, shall be protected during clearing and construction in accordance with the approved sediment control plan until they are permanently stabilized.
- All sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved sediment control plan.
- Topsoil required for the establishment of vegetation shall be stockpiled in the amount necessary to complete the finished grading of all exposed areas.
- Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable material.
- All fills shall be compacted, as required, to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.
- Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
- Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fills.
- Fill shall not be placed on a frozen foundation.
- Fill shall not be kept free of sediment during all phases of development.
- Seeps or springs encountered during construction shall be handled in accordance with the measures of subsurface drainage or other approved methods.
- All graded areas shall be permanently stabilized immediately following finished grading. If final grading is to be delayed for more than 30 days after land disturbance activities cease, temporary soil stabilization measures shall be applied immediately.
- Site is to be graded as needed, and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance.
- Cut and fill slopes shall not be steeper than 2:1 (2 horizontally to 1 vertically). Where it is to be mowed, the slope shall be no steeper than 3:1. A 4:1 slope is preferred because of safety factors related to mowing steep slopes.
- Apply seed uniformly by hand, cyclone seeder, drill cultipacker type seeder or hydroseeder (slurry including seed and fertilizer). Normal seeding depth is from 1/4 to 1/2 inch. Hydroseedings which are mulched may not be left on soil surface.
- Where feasible, except where either a cultipacker type seeder or a hydroseeder is used, the seedbed should be firmed following seeding operations with a roller, or light drag. Seeding operations should be on the contour.
- Fertilizer and lime to be worked into the soil as nearly as practical to a depth of 4 inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. All but clay or silty soils and coarse sands should be rolled to firm the seedbed wherever feasible.
- Remove from the surface all stones two inches or larger in any dimension. Remove all other debris, such as wire, cables, tree roots, pieces of concrete, blocks, lumps or other unsuitable material.
- Inspect seeded just before seeding. If traffic has left the soil compacted, the area must be retilled and firmed as above.
- Where grasses predominate, fertilize according to a soil test or broadcast bennitini, 300 pounds of 10-10-10 or equivalent per acre (7.5 pounds per 1,000 square feet).

Temporary seeding of disturbed areas shall be in accordance with the following schedule:

Species	lbs/acre	lbs/100SF	Recommended Seeding Dates
Annual Ryegrass	40	1.0	4/15 to 6/15
Winter Rye	120	3.0	8/15 to 9/15
Sudangrass	30	0.7	

(Temporary seeding is not limited to the species shown. Other species recommended by the soil conservation service for temporary seeding may be used.)

Stray hay mulch is to be applied to seedbed at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds per 1000 square feet.

Seedbed Preparation: Seeding dates - 4/15 to 6/15 & 8/15 to 9/15

Disturbed areas shall be covered with a minimum of 4 inches of topsoil. Fertilizer to be applied at the rate of 300 pounds per acre or 7.5 pounds per 1000 square feet, using 10-10-10 or equivalent. Apply limestone (equivalent to 50% calcium plus magnesium) at the rate of 2 tons/acre or 90 pounds per 1000 square feet.

Seed Mixture	20 pounds/acre	45 pounds/1,000 square foot
Kentucky Bluegrass	20 pounds/acre	45 pounds/1,000 square foot
Crested Red Fescue	20 pounds/acre	45 pounds/1,000 square foot
Perennial Ryegrass	45 pounds/acre	10 pounds/1,000 square foot
Total	45 pounds/acre	100 pounds/1,000 square foot

Cover with Hay Mulch

A. Stray/Hay Bales

(1) Sheet Flow Application

- Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.
- All bales shall be either wire-bound or string-tied. Bales shall be installed so that bindings are oriented along the sides rather than along the tops and bottoms of the bales to prevent deterioration of the bindings.
- The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier (see figures 7-7). Ideally, bales should be placed 10 feet away from toe of slope (figure 7-8).
- Each bale shall be securely anchored by at least two stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or rebars shall be driven deep enough into the ground to securely anchor the bales.
- The gaps between the bales shall be chinked (filled by wedging) with straw to prevent water from escaping between the bales. (Loose straw scattered over the area immediately uphill from the straw bale barrier tends to increase barrier efficiency).
- Bale barriers shall be removed when they have served their useful purpose, but not before the upslope areas have been permanently stabilized.

(2) Channel Flow Applications

- Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one another.
- The remaining steps for installing a bale barrier for sheet flow application apply here, with the following addition.
- The barrier shall be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale to ensure that sediment laden runoff will flow either through or over the barrier but not around it.

(3) Catch Basin Applications

- Bales shall be placed in a square rectangular shape around depressed catch basin inlets. Catch basins constructed on sloping areas shall not be encircled by bales.
- The areas immediately around the catch basin may be excavated slightly to increase ponding of runoff water around the catch basin.
- The remaining steps for installing a bale barrier for sheet flow applications apply here.

(4) Maintenance

- Inspection shall be made after each storm event and repair or replacement shall be made promptly, as needed.
- Cleanout of accumulated sediment behind the bales is necessary if 1/2 of the original height of the bales become filled with sediment.

B. Filter Fences

(1) Materials

(a) Synthetic Filter Fabric

Synthetic filter fabric shall be a previous sheet of propylene, nylon, polyester or ethylene filaments and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Requirements
Filtering Efficiency	75% (min.)
Tensile strength	Extra Strength—50 lbs/1 in. (min.) Standard Strength—30 lbs/1 in. (min.)
20% (max) Elongation	
Flow Rate	0.3 gal. sq. ft./min. (min.)

(b) Synthetic Filter Fabric Requirements

Burlap shall be 10 ounce per square yard fabric.

Posts for filter fences shall be either 2x3 or 2x4 inch studs or 0.5 pounds (minimum) per linear foot steel with a minimum length of 5 feet. Steel posts shall have projections for fastening wire to them.

Stakes for filter fences shall be 1"x2" wood or equivalent metal with a minimum length of 3 feet.

Wire fence reinforcement for silt fences using standard filter cloth shall be a minimum of 42 inches in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.

Some silt fences do not require a wire backing. Consult manufacturer's instructions for proper installation requirements.

Extra silt fencing shall be kept on site during construction for maintenance.

(2) Installation Requirements

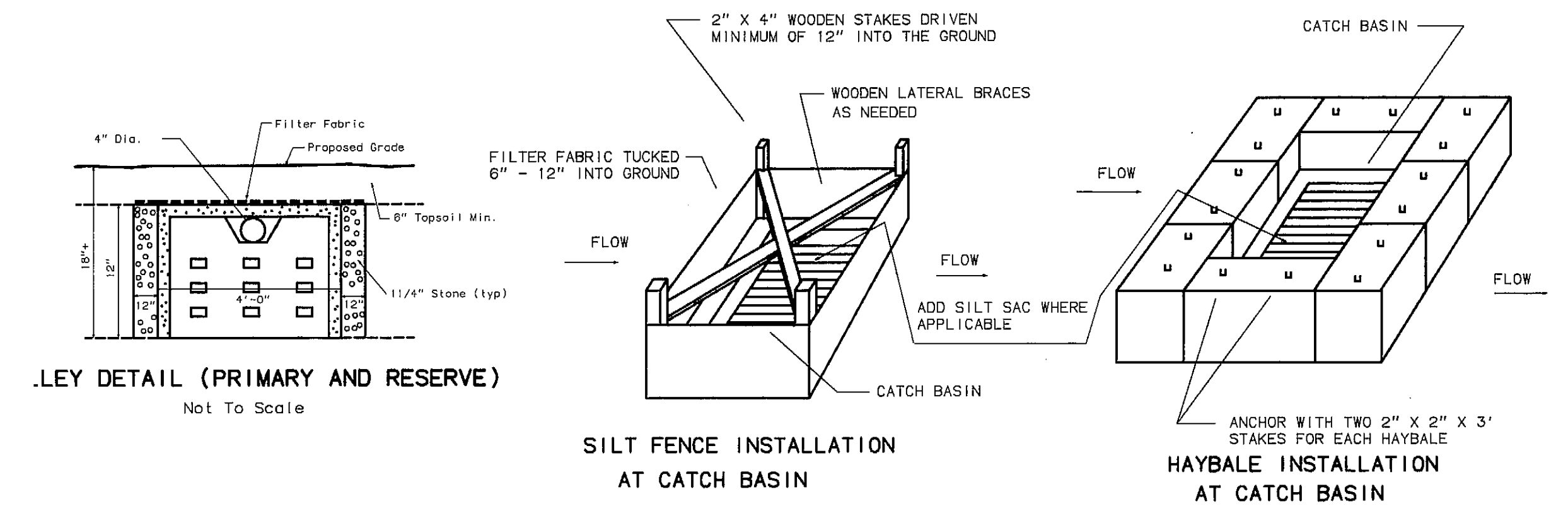
This sediment barrier utilizes burlap or strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected. In special cases, burlap may be used in drainage ways.

- The height of the barrier shall not exceed 36 inches (higher barriers may impound volumes of water sufficient to cause failure of the structure). Ideally the filter fence shall be placed 10 feet away from the toe of slope.
- When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 8-inch overlap, and securely sealed. See manufacturer's recommendations.
- Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). When extra strength fabric is used without the wire support fence, post spacing shall be as manufacturer recommends.
- A trench shall be excavated approximately 6 inches wide and 6 inches deep along the line of post, and upslope from the barrier in accordance with manufacturer's recommendations.
- When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one inch long. The wire shall extend into the trench a minimum of two inches and shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
- The standard strength filter fabric shall be stapled, wire or tied to the wire fence and eight inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
- When extra strength filter fabric or burlap and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled, wired, or tied directly to the posts with all other provisions of item no. (f) applying.
- The trench shall be back filled and the soil compacted over the filter fabric (Figure 7-6).
- Filter barriers shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

Notes

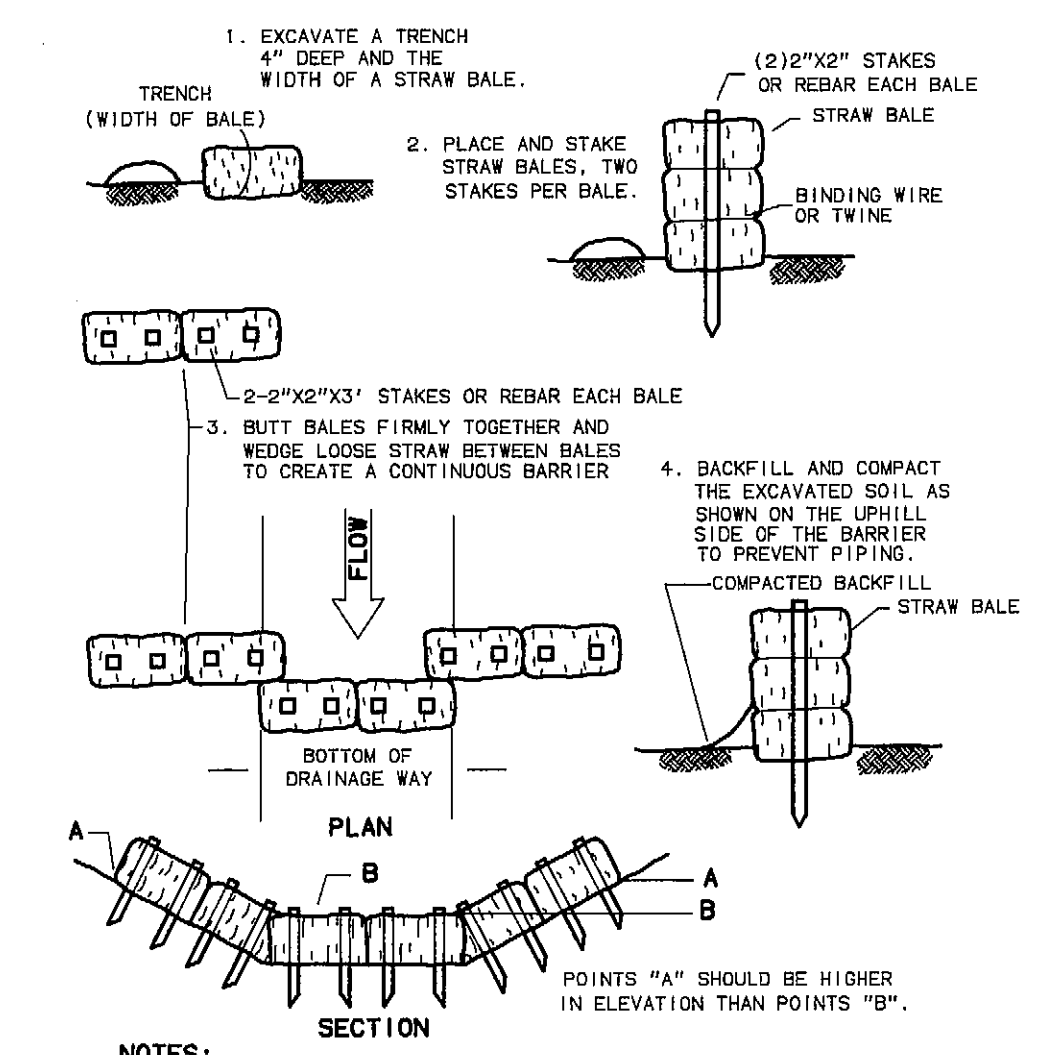
- This plan may be modified by authorized Town Agents depending on actual site and weather conditions.
- It may be determined that some erosion controls may have to be implemented before major site work begins. In this case, the Town may require that erosion controls are implemented before a zoning permit will be issued.
- Once a zoning permit is issued, it may be withdrawn and a stop work order may be issued if the required erosion control devices are not properly maintained.
- No certificate of occupancy will be issued for the dwelling until such time as the driveway apron is paved in accordance with the Town standards.
- Property pins must be installed and certified by a licensed Land Surveyor prior to filing maps.

Note: Prior To Any Activity For Either Phase I, II or III, A Preconstruction Meeting Shall Be Held On Site With All Appropriate Town Staff, Project Engineer, And Site Contractor.



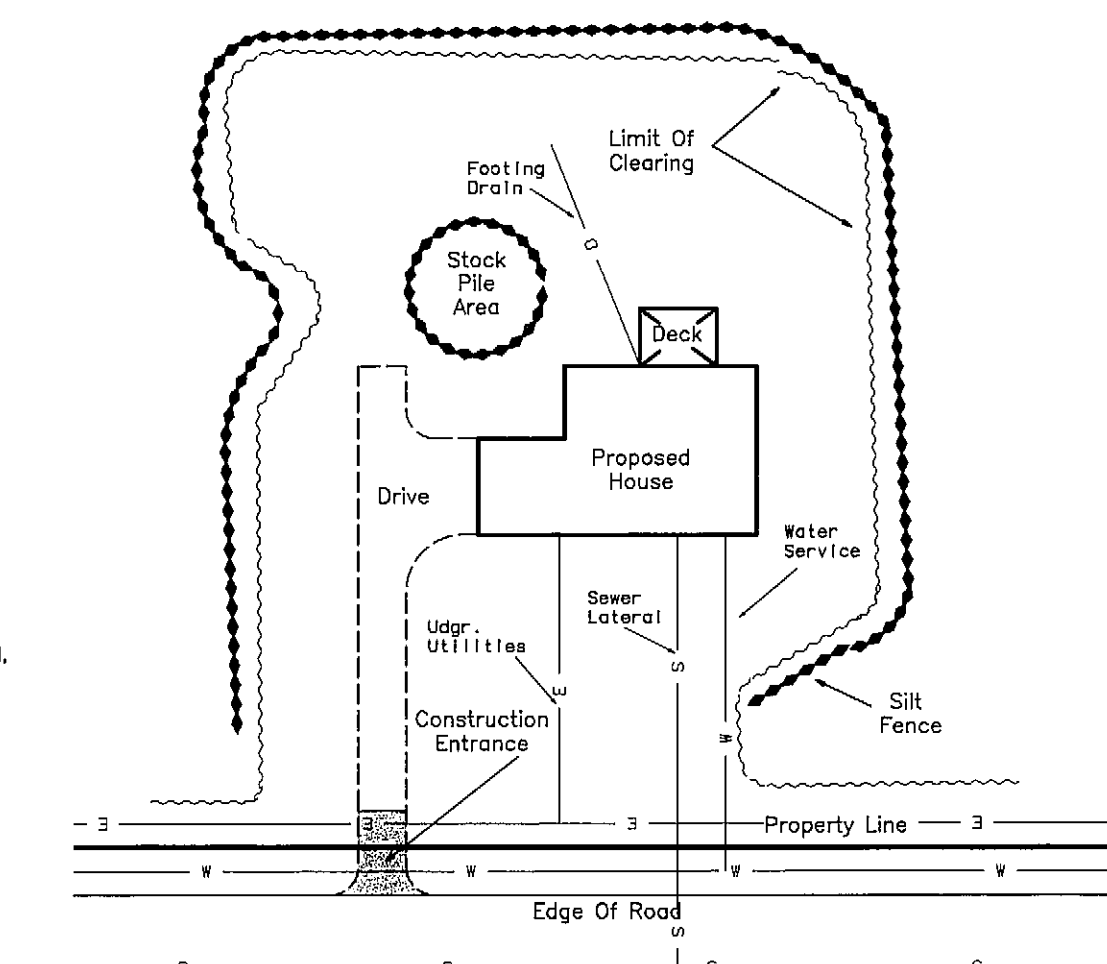
EROSION CONTROL MEASURES

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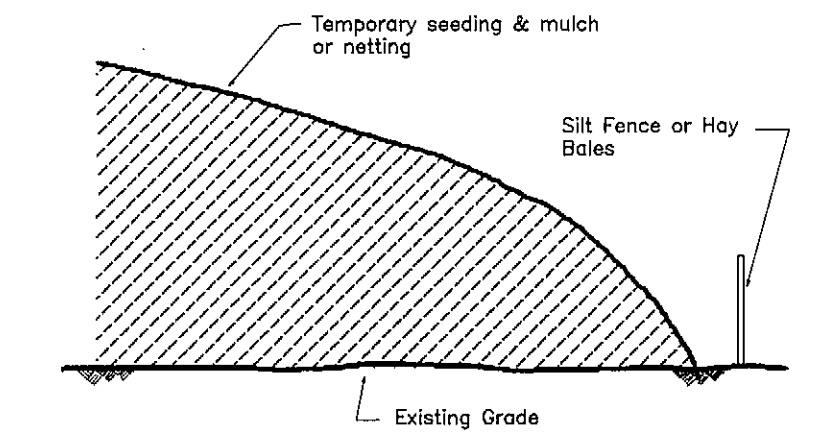
HAY BALE DETAIL

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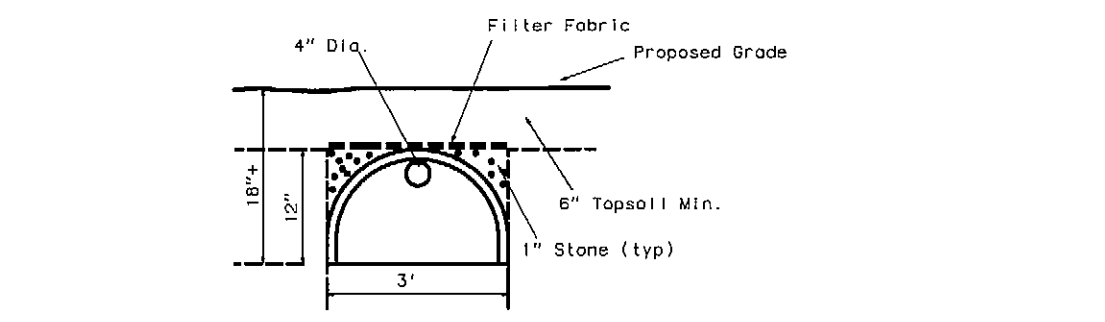
TYPICAL CLEARING LIMITS AND SILT FENCE LOCATION FOR INDIVIDUAL LOTS

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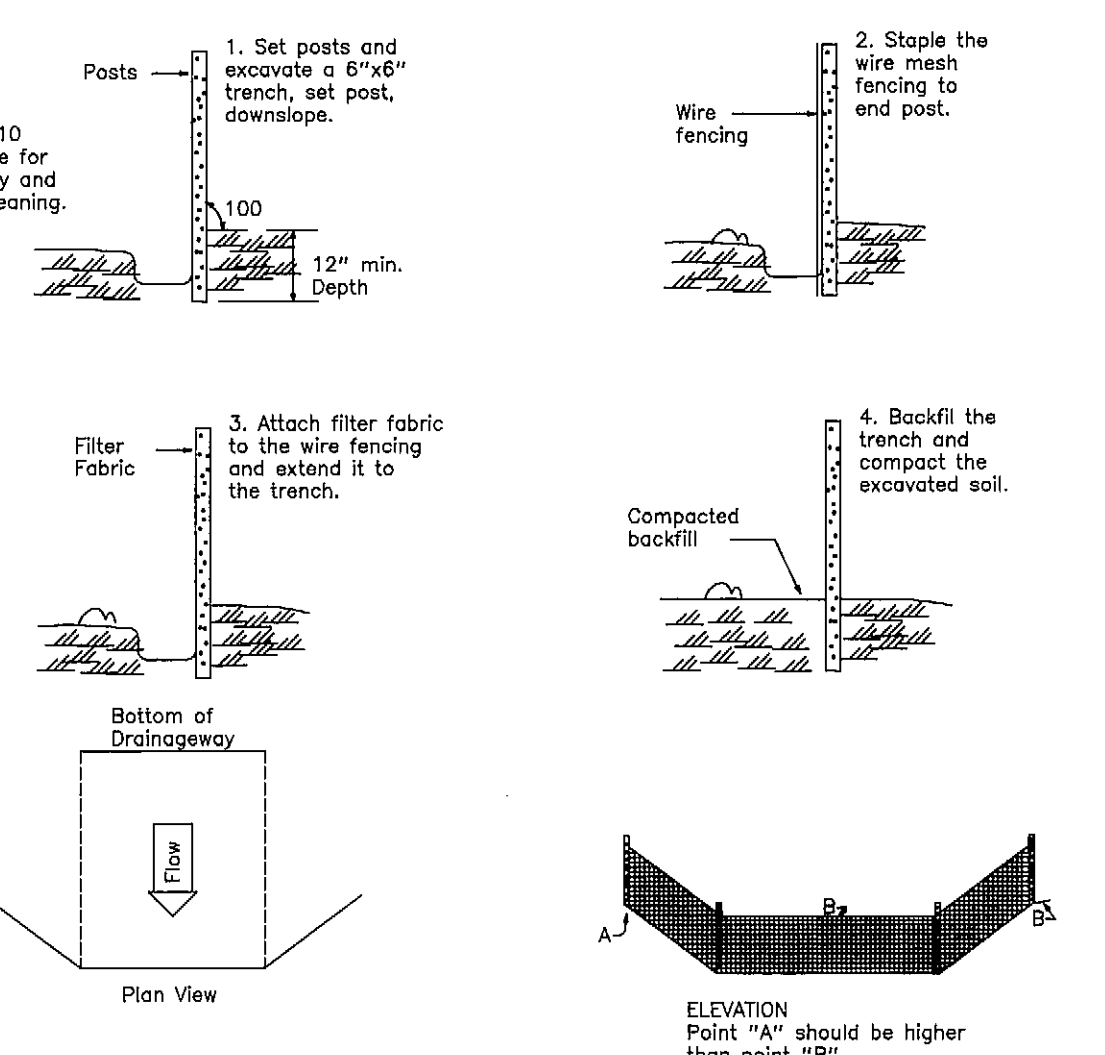
STOCKPILE DETAIL

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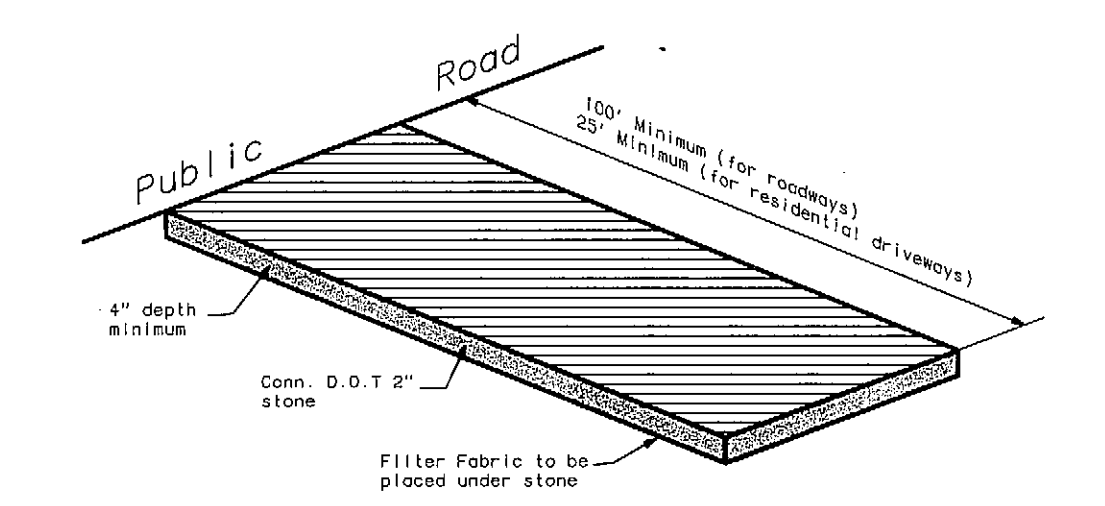
INFILTRATOR FOR ROOF LEADERS

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SILT FENCE DETAIL

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CONSTRUCTION ENTRANCE DETAIL

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THIS MAP PRODUCED BY ORIGINAL INK DRAWING ON POLY FILM
TARBELL, HEINTZ & ASSOC.
1227 BURNSIDE AVE. - SUITE 31
EAST HARTFORD CT 06108

REVISION
8-12-10
9-14-10
10-12-10

"LAKEWOOD ESTATES"
NOTES & DETAILS
PREPARED FOR
JAMES GROSSMAN
LAKE ROAD, HILLCREST DRIVE, & RTE #85
HEBRON, CONNECTICUT
TARBELL, HEINTZ & ASSOC., INC.
CIVIL ENGINEERS - LAND SURVEYORS
1227 BURNSIDE AVE., SUITE 31 EAST HARTFORD, CT (860) 526-1810
JOB NO. 1091 DATE: 12-03-07 SCALE: AS NOTED DRAWN BY: E.M.W. SHEET NO: 37 OF 39