

SPECIFICATIONS FOR PLANTING AND SCREENING

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Specifications for Planting and Screening.

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Draft Specification - Screening

All plans will be followed exactly. Modifications may be made only after obtaining written permission from the landscape officer.

1. Contouring:
 - a) All contouring shall be completed prior to planting any stock. Existing top soil, where present, shall be removed from burn areas and piled so as to disrupt as little of the existing vegetation cover as possible. Clean subsoil fill will be piled so as to develop a smooth flowing burn to a height of no less than 2.0' and no more than 3.5' with slopes being no/

greater, at any point, than 32°. The burns must be compacted to the satisfaction of the landscape officer prior to replacing the top soil. A coverage of no less than 6" of top soil will cover the burn and be raked smooth, removing all stones in excess of 1" in diameter and all twigs, wood and debris.

- b) If screen development is on unsuitable substrata, one of the following procedures will be followed:
- i) on a gravel or sand base subsoil fill will be placed on the existing surface and the work will continue according to 1(a).
 - ii) If the surface is a rock layer blasting must be employed to provide for the penetration of roots below the burn.
 - iii) If the surface has been employed previously as a "refuse dump", rolling with a sheeps foot roller will be carried out prior to bringing other equipment on the site. Subsoil fill will be placed on the compacted grade and burn development will continue according to 1(a).

2. Selection of Plant Material:

- a) Plant names derived from L.H. Bailey,
Manual of Cultivated Plants.

All plant material shall have been grown for one full year under the climatic conditions similar to those in the project area. All plant materials shall be true to name, type and form, and shall be constructurally sound. Plant materials shall be free of disease, insect infestation, abrasion or other bark damage and shall possess a strong root system and be well branching above ground.

All parts of the plant shall show green cambium when cut.

- b) Deciduous trees:

All deciduous trees shall meet section 2(a) and (e) to (i). Each tree shall be at least 6' in height and at least 1" in diameter measured 12" above the level at which it was last grown.

The deciduous trees will be pruned to 5' above the surface prior to being turned over to the S.S.E.B.

All deciduous stock may be bare rooted.

c) Coniferous trees:

All coniferous trees shall meet the specifications outlined in section 2 (a) and (e) to (i). All coniferous trees shall be B & B stock with soil balls wrapped in burlap and tied firmly with rope so as to produce a solid unit. The diameter and depth of the soil ball shall be sufficient to encompass an adequate root system to facilitate healthy development of the plant.

All coniferous trees will be at least 4.5' in height.

d) Deciduous shrubs and ground covers:

All stock considered under this section must comply with section 2 (a) and (e) to (i). All deciduous shrubs and ground covers may be bare root stock.

All deciduous shrubs and ground cover will be planted so as to give reasonable dense coverage in 3 years, but not so as to be crowded out. The landscape officer will be the sole judge of over-planting or under-planting.

e) Moving:

All material shall be lifted, transported and placed in the new location in such a manner as to not expose roots or branching structure to physical damage or desiccation. The roots of all bare root material shall be covered by moist burlap or canvas. No B & B stock shall be accepted if the soil ball has cracked while in transit.

f) Storage:

The least possible time shall elapse between digging and planting. If temporary storage is required, all plants will be heeled-in in top soil in a protected location and watered as necessary. The landscape officer shall be the sole judge of the contractors adherence to section 2(f).

g) Planting:

Planting shall be according to S.S.E.B. specifications.

All holes shall be adequately large to accommodate the roots when spread. The roots of bare root stock will be spread naturally prior to the addition of top soil. Allowance must be made for a least 6" of top soil below and 12" of top soil on all sides of the root system.

Superphosphate fertilizer will be added to the top soil to be compacted around the root system at the rate of 5 lbs per cu. yd. of soil.

Placement of all plants shall be such that when backfilling is complete each plant shall stand at the level at which it previously stood.

All soil shall be compressed by foot at regular intervals to ensure that the plant will stand firmly and that no air pockets remain. Wet or frozen earth will not be used in back filling.

A soil saucer shall be created at the base of each plant to retain water around the roots of the plant.

h) Staking and Guying:

Evergreen trees will be guyed vertically on three sides. The guy wires will be kept tight at all times. The point of attachment to the trunk will be protected by passing the wire through a 2 ply rubber hose section. The guy will be fastened to the ground by 3' steel stakes or other suitable tree anchor. Galvanized turn-buckles or Ideal wire tensioners will be used to tighten wires.

All bare root deciduous trees will be firmly staked with min. 1" "T" bar, 9' long, (snow fence posts) driven at least 3' into the ground. One stake on the prevailing wind side of the tree will be considered minimum. No. 9 wire will be used to connect the tree to the upper end of the stake. Where the wire passes around the trunk of the tree it will be covered by a 12' section of 2 ply rubber hose to protect the bark.

Other means of fastening trees to the stake may be accepted by the landscape officer.

i) Post Planting Care:

Any necessary pruning will be carried out during the guarantee period to ensure a healthy, well-balanced plant. All cuts in excess of $\frac{3}{4}$ " will be treated with recognized tree dressing suitable to the landscape officer.

All rejected plant material and unused materials and debris shall be removed immediately from the site.

The contractor will be responsible for the growth of all plants during the six months following planting.

Waterings will be carried out as necessary.

Only those plants lost through vandalism will be considered the responsibility of the S.S.E.B.

Substitutions of any type must be approved, in writing, by the landscape officer.

Any plant material dieing during the six months following planting will be replaced by the contractor at no additional cost to the S.S.E.B.

3. Vehicle Barriers:

Vehicle barriers will be erected, according to landscape plans, behind screening. The contractor will supply all materials, carry out all work and clean-up at the close of this phase of the work.

a) Barrier posts will be a minimum of 3" in diameter. Larch (Larix Species) posts will be used (other wood, soaked in an acceptable wood preservative, may be accepted by the landscape officer. Each post will be a minimum of 7.5' long.

b) cable:

Multi strand $\frac{1}{2}$ " diameter steel cable will be considered minimum. Where splicing is necessary it shall be according to S.S.E.B. specifications.

c) Construction:

The barrier will extend from the southern margin of the right-of-way to the northern margin, permitting no space for unauthorized vehicular passage.

Postholes will be 4' deep with the thicker end downward. Backfill material will be tamped regularly with a steel pipe to ensure the solidarity of the post. Posts shall be placed regularly a minimum of 12' apart.

Cables will be passed through $\frac{3}{4}$ " diameter holes drilled 30" above ground level and tightened with a wire tightener. The landscape officer will not accept any barrier in which the cable can be compressed any closer than 18" above ground level.

The tops of each post will be cut off evenly 6" above the cable at a 30° angle (approximately). The low side of the post shall be towards the border and road.

Each cable line will terminate by being spliced to a $\frac{5}{8}$ " diameter eye bolt turned at least 5' into the last post. A vehicular passage is required $\frac{5}{8}$ " eye bolts will be installed in the post 24" above ground level. One end of the cable will be spliced to one eye bolt and the other end will terminate in a spliced loop. The length should readily facilitate the padlocking of the "loop" end of the cable to the eye bolt in the post.

4. Turf Development:

Only at the completion of all planting, rough grading, vehicle barrier construction and refuse and unused material disposal will the contractors begin fine grading and soil preparation.

Seeding will be carried out on:

- i) burns
- ii) areas where top soil was stored
- iii) any areas where the existing vegetation was killed while other phases of construction was being carried out.

a) Fine Grading:

All burns will be given a smooth natural form providing an aesthetically pleasing profile to the road. Any repair work will require the addition of acceptable top soil to depressions so as to prevent water from laying on the surface.

No work will be carried out if the soil is frozen or is such that it will adhere to the workman's tools and boots. All areas to be seeded will be rototilled to a depth of 6" before raking in a final grade. The surface will be raked smoothly removing all debris, vegetation, and stones and providing a friable surface free of large clumps of soil.

Rolling with a 250-500 lb. min. 30" wide roller will be employed to compact the grade. A final raking will be carried out to fill any depressions formed by the roller. An application of super phosphate at the rate of 20 lbs. per 1000 sq. ft. will be carried out prior to seeding. Fertilizing will be done by a cyclone type spreader to ensure even and thorough coverage.

b) Seeding:

Seed will be applied at the rate of 3 - 4 lbs. per 1000 sq. ft. using a cyclone type spreader. Thorough and even coverage must result.

Seed:

50% Kentucky Bluegrass
50% Creeping Red Fescue
with the addition of 10% Red Top

The above mixture is recommended for relatively well drained and exposed localities. Where other conditions exist the landscape officer will provide seed specifications.

All seed shall be No. 1 certified seed, free of weeds, chaff and other types grass seed.

Following seeding the area shall be raked lightly to allow the seed to settle to a depth of $\frac{1}{4}$ ".

The area shall then be rolled with a steel roller not less than 30" wide and weighing between 250 and 400 lbs.

c) Post Seeding Care:

The contractor shall be responsible for maintenance of the seeded areas to, and including the first cut. Water will be applied, as necessary, by the contractor, who will be responsible for regular inspection of the seeded area to ensure healthy development of the turf.

The first cut will be made at a height of $\frac{1}{2}$ " to 2".

If, in the opinion of the landscape officer, there is too much broadleaf weed development in the seeded area, the contractor will apply a herbicide as directed by the inspector, prior to the site being accepted by the S.S.E.B.

The maintenance and guarantee period will be a minimum of thirty days in duration.

Any repairs directed by the landscape officer will be carried out by the contractor at his own expense prior to acceptance by the S.S.E.B.

At the end of the maintenance period all turf shall have a firm, healthy and even coverage throughout and be reasonably weed free. The contractor shall obtain written approval that all turf is in good growing condition prior to terminating his responsibilities.

5. Additional Work:

The contractor may be called upon by the landscape officer to carry out additional work. Any such additional work, not included in plans and specifications, will be done on a cost plus 10% basis. The landscape officer will be the sole judge of the acceptability of any additional work.