

TWEED SHIRE COUNCIL

DEVELOPMENT CONSTRUCTION SPECIFICATION

C273

LANDSCAPING

VERSION 1.4

SPECIFICATION C273 - LANDSCAPING

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DEVELOPMENT CONSTRUCTION SPECIFICATION C273

LANDSCAPING

GENERAL

C273.01 SCOPE

1. This Specification is for:
 - (a) The vegetation of cut and fill batters, median areas, pathways, verges, open drains and other areas within the site. Vegetation includes the initial surface preparation, topsoiling, fertilising, sowing of seed and may include surface protection works, hydroseeding, hydromulching and straw mulching.
 - (b) The supply of plants, planting at locations as shown on the design plans, fertilising, mulching, staking, watering and maintenance of plants.
2. Requirements for quality control and testing, including maximum lot sizes and minimum test frequencies, are cited in the Specification Part for Quality Requirements.
3. Works under this specification are to be executed in accordance with the appropriate technical specifications in *Development Design Specification D14 – Landscaping Public Space*.

Quality

C273.02 REFERENCE DOCUMENTS

1. Documents referenced in this Specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.

**Documents
Standards Test
Methods**

(a) Council Specifications

- D14 - Landscaping Open Space
- C211 - Control of Erosion and Sedimentation.
- C213 - Earthworks.

(b) Australian Standards

- AS 1160 - Bitumen emulsion for construction and maintenance of pavements.
- AS 2507 - The storage and handling of pesticides.
- AS 4419 - Soils for landscaping and garden use.
- AS 4454 - Composts, soil conditioners and mulches.
- AS 4843 - Synthetic weed blocking fabric.

(c) Standard Drawings that apply to this Section:

- S.D.701 - Tree and Shrub Planting Details
- S.D.702 - Standard Revegetation Details
- S.D.703 - Log Barrier Fencing
- S.D.704 - Bollard and Removable Rail Details
- S.D.705 - Tree Planting in Pavement Details
- S.D.706 - Bicycle Deflector Bar Details

VEGETATION OF SLOPES AND DRAINS

C273.03 EXECUTION AND TIMING OF WORK

- | | | |
|----|--|---|
| 1. | In association with the work to be executed under this Specification, the Subdivider shall implement effective erosion and sedimentation control measures in accordance with the Specification for CONTROL OF EROSION AND SEDIMENTATION. | <i>Subdivider's Responsibility</i> |
| 2. | The work to be executed under this Vegetation of Slopes and Drains includes the vegetation of cut and fill batters, pathway verges, median areas, open drains and other areas within the site. Vegetation includes the initial surface preparation, topsoiling, fertilising and either sowing of seed or turfing as shown on the design plans. | <i>Vegetation</i> |
| 3. | Exposed ground shall be vegetated before the area exceeds one (1) hectare or lesser area in compliance with Erosion and Sediment Control Plan requirements. | <i>Exposed Ground</i> |

C273.04 MATERIALS

(a) Topsoil

- | | | |
|----|---|-----------------------|
| 1. | The Subdivider shall use topsoil stockpiled on site under the Specification for EARTHWORKS. Where imported topsoil is required it shall comply with AS 4419 and shall:- | <i>Quality</i> |
| | (i) be of a friable, porous nature; | |
| | (ii) be free of weeds and weed seeds, bulbs, corms and vegetable propagules; | |
| | (ii) contain no refuse or materials toxic to plant growth; | |
| | (iv) contain no stumps, roots, clay lumps or stones larger than 50mm in size; | |
| | (v) have an organic content of at least 3 per cent by mass; | |
| | (vi) have a pH neither less than 5.5 nor more than 7.5; | |
| | (vii) have a soluble salt content not exceeding 0.06 per cent by mass. | |

(b) Herbicide

- | | | |
|----|--|--|
| 1. | Herbicide used shall be a glyphosate based herbicide listed in Annexure C273A. | |
|----|--|--|

(c) Seed

- | | | |
|----|--|---|
| 1. | All seed used shall be of the species and varieties listed in Annexure C273A and shall be sown at the application rates specified therein. The Subdivider shall submit to the Certifying Engineer the name/s of the proposed seed supplier/s within two (2) weeks of the acceptance of the tender. | <i>Seed Type and Supplier</i> |
| 2. | The Subdivider's attention is drawn to the lead time that may be required to procure some native seed species. The native seed shall be delivered to the site in separate lots for each species and variety, clearly labelled to show species, variety and weight. | <i>Lead Time for Native Seed</i> |
| 3. | All seed must be accompanied by a "Certificate of Authenticity" which shall be furnished by the Subdivider to the Certifying Engineer upon request at any stage of the work. Grass and clover seed shall be pre-packed commercially with an accompanying certificate of germination. | <i>Certification</i> |

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4. The Subdivider shall not take possession of the seed more than seven (7) days before sowing is to occur. The seed shall be stored in clean, air tight containers and kept away from direct sunlight. It shall not be exposed to the elements at any stage during storage. **Storage**
5. The Subdivider shall replace at the Subdivider's expense any exotic seed batch found not true to type. **Subdivider's Cost**
- (d) Turf**
1. Turf shall consist of 25mm depth of dense, well rooted, vigorous grass growth with 25mm depth of topsoil. The type of grass turf to be used shall be selected from Annexure C273A and in accordance with the design plans. Unless specified, Kikuyu grass shall not be used. Turf shall be free of weeds, soil pests and diseases. The turf shall be supplied as rolls in long lengths of uniform width, not less than 300mm, and shall be in sound unbroken condition.
- (e) Fertiliser**
1. Fertiliser shall be an organic type listed in Annexure C273A with Nitrogen: Phosphorus: Potassium (N:P:K) ratios of 8 : 3.6 : 2. **Type**
- (f) Vegetable Mulch**
1. Vegetable mulch used in hydromulching shall consist of straw, chaff, wood fibre, paper pulp or similar material all finely shredded to a maximum dimension of 10 mm. Meadow hay or weeds shall not be used and paper pulp if used shall not exceed 50 per cent by mass of the total mulch. **Composition**
- (g) Water**
1. Water used shall be potable. **Quality**
- (h) Binder**
1. The binder used in hydromulching and straw-mulching shall be Grade ASS, slow setting anionic bitumen emulsion, complying with AS 1160.
- (i) Wetting Agent**
1. The soil wetting agent added in hydromulching or hydroseeding shall be listed in Annexure C273A and applied at the application rate specified therein.
- (j) Pesticide**
1. Pesticide used shall be a liquid or powder listed in Annexure C273A. The storage and handling of pesticides shall be in accordance with AS 2507.

C273.05 VEGETATION OF SLOPES 4 TO 1 OR FLATTER

- (a) Preparation of Surface**
1. Slopes shall be sprayed with herbicide applied at the rate specified in Annexure C273A to kill weed infestation. Sprayed areas shall remain undisturbed for two (2) weeks. **Herbicide Treatment**
2. The surface shall then be tined to a depth of 200 mm to produce a loose surface and all large stones, rubbish and other materials that may hinder germination shall be removed before topsoiling. **Preparation**

(b) Topsoiling

1. Topsoil shall be uniformly applied to provide an average compacted thickness of 50mm with a minimum compacted thickness of 30mm at any location. The topsoiled area shall be cultivated to a depth of 50mm to provide a roughened surface with soil lumps not exceeding 50mm dimension. **Application**

(c) Mixing of Seed

1. The Subdivider shall give the Certifying Engineer two (2) days' notice before each sowing operation. Seed shall be sown on the day of mixing with pesticide. **Notice**

(d) Incorporation of Pesticide

1. Immediately before sowing, all grass and native seed shall be treated with pesticide. The pesticide shall be thoroughly mixed as a dry powder with the seed at the rate specified in Annexure C273A to the equivalent mass of seed to be spread on 1 hectare of the surface in accordance with Annexure C273A. **Mixing**

(e) Sowing

1. Sowing shall be carried out with an appropriate mechanical seeder. Where practicable, passes shall follow finished surface contours. Seed shall be sown at a depth of 5mm or shall be raked or harrowed to provide 5mm cover. **Seeder**
2. Seed and fertiliser shall be evenly distributed over the areas to be sown at the rates specified in Annexure C273A. Fertiliser shall be applied concurrently with the seeding operation. **Sowing Rate**

(f) Turfing

1. Turf shall be placed on the prepared topsoiled surface. Runs of turf shall butt hard against each other and be placed perpendicular to the direction of water flow. Turf seams shall then be top-dressed with topsoil. **Placing**
2. Four (4) to six (6) weeks after placement, the turf shall be lightly top-dressed with topsoil to correct any undulations or unevenness in the established turf. **Topdressing**

(g) Watering

1. The Subdivider shall water areas to be sown to a moist condition and shall rewater areas to a moist condition without surface runoff on a daily basis for a minimum of 15 days after sowing, or as otherwise directed by the Certifying Engineer, to promote and maintain growth.

C273.06 VEGETATION OF SLOPES STEEPER THAN 4 TO 1**(a) General**

1. Where shown on the design plans or directed by the Certifying Engineer, slopes shall be vegetated by one (1) of the following methods: **Method**
- (i) Topsoiling and hydromulching;
 - (ii) Topsoiling, hydroseeding and straw mulching;
 - (iii) Hydroseeding.

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(b) Preparation of Surface

1. Weeds shall be killed by spraying with herbicides as specified under Clause C273.05(a). **Herbicide Treatment**
2. No more than seven (7) days before seeding all loose material shall be removed from fill batters and cut batters, which are not stepped, by dragging a heavy steel chain of minimum weight of 30 kilograms per metre of length or by other methods approved by the Certifying Engineer. **Preparation**

(c) Topsoiling

1. Where batters have been stepped, the steps shall be loosely filled with topsoil. Elsewhere, topsoil shall be uniformly applied to provide an average thickness of 50mm with a minimum compacted thickness of 30mm at any location. **Application**

(d) Hydromulching or Hydroseeding

1. The hydromulch or hydroseed shall comprise the materials shown in Table C273.1. The materials shall be applied at the application rates shown in Table C273.1. **Application Rate**
2. Dry surfaces shall be watered by a fine spray before the application of the hydromulch. **Watering**
3. The mixing and treatment of seed shall be carried out in accordance with Clause C273.05(c). **Treatment of Seed**
4. During preparation of the hydromulch or hydroseed slurry, liquid form pesticide shall be added to the storage tank, to facilitate surface application, at a rate of 5 litres of pesticide to the equivalent volume of hydromulch or hydroseed slurry to be spread on 1 hectare of surface in accordance with Table C273.1. **Pesticide**
5. Storage tanks, containers and equipment to be used in hydromulching or hydroseeding of slopes shall be clean and free of contamination from previous operations. **Equipment**
6. A slurry mixture shall be produced by addition of the specified materials in the tank and agitated to maintain a uniform consistency during application. It shall be applied uniformly over the whole surface. **Uniform Mix**
7. Hydromulch or hydroseed shall not be applied under the following weather conditions at the site: **Weather Conditions**
 - (i) when temperature is higher than 35°C
 - (ii) when winds exceed 15 km/hr;
 - (iii) where, in the opinion of the Certifying Engineer, the surface is too wet or
 - (iv) during rain periods or when rain appears imminent.
8. Application rates shall be in accordance with Table C273.1

| Material | Application Rate per Hectare | |
|--------------------------|------------------------------|--------------|
| | Hydromulching | Hydroseeding |
| (i) Vegetable Mulch (kg) | 2,500 | Nil |
| (ii) Water (l) | 35,000 | 20,000 |
| (iii) Binder (l) | 700 | Nil |

| | | |
|------------------------|--------------------|----|
| (iv) Fertiliser | See Annexure C273A | |
| (v) Seed | See Annexure C273A | |
| (vi) Wetting Agent (l) | 35 | 20 |
| (vii) Pesticide (l) | 5 | 5 |

Table C273.1 - Materials and Application Rates

(e) Straw Mulching

1. The mulch to be applied after hydroseeding shall comprise a matrix of straw and an anionic slow setting bitumen emulsion binder. Meadow hay shall not be used. The straw mulch shall be uniformly applied by a suitable blower unit at a rate of 250 bales (each of 20 kilograms) of straw per hectare of surface. The bitumen emulsion shall be incorporated as a spray into the air stream of the mulch blower at a rate of not less than 2,500 litres of bitumen emulsion per hectare of surface. The finished straw mat shall have a minimum thickness of 20mm at any location. **Method**

C273.07 VEGETATION OF OPEN DRAINS

(a) Preparation of Surface

1. The Subdivider shall execute the work such that the excavation of open drains to the specified profiles is followed within seven (7) days by the vegetation of the surface as specified in this Clause. Topsoil shall be spread to provide an average compacted thickness of 50mm with a minimum compacted thickness of 30mm at any location. **Profile and Topsoil**

(b) Sowing

1. Before sowing, the surface shall be watered. Seed and fertiliser shall then be applied uniformly at the rates specified in Annexure C273A by one (1) of the following procedures as directed by the Certifying Engineer: **Procedure**
- (i) Mechanical sowing.
 - (ii) Hydromulching or hydroseeding.
 - (iii) By hand.

(c) Surface Protection

1. Where shown on the design plans or directed by the Certifying Engineer, one (1) of the following protective treatments shall be applied immediately to all or part of the sown surface. **Methods**
- (i) Spraying with Bitumen Emulsion

An anionic slow setting bitumen emulsion, conforming with Grade ASS of AS 1160, shall be sprayed over the surface at a rate of 1 litre of bitumen emulsion per square metre of surface. **Application Rate**
 - (ii) Lining with Organic Fibre Mat

The channel surface shall be lined with an organic fibre mat listed in Annexure C273A. The runs of matting shall be laid along the direction of water flow. The matting shall be laid loosely on the soil surface and not stretched. **Laying**

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The upstream end of the matting shall be slotted into a trench 150mm wide by 150mm deep and pinned to the base of the trench at 200mm centres. The trench shall be backfilled with soil and compacted by foot.

Anchorage

The pins shall be 'U' shaped, 4mm gauge wire, 50mm wide and 150mm long legs.

Pins

Adjacent runs of matting shall be overlapped 100mm with the higher run lapped over the lower run. The matting shall be pinned along the sides of each run at 500mm centres and along the middle of each run at 1m centres. End overlaps shall be 150mm wide with the higher run end lapped over the start of the lower run and pinned at 200mm centres.

Lapping

(iii) **Turfing**

Turf shall be as specified under Clause C273.04(d).

Quality

Runs of turf shall butt hard against each other and be placed perpendicular to the direction of water flow in the drain, and pinned into position at 500mm centres.

Placing

Seams of turf shall be top-dressed with topsoil.

Topdressing

(d) Watering

1. The Subdivider shall water treat areas in order to promote and maintain growth as specified under Clause C273.05(g).

LANDSCAPE PLANTING

C273.08 EXECUTION AND TIMING OF WORK

1. The work to be executed includes the ground preparation, the supply of plants, planting as shown on the design plans, fertilising, mulching, staking, watering and maintenance of plants.
2. The Subdivider shall give the Certifying Engineer a minimum of two (2) days' notice of commencement of planting. Landscape planting shall not be carried out in extreme weather conditions (above 35°C or below 10°C).

Extent of Work

Notice of Commencement

C273.09 MATERIALS

(a) Topsoil

1. Topsoil shall comply with the requirements of Clause C273.04(a).

(b) Herbicide/Weed Blocking Fabric

1. Herbicide shall comply with the requirements of Clause C273.04(b).
2. Synthetic weed blocking fabric shall comply with AS 4843.

(c) Fertiliser

1. Fertiliser shall be a slow-release type in pellet form, listed in Annexure C273A, with a nine (9) months' release period and having Nitrogen: Phosphorus: Potassium (N:P:K) ratios of 6.3 : 1.8 : 2.8.

Quality

(d) Mulch

- 1. All mulches used for landscape planting shall consist of organic material complying with the requirements of AS 4454. Mulch shall be composted or pasteurised as indicated in Annexure C273A. The use of other materials as ground cover shall be as indicated on the design plans and approved by Certifying Engineer. **Quality**
- 2. A 10 kilogram sample of mulch proposed by the Subdivider shall be submitted for approval to the Certifying Engineer two (2) weeks before its intended use. The mulch subsequently used shall be consistent in every respect with the sample approved by the Certifying Engineer. **Sample**

(e) Plant Material

- 1. The Subdivider shall obtain all plants from a nursery located in an area having a similar climate to the site of the Works. **Source**
- 2. There shall be no substitution of any species without the Certifying Engineer's approval. All plant material shall be true to species and sizes. Plants shall be healthy, of good form, not soft or forced and with large robust root systems. They shall not be rootbound and shall be free from disease and insect pests. All container soil mix shall contain between 20 per cent and 25 per cent clay by volume. Trees shall have a single leading shoot. For hardening off purposes, all plants shall be delivered to a site within the locality of the Subdivision at least four (4) weeks before planting out. Plant root systems shall be maintained moist at all times with particular attention being paid to watering during the on-site period before and during planting. Plant stock shall be classified as indicated in Table C273.2, and planted in accordance with the design plans. **Quality**

| | Type or Stock | | | | |
|---|--------------------|--------------------|--------------------|----------------|----------------|
| | Forestry Tube | Gro-Tube | Semi Advanced | Advanced Stock | Super Advanced |
| Plant Container: dia (mm) depth (mm) | 50 75 | 140 140 | 200 200 | 45L | 100L |
| Plant Height (mm) (leaf & stem) | 200 min 300 max | 250 min 400 max | 350 min 400 max | 1.8m | 2.4m |
| Planting Holes: side dia (mm) depth (mm) | 200 200 | 200 200 | 300 300 | 500 500 | 700 700 |
| Number of Fertilizer Pellets | 2 | 3 | 5 | 5 | 7 |

Table C273.2 - Plant Stock

(f) Stakes

- 1. All stakes shall be 50mm square by 2400mm long hardwood and sharpened at one (1) end. **Size**

C273.10 PLANTING**(a) Mass Planting in Mulched Bed**

1. The area to be planted shall be sprayed with herbicide, as specified under Clause C273.05(a). Sprayed areas shall remain undisturbed for two (2) weeks. Alternatively, where approved by Certifying Engineer, a synthetic weed blocking fabric shall be applied to the area to be planted. **Herbicide/
Weed Blocking
Treatment**
2. The surface shall be ripped at 500mm centres to a depth of 300mm and the top 200mm of the planting bed broken up by cultivation to a maximum size of 50mm. Where required topsoil shall be imported to a depth of 300mm. Mulch, 100mm thick, shall be spread over the planting bed. After removal of the localised mulch, planting holes shall be excavated to the dimensions and depths as shown in Table C273.2 and the material removed. **Surface
Preparation**
3. The specified number of fertilizer pellets as shown in Table C273.2 shall be placed beside the rootball of each plant. **Fertilizer
Pellets**
4. The planting hole shall be backfilled with topsoil complying with Clause C273.04(a) and compacted by foot up to surface level, care being taken to avoid mixing mulch with topsoil. A stake shall be driven 600mm deep and 200mm clear of each 'Advanced' and 'Super Advanced' size stock and the stock tied to it by a strip of 50mm wide hessian webbing. **Backfill and
Staking**
5. Each backfilled hole shall receive 10 litres of water before the mulch is respread over the disturbed area. The mulch shall be left just clear of the plant stem. **Watering and
Mulching**

(b) Individual Planting

1. Planting holes shall be excavated to dimensions and depths as shown in Table C273.2 and the material spread evenly around each hole **Planting Holes**
2. The specified number of fertiliser pellets, as shown in Table C273.2, shall be placed beside the rootball of each plant. **Fertilizer
Pellets**
3. The planting hole shall be backfilled with topsoil complying with Clause C273.04(a) and compacted by foot up to surface level. A stake shall be driven 600mm deep and 200mm clear of each 'Advanced' and 'Super Advanced' size stock and the stock tied to it by a strip of 50mm wide hessian webbing. **Backfill and
Staking**
4. Each backfilled hole shall receive 10 litres of water. **Watering**
5. Weed infestation for a distance of 800 mm surrounding each proposed planting shall be killed by spraying with a herbicide as specified in Clause C273.05(a). All due care shall be taken to avoid damage caused by contact between herbicide and the plant by means of spray drift etc. Alternatively, where approved by Council, a synthetic weed blocking fabric shall be applied to the 800mm area surrounding each proposed planting. **Herbicide/
Weed Blocking
Treatment**
6. Immediately after planting, mulch 100mm thick, starting just clear of the plant stem, shall be spread over an area of 600mm radius surrounding the plant. **Mulch**

C273.11 CARE OF LANDSCAPE PLANTING

1. The Subdivider shall water all plants, from the time of planting, at the rate of 10 litres per plant every third (?) day for the first twelve (12) weeks. **Watering**

2. Missing plants, dead plants and plants nominated by the Certifying Engineer as unhealthy shall be replaced by the Subdivider. Replacement plants shall be of similar size and quality and of identical species and variety to the plant being replaced. The cost of replacement shall be borne by the Subdivider. **Replacement Plants Subdivider's Cost**

3. Weed and grass growth in mulched areas shall be killed by treatment with herbicide in accordance with the manufacturer's instructions at monthly intervals during the construction period and subdivision Defects Liability Period. Contact of the herbicide with the new plants shall be avoided and any damage repaired or damaged plant material replaced by the Subdivider. **Weed Control Subdivider's Cost**

SPECIAL REQUIREMENTS

C273.12 PROTECTION OF INFRASTRUCTURE

1. Root control barriers are required for all trees planted within 2m of paved surfaces, kerbing, underground services or similar infrastructure. Refer S.D.701. **Root Control Barriers**

C273.13 RESERVED

C273.14 RESERVED

C273.15 RESERVED

C273.16 RESERVED

LIMITS AND TOLERANCES

C273.17 SUMMARY OF LIMITS AND TOLERANCES

1. The limits and tolerances applicable to the various clauses in this Specification are summarised in Table C273.3 below.

| Item | Activity | Limits/Tolerances | Spec Clause |
|------|---------------------------|---|----------------------------------|
| 1. | Topsoil | | |
| | a) Organic Content | >3% by mass | C273.04a |
| | b) pH | >5.5 <7.5 | C273.04a |
| | c) Soluble Salt | <0.06% by mass | C273.04a |
| 2. | Turf | Widths >300mm. | C273.04d |
| 3. | Vegetable Mulch | | |
| | a) Material | maximum size <10mm | C273.04f |
| | b) Paper Pulp | <50% by mass of total mulch | C273.04f |
| 4. | Topsoiling | Minimum compacted thickness at any location of 30mm | C273.05b C273.06c C273.07a |
| 5. | Straw Mulching | | |
| | a) Straw Mat | Finished thickness >20mm. | C273.06e |
| 6. | Landscape Planting | | |
| | a) Temperature | Planting not to be undertaken when temperatures >35°C or <10°C. | C273.08 |
| 7. | Mulch | | |
| | a) Fines | Shall not exceed 5% by volume. | C273.09d |
| | b) Woodchip | Maximum size <50mm. | C273.09d |
| 8. | Plant Material | | |
| | a) Container Soil Mix | Contain >20% <25% by volume of clay. | C273.09e |

Table C273.3 - Summary of Limits and Tolerances

ANNEXURE C273A

LANDSCAPING MATERIALS

| MATERIAL | TYPE | MINIMUM APPLICATION RATE |
|---------------------------------|--|---|
| 1. HERBICIDE * | 'Roundup' | 9 litres/200 litres water/ha |
| 2. SEED | | |
| a) Grass | Rye Corn (April-August) or Japanese Millet (September-March) Hulled Couch Red Clover (Inoculated) White Clover (Inoculated) "Elka" Perennial Rye | 60 kg/ha 60 kg/ha 5 kg/ha 5 kg/ha 5 kg/ha 5 kg/ha |
| (b) Native | Acacia dealbata Acacia buxifolia Acacia decurrens Acacia pravissima Leptospermum lanigerum Hardenbergia violacea Kennedia prostrata Acacia implexa Banksia marginata Bursaria spinosa Callistemon pallidus Dodonaea viscosa | 4 kg/ha 1 kg/ha 1 kg/ha 1 kg/ha 1 kg/ha 500 g/ha 500 g/ha 200 g/ha 200 g/ha 200 g/ha 200 g/ha 200 g/ha |
| 3. TURF GRASS | | |
| (a) Medians | Couch | Refer to design plans |
| (b) Verges/Footpaths | Buffalo | Refer to design plans |
| (c) Other Areas | Couch | Refer to design plans |
| 4. FERTILISER * | | |
| (a) Vegetation Slopes/Drains | of Dynamic Lifter 'Nitro" 'Kokei' pellets | 1000 kg/ha Refer Table C273.2 |
| (b) Landscape Planting | | |
| 5. WETTING AGENT * | 'Aquasoil' | 1 litre/1000 litres of mix water |
| 6. PESTICIDE * | | |
| (a) Liquid | 'Lorsban 500 EC' | 5 litres |
| (b) Powder | 'Lorsban 250 W' | 10 kg |
| 7. ORGANIC FIBRE MAT * | 'Sta-firma' (light grade) | - |
| 8. MULCH | Composted/Pasteurized | 100mm thick |

* Material shall be as listed or equivalent as approved by Council.