TWEED SHIRE COUNCIL

DEVELOPMENT
CONSTRUCTION
SPECIFICATION

C211

CONTROL OF EROSION AND
SEDIMENTATION

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This document is named “Tweed Shire Council, Development Construction Specification C211 - Control of Erosion and Sedimentation”

ORIGIN OF DOCUMENT, COPYRIGHT

This document was originally based on AUS-SPEC - Development Construction Specification C211 - Control of Erosion and Sedimentation, February 2002 (Copyright SWR-TM). Substantial parts of the original AUS-SPEC document have been deleted and replaced in the production of this Tweed Shire Council Development Specification. The parts of the AUS-SPEC document that remain are still subject to the original copyright.

VERSIONS, C211 CONTROL OF EROSION AND SEDIMENTATION

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CONTROL OF EROSION AND SEDIMENTATION

DEVELOPMENT CONSTRUCTION SPECIFICATION C211

CONTROL OF EROSION AND SEDIMENTATION

GENERAL

C211.01 SCOPE

1. This Specification is for the construction of structures and the implementation of measures to control erosion and sedimentation in accordance with the approved Erosion and Sediment Control Plan (ESCP) or Storm Water Management Plan (SWMP) included in the design plans. These may be temporary or permanent.

2. The Subdivider shall plan and carry out the whole of the Works to avoid erosion and sedimentation of the site, surrounding country, watercourses, waterbodies and wetlands.

3. All measures for erosion and sedimentation control shall be designed, installed and maintained by the Subdivider in such a manner so as not to present a potential hazard to any person or property.

C211.02 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.

   (a) Council Specifications

   D7       - Stormwater Quality
   C212     - Clearing and Grubbing
   C213     - Earthworks
   C224     - Open Drains, Including Kerb and Gutter
   C273     - Landscaping

   (b) NSW State Legislation


   (c) Other

   NSW Department of Housing (DOH)
   NSW Department of Land and Water Conservation
   NSW Environmental Protection Authority
   - “Treatment Techniques” November 1997
   The Institution of Engineers, Australia – Queensland Division

   (d) Standard Drawings that apply to this Section:
C211.03 EROSION AND SEDIMENTATION CONTROL PLAN

1. All works that involve any disturbance to the surface of land are to be carried out in accordance with an approved Erosion and Sediment Control Plan (ESCP).

Erosion and sediment control shall be carried out in accordance with an Erosion and Sediment Control Plan (ESCP) prepared in accordance with specification D7 Stormwater Quality.

C211.04 EROSION AND SEDIMENTATION CONTROL MEASURES

1. Erosion and sedimentation control measures shall be in accordance with the ESCP.

C211.05 EARTHWORKS FOR EROSION AND SEDIMENTATION CONTROL BASINS

1. Earthworks for erosion and sedimentation control basins shall be to the planned levels and dimensions shown on the approved design plans.

2. The entire storage and embankment foundation area of erosion and sedimentation control basins shall be cleared in accordance with the Specification for CLEARING AND GRUBBING and shall be stripped of topsoil and any unsuitable material under embankments removed in accordance with the Specification for EARTHWORKS.

3. The embankments shall be constructed in accordance with the specification for EARTHWORKS.

C211.06 INLETS, SPILLWAYS AND LOW FLOW OUTLETS FOR SEDIMENTATION CONTROL BASINS AND SEDIMENT TRAPS

1. Inlets and spillways shall be constructed in accordance with the approved ESCP.

C211.07 DROP INLET SEDIMENT CONTROL

1. Drop inlet sediment traps and inlet control banks shall be constructed on completion of each gully pit unless otherwise directed by the Certifying Engineer. These drop inlet sediment traps and inlet control banks are additional to the temporary sedimentation control measures that may be required under Clause C211.10 during construction of the gully pits.

2. The drop inlet sediment traps are intended to remove sediment from the surface flow before it enters the drainage system. The inlet control banks shall be constructed as required to prevent the surface flows bypassing the gully pits.

3. The drop inlet sediment traps shall be constructed as shown on the design plans. The associated inlet control banks shall consist of at least two (2) courses of sandbags containing a 10:1 sand/cement mix. The bags shall be keyed at least 25 mm into the surface, dampened sufficiently to ensure hydration of the cement and tamped lightly to provide mechanical interlock between adjacent bags.

C211.08 CLEANING SEDIMENTATION CONTROL STRUCTURES

1. The Subdivider shall clean out permanent sedimentation control structures, cleaning out whenever the accumulated sediment has reduced the capacity of the structure by 70 per cent or more, or whenever the sediment has built up to a point where it is less than 300 mm below the spillway crest. All permanent sedimentation control structures shall be cleaned out by the Subdivider prior to Practical Completion of the Works.
2. Accumulated sediment shall be removed from permanent sedimentation control structures in such a manner as not to damage the structures. The sediment removed shall be disposed of in such locations that the sediment will not be conveyed back into the construction areas or into watercourses. The Subdivider shall provide and maintain suitable access to permanent sedimentation control structures to allow cleaning out in all weather conditions.

C211.09 RESERVED

TEMPORARY EROSION AND SEDIMENTATION CONTROL

C211.10 GENERAL
1. The Subdivider shall ensure that effective erosion and sedimentation control is provided at all times during the subdivision works and until all disturbed surfaces are fully restored or revegetated to the satisfaction of the Certifying Engineer.

Subdivider's Responsibility

Pollutant Free

2. Runoff from all areas where the natural surface is disturbed by construction, including access roads, depot and stockpile sites, shall be free of pollutants. The Subdivider shall be responsible for all temporary erosion and sedimentation control measures required for this purpose.

Maintenance by Subdivider

3. The Subdivider shall provide and maintain slopes, crowns and drains on all excavations and embankments to ensure satisfactory drainage at all times. Water shall not be allowed to pond on the works unless such ponding is part of an approved ESCP.

Maintenance by Subdivider

C211.11 TEMPORARY DRAINS
1. Runoff from areas exposed during the work shall be controlled in accordance with the approved ESCP.

Control of Runoff

C211.12 TEMPORARY SEDIMENT TRAPS
1. Temporary sediment-trapping devices shall be provided during construction in accordance with the approved ESCP to remove sediment from sediment-laden runoff before it enters natural watercourses or adjacent land.

Sediment Traps

C211.13 BATTER PROTECTION
1. The Subdivider shall take all necessary action to protect batters from erosion during the subdivision works.

Subdivider's Responsibility

Scour Control

2. Scour of newly-formed fill batters during and after embankment construction shall be minimised by diverting runoff from the formation away from the batter until vegetation is established.

Scour Control

C211.14 MAINTENANCE AND INSPECTION
1. The Subdivider shall be responsible for operation, monitoring, cleaning out, maintenance, repair and rectification of erosion and sediment control works as specified in the approved ESCP.

Subdivider's Responsibility

Access

2. The Subdivider shall provide and maintain access from within the road reserve or from other locations acceptable to the Certifying Engineer, for cleaning out sedimentation control works.

C211.15 REMOVAL
1. All temporary erosion and sedimentation control works shall be removed by the Subdivider when revegetation is established on formerly exposed areas before the end of the subdivision works. All materials used for the temporary erosion and sedimentation control works shall be removed from the site.

Subdivider's Responsibility
SPECIAL REQUIREMENTS

C211.16 RESERVED
C211.17 RESERVED
C211.18 RESERVED
C211.19 RESERVED