Standard Construction Details - Series 600

April 2017
Standard Construction Details (SCDs) – Series 600

TII Publications contains Standard Construction Details (SCDs) for use on National Road schemes in Ireland. This composite document brings together all the Series 600 SCDs from TII Publications current at the date of this document’s publication, into a single location for convenience.

Every effort has been made to keep this composite document updated and available from the TII Publications website (http://www.tiipublications.ie/). Please note that the SCD drawings available from the TII Publications website (individually linked below) are the controlled versions for all SCDs.

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Series 600 Earthworks

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WHERE THE DEPTH OF FILL ADJACENT TO THE CUT/FILL LINE IS ≤ 1.5m, THE FILL MATERIAL IS TO BE CAPPING.

CAPPING DEPTH AS SPECIFIED IN APPENDIX 6/7 FOR THE PARTICULAR FILL AREA.

EXISTING GROUND LEVEL AFTER TOPSOIL STRIP

CAPPING

1.5m

EARTHWORKS OUTLINE

CAPPING DEPTH
AS SPECIFIED IN APPENDIX 6/7 FOR THE PARTICULAR CUT AREA

EXISTING GROUND LEVEL
AFTER TOPSOIL STRIP

EXCAVATE AND BACKFILL WITH CAPPING TO THE DEPTH AND DISTANCE SPECIFIED IN APPENDIX 6/7.
1. The maximum permitted slope angle shall be in accordance with the specification and the earthworks design.

2. The rounding of rock cutting slopes shall be determined based on the permanent safety barrier requirements for that slope.
NOTES:

1. THE EXCAVATION IS TO BE CARRIED OUT A MINIMUM OF 3.0m FROM THE EARTHWORKS TOE ON THE UPSTREAM AND DOWNSTREAM ENDS OF THE WATERCOURSE.

2. A CLASS 2A PLUS SHALL BE PROVIDED A MINIMUM OF 3.0m FROM THE EMBANKMENT TOE ON THE UPSTREAM AND DOWNSTREAM ENDS OF THE WATERCOURSE.

PROFILE OF EXISTING WATERCOURSE

EXCAVATION OUTLINE – ALL SOFT AND ORGANIC SOILS TO BE REMOVED (300mm MIN). SLOPE BENCHING AS SPECIFIED IN APPENDIX 6/3

EXISTING GROUND PROFILE

GEOTEXTILE SEPARATOR (CLAUSE 609) AS SPECIFIED IN APPENDIX 6/8

EXCAVATION TO BE BACKFILLED AS SPECIFIED IN APPENDIX 6/8
NOTES:

1. BENCING SHALL BE CARRIED OUT ON EMBANKMENT FOUNDATIONS WHERE THE SLOPE OF EXISTING GROUND EXCEEDS 1(V):5(H).

2. BENCH DIMENSIONS SHALL BE AS SPECIFIED IN APPENDIX 6/3 AND SHALL NOT RESULT IN A SLOPE ANGLE STEEPER THAN 1(V):2.5(H) MEASURED FROM THE TOE TO THE CREST OF THE SLOPE.

DRAINAGE LAYER WHERE REQUIRED IN APPENDIX 6/3

EXISTING GROUND PROFILE

GENERAL EMBANKMENT FILL

VARIIES

2.5m (TYP.)

TYP. 2% FALL (5% MAX.)

1.0m (TYP.)

1m MIN

GROUND TREATMENT SHALL FOLLOW THE REQUIREMENTS OF APPENDIX 6/3

INTERCEPTOR DITCH WHERE REQUIRED (SEE DRAINAGE DRAWINGS)
NOTES:

1. WHERE DETAILS OF FLOOD LEVEL ARE NOT AVAILABLE, A MINIMUM OF 1.0m OF CLASS 6B/6C SHALL BE USED IN AREAS PRONE TO FLOODING.
1. The maximum permitted rock slope angle shall be as specified in Appendix 6/3.
NOTES:

1. Bench dimensions shall be as specified in Appendix 6/3 and shall not result in a slope angle steeper than 1(V):
2(H) measured from the toe to the crest of the slope.

FULL EXTENT OF TOPSOIL AND ANY ADDITIONAL VEGETATIVE COVER TO BE REMOVED. ADDITIONAL REMOVAL OF VEGETABLE MAY BE REQUIRED AS SPECIFIED IN APPENDIX 6/3.

FOUNDATION TREATMENT AS SPECIFIED IN APPENDIX 6/3.
NOT TO SCALE

PERMEABLE BACKING IN ACCORDANCE WITH CLAUSE 513
CLASS 6N1, 6N2 OR 6P COMPLYING WITH TABLE 6/1

TRANSITION ZONE
(SEE NOTE 2)

STRUCTURE CONSTRUCTED IN ADVANCE OF EARTHWORKS

TRANSITION ZONE
(SEE NOTE 2)

PERMEABLE BACKING IN ACCORDANCE WITH CLAUSE 513
CLASS 6N1, 6N2 OR 6P COMPLYING WITH TABLE 6/1

1.5
1 (MAX SLOPE ANGLE)

NOTES:

1. THE WIDTH OF THE TRANSITION ZONE SHALL BE SHOWN ON THE RELEVANT
STRUCTURES DRAWINGS.

2. MINIMUM WIDTH OF THE TRANSITION ZONE SHALL BE DETERMINED BY:
   a) THE REQUIREMENTS OF GOOD COMPACTION, SO AS TO REDUCE TO A MINIMUM
      DIFFERENTIAL SETTLEMENT BETWEEN THE EARTHWORKS AND THE STRUCTURE AND
   b) THE NEED TO SATISFY THE PRINCIPLES USED IN THE CALCULATION OF THE EARTH
      PRESSURE ON THE STRUCTURE
      BUT SHALL NOT BE LESS THAN 1.0m.

3. THE GEOMETRY OF THE STRUCTURE IS SHOWN FOR DIAGRAMMATIC
   PURPOSES ONLY.