

CASEY STANDARD WATER SENSITIVE URBAN DESIGN DRAWINGS REQUIREMENTS

CLAUSE 56 OF THE PLANNING SCHEME REQUIRES THAT ALL NEW DEVELOPMENTS COMPLY WITH BEST PRACTICE STORMWATER QUALITY OBJECTIVES AS STATED IN THE URBAN STORMWATER BEST PRACTICE ENVIRONMENTAL GUIDELINES (1999). THIS DRAWING SET HAS BEEN PREPARED TO AID CONSULTANTS AND DEVELOPERS IN REGARD TO MEETING THIS REQUIREMENT.

THE DRAWINGS CONTAINED IN THIS SET ARE NOT EXHAUSTIVE. CHANGES AND ADDITIONS CAN BE MADE TO SUIT DIFFERENT SITE REQUIREMENTS AND PROJECTS PROVIDED COUNCIL AGREES TO THESE CHANGES. THE AIM OF THE DRAWING SET IS TO CREATE SUCCESSFUL, LOW MAINTENANCE WSUD PROJECTS WHICH WILL BE SELF SUSTAINING WELL INTO THE FUTURE AND WHICH WILL SUPPLEMENT THE LOCAL LANDSCAPE AND ECOLOGY OF URBAN ENVIRONMENTS.

DESIGN

1. AS INDICATED ON THE STANDARD DRAWINGS DIMENSIONS OF SWALES AND ROAD RESERVE WIDTHS ARE MINIMUM ONLY. THE DESIGNER IS RESPONSIBLE FOR SIZING THE SWALES TO CATER FOR THE 5 YEAR ARI FLOW AND UNDERGROUND PIPE SYSTEM FOR BOTH WATER QUALITY TREATMENT. THE TOTAL ROAD RESERVE MUST BE DESIGNED TO HANDLE A 100 YEAR EVENT.
2. THE DESIGNER IS DIRECTED TO USE THE MELBOURNE WATER CORPORATION W.S.U.D. ENGINEERING PROCEDURES (STORMWATER) MANUAL TO ADEQUATELY SIZE SWALES, BIORETENTION AND NODAL SYSTEMS. DRAINAGE SYSTEM TO CATER FOR RUNOFF FLOWS FROM AUSTRALIAN RAINFALL AND RUNOFF
3. SWALES CANNOT BE USED IN DRAINAGE EASEMENTS WITHIN LOTS UNDER ANY CIRCUMSTANCES.
4. SOIL TESTS TO OCCUR PRIOR TO THE DESIGN OF W.S.U.D ELEMENTS. W.S.U.D ELEMENTS MAY NOT BE USED UNDER ANY CIRCUMSTANCES IN AREAS WITH CLAY SUBSURFACES.
4. THE DESIGNER MUST MAKE PROVISION FOR THE FLUSHING OUT AND/OR RODDING OF THE BIORETENTION SYSTEMS PERFORATED PIPES.
5. EARTHWORKS CONSTRUCTION TOLERANCES SHALL BE +/- 10-20 mm.
6. IF LOT DENSITIES ARE SUCH THAT LOT FRONTAGES ARE LESS THAN 14 – 15m STREETScape SYSTEMS ARE CONSIDERED INAPPROPRIATE AND THE DESIGNER IS DIRECTED TO PROVIDE A NODAL END OF LINE TREATMENT.
7. ALL CULVERT CROSSING AND INLETS TO THE PIPE SYSTEM DOWN STREAM OF BIORETENTION SWALES ARE TO BE SET 100mm ABOVE THE INVERT OF THAT SWALE TO FACILITATE PONDING.
8. THE IMPERVIOUS MEMBRANE SURROUNDING THE LOWER SECTION OF THE BIORETENTION TRENCH IS NOT REQUIRED IF THE TRENCH IS GREATER THAN 2.40m OFFSET FROM THE BACK OF KERB AND THE SURROUNDING GROUND IS NON DISPERSIVE.
9. EVEN THOUGH VELOCITIES WITHIN THE SWALE SYSTEM SHOULD BE MINIMAL, TO ACHIEVE SUITABLE WATER QUALITY TREATMENT, THE DESIGNER SHOULD CONSIDER ROCK BEACHING EROSION PROTECTION AROUND INLET AND OUTLET STRUCTURES.
10. EROSION PROTECTION IS TO BE PROVIDED ON BOTH SIDES OF, SWALES IMMEDIATELY AFTER TOP SOILING, IN THE FORM OF A 1.0m WIDE STRIP OF INSTANT TURF. REFER DETAIL PROVIDED.

LANDSCAPING NOTES:

- 1, LANDSCAPE DESIGNERS ARE DIRECTED TO USE THE RECOMMENDED PLANT LIST PROVIDED IN THE MELBOURNE WATER CORPORATION WSUD ENGINEERING PROCEDURES : STORMWATER MANUAL.
2. COUNCILS LANDSCAPE SECTION MUST APPROVE THE PLANT SPECIES PRIOR TO CONSTRUCTION..
3. TREE ROOT BARRIERS ARE TO BE PROVIDED WHERE TREES ARE IN THE VICINTY OF BIORETENTION TRENCHES. "TREEMAX TYPE 1400" OR EQUIVALENT IS TO BE USED.
4. WHERE PLANTED SWALES OR BIORETENTION SWALES ARE ADJACENT TO EXOTIC FLORA, HARD WOOD EDGING SHALL BE SUPPLIED TO DELINEATE A MAINTENANCE EDGE.
5. VEGETATED BIORETENTION SWALES ARE TO BE TOPSOILED TO A MINIMUM DEPTH OF 200mm.

CITY OF CASEY

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NOTES AND CONSTRUCTION REQUIREMENTS



MANAGER OF ENGINEERING &
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AMENDMENTS:

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