

## **STA SWALE - CARPARK BIO-RETENTION - SECTION**

## **GENERAL NOTES & SPECIFICATION**

- 1. GENERAL DESIGN: STA BIORETENTION SYSTEM TO BE DESIGNED IN ACCORDANCE WITH "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN).
- 2. CONSTRUCTION: STA BIORETENTION SYSTEM TO BE CONSTRUCTION IN ACCORDANCE WITH "CONSTRUCTION AND ESTABLISHMENT GUIDELINES" (WATER BY DESIGN)
- 3. ENSURE SWALES ARE LOCATED IN ACCORDANCE WITH PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- 4. SWALE DESIGN TO PROVIDE FOR SAFE CONVEYANCE OF MINOR FLOWS (2 YEAR ARI) AND NON-DAMAGING FLOW VELOCITIES IN MAJOR FLOODS (50 YEAR ARI)
- 5. SWALE DIMENSIONS AND/OR FIELD INLET LEVEL OF PIT TO PROVIDE STORAGE CAPACITY FOR 3 MONTH ARI OR AS OTHERWISE SPECIFIED BY HYDRAULIC ENGINEER.
- 6. AVOID TRIP HAZARD BY CAREFUL PLACEMENT OF COBBLES AROUND FIELD INLETS.
- 7. ENSURE EVEN GRADE FALLS MIN. 1:50 TO SWALE FROM CARPARK PAVEMENTS.
- 8. ENSURE SWALES ARE LOCATED IN ACCORDANCE WITH DETAILED LANDSCAPE
- PLAN, AND SUBDIVISION AND DEVELOPMENT GUIDELINES. 9. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).- PLACE A SINGLE BIDIM A24 GEOFABRIC LAYER (OR APPROVED EQUIVALENT) OVER THE INSITU BASE MATERIAL AND AGGREGATE. THE 200 SAND FILTER CAN THEN BE BACKFILLED.

- 10. WHEN BACKFILLING THE BIO-RETENTION FACILITY, FIRST PLACE 80 TO 100 OF PLANTING SOIL OVER THE SAND THEN CULTIVATE/TILL THE SAND/PLANTING SOIL TO CREATE A GRADUATION ZONE.
- 11. BACKFILL THE REMAINDER OF THE PLANTING SOIL TO FINAL GRADE. PLANTING SOIL IS TO BE PLACED IN 300 TO 450 LIFTS AND LIGHTLY COMPACTED.
- 12. DRAINAGE PIPES SHALL BE FLUSH JOINTED SLOTTED FRC. ENSURE MINIMUM LONGITUDINAL GRADE OF 1:50.
- 13. DRAIN TO LANDSCAPE OR TO STORMWATER INLET LOCATION SHOWN ON PLAN. FIELD INLET AND CONNECTION TO STORM WATER LINE TO HYDRAULIC ENGINEERS SPECIFICATIONS.
- 14. PROVIDE PIPE CLEANOUT OR RODDING POINTS AT MINIMUM 60m CENTRES.
- 15. VEGETATION: PLANT SPECIES, TO BE DETERMINED ON A PROJECT BY PROJECT BASIS. PLANT SPECIFICATION AND DENSITY SHALL BE IN ACCORDANCE WITH "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN) AND BRISBANE CITY COUNCIL'S INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY. TREE SPECIES TO BE SELECTED AS PER THE CENTRES DETAIL DESIGN MANUAL AND ALSO CONSIDERING THEIR SUITABILITY FOR WET AND DRY CONDITIONS. VEGETATION TO BE INSTALLED ON 300 MINIMUM TOPSOIL LAYER.
- 16. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).



THE PURPOSE OF THIS STANDARD DRAWI OUTCOMES OF THE BRISBANE CITY PLAN 201 PURPOSE OF THIS STANDARD DRAWING FOR APPROPRIATELY QUALIFIED DESIGNER AND/

> BRISBANE CITY COU STORMWATER TR BIORETE

SEISBA I-CIT

CARPARK

SERVICES PRIOR TO

FIELD INLET STRUCTURE - REFER BSD-8091 AND

250 COARSE SAND FILTER LAYER

SOIL AS SPECIFIED - MIN. 750 DEPTH - PROFILE DEPTH AND SOIL TYPE VARIES WITH INVERT

100-150 DEPTH WASHED RIVER COBBLES NOM. - 40-75mm Ø. FINISH 25 BELOW ADJACENT F.S.L. ENSURE 1:6 GRADE TO SWALE FORM.

CARPARK AS SPECIFIED. REFER BSD-2001 FOR CONCRETE EDGE VARIATIONS.

SINGLE LAYER GEOFABRIC (BIDIM A24 OR

ENSURE SUB-GRADE FALLS TOWARDS DRAINAGE PIPE.

SAND/PLANTING SOIL GRADUATION ZONE.

Ø300 CLASS 1 FRC SLOTTED PIPE WITH SINGLE LAYER GEOFABRIC. 150 CLEARANCE OF FREE DRAINING 10-20mm BLUE METAL AGGREGATE. HYDRAULIC ENGINEER CERTIFICATION

NG IS TO PROVIDE TYPICAL DETAILS THAT SUPPORT THE DESIRED 14 AND ASSOCIATED PLANNING SCHEME POLICIES. THE FITNESS FOR R A SPECIFIC PROJECT SHOULD BE ASSESSED AND ACCEPTED BY AN OR REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).	
JNCIL STANDARD DRAWING	PUBLISH DATE JUN 2023
REATMENT ASSET (STA) ENTION SWALE	1:20 DRAWING NUMBER BSD-8338

ORIGINAL SIZE

A3

REVISION

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