BIORETENTION SWALE NOTES:

1. Bioretention Swale may be used in the Centre Median and in the Footpath at Park Frontages. Bioretention Swales shall not be used in the Footpath at Residential Frontages.

2. For Bioretention Swale Field Inlet Details refer to BSD-8308, for Verge Swales and Median Swales refer to BSD-8308.

3. The depth velocity product (d √ v) in the Swale shall be limited in accordance with QWMD Section 7.4.2 General Requirements for Pedestrian Safety (typically 0.4m/s or 0.6m/s in high risk areas).

4. Bioretention filter media, transition layer and drainage layer in accordance with the "Guidelines for Soil Media in Bioretention Systems", facility for advancing water bioretention (FAMS).

5. 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 300mm minimum topsoil layer.

6. Mulch: 50-75mm mulch layer to be organic and friable, such as sugarcane. Use jute mesh or similar biodegradable netting over strips of mesh to be buried in 300mm trench. Each join is to be overlapped by 150mm. 300mm biodegradable pads are to be used and installed at 500mm centres or as per manufacturers specification.

7. Filter cloth: Non-woven geotextile. Filter cloth not to be placed between any filter layers. Impermeable liner may be required adjacent to roads and may also be required subject to soil testing requirements in accordance with the "Bioretention technical design guidelines" (water by design).

8. General Design: Bioretention System to be designed in accordance with "Bioretention technical design guidelines" (water by design).

9. General Construction: Bioretention System to be constructed in accordance with water by design's "Construction and Establishment Guidelines: Swales, Bioretention Systems and Wetlands".

10. Erosion Control and Public Safety Risks need to be considered and managed. Vegetated Swales should be no steeper than 1:4 if used in the streetscape.

11. Underdrain: Slotted Rigid Pipe (UPVC, HDPE, or similar to AS 2439.1) or approved equivalent. 0.5m minimum grade, 2-3mm slotted, diameter typically 100 to 150mm. Pipe joints shall be sealed into pits using grout or other approved waterproof seal. 300mm wide drain layer (fine aggregate) cover over slotted pipe.

12. Street furniture and layout to be determined on a project by project basis.