**Potential MDC for Permeable Pavement**

for MDC Team discussion on January 26, 2015

(Blue font = from Agreed-Upon Infiltration MDC)

1. SITING. Permeable pavement shall not be installed in the portions of hotspot areas where toxic pollutants are stored or handled (some examples of hotspots are listed in Section 18.3).

2. SEPARATION FROM THE SHWT. The bottom of infiltration systems shall be a minimum of two feet above the SHWT. However, the separation can be relaxed to one foot when the applicant can prove that the water table will subside to its pre-storm elevation in five days or less.

3. SOIL SUBGRADE SURFACE. The surface of the soil subgrade shall have a slope of less than or equal to two percent (level). Terraces and baffles may be installed to achieve a level subgrade.

4. AGGREGATE. Washed aggregate base materials shall be used.

5. PAVEMENT SURFACE. Designers who propose pavement surfaces other than Permeable Interlocking Concrete Pavers (PICP), Pervious Concrete (PC) and Porous Asphalt (PA) shall demonstrate that the proposed design functions adequately hydraulically and structurally in the long term.

6. PERMEABLE ASPHALT. For permeable asphalt, a modified asphalt binder as specified by the Carolina Asphalt Pavement Association (CAPA) shall be used to ensure long term durability and permeability.

7. PERMEABLE CONCRETE. For Permeable Concrete, the mix design shall be in accordance with the latest version of ACI 522.1 *Specification for Pervious* *Concrete*. For PA, the mix design shall be in accordance with NAPA’s *Porous Asphalt* *Pavements for Stormwater Management* and CAPA’s *Porous Asphalt Guide Specification*.

9. RUNOFF FROM ADJACENT BUA. Permeable pavement may be designed to receive runoff from adjacent BUAs provided that the there is a well-designed system to convey the runoff from the BUA to the permeable pavement.

10. RUNOFF FROM ADJACENT PERVIOUS AREAS. Runoff from adjacent pervious areas shall be prevented from reaching the permeable pavement. Exceptions such as site restrictions on redevelopment projects shall be reviewed on a case-by-case basis.

13. CONSTRUCTION SEQUENCE. Permeable pavement shall not be installed until the upslope and adjoining areas are stabilized. After installations, barriers shall be installed to prevent construction traffic from driving on the pavement an infiltrating permeable pavement system shall be capable of infiltrating the

12. DRAW DOWN TIME AND SOIL INVESTIGATION. Infiltrating pavement systems shall be designed to completely dewater the treatment volume to the bottom of the infiltration device within 72 hours. A site-specific soil investigation shall be performed to establish the hydraulic properties and characteristics of the area in which the infiltration device will be sited.

13. CONTRACTORS. For PICP, PA and PC, the use of certified and qualified contractors in accordance with industry standard documents shall be required and noted on both project plans and specifications.

14. SOIL PREPARATION. In HSG B, C and D, the surface of the soil subgrade under infiltrating permeable pavement should be scarified, ripped or trenched immediately prior to aggregate base placement to maintain the pre-construction subgrade infiltration rate.

15. PLACEMENT OF INFILTRATION MEDIA. In-situ soils may be removed and replaced with infiltration media or infiltration media may be placed on top of in-situ soils if the applicant can demonstrate that the modified soil profile allows for drainage of the treatment volume within 72 hours.

16. OBSERVATION WELL. For infiltrating pavement surfaces located under the ground surface, a minimum of one inspection port shall be provided at the low point in the system unless the subgrade is terraced; in that case, there shall be one well for each terrace.

17. DETENTION SYSTEMS. Pavemetn systems may be designed to detain stormwater in the aggregate for a period of two to five days.

18. DOWNSPOUT OUTLETS. Downspout outlets or ground level impervious surfaces shall not drain more than 1,000 sf to a single point onto the permeable pavement.

19. GRADING WHEN DRY. The soil subgrade for the permeable pavement shall be graded when dry. The aggregate base and permeable surface course should be completed as quickly as possible to reduce risk of soil subgrade compaction.

20. EDGE RESTRAINTS. Edge restraints shall be provided around the perimeter of permeable interlocking grid pavers as well as anywhere permeable pavement (of any type) is adjacent to conventional asphalt.

21. PERMEABLE PAVEMENT SIGNAGE. Permeable pavement signage shall be clearly and permanently posted to prevent use by inappropriate vehicles, and the deposition and storage of particulate matter (except for single family residences, where signage is optional)**.**