Comment 1 - Item 1
On the 8th page of the pdf document emailed, appears a text change on Page 6-11 of Volume 1.

Currently Proposed Amendment: "However, no structures, impervious surfaces, fill, or water quality BMPs shall be placed in Zone 2 without SWMC approval."

Suggested Amendment: "However, no structures, impervious surfaces, fill in excess of 4:1 slopes, or water quality BMPs shall be placed in Zone 2 without SWMC approval."

Zone 2 Bufferyards are currently allowed to be disturbed by grading activities, then revegetated and maintained using grass or other vegetation. In almost every circumstance, the only reason to disturb a Zone 2 buffer is to begin a slope for fill necessary to construct a development outside of the stream buffers. There may be a rare instance where a Zone 2 buffer would be disturbed by cutting, but the majority of the time their disturbance is for the purpose of fill. All that said, I do understand the intent of adding the word fill into this sentence. It is to prevent steels slopes of 2:1 from being installed and eliminating the true intent of the Zone 2 Bufferyards. We would recommend that fill slopes be allowed...but not in excess of a 4:1 slope. This could allow for Zone 2 buffers to be disturbed, revegetated and utilized as "usable property", but also meet the intent of a grassy area for sheet flow runoff. It is our fear that by eliminating all fill practices in a Zone 2 Bufferyard, it would essentially create another non-disturbance buffer area, resulting in further land losses of our clients and other land developers.

Comment 1 - Item 2
This item did not appear in the proposed amendments but we feel that it should. In most areas of all four manuals, the required freeboard on stormwater ponds is 1 foot (measured from the 100 year water surface). This is the current "rule of thumb" that is enforced by the staff reviewers and what we use in our designs. Conflicting with that is language in Volume 4, under the PTP-01 section. Under Item #28, in the subsection "Emergency Spillways" located on Page 7 of PTP-01 it reads "A minimum of 2 feet of freeboard must be provided, measured from the top of the water surface elevation for the 100-year storm event...". Two feet of freeboard is also specified on Figures 1.1, 1.2, 1.4 and 1.6 of the same PTP-01 section. A simple fix would be to replace the reference to 2' of freeboard to 1' freeboard in these places. This would bring it in line with all other Volumes, current staff reviews and design practices.

Also, there currently is no mention or reference (that I am aware of) in any of the Volumes or their sections to freeboard on underground detention. Since underground detention typically has minimum covers of 1.5'-2', it has freeboard in the concept of the head supplied to it. Therefore, if deemed applicable, we would like that a sentence referencing no freeboard requirement is required on underground detention. To this point, we have handled this on a case-by-case basis but it would be helpful if it were included.

Comment 2
I must reiterate my comment from the meeting of the Storm Water Advisory Committee. The replacement of wording “3 to 1 or greater” with wording “3 to 1 or steeper” is erroneous. If the objective is to have slopes that are 3 to 1 stabilized with rock riprap, geosynthetic material, or other methods, then the correct wording would be “steeper than {appropriate width} to 1”. The correct way would be to cite the point at which the rule considers the stability a given. The wording as proposed does not state the point at which stability is considered adequate and therefore defeats the purpose of having written requirements. It only implies that slopes of 3.000001 to 1 are acceptable without additional stabilization.

If, as has always been the case, the intent is that of slopes 3 to 1 are acceptable without additional measures but those steeper than 3 to 1 must be stabilized to the stated degree, then the correct wording would be “steeper than 3 to 1”. This would be consistent with Metro Nashville Department of Public Works standards (see DWG. No. ST-255) or as an example of how to word the standard correctly is illustrated in *The Tennessee Erosion & Sediment Control Handbook* second edition – Disturbed Area Stabilization – SO-2 “On slopes steeper than 3:1”, and in *National Engineering Handbook 653, Stream Corridor Restoration: Principles, Processes and Practices* “However, they can be applied on slopes steeper than 2:1”.