

## ENGINEERING STANDARDS REVIEW COMMITTEE

Meeting Date: February 1, 2018

Time: 2:00 P.M.

Location: Herrity Building, Room #604  
12055 Government Center Parkway  
Fairfax, Virginia 22035-5503

| MEMBERS IN ATTENDANCE |         |        |                    |   |            |                |
|-----------------------|---------|--------|--------------------|---|------------|----------------|
|                       | PRESENT | ABSENT | NAME               | REPRESENTING  | VOTING (V) | NON-VOTING (N) |
| 1.                    | x       |        | Theodore Britt     | Virginia Society of Professional Engineers,<br>Northern Virginia Regional Council | V          |                |
| 2.                    |         | x      | James Clark        | Heavy Construction Contractors Association  | V          |                |
| 3.                    |         | x      | Bill Ewing         | Citizen at Large  | V          |                |
| 4.                    |         | x      | Maya Huber         | Citizen's Committee<br>on Land Use & Transportation                               | V          |                |
| 5.                    |         | x      | Paul Johnson       | Northern Virginia Building Industry<br>Association, <b>CHAIR</b>                  | V          |                |
| 6.                    |         | x      | Michael Kitchen    | National Association of Industrial and Office<br>Properties, Northern VA          | V          |                |
| 7.                    | x       |        | Robert Kohnke      | Northern Virginia<br>Soil & Water Conservation District                           | V          |                |
| 8.                    | x       |        | Bryan Layman       | Associated Builders and Contractors, VA   | V          |                |
| 9.                    | x       |        | Mark Liberati      | Virginia Association of Surveyors,<br>Mount Vernon Chapter, <b>SECRETARY</b>      | V          |                |
| 10.                   |         | x      | Robert Meredith    | League of Women Voters  | V          |                |
| 11.                   | x       |        | Dr. Robert Norwood | Citizen at Large  | V          |                |
| 12.                   |         | x      | Paul Noursi        | Citizen at Large  | V          |                |
| 13.                   | x       |        | Ned Poffenberger   | Fairfax County<br>Federation of Citizens Associations                             | V          |                |
| 14.                   | x       |        | Robert Scheller    | Washington Area<br>Council of Engineering Laboratories                            | V          |                |

| MEMBERS IN ATTENDANCE |         |        |                   |   |            |                |
|-----------------------|---------|--------|-------------------|---|------------|----------------|
|                       | PRESENT | ABSENT | NAME              | REPRESENTING  | VOTING (V) | NON-VOTING (N) |
| 15.                   | x       |        | Keith Sinclair    | Engineers & Surveyors Institute, <b>VICE CHAIR</b>  | V          |                |
| 16.                   | x       |        | Bruce Titus       | Fairfax County Bar Association  | V          |                |
| 17.                   | x       |        | Chad Crawford     | Department of Public Works & Environmental Services, Maintenance & Stormwater Management Division | N          |                |
| 18.                   | x       |        | John Matusik      | Land Development Services (LDS),<br><b>TECHNICAL ADVISOR/ADMINISTRATOR</b>                        | N          |                |
| 19.                   |         | x      | Saundra O'connell | Department of Planning & Zoning   | N          |                |
| 20.                   | x       |        | Kevin Nelson      | Virginia Department of Transportation   | N          |                |

| OTHERS IN ATTENDANCE |                    |   |
|----------------------|--------------------|---|
|                      | NAME               | REPRESENTING  |
| x                    | Ellie Coddington   | Director, Code Development and Compliance, LDS      |
| x                    | Danielle Badra     | Technical Writer, SCRD, CDCD, LDS                   |
| x                    | Don Lacquement     | Engineer IV, SCRD, CDCD, LDS                        |
| x                    | Behzad Amir Faryar | Senior Engineer III (Geotech), SDID, LDS            |
| x                    | Bijan Sistani      | Engineer V, SDID, LDS                               |
| x                    | Keith Cline        | Director, Urban Forestry Management Division (UFMD) |
| x                    | Dr. Al Nouri, P.E. | Geotechnical Review Board (GRB)                     |
| x                    | Shaz Moosa         | GRB   |
| x                    | Paul Burkat        | GRB   |
| x                    | Christopher Giese  | GRB   |
| x                    | Daniel Rom         | GRB   |
| x                    | Chris Crawford     | GRB   |

**1. Information Distributed.** The following information was made available for the meeting on February 1, 2018:

- the meeting agenda for February 1, 2018
- the draft meeting minutes of December 7, 2017
- PFM redlined chapter binders for ESRC members with redlined chapters 1, 4 and 12
- Guidelines for ESRC chapter review
- SmartSheet printout for major changes to Chapters 1, 4 and 12 of the PFM
- Handout with an update to the introduction of Chapter 1
- Handout with a summary of chapter 1 annotations
- Power Point: Chapter 1 annotations
- PowerPoint: Chapter 4 annotations
- PowerPoint: Chapter 12 annotations

**2. Administrative Items.**

- The meeting minutes from December 7, 2017, were approved.

**3. Critical revision of introductory paragraph of PFM to enhance guidelines document**

Jan Leavitt, SCRD, presented newly revised introductory paragraphs to chapter 1 to help highlight the notion that the PFM is a guidelines document and is not regulatory. This information was presented via a printed handout, which read:

1-0100 INTRODUCTION

The Public Facilities Manual (PFM) sets forth guidelines for the design of all public facilities constructed to serve development. In adopting its Subdivision Ordinance in 1975, the Board incorporated specific reference to the requirements described in the PFM. Similarly, in 1978, the Board adopted a Zoning Ordinance which made specific reference to the requirements in this PFM.

The Director is the designated official to administer the standards and requirements contained in this PFM. ~~He shall~~ The Director will make the final decision on questions regarding the PFM after having reviewed recommendations from designated departments, authorities, boards, and committees. Except as expressly provided otherwise in this document, the Director can approve a waiver where strict application of the standard cannot be met for a particular site or where new or creative designs are proposed that meet the intent of the provisions, with adequate justification and supporting data and information.

Wherever the term “Director” is used in this PFM without further organizational reference, the reference shall be interpreted as meaning the Director, Land Development Services ~~Public Works and Environmental Services~~. (See Definitions, §13-0300.)

A few questions were asked regarding the interpretations section and the meaning of the terms “shall,” “must,” and “adequate justification.” Members were directed to the interpretations section of Chapter 1.

ESRC motioned—seconded—aye! The revised paragraphs were unanimously approved.

Questions should be directed to Jan Leavitt at [Jan.Leavitt@fairfaxcounty.gov](mailto:Jan.Leavitt@fairfaxcounty.gov).

#### **4. Introduction to the ESRC chapter review process for the PFM**

John Matusik, SCRD, presented a handout “Guidelines for ESRC Chapter Review.” Highlights of the handout and PFM initiative are below.

##### **ESRC Meeting Goals:**

- The entire PFM will be delivered piecemeal to the ESRC over the next several months.
- The goal is for the ESRC initial review to be complete by June 2018.
- In order to streamline the review process, any questions not resolved during an ESRC presentation will be resolved via email.

##### **Role of PFM Flexibility Core Team:**

- Facilitate ESRC meetings to streamline the chapter review process (manage topic and time).
- Coordinate with PFM chapter leads to provide well-organized and concise chapter presentations.
- Be available for general PFM questions throughout the review process.

##### **Role of PFM Chapter Presenter:**

- TAC chapter leads will present most **critical** priority 1 annotations.
- Leads will be available after their presentation for a brief Q&A.
- Any questions not resolved during the ESRC meeting can be resolved through email.
- The TAC chapter lead will be available via email in the month leading up to the 2<sup>nd</sup> ESRC meeting.

##### **Role of ESRC Members:**

- Highlight critical sections in each PFM chapter as presented by the TAC chapter lead.
- Review critical sections of each PFM chapter and the remaining annotations during the month between meetings.
- Email TAC chapter lead with any questions regarding the annotations prior to the 2<sup>nd</sup> ESRC meeting.

##### **Process for Chapter Review and Vote:**

1. PFM chapters attached to ESRC meeting invitation.
2. PFM chapter presentations to highlight **critical** annotations at first ESRC meeting.
3. Month-long review of critical annotations and email Q&A with chapter leads.
4. Vote of approval at beginning of second ESRC meeting.

**Tentative Timeline for PFM Chapter Review:**

| <b>PFM Chapter(s)</b>         | <b>ESRC Chapter Presentation</b> | <b>ESRC Chapter Vote</b> |
|-------------------------------|----------------------------------|--------------------------|
| <b>Chapters 1, 4 &amp; 12</b> | February 1 <sup>st</sup>         | March 1 <sup>st</sup>    |
| <b>Chapter 3, 5 &amp; 11</b>  | March 1 <sup>st</sup>            | April 5 <sup>th</sup>    |
| <b>Chapter 6, 9 &amp; 10</b>  | April 5 <sup>th</sup>            | May 3 <sup>rd</sup>      |
| <b>Chapters 2 &amp; 8</b>     | May 3 <sup>rd</sup>              | June 7 <sup>th</sup>     |
| <b>Chapter 7</b>              | June 7 <sup>th</sup>             | July 5 <sup>th</sup>     |

ESRC motioned—Seconded—Aye! These proposed guidelines were unanimously agreed upon.

Questions should be directed to John Matusik at [John.Matusik@fairfaxcounty.gov](mailto:John.Matusik@fairfaxcounty.gov).

**5. Chapter 1 annotations**

Danielle Badra, SCRD, presented the PowerPoint “Chapter 1 ESRC Presentation.” Highlights of the PowerPoint are below.

**Chapter 1: Proposed PFM Amendments**

**Combining Chapter 1 and 13:**

- For the purpose of moving the definitions section into chapter 1, chapter 13 has been combined with chapter 1.
- This combination of chapters is the most major alteration to chapter 1.
- All chapter 13 provisions have been added on to the end of chapter 1.

**1. Deleted Text:** § 1-0200

- Deleted “Establishment of the PFM” section.

**2. Deleted and Modified Text:** § 1-0602.1-4, new §1-0502

- Deleted “Plates” subsections and modified the first line of 1-0502.

**3. Deleted Text:** old § 1-0700

- Deleted “Comments and Recommendations” section.

**4. Added Text:** § 1-0700

- Added the “Applicability” section.

**5. Relocated and Modified Text: § 1-0800**

- Relocated the “PFM Structure” section from Chapter 13 to Chapter 1, and modified the text to add clarity.

**6. Relocated and Modified Text: § 1-0900**

- Relocated the “Interpretations” section from Chapter 13 to Chapter 1, and modified the text to add clarity and include interpretations for “shall,” “must,” “may,” “may not,” “will,” and “should.”

**7. Relocated and Modified Text: § 1-1000**

- Relocated the “Symbols and Acronyms/Abbreviations” section from chapter 13 to chapter 1; added alphabetized tables for easier navigation of acronyms; updated with all acronyms found in the PFM.

**8. Relocated and Modified Text: § 1-1000.1C**

- Relocated “Definitions” section from chapter 13 to chapter 1; updated the definition of “Director” to reflect changes from DPWES to LDS.

**9. Relocated Tables: § 1-1100 and § 1-1200**

- Relocated the Metric Conversion and the English Conversion tables.

**10. Reformatted Outline; Replaced “shall”; Added Hyperlinks: Chapter 1**

- Reformatted the chapter to include an indented outline; replaced most “shall” with “should” or “must”; added internal and external hyperlinks.

A comment was made that under the interpretation of “adequate justification” the language should be changed to say, “Financial hardship alone...”

A comment was made that the interpretation of “may not” should be combined with “must” and “shall” since it has the equivalent meaning.

A comment was made to update the class specifications from the metric megapascals. Perhaps delete these references all together.

A comment was made as toward whether or not the English and Metric conversion tables are still necessary in the PFM.

Questions should be directed to Danielle Badra at [Danielle.Badra@fairfaxcounty.gov](mailto:Danielle.Badra@fairfaxcounty.gov).

**6. Chapter 4 annotations**

Behzad Amir Faryar, SDID, presented the PowerPoint “Chapter 4 ESRC Presentation.” Highlights of the PowerPoint are below.

**An outline of proposed changes:**

1. Changing “shall” to “must/should/may/may not/will”
2. Reordering the sections within the chapter
3. Updating the information such as organizations names, etc., and correcting typos
4. Condensing and eliminating repeated words and clarifying sections
5. Including sections pertaining to topics where no information is available in current PFM; such as:
  - a. Naturally occurring asbestos (NOA)
  - b. Minimum exploration requirements for buildings
  - c. Geotechnical requirements for in-ground swimming pools, and
  - d. Global stability analysis for non-Potomac formation soils

A question was asked, “do the bore holes include augers?” The answer was yes.

A question was asked, “is there a definition in the PFM for impounding water?” The answer is no, not yet. Might consider changing the text to read “permanently impounds water.”

A question was asked, “Is there any advantage to noting that VDOT’s critical slope is the same as PFM’s significant slope?” Consider changing this back to critical slope and defining this somewhere in the definition section of the PFM. Otherwise, this won’t be adding much clarity or flexibility to the PFM because it will be in conflict with a VDOT provision. Needs consistency.

Questions should be directed to Behzad Amir Faryar at [Behzad.AmirFaryar@fairfaxcounty.gov](mailto:Behzad.AmirFaryar@fairfaxcounty.gov).

**7. Chapter 12 annotations**

Keith Cline, UFMD, presented the PowerPoint “Chapter 12 ESRC Presentation.” Highlights of the PowerPoint are below.

**Proposed Priority 1 Chapter 12 Amendments:**

- Revise introductory sections
- Add text to provide guidance on tree condition assessment based on industry standards
- Allow more flexibility for counting tree canopy by deleting “existing forest” from § 12-0404.4A
- Added text to § 12-0504.1 and 12-0506.1C to add clarity and update information.
- Changed “hazardous” to “high risk” in certain provisions throughout the chapter.
- Changed “shall” to “should/must/may not/may/will” throughout chapter.
- Deleted outdated text from § 12-0509.3K
- Deleted text from § 12-0510.3C and 12-0510.3D that removes a disincentive to save trees.
- Deleted text from §12-0510.4B(5) because it is a requirement that is not practical and not enforced.
- Relocated §12-0515.3 to §12-0510.4E(x)—it is more appropriate her with all the planting area requirements.

- Added text to §12-0510.4E(x)—these introduce the concept of soil volume requirements and use of alternative designs. These two sections are “should” that allow for alternate designs but require soil volume to be considered.
- Deleted text from §12-0705.1E-G—text is unnecessary. Industry standards are referenced.
- Deleted/condensed language in §12-0705.2-5, latest industry standards for tree planting are referenced and unnecessary explanatory text is removed.

A question was asked regarding a civil tree dispute and another question was asked regarding credit. The answer had something to do with the issue of new reviewers—which will be addressed in a weekly meeting at UFMD.

Questions should be directed to Keith Cline at [Keith.Cline@fairfaxcounty.gov](mailto:Keith.Cline@fairfaxcounty.gov).

The meeting adjourned at approximately 4:07 p.m.

Mark Liberati, ESRC Secretary

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by John Matusik  
Acting ESRC Technical Advisor/Administrator