DEPARTMENT OF GENERAL SERVICES
BUREAU OF CAPITAL OUTLAY MANAGEMENT
Serving Government. Serving Virginians.

BCOM Newsletter

Issue # 13

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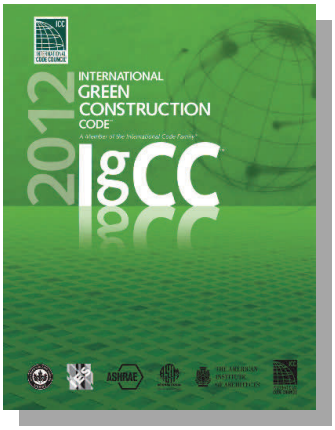
In this Issue:

DEB Notice 012016
High Performance Buildings Act



DEB Notice 012016 was issued, effective January 20, 2016, to update the referenced document of the ***Virginia Energy Conservation and Environmental Standards (VEES)*** to the ***2012 International Green Construction Code***.

CPSM Sections 6.1.3 C and 6.1.3.1 were replaced and a new **CPSM Appendix V** was added.

Form **DGS-30-382*, VEES Compliance Matrix***, was deleted from the submittal requirements.

To view the DEB Notice and the associated CPSM Appendix V, click here.

CPSM Forms Update

The following CPSM form was recently revised and is available for download from the DGS Forms Center:

- **DGS-30-104 (CO-12) Schedule of Values and Certificate for Payment** (Revised 01-16)
- Please download Form **DGS-30-000, Capital Outlay Forms Master List** for a complete listing of the latest version of each CPSM form. All current forms may be downloaded from the DGS Forms Center. If a prior version of a form is required, please contact capout@dgs.virginia.gov.

The following CPSM forms have been recently revised and are currently under BCOM internal review. These updated forms will be posted to the Forms Center in February:

- **DGS-30-092 (CO-11) Construction Change Order**
- **DGS-30-100 (CO-11ae) Architect/Engineer Contract Change Order**

Financing Capital Projects, Part 1: Article X, Section 9 of the Virginia Constitution

Traditionally, Virginia has used two methods to fund capital outlay projects: cash and debt. The cash method uses current revenues to pay capital project expenses, whereas the debt method finances capital project expenses over an extended period. State debt falls into several categories defined by their method of repayment: **general obligation debt**, **appropriation and revenue-backed debt**, and **lease financing debt**. State debt financing usually involves the sale of bonds to raise the necessary funds. The Virginia Constitution sets out the requirements for Commonwealth debt in Article X, Section 9.

9(b) General Obligation Debt for Capital Projects

General Obligation Bonds are secured by a pledge of the full faith and credit of the Commonwealth. General Obligation Bonds of the Commonwealth are currently rated in the highest bond ratings category - AAA, Aaa and AAA by Fitch, Moody's and Standard and Poor's, respectively.

Section 9(b) of Article X of the Constitution permits the issuance of general obligation debt for capital projects upon authorization by the General Assembly, and upon approval by a majority of the voters at referendum. The last referendum was held in 2002, when general obligation bonds were authorized for up to $900.5 million for capital projects at educational facilities of the Commonwealth. In the same year, up to $119.0 million was authorized for state park and recreational facilities. These bonds have all been issued.

9(c) Debt for Certain Revenue-Producing Capital Projects

Section 9(c) of Article X of the Constitution permits the issuance of general obligation bonds without voter approval for specific revenue-producing capital projects secured by net revenues derived from rates, fees and charges of the project, and the full faith and credit of the Commonwealth. 9(c) bonds are frequently authorized and issued for revenue producing projects such as higher education dormitories and dining facilities.

Prior to the authorization of 9(c) bonds, and prior to issuance, the Governor has to certify that net revenues are expected to be sufficient. If revenues later prove to be insufficient, the 9(c) authorization carries a general obligation pledge that the General Assembly/Governor will appropriate sufficient general funds revenues to make up any deficiency. The debt must be authorized by the affirmative vote of two-thirds of the members elected to each house of the General Assembly. That is why there has to be a bill, separate from the budget bill, for the approval of 9(c) bonds. 9(c) bond projects also need to be included in the Appropriation Act because that is where the bond proceeds are appropriated for use.

Because these bonds carry the general obligation pledge (the highest pledge a government can give), they are rated more highly than 9(d) bonds.

(cont.)

Financing Capital Projects, Part 1

(cont.)

9(d) Other Debt Obligations (to which Section 9 is not applicable)

Bonds issued under the provisions of Section 9(d) do not pledge the full faith and credit of the Commonwealth. Bonds issued for projects under the provisions of this section can be of various credit qualities, depending on what is pledged for the payment of the debt service.

Pool-process projects are "appropriation-pledged". That is, in their authorization for these projects, the General Assembly has indicated their intent to annually appropriate funds (usually all or mostly general fund monies) for the payment of the debt service on these bonds. While these bonds lack the general obligation pledge, there is a high level of confidence that the General Assembly will make good on their pledge (based on track record and budgetary practices), so these are still highly rated bonds (usually AA+), but are rated slightly lower than the general obligation-backed bonds. All else being equal, you would expect 9(d) bonds to carry a slightly higher borrowing cost. A project that would otherwise qualify for 9(c) financing can be financed under the 9(d) provisions, but usually not the reverse.

9(d) bonds can be authorized with simple language in the Appropriation Act.

Recap of 2015 BCOM Newsletter Articles

The BCOM Newsletter was initiated in January 2015 as a more structured means to provided regular, versus ad hoc notifications regarding DEB Notices, CPSM Revisions and CPSM forms updates. Rather than the prior distribution method for these items (emailing key agency contacts only, with instructions to forward), the BCOM Newsletter was made available as a self-subscribe service in which any agency staff could enroll. As the private sector design consultants and contractors who participate in State projects also had need for this type of information, the subscription site was made available to those individuals as well.

To provide additional useful content, BCOM staff have provided articles on CPSM clarifications and CPSM/ VCCO seminars, and have provided information/guidance on project procurement, project cost, Building Official (permitting/certification/code) and capital outlay issues.

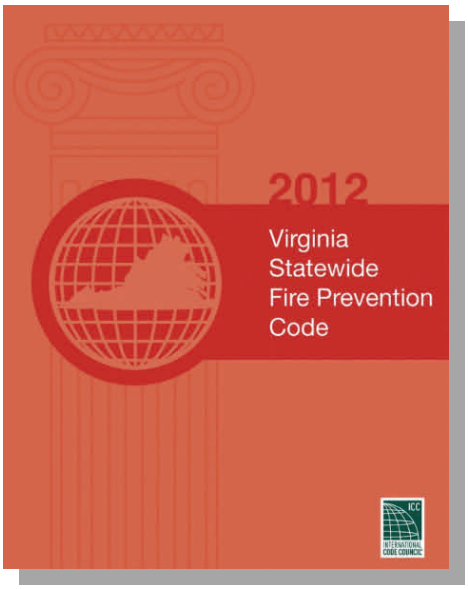
The next page contains a listing of key BCOM Newsletter articles published in 2015. To revisit an article, please click on the Newsletter date to access that Newsletter edition.

BCOM welcomes feedback from Newsletter readers, including suggestions for future articles. Please email your suggestions to bits@dgs.virginia.gov

Recap of 2015 BCOM Newsletter Articles

Jan 2015	Appendix A - DEB Roofing Policy and Technical Standards
	Virginia Energy Conservation Code and High Performance Building Act
	Pool Process for Funding Projects
Feb 2015	Guidance for Creating BITS Forms
	Scope and Extent for Pool-Funded Projects
	Generators
Mar 2015	Why Schematic Cost Reviews are Important
	Lessons Learned: Fire Rated Laboratory Chemical Fume Hood Exhaust Systems
	BITS Security
	Debarment and Enjoinment Procedures
Apr 2015	2014 CPSM, Revision 1
May 2015	Using the New CR-3 Worksheet to Develop CBR Cost Proposals
	BCOM's Specialized Email Mailboxes
	Submittal Guidance
	Summary of Key Changes Mandated by Executive Order 20 (July 2014)
	Code Guidance: Area of Refuge and Two-Way Communication Devices
Jun 2015	Budgeting Phased Projects
	Searching the CPSM
	BITS Q & A: Why are Two Forms needed to adjust Funds for Subprojects?
	Reminder: Submit A/E Contracts and MOUs within 10 Days following Award
Jul 2015	BCOM Seminars
	Responsibilities for Structural and Special Inspections
	HVAC Work without a Building Permit
	Safe Room and Secure Room Design & Construction
Aug 2015	Clarification of Fees for Temporary Structure Permits
	Schematic Cost Reports for Pool Projects
	Utility Required Electrical Special Inspection
	Atrium Smoke Control Systems
	Top 10 Ways to Expedite Design Reviews and Inspections
Sep 2015	Reminders: A/E Contracts; Transmittal Forms; Electronic Submittals
	Construction Management Process Improvements
	Construction Procurement Survey
	Structural Requirements when Reroofing, Virginia Rehabilitation Code (VRC) 706.3
	VE Waiver Requirement for CM & DB Projects Eliminated
Oct 2015	The Funding Report
	BCOM Technical Assistance
	Alert: Changes to Seismic Design Requirements for Fire Protection Sprinkler Systems
	Correction to September Article on Structural Requirements when Reroofing
Nov 2015	Change Orders
	BCOM's Application of NFPA 285 within the Virginia Construction Code
	Do I Need a Building Permit?
Dec 2015	Forgot BITS Password?
	VEES 2012 is Coming
	Motion Sensor Controlled Egress Illumination

FIRE PROTECTION WATER SUPPLIES



This advisory is intended to alert state agencies and their professional consultants of the need to provide fire protection water supplies for their building construction projects. A portion of the project budget should be allocated for this purpose. **Section 507 Fire Protection Water Supplies** of the ***Virginia Statewide Fire Protection Code*** requires projects to have an approved water supply. This water supply can be accomplished by several methods.

Many projects have fire hydrants that are connected to a public water system. Hydrants are optimally spaced when fire hoses can reach the far side of the building using 400 feet of hose. When the building is equipped with an automatic fire sprinkler system the hose length can be 600 feet. Fire hydrants are connected to a minimum 6 inch water line. Private fire service mains are installed according to **NFPA 24**.

Providing an approved water supply in some suburban and rural areas is more difficult to achieve. Typically a dry hydrant is connected to a water source such as a buried fire tank, a wet retention pond, a lake, a continuously flowing creek, or a river. A dry hydrant is a vertically oriented 6 inch pipe with a 4 ½ inch steamer hose connection mounted on the side of the pipe. A strainer is mounted at the hose connection. When connected to an open body of water the dry hydrant is an L shaped piping arrangement with one leg into the earth and the other leg horizontally into the water with a strainer at the end. Dry hydrants are installed according to **NFPA 1231: Standard on Water Supplies for Suburban and Rural Fire Fighting**. Water tanks are installed according to **NFPA 22: Standards for Water Tanks for Private Fire Protection**.

As a last resort the local fire department may agree to provide tanker trucks in order to provide an approved water supply. This method involves shuttling fire tankers to the fire from a water source. Adequate water can usually be brought to the site to control the fire, but time delays may result in the loss of the structure.

The fire flow requirements vary with each building and the available water source. The Commonwealth of Virginia has not adopted Appendix B Fire-Flow Requirements for Buildings which is part of the Virginia Statewide Fire Prevention Code. Buildings with automatic sprinkler systems must have a minimum water flow for the most hydraulically demanding area of application plus the required hose allowance or have adequate water flow for the standpipe system when it has a greater flow than the sprinkler system. Where the water supply is provided via a dry hydrant a simple 3 variable formula from **NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting** may be used.

Starting with the budgeting phase state agencies need to provide water supplies for fire protection. Fire flow requirements may be based on the construction type, the occupancy hazard classification, the volume and height of the building and its location.