DEPARTMENT OF GENERAL SERVICES
BUREAU OF CAPITAL OUTLAY MANAGEMENT
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BCOM Newsletter

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October 2017

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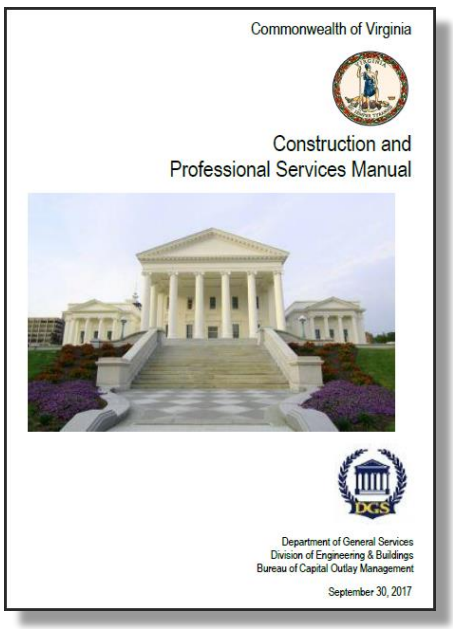
2017 Edition - Construction & Professional Services Manual - Revision 0

In last month's BCOM Newsletter, we announced the release of the new 2017 Edition of the *Construction and Professional Services Manual* (aka, "the *CPSM*" or "the *Manual*"). The new version became effective September 30, 2017 and is available on the CPSM webpage of the BCOM website

The related *DEB Notice 093017* is now available on the DEB Notices webpage of the BCOM website. This DEB Notice provides a summary of the key changes that have been incorporated within the new *CPSM* edition. All *CPSM* users are encouraged to review this Notice to be aware of the significant adds, edits, and deletes to the prior Manual. New or infrequent users of the *Manual* are encouraged to attend a CPSM seminar to obtain a better understanding of key *Manual* provisions.

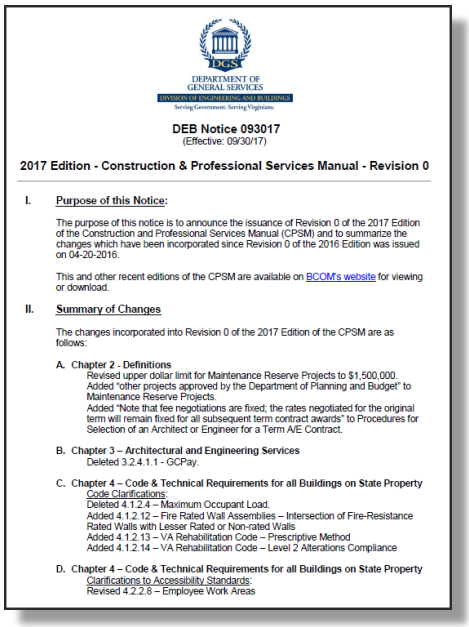
The upcoming November 8-9 CPSM Seminar is fully booked. The next CPSM seminars will be held in the Spring of 2018. If you would like to be notified of, and receive an application to attend, one of the Spring seminars, please complete the online Expression of Interest form, if you have not already done so. ❑


Commonwealth of Virginia

Construction and Professional Services Manual

Department of General Services
Division of Engineering & Buildings
Bureau of Capital Outlay Management

September 30, 2017


DEPARTMENT OF GENERAL SERVICES
DIVISION OF ENGINEERING AND BUILDINGS

DEB Notice 093017
(Effective: 09/30/17)

2017 Edition - Construction & Professional Services Manual - Revision 0

I. **Purpose of this Notice:**

The purpose of this notice is to announce the issuance of Revision 0 of the 2017 Edition of the Construction and Professional Services Manual (CPSM) and to summarize the changes which have been incorporated since Revision 0 of the 2016 Edition was issued on 04-20-2016.

This and other recent editions of the CPSM are available on BCOM's website for viewing or download.

II. **Summary of Changes**

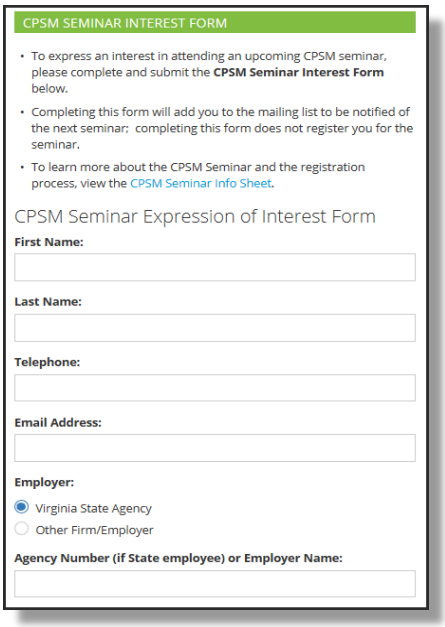
The changes incorporated into Revision 0 of the 2017 Edition of the CPSM are as follows:

A. **Chapter 2 - Definitions**
Revised upper dollar limit for Maintenance Reserve Projects to $1,500,000.
Added "other projects approved by the Department of Planning and Budget" to Maintenance Reserve Projects.
Added "Note that fee negotiations are fixed; the rates negotiated for the original term will remain fixed for all subsequent term contract awards" to Procedures for Selection of an Architect or Engineer for a Term A/E Contract.

B. **Chapter 3 – Architectural and Engineering Services**
Deleted 3.2.4.1.1 - GCPay.

C. **Chapter 4 – Code & Technical Requirements for all Buildings on State Property**
Code Clarifications:
Deleted 4.1.2.4 – Maximum Occupant Load.
Added 4.1.2.12 – Fire Rated Wall Assemblies – Intersection of Fire-Resistance Rated Walls with Lesser Rated or Non-rated Walls
Added 4.1.2.13 – VA Rehabilitation Code – Prescriptive Method
Added 4.1.2.14 – VA Rehabilitation Code – Level 2 Alterations Compliance

D. **Chapter 4 – Code & Technical Requirements for all Buildings on State Property**
Clarifications to Accessibility Standards:
Revised 4.2.2.8 – Employee Work Areas


CPSM SEMINAR INTEREST FORM

- To express an interest in attending an upcoming CPSM seminar, please complete and submit the **CPSM Seminar Interest Form** below.
- Completing this form will add you to the mailing list to be notified of the next seminar; completing this form does not register you for the seminar.
- To learn more about the CPSM Seminar and the registration process, view the CPSM Seminar Info Sheet.

CPSM Seminar Expression of Interest Form

First Name:

Last Name:

Telephone:

Email Address:

Employer:

◉ Virginia State Agency
○ Other Firm/Employer

Agency Number (if State employee) or Employer Name:

Light Gage Framing Construction: BCOM Submittal Requirements

Economic forces and reliability are making light gage framing the right choice for many projects. What is not always clear is what is expected on the construction documents when submitting to BCOM for review and approval.

One of the first things to consider is who is responsible for the design of the light gage steel members. Will it be the contractor's supplier or the SER – the Structural Engineer of Record?

Non-Load Bearing Construction

Non-load bearing interior partitions do not support building structural elements, so they may be performance-specified. Typically, the architect will provide the layout and the light gage stud supplier will design the metal studs, including the required material properties and section properties. The construction documents must provide for lateral stability, either by the wall configuration or by details showing supporting structure at the top of the partition.

Load Bearing and Exterior Wall Construction

Stick-built load bearing members and exterior walls that resist wind loads are the responsibility of the SER and are not typically delegated design. Like wood construction, the SER is responsible for member sizes, spacing and connection details.

In the Working Drawings, the SER shall provide a complete load path and determine the forces on the supporting structure.

- Show or specify the deflection criteria, minimum section modulus and moment of inertia.
- Indicate the minimum gage permitted.
- Require mechanical bridging until wall sheathing is installed.
- Where appropriate, show slip track at top of walls to accommodate the anticipated deflection of structure above.
- Use care at jambs with wide openings, considering forces in the jambs and required connections or any other special configurations.
- When required, details needed include bridging, X-bracing, and hold-downs. .

Delegated Design

So when can delegated design be used for light gage framing, other than interior partitions? Refer to Section 5.0 in the *Construction and Professional Services Manual* (CPSM):

> "Design is the sole responsibility of the A/E. Specifications which require the contractor to provide engineering design are not acceptable unless the products specified for contractor design are closed engineered systems. Closed engineered systems include: pre-engineered buildings, manufactured mechanical equipment, prefabricated trusses, and precast and common steel structural connections. Other systems can be defined as closed engineered systems if approved by the Director, Division of Engineering and Buildings."

Basically, the design of shop fabricated, light gage components can be delegated. The most prevalent prefabricated light gage structural members are light gage trusses. Shop fabricated panelized wall systems may also be used.

Light Gage Trusses

For light gage metal trusses, the roof framing system and truss layout is designed by the structural engineer. The design of individual trusses is completed by the fabricator. In the Working Drawings, the SER is expected to:

- Provide load diagrams for typical trusses, girder, jack, hip, and step-down trusses; include uniform roof loads as well as any special or concentrated loads.
- Distinguish between actual hip trusses and hips formed by the roof deck between stepdown trusses.
- Provide a mechanism for supporting the free edge of deck along the hip between stepdown trusses.
- Specify deflection criteria, especially with long spans where architectural features may be affected by L/180 deflections.
- Ensure that connections to the structure are adequate and that the supporting structure is capable of resisting the design loads, including uplift.
- Require a system of temporary and permanent bracing be installed per the manufacturer's requirements.
- Require continuous bridging and truss bracing as indicated on the Shop Drawings and in accordance with LGSEA's Technical Note 551e, "*Design Guide for Permanent Bracing of Cold-Formed Steel Trusses*".

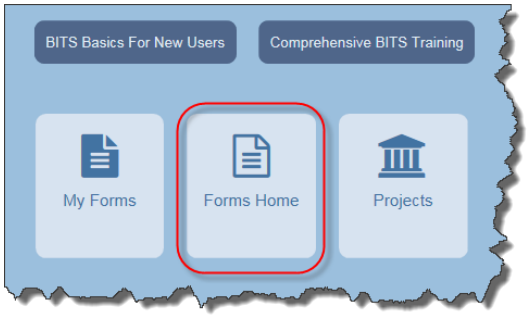
Prefabricated Wall Panels

Prefabricated wall panels, as part of proprietary systems, have been accepted by BCOM as closed engineered systems. The SER is responsible for determining all VUSBC Section 1603 design loads and including these loads on the documents for use the fabricator. Shop drawings must be reviewed by the SER to ensure that the loads and locations of loads imposed on the supporting structure are within the design assumptions.

Additional information is available in the CPSM. Refer to Section 5.8.6.7 and Appendix Q. ❑

BITS Guidance: Creating CPSM Forms

New CPSM forms are created from the BITS **Forms Home** Page.



There are two ways to create a new form:

1. **From scratch** (i.e., by starting with an empty/blank form).

2. **By copying from an existing form**
   (the "Copy To" method).

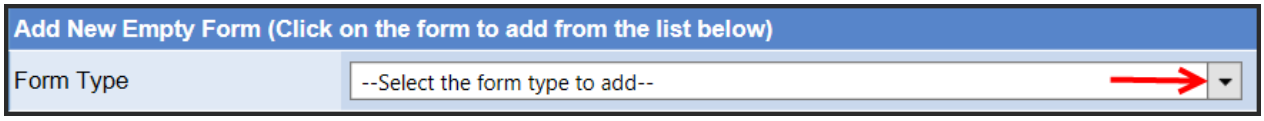
Creating a New Form from Scratch

This method can be used to create any form type, but is the recommended method for creating:

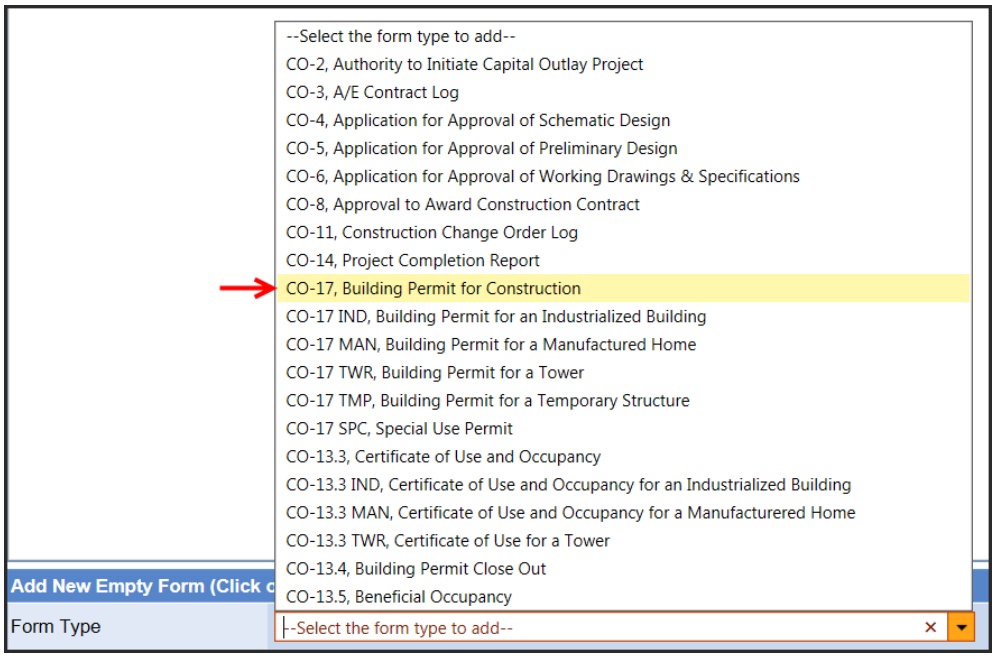
- **the initial CO-2 for the primary (overall) project** (i.e., the "000" subjob for capital projects).
- **the initial CO-17 form for any project** (capital or non-capital).

Steps:

1. Scroll to the very bottom of the Forms Home Page, to the section entitled" Add New Empty Form".
2. Click on the down arrow illustrated below:



3. Select the type of form you wish to create:



4. A completely blank form will now appear, ready for data input.

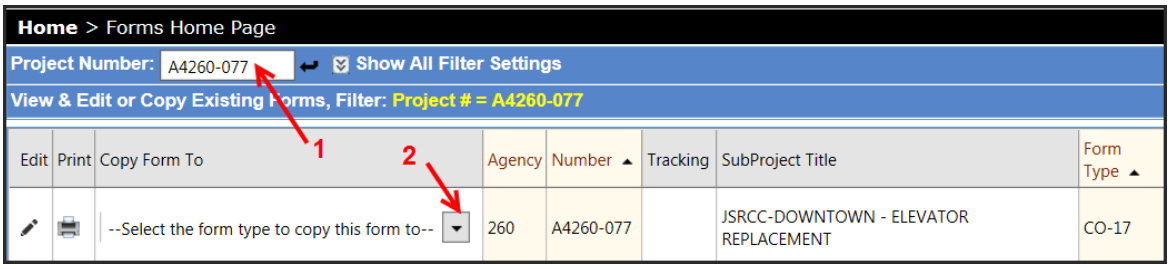
Creating a New Form by Copying from an Existing Form (the "Copy To" method)

In this method, an existing ("source") form is used to create a new ("target") form. In the procedure below, the target form is referred to as the "Copy To" form. Significant time and effort can be saved by using this method as the common data fields in the new, target form are prepopulated with the data from the existing, source form. See the next sheet for a summary of the recommended source form types to use for creating new forms.

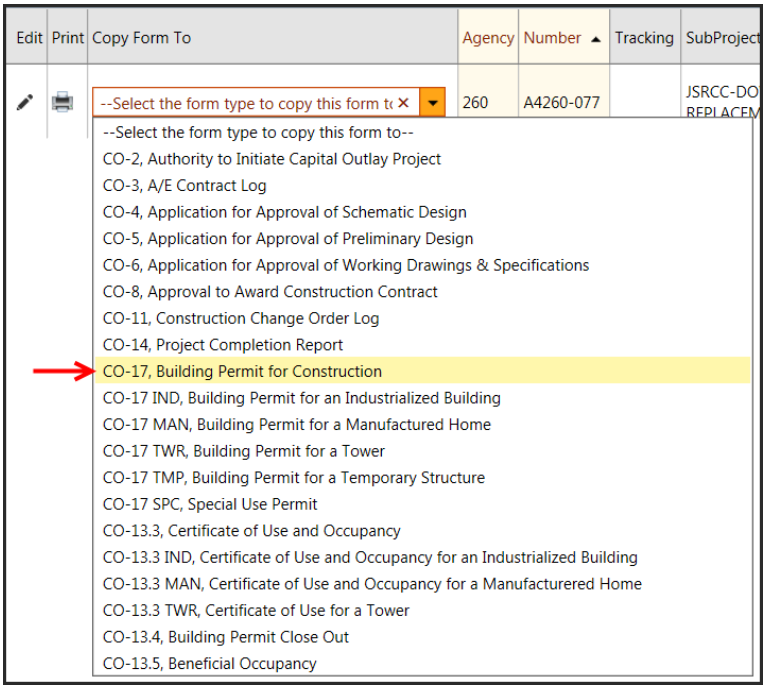
Steps:

1. Filter (query) the Forms Home Page to locate the existing, source form you wish to use to create the new, target form. (If you are a new or infrequent user of BITS and not familiar with BITS filters, refer to the "Comprehensive BITS Training" instructions available from the BITS Home Page.)

   In this example, we have filtered to find an existing CO-17 form we wish to use as the source form:



2. Click on the down arrow illustrated above and a picklist of form types will now appear:



3. Select the type of form you wish to create. In the above example we selected another CO-17 form, for example, to request an extension of the earlier Permit. Like the "from scratch" method this created a new form. However, rather than just creating a blank form, the above "Copy To" method also copied in the existing data from the source form. The new form needs only minor edits to the data rather than complete data entry.

   Refer to the next page for the recommended source form types to use when creating new forms.

To create a new …	Use the …	Recommended Source File
Initial CO-2 for the primary (i.e., complete, "000") project	"From Scratch" method	New blank CO-2 form.
Revised CO-2 for the primary (i.e., complete, "000") project	"Copy To" method	Latest approved CO-2 for the primary (complete, "000") project.
Initial CO-2 for a subproject	"Copy To" method	Latest approved CO-2 for the primary (complete, "000") project.
Revised CO-2 for a subproject	"Copy To" method	Latest approved CO-2 for the same subproject.
CO-4	"Copy To" method	Latest approved CO-2 for the specific project/subproject.
CO-5	"Copy To" method	Latest approved CO-4 for the specific project/subproject. If no CO-4, use latest approved CO-2 for the specific project/subproject.
CO-6	"Copy To" method	Latest approved CO-5 for the specific project/subproject. If no CO-5, use latest approved CO-4 for the specific project/subproject. If no CO-5 or CO-4, use latest approved CO-2 for the specific project/subproject.
Initial CO-8	"Copy To" method	Latest approved CO-2 for the specific project/subproject.
Revised CO-8	"Copy To" method	Latest approved CO-8 for the specific project/subproject.
Initial CO-14	"Copy To" method	Latest approved CO-8 for the specific project/subproject. For acquisitions, latest approved CO-2 for the specific project/subproject.
Revised CO-14	"Copy To" method	Latest approved CO-14 for the specific project/subproject.
Initial CO-17	"From Scratch" method	New blank CO-17 form.
Revised CO-17	"Copy To" method	Latest approved CO-17 for the specific project/subproject.
Initial CO-13.3, 13.4 or 13.5	"Copy To" method	Latest related CO-17 for the specific project/subproject.
Revised CO-13.3, 13.4 or 13.5	"Copy To" method	Latest approved CO-13.3, 13.4 or 13.5 for the specific project/subproject.

DO NOT use a "BO form" (i.e., CO-17, 13.3, 13.4 or 13.5) as the source document for creating a "CO form" (CO-2, 4, 5, 6 , 8 or 14).