



## DSA PROCEDURE 09-05

Revised: 10-08-09

Effective Date: 08-01-09

Issue Date: 07/22/09

Supersedes: BU 06-03

**To: DSA Staff  
Interested Parties**

**From: Division of the State Architect  
Department of General Services  
State of California**

**SUBJECT: Plan Review Submittals for DSA Projects  
Electronic Submission and Review**

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**Purpose:** This DSA Procedure provides specific requirements for electronic submittals and describes DSA's process for electronic plan review, and the Design Professional's participation.

**Background:** Since 2005, DSA has offered an electronic plan submittal and review process. This process was described in DSA Bulletin, BU 06-03. The procedure described in BU 06-03 required that all new projects submitted to DSA for review be accompanied by a compact disc (CD), containing all the submitted document files. If the project was considered a good candidate for electronic review, the electronic documents would be processed for review and the paper submittals recycled.

DSA is moving forward in its conversion to a "paperless" environment. Beginning August 1, 2009, all projects with an estimated project cost not to exceed a limit prescribed by DSA [Policy 09-02](#) shall be submitted and reviewed electronically, with some exceptions. ||

In light of this, DSA is changing the process by which projects are accepted for electronic plan review. Projects submitted on paper no longer need to be accompanied by a CD with electronic versions of the submittals. Procedure PR 09-05 supersedes and replaces BU 06-03 and reflects this change in policy.

**Electronic Submission of Construction Documents:** All projects submitted for electronic review shall be submitted to the DSA File Transfer Protocol (FTP) servers. Compact discs are no longer requested or required.

The following describes the processes and requirements for registering for a folder on DSA's FTP servers, for uploading documents for review, and reviewing and backchecking electronically submitted projects. |

***Note:** Many links in this document will send the reader to the referenced part of the document. To return to the previous place in the document, press "ALT←" [Alt Key and Back **Arrow** keys together].*

**Workflow:** The following is the workflow that DSA and the Design Professional shall follow for an electronic plan review. It presumes that the Design Professional has never participated in an electronic plan review.

## 1. REGISTRATION FOR A *FIRM NAME FOLDER* ON THE DSA FTP SITE:

**NOTE:** If the Design Professional already has a **Firm Name Folder**, skip to Step 2.

The Design Professional contacts the Designated Contact for the DSA Office having jurisdiction and obtains a link to the DSA Online Documents Submittal Website.

1.1 Email and call the Designated Contact at the DSA Office having jurisdiction for the project:

**Oakland Regional Office:** Allyson Champion (510) 873-6433  
[Allyson.Champion@dgs.ca.gov](mailto:Allyson.Champion@dgs.ca.gov)

**Sacramento Regional Office:** Tim Powell (916) 323-9625  
[Timothy.Powell@dgs.ca.gov](mailto:Timothy.Powell@dgs.ca.gov)

**Los Angeles Regional Office:** Sam Luk (213) 897-3302  
[Samuel.Luk@dgs.ca.gov](mailto:Samuel.Luk@dgs.ca.gov)

**San Diego Regional Office:** Douglas Magee (858) 674-5468  
[Douglas.Magee@dgs.ca.gov](mailto:Douglas.Magee@dgs.ca.gov)

**Alternate Contact:** Alan Trevor (916) 323-5234  
[Alan.trevor@dgs.ca.gov](mailto:Alan.trevor@dgs.ca.gov)

- The Designated Contact sends an email to the Design Professional containing a link to the **DSA Online Documents Submittal** web site.
- Open the link and select “Register Profile” on the left hand navigation bar.
- Complete all fields in the form that are marked with a red star.
- Click the down arrow in the “Process” field and select “Online Plan Review Submittal.”
- Create a password and enter it twice, where indicated. This password must be used to access the **Firm Name Folder** on the DSA ftp site.
- Click on “I Agree”. An email will be sent to the FTP Site Administrator, informing him or her of your application for a folder.
- The FTP Site Administrator will create a **Firm Name Folder** and will send a confirmation email with the folder name to the Design Professional.

## 2. SUBMIT A PROJECT ELECTRONICALLY:

2.1 Create a new **Submittal Folder** in the **Firm Name Folder** found on the FTP site for the Regional Office having jurisdiction.

2.2 Upload all required documents with formats, document names, and version numbers in compliance with Appendix 1: **Document Format and Presentation For First Submittal**, and Appendix 2: **Technical Requirements for Electronic Documents**.

2.3 Inform the Intake Specialist for the Regional Office having jurisdiction **by phone call and email** that documents for the new project have been uploaded, and that a copy of form **DSA-1** and a fee warrant are being sent immediately.

2.4 Immediately send a copy of the DSA-1 form, attached to a check or warrant for the fee to DSA.

2.5 Upon receipt of the application and fee, an application number will be assigned to the

project.

- 2.6 The Intake Specialist changes the **Submittal Folder** on the FTP site to a **Project Folder** by renaming it in compliance with the **Folder Naming System**.
- 2.7 The Intake Specialist creates the **Routing Folders** under the ***Project Folder*** and causes the uploaded documents to be moved to the **IN Folder**.
- 2.8 The Intake Specialist copies the ***Project Folder*** and its contents to an internal, shared DSA server for plan review.

### 3. PROJECT INTAKE REVIEW:

- 3.1 The Project Intake specialist reviews the submittals electronically and informs the Design Professional of any deficiencies.
- 3.2 The Design Professional corrects the documents as needed, increments the version letter on the file name, and uploads them to the ***IN Folder*** under the ***Project Folder***. The Design Professional ***SHOULD NOT*** overwrite any previously uploaded files.
- 3.3 The Design Professional ***immediately*** notifies the Project Intake Specialist by phone call and email that the corrected documents are uploaded.
- 3.4 The Intake Specialist copies the corrected documents from the FTP site and continues the Intake Review. If corrections are still necessary, the process continues from 3.1 above.
- 3.5 When the project is ready for review, the Intake Specialist informs the DSA Plan Review Supervisors that an electronic project is ready for review.

### 4. PLAN REVIEW: The Plan Reviewers copy the necessary documents to local DSA plan review folders and rename the files in conformance with the **Standard File Naming System**:

- 4.1 The Plan Reviewer adds the sixth term, "**Reviewer**".
- 4.2 The projects are reviewed in the proper order and priority with other projects. Project review times are equivalent to paper projects.
- 4.3 At the end of the plan review, the reviewers upload their review files into the ***OUT*** folder under the ***Project Folder*** on the FTP site.
- 4.4 The Reviewer notifies the Design Professional by phone call and email that the review documents are ready for download and correction.

### 5. **BACKCHECK:** There are two ways of performing a backcheck for an electronic plan review: Electronic or Traditional

#### 5.1 **Electronic Backcheck**

##### 5.1.1 **Resubmittal for Electronic Backcheck:**

- 5.1.1.1 When the Design Professional and all consultants have corrected the plans, the Design Professional uploads ***one*** file of each of the corrected documents, to the ***IN Folder*** under the ***Project Folder*** on the DSA FTP site.
- 5.1.1.2 In renaming the files, the Design Professional shall:
  - Increase the fifth term, "**Version**", by one, and
  - Remove the sixth term, "**Reviewer**."
- 5.1.1.3 The Design Professional should prepare a document listing all corrections and upload it with the corrected documents. This will assist the Plan Reviewers in performing the backcheck. The name for this document must include the application number and the word "RESPONSE."

**5.1.1.4** The Design Professional informs the Structural Plan Reviewer by phone and email that the project is ready for backcheck.

**5.1.2 DSA Performance of Electronic Backcheck:**

**5.1.2.1** The Structural Plan Reviewer downloads the files from the FTP site and notifies the other Reviewers that the plans are ready for backcheck.

**5.1.2.2** The Structural Plan Reviewer schedules the backcheck time for the other Reviewers, as is done for a conventional (paper) backcheck appointment, so that their time is committed to do the backcheck.

**5.1.2.3** The Reviewers compare the corrected construction document files against the original comment sets. At the end of the backcheck, the Reviewers call the Design Professional and consultants to discuss unresolved comments, and agree to the most expeditious means of resolving them. Web-conferencing software may be used.

**5.1.2.4** If further corrections are required, another set of review documents, using subsequent **Version** terms in the file name, are placed in the **OUT Folder** under the **Project Folder**, and the process iterates from Section 5.1.1 above.

**5.1.2.5** This review/response cycle continues until all comments and corrections have been brought to resolution.

**5.2 Traditional Backcheck:**

**5.2.1** The Design Professional calls the Structural Reviewer to make an appointment for a traditional, face-to-face backcheck.

**5.2.2** The Design Professional brings reproducible of the corrected drawings and specifications, corrected calculations and other documentation to DSA.

**5.2.3** The Design Professional brings copies of the electronic review set on paper no smaller than 11x17 to assist in the backcheck.

**5.2.4** The Design Professional and the Reviewers meet face-to-face to compare the corrected documents with the review documents. If further corrections are required, the Design Professional makes them immediately to the reproducible. If further corrections are so extensive that they cannot be made during the appointment, the Design Professional takes the documents back and makes the corrections. The Design Professional then calls the Structural Reviewer again to make a new backcheck appointment.

**6. STAMPING AND SCANNING CONSTRUCTION DOCUMENTS:** There are two ways to Stamp and scan the construction documents

- Electronically identifying and indexing electronic documents
- Stamping and scanning paper documents

**6.1 Electronically Identifying and Indexing Electronic Documents**

See Procedure [PR 08-01](#) for a complete description of DSA's use of digital signatures for identification of electronic files.

**6.2 Stamping and Scanning of Paper Documents**

**6.2.1** When all the comments have been resolved, the Design Professional either brings or sends the construction documents to DSA for manual stamping for identification and initialing by all the DSA Plan Reviewers.

**Note:** *The Design Professional must ensure that the documents brought or*



*sent to DSA ARE THE MOST CURRENT DOCUMENTS AND INCLUDE THE LATEST CORRECTIONS. Several times in the past, DSA has received documents which did not reflect the most current corrections; and DSA had either sent them all back for replacement, or held them while waiting for the replacement of the few deficient documents. If the documents are found to be deficient, the Structural Plan Reviewer will inform the Design Professional of the deficiency by phone call, and will arrange the most expeditious means of resolving it.*

- 6.2.2** The Following Documents must be brought or sent to DSA with the construction documents:
- A paper copy of the wet-signed Access, Gates, and Fire-Flow Approval drawing.
  - A single, complete, properly marked and ordered paper copy of the Fire Alarm Component Submittal and Access Compliance component submittal.
  - A paper copy of the wet-stamped and signed Structural Calculations.
  - Revised, amended, Geotechnical and Geohazard Reports, as needed for inclusion of CGS comments, and an acceptance letter from CGS.
  - Revised, amended Title 24 Energy reports and calculations.
  - The completed form [DSA-145: Record Set Handling Instructions](#)
- 6.2.3** If the construction documents are sent, the Design Professional must note on the transmittal **“ORIGINAL DOCUMENTS FOR STAMPING AND SCANNING”** to notify the mailroom technician. The mailroom technician shall immediately notify the Structural Plan Reviewer of receipt of the drawings
- 6.2.4** The Structural Plan Reviewer schedules time for stamping and initialing the construction documents with the other Reviewers. Stamping of construction documents is given highest priority.
- 6.2.5** After stamping, the construction documents are given to the DSA Scanning Staff for scanning and indexing into the DSA Information Management System (IMS).
- 6.2.6** The construction documents are either handed back to the Design Professional, picked up by a designated carrier, or are sent back to the Design Professional.

## APPENDICES

- 1 – Required Document Format and Presentation**
- 2 – Technical Requirements for Electronic Documents**
- 3 – Folder Naming System**
- 4 – File Naming System**
- 5 – Segregation of Drawings to Limit File Size**

**APPENDIX 1 –  
REQUIRED DOCUMENT FORMAT AND PRESENTATION FOR FIRST SUBMITTAL:**

**Note:** *In order to facilitate the intake process, all documents must be named as noted below. The letter in the name represents the version of the document. If a document must be modified or corrected during the Intake Process, this letter will be increased by one with each subsequent submittal.*

1. All documents required by [Form DSA-3, Project Submittal Checklist](#), shall be submitted to DSA. However, upload each electronic document only once to the DSA FTP server.
2. **Drawings:**
  1. **All** drawings must be combined into a single electronic file. (Name: **DWG\_A**)  
(See [Appendix 5](#) for files exceeding 60 Megabytes)
  2. Drawings must be placed in proper order, with bookmarks created for each drawing.
  3. Each bookmark name must include the sheet number and the sheet name.  
Example: "**A2.2.3\_Bldg-B\_Roof\_Plan**"
3. **Specifications:** (Name: **SPC\_A**)
  1. All specification sections must be contained in one electronic file.
  2. Sections must be placed in the proper order, with bookmarks created for each section.
4. **Calculations** (Name: **STC\_A**)  
Calculations may be scanned images of hand written pages. Large calculation packages must be book marked for the following sections:
  1. Design Criteria.
  2. Loads
  3. Gravity analysis and design.
  4. Lateral Analysis and design.
  5. Foundation analysis.
5. **Input and Output files for any and all structural software used for design.** (*The name for these files shall be as given by the Structural Engineer of Record*)
6. **Fire Alarm Component submittal, and voltage drop calculations.** (Name: **FAC\_A**).
  1. The Component Submittal must be contained in one file.
  2. The order of the components must follow that of their appearance on the drawings.
  3. The components must be properly marked and referenced on the drawings and calculations.
7. **Access Compliance Component Submittals.** (Name: **ACS\_A**)
  1. The Component Submittal must be contained in one file.
  2. The order of the components must follow that of their appearance on the drawings.
  3. The components must be properly marked and referenced on the drawings.
8. Any and all correspondence with DSA regarding the project. *Named at the Design Professional's discretion*).
9. The Architect's Transmittal Form covering all the documents submitted. (Name: **TRNS\_A**)
10. The Test and Inspections List. (Name: **T&I\_A**).
11. The Geotechnical Report and Geohazard Report (if required for the project) See [IR A-4](#) for GeoHazard Report submittal requirements. (Name: **GTC\_A** or **GHZ\_A**).
12. Title 24 Energy compliance forms and calculations (if required for the project). (Name: **ENG\_A**).
13. The Local Fire Authority's Access, Gates, Hydrants and Fire Flow sign-off drawing,

(alternately referred to as "local sign off"). (Name: **AGFF\_A**).

## APPENDIX 2 - TECHNICAL REQUIREMENTS FOR ELECTRONIC DOCUMENTS

### 1. FILE FORMATS: All documents shall be submitted in Portable Document Format (PDF).

**NOTE:** *It is understood that the Design Professional has obtained and understands how to use software for the preparation, creation, marking, and manipulation of Portable Document Format (PDF) files. There are several software packages available to do this.*

*Other formats may be acceptable with the consent of the Regional Manager.*

### 2. FILE SIZE: PDF documents should not exceed 60 megabytes (mb) in size. If a submittal will exceed this limit, see **Appendix 5** for a suggested means of segregating sheets in order to create files that are below 60 mb.

### 3. IMAGE SIZE

The size of the electronic image must agree with the standard paper size of the sheet; for example:

1. A 30" x 42" drawing should not be placed on an 11"x17" sheet size.
2. An 11"x 17" image should not be placed on a 30"x42" sheet size.
3. All drawings must be submitted in landscape format.

### 4. SUGGESTED DRAFTING CONVENTIONS:

**Note:** *The following are suggestions only. In order to facilitate the review of an electronic submittal, DSA welcomes the following formats and drafting conventions. DSA believes that these suggestions will ease the transition to an electronic review by creating an environment that minimizes the number of pans and zooms necessary to navigate and view a submittal on two 19 inch to 24 inch monitors.*

1. **Sheet Size:** No larger than 24 inches x 36 inches
2. **Font Size:** No smaller than 12 point.
3. **Resolution:** No less than 400 dpi.

### **APPENDIX 3 - STANDARD FOLDER NAMING SYSTEM FOR THE DSA FTP SITE:**

There are four folder names used on the DSA File Transfer Protocol (FTP) site. Two of the names apply to the same folder. The names are:

[Firm Name Folder](#)  
[Submittal Folder](#)  
[Project Folder](#)  
[Routing Folder](#)

See [FIGURE 1](#) for an example of the Folder Structure used.

#### **FIRM NAME FOLDER:**

The name of the ***Firm Name Folder*** comprises abbreviations of the Design Firm Contact Person's name and the Name of the Design Firm. Department of General Services, Office of Technology Resources requires that an individual at each firm possessing a folder be designated as the contact person for that firm. Only one folder per design firm for each DSA Regional Office is allowed.

*Example:*

The Design Firm is called "Really Good Architects, Inc."

The Contact Person is "John Smith".

**Format:** *FirmName\_ContactName*

**Folder Name:** "ReallyGood\_JSmith"

#### **SUBMITTAL FOLDER NAME:**

The name of the ***Submittal Folder*** comprises information about the project *before* DSA assigns the project an application number. The separator between each term must be an underscore.

*Example:*

The project is a new multipurpose room for San Francisco Unified School District

The Regional Office Number is 01

The District File Number is 38-01

The name of the school is "Starr-King Elementary School"

The Date that the review files were first uploaded to DSA's FTP server is July 10, 2009

**Format:** *RegionalOfficeNumber\_File-Number\_Project-Name\_Upload-Date*

**Folder Name:** "01\_38-01\_Starr-King\_7-10-09"

#### **PROJECT FOLDER NAME:**

The name of the ***Project Folder*** comprises information about the project *after* DSA has assigned the project an Application Number:

*Example:*

The DSA Application Number given to the project is 01-110957

**Format:** *App-Number\_Job-Name*

**Folder Name:** 01-110957\_STARR-KING-ELEM

**APPENDIX 3 (continued)**

**ROUTING FOLDER NAMES:**

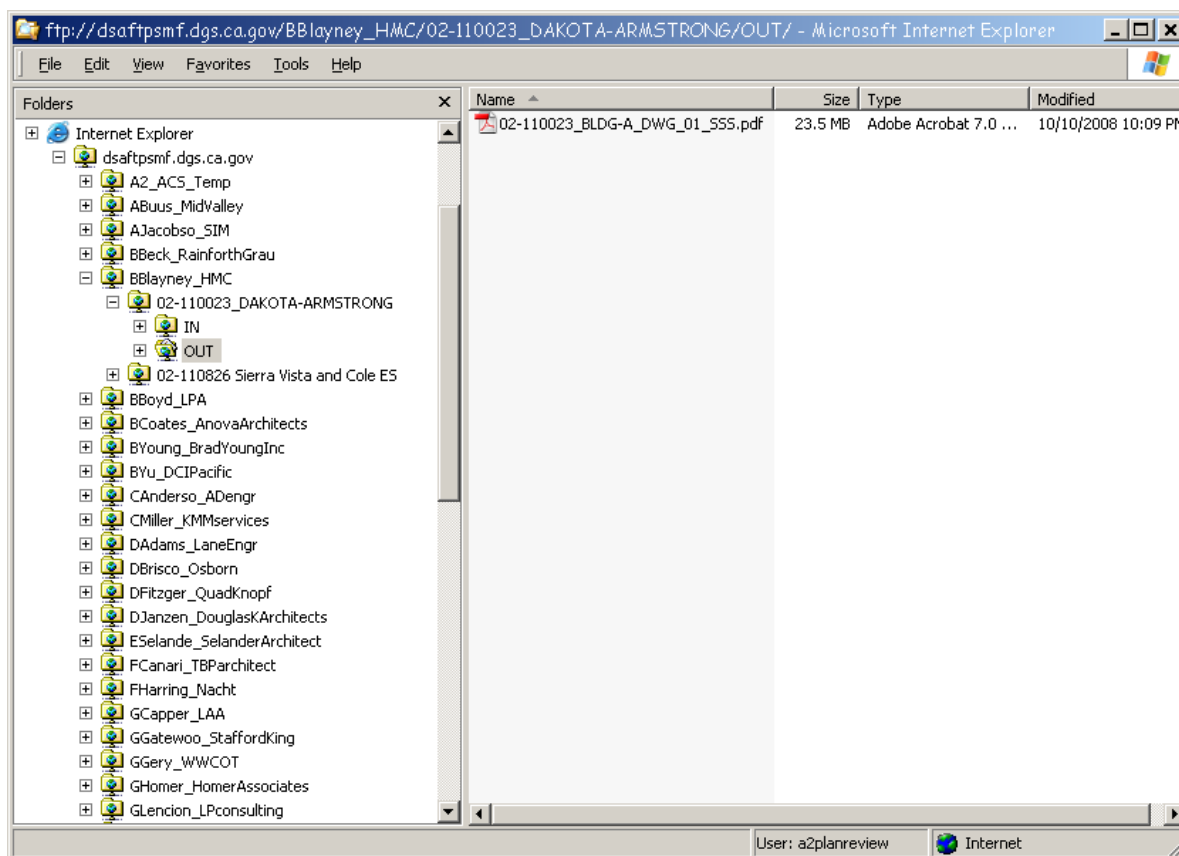
**Routing Folders** contain documents created by the Design Professional or DSA:

1. **IN** This folder contains all the files created and uploaded by the Design Professional, including, but not limited to:
 

DSA-1	Plumbing Cut sheets
DSA-3	Hardware Submittals
A copy of the fee warrant	Drawings
The Architect’s Transmittal	Specifications
Access Gates Hydrants Fire Flow local sign-off	Structural Calculations
Any other pertinent correspondence	Fire Alarm Component Submittal
Geotechnical Report	Energy Compliance forms and calculations
Geohazard Report	
  
2. **OUT** This folder contains all the review files created and uploaded by DSA reviewers that are returned to the Design Professional for correction, including, but not limited to:
 

Drawings Review Set	Access Compliance submittal Review Set
Specifications Review Set	Energy Compliance forms and calculations
Fire Alarm Component Submittal Review Set	

**FIGURE 1: EXAMPLE OF FTP FOLDER STRUCTURE AND FILE NAMING SYSTEM**





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**APPENDIX 5 – SEGREGATION OF DRAWINGS TO LIMIT FILE SIZE:**

As file sizes increase, the responsiveness of the file during plan review slows considerably. Experience has found that files below 60 megabytes perform acceptably. The following are suggestions for breaking up an electronic drawing file to keep it under 60 Mb.

**SUGGESTION 1:** For multiple building projects, break the drawing set up by building. The submittal files will contain a complete drawing set for Architectural, Structural, MEP, etc. The submittal files might be named:

BLDG-A\_DWG\_A or:  
MP-BLDG\_DWG\_A  
Etc.

**SUGGESTION 2:** For Single building projects, break the drawing set up by discipline. The submittal files will contain drawings for only one discipline each. The Submittal files might be named:

ARCH-DWG\_A  
STR-DWG\_A  
MEP-DWG\_A  
Etc.

If neither of these two suggestions meet the needs of the project, call the Designated Contact to discuss.