

Conduct of Engineering Request for Variance or Alternate Method

To display the VAR Request Metadata pane for this document, click File > Info > Properties > Show Document Panel.

1.0 General

1.1 Document Number: VAR-10066	1.2 Revision: 1		
1.3 Brief Descriptive Title: Electronic Drawing Approval			
1.4 Affected Program: Engineering Standards	1.5 Request Type: Variance		
1.6a Affected Tech Area 99	1.6b Affected Buildings Sitewide		
1.7 Requestor: Richardson, Scott C Organization: ES-FE			
1.8 Revision History Revision Number Changes and Comments			
0 Initial issue Revision Number Changes and Comments 1 Converted VAR-10066 into a variance from its original alternate method; removing previous title block and title sheet templates from the website in favor of a new single template to be posted with approval of this VAR rev1			

2.0 Affected Conduct of Engineering Program/Documents

2.1 Affected "P" Document: P342 Engineering Standards	2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter & section; or code, Order, standard, etc.]: Document Title/No.: CAD Standards Manual, Sections 100 & 200
If against the P document itself,	Revision 5
revision (or N/A): N/A	Document Title/No.: Enter text
1,7,1	Revision Enter text
Document Title/No.: Enter text	
	Revision Enter text
2.3 Section/Paragraph: Section 103.1.0.B.6 (Revisions To Drawings): Section 202 (Title Blocks, except non-	

2.3 Section/Paragraph: Section 103.1.0.B.6 (Revisions To Drawings); Section 202 (Title Blocks, except non-electronic Sketches); and Section 203 (Title Sheets, except non-electronic Sketches)

2.4 Specific Requirement(s) as Written in the Document(s):

Various locations within the cited sections of the documents specifically mention "hand written signatures or initials" for the required approvals of each sheet of drawings.

2.5 Contractual, preference, or other basis for requirement in 2.4:

The standard title block is based on the historical title block in use at LANL for many years. It was developed for traditional "wet" signatures of approval of the individual drawing sheets for procedural control of approving drawings and electronically produced sketches for implementation of design in the field.

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2.6 Type of VAR from ESM Chap 1, Z10 [Applies only to standards variances) Type 1	2.7 Discipline CAD

3.0 Request Information & Comments

3.1 NCR required (work has occurred)? No	
If Yes, NCR Number: Enter text.	
3.2 System/Component Affected	3.3 Highest ML Level
OpSystem Acronym & Name [Select OpSysAcronymAndName]	
System Number or Name [Select SystemNumberOrName]	ML-1

3.4 Proposal with Justification/Compensatory Measures:

A modified drawing title block, similar in appearance to the standard title block but with approval blocks large enough to accommodate digital signatures utilizing validated certificates, will supersede all previous drawing title blocks that only supported "wet" signatures, including sketches.

This modified title block template will be available from the CAD Manual website as a replacement to the current "wet" signature templates. Should the need arise, new templates can be printed, wet-signed, and scanned; however, this is discouraged due to loss of legibility and the maximum allowable number of scans is one time—i.e., once during the entire signature routing process (typically at the end). Additionally, if "wet" signatures are to be used, all signers must use the "wet" signature method.

LANL signers must use Entrust while outside AEs will be allowed to use alternatives, including Acrobat. Templates may be updated by POC without revision of this VAR.

Revision to the affected Sections of the CAD Manual itself will allow-supersede this Variance to expire.

The CAD Standards Manual POC may allow alternatives to use of this approach by email permission.

Justification

The elimination of large quantities of paper and printer ink consumption has a significant cost benefit. Additionally, eliminating scanning of signed hardcopy drawings (as the current practice requires) to electronic document formats greatly improves the functionality and usability of the final electronic document for its expected life.

The summer 2020 release of an Acrobat Pro script that allows users to sign multiple, separate documents simultaneously eliminated concerns that e-signing is more time-consuming than wet-signing; it is posted with the Manual.

3.5 Attachments Document Title or Description none 3.6a Project ID N/A N/A or Project Name N/A or Project Name N/A or Date

3.7 Duration:	3.8a If Finite Period, Start Date:	3.8b End Date:
Lifetime	Click to enter a date.	Click to enter a date
3.8c Provide the PFITS number for track	king removal/correction: [PFITSNum]	
3.9 USQD/USID required (Nuclear, High/Mod Hazard)? No If Yes, USQD/USID Number Click here to enter text.		
3.10 QA Review for process change matters potentially affecting LANL's NQA-1 implementation Is a QPA Determination required?: No If Yes , then: Choose an item. QPA Comments: Enter text		
3.11 POC Determination: Accept POC Comments: Enter text		
3.12 Management Program Owner's (SMPO) Approval for P341 and APs; P342, ESM, ML-1 and -2, and Contract Matters; and P343		
SMPO Determination: Accept		

- 4.0 Participant Signatures NOTE: DO NOT ADD NAMES FROM WITHIN WORD! Save and close the form first, then do 1-4 below:
 1. From the SharePoint library, select the document, then click the ellipsis (...) in the second column; a small dialog appears
 2. In the small dialog click the ellipsis again

 - 3. Click Edit Properties and check out the document if prompted toEnter names using the controls provided, then Save

4.1 POC (Management Program Owner's Representative): Richardson, Scott C	Organization ES-EPD	Signature
4.2 Facility Design Authority Representative	Organization Enter text	Signature
[FDARName]		
FDAR signature not required		
4.3 LANL Owning Manager (FOD or R&D/Program)	Organization Enter text	Signature
[FODorPrgmMgrName]		
FOD or Program Manager signature not required		
4.4 Quality Reviewer's Name:	Organization Enter text.	Signature
[QPAName]		
QPA review/signature not required 🗵		

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4.5 Safety or Security Management Program Owner's Approval for P341 and APs; P342, ESM and Contract Matters; and P343	Organization ES-DO	Signature
Streit, Jim		
SMPO signature not required (Type 1 variance) \square		
4.6 Additional Signer 1	Organization	Signature
[AdditionalSigner1]	Enter text.	
Role: Enter text.		
4.7 Additional Signer 2	Organization	Signature
[AdditionalSigner2]	Enter text.	
Role: Enter text.		
4.8 CoE Administrator Signature	Signature	
Salazar-Barnes, Christina L		
NOTE: The CoE Admin is always the last signature placed on this document. The date of that signing is the date of this document.		