Mobile District Advanced Modeling (AdM) Bulletin Drawing Revisions SAM AMB 2024-07

Based on the standards produced by the





US Army Corps of Engineers Mobile District Engineering Division September 2024 (blank page)

Version changes:

September 2018

1. New bulletin 2018-02

July 2021

- 1. Bulletin 2021-02: Multiple sections edited, and illustrations added for clarity, including specifically to add clarification on how to deal with successive revisions.
- 2. General reformatting and grammatically corrections.

September 2024

1. Change the bulletin version to 2024-07

Table of Contents

PREFACE	5
GENERAL	5
Definitions	5
Compliance	5
Instructions	6
Revision Designation	6
Successive Revisions	6
Sheet Designation	6
UPDATED DRAWINGS	7
REPLACED DRAWINGS	8
ADDED DRAWINGS	10
DELETED DRAWINGS	12

Preface

The advanced modeling (AdM) drawing revisions herein are based on the latest version of the A/E/C CAD Standard and the A/E/C Graphics Standard as developed and maintained by the CADD/BIM Technology Center. The standard leaves some options open for multiple reasons including allowance for local variances and requirements as well as client requirements. In this document, the A/E/C CAD Standard will be referred to as the AEC CAD Standard, the A/E/C Graphics Standard will be referred to as the AEC Graphics Standard. For internal users, local copies of both documents are located in ProjectWise under AEC Standards, or online at https://cadbimcenter.erdc.dren.mil.

General

Definitions

Drawing / Sheet / Drawing Sheet – In the context of revisions, these three terminologies are used interchangeably here to refer to the 2D design layout representation. For CAD, these may refer to the CAD sheet files and/or the 2D layouts. For Revit, these refer to the 2D sheet views.

Revisions – Any changes to drawings including updates, replacements, additions, and deletions. There are two types of drawing revisions:

Amendments - Revisions that occur during advertisement
 Modifications - (formerly known as Change Orders) Revisions that occur after a contract is awarded

Updated Drawing – A drawing on which one or areas of the design has been revised

Replaced Drawing - A drawing that has been completely replaced by a revised version

Added Drawing – A new drawing that has been added

Deleted Drawing – A drawing that has been removed in whole

Compliance

In-house Projects

Refer to the <u>SAM-AMB 2020-05 Design File Management – MIL Projects</u> for proper versioning of military projects' design files prior to making revisions. File management policies and procedures for other missions will be developed at a future date. Meanwhile, the MIL Projects standard should be used to the extent possible.

Each designer shall coordinate with the project Engineering Technical Lead (ETL) to ensure that all affected drawings are included in the revision drawing list sent to the Engineering Division Technical Services Branch.

A/Es and Contractors

Coordinate through the appropriate channels to ensure that the affected drawings are documented and submitted.

Instructions

This guide supplements the requirements of the AEC Graphics Standard and expands as

needed where the AEC Graphics Standard allows for options. The requirements are also platform-neutral. However, since there seems to be a lot of confusion with Revit revisions, this guide was developed using Revit screenshots and also includes a tabloid-size Revit revisions guide at the end.

IMPORTANT:

Make sure you are using the latest copy of the model(s) and drawing(s), (i.e. either the advertised drawing or last time it was revised and the associated model in the case of BIM) to make your revisions.

Revision Designation

Amendments shall be numbered sequentially 1, 2, 3, etc. and modifications shall be sequentially identified with uppercase letters A, B, C, etc. Revisions shall be sequentially numbered per drawing (or sheet). Contact the TL or the Engineering Technical Support Branch (EN-TS) for the Amendment number or Modification letter associated with the revision.

Successive Revisions

With successive revisions, cloud and tag only changes for the current revision. Clouds and tags from all previous revisions shall be hidden.

Sheet Designation

A note shall be placed in the lower right corner of each revised drawing sheet to identify the revision. See example Figures C and E. List all revisions, current and all previous in the revision block.

Updated Drawings

Revisions on an existing drawing shall be enclosed in a revision cloud and tagged with an equilateral triangle positioned adjacent to the revision cloud in accordance with the current AEC Graphics Standard (See examples below). The center of the triangle shall be given the sequential number or letter

IMPORTANT:

Note that the sequential numbering is relative to the revision per sheet., and not per project. The numbering does not correlate to the project amendment or modification number.

associated with the revision. The revisions block shall be notated with a description of the changes such as "AMD0001: MULTIPLE REVISIONS" as illustrated in Figure C example.

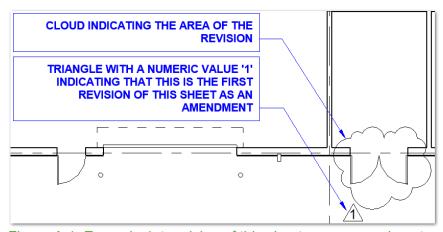


Figure A.1: Example 1st revision of this sheet as an amendment

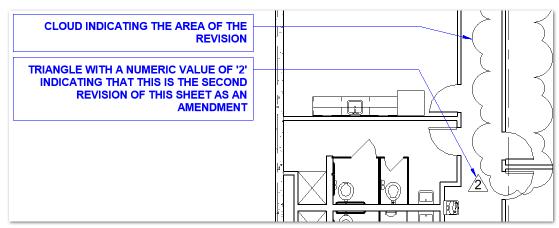


Figure A.2: Example 2nd revision of this sheet as an amendment

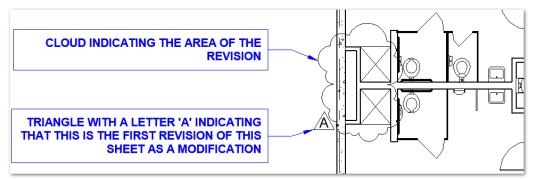


Figure A.3: Example 1st revision of this sheet as a modification

Replaced Drawings

A drawing is considered replaced when the original drawing is superseded by a new drawing in its entirety. When a drawing supersedes an original, the Sheet Reference number (SHEET ID) shall match the Sheet Reference number of the original, with a ".1" suffix added to the end of the number for the first replacement and a ".2" for the second replacement, etc. The replaced drawing title block shall have the same information as the original drawing and include a revision cloud around the Sheet Reference Number and tagged near the Sheet Reference Number block as illustrated in Figure B example.

The revisions block shall be notated with a description of the replacement revision such as "MOD0006: REPLACED DRAWING" as illustrated in Figure C example. The

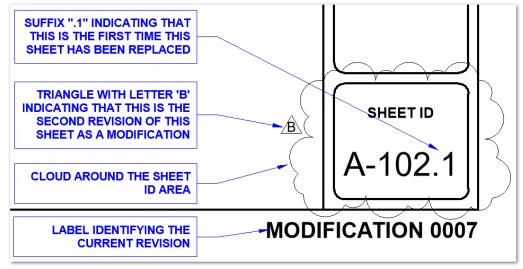


Figure B: Example of Replaced Drawing

Index of Drawings shall be revised to reflect this change with a revision cloud and a triangle as illustrated in Figure D example.

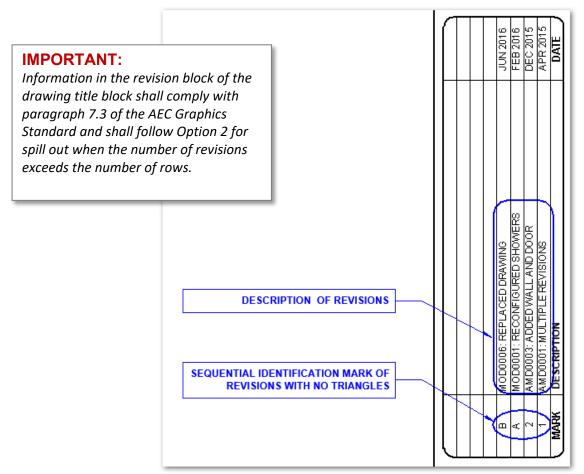


Figure C: Example of Revision Block Showing Multiple Successive Revisions of One Sheet

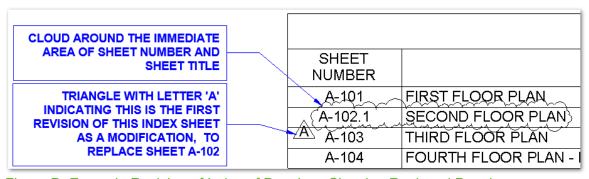
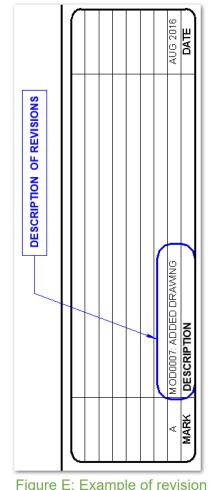


Figure D: Example Revision of Index of Drawings Showing Replaced Drawing

Added Drawings

When new drawings are added as part of a revision, the revision description shall indicate "ADDED DRAWING", "SHEET ADDED" or similar verbiage. A cloud and triangle shall be placed around the Sheet Reference Number block as illustrated in Figure F example. The new drawing shall use the existing project sheet numbering convention. When the new drawing follows the last existing drawing in the package or at the end of a set of discipline sheets, the next sequential sheet reference number shall be used without a suffix. If the new drawing(s) are inserted between two existing sheet reference numbers, the new drawings shall be numbered the same as the previous existing drawing in the set and with an appended sequential alpha-character, e.g., added drawings following sheet A-401 would be labeled drawing A-401A, A-401B, etc.



SUFFIX "A" ON THE SHEET ID INDICATES THIS IS THE FIRST SHEET ADDED AFTER THE ORIGINAL SHEET A-103

TRIANGLE WITH LETTER 'A' INDICATING THIS IS THE FIRST REVISION OF THIS SHEET AS A MODIFICATION

CLOUD AROUND THE SHEET ID AREA

LABEL IDENTIFYING THE CURRENT REVISION

LABEL IDENTIFYING THE CURRENT REVISION

Figure F: Example of Added Drawing that Falls Between Two Sheets within a Discipline

On the sheet where the Index of Drawings is placed, the newly added sheet is identified on the Index of Drawings with a revision cloud and a triangle illustrated in Figure G example.

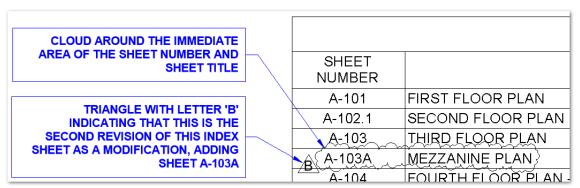


Figure G: Example Revision of Index of Drawings indicating Added Drawing

Deleted Drawings

When a drawing is to be deleted from an existing advertised/awarded contract package, the Index of Drawings shall be flagged with a triangle symbol on the line of that particular drawing as illustrated in Figure G example. A strike-out line shall be drawn through the listing for that drawing with the word "DELETED" inserted at the end of the title. The entire line shall be enclosed with a revision cloud and tagged. The Revisions block of the index sheet shall also be flagged, and the deletion noted as indicated in Figure H.

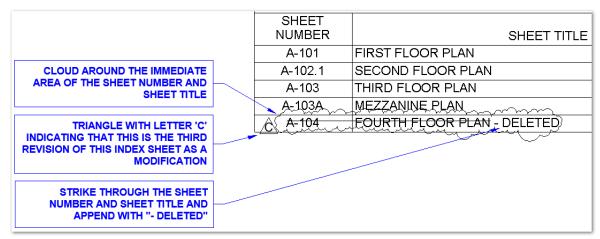


Figure G: Example Revision of Index of Drawings indicating Deleted Drawing

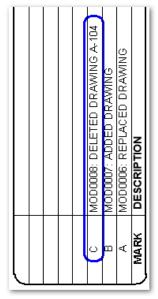
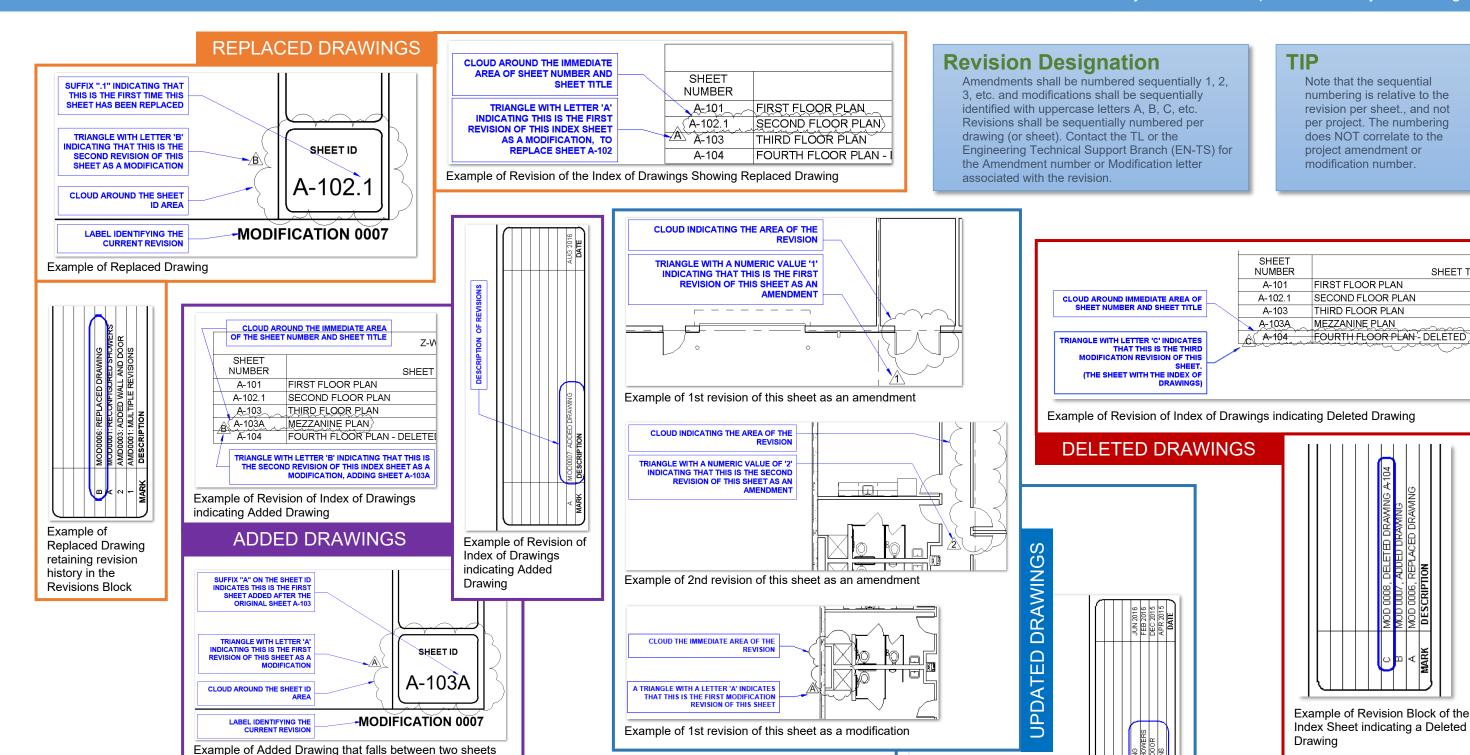


Figure H: Example of Revision Block on the Index Sheet indicating Deleted Drawing

SHEET T



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within a discipline

TIP

DESCRIPTION OF REVISIONS

SEQUENTIAL IDENTIFICATION MARK OF

Example of Revision Block Showing

Multiple Revisions of One Sheet

of the model(s) and drawing(s), (i.e. in the case of BIM) to make your revisions.

Make sure you are using the latest copy either the advertised drawing or last time it was revised and the associated model

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