HABS/HAER GUIDELINES
for
RECORDING HISTORIC SITES and STRUCTURES
using
COMPUTER-AIDED DRAFTING (CAD)

1.0 INTRODUCTION

1.1 Objectives. These guidelines address the application of the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation* to the use of computer-aided drafting (CAD) software in the production of two-dimensional HABS/HAER measured drawings. This document is intended as an addendum to *Recording Structures and Sites with HABS Measured Drawings* (hereafter referred to as the HABS Guidelines) and *Recording Historic Structures and Sites for the Historic American Engineering Record* (hereafter referred to as the HAER Guidelines). Reference should be made to the HABS and HAER Guidelines for any issues not addressed in this document.

2.0 FIELD RECORDS

2.1 Digital Records. A hard copy plot or printout of any digital data or image used in the field recording process should be included as part of the field records. (Examples include scanned raster images, digital photographs, and lists of electronic surveying data points.)

2.2 Photogrammetric Images. A print of any photgrammetric image used in the field recording process, along with dimensional information pertinent to control points in the image, should be included as part of the field records.

3.0 MEASURED DRAWINGS

3.1 CAD Software and File Formats. HABS/HAER does not require or recommend the use of any particular CAD software nor of any specific file format.

3.2 Layer Naming Conventions. HABS/HAER does not require the use of any specific layering system. HABS/HAER recommends the use of a layering system based on the *CAD Layer Guidelines* developed by the American Institute of Architects (AIA), as adapted to the specific needs of a particular project.

3.3 Line Weights. Line weights should be configured to correspond to those described in Section 5.3 of the HABS Guidelines or Section 4.9 of the HAER Guidelines.

3.4 CAD Fonts. HABS/HAER recommends the use of a sans-serif or Roman serif font for drawing text. Only one font should be used per project. All fonts should be TrueType (TTF) format.

4.0 FINAL PLOTS

4.1 Sheet Materials. Final plots must be made on 4 mil(0.004") thick drafting film (also known as mylar), with a single- or double-matte finish. For plotters using cut sheets, sheets preprinted with either a HABS or HAER border are available from the HABS/HAER office. For roll plotters, digital versions of the HABS and HAER title blocks, in either DXF or AutoCAD DWG formats, are available from the HABS/HAER office, or may be downloaded from the HABS/HAER website.

4.2 Pen Plotters. Plotters using pens which contain ink which meets the standards of the Library of Congress for archival stability, such as those listed in Section 1.4.3 of the HABS Guidelines or Section 4.9 of the HAER Guidelines, may be used for making final plots of HABS and HAER drawings.

4.3 Inkjet Plotters. Plots made by inkjet plotters do not meet the standards of the Library of Congress for archival stability, and therefore must never be used for making final plots of HABS and HAER drawings.

4.4 Electrostatic and Laser Plotters. Plots made by electrostatic and laser plotters (also known as LED plotters) meet the standards of the Library of Congress for archival stability, and therefore may be used for making final plots of HABS and HAER drawings.

5.0 DIGITAL FILES

5.1 Submission of Digital Files. Neither the HABS/HAER office nor the Library of Congress currently maintains an archive of digital HABS and HAER files. Therefore the submission of such tiles, as an accompaniment to the final plots, is not required. Those who wish to do so may include, along with their field notes, a copy of their digital files on diskette, tape, or CD-ROM. This should be accompanied by a hard copy document which lists and describes the software used, the individual tile names, the layering system, the corresponding line weights, and any other information pertinent to digital aspects of the project. (Keep in mind that the Library of Congress does not consider magnetic media such as diskettes and tapes to be archival. Thus the Library makes no guarantees that files submitted on such media will be able to be retrieved in the future.)