

NAME OF SYSTEM:

Public Works Drawings Retrieval

ORIGINATOR:

**Public Works Department
Puget Sound Naval Shipyard
Department of the Navy
Bremerton, Washington 98314**

OBJECTIVE. To design and operate a document storage and retrieval system that will insure the integrity of the original information and still permit fast access and normal use of the stored information.

BACKGROUND. The Public Works Department of the Puget Sound Naval Shipyard is responsible for the activities associated with changes and modification of buildings, structures, and utilities located on the installation. In support of these matters, the Design Division of the Public Works Department prepares the necessary engineering drawings and insures their safekeeping.

The engineering documents for the smaller shipyard construction requirements are prepared in-house, while those pertinent to larger construction activities are developed either by higher Navy levels or by commercial contract. Developed drawings come under the control and custodianship of the Design Division. Because these large and detailed drawings are often used at some distance from their storage site and are frequently subjected to hard usage at work locations, a better method for control and use of the drawings was needed. An aperture card system was adopted as the best way for preserving the integrity of drawing information.

THE NEW METHOD. The collection of about 53,000 engineering drawings identifies specific elements or features of the shipyard facilities. The reference system is based on local classification features. The main categories include such data elements as assigned facility number, originator's branch code, physical location, and type of work to be performed.

The initial conversion to the standard aperture card format began with the sorting of the engineering drawings into compatible sizes for more effective productivity during the microfilming and image inserting process. The reference information was then placed on a log sheet that governed subsequent processing actions. A copy of the log sheet was used as a basis for data input to the aperture card and assured proper matching of card and microfilm image during the image mounting process.

New engineering drawings now entering the system are assigned a facility group or category by the originator, based on the structure's name or identity number. Selected identifying data is keypunched into the punched cards and interpreted (printed) across the top of the card. When more than one facility is involved in a work project, duplicate locator cards are prepared for cross-indexing purposes. These duplicate cards, which do not contain film images, are maintained for machine processing purposes and are commonly referred to as "slave decks." They are filed primarily by facility or group category, followed by the organizational branch to which the facility is assigned.

Engineering drawings are photographed on 35-mm. negative roll microfilm. A microfilm roll duplicate copy is produced for aperture card purposes, and the original microfilm is retained for archival purposes. The aperture cards are filed by drawing number in the Design Division.

Searches for drawings originate primarily within the Division and are handled by an assigned engineering technician. Searching is accomplished by machine sorting of the locator "slave deck" cards and facility grouping. The first sort run will isolate the designated subclass, and where volume warrants additional runs may be made to facilitate the numerical identity of the desired drawings. The appropriate aperture card reproductions of the original tracings are then retrieved from the aperture card file. Users can read the information or produce enlarged paper copies by using the aperture card reader-printer.

REMARKS. This system satisfies the Design Division's objectives of assuring file integrity, and, additionally, the master roll is always available to recreate the original drawing in appropriate size should the aperture

card become lost. The system's mechanical sorting capability improves the search process by quickly identifying desired drawings and reducing the possibility that any pertinent drawings are overlooked.

PUBLIC WORKS DRAWINGS RETRIEVAL

