Docket No. N2012-1

USPS Library Reference N2012-1/19

USPS Handbook AS-504, Chapter 4:
Workstation Units for Processing Mail Area Mail Processing
(July 1999)

PREFACE

PURPOSE: USPS-LR-N2012-1/19 is a Category 2 library reference consisting of Chapter 4 of the USPS Handbook AS-504, Workstation Units for Processing Mail (1999). It consists of space requirement drawings of postal workstation unit layouts for visual reference. These workstation units are for numerous mail processing operations, including mail preparation; distribution of letter and flat mail; distribution of irregular parcels and pieces; processing special category mail and distribution of parcel post; bulk sorting and material handling operations; computerized forwarding system operations; and office and clerical operations.

PREDECESSOR MATERIAL: None.

UNITED STATES POSTAL SERVICE

Space Requirements

Handbook AS-504 July 1999

A. Purpose. This handbook provides rules and guidelines for developing the various types and sizes of facilities found in the Postal Service. It also provides templates of the equipment to be housed in those facilities.

B. Contents. This handbook replaces Handbook AS-504, *Space Requirements*, August 1995. Major changes are discussed here. The upper limit in size of small standard buildings is being increased from 6,500 square feet to 9,000. This necessitates changes in the matrixes for determining building size, parking requirements, and the overall site sizes; therefore, the computerized Facility Planning Concept has been revised. Forms 919 and 929 have also been revised to reflect changes.

The retail modules (service counters), the administrative modules, Inspection Service offices, and the space requirements for support areas less a medical unit have been changed. The section on machinable letters and flats has been modified to include the delivery barcode sorter/optical character reader (DBCS/OCR) and the flat sorting machine model 1000 (FSM-1000) as well.

Templates have been added to Chapter 4 for the DBCS/OCR, FSM-1000, straight-line small parcel and bundle sorters with the Siemens and the Lockheed Martin feed systems, four blocks of space for universal sorters (5000, 10000, 15000, and 20000 square feet), pedestal and gantry robots, sleevers and strap equipment, and mechanized scan-where-you-band equipment. The carrier loading vestibule (section 52) has been reduced to 400 square feet. In Chapter 6, text and layouts for the image processing unit rooms at the remote encoding center sites have been changed to reflect current practices and procedures.

C. Revisions. This handbook will be revised as new methods are developed that affect space requirements and/or as new equipment is added.

D. Distribution

1. **Initial.** This document is being distributed directly to major facilities offices, facilities service offices, district offices, and plants.
2. **Additional Copies.** Order copies from the material distribution center (MDC) using Form 7380, *MDC Supply Requisition.*

E. Comments. Direct any questions through channels to:

SYSTEMS/PROCESS INTEGRATION
ENGINEERING
UNITED STATES POSTAL SERVICE
8403 LEE HIGHWAY
MERRIFIELD VA 22082-8146

F. Effective Date. This material is effective immediately upon receipt.

William J. Dowling
Vice President
Engineering

Originally Printed
on Recycled Paper

UNITED STATES POSTAL SERVICE

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4 Workstation Units for Mail Processing

41 General

Chapter 4 provides space requirement drawings of workstation unit (WSU) layouts for visual reference. These WSUs are provided for mail processing operations, including mail preparation; distribution of letter and flat mail; distribution of irregular parcels and pieces (IPPs); processing special category mail; distribution of parcel post; bulk sorting and materials handling operations; computer forwarding system (CFS) operations; and office and clerical operations. Section 33 instructs the analyst to use these WSUs in the assembly of the work space requirements for a mail processing facility. All WSUs are designed with current postal equipment. WSUs may have to be adjusted for future obsolete equipment. Exhibit 41 lists equipment that is referenced by Postal Service identification number (PSIN) within certain WSUs.

42 Mail Preparation

Exhibit 42a lists the WSUs, and square feet (sq ft) required, currently used for mail preparation. Exhibits 42b through 42ah illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 41
Equipment Referenced in WSUs

PSIN (Item Number)	Description
3B	Dumping and Facing Table
8B	Canceling Machine Table
11	Dumping and Stamping Case and Table
30	Pouch Rack
31A	Pouch Rack (No Bottom)
31B	Pouch Rack
32	Parcel Post Sack Rack
53	Adjustable Platform Stool
61A,B	Sack Racks
77	Swinging Letter Case Wing
78	Swinging Letter Case Wing (Closed Back)
79	Letter Case and Table
80	Letter Case and Table (Closed Back)
109B	Flat Case and Table
124C	Carrier Case and Table
136B	Flat Case
144C	Carrier Case and Table Wing
0857	Automatic Indicating Scale
1033	Small Canvas Hamper
1046	Large Canvas Hamper
1070	Nutting Truck
1075	Utility Cart (U-Cart)
1226C	Tray Cart
1226F	Tray Cart (Delivery Barcode Sorter (DBCS))
1922A	Model 89 Conveyor 17′
1922B	Model 89 Conveyor 25′
1938	Gravity Roller Conveyor
3601	Canceling Machine, Medium Volume
3602	Canceling Machine, Large Volume
3909	General-Purpose Mail Container
3910	Bulk Mail Container (BMC), Over-the-Road (OTR) Container
3919	Wood Pallet, 40″ x 48″
3919A	Particle Board Pallet, 40″ x 48″
3919B	Plastic Pallet, 40″ x 48″
3921	Eastern Region Mail Container

Exhibit 42a
WSUs Used for Mail Preparation

WSU Number	PostalCAD Drawing Name	Square Feet Required	Item Numbers and/or Description
420001	420001.DWG	87	36-Separation Canceling Workstation Without Cancel Machine
420001a	420001A.DWG	101	36-Separation Canceling Workstation With Cancel Machine
420002	420002.DWG	142	49-Separation Canceling Workstation With Cancel Machine
420002a	420002A.DWG	231	77-Separation Canceling Workstation With Cancel Machine
420003	420003.DWG	68	Canceling Workstation With #3B Table Without Cancel Machine
420003b	420003b.DWG	110	Canceling Workstation With #3B Table With Cancel Machine
420006	420006.DWG	527	1/2 Mark Canceler With Culling and Facing Conveyor (10-Ft Work Area)
420006a	420006A.DWG	680	1/2 Mark Canceler With Culling and Facing Conveyor (18-Ft Work Area)
420007	420007.DWG	918	1/2 Mark Canceler With Tandem Culling and Facing Conveyor (28-Ft Work Area)
420008	420008.DWG	2,023	Micro Mark II Facer Canceler System With Culling Belt and Meter Mail Setup
420008a	420008A.DWG	1,184	Micro Mark II Facer Canceler System With Culling Belt
420008b	420008b.DWG	821	Micro Mark II Facer Canceler Systems for Advanced Facer-Canceler System (AFCS) Thicks
420009	420009.DWG	4,516	Two Micro Mark II Facer Canceler Systems With Tandem Culling Belt and Tandem Meter Mail Setup
420009a	420009A.DWG	3,745	Two Micro Mark II Facer Canceler Systems With Tandem Culling Belt
420010a	420010A.DWG	2,294	Advanced Facer Canceler System With Culling Belt
420010b	420010B.DWG	7,300	Two AFCSs With Standard Cull/Feed System
420010c	420010C.DWG	8,262	Three AFCSs With Standard Cull/Feed System
420010d	420010D.DWG	9,126	Four AFCSs With Standard Cull/Feed System
420010e	420010E.DWG	10,876	Five AFCSs With Standard Cull/Feed System
420010f	420010F.DWG	11,740	Six AFCSs With Standard Cull/Feed System
420010g	420010G.DWG	11,836	Seven AFCSs With Standard Cull/Feed System
420010h	420010H.DWG	12,700	Eight AFCSs With Standard Cull/Feed System
420011	420011.DWG	700	Tandem Meter Mail Setup
420012	420012.DWG	648	Five-Position Meter Mail Setup
420012a	420012A.DWG	495	Three-Position Meter Mail Setup
420013	420013.DWG	260	Storage and Cutting
420014	420014.DWG	970	Pouch Opening With 63 Separations
420014a	420014A.DWG	444	Pouch Opening With 48 Separations
420015	420015.DWG	1,000	Sack Opening, Paper, and Small Parcels and Rolls (SPRs) — Primary Cutting and Setup (58 Separations)
420016a	420016A.DWG	950	SPR and Thicks Canceling (17-Ft Belt)
420016b	420016B.DWG	1,175	SPR and Thicks Canceling (25-Ft Belt)
420017a	420017A.DWG	950	Model 15 Flats Canceler/Stacker (17-Ft Belt)
420017b	420017B.DWG	1,175	Model 15 Flats Canceler/Stacker (25-Ft Belt)

Exhibit 42b
420001, 36-Separation Canceling Workstation Without Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 87 Sq Ft

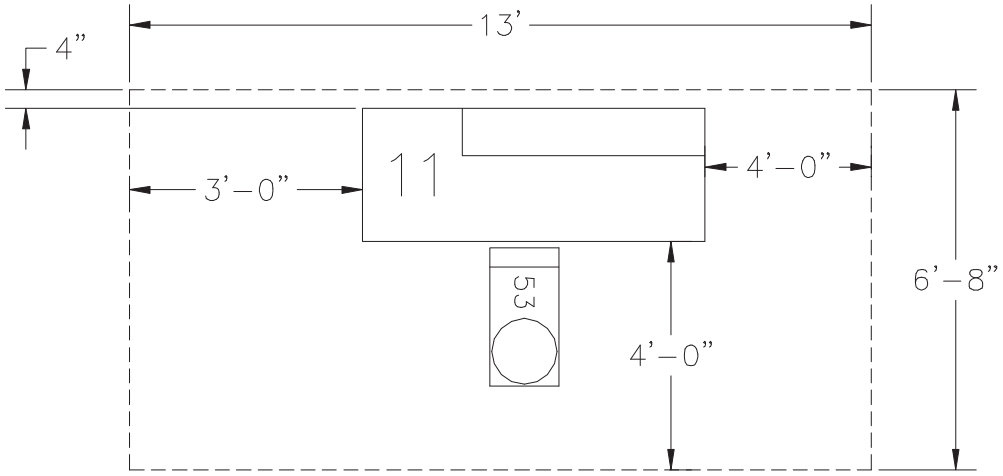


Exhibit 42c
420001a, 36-Separation Canceling Workstation With Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 101 Sq Ft

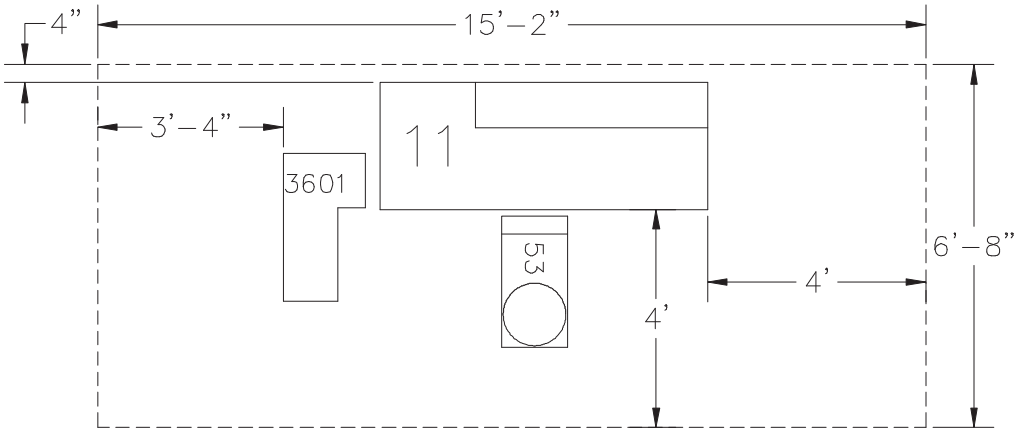


Exhibit 42d
420002, 49-Separation Canceling Workstation With Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 142 Sq Ft

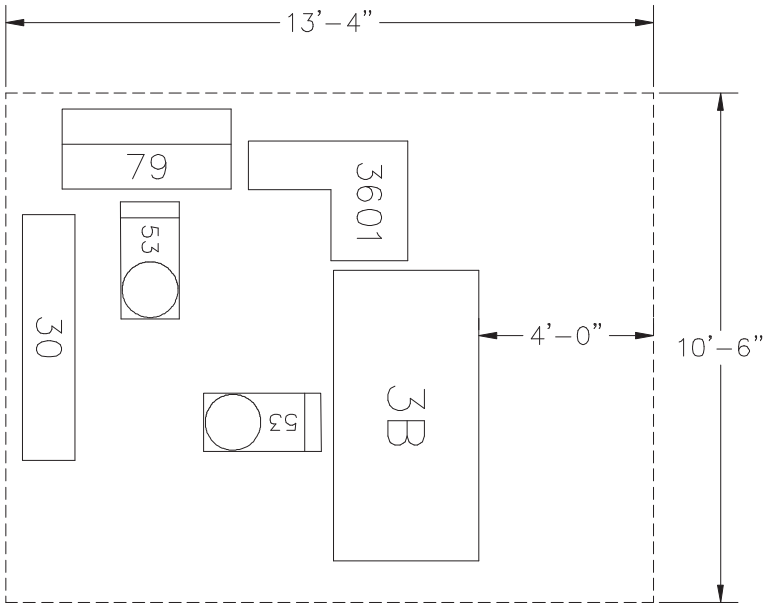


Exhibit 42e
420002a, 77-Separation Canceling Workstation With Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 231 Sq Ft

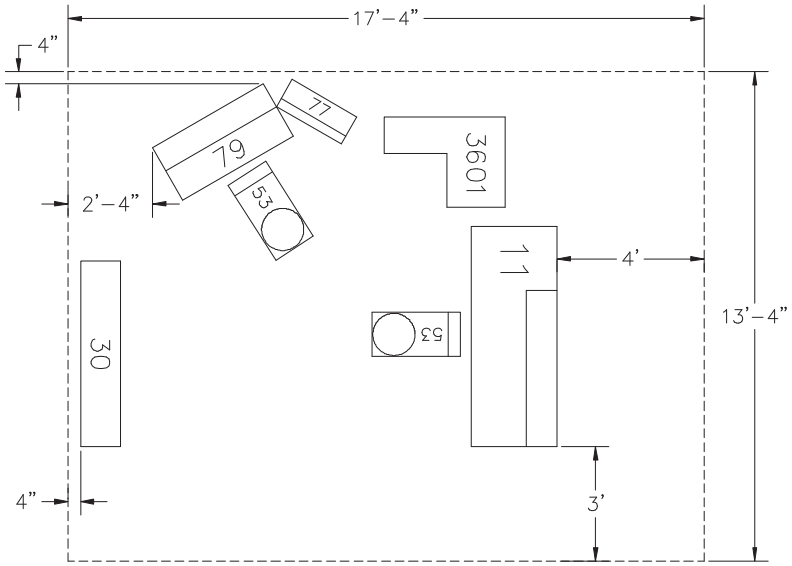


Exhibit 42f

420003, Canceling Workstation With #3B Table Without Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 68 Sq Ft

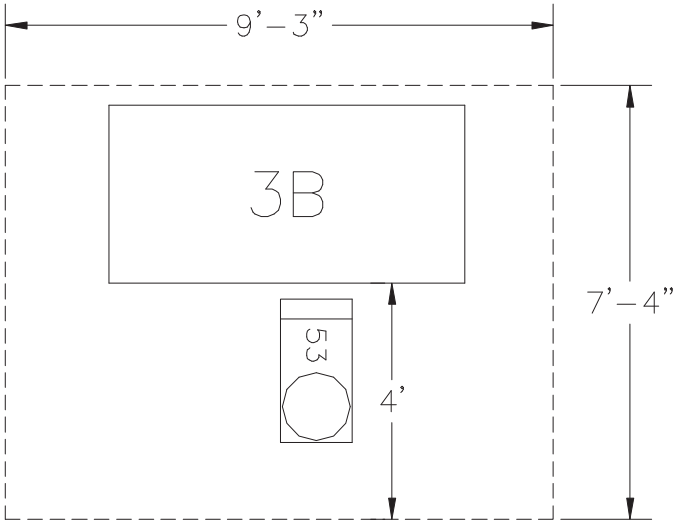


Exhibit 42g

420003b, Canceling Workstation With #3B Table With Cancel Machine

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 110 Sq Ft

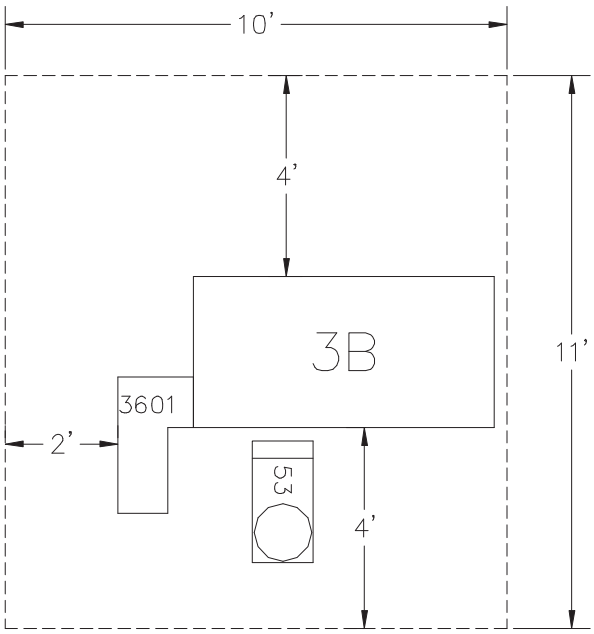


Exhibit 42h

420006, 1/2 Mark Canceler With Culling and Facing Conveyor (10-Ft Work Area)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 527 Sq Ft

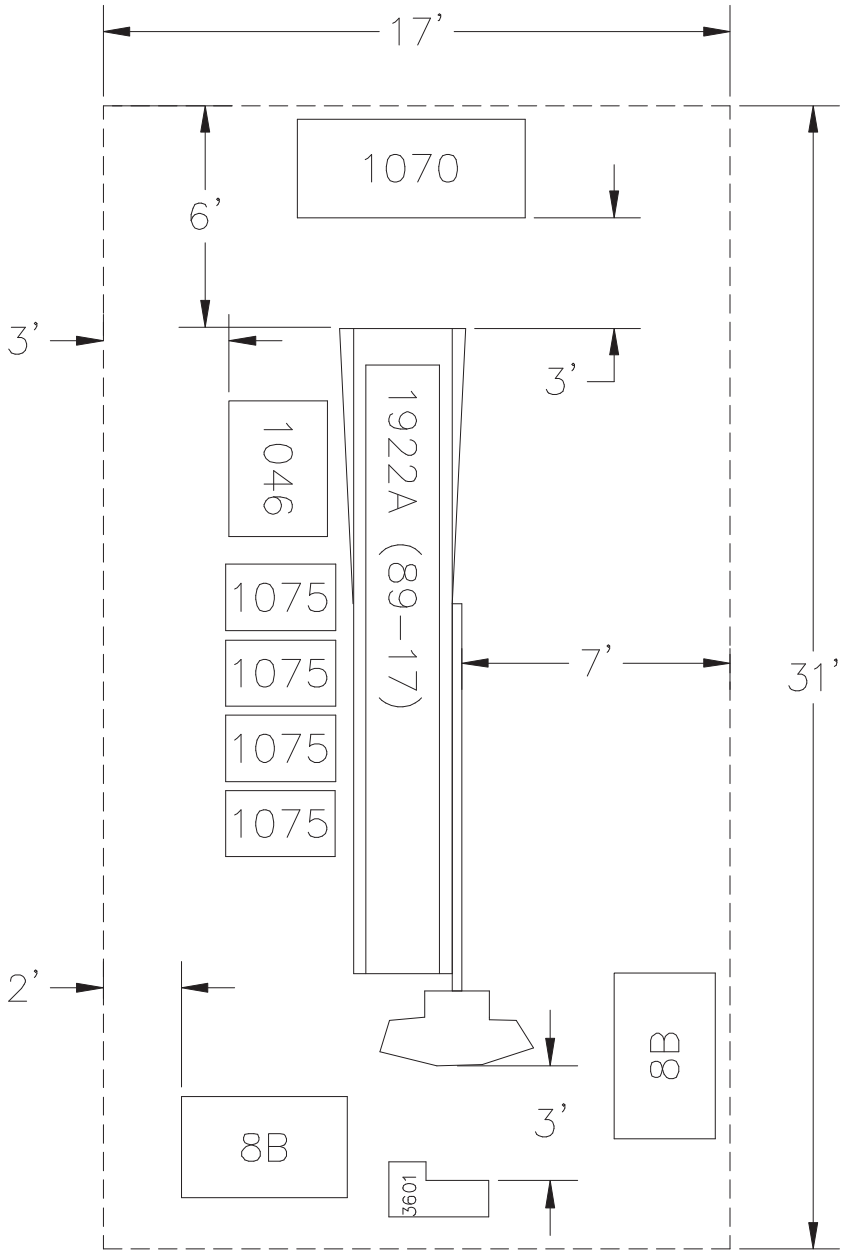


Exhibit 42i

420006a, 1/2 Mark Canceler With Culling and Facing Conveyor (18-Ft Work Area)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 680 Sq Ft

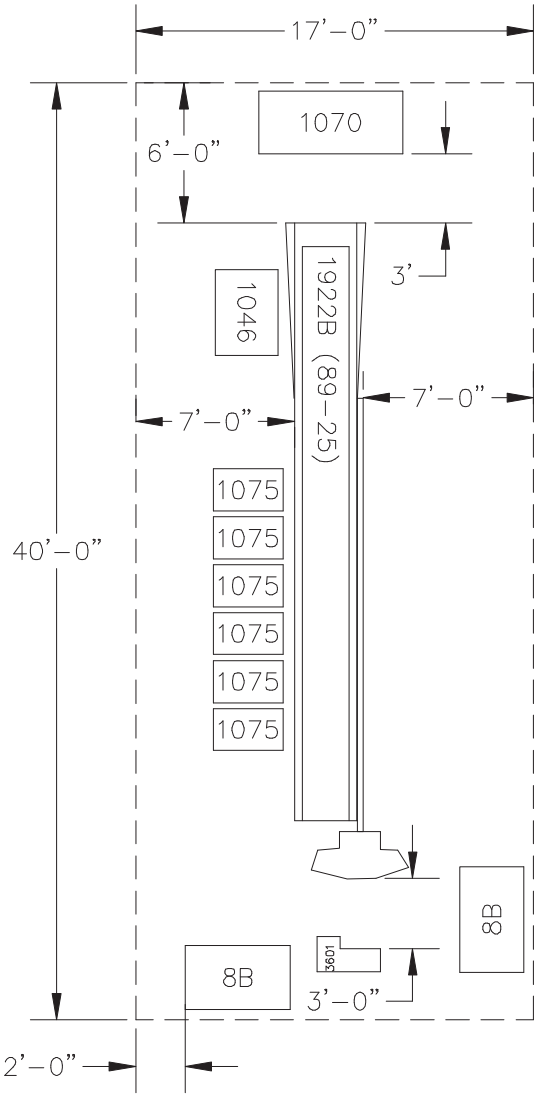


Exhibit 42j

420007, 1/2 Mark Canceler With Tandem Culling and Facing Conveyor (28-Ft Work Area)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 918 Sq Ft

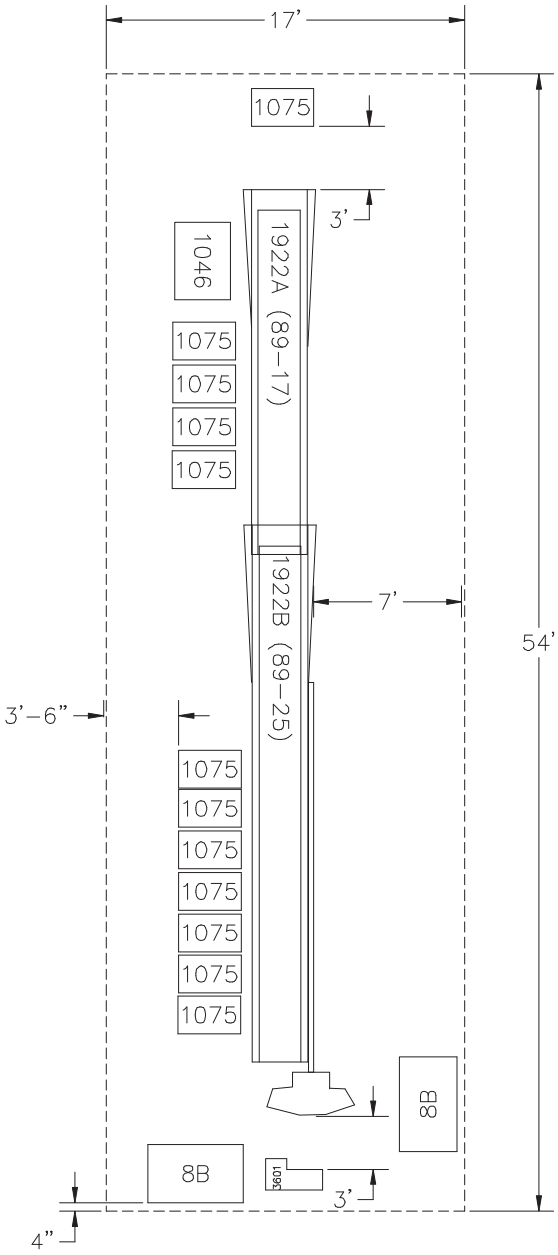


Exhibit 42k

420008, Micro Mark II Facer Canceler System With Culling Belt and Meter Mail Setup

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 2,023 Sq Ft

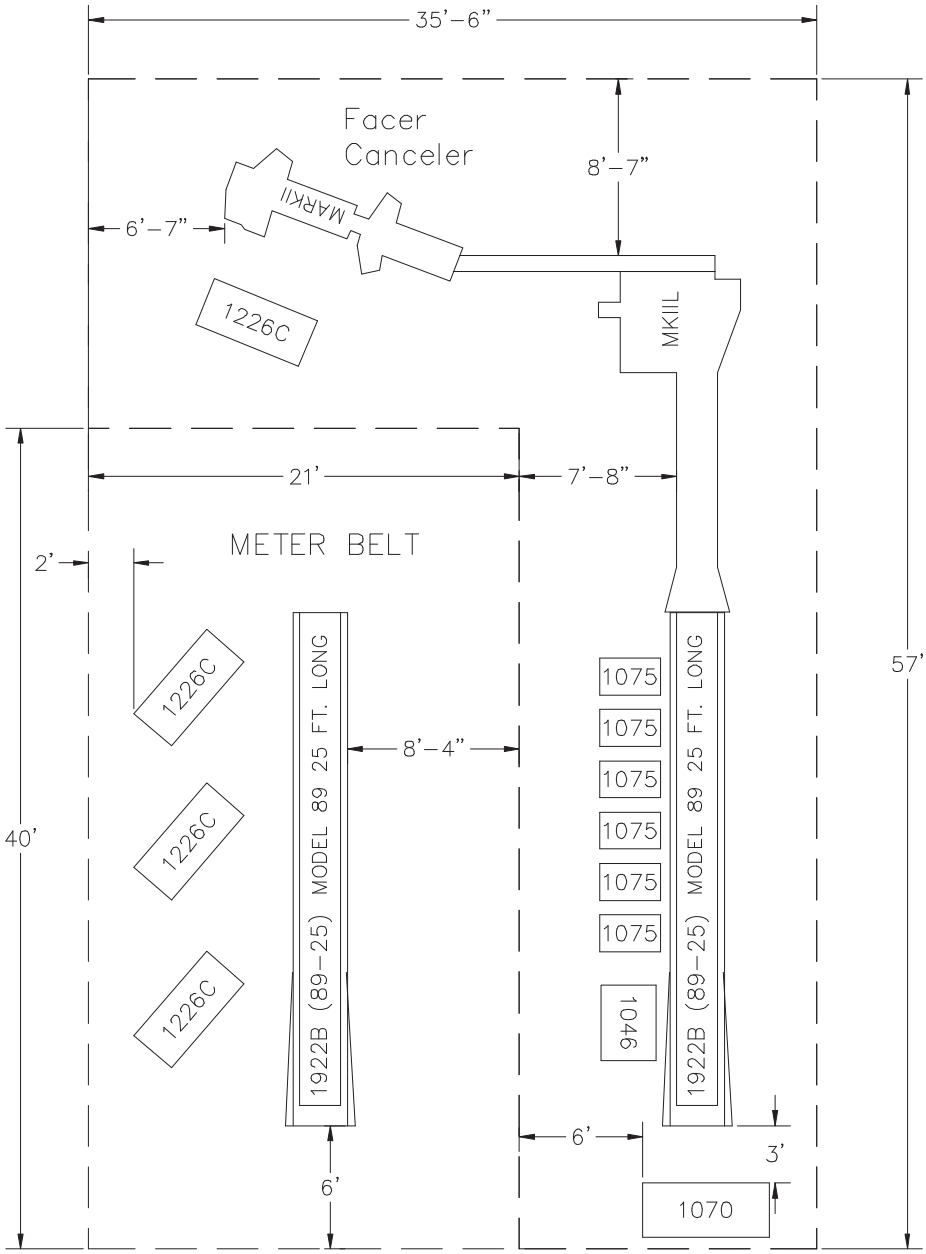


Exhibit 42l
420008a, Micro Mark II Facer Canceler System With Culling Belt

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 1,184 Sq Ft

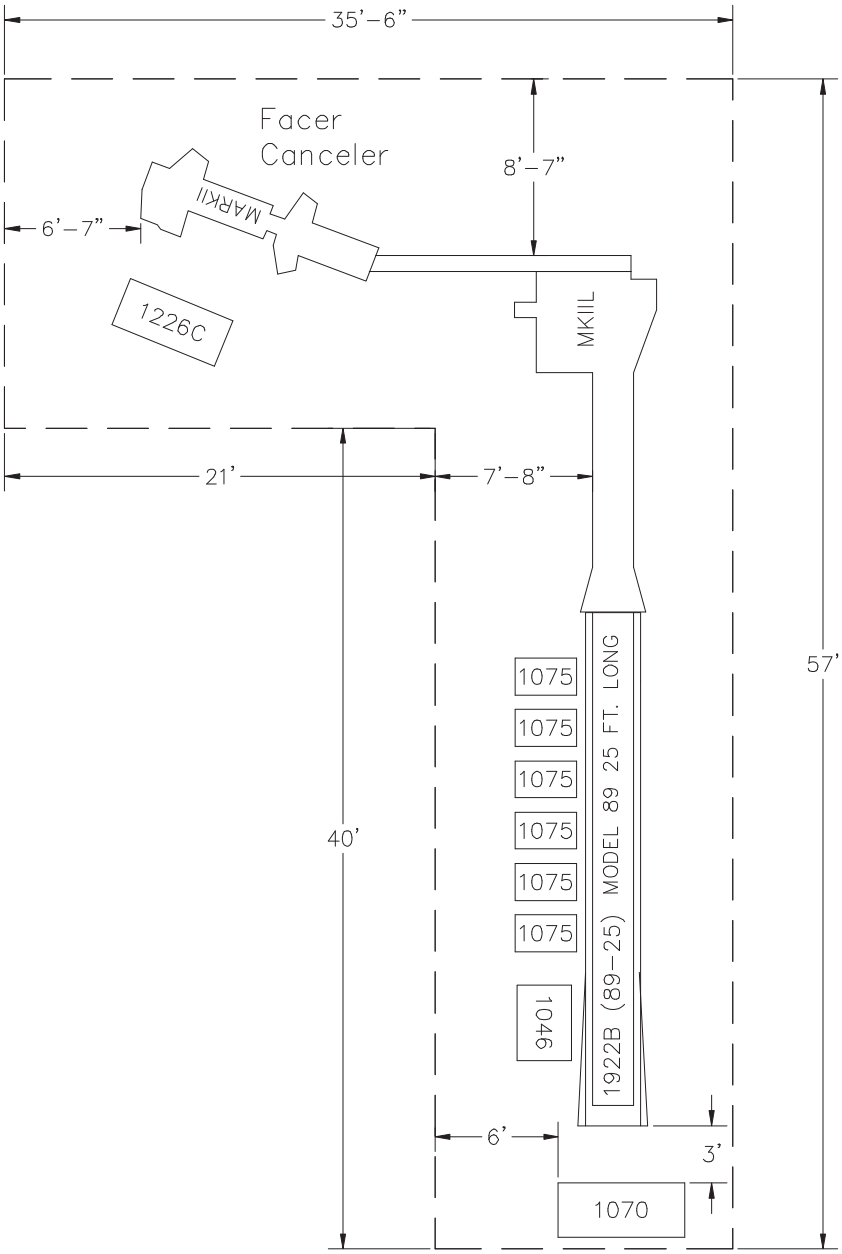


Exhibit 42m

420008b, Micro Mark II Facer Canceler Systems for AFCS Thicks

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 821 Sq Ft

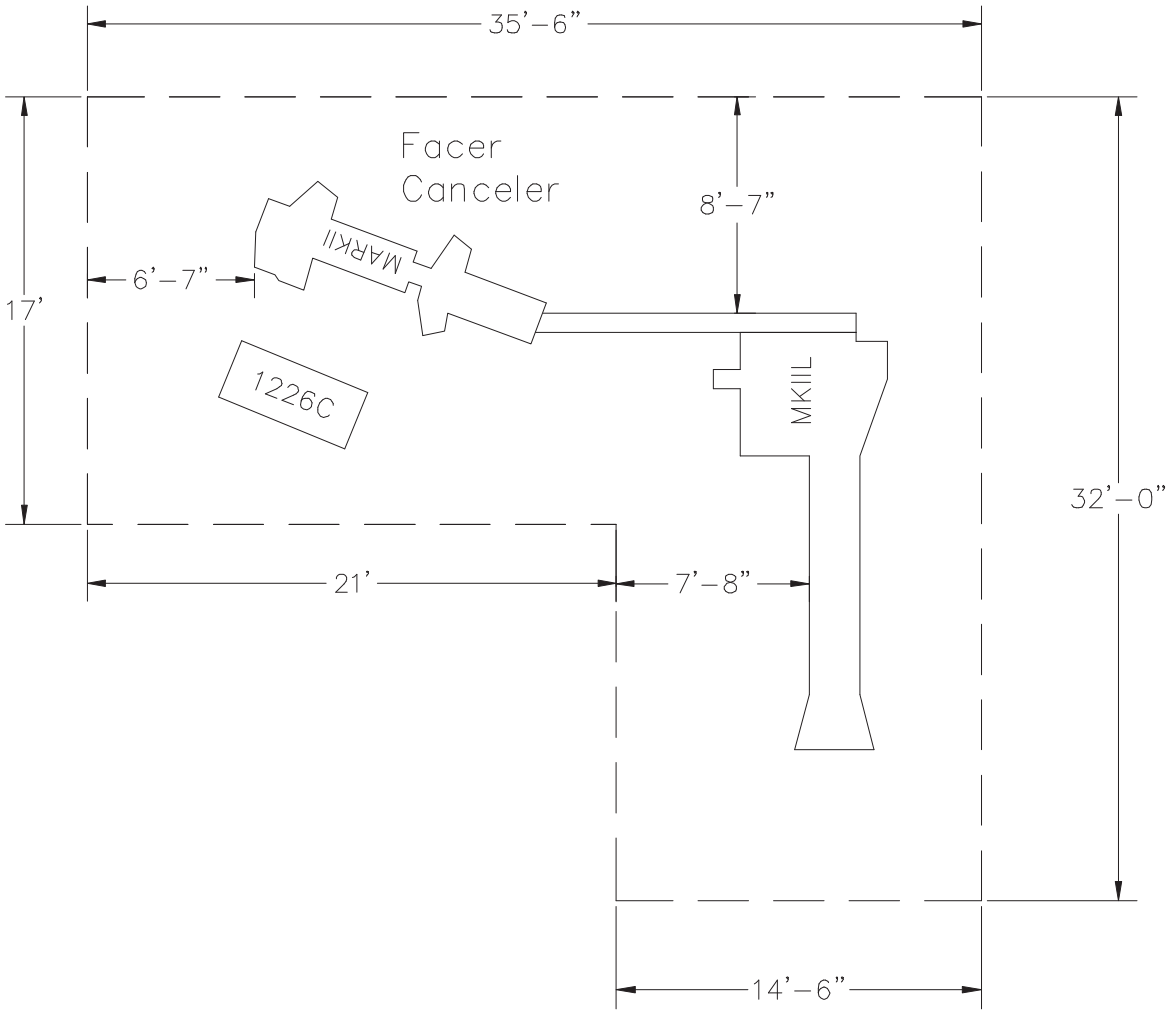


Exhibit 42n

420009, Two Micro Mark II Facer Canceler Systems With Tandem Culling Belt and Tandem Meter Mail Setup

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 4,516 Sq Ft

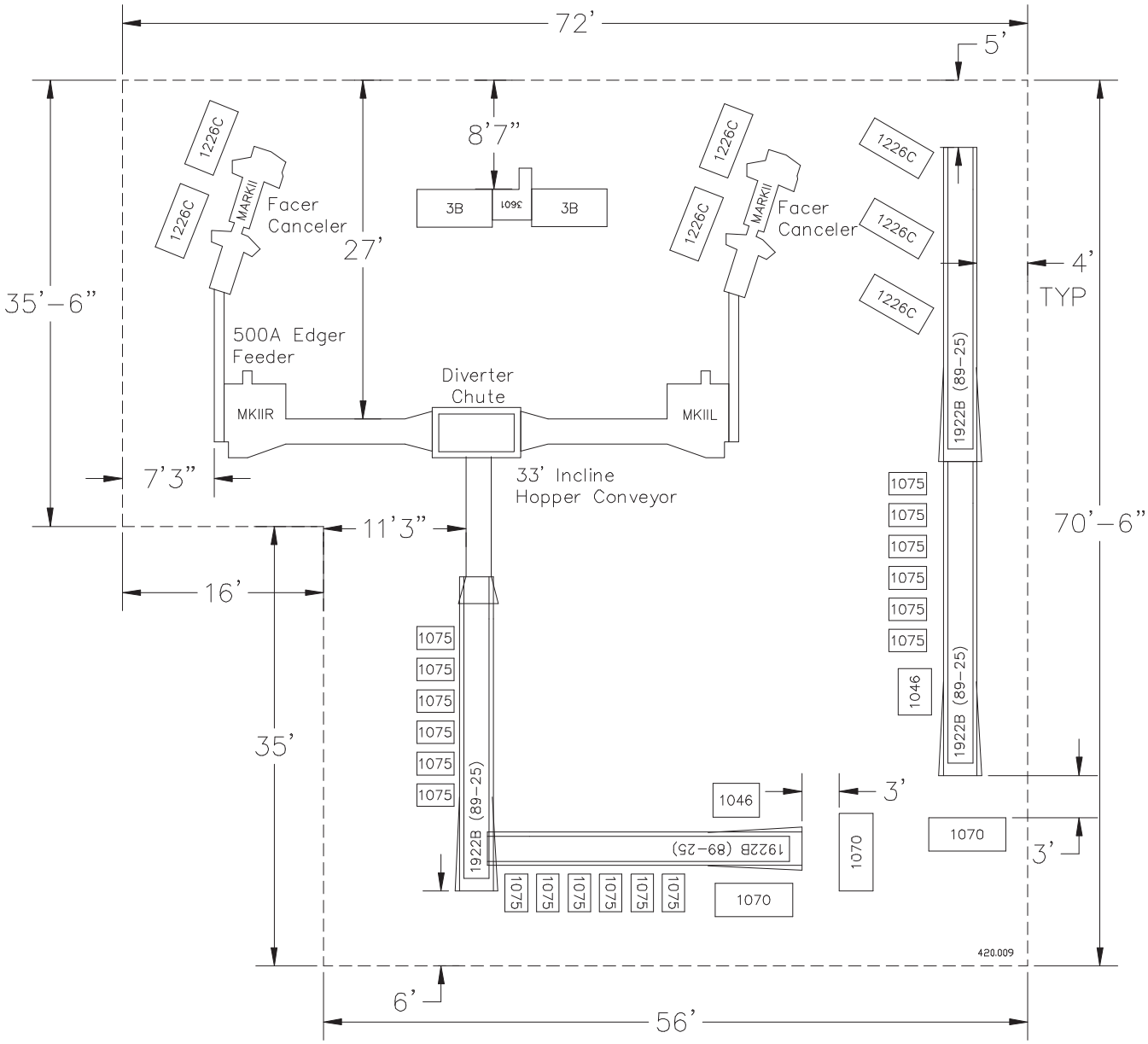


Exhibit 42o

420009a, Two Micro Mark II Facer Canceler Systems With Tandem Culling Belt

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 3,745 Sq Ft

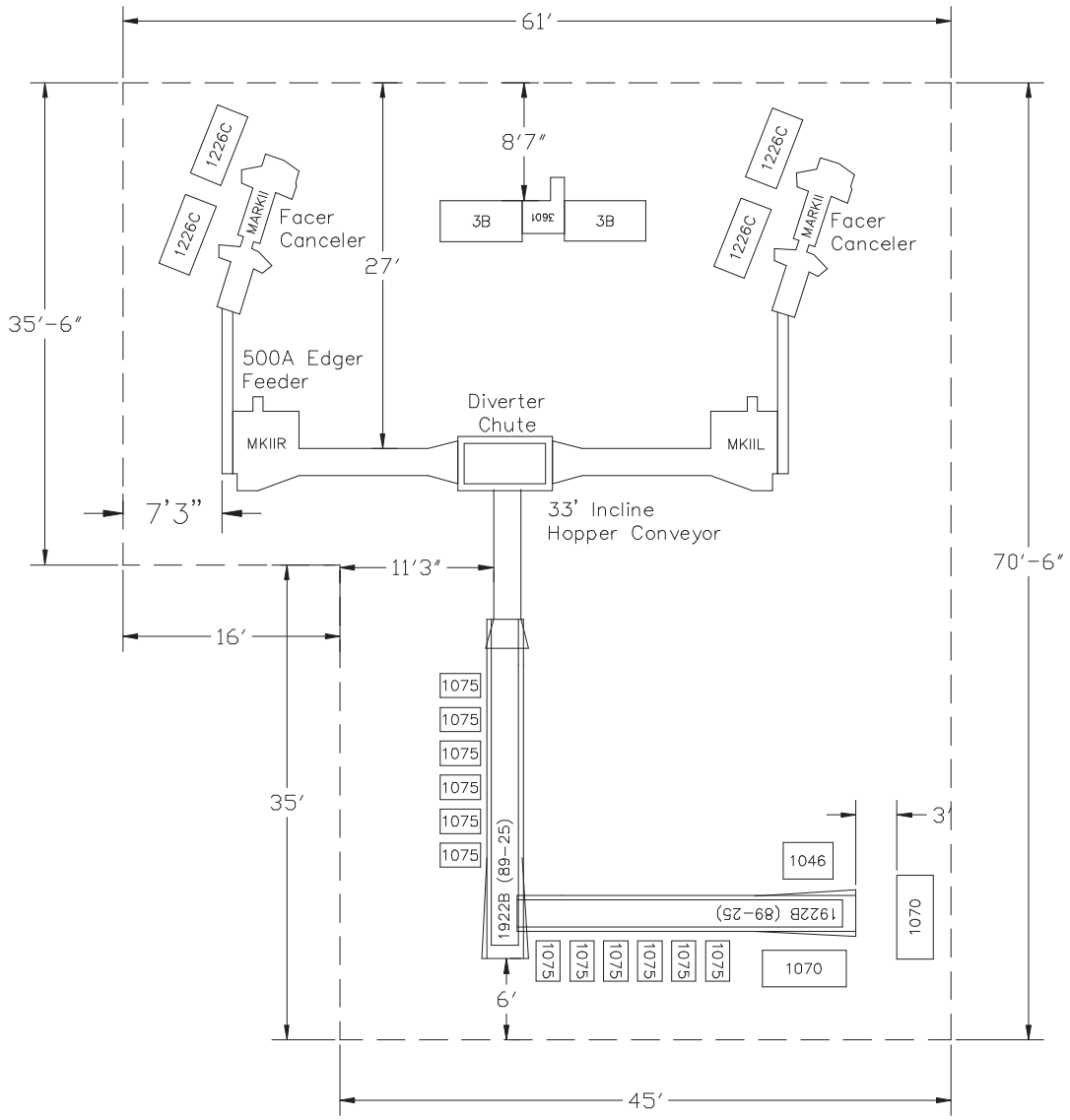


Exhibit 42p

420010a, Advanced Facer Canceler System With Culling Belt

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 2,294 Sq Ft

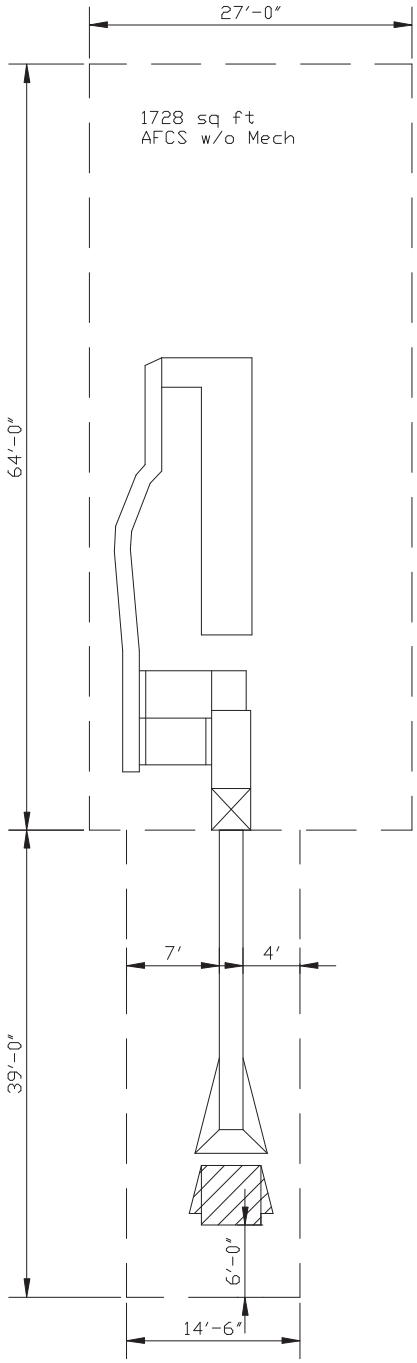


Exhibit 42q

420010b, Two AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 7,300 Sq Ft

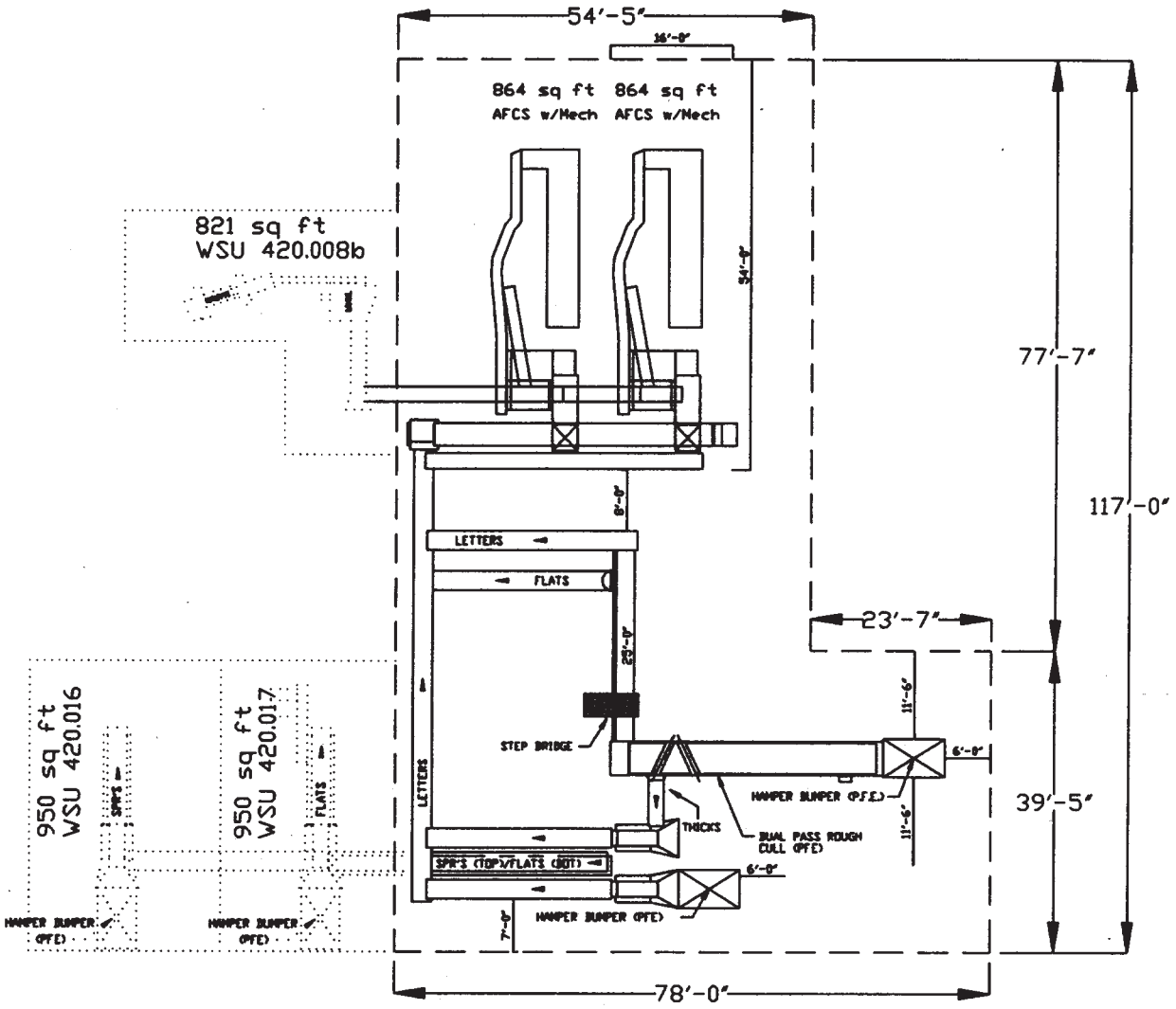


Exhibit 42r
420010c, Three AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 8,262 Sq Ft

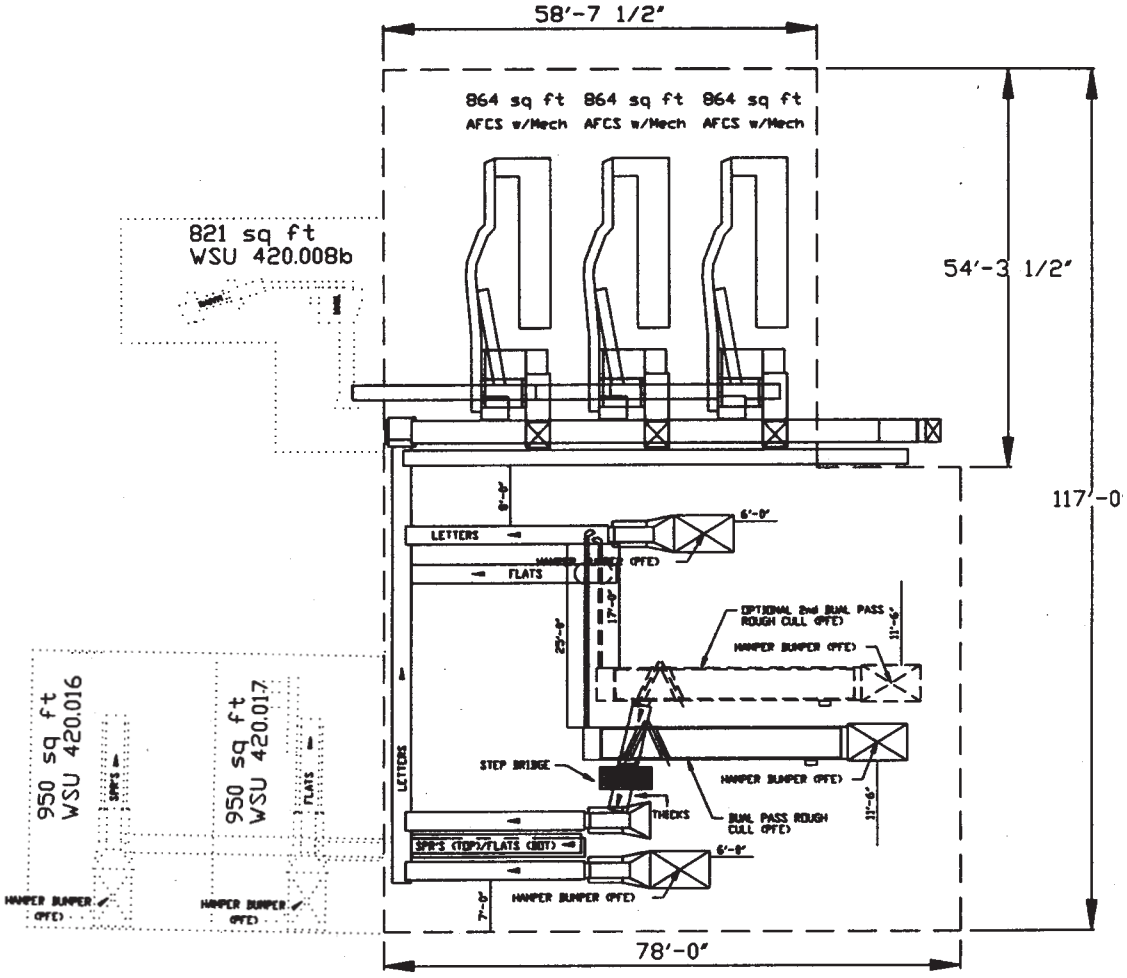


Exhibit 42s

420010d, Four AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 9,126 Sq Ft

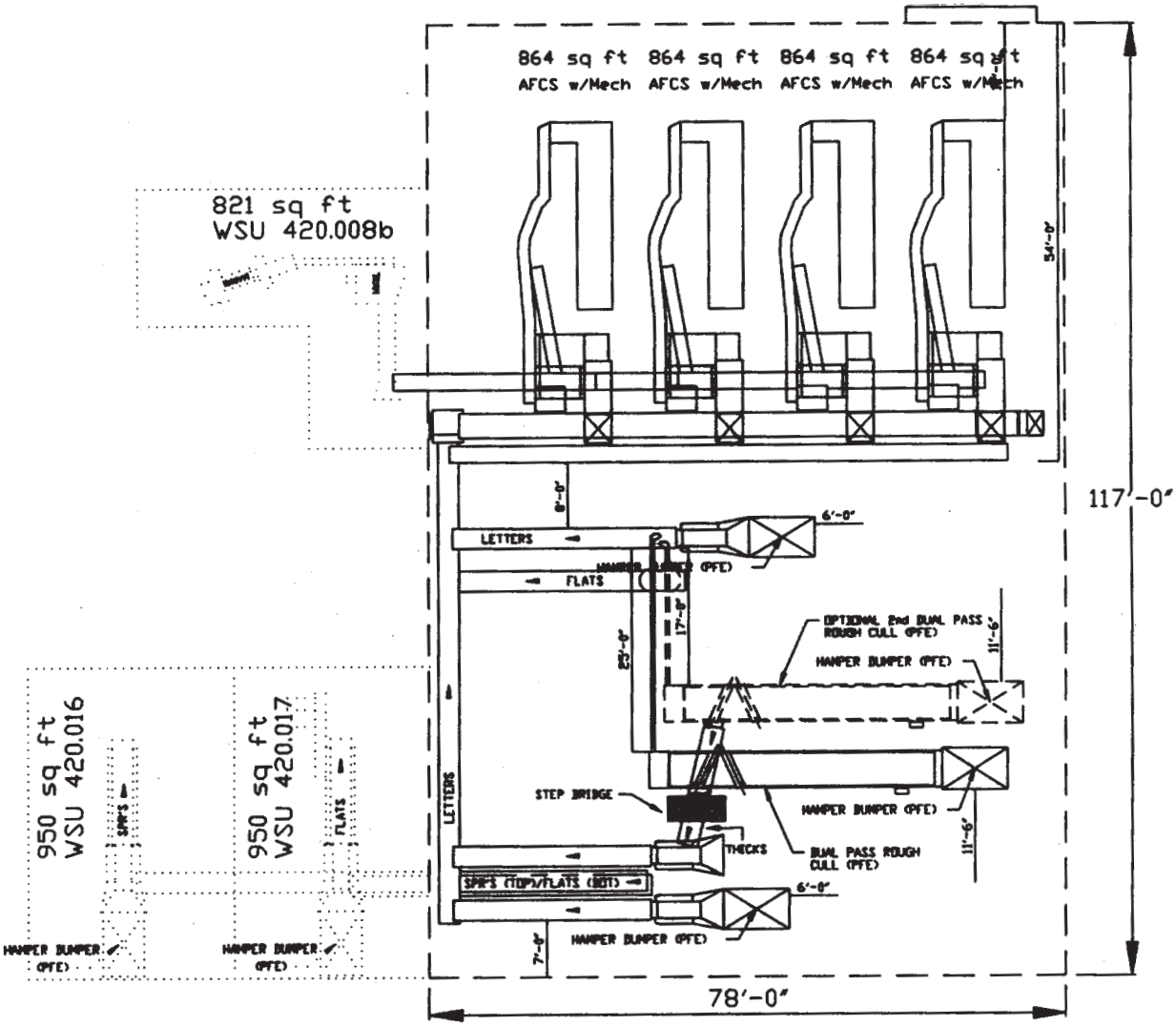


Exhibit 42t

420010e, Five AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 10,876 Sq Ft

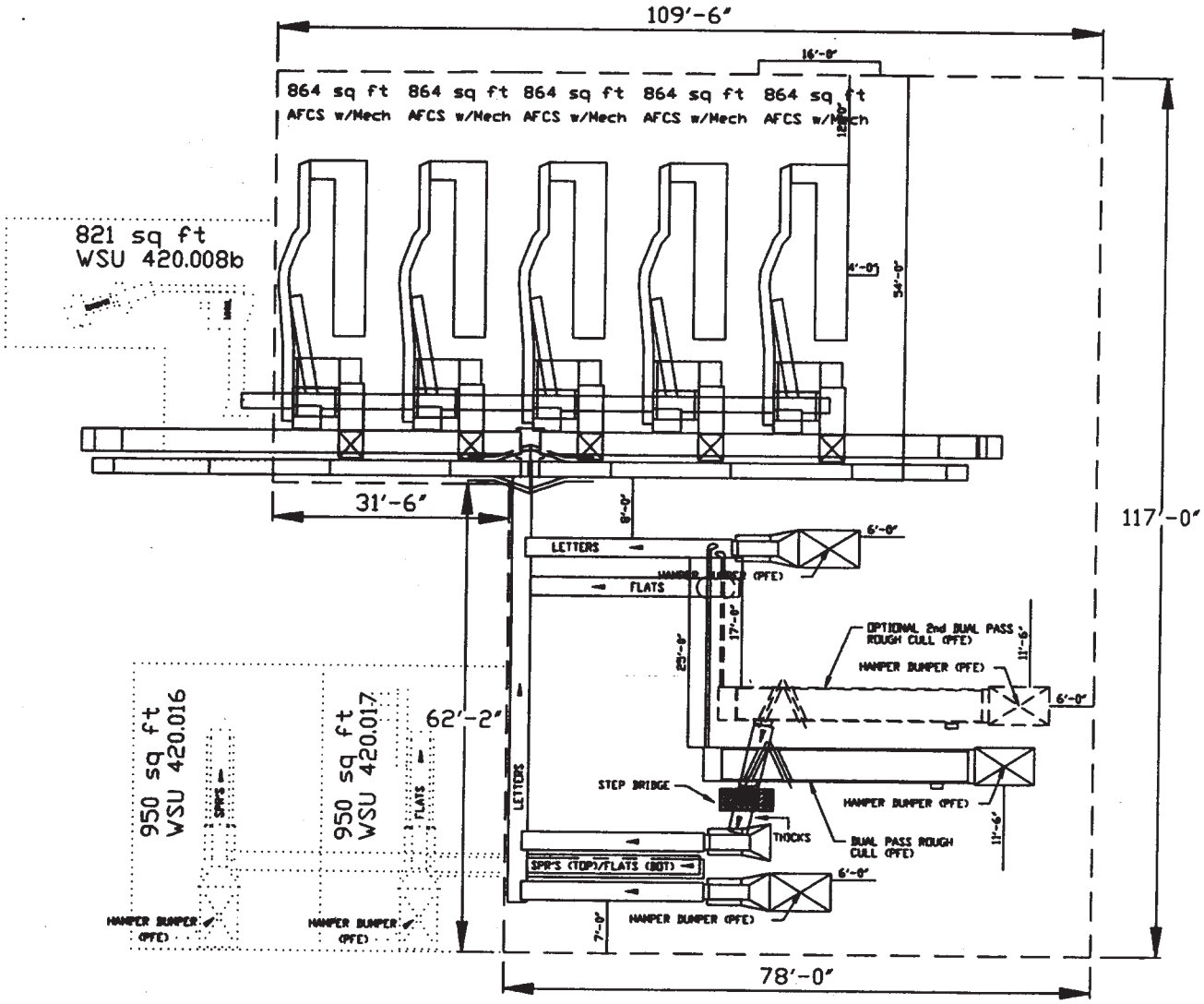


Exhibit 42u

420010f, Six AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 11,740 Sq Ft

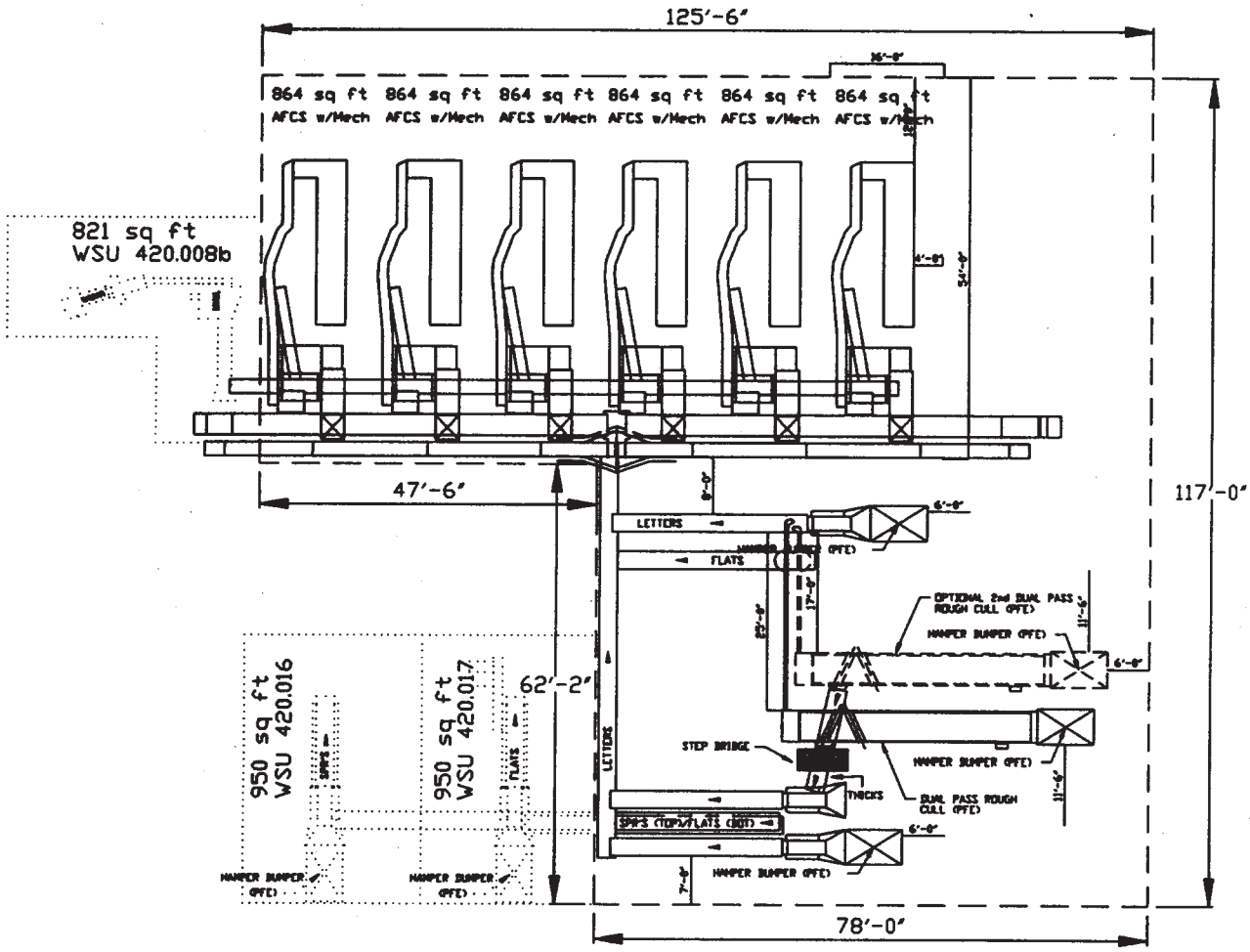


Exhibit 42v

420010g, Seven AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 11,836 Sq Ft

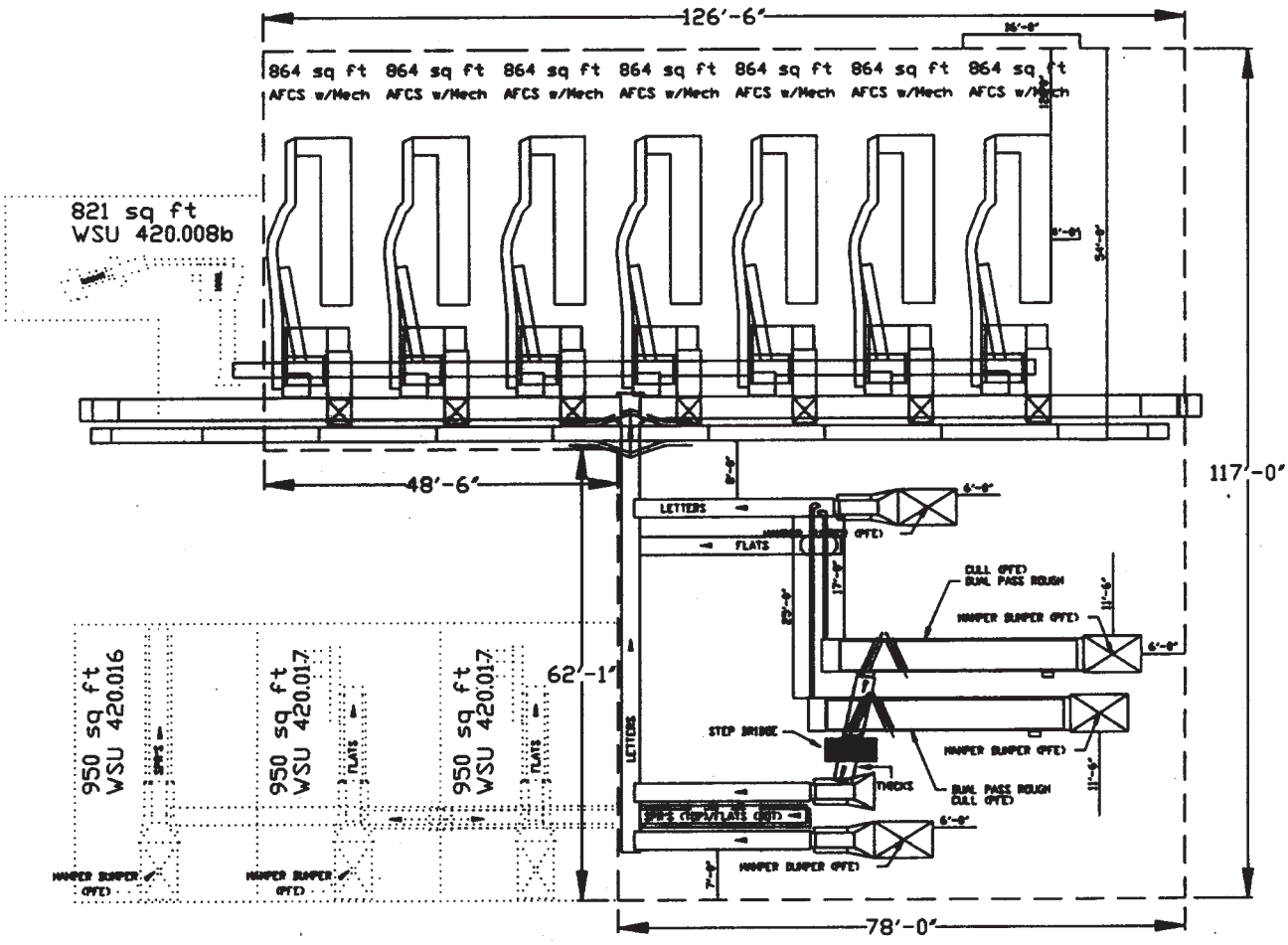


Exhibit 42w

420010h, Eight AFCSs With Standard Cull/Feed System

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 12,700 Sq Ft

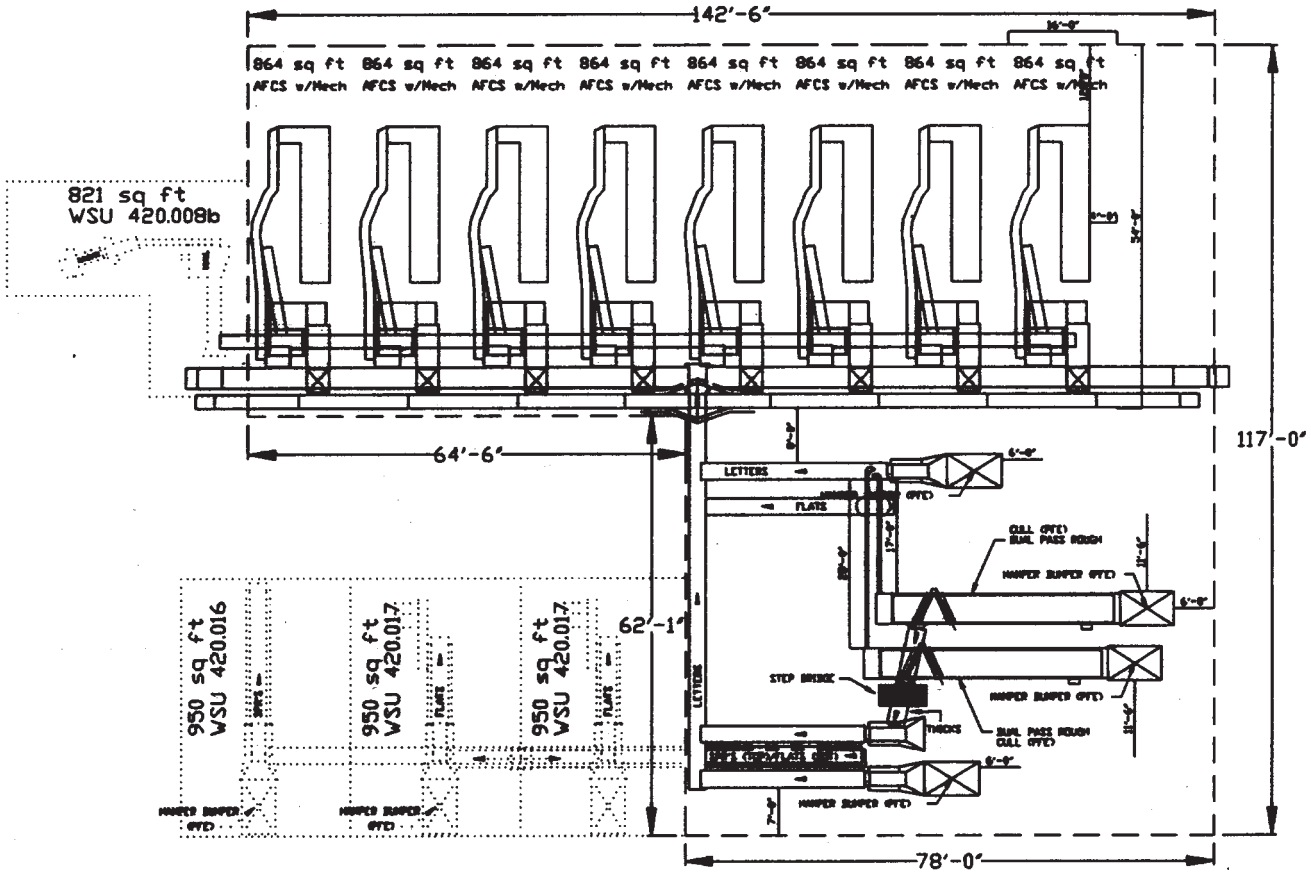


Exhibit 42x
420011, Tandem Meter Mail Setup

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 700 Sq Ft

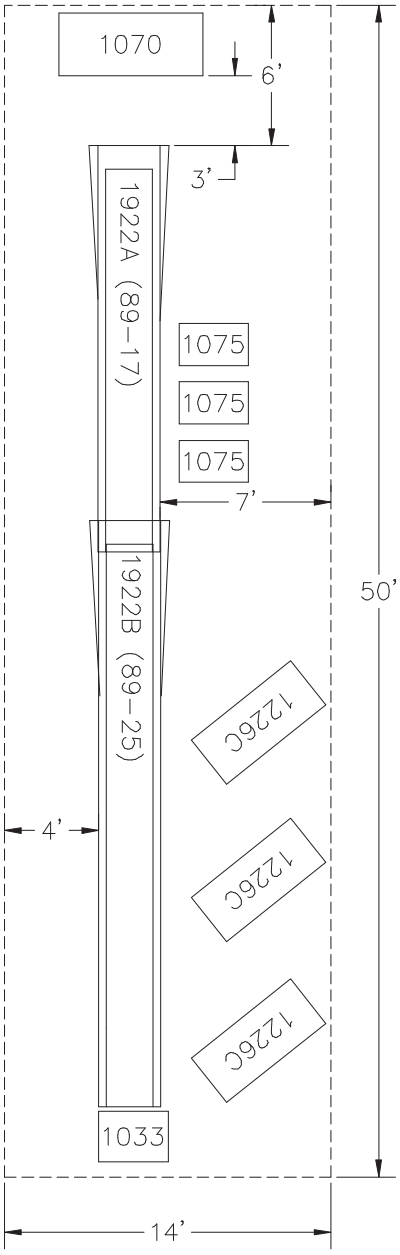


Exhibit 42y
420012, Five-Position Meter Mail Setup

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 648 Sq Ft

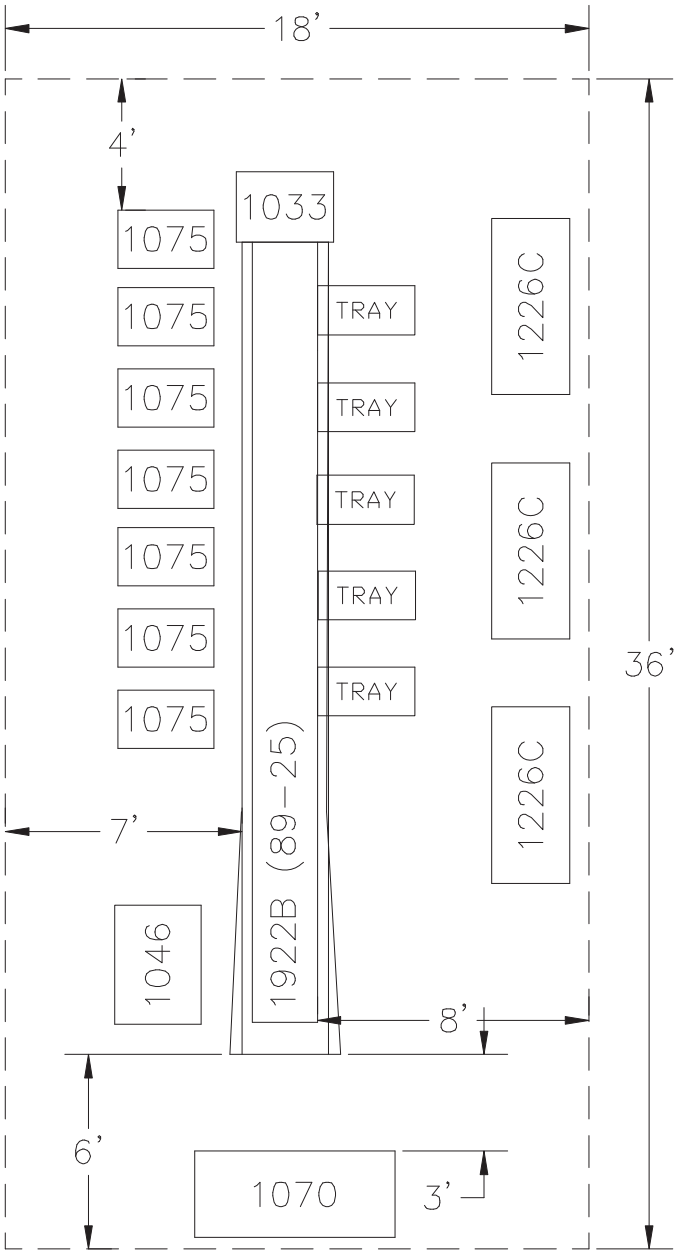
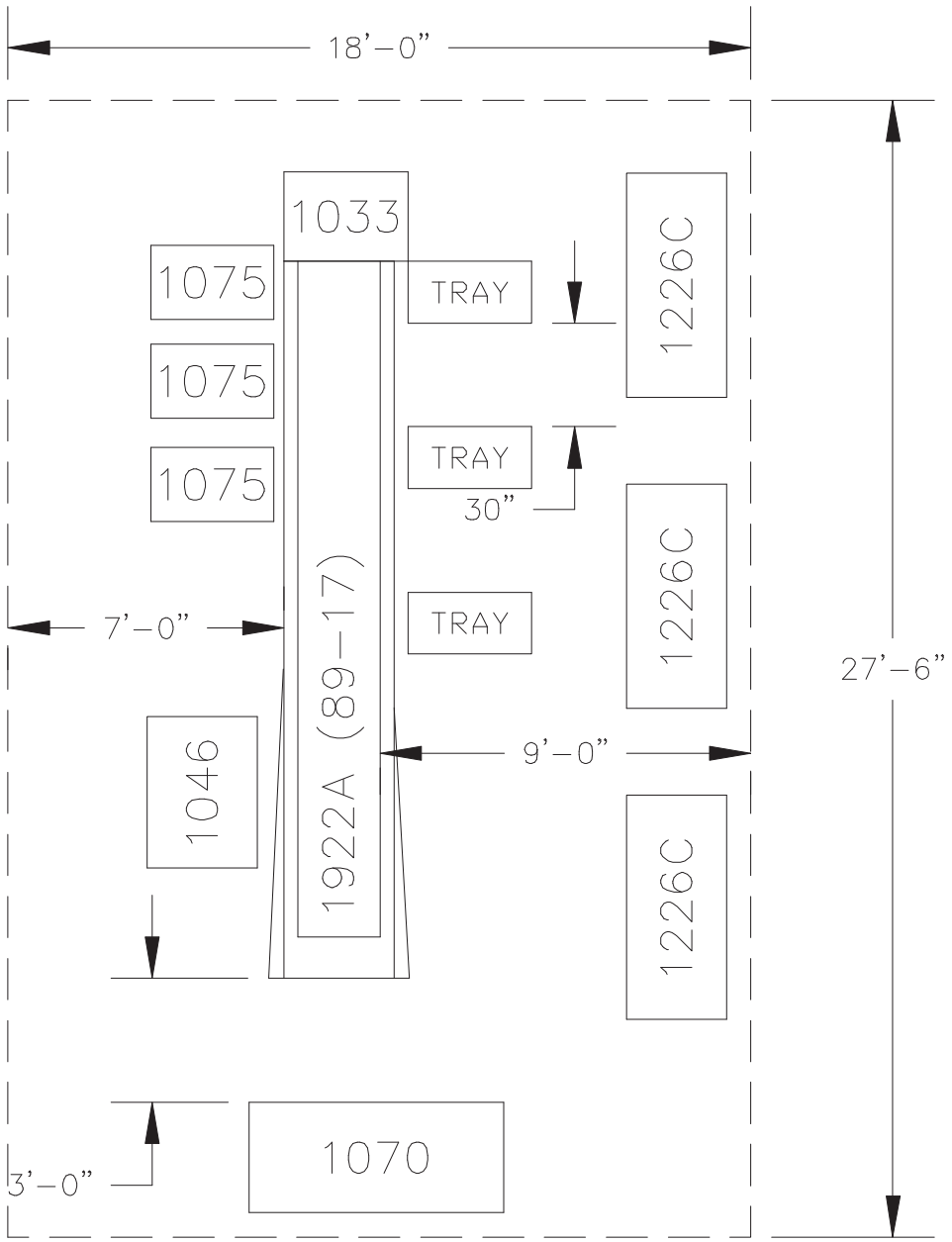


Exhibit 42z
420012a, Three-Position Meter Mail Setup

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 495 Sq Ft



Note: Model 89 conversion is 17′-0″ long with 3 separations.

Exhibit 42aa

420013, Storage and Cutting

Date: Sept. 1997
Mail Preparation
Scale: No Scale
Area: 260 Sq Ft

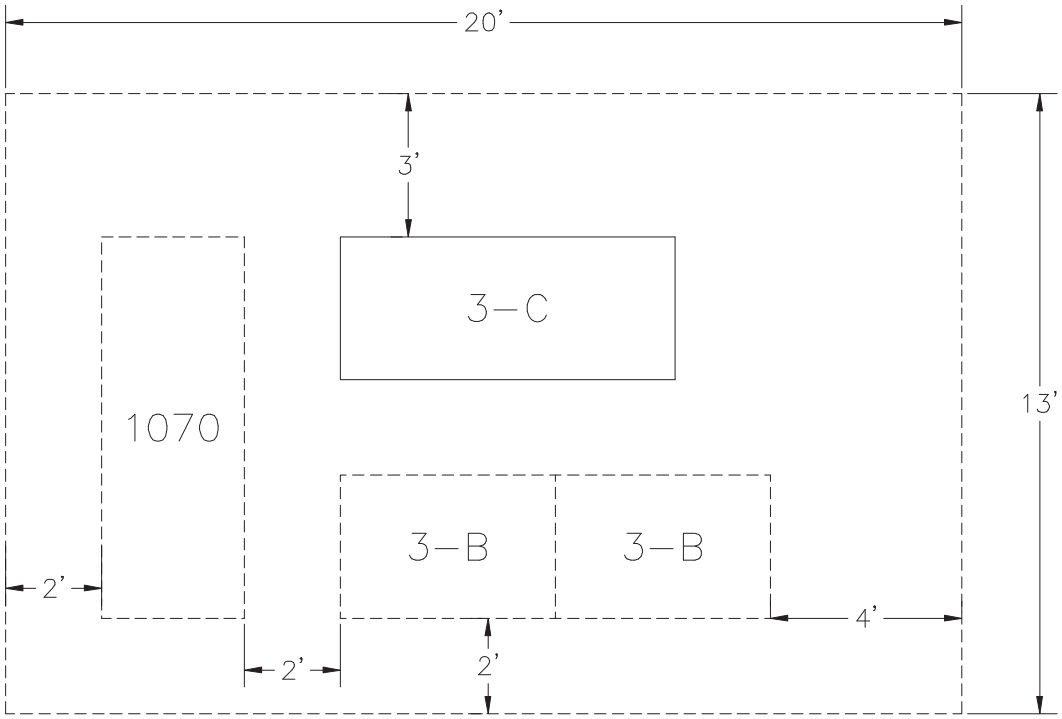


Exhibit 42ab
420014, Pouch Opening With 63 Separations

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 970 Sq Ft

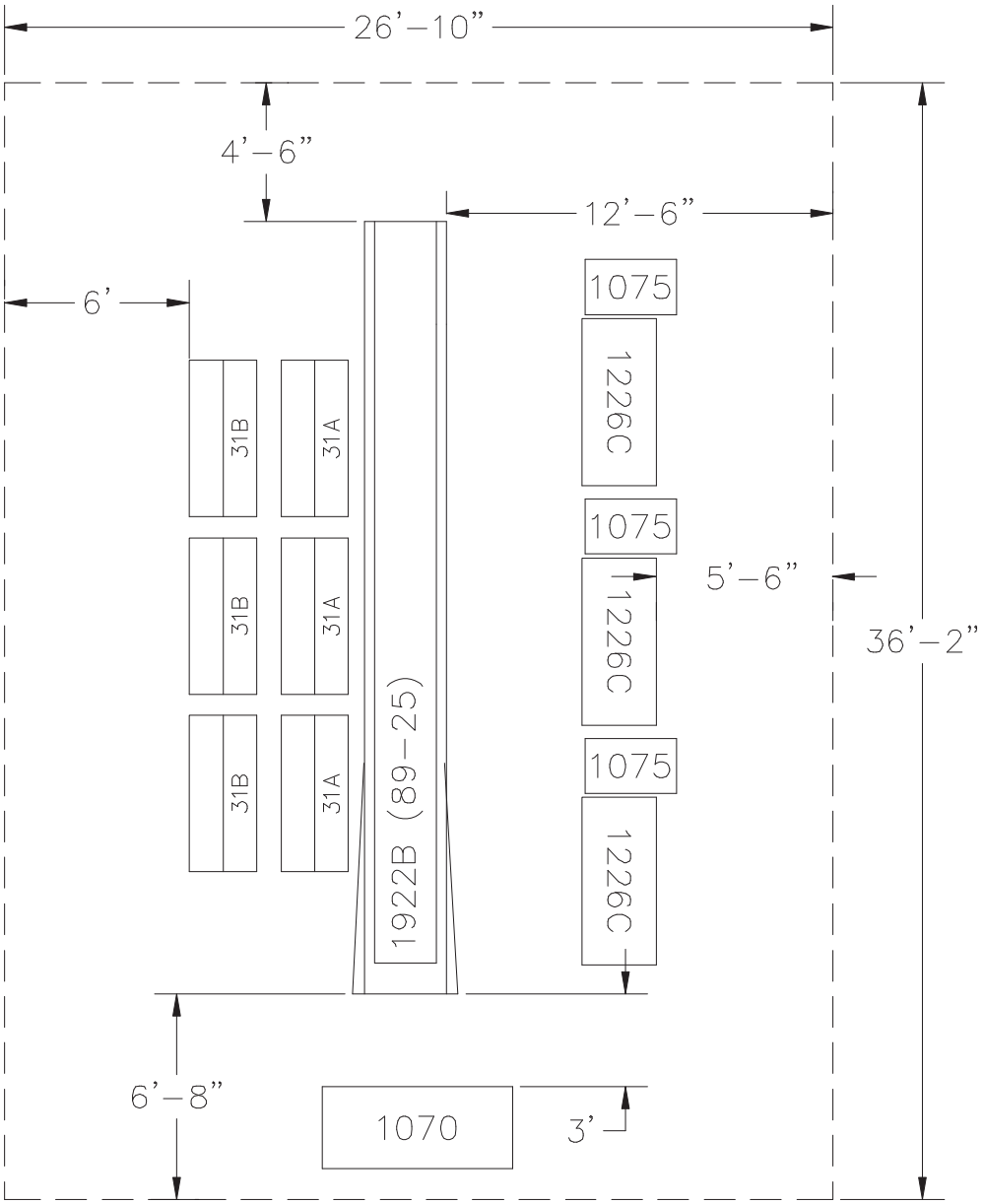


Exhibit 42ac

420014a, Pouch Opening With 48 Separations

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 444 Sq Ft

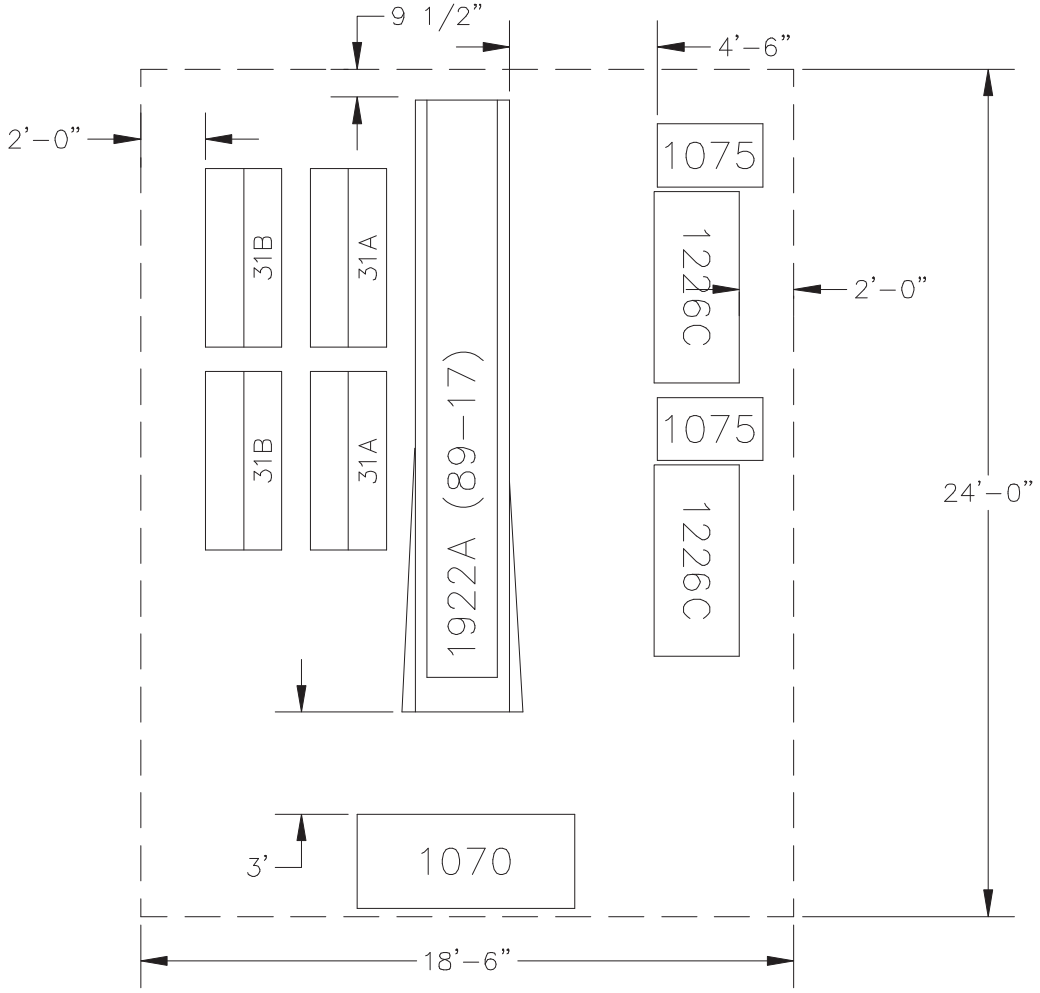


Exhibit 42ad

420015, Sack Opening, Paper, and SPRs — Primary Cutting and Setup (58 Separations)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 1,000 Sq Ft

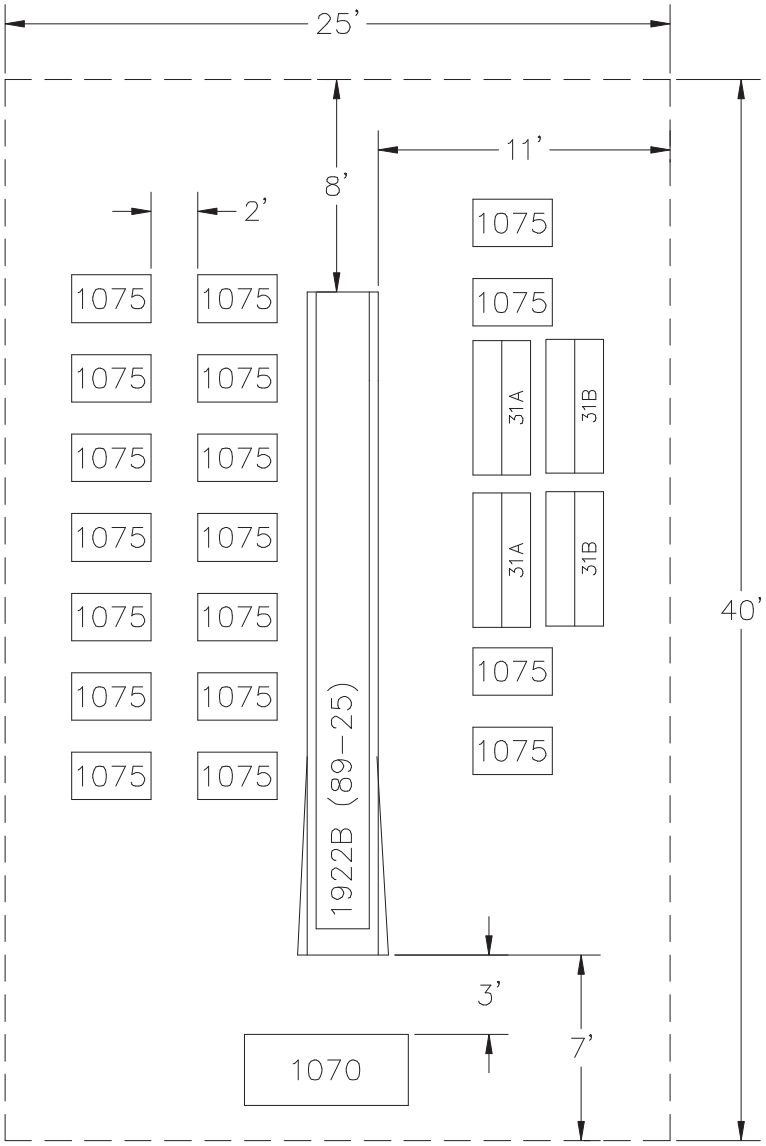


Exhibit 42ae

420016a, SPR and Thicks Canceling (17-Ft Belt)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 950 Sq Ft

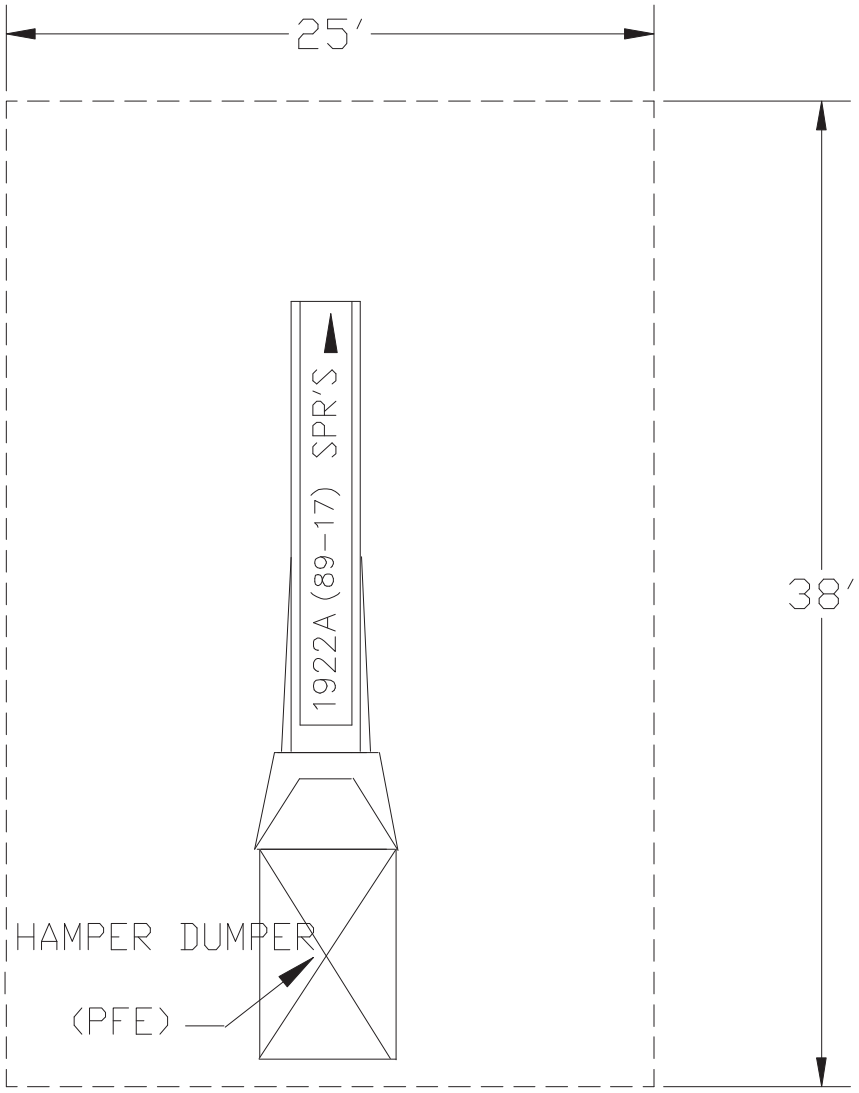


Exhibit 42af
420016b, SPR and Thicks Canceling (25-Ft Belt)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 1,175 Sq Ft

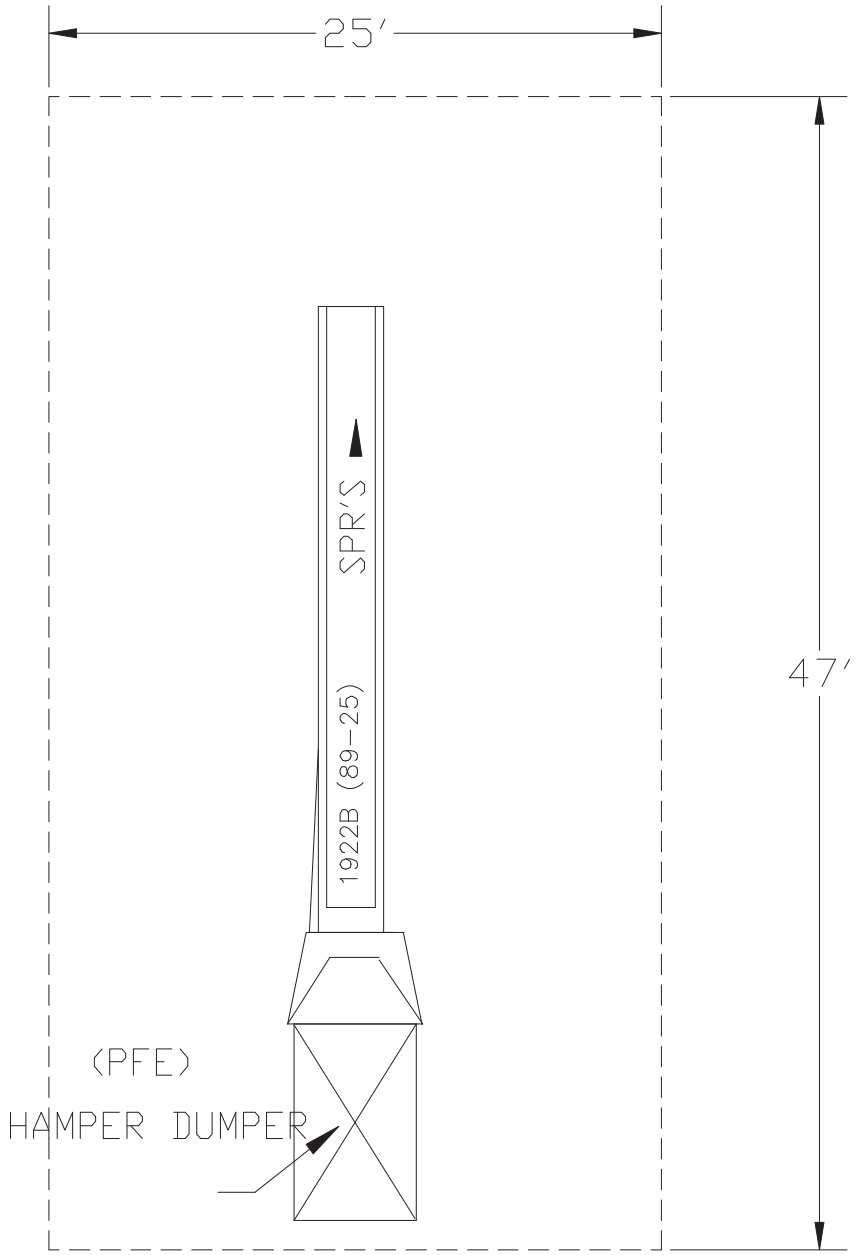


Exhibit 42ag

420017a, Model 15 Flats Canceler/Stacker (17-Ft Belt)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 950 Sq Ft

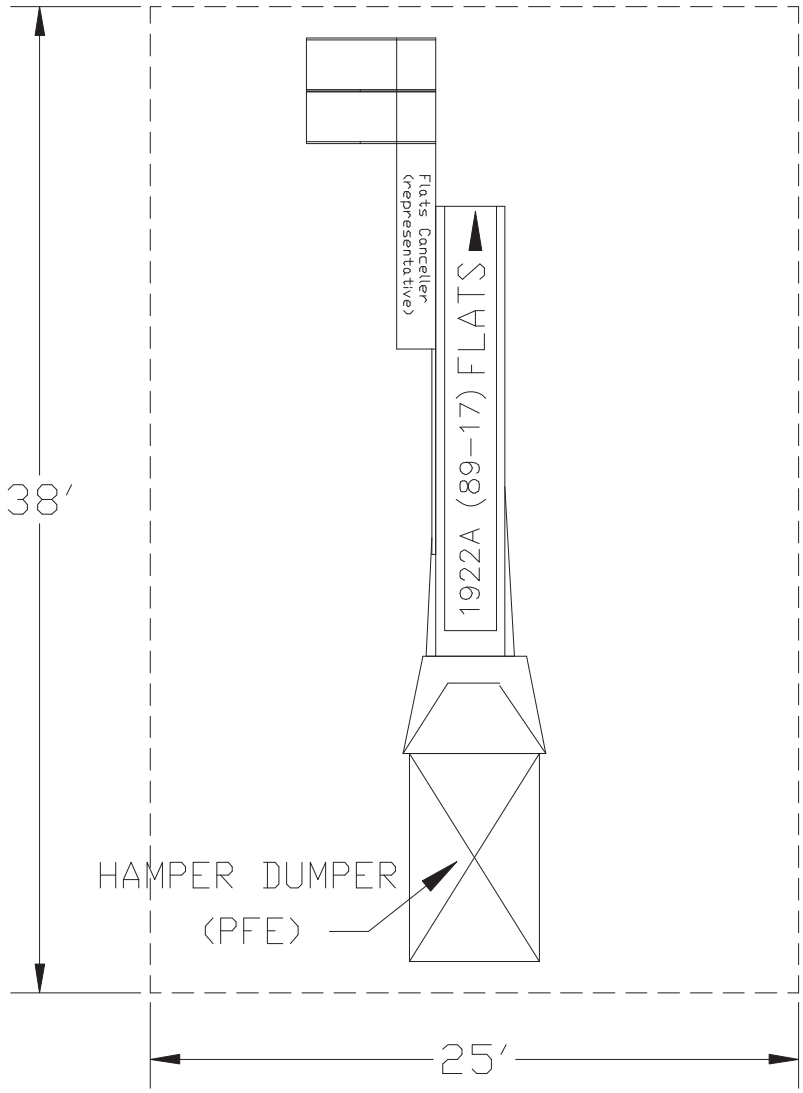
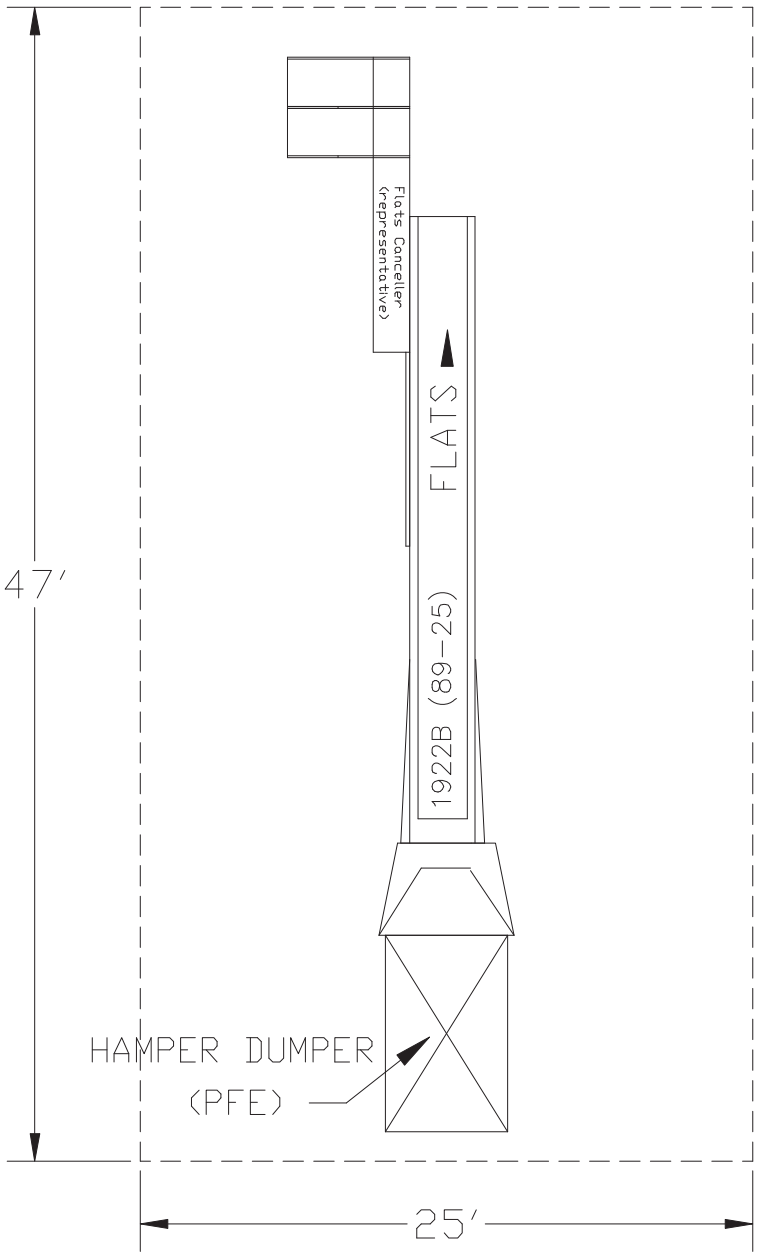


Exhibit 42ah
420017b, Model 15 Flats Canceler/Stacker (25-Ft Belt)

Date: Dec. 1994
Mail Preparation
Scale: No Scale
Area: 1,175 Sq Ft



43 Distribution of Letter and Flat Mail

431 Letter Mail

The footprint shown in the WSUs of the 431 series provides for movement of mail and personnel within the work center, exclusive of dedicated aisles, and an allowance for column interference and unusable space. Exhibit 431a lists the WSUs currently used for distributing letter mail. Exhibits 431b through 431m illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 431a
WSUs Used for Distribution of Letter Mail

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
431001	431001.DWG	65	Letter Distribution Workstation — Open Back (77 Separations)
431001a	431001A.DWG	36	Letter Distribution Workstation — Closed Back (77 Separations)
431006	431006.DWG	240	Letter Mail Labeling Machine — 200 (LMLM-200)
431006a	431006A.DWG	364	Letter Mail Labeling Machine — 400 (LMLM-400)
431007	431007.DWG	2,250	Twelve-Position Multiposition Letter Sorting Machine (MPLSM)
431007a	431007A.DWG	468	Single-Position Letter Sorting Machine (SPLSM)
431009	431009.DWG	1,676	Mail Processing Barcode Sorter (MPBCS) With 96 Stackers
431010a	431010A.DWG	1,425	44-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit
431010b	431010B.DWG	1,712	60-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit
431011	431011.DWG	351	National Directory Support System (NDSS), MICROVAX 3400, Image Processing Subsystem (IPSS), or ALPHA Site
431012	431012.DWG	1,080	Sleeving, Weighing, and Strapping Area: Nonmechanized System
431013	431013.DWG	870	Sleeving, Weighing, and Strapping Area: Mechanized System

Exhibit 431b
431001, Letter Distribution Workstation — Open Back (77 Separations)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 65 Sq Ft

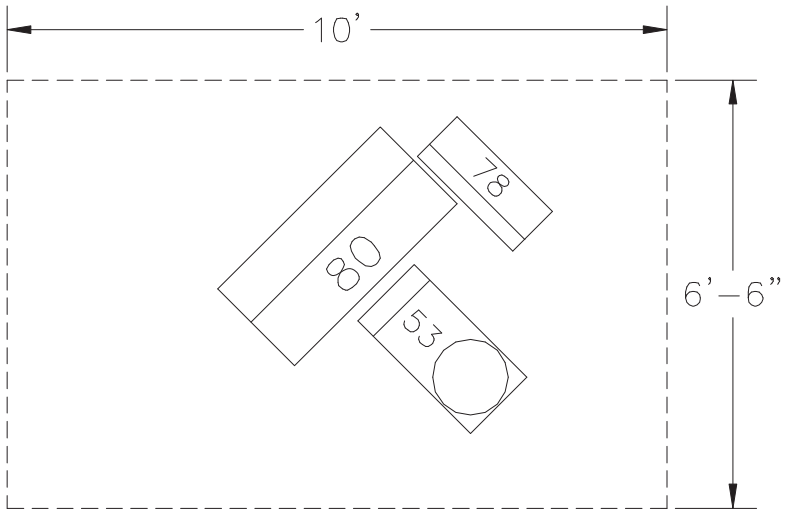


Exhibit 431c
431001a, Letter Distribution Workstation — Closed Back (77 Separations)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 36 Sq Ft

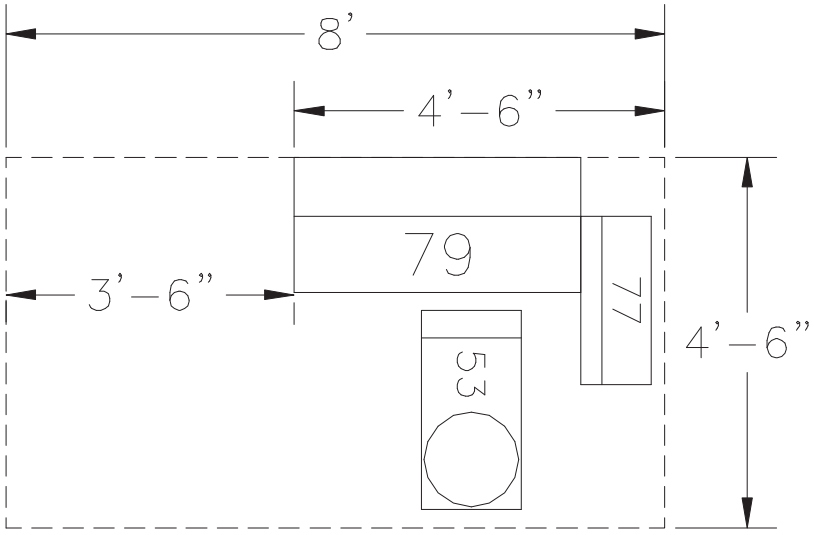


Exhibit 431d

431006, Letter Mail Labeling Machine — 200 (LMLM-200)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 240 Sq Ft

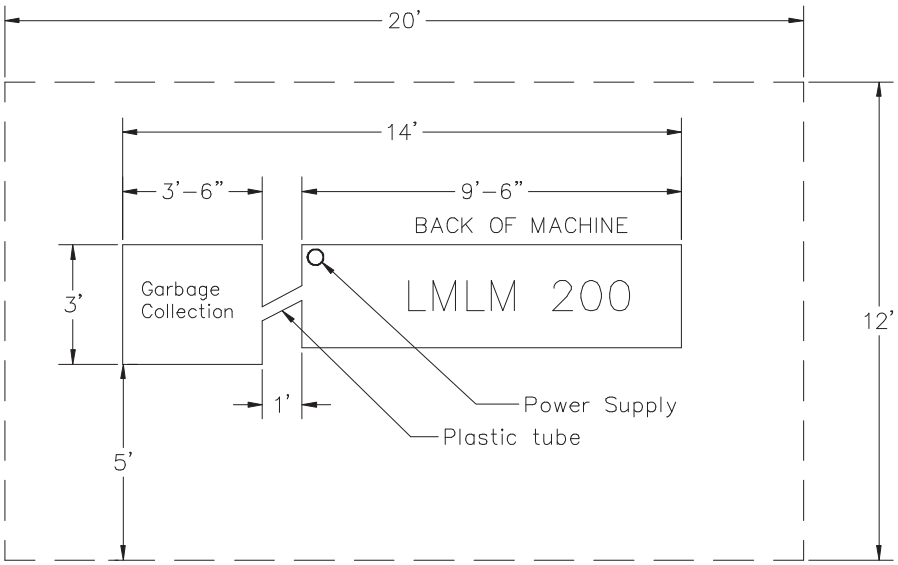


Exhibit 431e

431006a, Letter Mail Labeling Machine — 400 (LMLM-400)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 364 Sq Ft

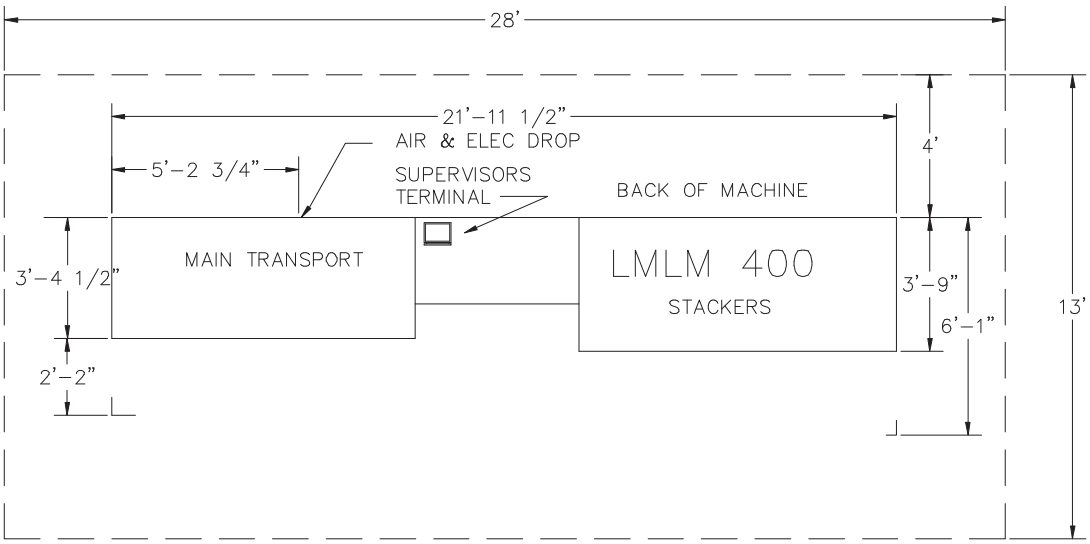
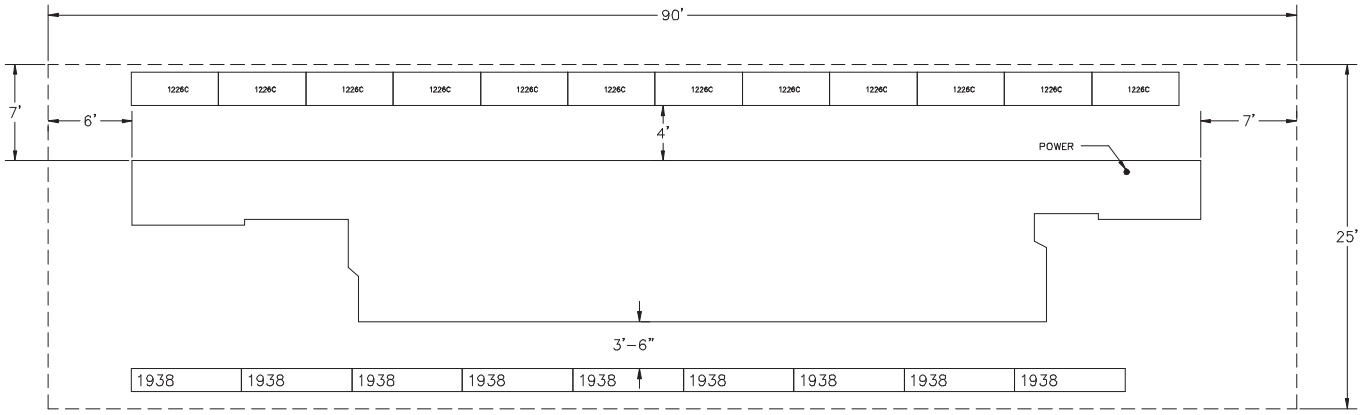


Exhibit 431f

431007, Twelve-Position Multiposition Letter Sorting Machine (MPLSM)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 2,250 Sq Ft



Specifications:

- Machine height: 9′-6″.
- Overhead clearance required: 12′-6″ minimum (14′-0″ preferred).

Exception: Conveyors or lookout galleries crossing at 90 degrees over the machine may be 12′-0″.

Exhibit 431g
431007a, Single-Position Letter Sorting Machine (SPLSM)

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 468 Sq Ft

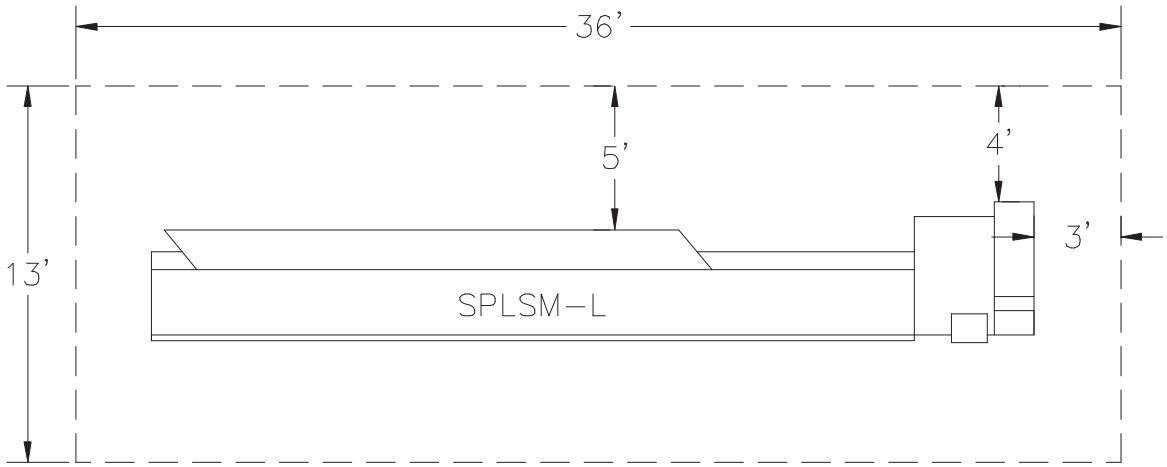


Exhibit 431h
431009, Mail Processing Barcode Sorter (MPBCS) With 96 Stackers

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 1,676 Sq Ft

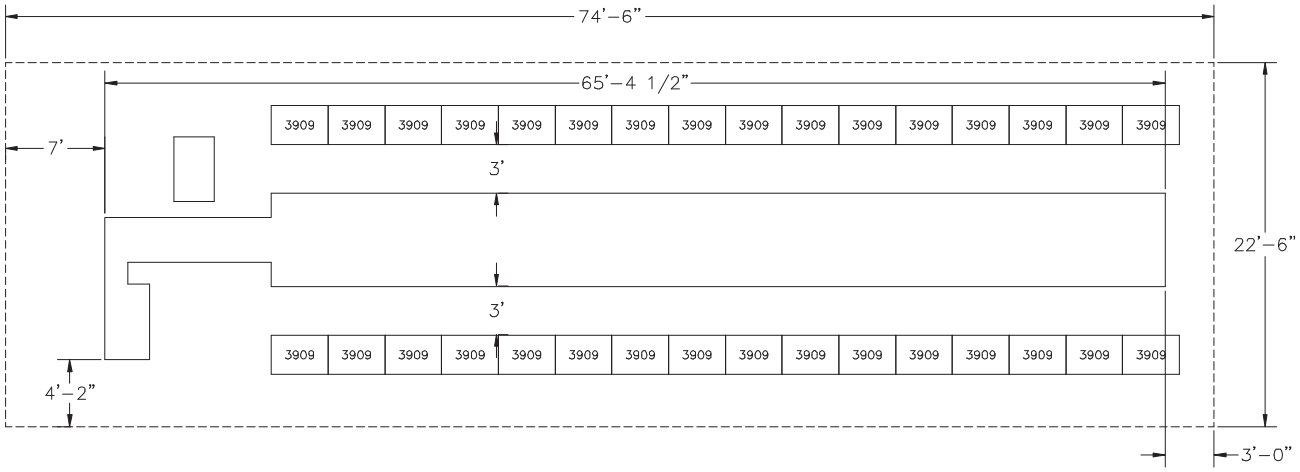


Exhibit 431i
431010a, 44-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 1,425 Sq Ft

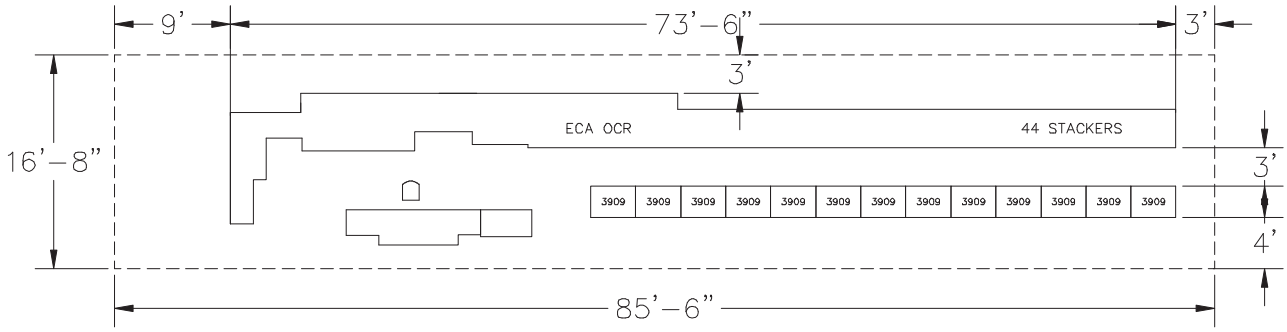


Exhibit 431j
431010b, 60-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 1,712 Sq Ft

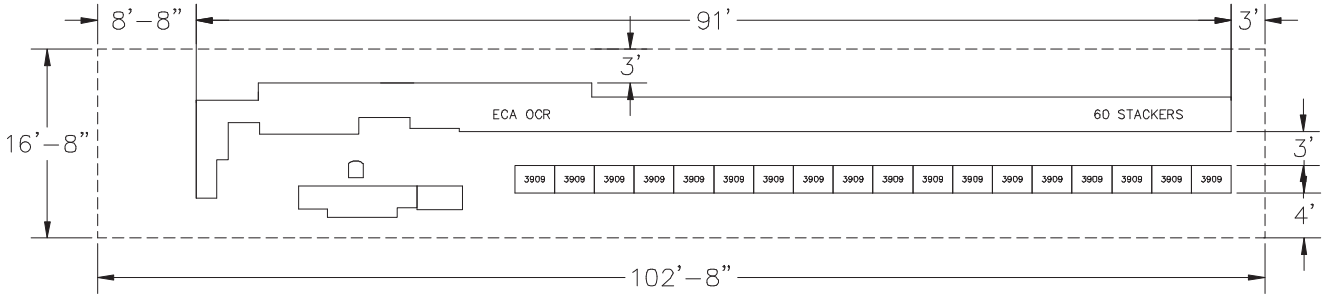


Exhibit 431k

431011, NDSS, MICROVAX 3400, IPSS, or ALPHA Site

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 351 Sq Ft

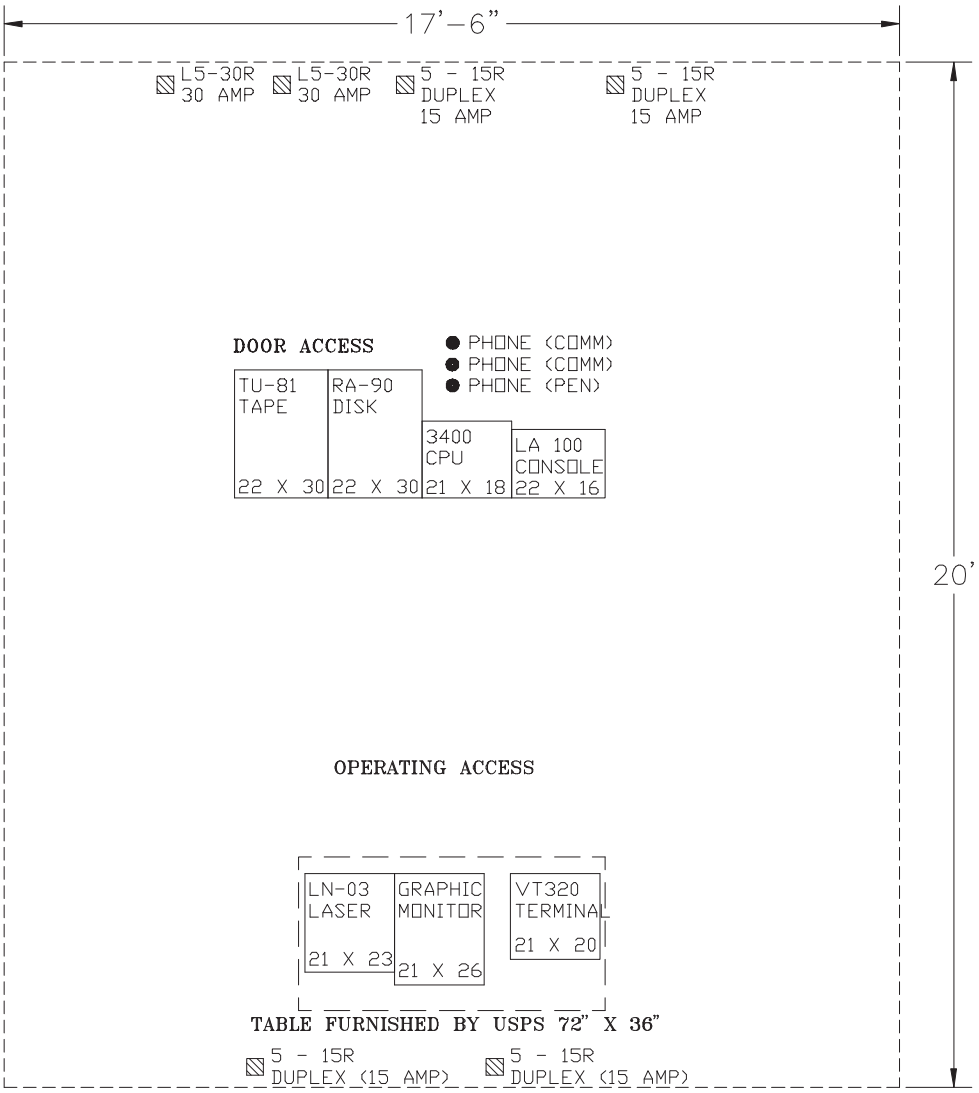
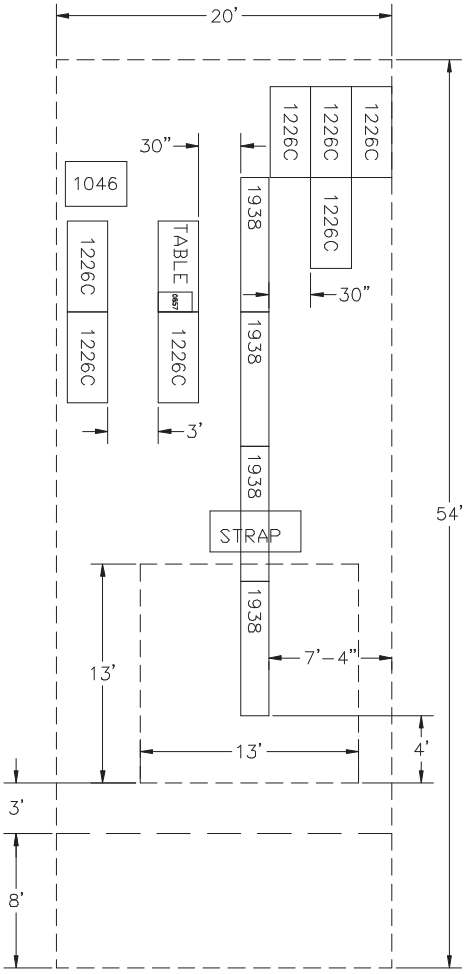


Exhibit 431I

431012, Sleeving, Weighing, and Strapping Area: Nonmechanized System

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 1,080 Sq Ft

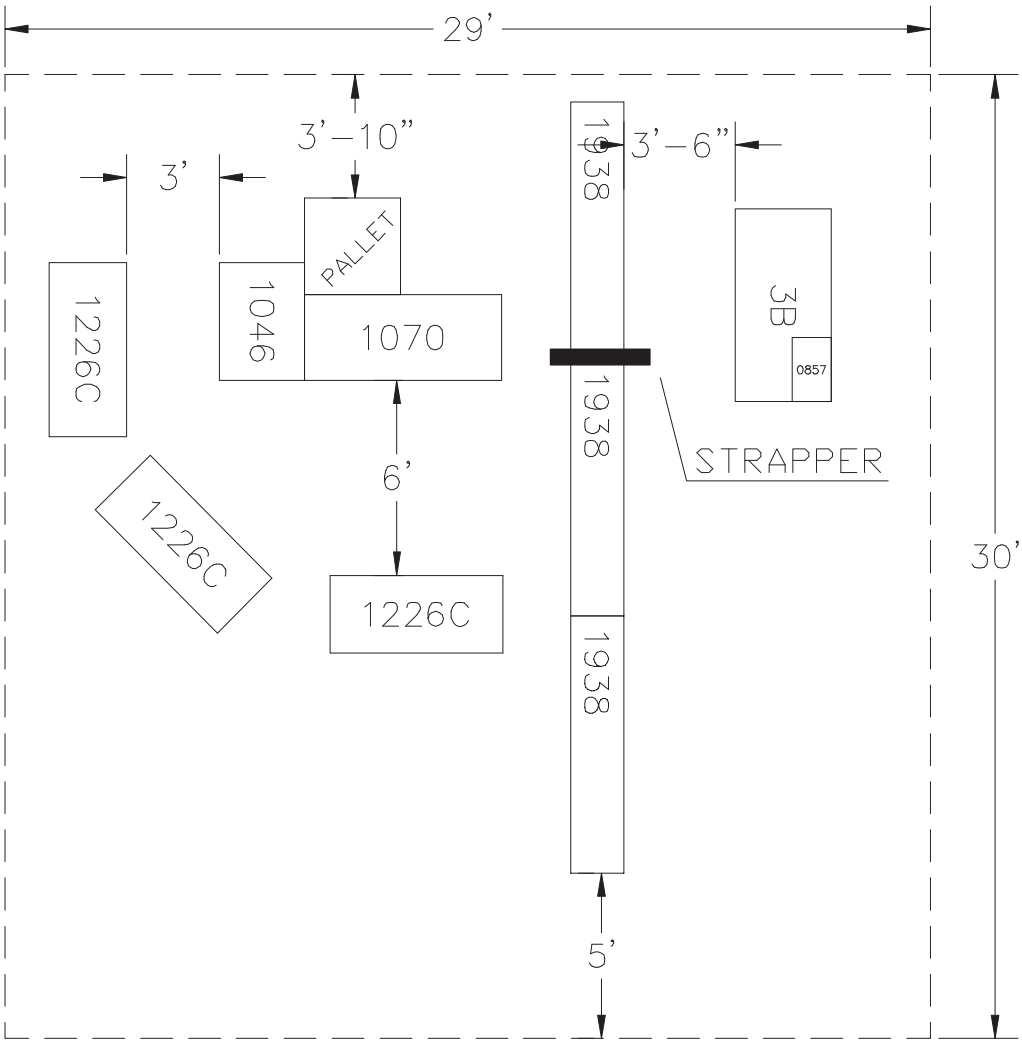


Notes:

a. 20′-0″ conveyor ahead of strapping operation for surge capacity (facilities with insufficient floor space may use a shorter conveyor).
b. Distribution to dispatch container.
c. Dispatch equipment staging area.

Exhibit 431m
431013, Sleeving, Weighing, and Strapping Area — Mechanized System

Date: Dec. 1994
Distribution Letter Mail
Scale: No Scale
Area: 870 Sq Ft



Note: An additional sleeving and weighing operation, duplicating items, may be added here if volumes warrant.

432 Delivery Barcode Sorters

432.1 Electro-Com Automation Double-Sided DBCSs

The footprint for each of these DBCSs makes the following assumptions:

a. Staging and dispatch of mail manually into general-purpose mail containers (GPMCs)

b. No staging space allocated for GPMCs.

c. Minimal maintenance access (3 ft from any panel that opens outward).

d. Safety taken into account with minimal space design.

e. No obstructions within workspace (including columns).

f. Staging of empty 1226F Tray Carts at the head of the DBCS.

Exhibit 432.1a lists the WSUs currently used for the electro-com automation (ECA) double-sided DBCSs and the associated number of 1226F Tray Carts required. Exhibit 432.1b lists the space requirements for each of these WSUs. Exhibits 432.1c through 432.1k illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 432.1a
WSUs and Tray Carts Needed for ECA Double-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	1226F Tray Carts Required FRONT	1226F Tray Carts Required BACK	1226F Tray Carts Required TOTAL
432001a	432001A.DWG	ECA 102D	4	8	12
432001b	432001B.DWG	ECA 126D	6	10	16
432001c	432001C.DWG	ECA 150D	8	12	20
432001d	432001D.DWG	ECA 174D	8	12	20
432001e	432001E.DWG	ECA 198D	10	14	24
432001f	432001F.DWG	ECA 222D	12	16	28
432001g	432001G.DWG	ECA 246D	12	16	28
432001h	432001H.DWG	ECA 270D	14	18	32
432001i	432001I.DWG	ECA 294D	16	20	36

Exhibit 432.1b
WSU Space Requirements for ECA Double-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	Minimum Space Required BEHIND DBCS	Minimum Space Required at the END of DBCS	Min. Length	Min. Width	Square Feet Required
432001a	432001A.DWG	ECA 102D	9 ft	7 ft	45 ft	25 ft	1,125
432001b	432001B.DWG	ECA 126D	9 ft	7 ft	52 ft	25 ft	1,300
432001c	432001C.DWG	ECA 150D	9 ft	7 ft	58 ft	25 ft	1,450
432001d	432001D.DWG	ECA 174D	9 ft	7 ft	63 ft	25 ft	1,575
432001e	432001E.DWG	ECA 198D	9 ft	7 ft	69 ft	25 ft	1,725
432001f	432001F.DWG	ECA 222D	9 ft	7 ft	76 ft	25 ft	1,900
432001g	432001G.DWG	ECA 246D	9 ft	7 ft	81 ft	25 ft	2,025
432001h	432001H.DWG	ECA 270D	9 ft	7 ft	87 ft	25 ft	2,175
432001i	432001I.DWG	ECA 294D	9 ft	7 ft	84 ft	25 ft	2,350

Exhibit 432.1c
432001a, ECA 102 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,125 Sq Ft

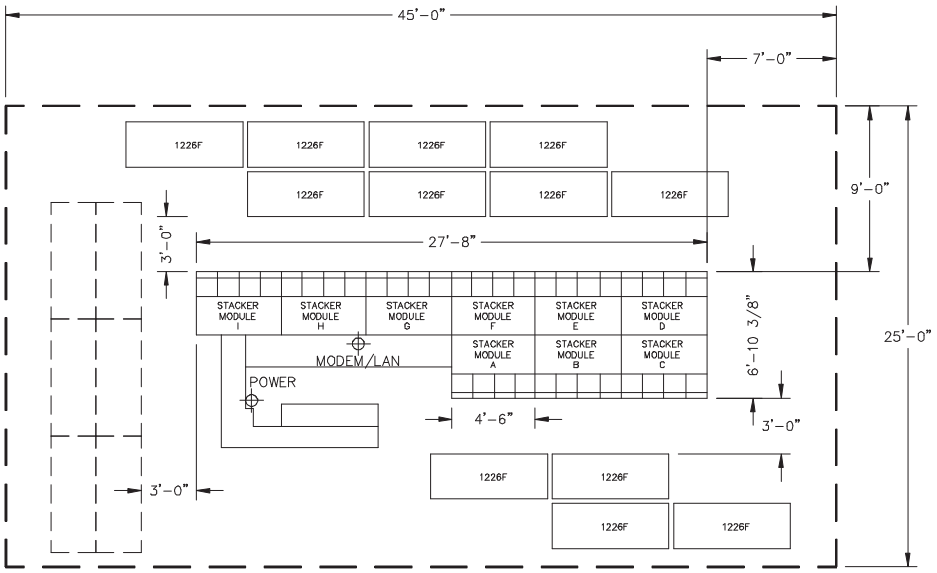


Exhibit 432.1d
432001b, ECA 126 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,300 Sq Ft

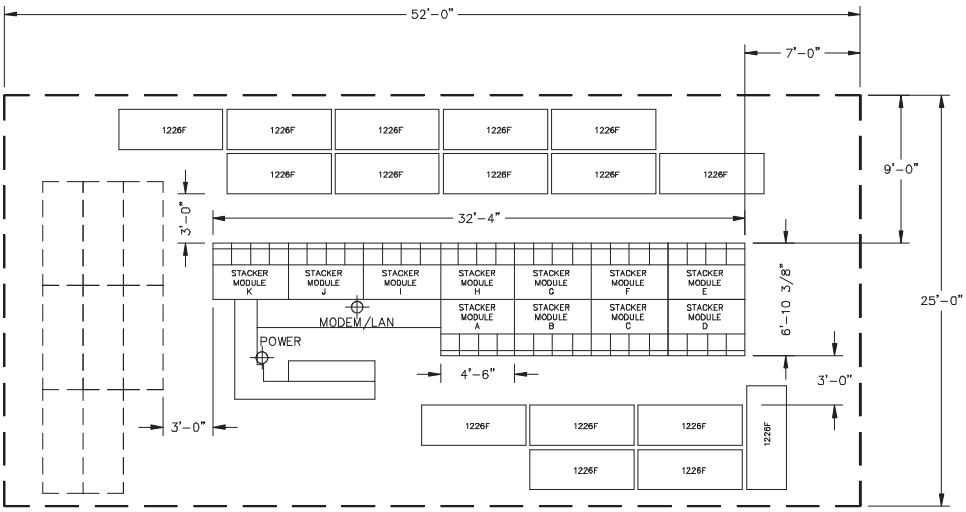


Exhibit 432.1e
432001c, ECA 150 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,450 Sq Ft

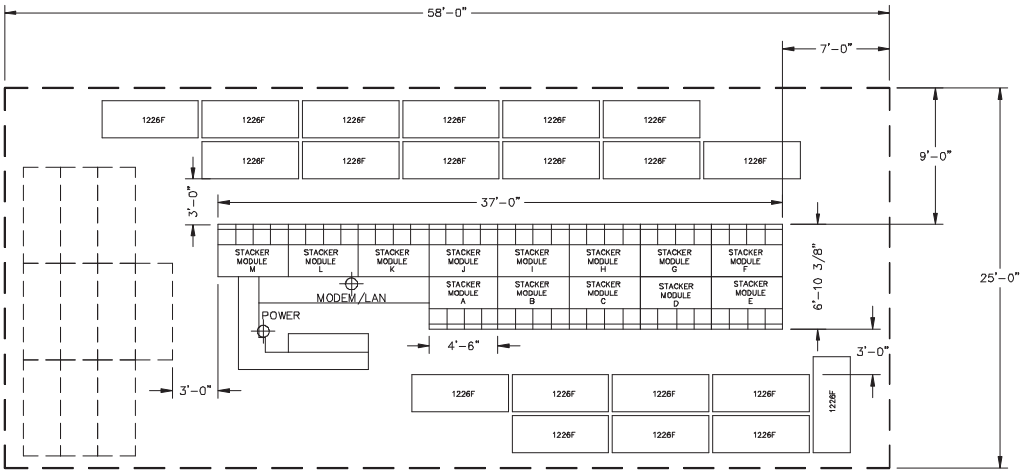


Exhibit 432.1f
432001d, ECA 174 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,575 Sq Ft

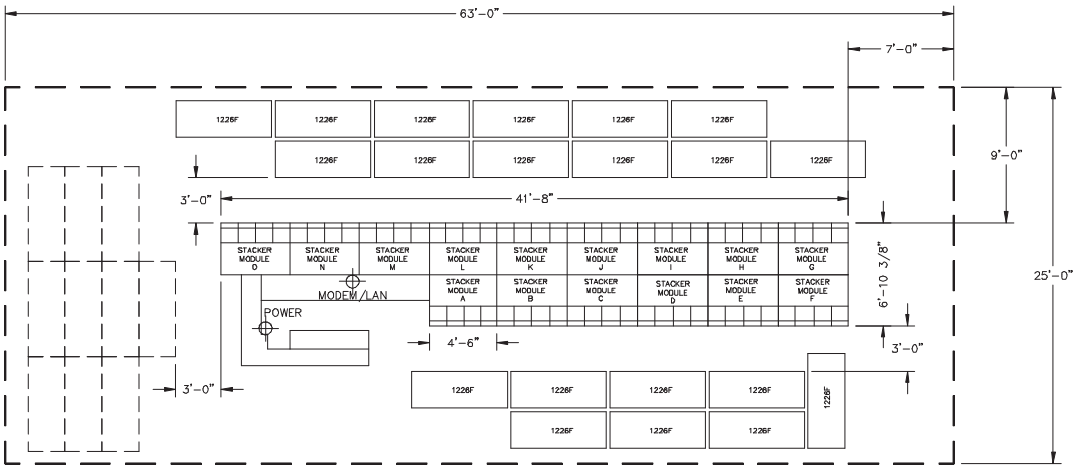


Exhibit 432.1g
432001e, ECA 198 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,725 Sq Ft

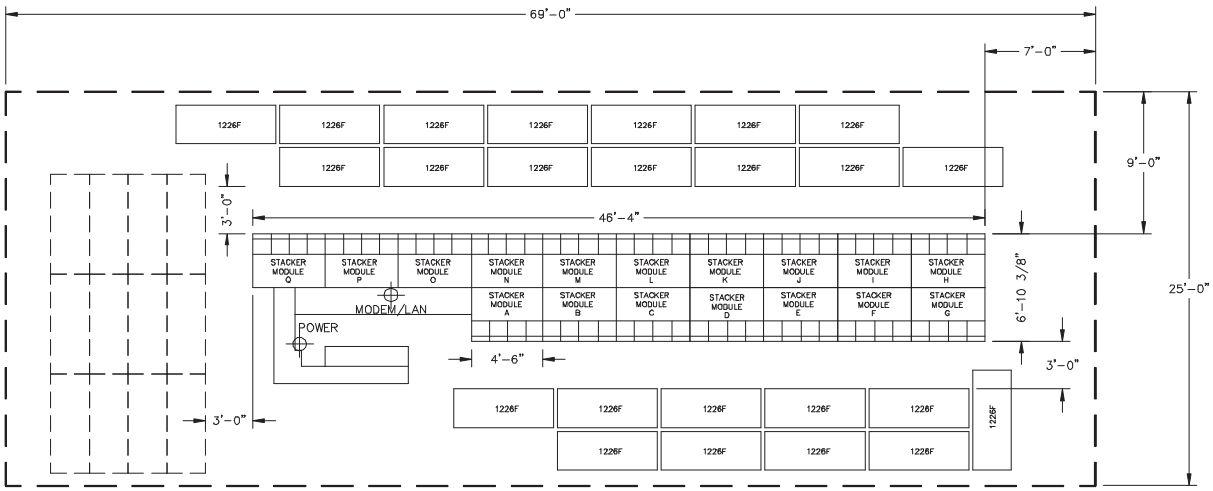


Exhibit 432.1h
432001f, ECA 222 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,900 Sq Ft

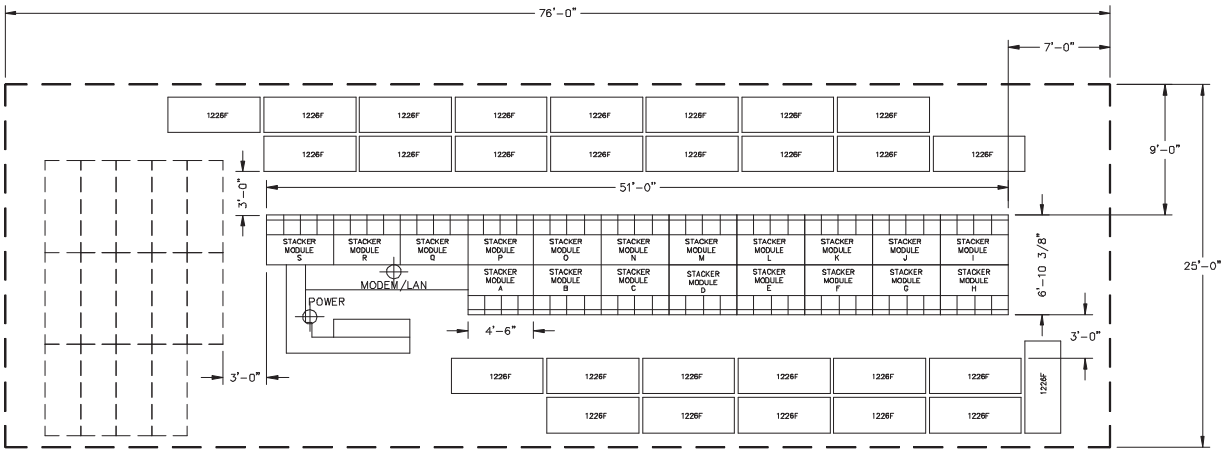


Exhibit 432.1i
432001g, ECA 246 Double-Side DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 2,025 Sq Ft

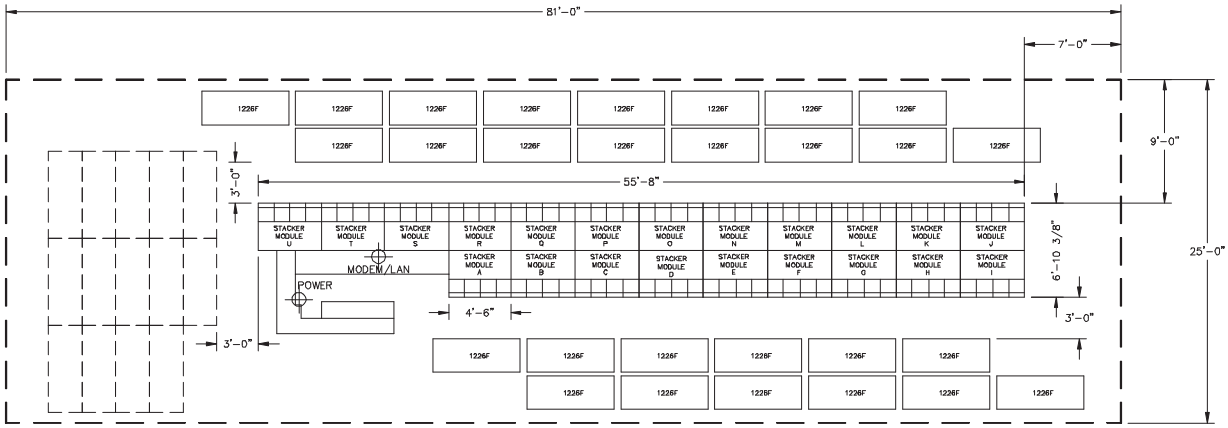


Exhibit 432.1j
432001h, ECA 270 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 2,175 Sq Ft

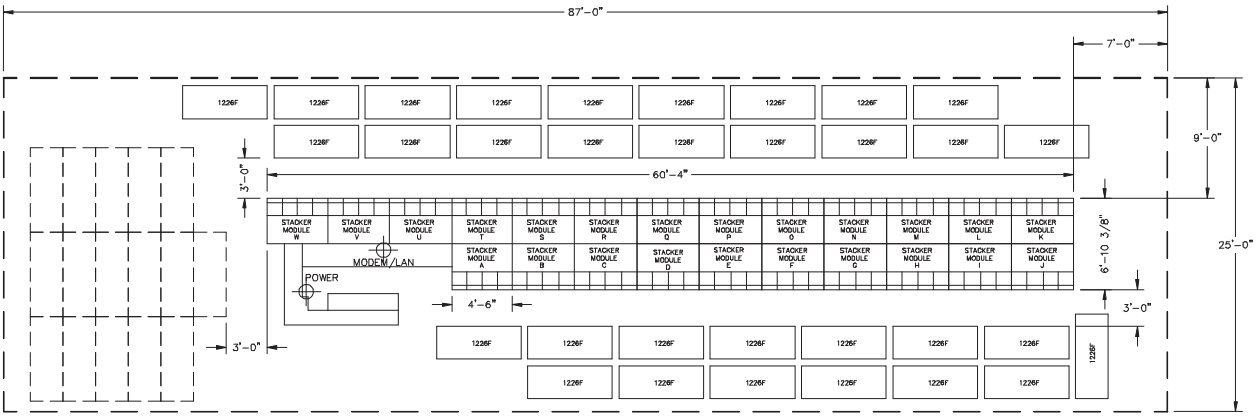
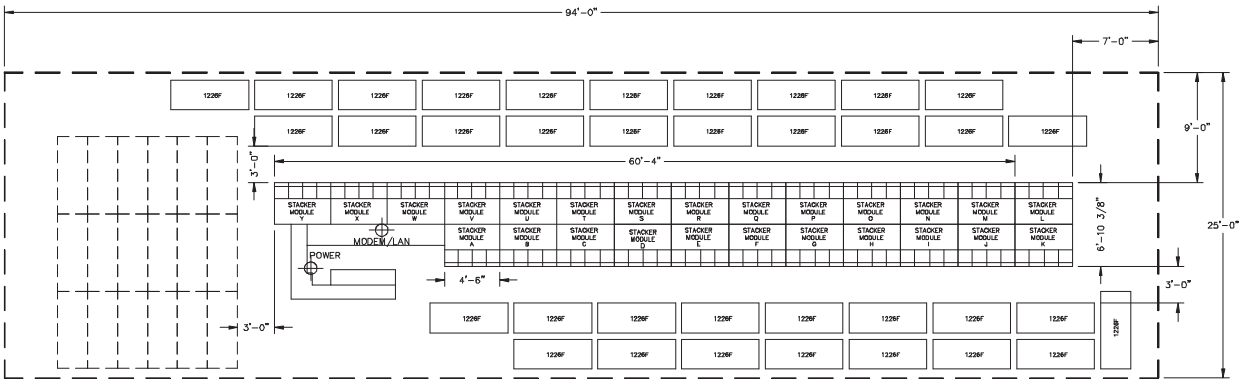


Exhibit 432.1k
432001i, ECA 294 Double-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 2,350 Sq Ft



432.2 ECA Phase II Single-Sided DBCSs

The footprint for each of these DBCSs makes the following assumptions:

a. Staging and dispatch of mail manually (GPMCs).

b. No staging space allocated for GPMCs.

c. Minimal maintenance access (3 ft from any panel that opens outward).

d. Safety taken into account with minimal space design.

e. No obstructions within workspace (including columns).

f. Staging of empty 1226F Tray Carts behind the DBCS.

Exhibit 432.2a lists the WSUs currently used for the ECA Phase II single-sided DBCSs and the associated number of 1226F Tray Carts required for each. Exhibit 432.2b lists the space requirements for each of these WSUs. Exhibits 432.2c through 432.2k illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 432.2a
WSUs and Tray Carts Needed for ECA Phase II Single-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	1226F Tray Carts Required FRONT	Stored Empty 1226F Tray Carts BACK	1226F Tray Carts Required TOTAL
432002a	432002A.DWG	ECA 111	10	5	15
432002b	432002B.DWG	ECA 126	12	6	18
432002c	432002C.DWG	ECA 142	12	6	18
432002d	432002D.DWG	ECA 158	14	7	21
432002e	432002E.DWG	ECA 174	16	8	24
432002f	432002F.DWG	ECA 190	16	8	24
432002g	432002G.DWG	ECA 206	18	9	27
432002h	432002H.DWG	ECA 222	20	10	30
432002i	432002I.DWG	ECA 238	20	10	30

Exhibit 432.2b
WSU Space Requirements for ECA Phase II Single-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	Minimum Space Required BEHIND DBCS	Minimum Space Required at the END of DBCS	Min. Length	Min. Width	Square Feet Required
432002a	432002A.DWG	ECA 111	4.5 ft	10 ft	60 ft	18 ft	1,080
432002b	432002B.DWG	ECA 126	4.5 ft	10 ft	65 ft	18 ft	1,170
432002c	432002C.DWG	ECA 142	4.5 ft	10 ft	69 ft	18 ft	1,242
432002d	432002D.DWG	ECA 158	4.5 ft	10 ft	74 ft	18 ft	1,332
432002e	432002E.DWG	ECA 174	4.5 ft	10 ft	78 ft	18 ft	1,404
432002f	432002F.DWG	ECA 190	4.5 ft	10 ft	83 ft	18 ft	1,494
432002g	432002G.DWG	ECA 206	4.5 ft	10 ft	87 ft	18 ft	1,566
432002h	432002H.DWG	ECA 222	4.5 ft	10 ft	92 ft	18 ft	1,656
432002i	432002I.DWG	ECA 238	4.5 ft	10 ft	96 ft	18 ft	1,728

Exhibit 432.2c
432002a, ECA 111 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,080 Sq Ft

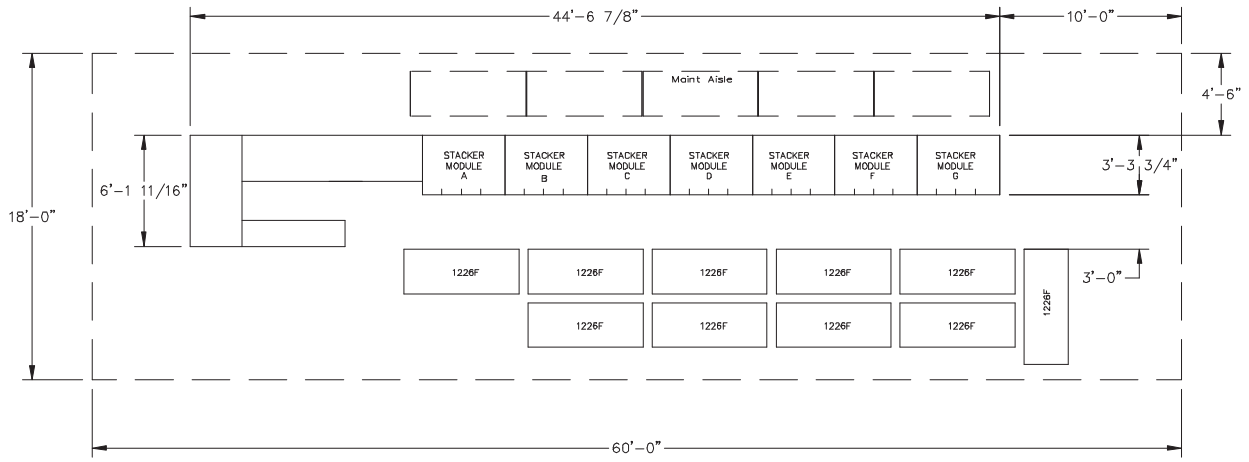


Exhibit 432.2d
432002b, ECA 126 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,170 Sq Ft

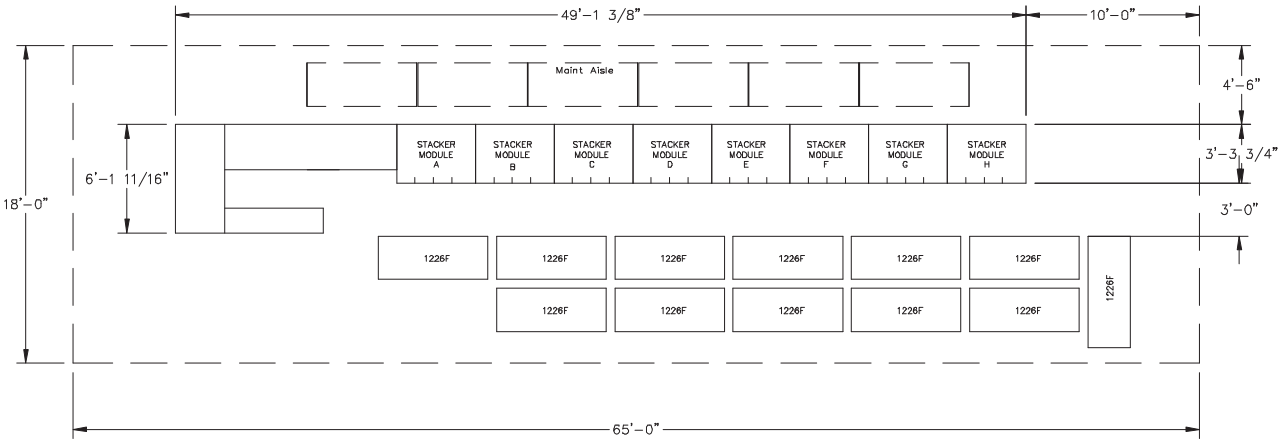


Exhibit 432.2e
432002c, ECA 142 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,242 Sq Ft

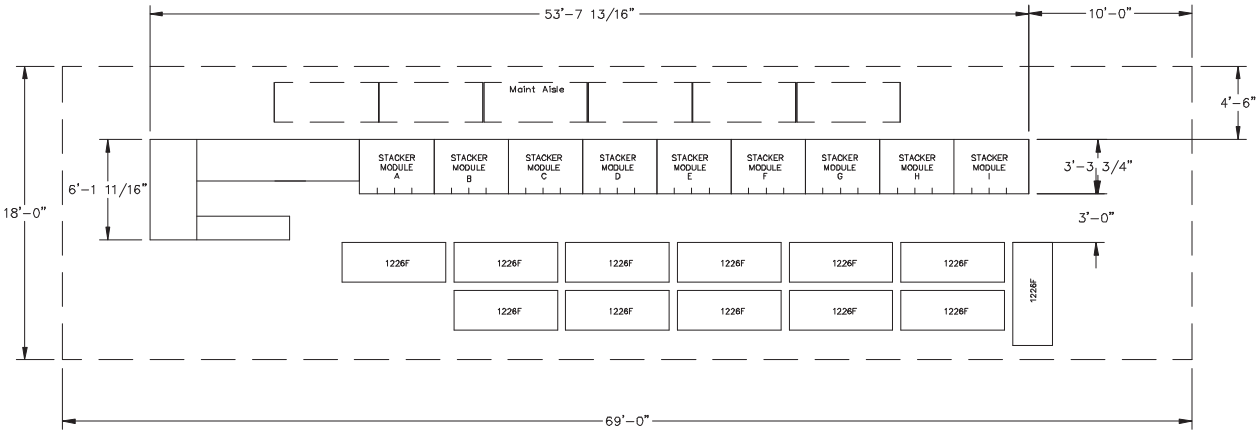


Exhibit 432.2f
432002d, ECA 158 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,332 Sq Ft

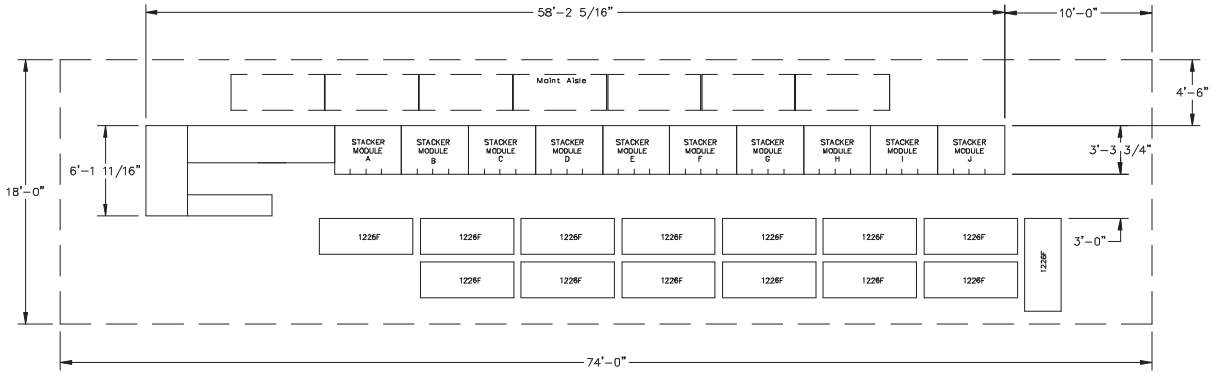


Exhibit 432.2g
432002e, ECA 174 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,404 Sq Ft

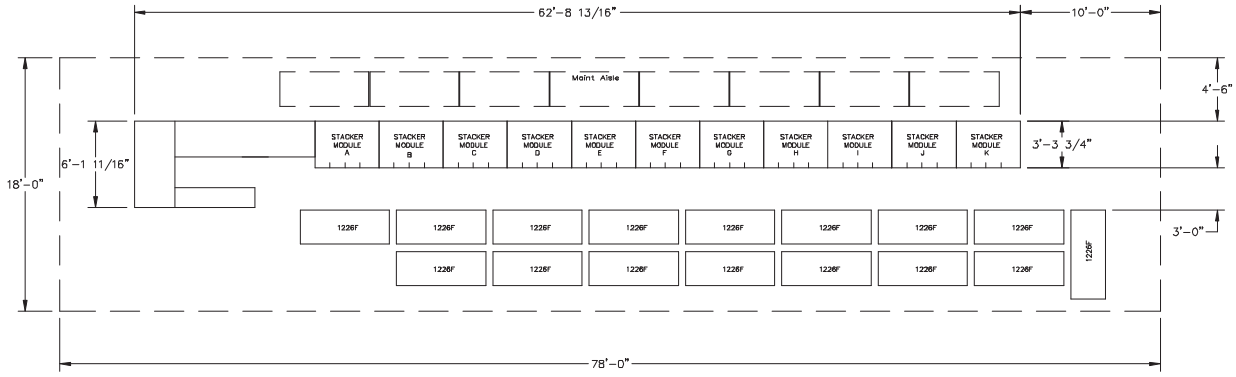


Exhibit 432.2h
432002f, ECA 190 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,494 Sq Ft

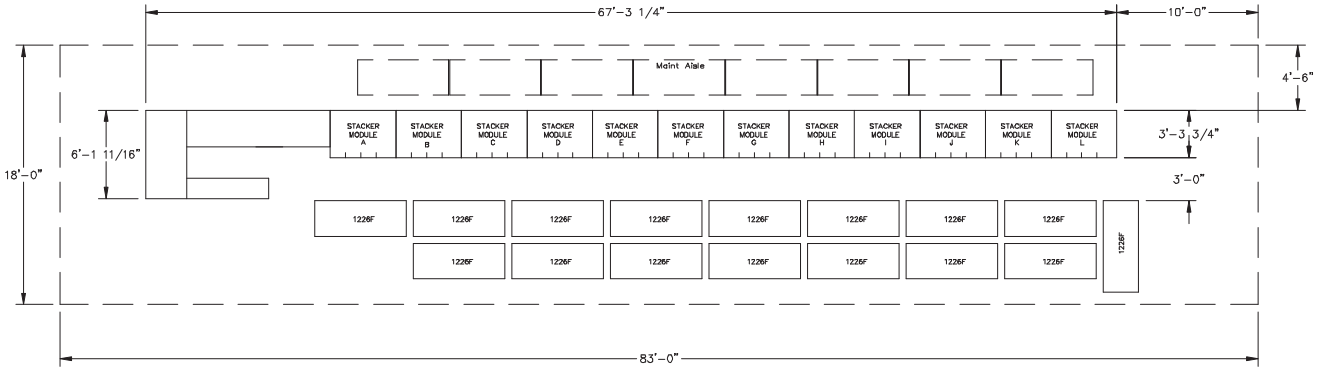


Exhibit 432.2i
432002g, ECA 206 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,566 Sq Ft

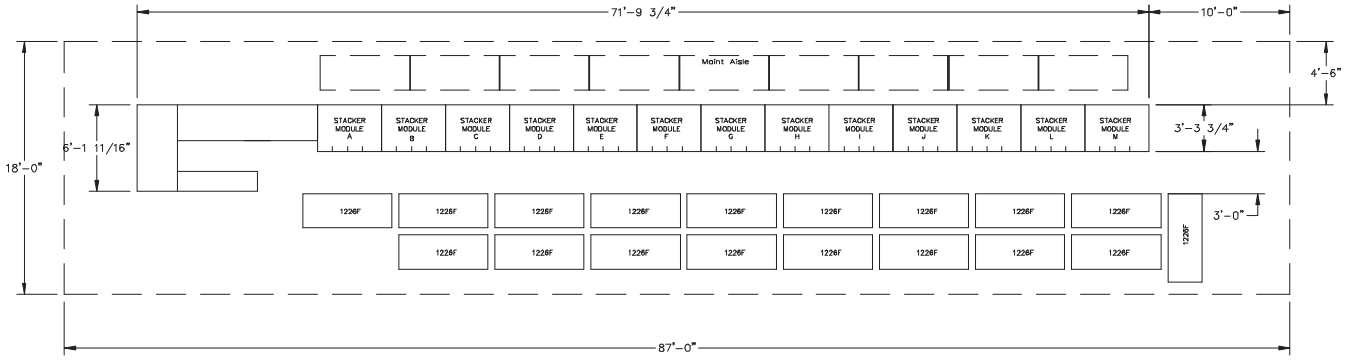


Exhibit 432.2j
432002h, ECA 222 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,656 Sq Ft

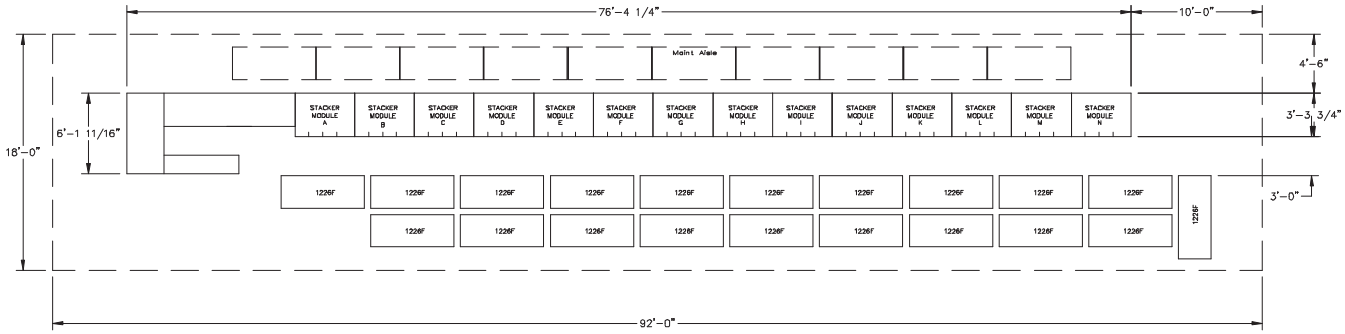
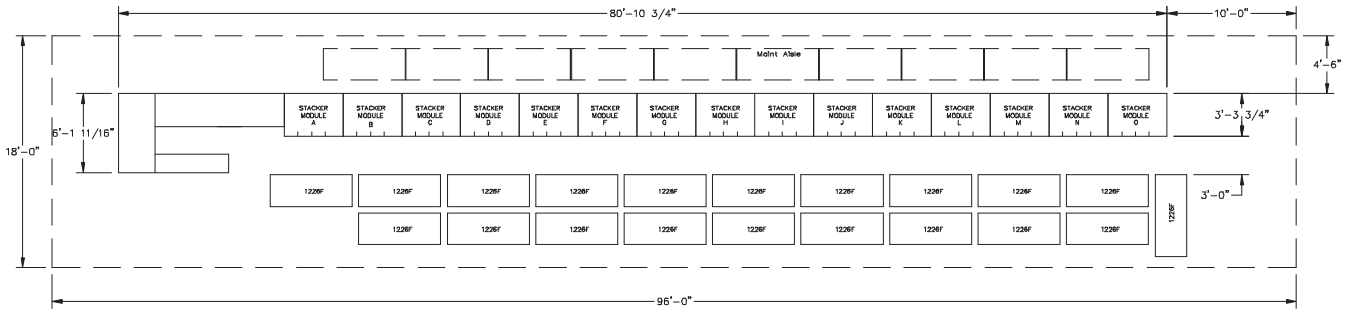


Exhibit 432.2k
432002i, ECA 238 Phase II Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,728 Sq Ft



432.3 Martin Marietta Single-Sided DBCSs

The footprint for each of these DBCSs makes the following assumptions:

a. Staging and dispatch of mail manually (GPMCs).

b. No staging space allocated for GPMCs.

c. Minimal maintenance access (3 ft from any panel that opens outward).

d. Safety taken into account with minimal space design.

e. No obstructions within workspace (including columns).

f. Staging of empty 1226F Tray Carts behind the DBCS.

Exhibit 432.3a lists the WSUs currently used for the Martin Marietta single-sided DBCSs and the associated number of 1226F Tray Carts required for each. Exhibit 432.3b lists the space requirements for each of these WSUs. Exhibits 432.3c through 432.3k illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 432.3a
WSUs and Tray Carts Needed for Martin Marietta Single-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	1226F Tray Carts Required FRONT	Stored Empty 1226F Tray Carts BACK	1226F Tray Carts Required TOTAL
432003a	432003A.DWG	MM 100	10	5	15
432003b	432003B.DWG	MM 120	10	5	15
432003c	432003C.DWG	MM 140	12	6	18
432003d	432003D.DWG	MM 160	14	7	21
432003e	432003E.DWG	MM 180	16	8	24
432003f	432003F.DWG	MM 200	18	9	27
432003g	432003G.DWG	MM 220	20	10	30
432003h	432003H.DWG	MM 240	20	10	30
432003i	432003I.DWG	MM 260	22	11	33

Exhibit 432.3b
WSU Space Requirements for Martin Marietta Single-Sided DBCSs

WSU Number	PostalCAD Drawing Name	Equipment Name	Minimum Space Required BEHIND DBCS	Minimum Space Required at the END of DBCS	Min. Length	Min. Width	Square Feet Required
432003a	432003A.DWG	MM 100	4.5 ft	10 ft	47 ft	18 ft	847
432003b	432003B.DWG	MM 120	4.5 ft	10 ft	53 ft	18 ft	954
432003c	432003C.DWG	MM 140	4.5 ft	10 ft	58 ft	18 ft	1,044
432003d	432003D.DWG	MM 160	4.5 ft	10 ft	63 ft	18 ft	1,134
432003e	432003E.DWG	MM 180	4.5 ft	10 ft	69 ft	18 ft	1,242
432003f	432003F.DWG	MM 200	4.5 ft	10 ft	74 ft	18 ft	1,332
432003g	432003G.DWG	MM 220	4.5 ft	10 ft	79 ft	18 ft	1,422
432003h	432003H.DWG	MM 240	4.5 ft	10 ft	84 ft	18 ft	1,512
432003i	432003I.DWG	MM 260	4.5 ft	10 ft	90 ft	18 ft	1,620

Exhibit 432.3c
432003a, Martin Marietta 100 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 846 Sq Ft

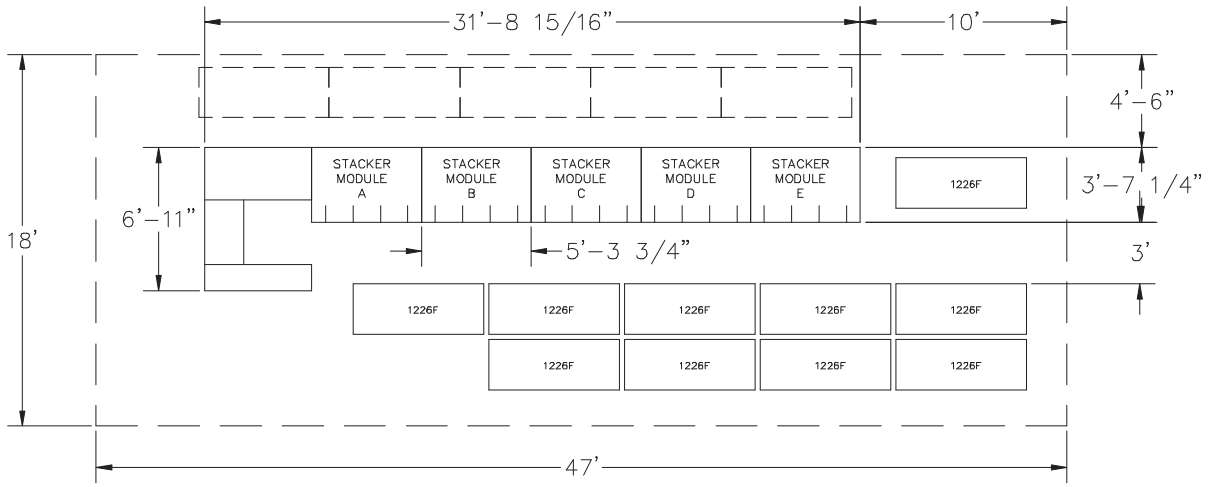


Exhibit 432.3d
432003b, Martin Marietta 120 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 954 Sq Ft

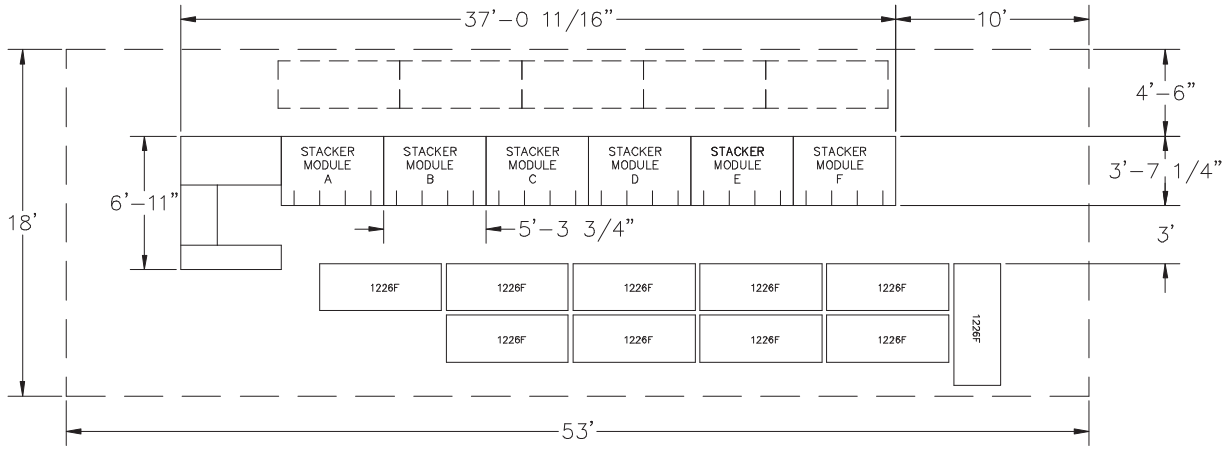


Exhibit 432.3e
432003c, Martin Marietta 140 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,044 Sq Ft

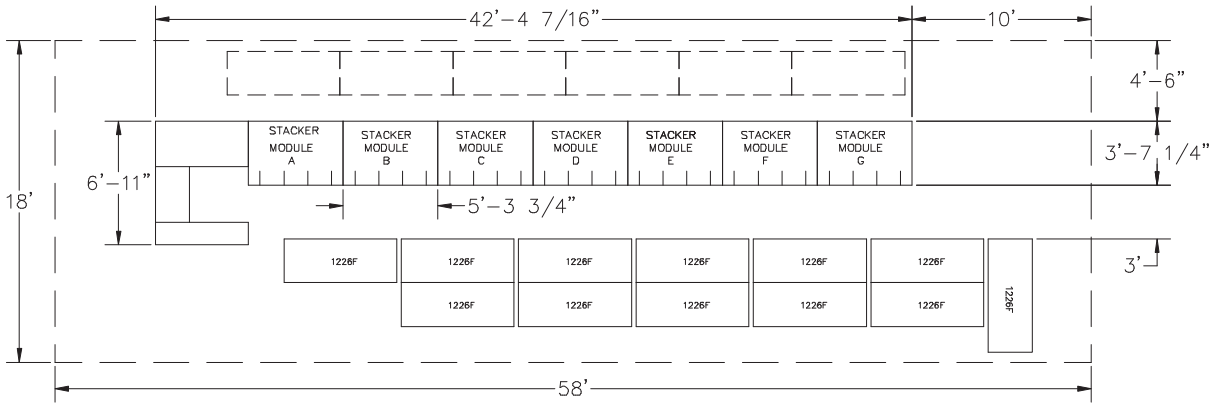


Exhibit 432.3f
432003d, Martin Marietta 160 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,134 Sq Ft

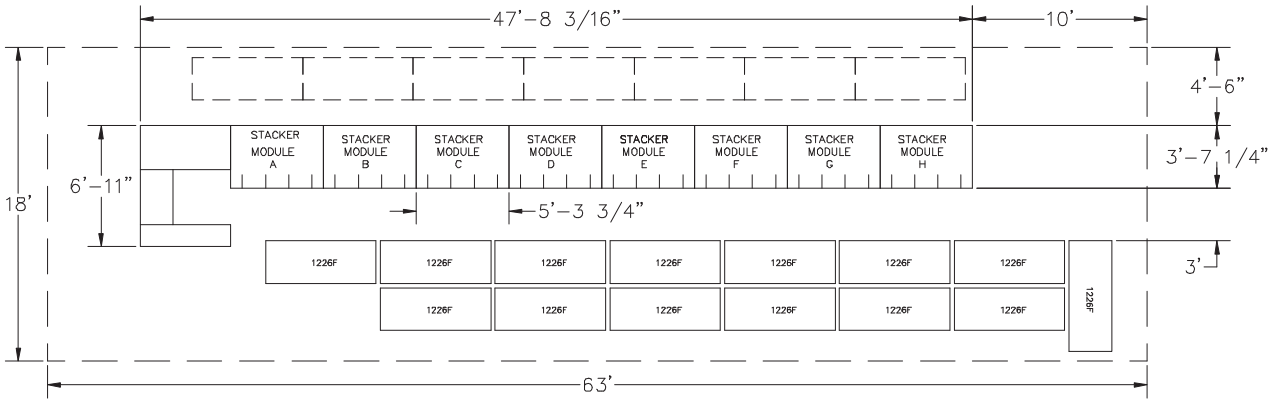


Exhibit 432.3g
432003e, Martin Marietta 180 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,242 Sq Ft

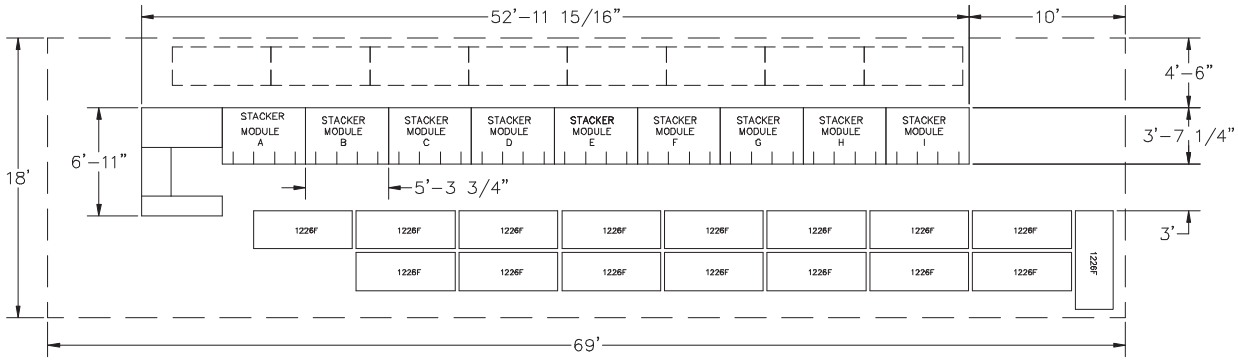


Exhibit 432.3h
432003f, Martin Marietta 200 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,332 Sq Ft

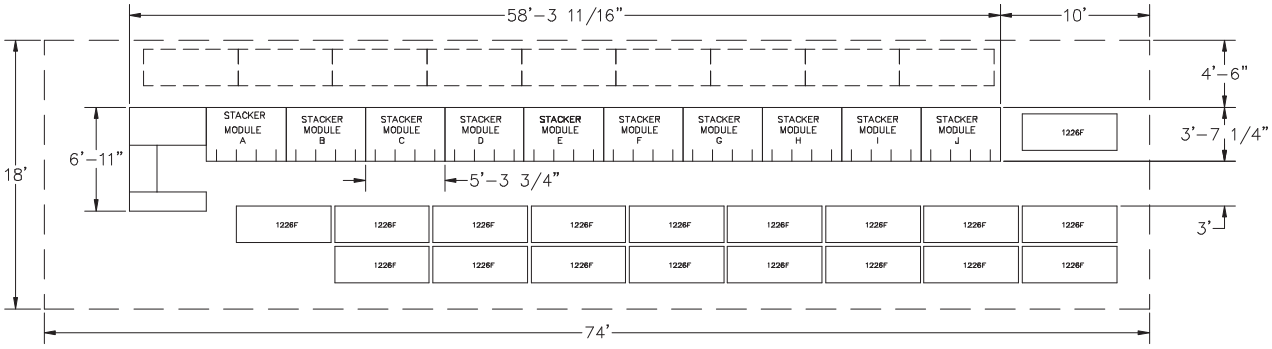


Exhibit 432.3i
432003g, Martin Marietta 220 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,422 Sq Ft

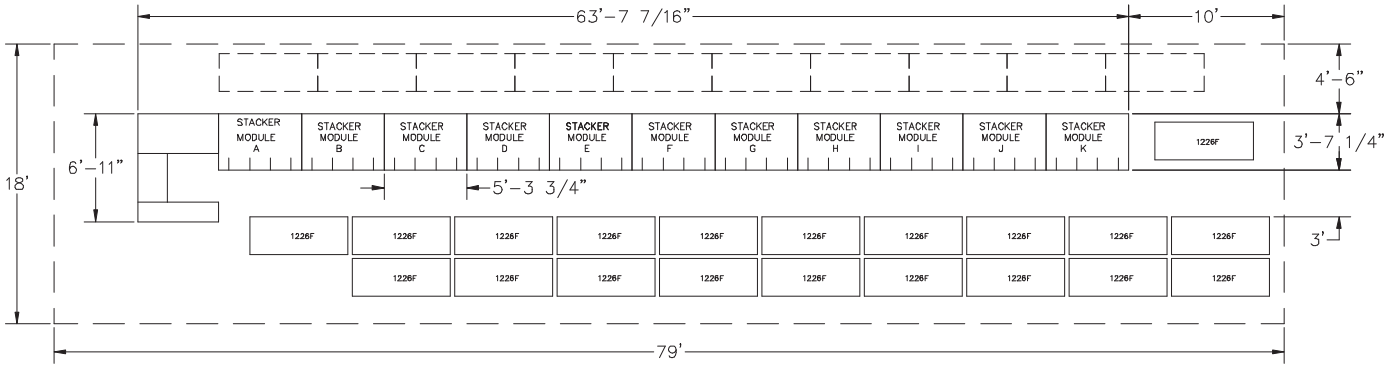


Exhibit 432.3j
432003h, Martin Marietta 240 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,512 Sq Ft

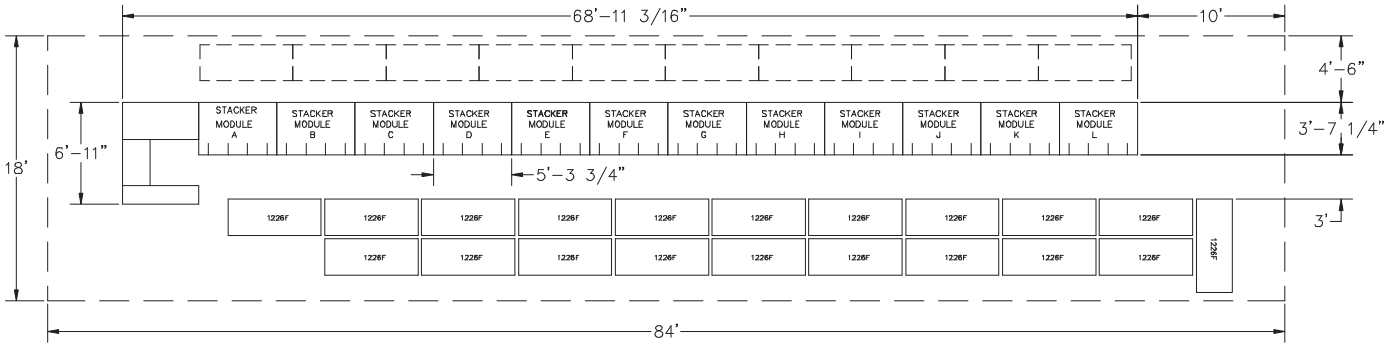
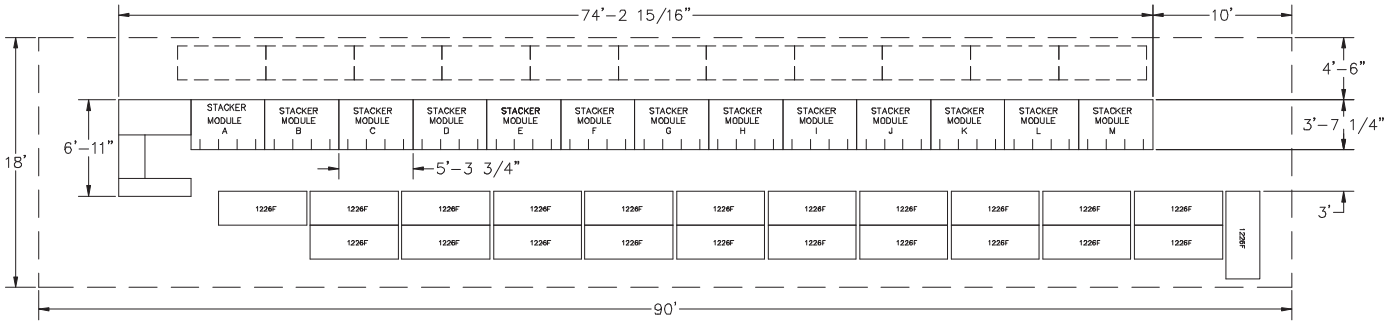


Exhibit 432.3k
432003i, Martin Marietta 260 Single-Sided DBCS

Date: Dec. 1994
Distribution Delivery Barcode Sorter
Scale: No Scale
Area: 1,620 Sq Ft



432.4 ECA Phase IV Single-Sided DBCS/Optical Character Reader

The footprint for each of these DBCSs makes the following assumptions:

a. Staging and dispatch of mail manually (GPMCs).

b. No staging space allocated for GPMCs.

c. Minimal maintenance access (3 ft from any panel that opens outward).

d. Safety taken into account with minimal space design.

e. No obstructions within workspace (including columns).

f. Staging of empty 1226F Tray Carts behind the DBCS/optical character reader (OCR).

Exhibit 432.4a lists the WSUs currently used for the ECA Phase IV single-sided DBCS/OCRs and the associated number of 1226F Tray Carts required for each. Exhibit 432.4b lists the space requirements for each of these WSUs. Exhibits 432.4c through 432.4f illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 432.4a
WSUs and Tray Carts Needed for ECA Phase IV Single-Sided DBCS/OCRs

WSU Number	PostalCAD Drawing Name	Equipment Name	1226F Tray Carts Required FRONT	Stored Empty 1226F Tray Carts BACK	1226F Tray Carts Required TOTAL
432012e	432012E.DWG	OCR 174	16	8	24
432012f	432012F.DWG	OCR 190	18	9	27
432012g	432012G.DWG	OCR 206	20	10	30
432012i	432012I.DWG	OCR 238	22	11	33

Exhibit 432.4b
WSU Space Requirements for ECA Phase IV Single-Sided DBCS/OCRs

WSU Number	PostalCAD Drawing Name	Equipment Name	Minimum Space Required BEHIND DBCS	Minimum Space Required at the END of DBCS	Min. Length	Min. Width	Square Feet Required
432012e	432012E.DWG	OCR 174	4.5 ft	10 ft	83 ft	18 ft	1,494
432012f	432012F.DWG	OCR 190	4.5 ft	10 ft	88 ft	18 ft	1,584
432012g	432012G.DWG	OCR 206	4.5 ft	10 ft	92 ft	18 ft	1,656
432012i	432012I.DWG	OCR 238	4.5 ft	10 ft	101 ft	18 ft	1,818

Exhibit 432.4c
432012e, ECA Phase IV 174 Single-Sided DBCS/OCR

Date: May 1997
Distribution Delivery Barcode Sorter — OCR
Scale: No Scale
Area: 1,494 Sq Ft

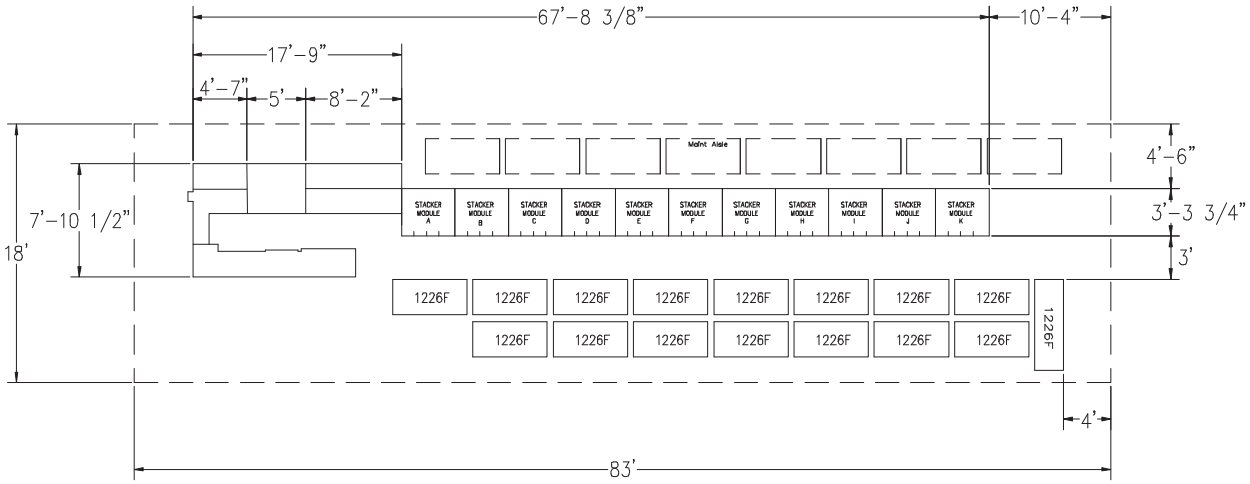


Exhibit 432.4d
432012f, ECA Phase IV 190 Single-Sided DBCS/OCR

Date: May 1997
Distribution Delivery Barcode Sorter — OCR
Scale: No Scale
Area: 1,584 Sq Ft

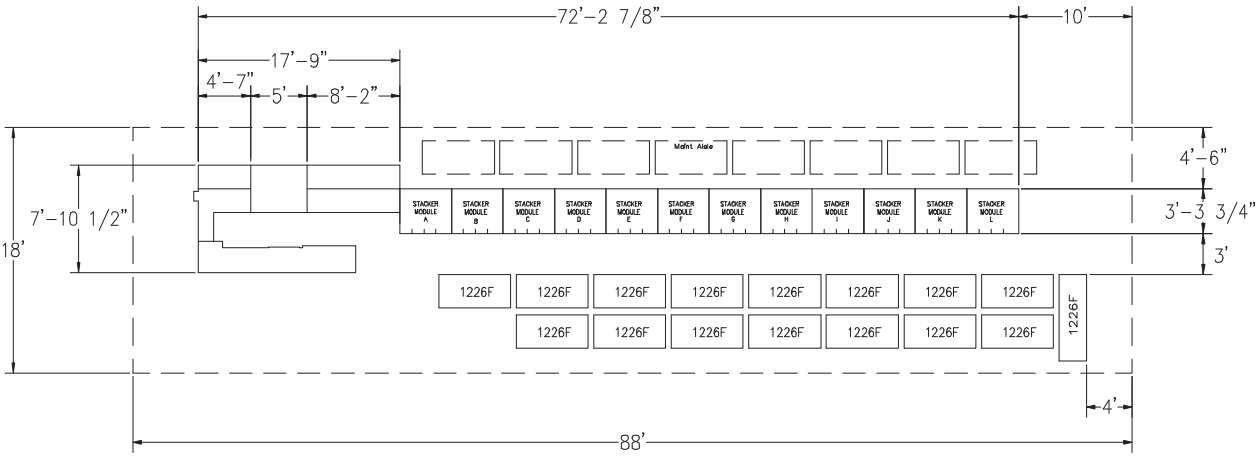


Exhibit 432.4e
432012g, ECA Phase IV 206 Single-Sided DBCS/OCR

Date: May 1997
Distribution Delivery Barcode Sorter — OCR
Scale: No Scale
Area: 1,656 Sq Ft

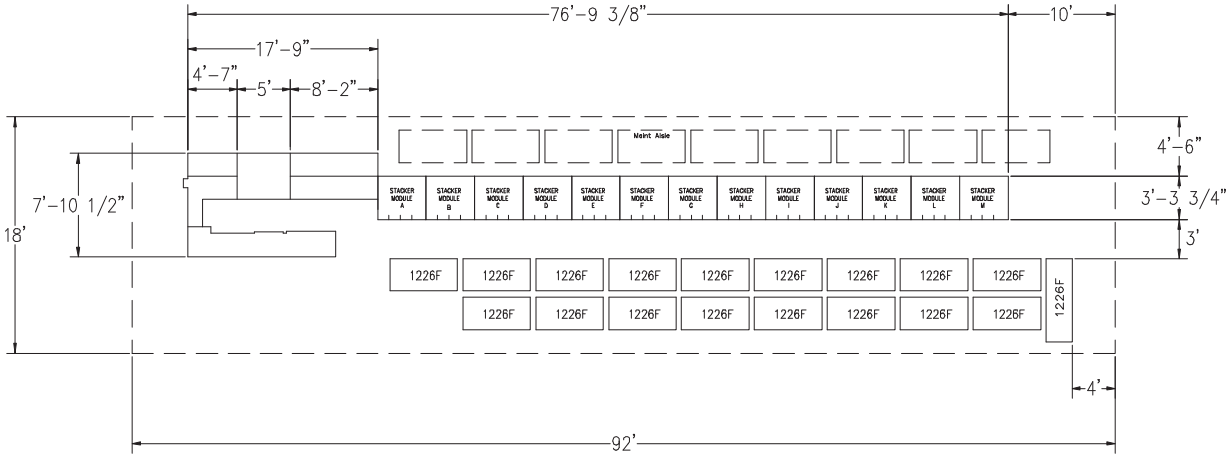
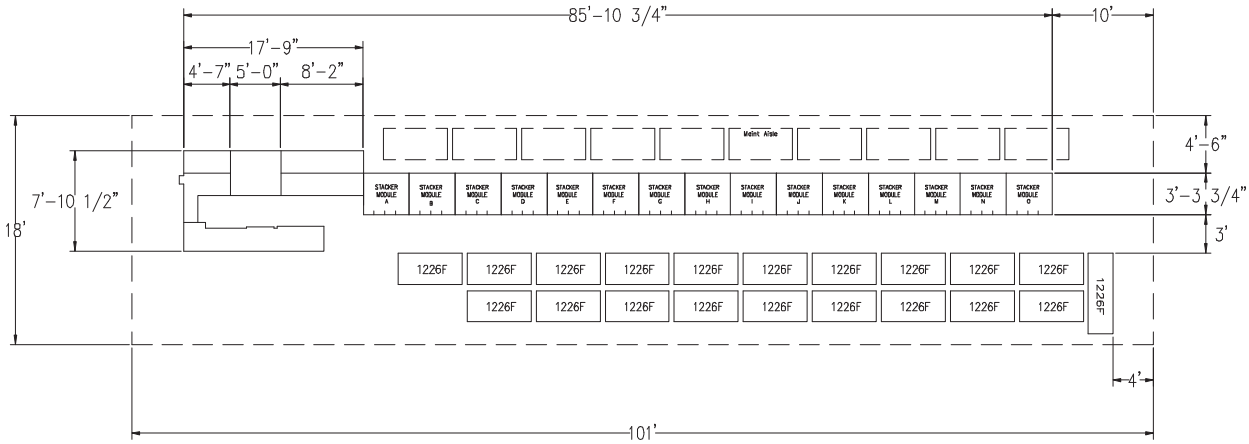


Exhibit 432.4f
432012i, ECA Phase IV 238 Single-Sided DBCS/OCR

Date: Jan. 1998
Distribution Delivery Barcode Sorter — OCR
Scale: No Scale
Area: 1,818 Sq Ft



433 Pouching and Sacking

Exhibit 433a lists the WSUs currently used for pouching and sacking. Exhibits 433b through 433l illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 433a
WSUs Used for Pouching and Sacking

WSU Number	PostalCAD Drawing Name	Square Feet Required	Arrangement	Item Numbers and Description
433001	433001.DWG	18	Single rack	61A, Loose Pack Rack — 2 Separations
433001a	433001A.DWG	32	Single rack	61B, Loose Pack Rack — 4 Separations
433002	433002.DWG	23	Single rack	30, 2 Pouch Racks — 5 Separations Each
433002a	433002A.DWG	46	Single rack	31A or 31B, 2 Pouch Racks — 10 Separations Each
433003	433003.DWG	187	Double depth	2-31A, 2-31B, 8B, 4 Pouch Racks — 10 Separations Each With Canceling Table
433004a	433004A.DWG	412	U-shape	3-31A, 3-31B, 8B, 6 Pouch Racks — 10 Separations Each With Canceling Table
433004b	433004B.DWG	412	2 rows deep	4-31A, 4-31B, 8B, 8 Pouch Racks — 10 Separations Each With Canceling Table
433004c	433004C.DWG	530	Double depth	5-31A, 5-31B, 8B, 10 Pouch Racks — 10 Separations Each With Canceling Table
433004d	433004D.DWG	530	Double depth	6-31A, 6-31B, 8B, 12 Pouch Racks — 10 Separations Each With Canceling Table
433005	433005.DWG	711	Double depth, with 17-ft conveyor	5-31A, 5-31B, 3-1070, 1922A Conveyor, 10 Pouch Racks —10 Separations Each With 17-Ft Conveyor and 3 Nutting Trucks
433006	433006.DWG	878	Double depth, with 25-ft conveyor	7-31A, 7-31B, 3-1070, 1922 Conveyor, 14 Pouch Racks — 10 Separations Each With 25-Ft Conveyor and 3 Nutting Trucks

Exhibit 433b

433001, Loose Pack Rack — 2 Separations

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 18 Sq Ft

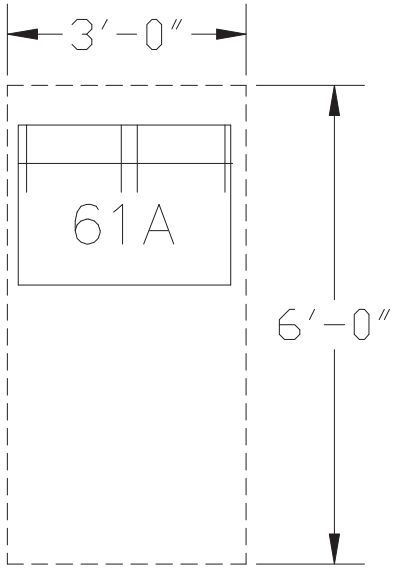


Exhibit 433c

433001a, Loose Pack Rack — 4 Separations

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 32 Sq Ft

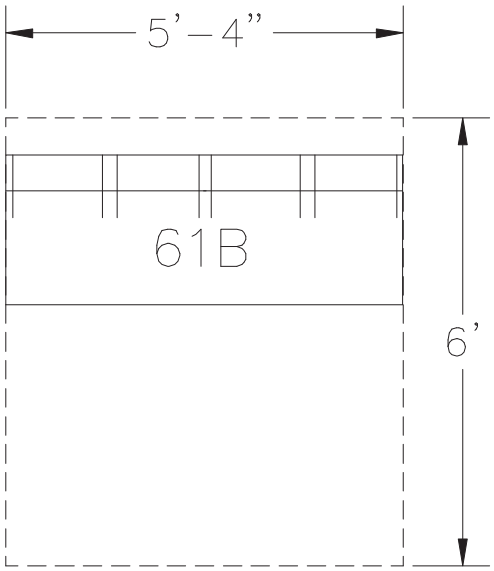


Exhibit 433d
433002, 2 Pouch Racks — 5 Separations Each

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 35 Sq Ft

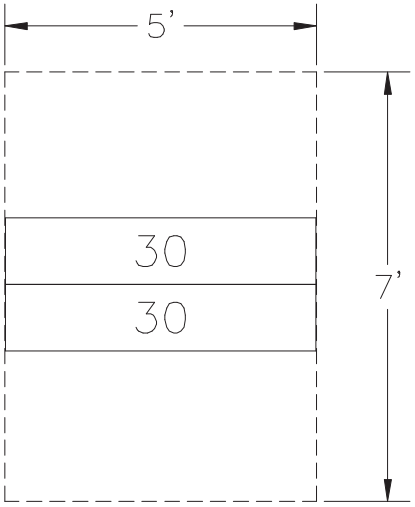


Exhibit 433e
433002a, 2 Pouch Racks — 10 Separations Each

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 46 Sq Ft

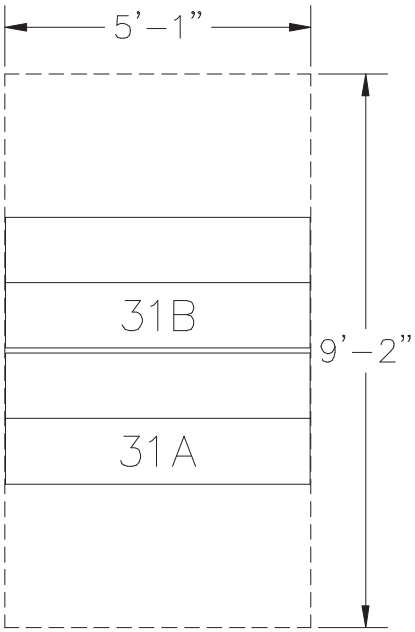


Exhibit 433f

433003, 4 Pouch Racks — 10 Separations Each, With Canceling Table

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 187 Sq Ft

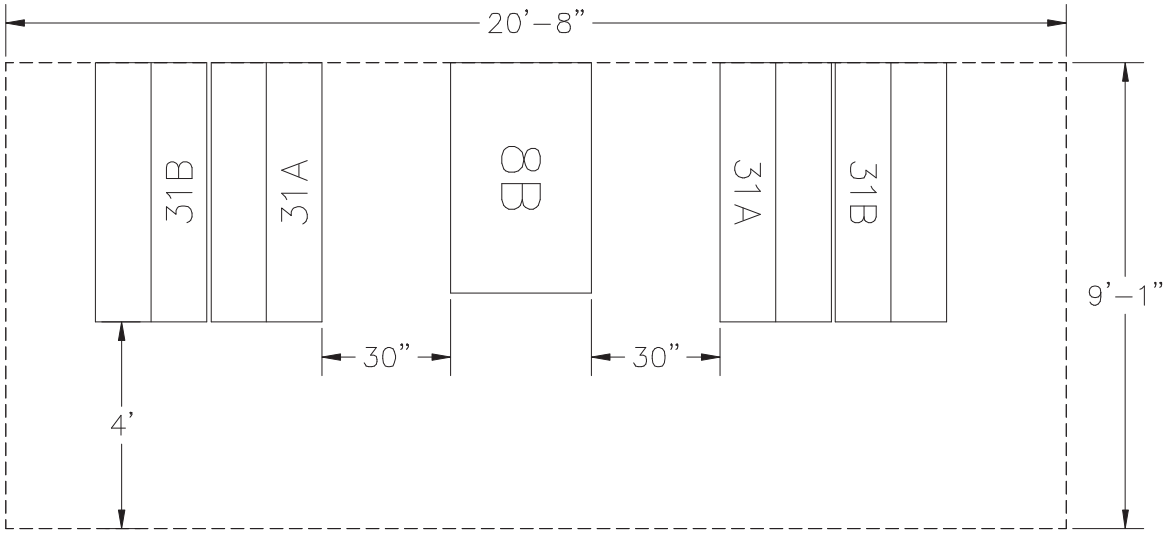


Exhibit 433g

433004a, 6 Pouch Racks — 10 Separations Each, With Canceling Table

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 412 Sq Ft

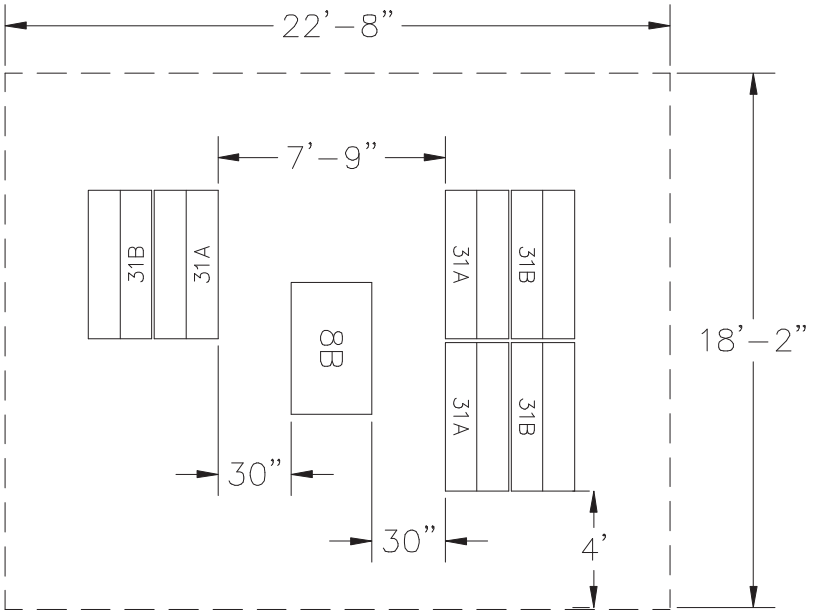


Exhibit 433h
433004b, 8 Pouch Racks — 10 Separations Each, With Canceling Table

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 412 Sq Ft

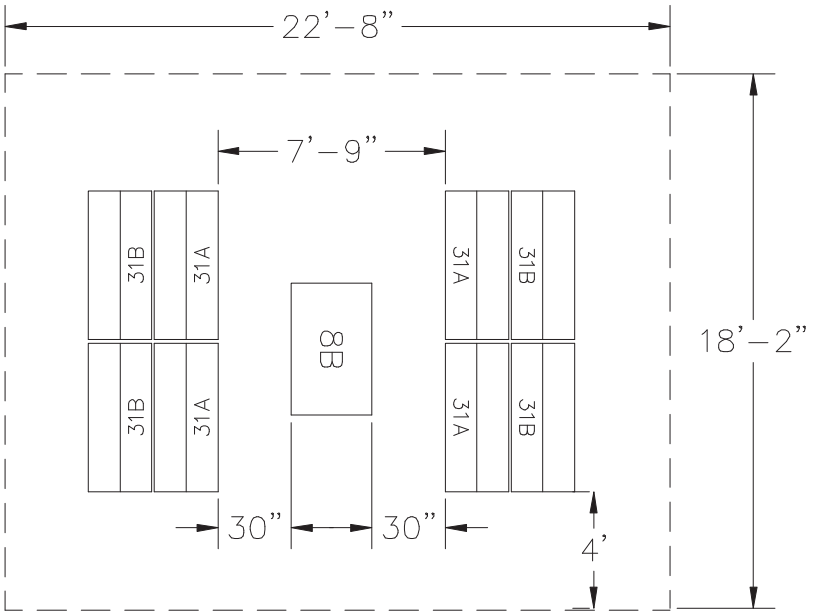


Exhibit 433i
433004c, 10 Pouch Racks — 10 Separations Each, With Canceling Table

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 530 Sq Ft

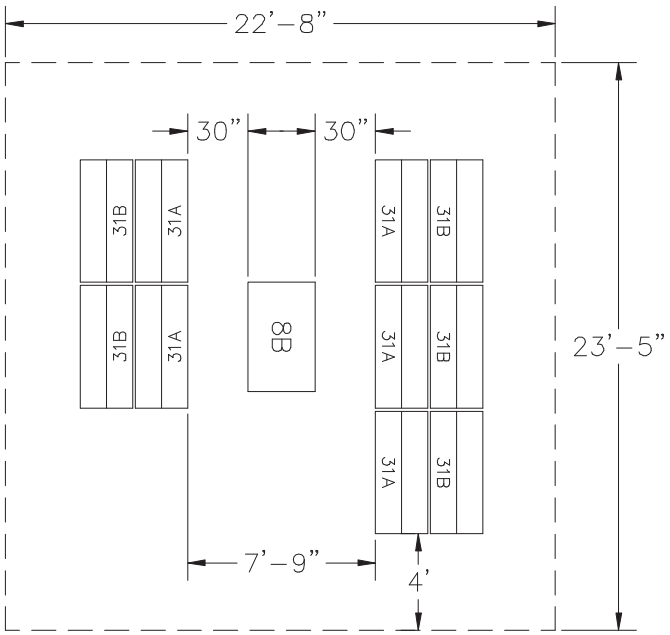


Exhibit 433j

433004d, 12 Pouch Racks — 10 Separations Each, With Canceling Table

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 530 Sq Ft

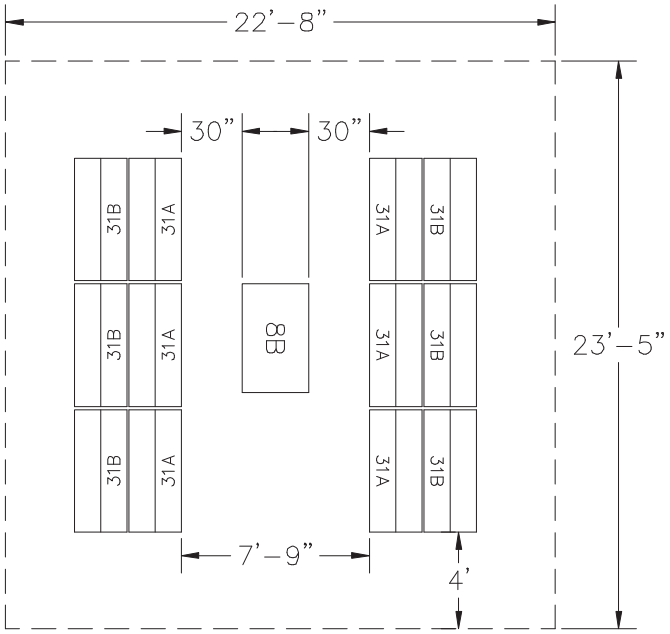


Exhibit 433k

433005, 10 Pouch Racks — 10 Separations Each, With 17-Ft 1922A Conveyor and 3 Nutting Trucks

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 711 Sq Ft

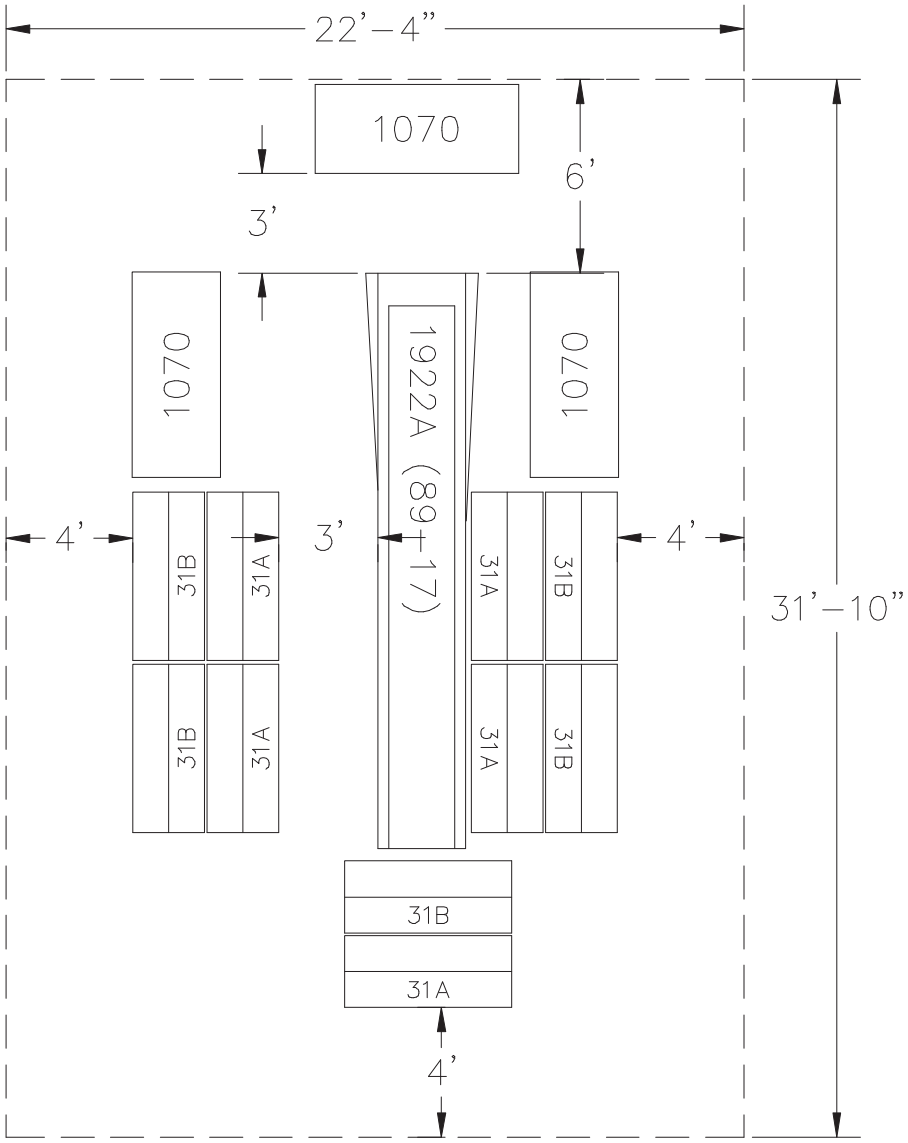
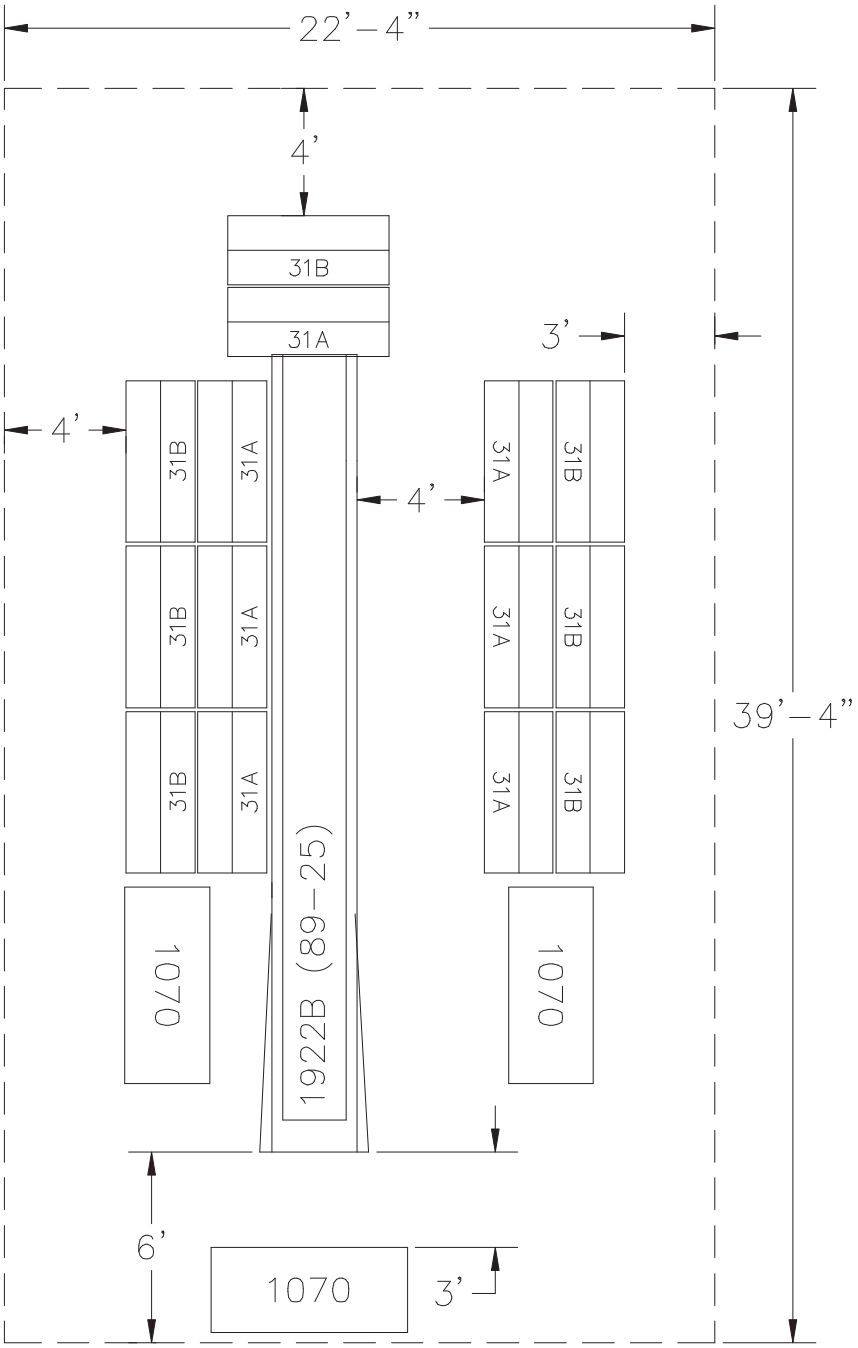


Exhibit 433I

433006, 14 Pouch Racks — 10 Separations Each, With 25-Ft 1922B Conveyor and 3 Nutting Trucks

Date: Dec. 1994
Pouching, Sacking
Scale: No Scale
Area: 878 Sq Ft



434 Reserved

435 Flat Mail — Manual Cases and Mechanized Sorting Machines

The footprints of these WSUs provide for movement of mail and personnel within the work center, exclusive of dedicated aisles, and an allowance for column interference and other unusable space. Exhibit 435a lists the WSUs currently used for flat mail — manual cases and mechanical sorting machines. Exhibits 435b through 435j illustrate these WSUs for visual reference in planning facility space requirements.

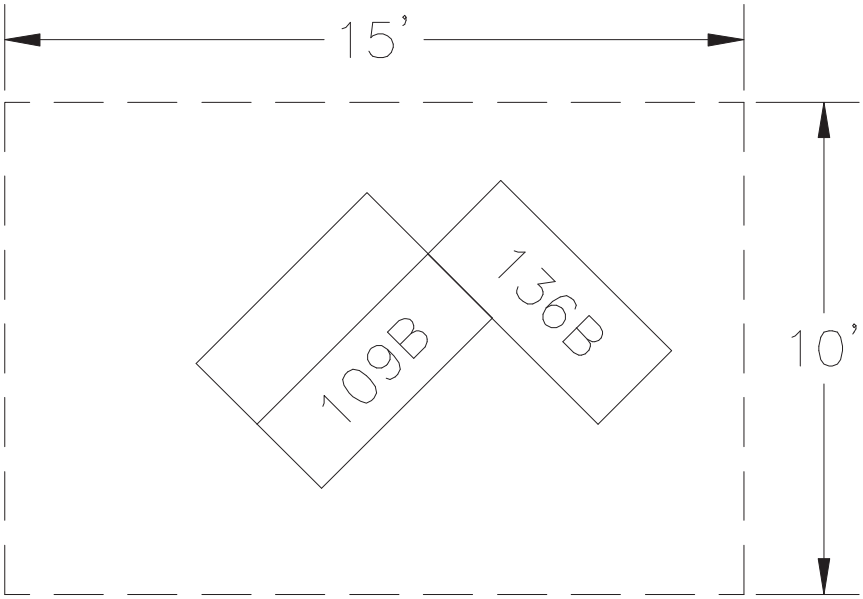
Exhibit 435a
WSUs Used for Flat Mail — Manual Cases and Mechanized Sorting Machines

WSU Number	PostalCAD Drawing Name	Square Feet Required	Separations	Description
435001	435001.DWG	150	60	Flat Workstation — Open Back
435002a	435002A.DWG	40	24–30	Flat Workstation — Open Back
435002b	435002B.DWG	56	36–42	Flat Workstation — Open Back
435003a	435003A.DWG	40	18	Flat Distribution Setup
435003b	435003B.DWG	80	19–36	Flat Distribution Setup
435003c	435003C.DWG	110	37–54	Flat Distribution Setup
435003d	435003D.DWG	130	55–72	Flat Distribution Setup
435008	435008.DWG	2,500	100	Flat Sorting Machine (FSM): 2+2 Model
435009	435009.DWG	3,093	100	Flat Sorting Machine (FSM-1000)

Exhibit 435b

435001, Flat Workstation — Open Back: 60 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 150 Sq Ft



Note: The planning area of 150 sq ft allows for:

a. A maximum of 21′-4″ back-to-back of cases.
b. A maximum of 12′-5″ from the back of case (toward distribution side) to a dedicated aisle, wall, or adjacent work area.
c. A 3′-6″ aisle at the ends of the rows of cases when not at a dedicated aisle.
d. 3′-0″ at the back and end of the cases for sweeping of the mail.

Exhibit 435c
435002a, Flat Workstation — Open Back: 24 to 30 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 40 Sq Ft

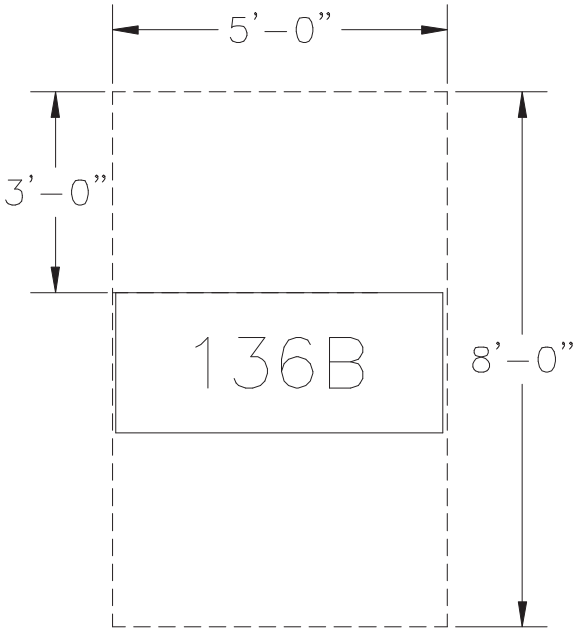


Exhibit 435d
435002b, Flat Workstation — Open Back: 36 to 42 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 56 Sq Ft

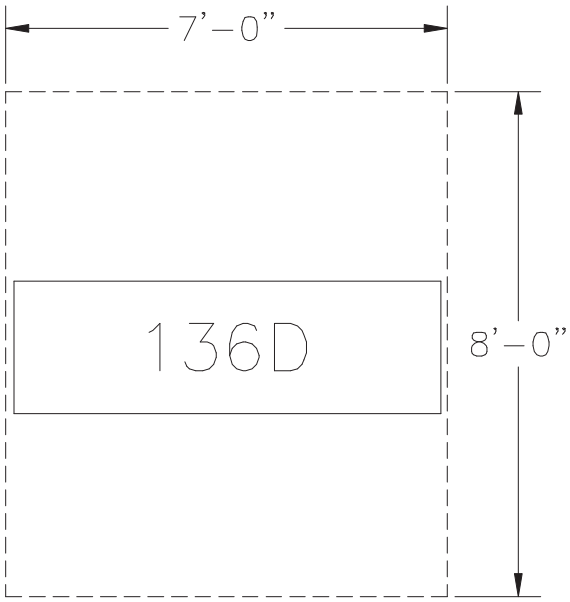
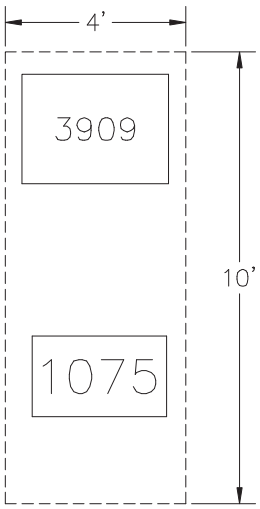


Exhibit 435e

435003a, Flat Distribution Setup: 18 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 40 Sq Ft



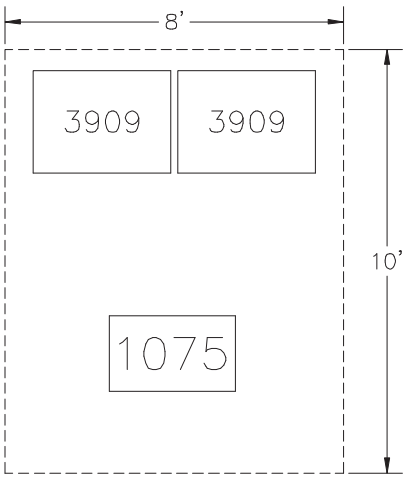
Flats distribution:

- 18 separations per container.
- 8 shelves per container.
- 24 trays per container — shipping capacity.

Exhibit 435f

435003b, Flat Distribution Setup: 19 to 36 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 80 Sq Ft

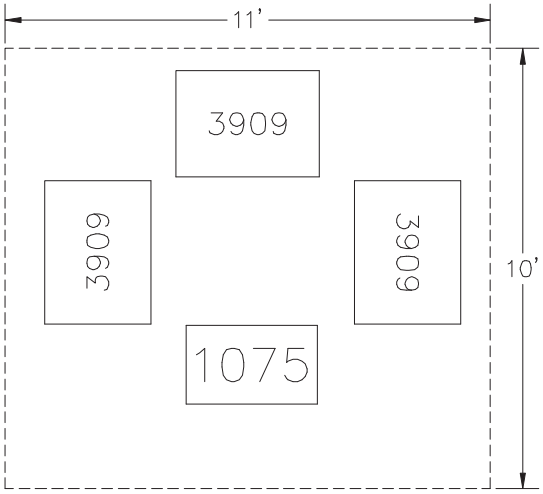


Flats distribution:

- 18 separations per container.
- 8 shelves per container.
- 24 trays per container — shipping capacity.

Exhibit 435g
435003c, Flat Distribution Setup: 37 to 54 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 110 Sq Ft

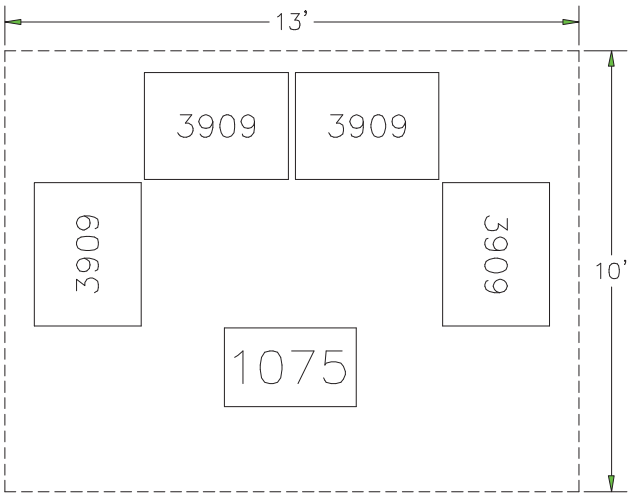


Flats distribution:

- 18 separations per container.
- 8 shelves per container.
- 24 trays per container — shipping capacity.

Exhibit 435h
435003d, Flat Distribution Setup: 55 to 72 Separations

Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 130 Sq Ft

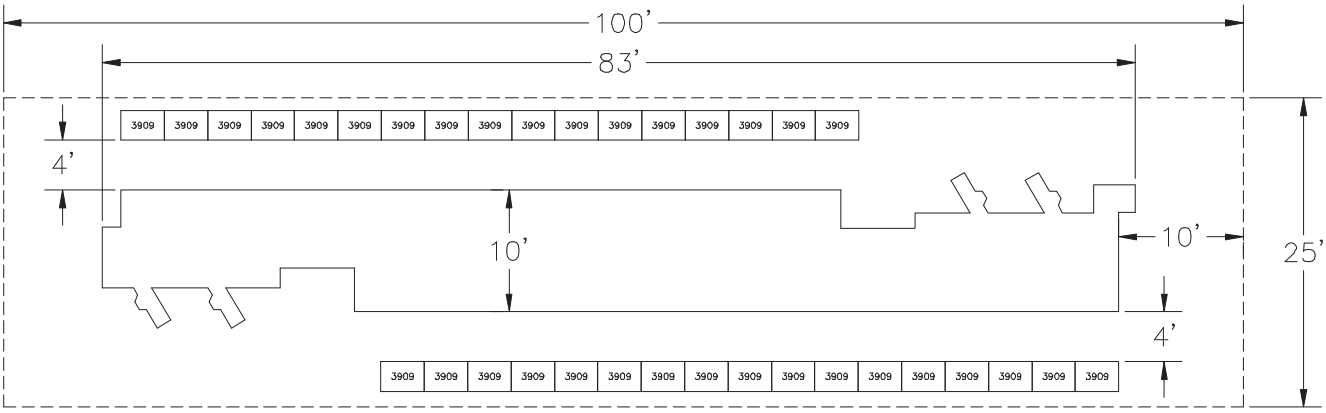


Flats distribution:

- 18 separations per container.
- 8 shelves per container.
- 24 trays per container — shipping capacity.

Exhibit 435i
435008, Flat Sorting Machine (FSM): 2+2 Model

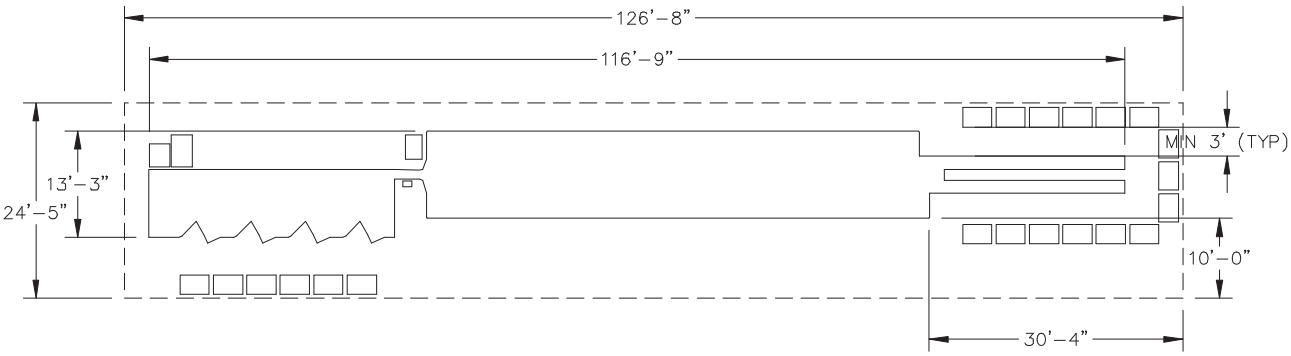
Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 2,500 Sq Ft



Note: Same space required for Model 775 Flat Sorting Machine.

Exhibit 435j
435009, Flat Sorting Machine (FSM-1000)

Date: May 1997
Distribution Flat Mail
Scale: No Scale
Area: 3,093 Sq Ft



44 Distribution of IPPs

Exhibit 44a lists the WSUs currently used for mechanized distribution of IPPs. Manual distribution of all classes of small parcels and rolls, circular letters, flat bundles, and ordinary paper bundles is usually done using standard pouching and sacking equipment. Exhibits 44b through 44p illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 44a
WSUs Used for Mechanized Distribution of IPPs

WSU Number	PostalCAD Drawing Name	Square Feet Required	Consoles	Arrangement	Description
440001a	440001A.DWG	10,098	4	Straight Line	Small Parcel and Bundle Sorter (SPBS)
440001b	440001B.DWG	10,626	5		
440001c	440001C.DWG	11,154	6		
440002a	440002A.DWG	8,316	4	U-Shaped	Small Parcel and Bundle Sorter
440002b	440002B.DWG	8,844	5		
440002c	440002C.DWG	9,372	6		
440003a	440003A.DWG	8,316	4	L-Shaped	Small Parcel and Bundle Sorter
440003b	440003B.DWG	8,844	5		
440003c	440003C.DWG	9,372	6		
440011a	440011A.DWG	10,098	4	Straight Line	SPBS With Siemens Feed System
440011b	440011B.DWG	10,626	5		
440011c	440011C.DWG	11,154	6		
440021a	440021A.DWG	10,098	4	Straight Line	SPBS With Lockheed Martin System*
440021b	440021B.DWG	10,626	5		
440021c	440021C.DWG	11,154	6		

* *A maneuvering area for forklift and pallet jacks is required which uses part of the 20 percent staging area as illustrated in the templates.*

Exhibit 44b

440001a, Small Parcel and Bundle Sorter: Straight Line (Without Feed System) — 4 Consoles

Date: Dec. 1997
Distribution IPPS
Scale: No Scale
Area: 10,098 Sq Ft

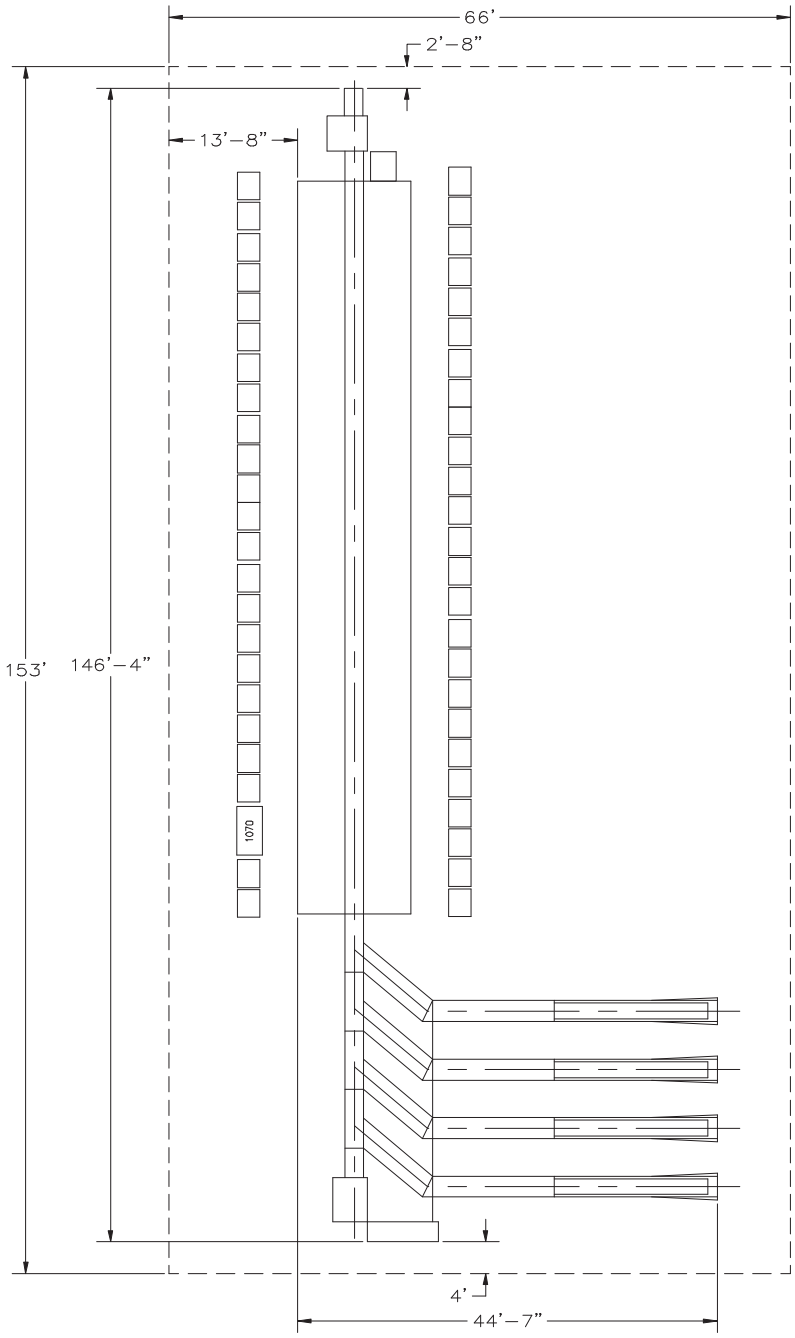


Exhibit 44c

440001b, Small Parcel and Bundle Sorter: Straight Line (Without Feed System) — 5 Consoles

Date: Dec. 1997
Distribution IPPS
Scale: No Scale
Area: 10,626 Sq Ft

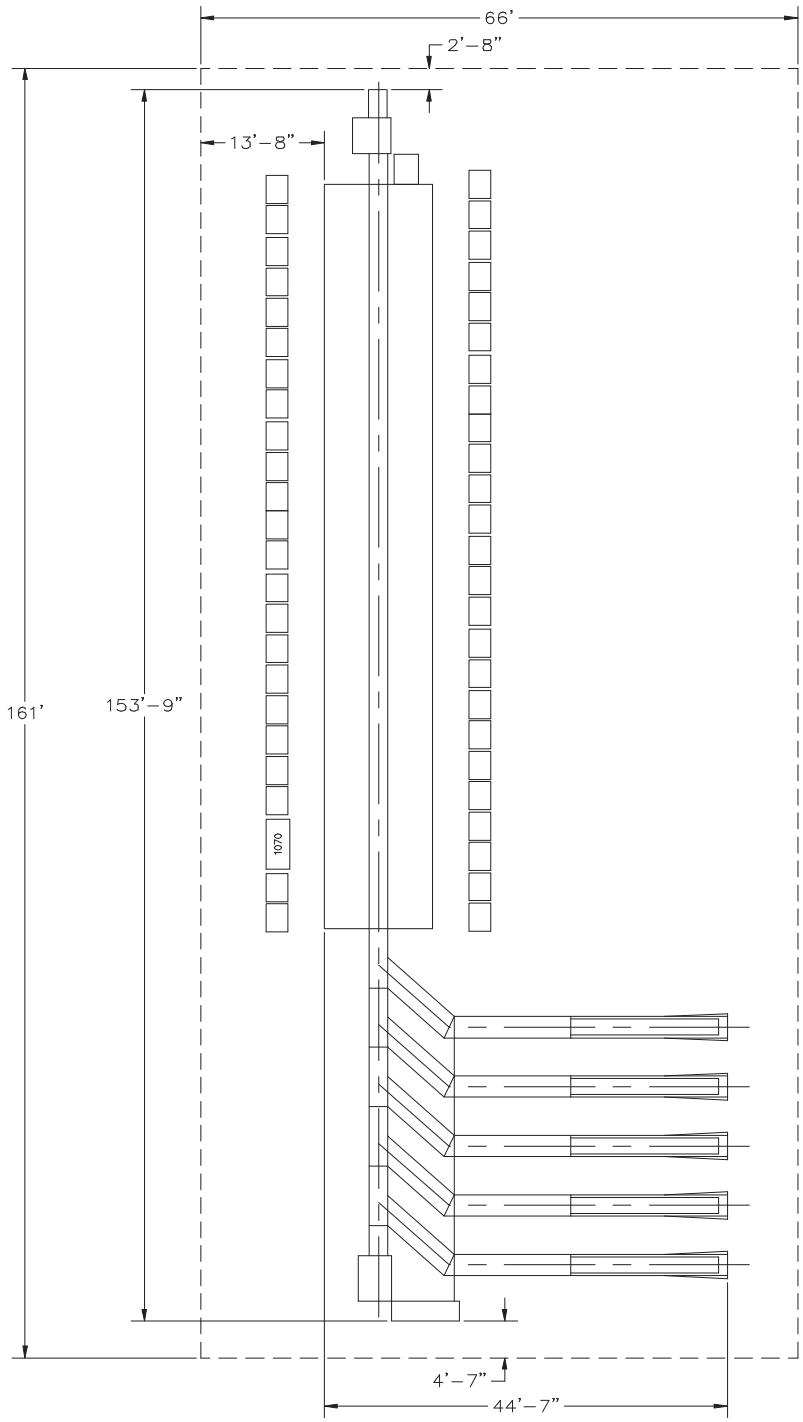


Exhibit 44d

440001c, Small Parcel and Bundle Sorter: Straight Line (Without Feed System) — 6 Consoles

Date: Dec. 1997
Distribution IPPS
Scale: No Scale
Area: 11,154 Sq Ft

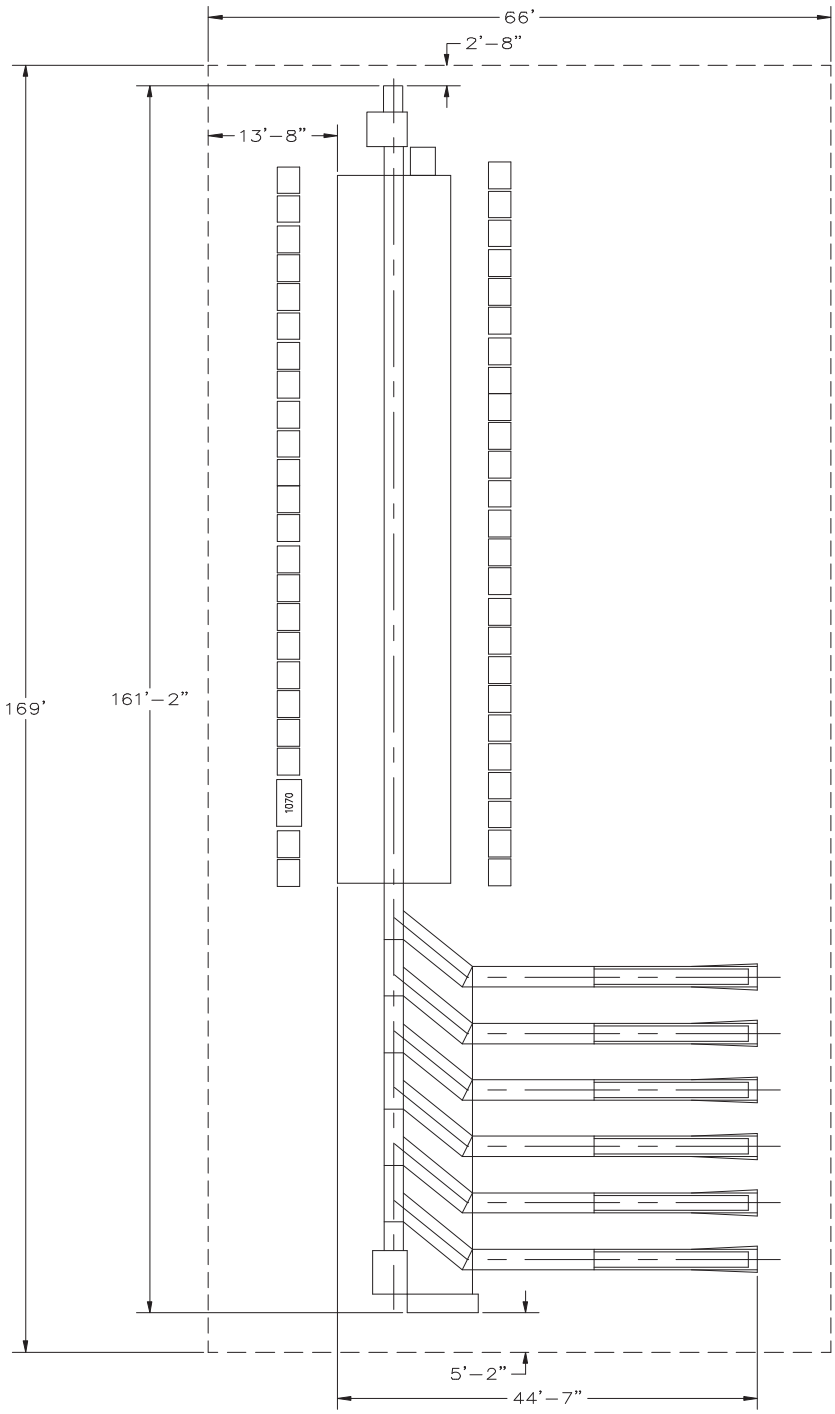


Exhibit 44e

440002a, Small Parcel and Bundle Sorter: U-Shaped — 4 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 8,316 Sq Ft

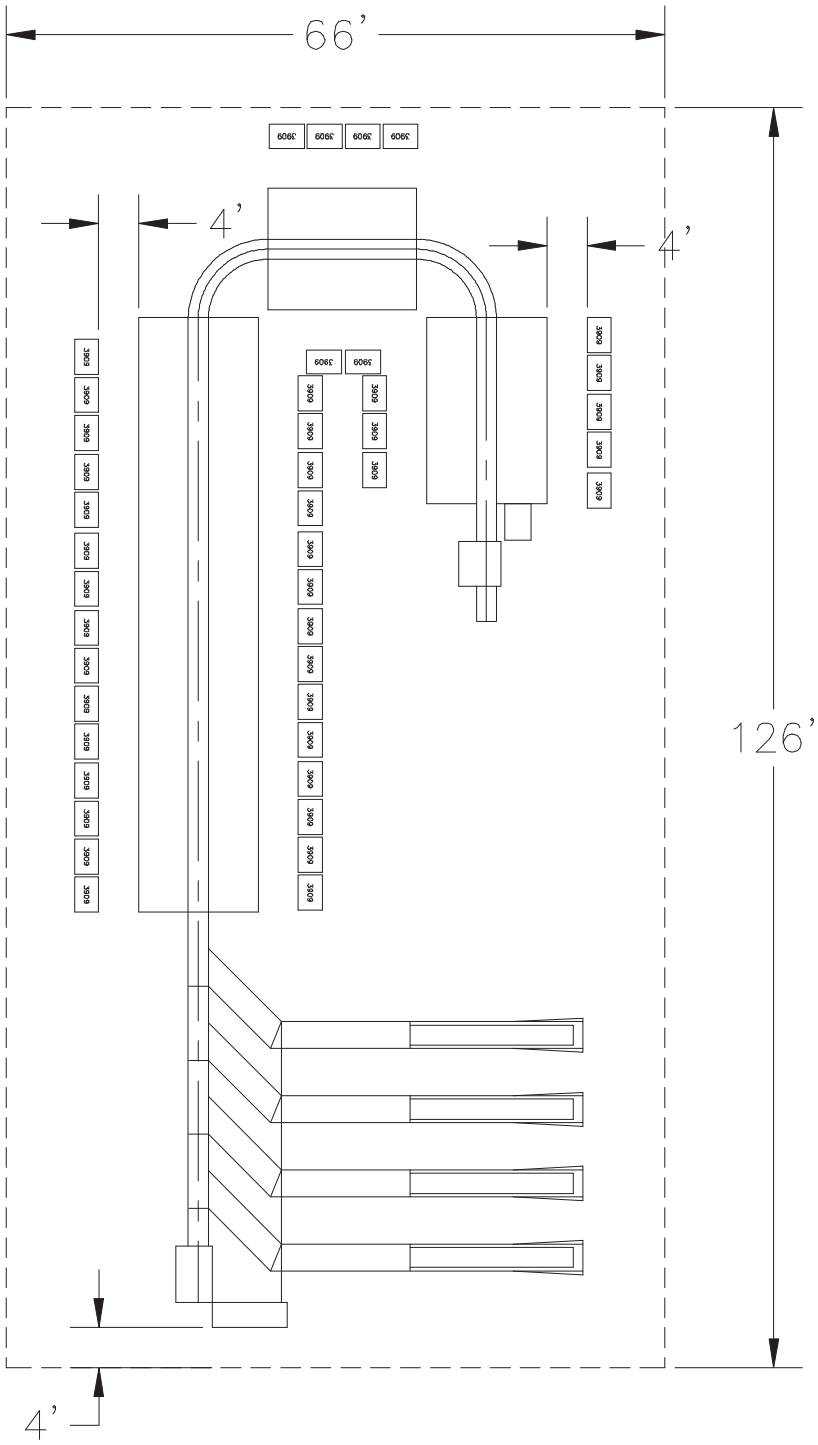


Exhibit 44f

440002b, Small Parcel and Bundle Sorter: U-Shaped — 5 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 8,844 Sq Ft

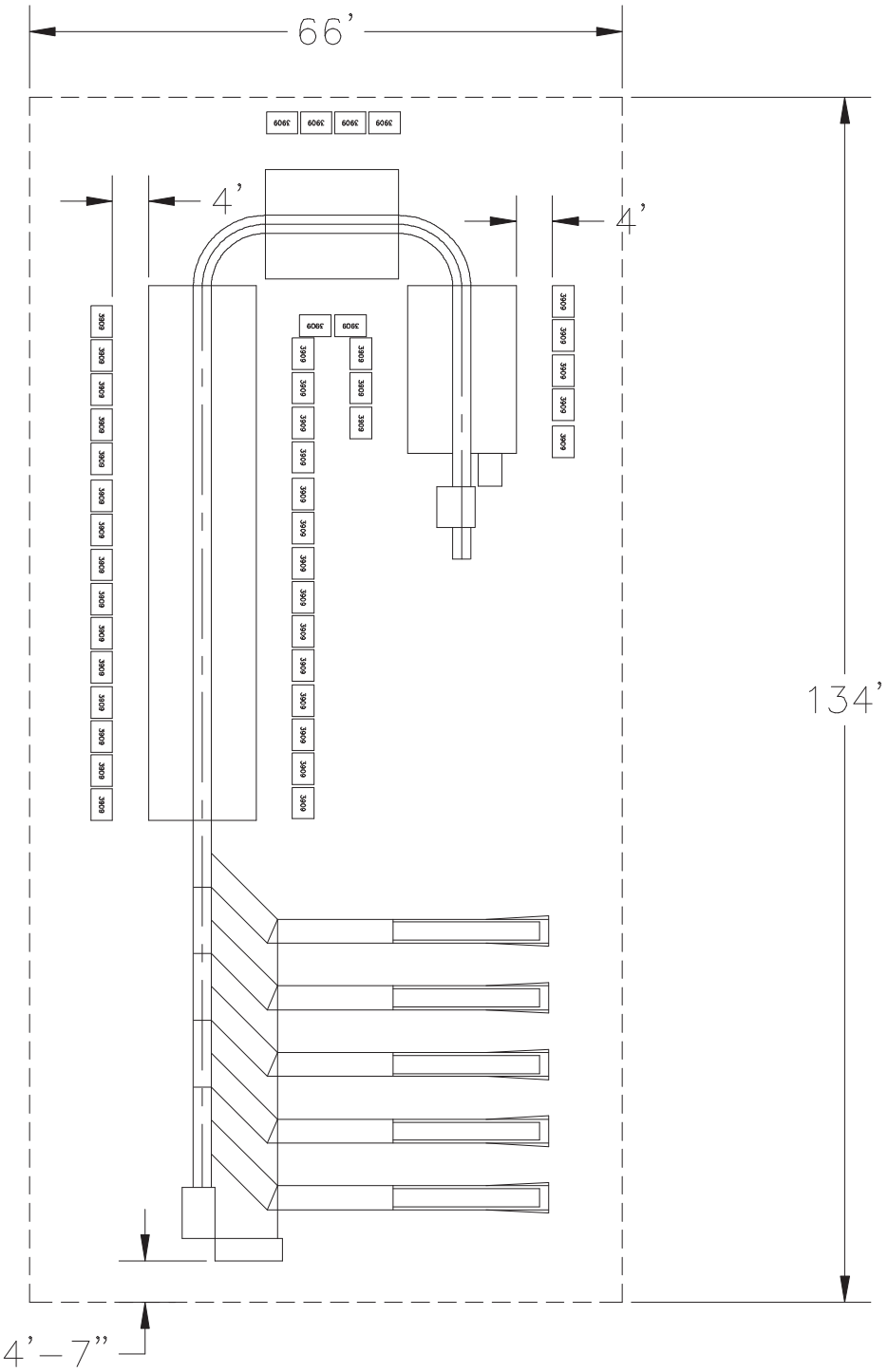


Exhibit 44g

440002c, Small Parcel and Bundle Sorter: U-Shaped — 6 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 9,372 Sq Ft

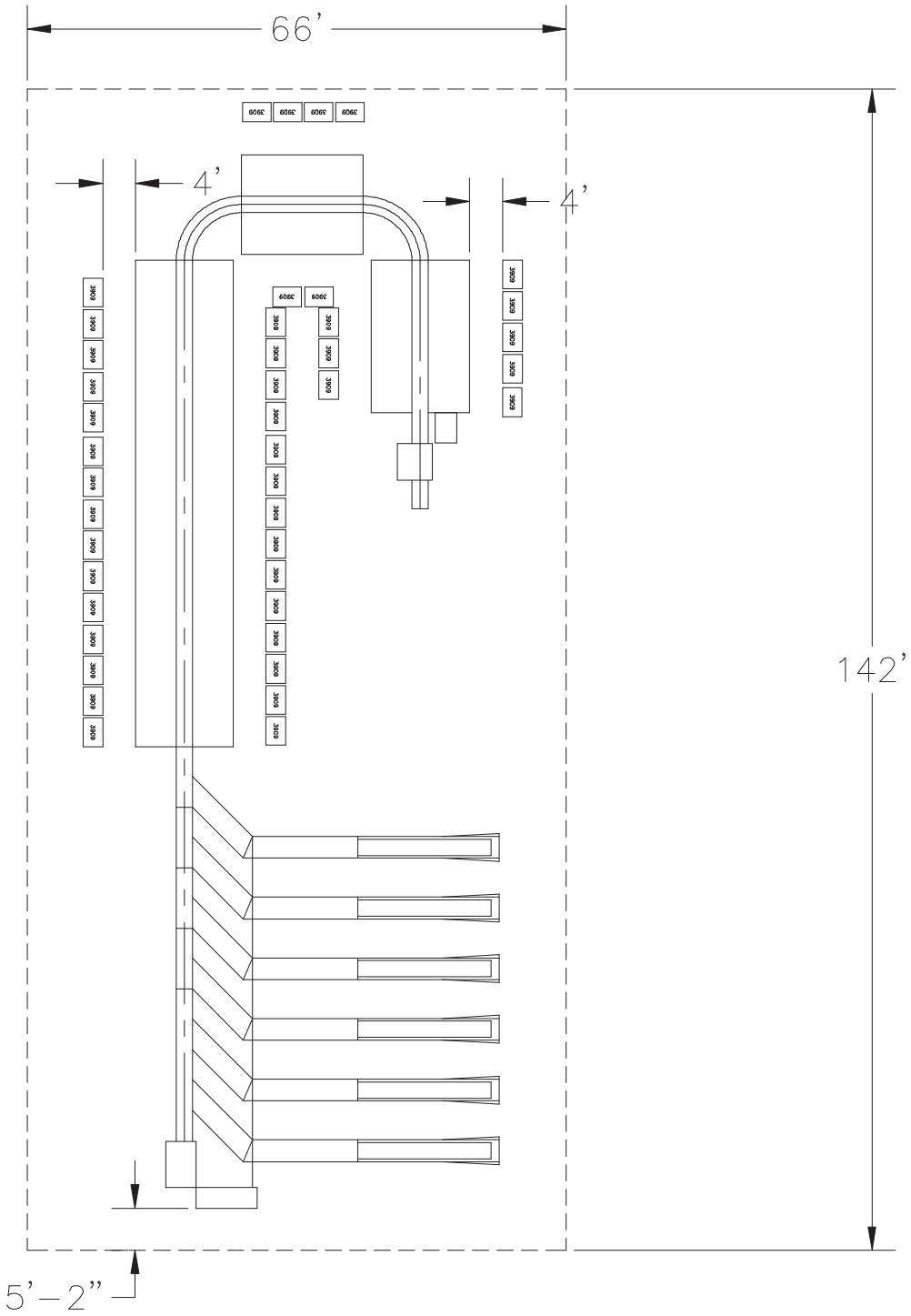


Exhibit 44h

440003a, Small Parcel and Bundle Sorter: L-Shaped — 4 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 8,316 Sq Ft

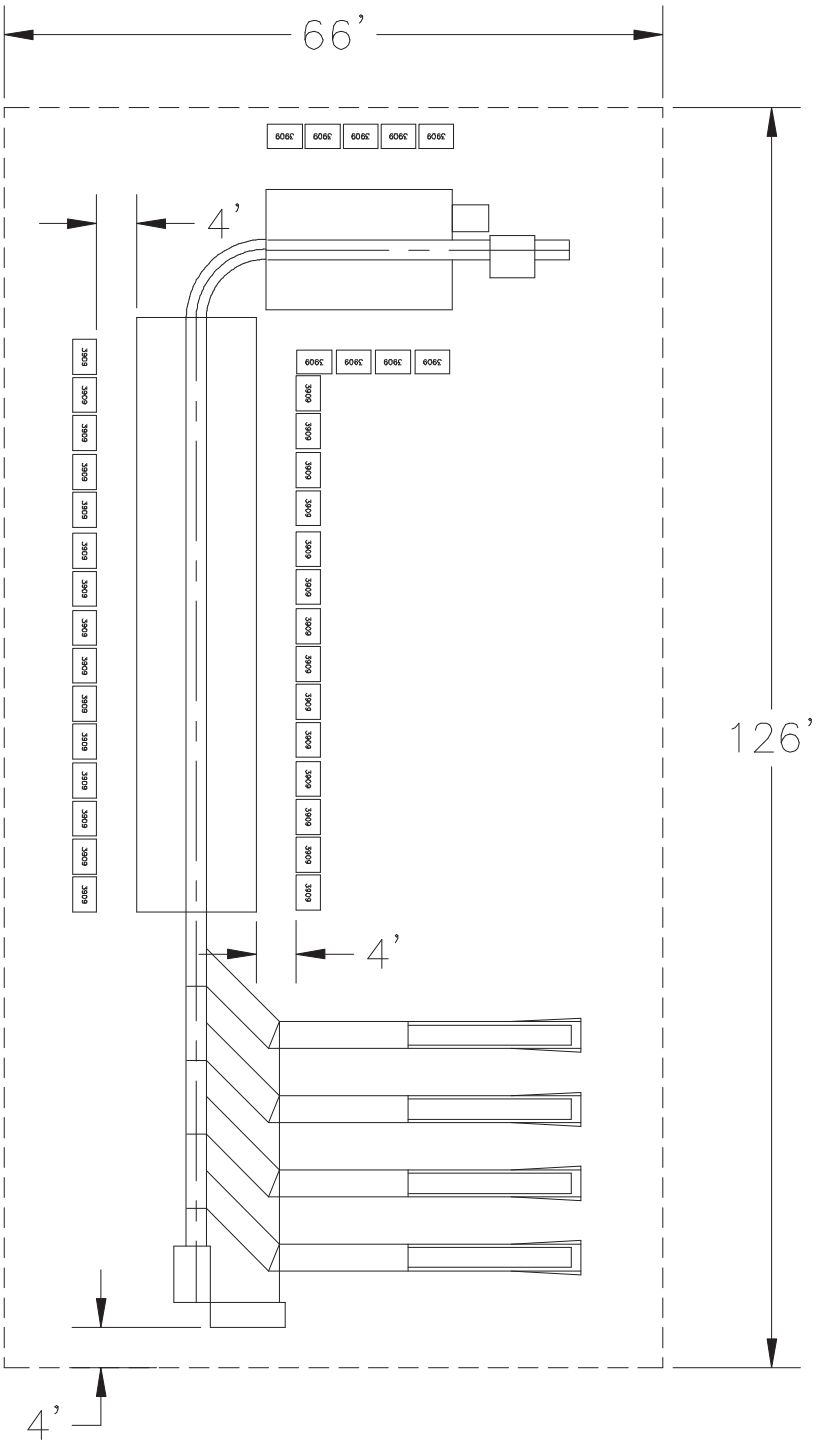


Exhibit 44i

440003b, Small Parcel and Bundle Sorter: L-Shaped — 5 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 8,844 Sq Ft

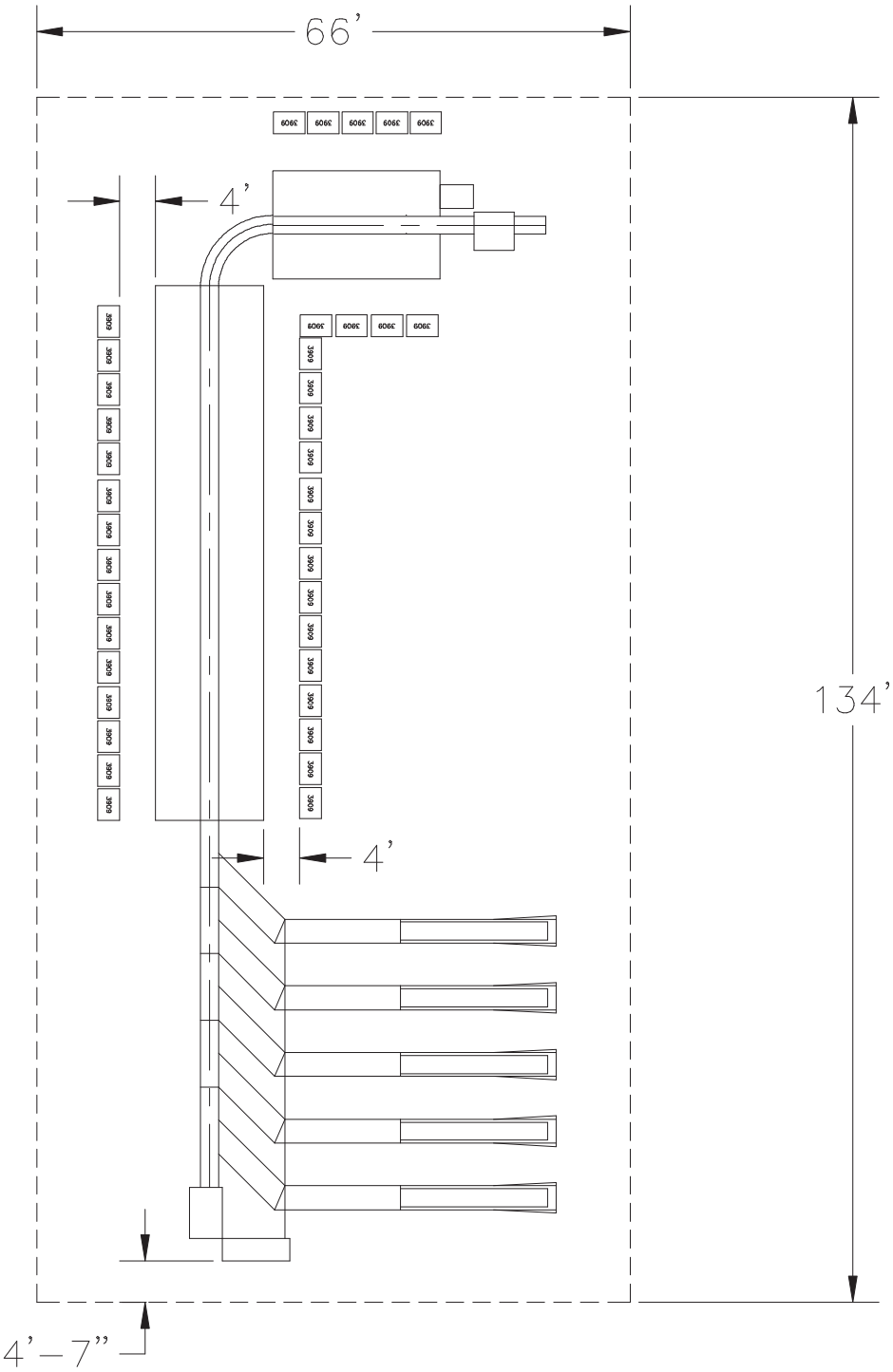


Exhibit 44j

440003c, Small Parcel and Bundle Sorter: L-Shaped — 6 Consoles

Date: Dec. 1994
Distribution IPPS
Scale: No Scale
Area: 9,372 Sq Ft

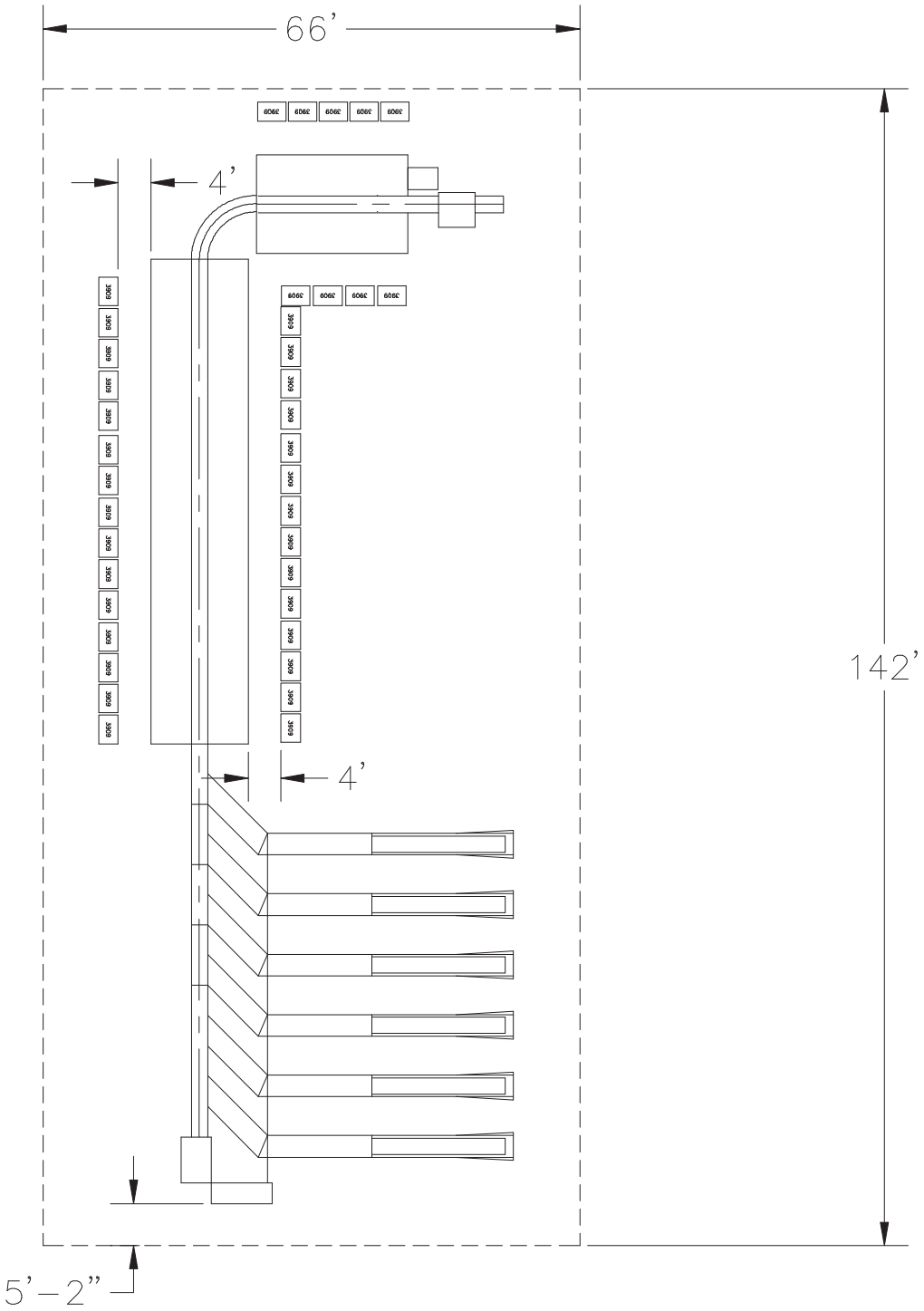


Exhibit 44k

440011a, Small Parcel and Bundle Sorter: Straight Line (With Siemens Feed System) — 4 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 10,098 Sq Ft

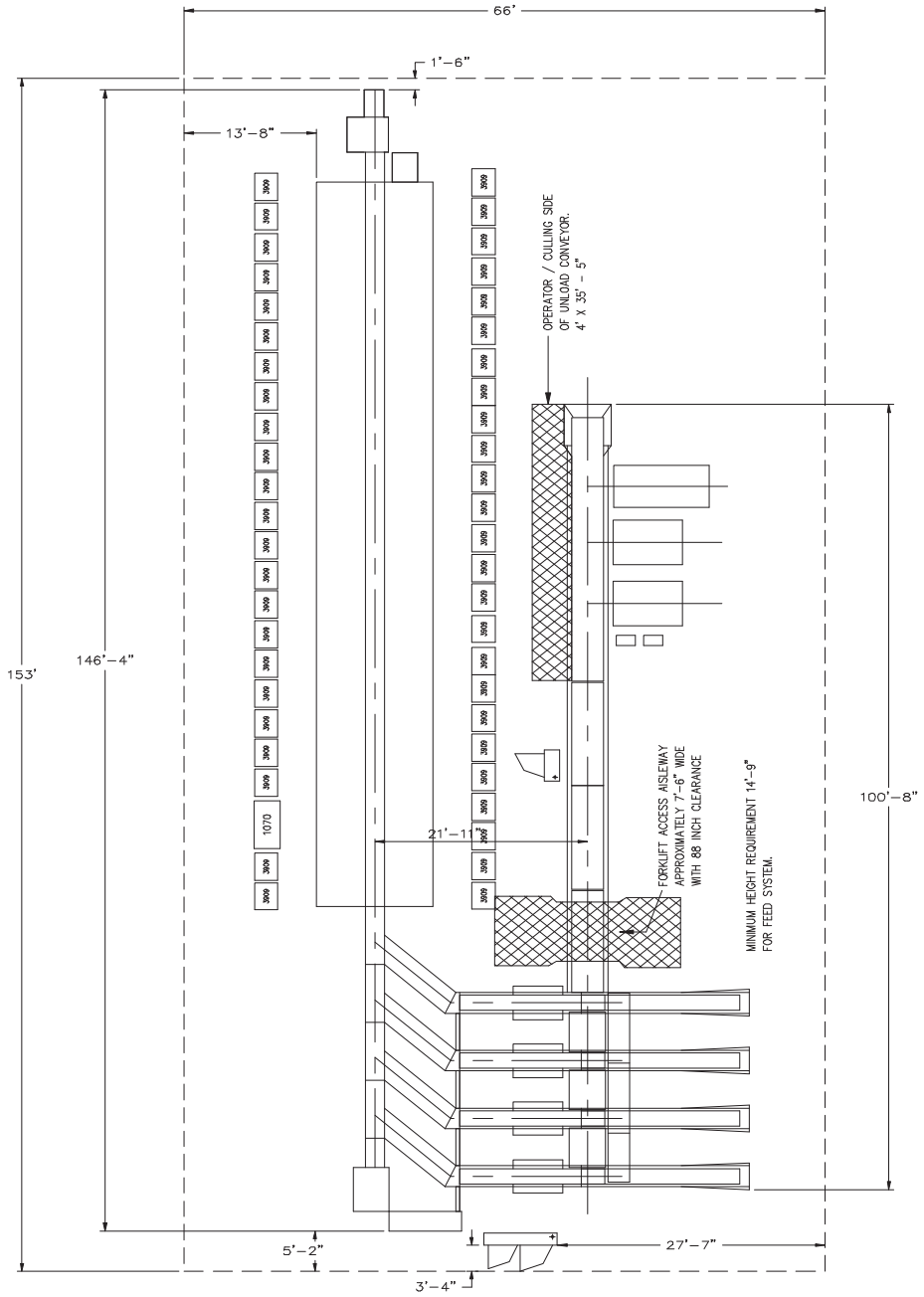


Exhibit 44I

440011b, Small Parcel and Bundle Sorter: Straight Line (With Siemens Feed System) — 5 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 10,626 Sq Ft

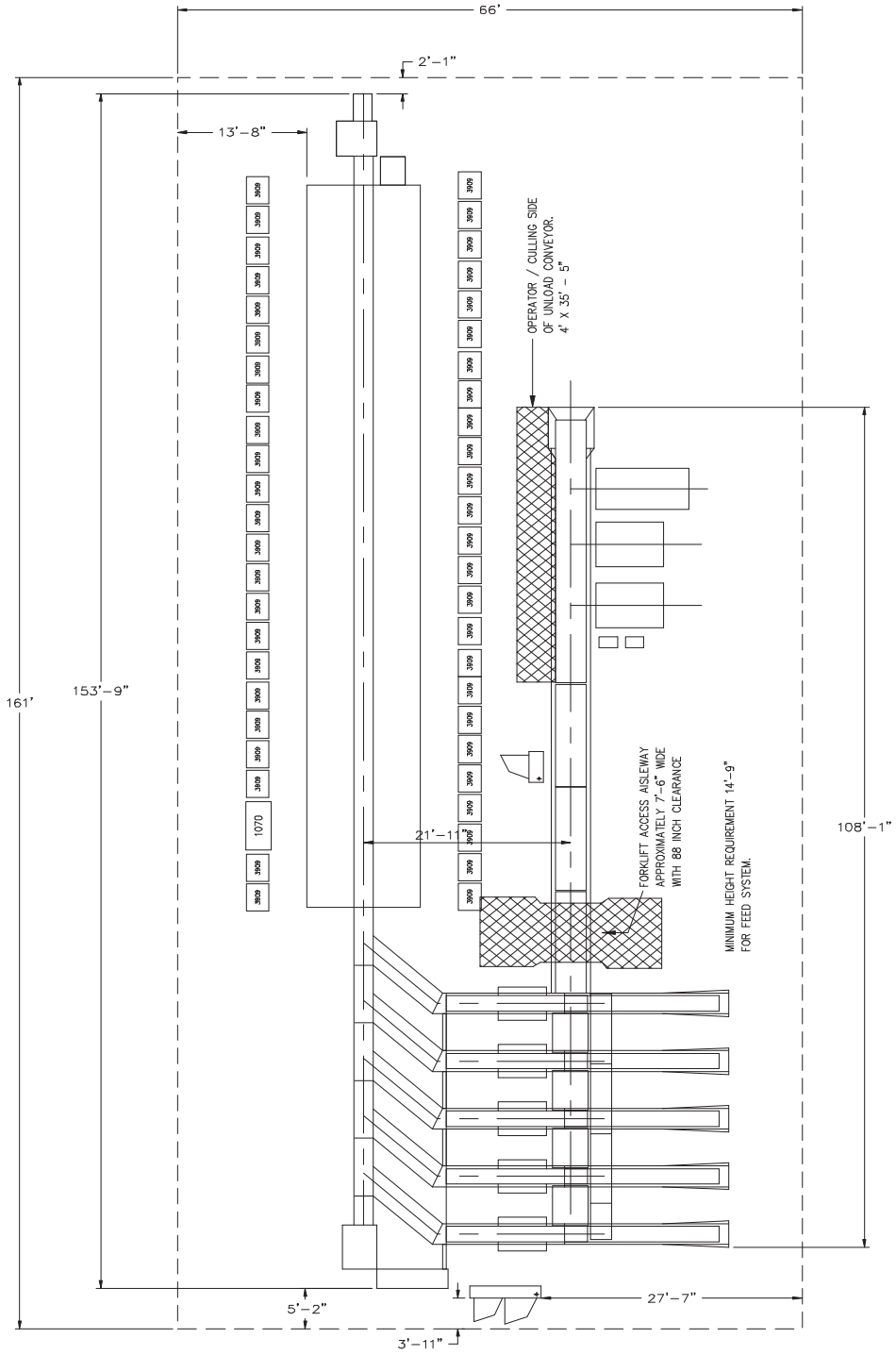


Exhibit 44m

440011c, Small Parcel and Bundle Sorter: Straight Line (With Siemens Feed System) — 6 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 11,154 Sq Ft

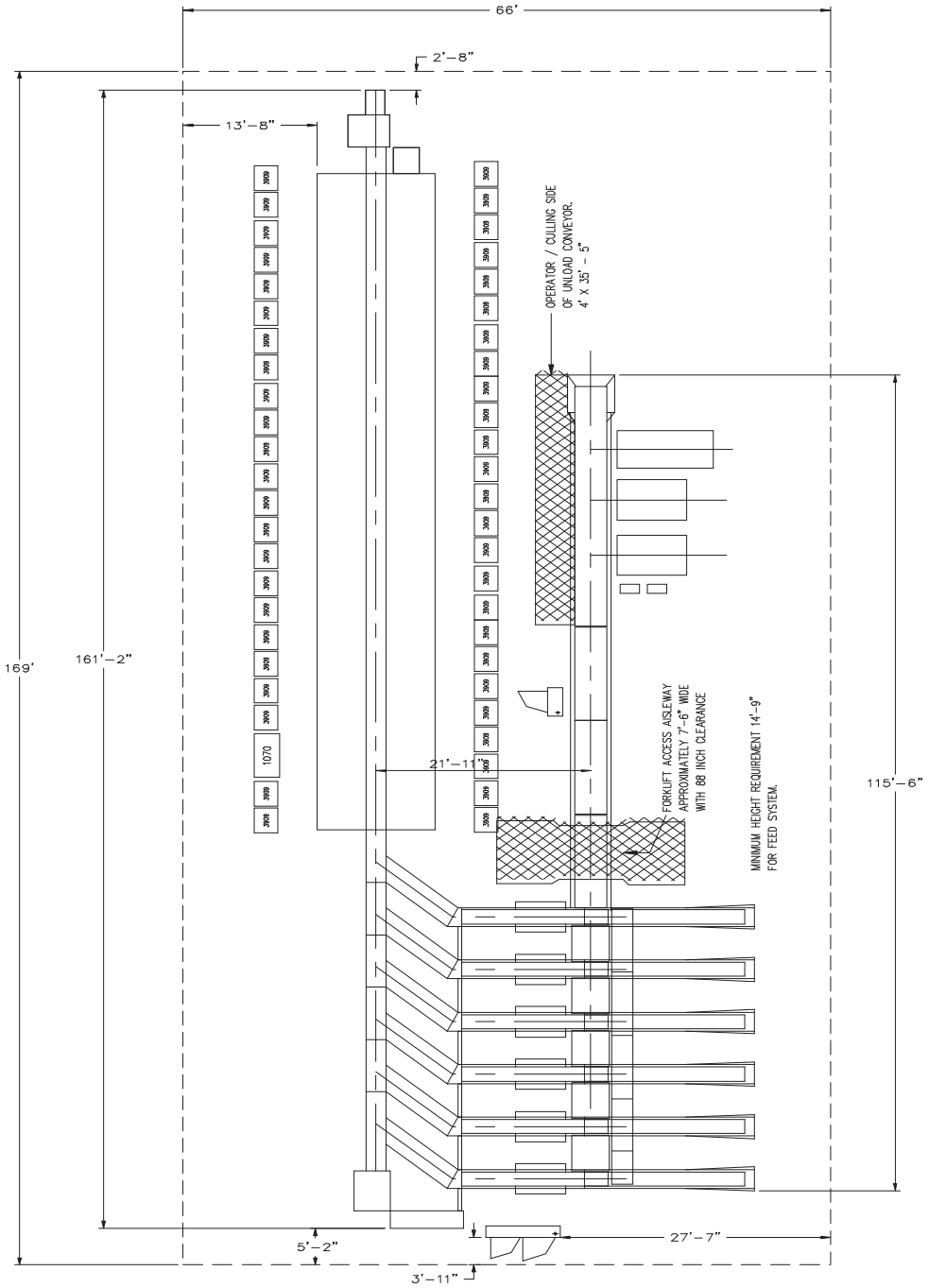


Exhibit 44n

440021a, Small Parcel and Bundle Sorter: Straight Line (With Lockheed Martin Feed System) — 4 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 10,098 Sq Ft

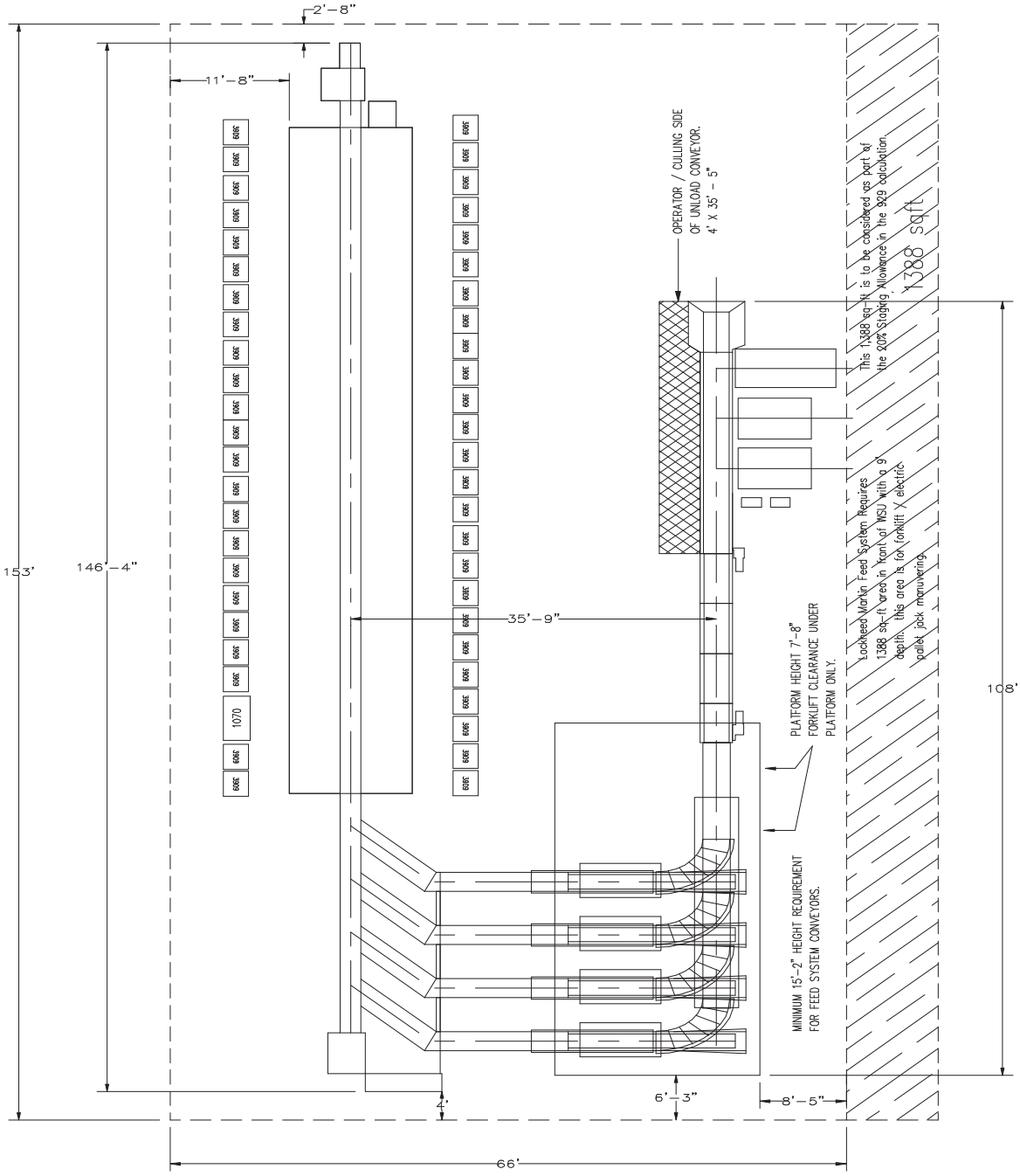


Exhibit 44o

440021b, Small Parcel and Bundle Sorter: Straight Line (With Lockheed Martin Feed System) — 5 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 10,626 Sq Ft

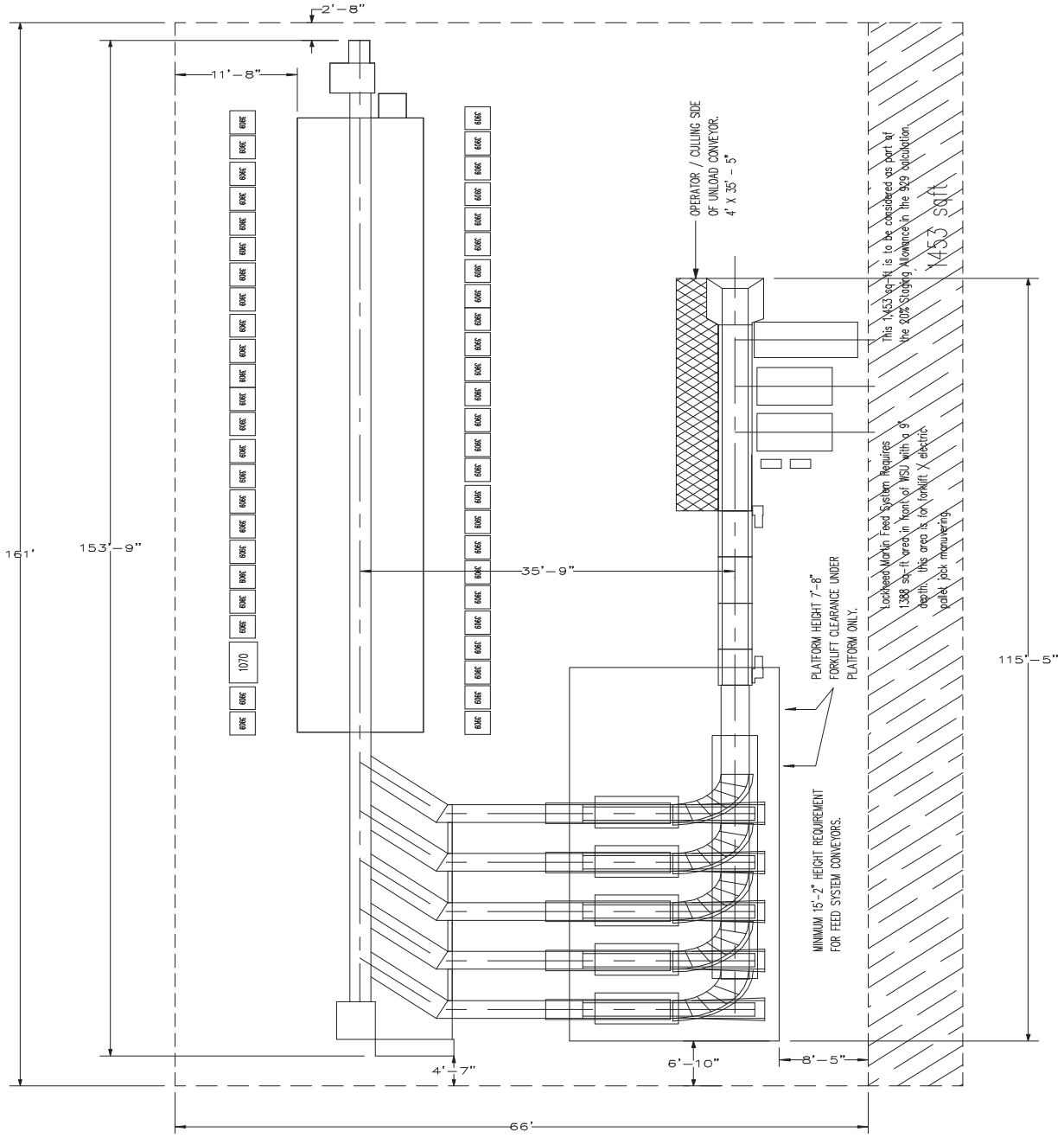
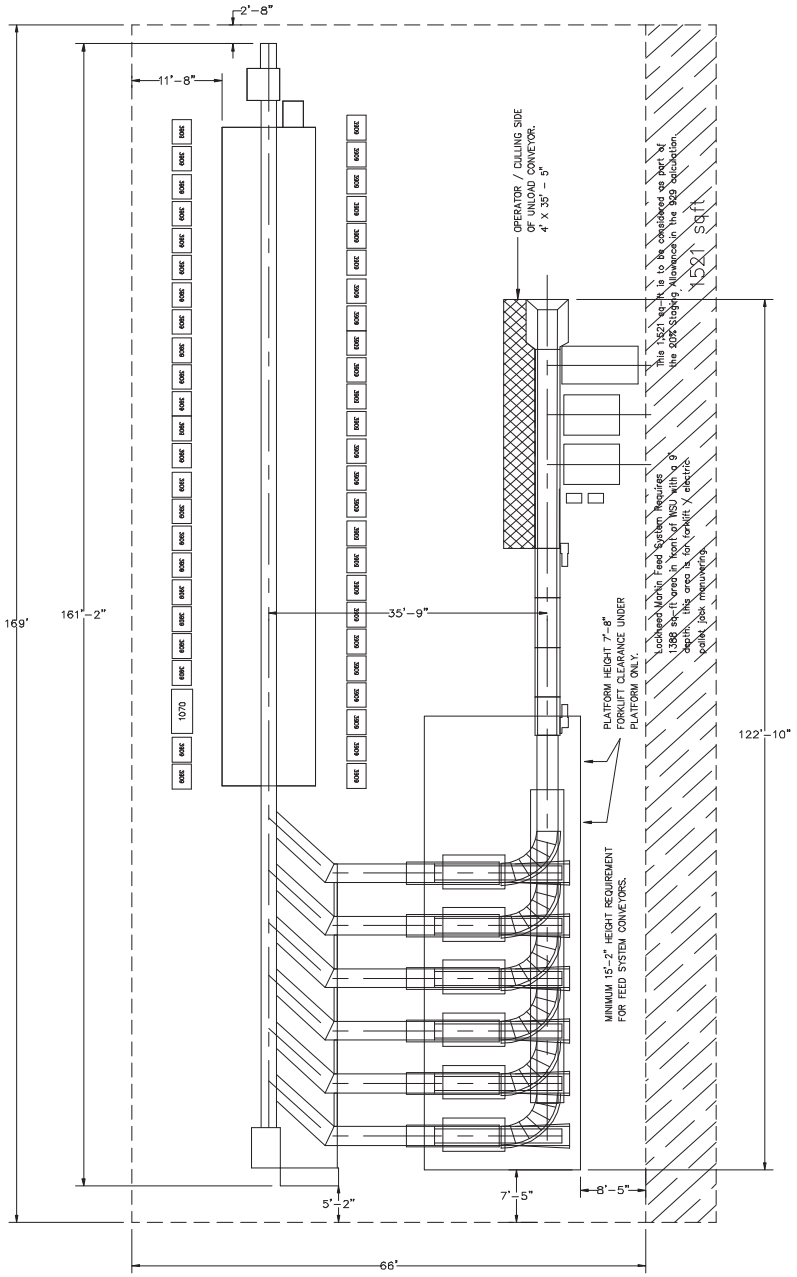


Exhibit 44p

440021c, Small Parcel and Bundle Sorter: Straight Line (With Lockheed Martin Feed System) — 6 Consoles

Date: Jan. 1998
Distribution IPPS
Scale: No Scale
Area: 11,154 Sq Ft



45 Processing Special Category Mail

Use distribution of parcel post standards (section 46) for special delivery parcels, airmail parcels, and priority and special handling parcels.

46 Distribution of Parcel Post

Exhibit 46a lists the WSUs currently used for parcel post distribution. Exhibits 46b through 46s illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 46a
WSUs Used for Parcel Post Distribution

WSU Number	PostalCAD Drawing Name	Square Feet Required	Separations	Description
460001a	460001A.DWG	255	5	Sort to 1033 Hampers
460001b	460001B.DWG	470	10	Sort to 1033 Hampers
460004a	460004A.DWG	1,122	16–40	Sort to 1033 Hampers From Hampers, Gurneys, and Sacks
460004b	460004B.DWG	1,296	52	Sort to 1033 Hampers From Hampers, Gurneys, and Sacks
460004c	460004C.DWG	1,494	60	Sort to 1033 Hampers From Hampers, Gurneys, and Sacks
460004d	460004D.DWG	1,874	74	Sort to 1033 Hampers From Hampers, Gurneys, and Sacks
460004e	460004E.DWG	2,123	90	Sort to 1033 Hampers From Hampers, Gurneys, and Sacks
460009a	460009A.DWG	587	5–10	Sort to 1046 Hampers
460009b	460009B.DWG	684	11–19	Sort to 1046 Hampers
460011	460011.DWG	1,356	20–40	Sort to 1046 Hampers From Hampers, Gurneys, and Sacks
460019a	460019A.DWG	222	5–10	Sort to Sacks
460019b	460019B.DWG	440	15–20	Sort to Sacks
460019c	460019C.DWG	440	25–30	Sort to Sacks
460019d	460019D.DWG	515	40–50	Sort to Sacks
460019e	460019E.DWG	684	60–70	Sort to Sacks
460019f	460019F.DWG	794	90	Sort to Sacks
460020a	460020A.DWG	724	30–50	Sort to Sacks From Hampers, Gurneys, or Sacks
460020b	460020B.DWG	932	60–90	Sort to Sacks From Hampers, Gurneys, or Sacks

Exhibit 46b

460001a, Sort to 1033 Hampers (5 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 255 Sq Ft

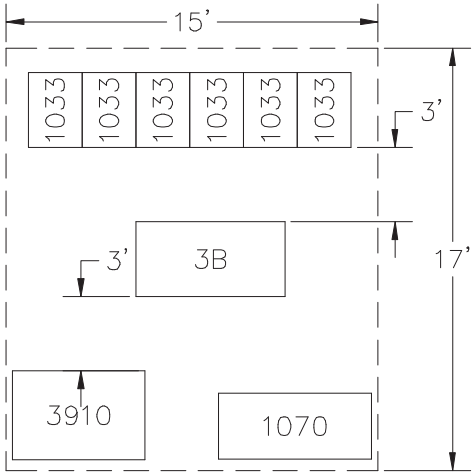


Exhibit 46c

460001b, Sort to 1033 Hampers (10 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 470 Sq Ft

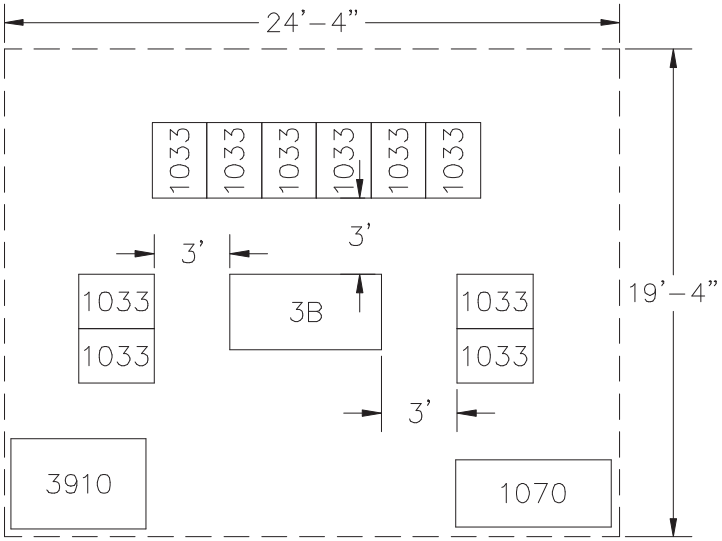


Exhibit 46d

460004a, Sort to 1033 Hampers From Hampers, Gurneys, and Sacks (16–40 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 1,122 Sq Ft

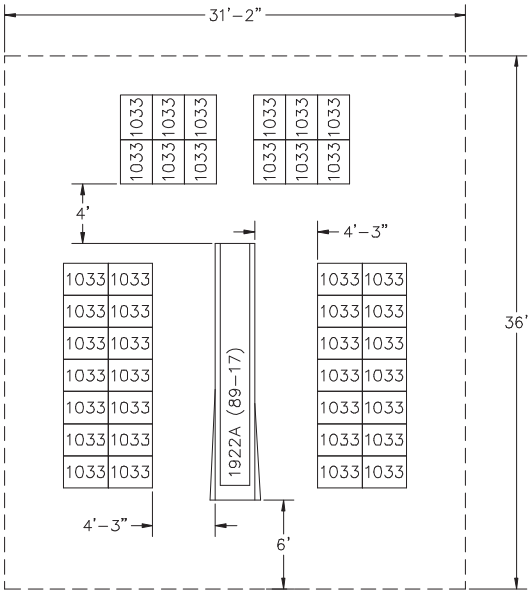


Exhibit 46e

460004b, Sort to 1033 Hampers From Hampers, Gurneys, and Sacks (52 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 1,296 Sq Ft

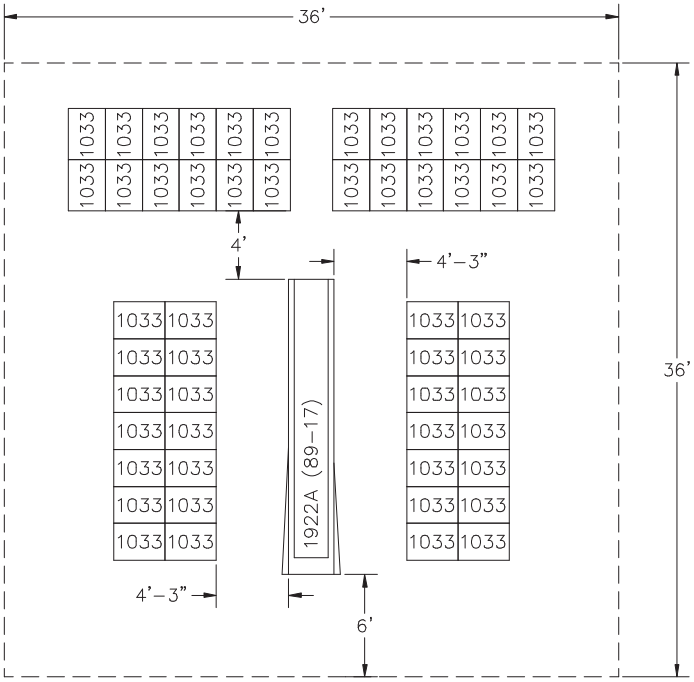


Exhibit 46f

460004c, Sort to 1033 Hampers From Hampers, Gurneys, and Sacks (60 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 1,494 Sq Ft

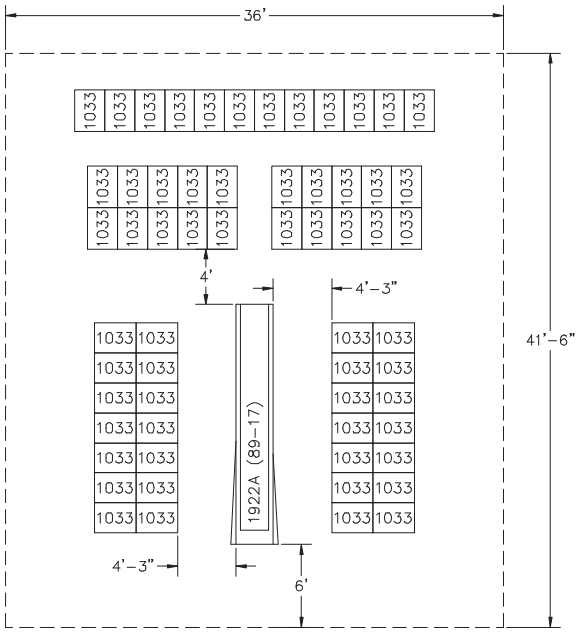


Exhibit 46g

460004d, Sort to 1033 Hampers From Hampers, Gurneys, and Sacks (74 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 1,874 Sq Ft

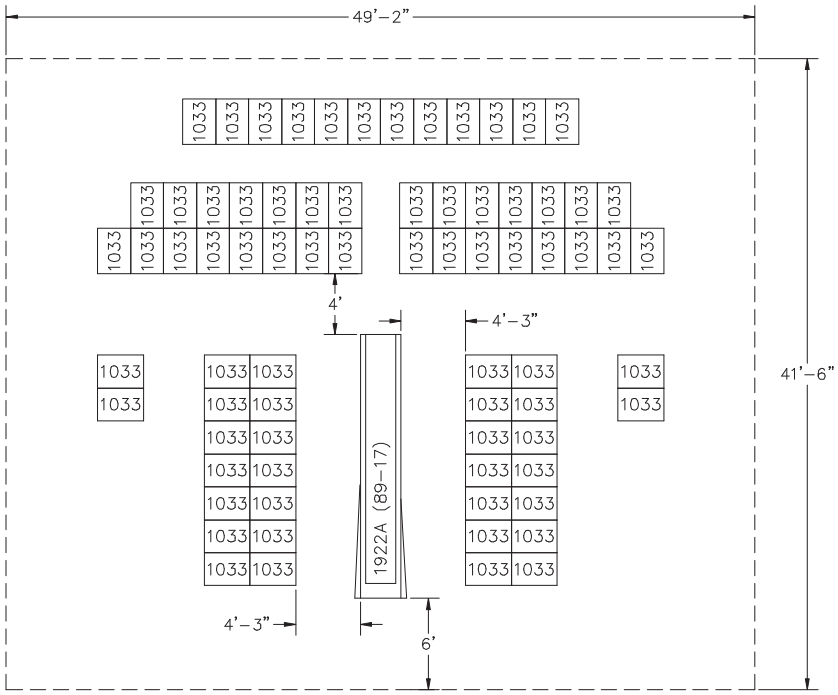


Exhibit 46h

460004e, Sort to 1033 Hampers From Hampers, Gurneys, and Sacks (90 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 2,123 Sq Ft

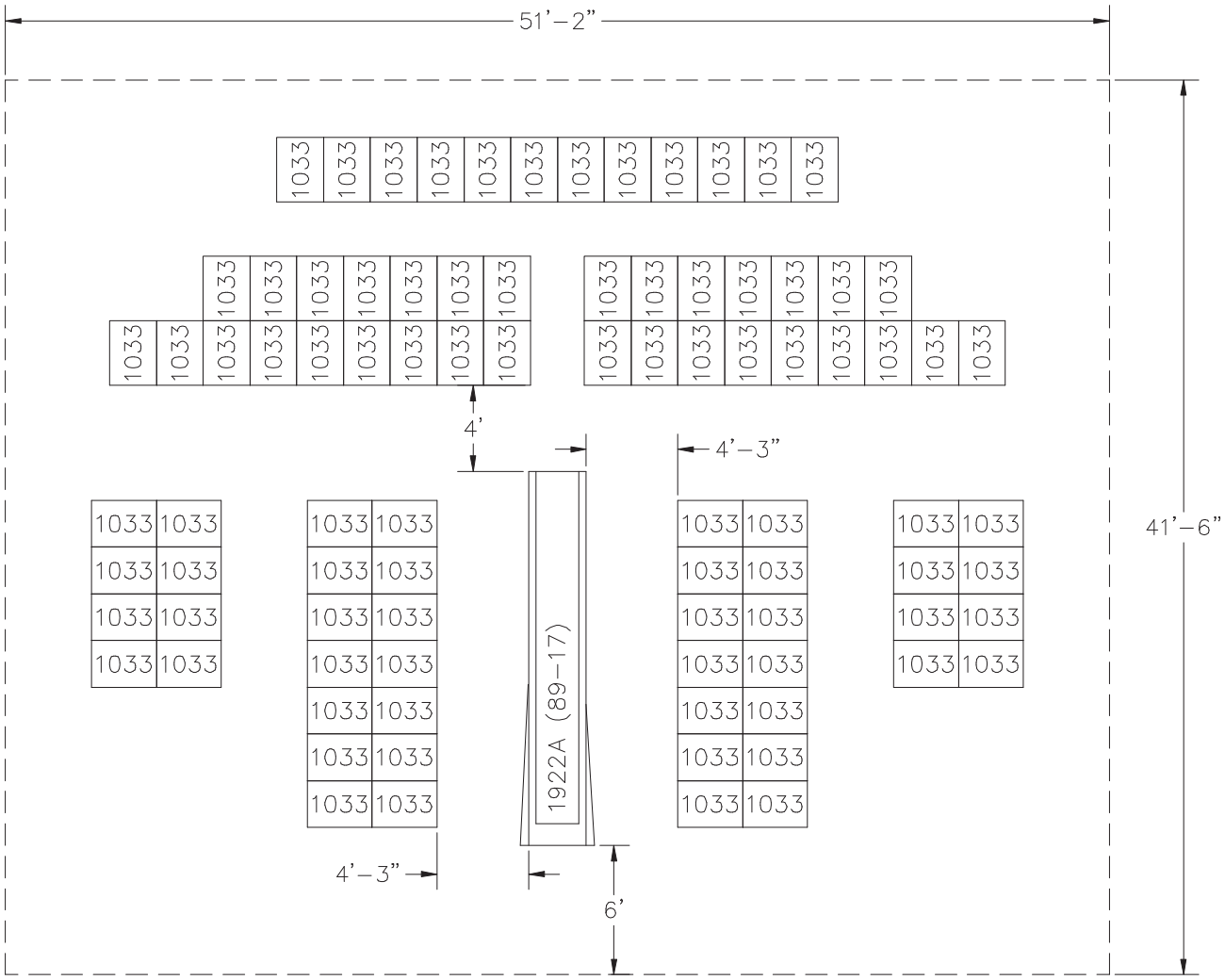


Exhibit 46i

460009a, Sort to 1046 Hampers (5–10 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 587 Sq Ft

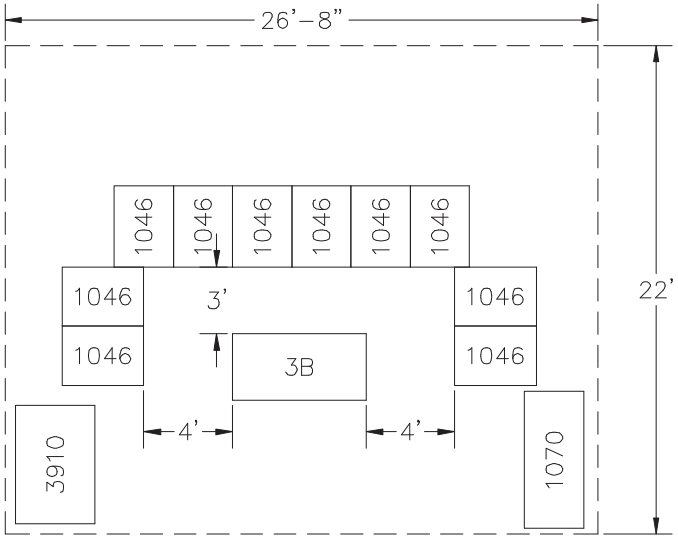


Exhibit 46j

460009b, Sort to 1046 Hampers (11–19 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 684 Sq Ft

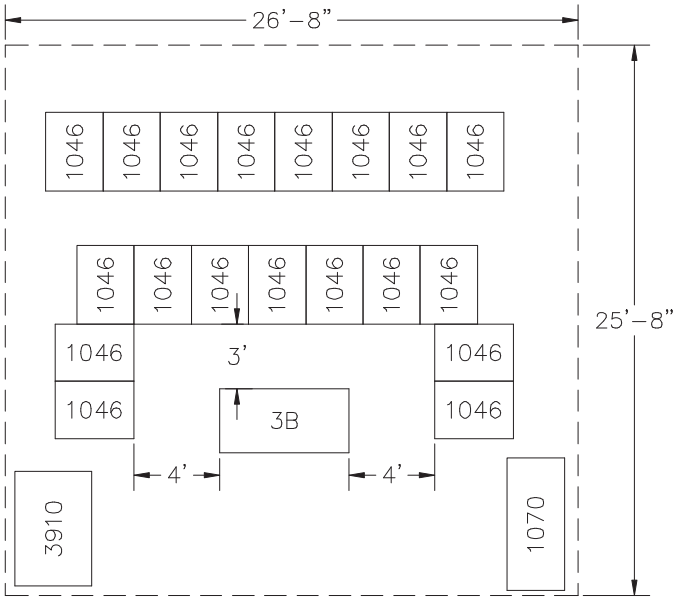


Exhibit 46k

460011, Sort to 1046 Hampers From Hampers, Gurneys, and Sacks (20–40 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 1,356 Sq Ft

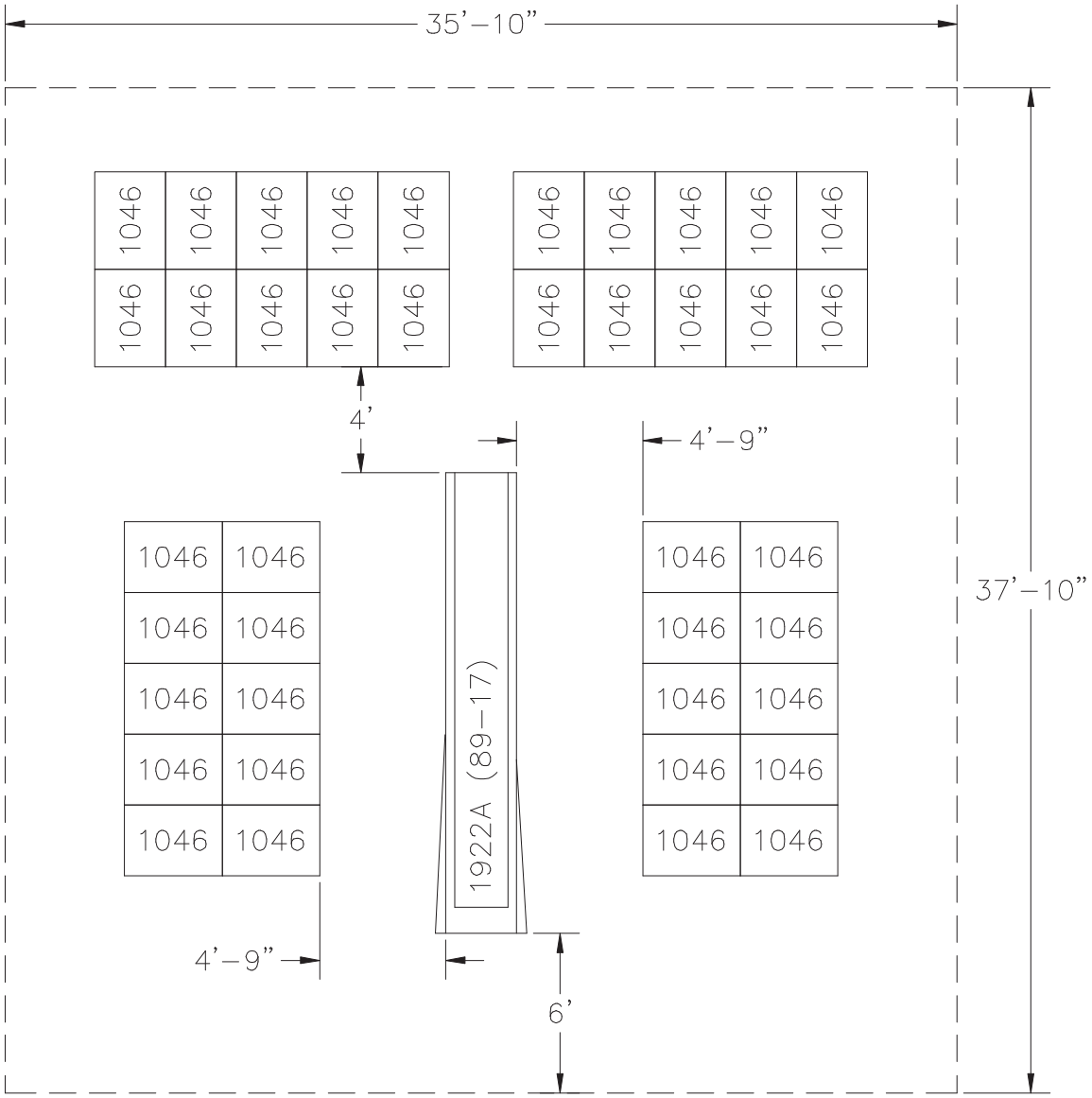


Exhibit 46l
460019a, Sort to Sacks (5–10 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 222 Sq Ft

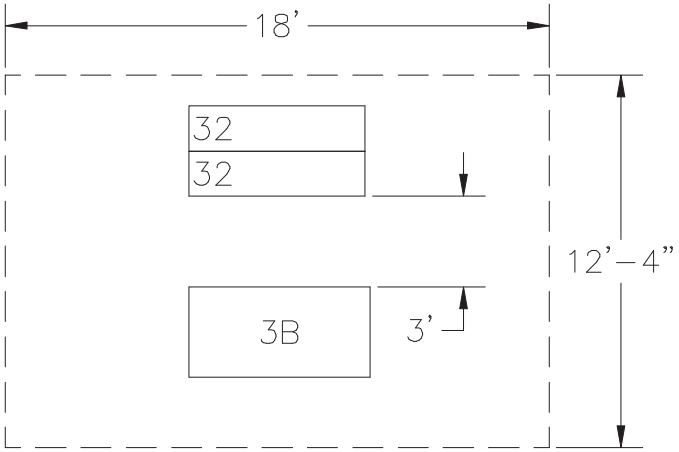


Exhibit 46m
460019b, Sort to Sacks (15–20 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 440 Sq Ft

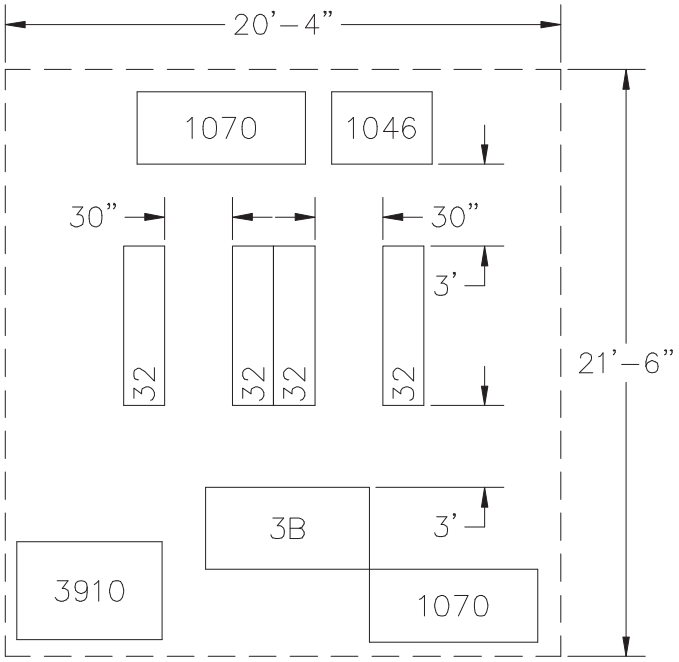


Exhibit 46n
460019c, Sort to Sacks (25–30 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 440 Sq Ft

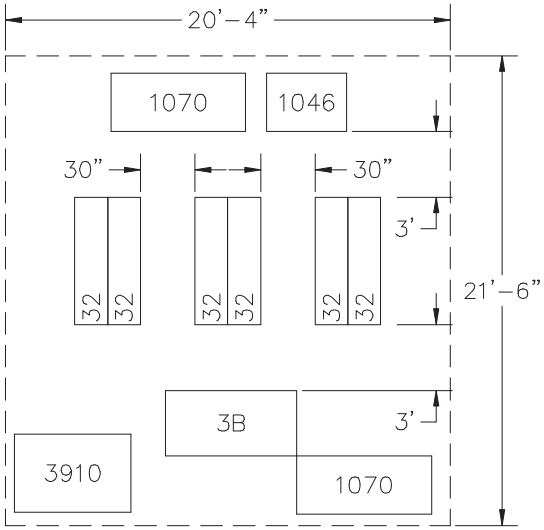


Exhibit 46o
460019d, Sort to Sacks (40–50 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 515 Sq Ft

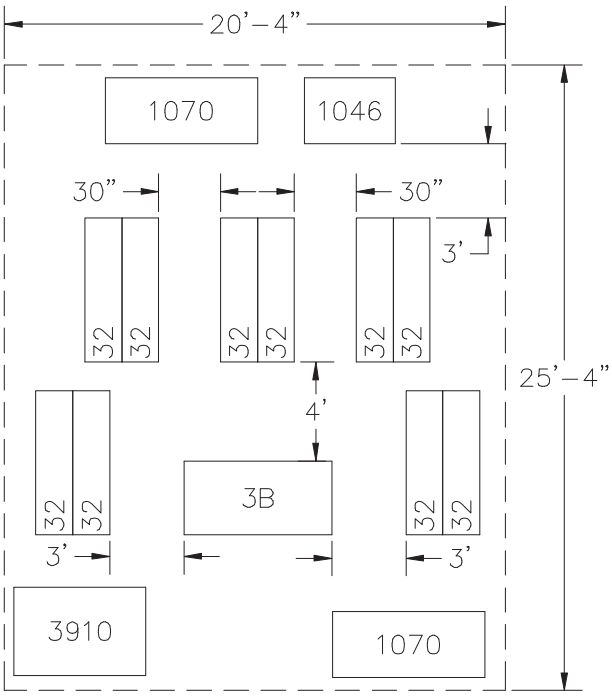


Exhibit 46p
460019e, Sort to Sacks (60–70 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 684 Sq Ft

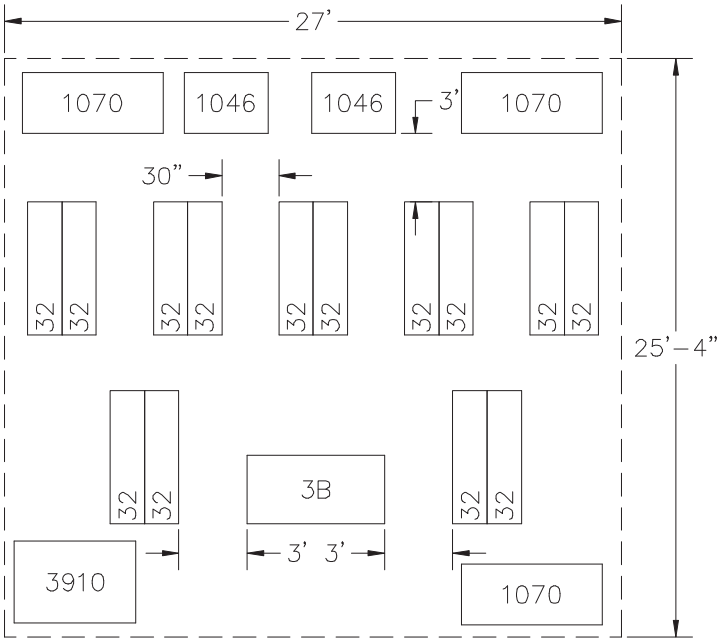


Exhibit 46q
460019f, Sort to Sacks (90 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 794 Sq Ft

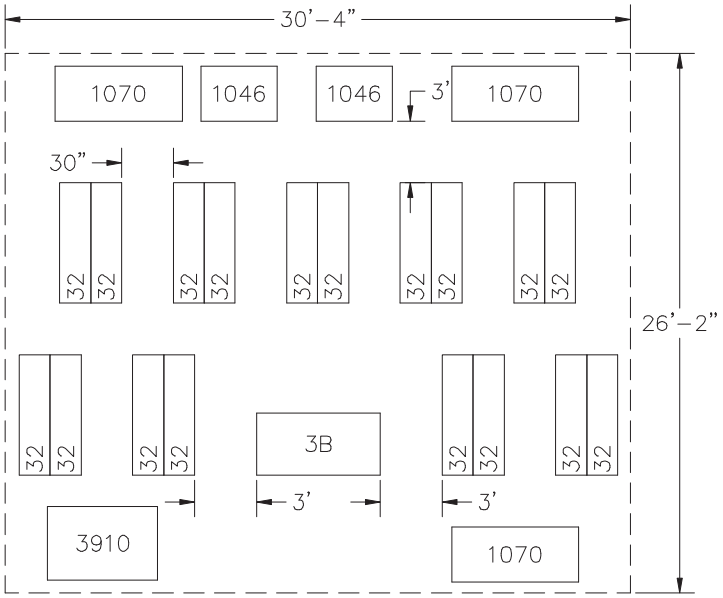


Exhibit 46r

460020a, Sort to Sacks From Hampers, Gurneys, or Sacks (30–50 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 724 Sq Ft

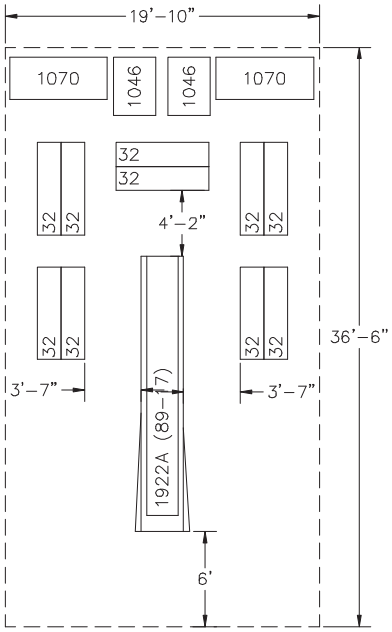
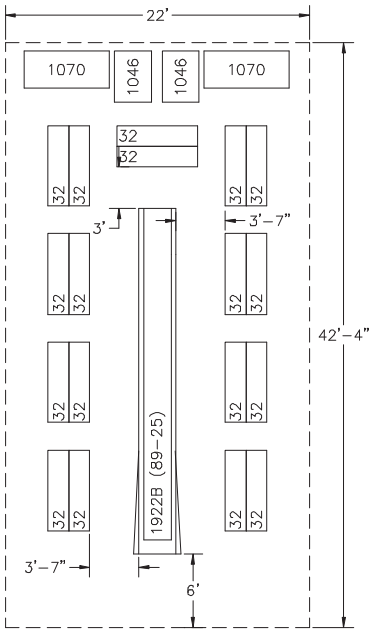


Exhibit 46s

460020b, Sort to Sacks From Hampers, Gurneys, or Sacks (60–90 Separations)

Date: Dec. 1994
Distribution Parcel Post
Scale: No Scale
Area: 932 Sq Ft



47 Bulk Sorting and Material Handling Operations

471 Bulk Sorting

Exhibit 471a lists the WSUs currently used for manual and mechanized bulk sorting. Exhibits 471b, 471c, and 471d illustrate the manual bulk sorting WSUs, and Exhibits 471e through 471h illustrate the different-sized WSUs for universal sorting systems.

Exhibit 471a
WSUs Used for Manual and Mechanized Bulk Sorting

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
471001	471001.DWG	1610	Manual Sack Sort — Platform Trucks (15 Separations)
471002	471002.DWG	6400	Multislide — Sack Racks (10 Separations)
471004	471004.DWG	1645	Manual Sack Sort — Sawtooth (15 Separations)
471005	471005.DWG	5,000	Universal Sorting System
471006	471006.DWG	10,000	Universal Sorting System
471007	471007.DWG	15,000	Universal Sorting System
471008	471008.DWG	20,000	Universal Sorting System

Note: Transfer, dispatch, and holding area:

a. Item 1070, platform truck, to be parked — 30 sq ft each.

b. Item 1070, platform truck, for separation of mail — 60 sq ft each.

Exhibit 471b

471001, Manual Sack Sort — Platform Trucks (15 Separations)

Date: Dec. 1994
Distribution Sacks
Scale: No Scale
Area: 1,610 Sq Ft

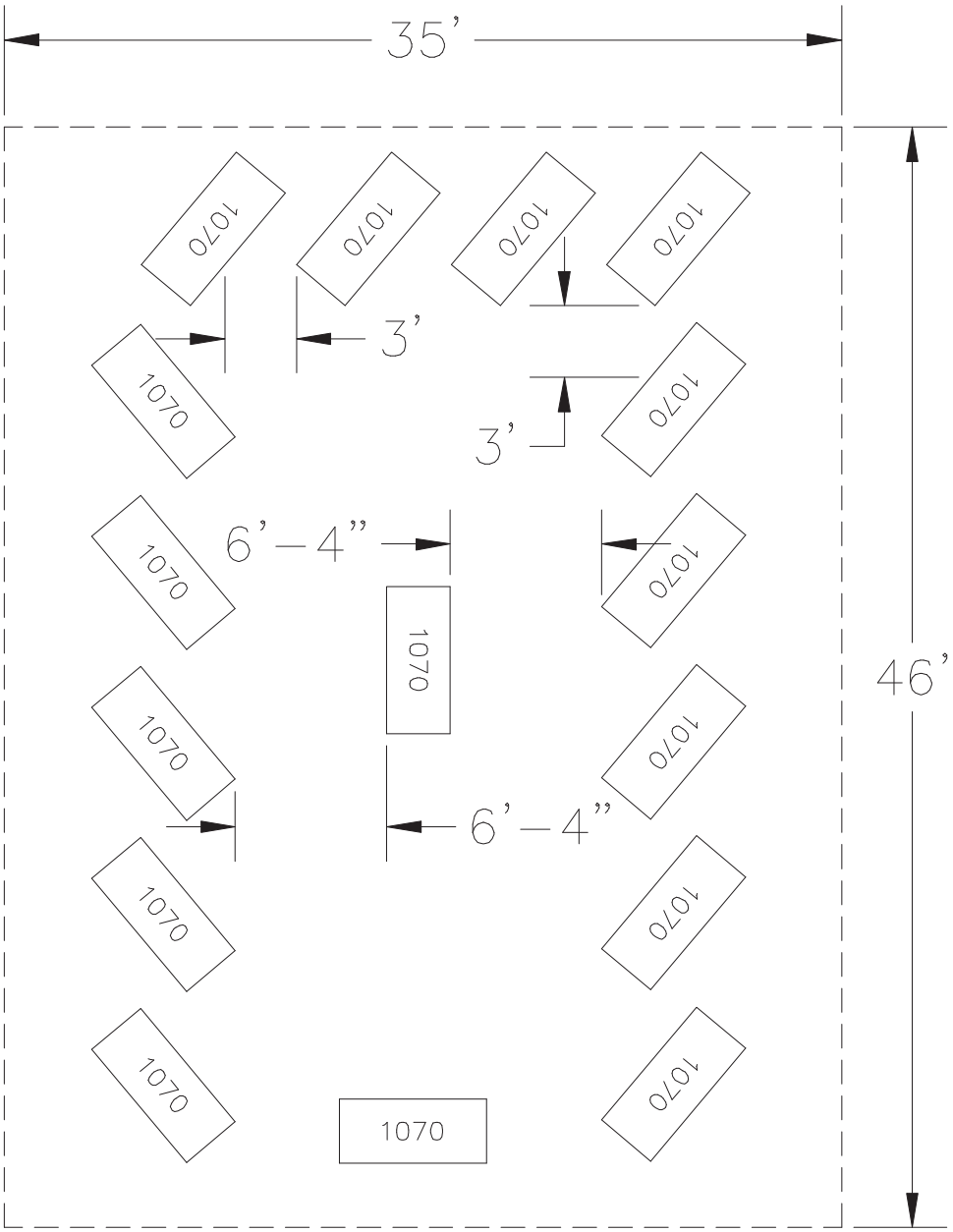


Exhibit 471c

471002, Manual Sort — Multislide (10 Separations)

Date: Oct. 1998
Distribution Bulk
Scale: No Scale
Area: 6,400 Sq Ft

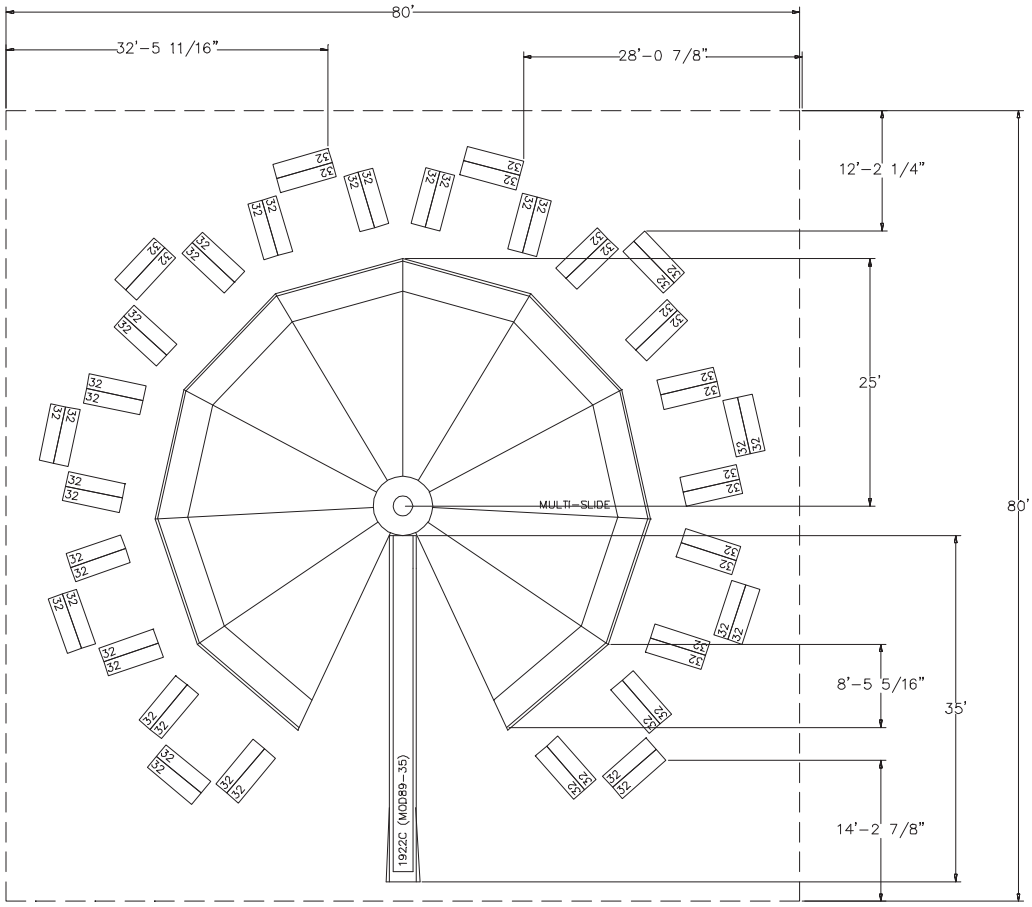


Exhibit 471d

471004, Manual Sack Sort — Sawtooth (15 Separations)

Date: Dec. 1994
Distribution Sacks
Scale: No Scale
Area: 1,645 Sq Ft

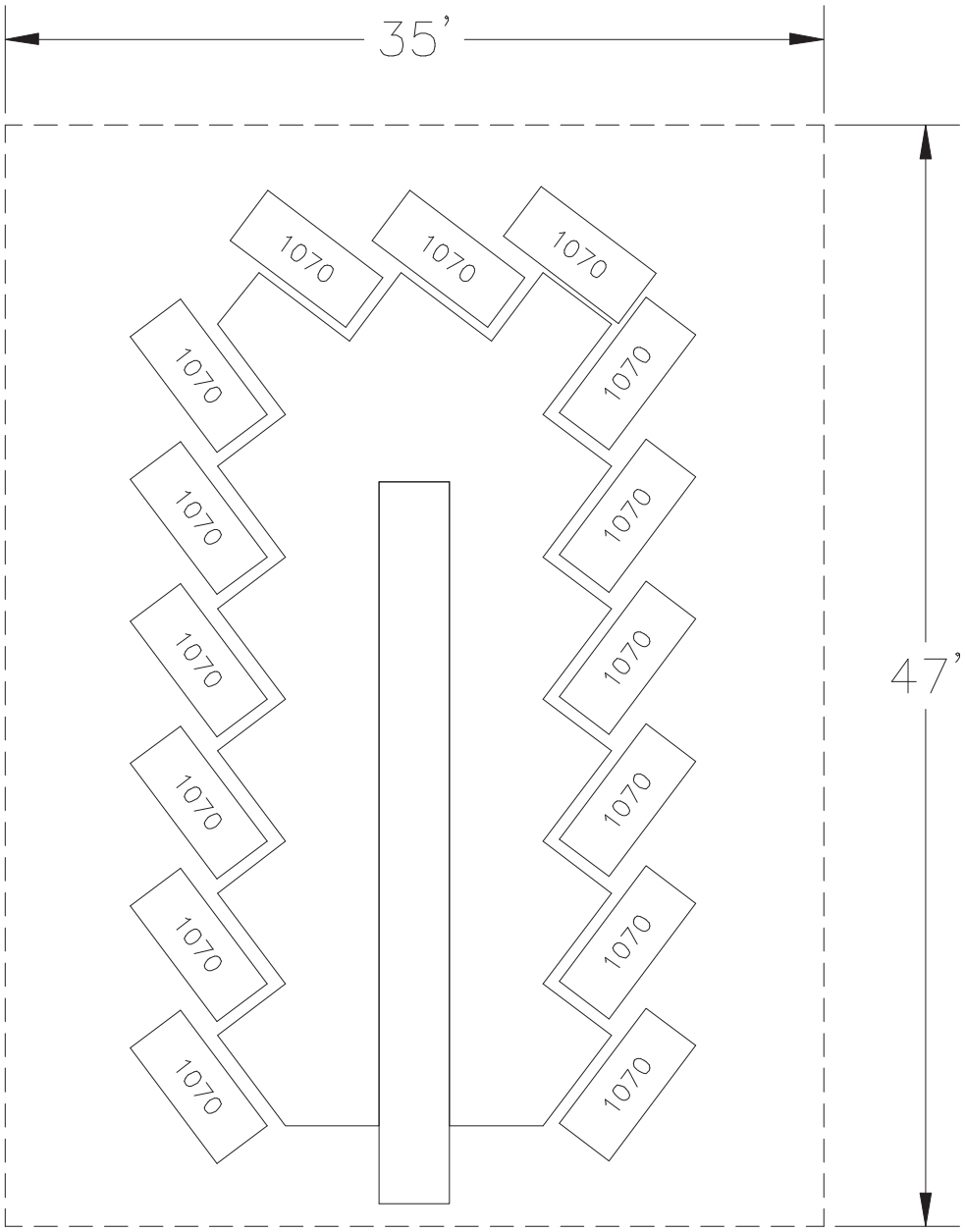


Exhibit 471e

471005, Universal Sorting System: 5,000 Sq Ft

Date: May 1997

Universal Sorting System — Outsides, Sacks, and Trays

Scale: No Scale

Area: 5,000 Sq Ft

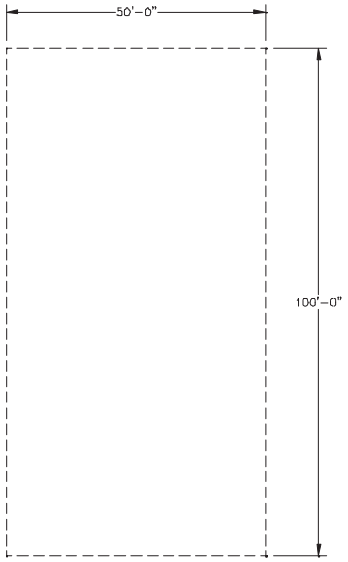


Exhibit 471f

471006, Universal Sorting System: 10,000 Sq Ft

Date: May 1997

Universal Sorting System — Outsides, Sacks, and Trays

Scale: No Scale

Area: 10,000 Sq Ft

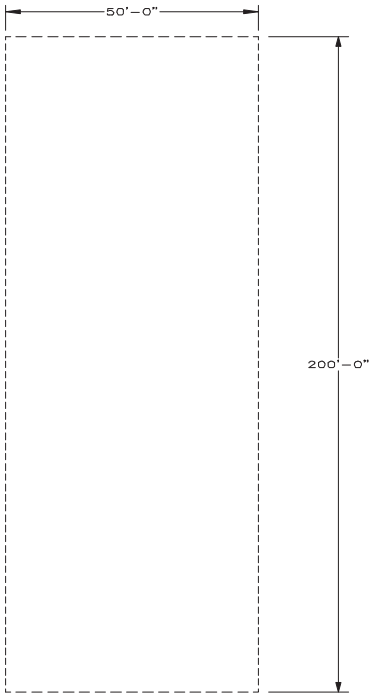


Exhibit 471g

471007, Universal Sorting System: 15,000 Sq Ft

Date: May 1997

Universal Sorting System — Outsides, Sacks, and Trays

Scale: No Scale

Area: 15,000 Sq Ft

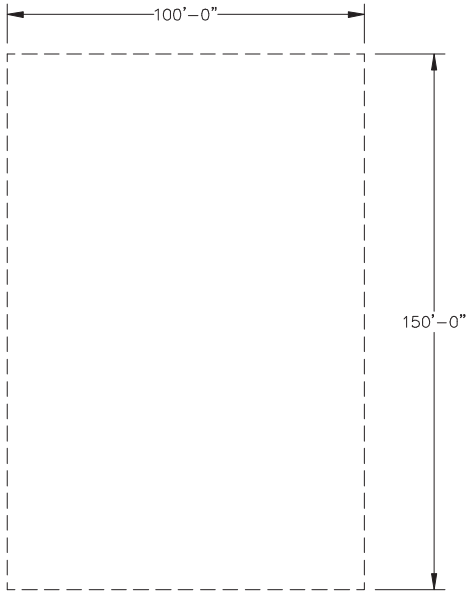


Exhibit 471h

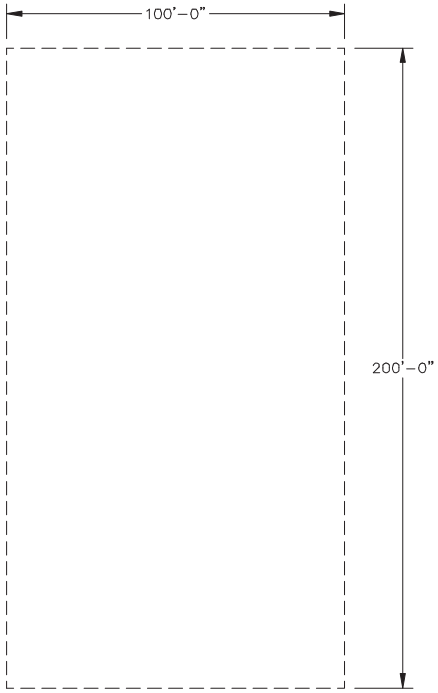
471008, Universal Sorting System: 20,000 Sq Ft

Date: May 1997

Universal Sorting System — Outsides, Sacks, and Trays

Scale: No Scale

Area: 20,000 Sq Ft



472 Robotics, Letters and Flats Sleeving and Banding, and Letters and Flats Scan-Where-You-Band

Exhibit 472a lists the WSUs currently used for robotics, sleeving and banding, and scan-where-you-band. Exhibits 472b and 472c illustrate the WSUs for visual reference in planning facility space requirements for robotics. Exhibits 472d and 472e illustrate the WSUs for sleeving and banding of letters and flats. Exhibits 472f and 472g illustrate the WSUs for letter and flat scan-where-you-band activities.

Exhibit 472a
WSUs Used for Robotics, Sleeving and Banding, and Scan-Where-You-Band

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
472001	472001.DWG	2,500	Pedestal Robot (Phase I)
472002	472002.DWG	1,550	Gantry Robot (Single)
472003	472003.DWG	2,500	Gantry Robot (Dual)
472004	472004.DWG	336	Letter Auto-Sleever and Strap
472005	472005.DWG	154	Flat Sleever and Strap
472006	472006.DWG	818	Letter Scan-Where-You-Band
472007	472007.DWG	330	Flat Scan-Where-You-Band

Exhibit 472b

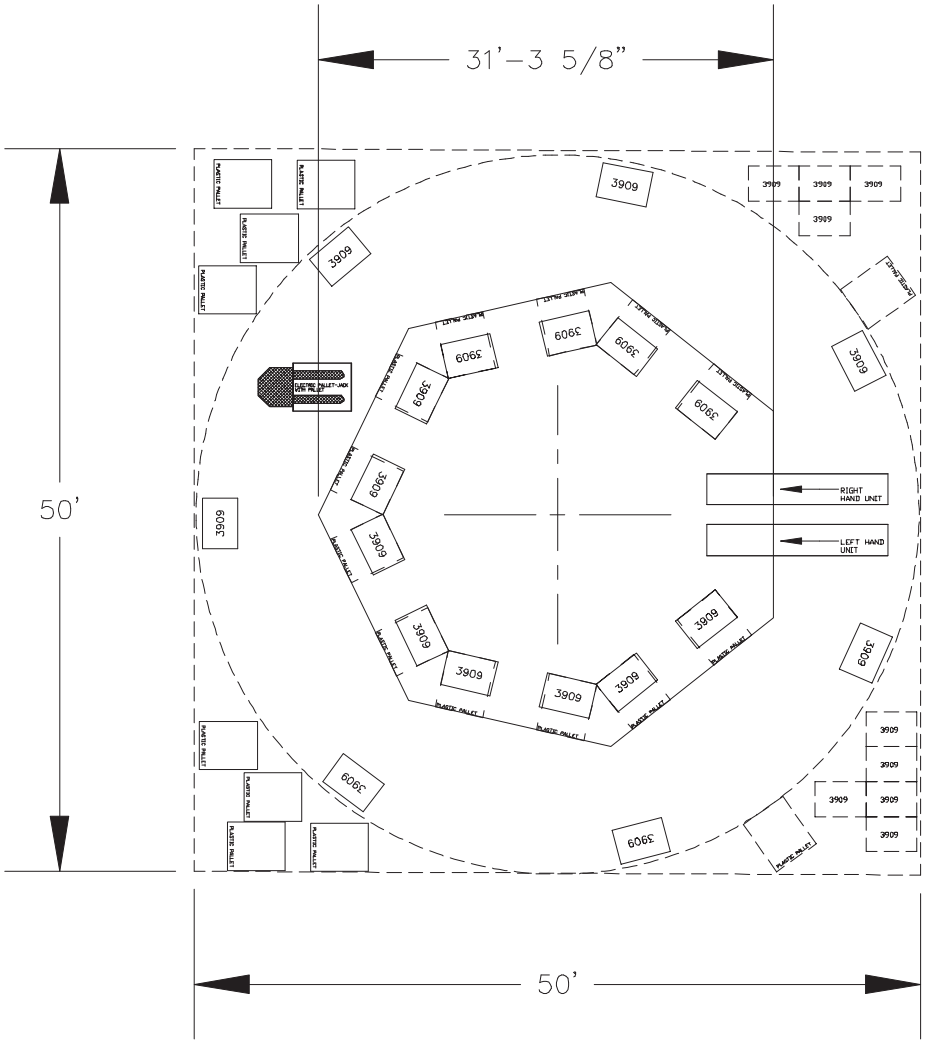
472001, Pedestal Robot (Phase I)

Date: Sept. 1997

Pedestal Robot Trays

Scale: No Scale

Area: 2,500 Sq Ft



Note: The WSU 472001 reflects an initial buy of 100 units. There shouldn't be any additional quantities.

Exhibit 472c

472002, Gantry Robot (Single)

Date: Sept. 1997

Gantry Robot Trays

Scale: No Scale

Area: 1,550 Sq Ft

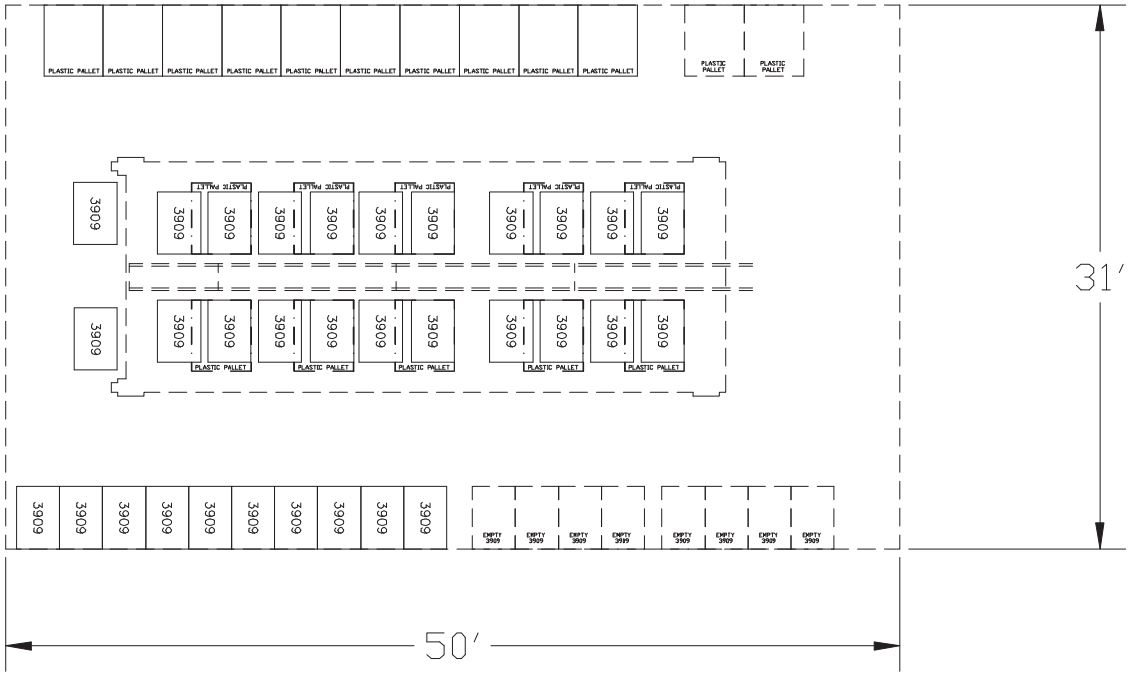


Exhibit 472d

472003, Gantry Robot (Dual)

Date: Sept. 1997

Dual Gantry Robot Trays

Scale: No Scale

Area: 2,500 Sq Ft

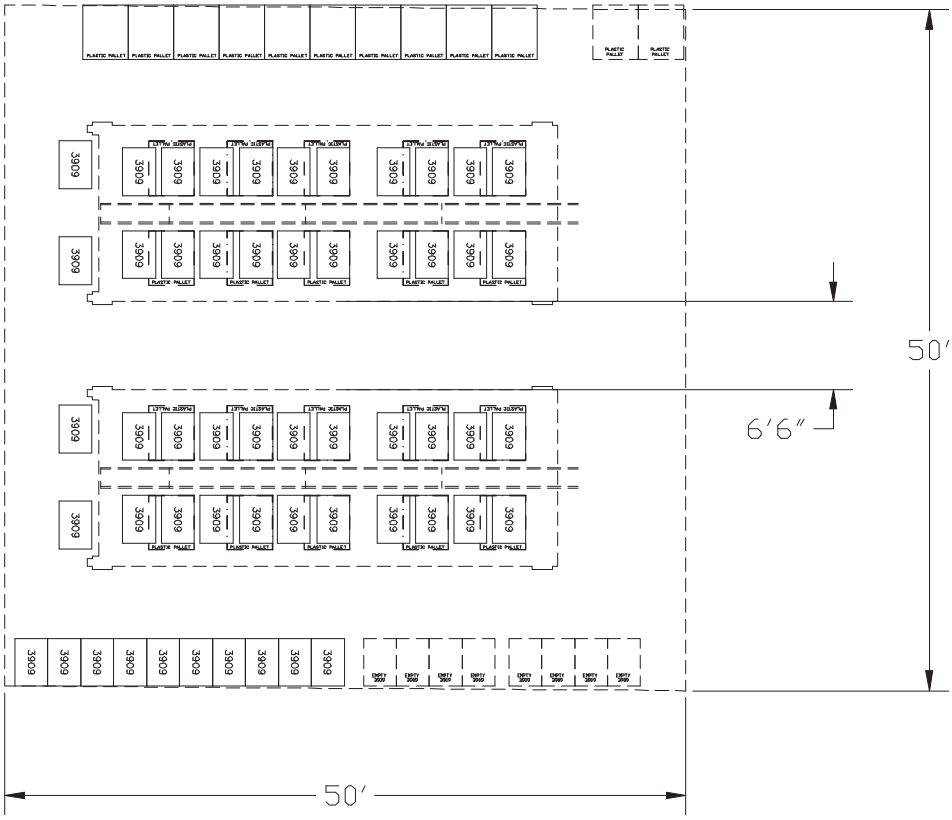


Exhibit 472e

472004, Letter Auto-Sleever and Strap

Date: Sept. 1997

Auto-Sleeve and Strap Letter Trays

Scale: No Scale

Area: 336 Sq Ft

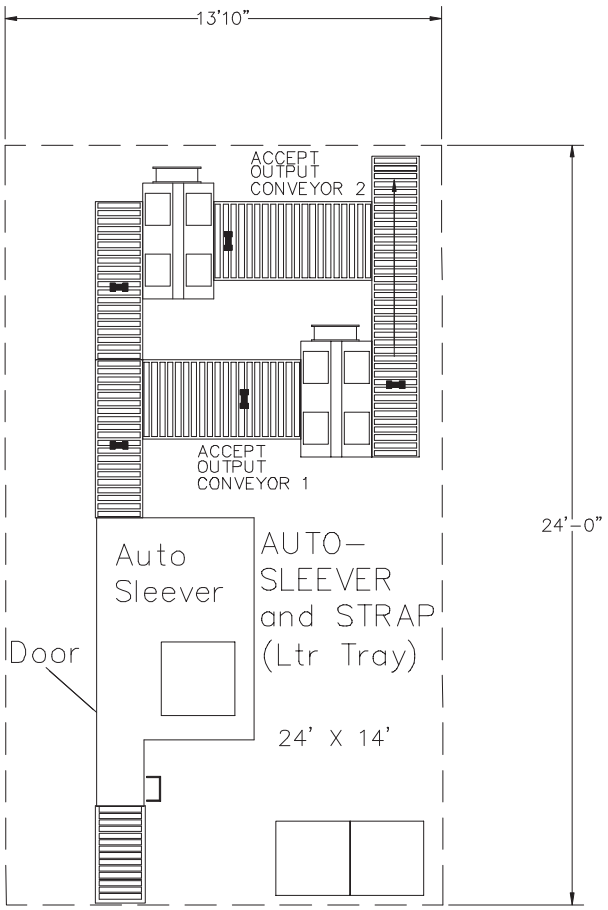


Exhibit 472f
472005, Flat Sleever and Strap

Date: Sept. 1997
Sleeve and Strap Flat Trays
Scale: No Scale
Area: 154 Sq Ft

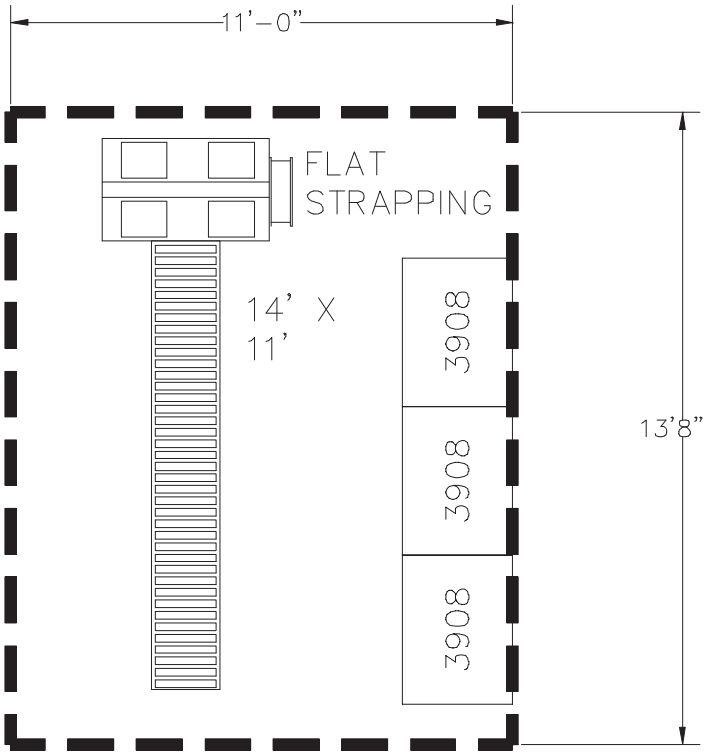


Exhibit 472g

472006, Letter Scan-Where-You-Band

Date: Sept. 1997

Scan-Where-You-Band Letter Trays

Scale: No Scale

Area: 818 Sq Ft

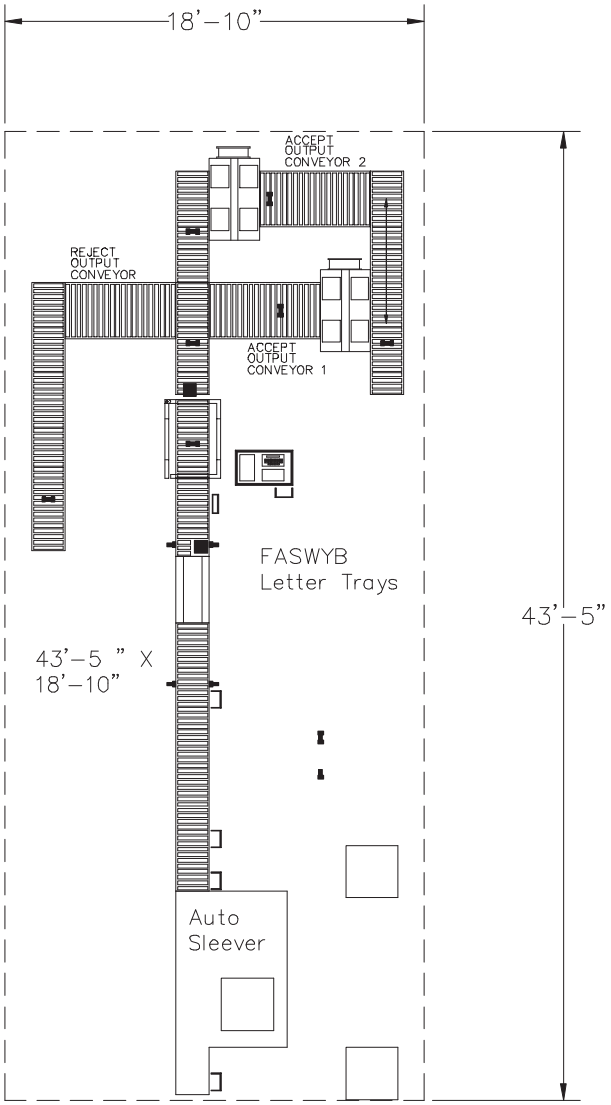
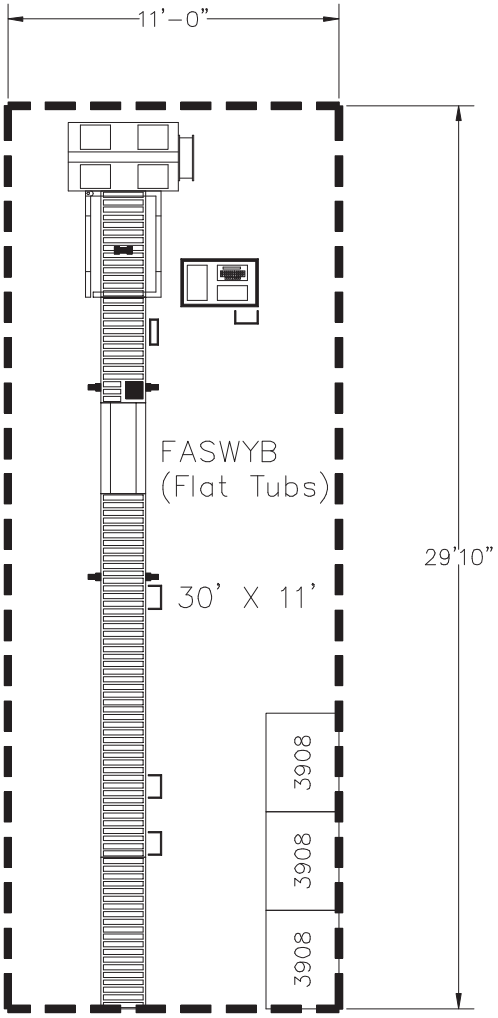


Exhibit 472h
472007, Flat Scan-Where-You-Band

Date: Sept. 1997
Scan-Where-You-Band Flat Trays
Scale: No Scale
Area: 330 Sq Ft



473 Reserved

474 Reserved

475 Platform Material Handling Equipment

Exhibit 475 lists the material handling equipment used on the platform.

Exhibit 475
Platform Material Handling Equipment

Item Number	Description
1033	Small Canvas Hamper
1046	Large Canvas Hamper
1070	Large Nutting Truck
1074	Small Nutting Truck

476 Platform Vestibule

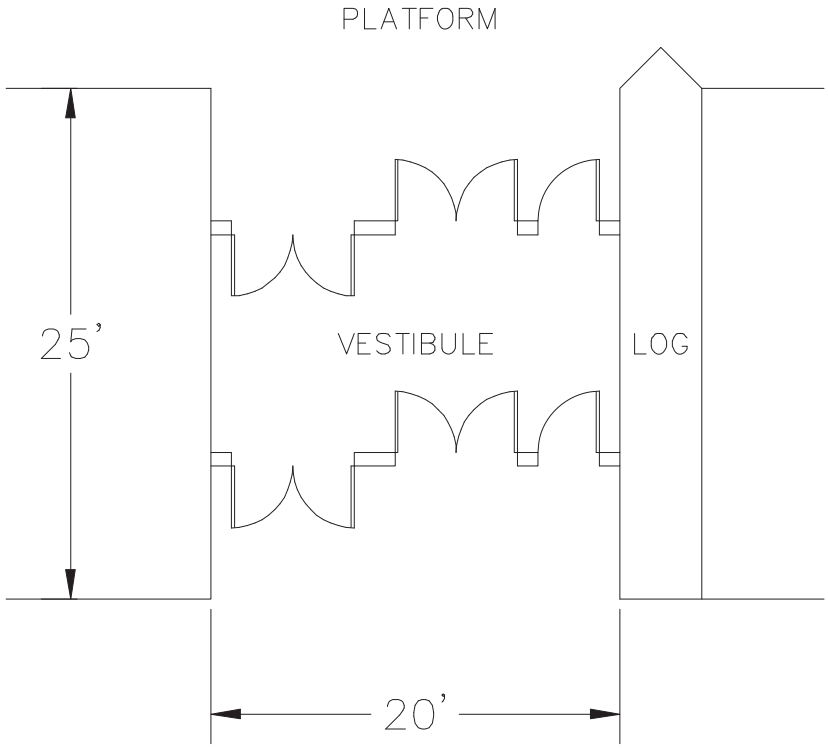
The footprint of the platform vestibule provides for movement of mail and personnel between the platform and the workroom floor. Exhibit 476a lists the WSU for the platform vestibule. Exhibit 476b illustrates the platform vestibule for visual reference in planning facility space requirements. The vestibule is no longer included in the construction of new facilities or in the renovation of existing ones.

Exhibit 476a
WSU Used for Platform Vestibule

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
476001	476001.DWG	500	Mailing Platform Vestibule, Entrance and Exit

Exhibit 476b
476001, Platform Vestibule Entrance and Exit

Date: Dec. 1994
Platform Vestibule
Scale: No Scale
Area: 500 Sq Ft



477 **Reserved**

478 **Reserved**

479 **Reserved**

48 CFS Operations

481 **Reserved**

482 **CFS Space**

The footprints of the CFS units provide for movement of mail and personnel within the work center, exclusive of dedicated aisles, and an allowance for column interference and other unusable space. Exhibit 482a lists the WSUs currently used for CFS units. Exhibits 482b through 482f illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 482a
WSUs Used for CFS Units

WSU Number	PostalCAD Drawing Name	Size of CFS Unit	Number of Mechanized Terminals	Number of Nonmechanized Terminals	Dimensions	Square Feet Required
482001	482001.DWG	Small	2	2	60′ x 50′	3,000
482002	482002.DWG	Medium	4	4	75′ x 60′	4,500
482003	482003.DWG	Medium-Large	6	6	100′ x 65′	6,500
482004	482004.DWG	Large	7	7	105′ x 85′	8,925
482005	482005.DWG	Jumbo	9	11	115′ x 87′	10,000

Exhibit 482b
482001, Small CFS Unit

Date: Dec. 1994
CFS
Scale: No Scale
Area: 3,000 Sq Ft

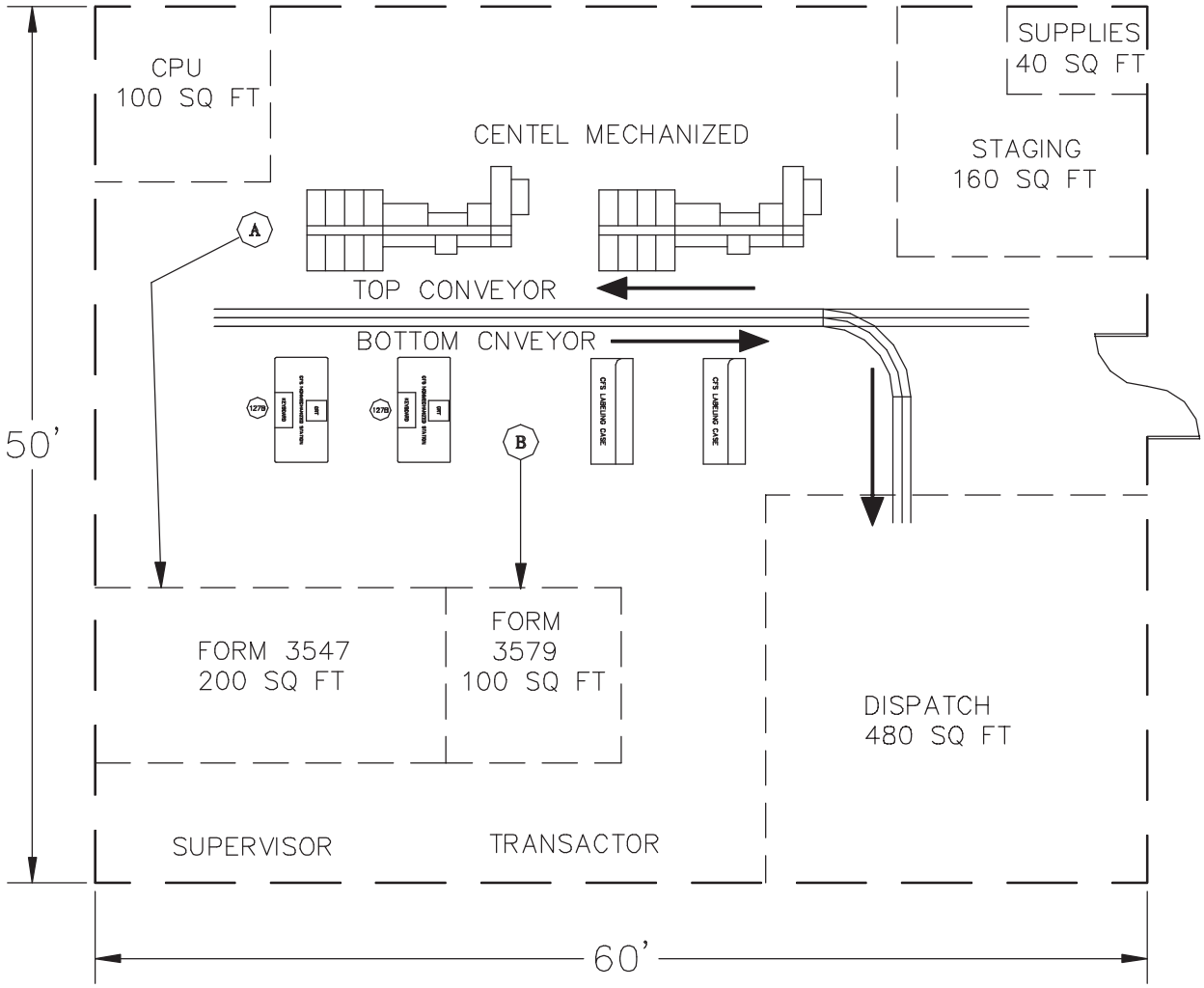


Exhibit 482c
482002, Medium CFS Unit

Date: Dec. 1994
CFS
Scale: No Scale
Area: 4,500 Sq Ft

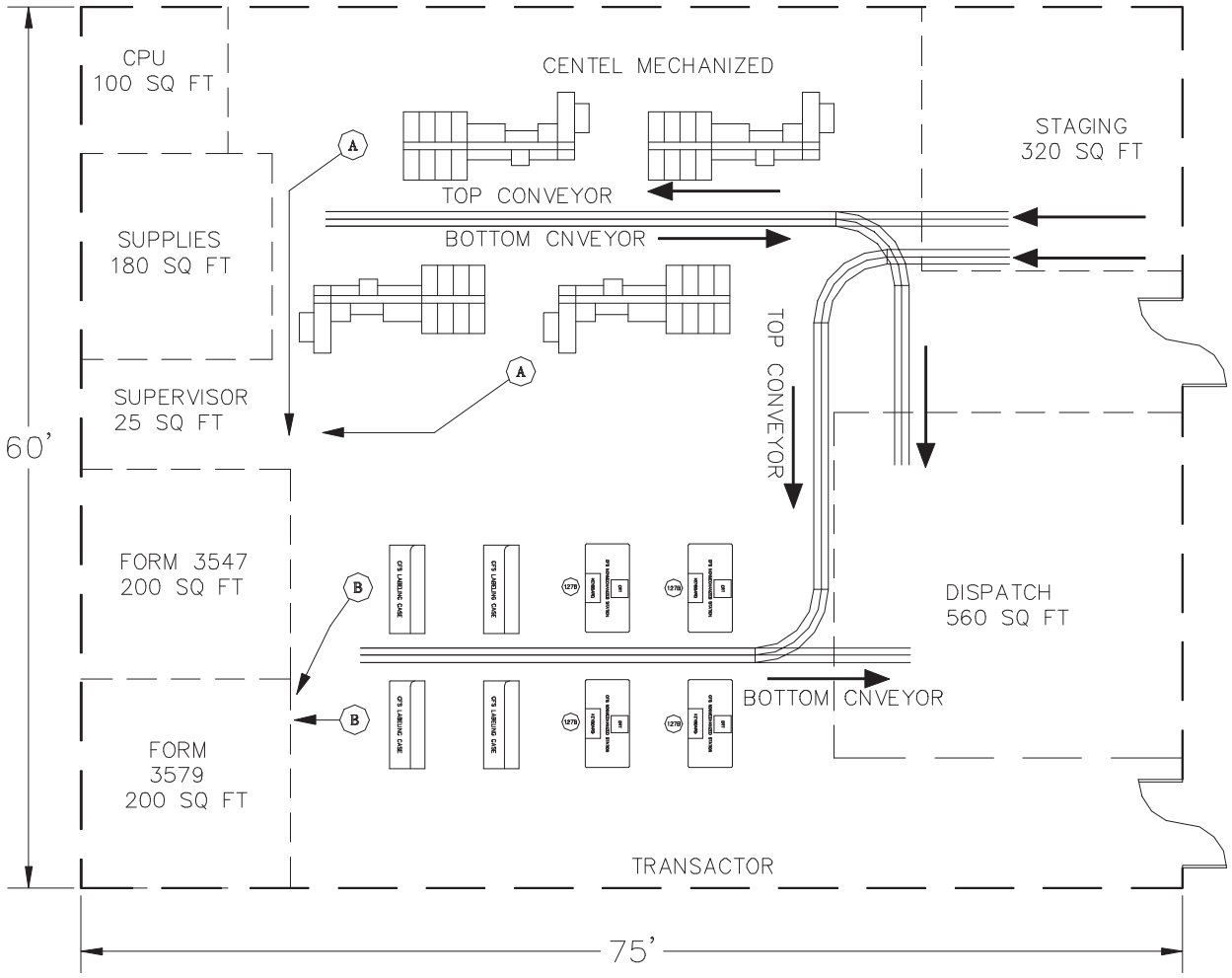


Exhibit 482d
482003, Medium-Large CFS Unit

Date: Dec. 1994
CFS
Scale: No Scale
Area: 6,500 Sq Ft

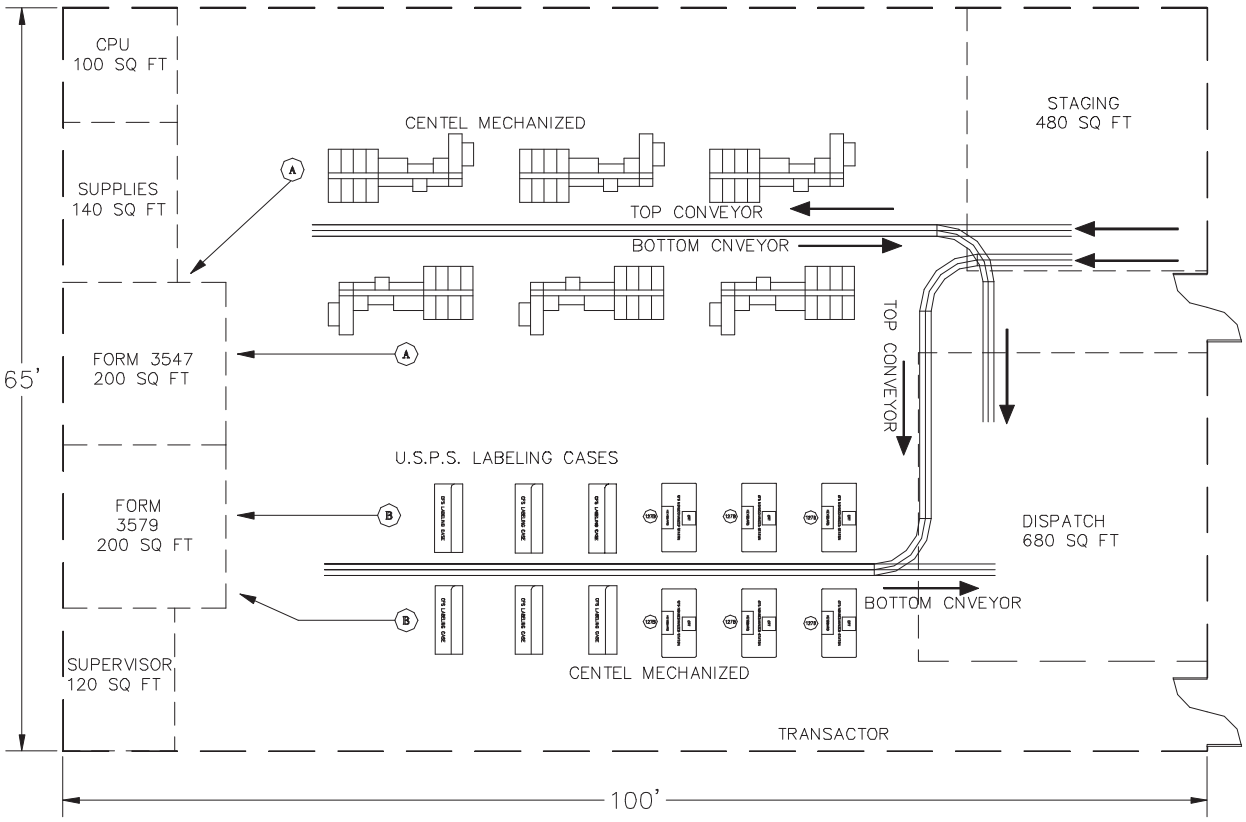


Exhibit 482e

482004, Large CFS Unit

Date: Dec. 1994
CFS
Scale: No Scale
Area: 8,925 Sq Ft

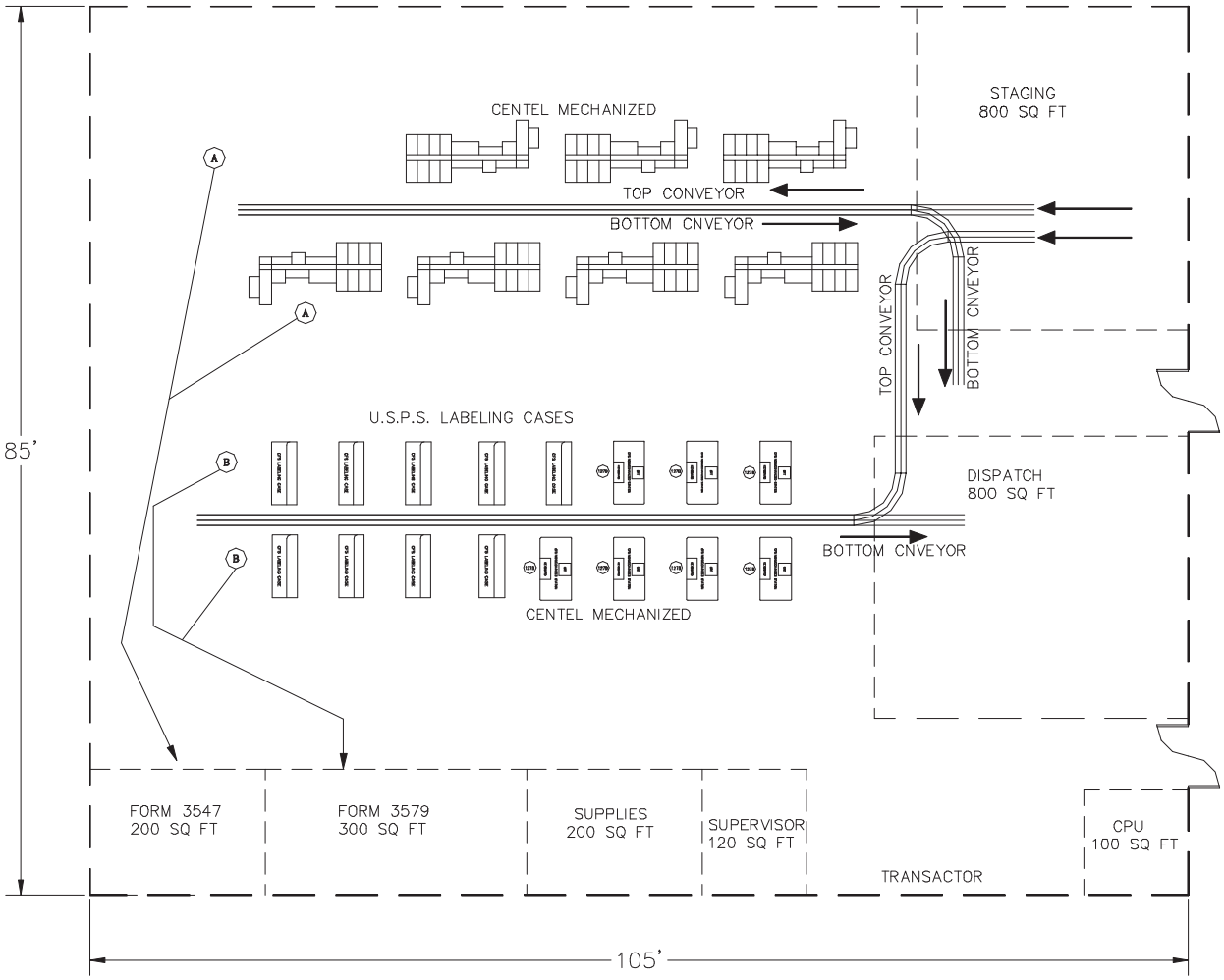
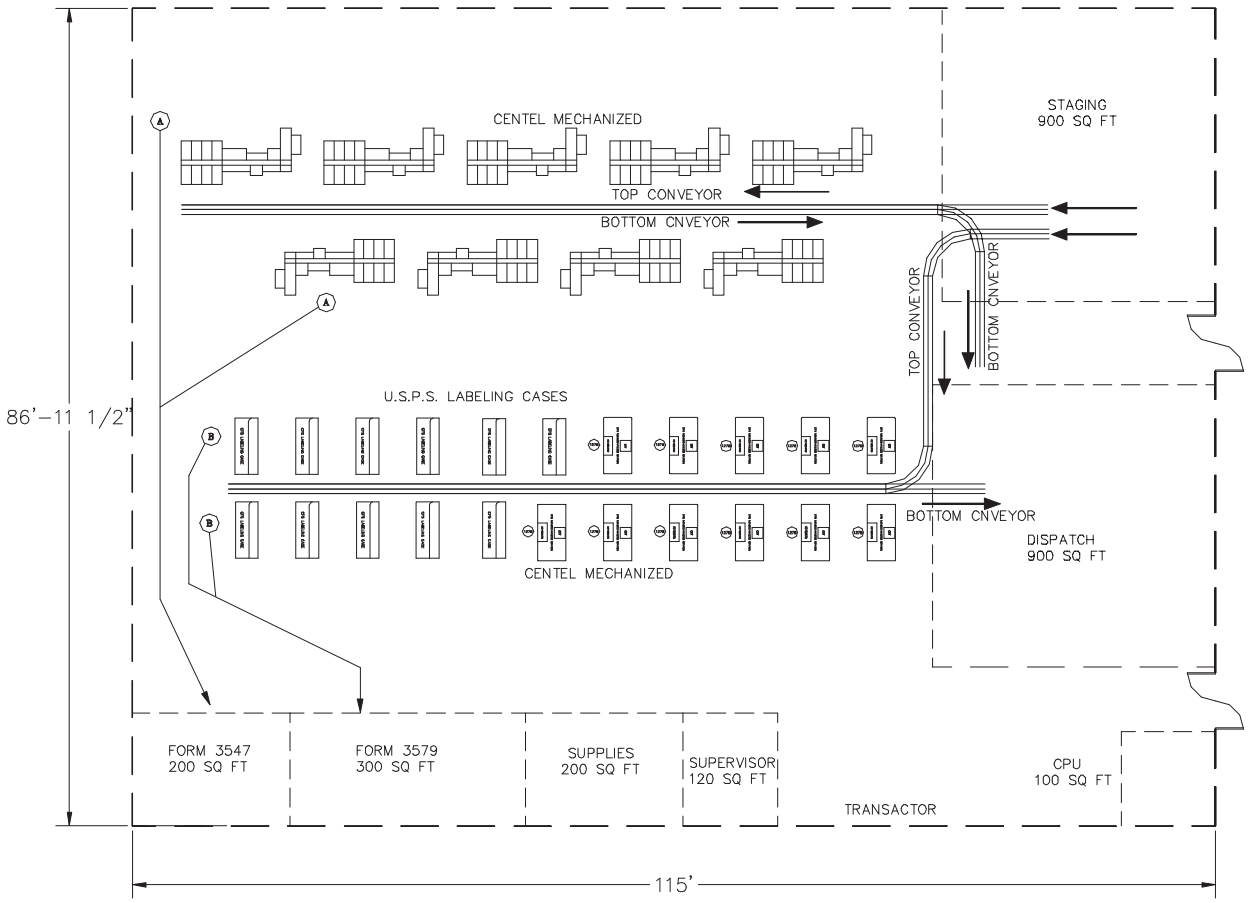


Exhibit 482f

482005, Jumbo CFS Unit

Date: Dec. 1994
CFS
Scale: No Scale
Area: 10,000 Sq Ft



49 Office and Clerical Operations

491 Reserved

492 Reserved

493 Administrative Offices

Exhibit 493a lists the WSUs currently used for developing administrative office space. Exhibits 493b through 493f illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 493a
WSUs Used for Administrative Office Space Requirements

WSU Number	PostalCAD Drawing Name	Square Feet Required	Position
493001	493001.DWG	270	Vice President of Area Operations
493002	493002.DWG	220	District Manager
		220	Postal Career Executive Service (PCES) Postmaster
		220	PCES Plant Manager
		220	PCES Air Mail Center (AMC) Manager
493003	493003.DWG	180	Executive and Administrative Schedule (EAS) Plant Manager Processing and Distribution Center (P&DC)
493004	493004.DWG	160	PCES Office Manager
		160	EAS Postmaster
		160	EAS Plant Manager Processing and Distribution Facility (P&DF)
		160	EAS AMC or Air Mail Facility (AMF) Plant Manager
		160	EAS Manager (Direct Report to District Manager or P&DC Plant Manager)
493005	493005.DWG	120	Manager of Customer Services
		120	EAS Manager (Direct Report to Plant Manager P&DF)
		120	Supervisor (If Private Office Is Required)

Exhibit 493b

493001, Vice President of Area Operations

Date: Dec. 1994
Private Offices
Scale: No Scale
Area: 270 Sq Ft

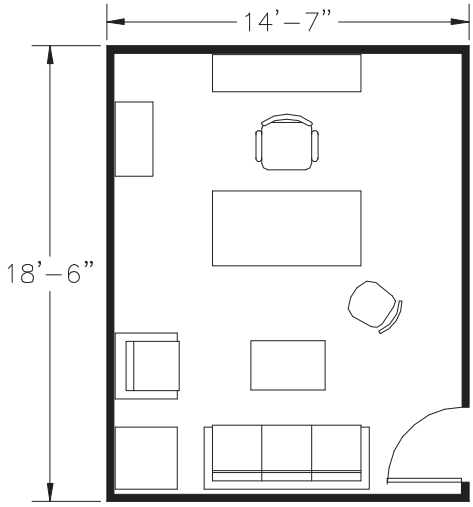


Exhibit 493c

493002, District Manager, PCES Postmaster, PCES Plant Manager, or PCES AMC Manager

Date: Dec. 1994
Private Offices
Scale: No Scale
Area: 220 Sq Ft

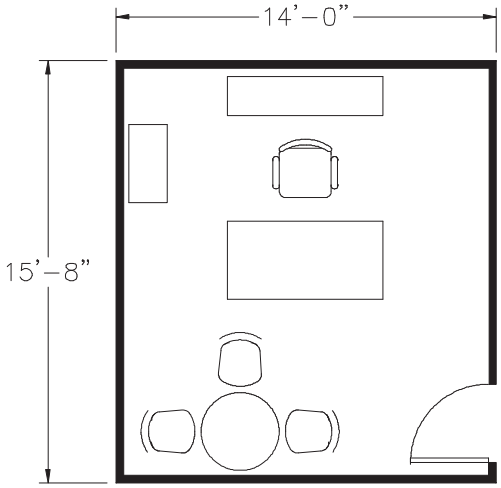


Exhibit 493d

493003, EAS Plant Manager (P&DC)

Date: Dec. 1994
Private Offices
Scale: No Scale
Area: 180 Sq Ft

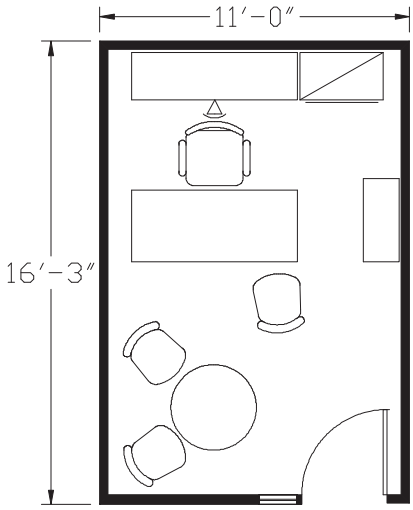


Exhibit 493e

493004, PCES Office Manager, EAS Postmaster, EAS Plant Manager (P&DF), EAS AMC/AMF Plant Manager, or EAS Manager (Direct Report to District Manager or P&DC Plant Manager)

Date: Dec. 1994
Private Offices
Scale: No Scale
Area: 160 Sq Ft

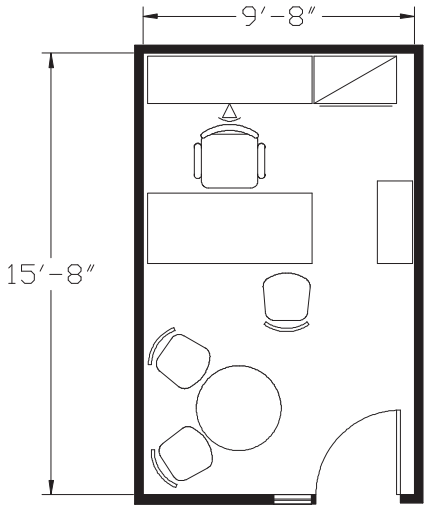
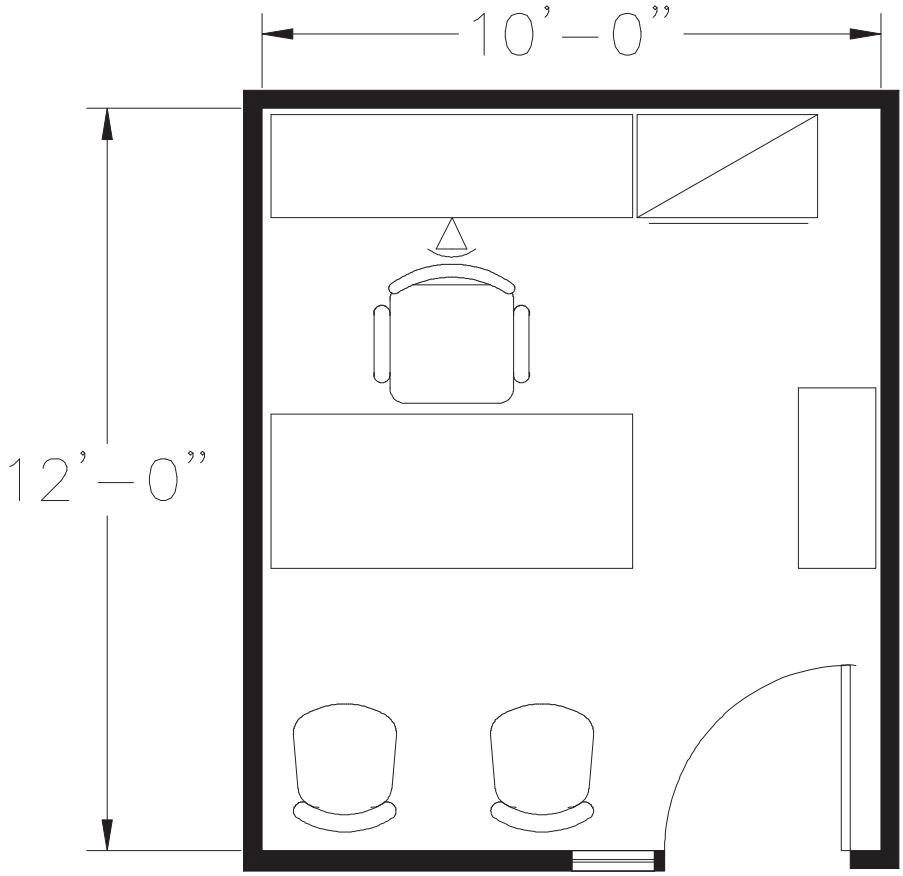


Exhibit 493f

493005, Manager of Customer Services, EAS Manager (Direct Report to Plant Manager P&DF), Supervisor (If Private Office Is Required)

Date: Dec. 1994

Private Offices

Scale: No Scale

Area: 120 Sq Ft