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
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Contents

Introduction — Guidelines and Instructions

I1 Introduction

I11 General

This handbook contains general instructions needed to develop the basic data necessary to complete the computerized Facility Planning Concept (FPC) for small customer service facilities less than 9,000 square feet; Form 919, *Facility Planning Data;* Form 929, *Major Facility Planning Data;* square footage requirements of the delivery workroom floor area; and space requirements for remote encoding centers (RECs). The instructions for the computerized FPC are contained in Chapter 1. Detailed instructions for completing Forms 919 and 929 are provided in Chapters 2 and 3. Basic information and instructions necessary to determine the square footage requirements of the delivery workroom floor are provided in Chapter 5. Space requirements for RECs are found in Chapter 6. Appendix A contains a copy of the computerized FPC, Appendix B contains Form 919 and Form 2282, *Facility Space and Condition Evaluation,* and Appendix C contains Form 929. Contact the local facilities service office (FSO) for the latest FPC planning model.

I12 Basic Criteria Assumptions

Space standards and equipment layout criteria contained in this handbook are based on Postal Service experience. The space requirements herein are to be used as standards for developing space requirements for facility projects.

I13 Projection Requirements

Handbook F-66, *General Investment Policies and Procedures,* establishes the requirement that the size of new customer service facilities be sufficient for 10 years after move-in. Exceptions such as expansions that maximize the available site area but do not meet the 10-year requirement must be requested through the manager of Facilities Planning and Approval, Headquarters. The normal planning and construction process takes approximately 2 years to complete; thus, projected needs are established for

12 years (2 investment years and 10 operating years). This criterion can vary depending on the type and size of the project.

I14 Project Planning Schedule

FSOs will establish a milestone schedule for customer service projects based on the approved 5-year capital plan. Facilities Planning and Approval will establish a milestone schedule for major projects based on the approved 5-year capital plan for new facilities.

I2 Description of Chapters 1 and 2

I21 Contents of Chapter 1

Chapter 1 contains instructions to determine building requirements from matrices for facilities less than 9,000 square feet. To simplify the process for this size project, Form 919 is no longer to be used. A computerized FPC has been developed that serves as both an FPC and a space package. Chapter 1 provides a step-by-step guide for completing that package. A matrix has been built into the most current version of the FPC so that, once the FPC is completed, the type of building is chosen automatically. This chapter also gives information on obtaining required information for retail and delivery functions which is needed to complete the FPC.

I22 Contents of Chapter 2

Chapter 2 contains guidelines for filling out Form 919, *Facility Planning Data,* for customer service buildings greater than 9,000 square feet. A major change is the inclusion of new medium standard building designs. These building designs consist of several modules: retail, administrative, workroom, support, and platform. The modules are described in the appropriate sections of this handbook.

I23 Baseline Projections (Form 919)

The population growth factors used to project move-in and 10-year requirements in Form 919 are estimates based on present environmental and operational conditions. Retail data along with local delivery records should be analyzed. Local government planning commissions combined with census and utility company records are suitable sources of projected-growth information. The analyst should use all available sources when developing the baseline criteria and projecting move-in and 10-year needs. These projections must be closely coordinated with local management officials.

I24 Postal Retail Store

All building designs have incorporated the Postal Retail Store. There are two options as follows: open merchandising, when justified, and limited open merchandising.

I25 Method for Selecting a Standard Building Design

Select a module of the small or medium standard building designs that will provide space requirements most closely approximating the corresponding 10-year needs.

I3 Description of Chapter 3

Chapter 3 contains planning criteria and instructions for completing the computerized Form 929, *Major Facility Planning Data*. The changes in Chapter 3 are minor technical policy statements and editorial changes. Contact Systems/Process Integration, Technology Planning and Analysis, Engineering, for the newest version of Form 929.

I4 Description of Chapter 4

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; processing special category mail and distribution of parcel post; bulk sorting and material handling operations; computerized forwarding system (CFS) operations; and office and clerical operations. Section 34 instructs the analyst to use these WSUs in the assembly of the workspace requirements for processing and distribution centers and facilities. Changes to Chapter 4 include new templates for the delivery barcode sorter/optical character reader (DBCS/OCR), flat sorting machine model 1000 (FSM-1000), small parcel and bundle sorter (SPBS) with feed systems, multislide sorter, universal sorter sizes, draft versions of the two robotic tray handling systems (RTHSs), and scan-where-you-band (SWYB) operations for both letters and flats.

I5 Description of Chapter 5

Chapter 5 provides basic information and instructions necessary to determine the square footage requirements of the delivery workroom floor area for a new or expanded facility. A basic standardized formula (on a per route basis) has been developed to eliminate the need for local planners to calculate space for each individual piece of equipment normally associated with the delivery function.

I6 Description of Chapter 6

Chapter 6 contains information regarding the development of space requirements for postal remote encoding centers. The chapter includes background information on REC operations as well as information for sizing video display terminal (VDT) workrooms, offices, and employee facilities. Many of the requirements used for this chapter are based on existing postal standards or handbooks. Most RECs will be housed in existing leased space that will be modified in accordance with the “Design Guidelines for Remote Encoding Center (REC) Facilities,” available through Systems Integration Support, Processing Operations, Field Operations Support, Headquarters.

1 Preparation of Facility Planning Concept for Small Standard Building Designs

11 General

Chapter 1 contains instructions for preparing the Facility Planning Concept (FPC) in order to determine which of the small standard building designs (SSBDs) is to be used for postal facilities of less than 9,000 square feet (sq ft). Appendix A contains a hard copy of the FPC. Contact the local facilities service office (FSO) for the latest FPC planning model. In accordance with Handbook RE-5, *Building and Site Security Requirements,* if a facility has 20 or more full-time employees now or will have within 10 years, a criminal investigative office is required.

12 Facility Planning Concept and Space Requirements

121 Comments

Refer to Management Instruction AS-520-96-9, *Facility Planning Concept,* for general instructions on the preparation and submission of FPCs. The comments below relate to the computerized version of the FPC used for small standard building designs. The FPC can also be filled out manually and the building size determined by using the appropriate matrix.

122 Section I: Justification

Development of the FPC involves the collection of data from various sources. Coordinate the Justification section with the postmaster or installation head. Obtain information from this individual regarding justification, new community developments, and any other information that helps explain the situation.

123 Section II: Description of Present Facility

Information on the present facility is available from the Facilities Management System for Windows (FMSWIN) and the building lease.

124 Section III: Functions in New Facility

124.1 Type of Merchandising

Coordinate with the manager of Retail at the district regarding the type of retail merchandising needed, which may be either limited open display (Type A) or a full Postal Retail Store (Type B); in some cases, a deviation may be granted by the manager of Retail Operations, Retail, Headquarters, to use enclosed displays. The retail specialist must complete the Retail Planning/Start-Up Questionnaire to determine this. The completed questionnaire must be submitted with the FPC for approval.

124.2 Delivery Route and Post Office Box Data

Operations Program Support at the district provides the current number of delivery routes (city and rural) and possible deliveries by ZIP Code along with the annual growth forecasts. The district manager of Retail, working with the local postmaster, provides post office box information, including the number of sections currently available, the number currently rented, and the projected annual percentage of increase. Note that parcel locker sections are generally provided as 10 percent of the total post office box quantity, although this ratio may be modified to suit particular situations.

125 Section IV: Distribution Concept

Coordinate with the installation head to determine the distribution concept, including the nearest processing plant.

126 Section V: Facilities Affected

Indicate the plans for use or disposal of the current facility. Notification of a disposal must be sent to the manager of Realty Asset Management, Facilities, Headquarters, as noted on the FPC.

127 Section VI: Preferred Area Boundaries

The installation head should provide information regarding the preferred area for the facility, from both an operational and community relations point of view. When it is appropriate, data should also be obtained from the manager of Retail at the district and the manager of Post Office Operations. In compliance with postal policy (39 *Code of Federal Regulations* 241.4, “Expansion Relocation, Construction, Construction of New Post Offices,” effective 10/5/98), the area surrounding the existing facility is to be included as part of any new preferred area boundaries. Include a map that outlines the boundaries of the preferred area and also identifies the existing facility location. This area ideally should be within a retail zone and convenient to customer and business traffic.

128 Section VII: Alternatives

Indicate all possible project alternatives. In accordance with existing postal policy, as noted in section 127, first consideration is expansion of the current facility, next is relocation to another existing building, and last is new construction.

129 Section VIII: Supplemental Data

Use this section to provide additional information that may affect building size or features. Mark the appropriate box(es) provided and/or provide written comments on issues not otherwise addressed. Attach additional sheets if necessary. The following areas must be completed:

a. Box 1 — Place a mark in the box if security fencing is required; consult with the local inspector in charge.

b. Box 2 — Place a mark in the box if a scissors lift is required. If a different type or quantity of dock equipment is preferred, provide written instructions under box 12, Other.

c. Box 3 — Place a mark in the box if a water well is required.

d. Box 4 — Place a mark in the box if a septic system is required.

e. Box 5 — Place a mark in the box if tractor-trailers will be used at this facility. Provide appropriate dock equipment and adequate maneuvering area.

f. Box 6 — Using the exhibits in section 142 as a guide, indicate the required number of parking spaces of each type. Place a mark in the appropriate box if adequate on-street parking is available in the preferred site area and will be used for all or part of the customer parking space requirement. Note that customer accessible (ACC) parking spaces must still be provided in the quantities indicated on the charts.

g. Box 7 — Place a mark in the box if the estimated value of stamp stock and/or cash to be stored in the facility overnight exceeds $100,000. An intrusion detection system (IDS) will be required. Note that an IDS is required in open merchandising (Type B) plans regardless of overnight value.

h. Box 8 — Place a mark in the box if the total (not *peak*) number of full-time employees is equal to or greater than 20. A criminal investigative office and system rough-in will be required.

i. Box 9 — Place a mark in the box if more than five security containers would be necessary at this facility; a vault will be provided instead, as it is more space efficient than multiple containers.

j. Box 10 — Place a mark in the box if the facility requires an enclosed platform. In order to qualify, a facility must be in an area that meets at least three of the following criteria:

Weather Factors (Normal Means and Extremes)	Breakpoint
Mean daily minimum temperature, October through March	22°F
Mean number of days 32°F or below, annually	180 days
Mean snowfall and sleet, annually	80 inches
Possible number of days at or below 16°F, annually	145 days
Mean number of days with 1 inch or more of snowfall and sleet, annually	22 days

Note: For SSBD plan size 30 and less, an enclosed platform may be used for facilities that have a mailing history which has regularly required overnight mail vestibule storage of large quantities of mail. In such cases, the weather factors listed above are not an issue.

k. Box 11 — Place a mark in the box if a building and grounds room is required at the edge of the platform.

l. Box 12 — Use this area to provide information on any other planning issues not addressed above. Attach additional sheets if necessary.

13 Site Visits

An on-site visit of the affected facility and review of the FPC with the installation head is recommended. Contact the installation head if there are any questions concerning the data.

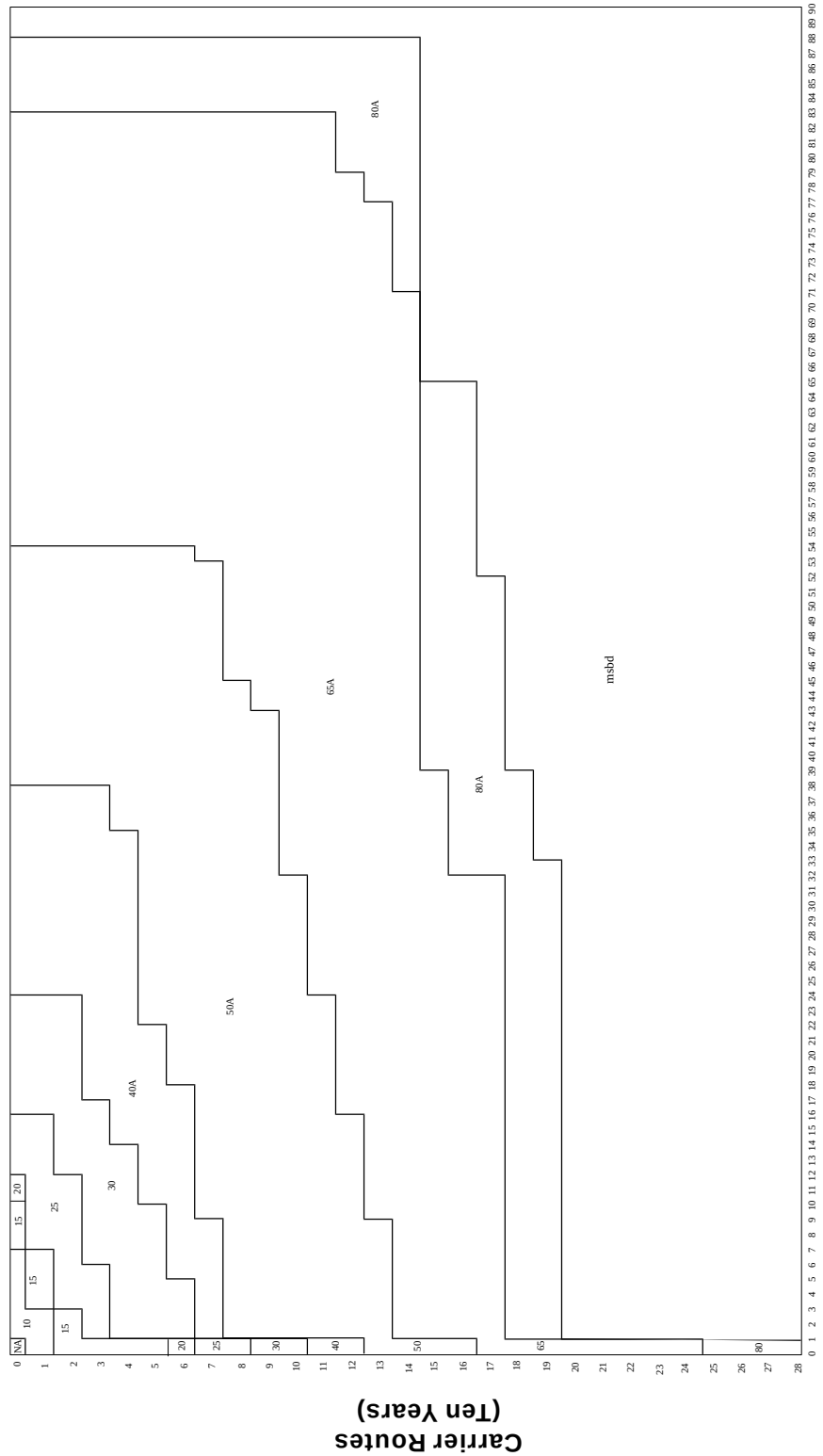
14 Standard Plans

141 Plan Selection

The computerized version of the FPC will automatically select the proper building size. If the form is being filled out manually, follow the instructions below:

a. Using the estimates developed in the FPC, select the standard building size from the appropriate matrix shown in Exhibit 141a or 141b. The Type A plans (Exhibit 141a) feature a modified Postal Retail Store with limited open merchandising, and the Type B plans (Exhibit 141b) feature a Postal Retail Store with open merchandising. If section III, item 1, of the FPC is checked “limited open displays,” use the Type A plan matrix; if the FPC is checked “open merchandising,” use the Type B plan matrix.

Exhibit 141a
Matrix for Determining Building Size: Type A Plans (Limited Open Merchandising)

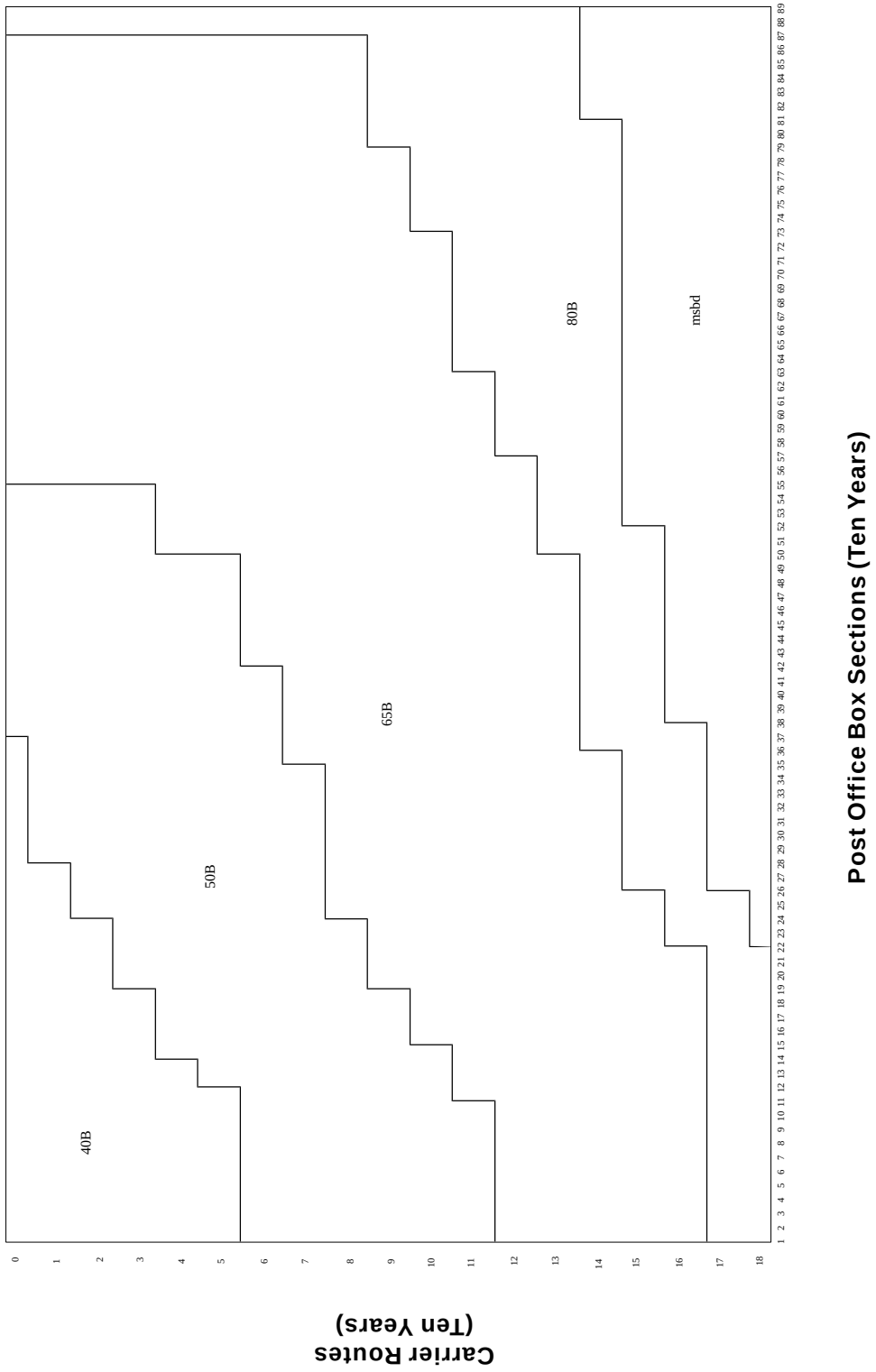


* = A size 20 plan is available which features 2 IRTs and can accommodate either of the following:

- Up to eleven (11) box sections with zero (0) carriers;
- Or, one carrier with zero (0) box sections.

Note: The size 20 plan is the smallest standard plan that has 2 IRTs.

Exhibit 141b
Matrix for Determining Building Size: Type B Plans (Open Merchandising)



b. After the appropriate matrix has been determined, find the number of carrier routes projected for 10 years on the vertical axis of the matrix. Draw a horizontal line across the chart. This line shows the projected number of routes for the proposed office. Next find the number of post office box and parcel locker sections projected for 10 years on the horizontal axis of the matrix. Draw a vertical line across the chart representing this number. The intersection point of the two lines determines the size of the facility needed.

c. When the facility size is determined, enter it in section VII, Alternatives, of the FPC. The FPC is complete once the supplemental section is filled out.

142 Parking

Parking requirements for each size building, including employee standard and accessible parking spaces, are indicated on the following exhibits. Exhibit 142a shows parking requirements for Type A plans, and Exhibit 142b shows parking requirements for Type B plans. For each plan size, several different parking configurations are listed that account for differing ratios of carriers to box sections — i.e., the maximum customer spaces apply to the maximum box sections. However, local factors, such as when ample on-street parking is available for customers, may influence the number of customer spaces actually required. The following recommended number of customer parking spaces may therefore be reduced if necessary and appropriate. (***Note:*** The indicated number of customer accessible parking spaces must still be provided at minimum in accordance with Handbook RE-4, *Standards for Facility Accessibility by the Physically Handicapped.*) Likewise, the quantity of spaces for postal vehicles assumes that carrier routes are motorized, and therefore allows for one space per route. If carrier routes are not motorized, the quantity may be reduced accordingly.

Exhibit 142a

Parking Requirements With Limited Open Merchandising (Type A Plans)

Plan Size	Customer		Employee		Postal Vehicle	Grand Total	Approximate Sq Ft
	Std	ACC	Std	ACC			
10	10	1	6	1	1	19	5370
	10	1	3	1	0	15	4290
15	10	1	7	1	2	21	5910
	10	1	6	1	1	19	5370
	12	1	3	1	0	17	4830
20	9	1	7	1	1	19	5370
	17	1	4	1	0	23	6450
25	14	1	9	1	3	28	7800
	17	1	8	1	2	29	8070
	18	1	7	1	1	28	7800
30	14	1	12	1	6	34	9420
	16	1	11	1	5	34	9420
	18	1	10	1	4	34	9420
	20	1	9	1	3	34	9420
	22	1	8	1	2	34	9420
40A	16	1	13	1	7	38	10500
	20	1	12	1	6	40	11040
	22	1	11	1	5	40	11040
	29	2	10	1	4	46	12780
	31	2	9	1	3	46	12780
50A	16	1	19	1	13	50	13740
	18	1	18	1	12	50	13740
	23	1	17	1	11	53	14550
	32	2	16	1	10	61	16830
	32	2	15	1	9	59	16290
	35	2	14	1	8	60	16560
	37	2	13	1	7	60	16560
	39	2	12	1	6	60	16560
65A	29	2	23	1	17	72	19800
	33	2	22	1	15	73	20070
	46	2	21	1	14	84	23040
	50	2	20	1	13	86	23580
	50	2	19	1	12	84	23040
	56	3	17	1	11	88	24240
80A	32	2	26	2	19	81	22350
	36	2	25	1	18	82	22500
	41	2	24	1	17	85	23310
	49	2	23	1	16	91	24930
	59	3	21	1	14	98	26940

Exhibit 142b

Parking Requirements With Open Merchandising (Type B Plans)

Plan Size	Customer		Employee		Postal Vehicle	Grand Total	Approximate Sq Ft
	Std	ACC	Std	ACC			
40B	17	1	11	1	5	35	9690
	18	1	10	1	4	34	9420
	20	1	9	1	3	34	9420
	23	1	8	1	2	35	9690
	24	1	7	1	1	34	9420
	32	2	4	1	0	39	10890
50B	16	1	17	1	11	46	12660
	18	1	16	1	10	46	12660
	20	1	15	1	9	46	12660
	23	1	14	1	8	47	12930
	29	2	13	1	7	52	14400
	32	2	12	1	6	53	14670
	35	2	11	1	5	54	14940
	39	2	9	1	3	54	14940
65B	22	1	22	1	16	62	16980
	24	1	21	1	15	62	16980
	30	2	20	1	14	67	18450
	38	2	19	1	13	73	20070
	39	2	18	1	12	72	19800
	46	2	17	1	11	77	21150
	47	2	16	1	10	76	20880
	53	3	15	1	9	81	22350
	56	3	14	1	8	82	22620
80B	25	1	25	1	18	70	19140
	27	2	24	1	17	71	19530
	33	2	23	1	16	75	20610
	41	2	22	1	15	81	22230
	56	3	21	1	14	95	26130
	59	3	20	1	13	96	26400

143 Site Size

Determine the estimated site size for the selected building by referring to Exhibit 143. A larger site size may be required if a water well, septic system, or special setback requirements are needed. Conversely, a smaller site may be adequate if justification exists for a reduction in parking requirements (see section 142). All special requirements should be noted in section VIII, Supplemental Data, so that the real estate specialist can determine appropriate site needs.

Exhibit 143
Factors for Determining Site Size

Std Plan No.	Net Interior Building Size	Net Platform Size	Gross Building Size	Maneu-vering Area[1]	Parking[2]	Misc Outside Areas[3]	Subtotal	Circulation, Landscaping, Sidewalks @ 40%	10-Year Site Size	20-Year Site Expansion @ 25%
10	1,060	275	1,510	6,640	5,370	360	13,880	5,552	19,432	24,290
15	1,605	275	2,085	6,640	5,910	360	14,995	5,998	20,993	26,241
20	2,065	275	2,570	6,640	6,450	360	16,020	6,408	22,428	28,035
25	2,585	275	3,110	6,640	8,070	360	18,180	7,272	25,452	31,815
30	3,055	275	3,605	6,640	9,420	360	20,025	8,010	28,035	35,044
40A	4,110	413	4,830	6,640	12,780	360	24,610	9,844	34,454	43,068
40B	4,110	413	4,830	6,640	10,890	360	22,720	9,088	31,808	39,760
50A	5,075	413	5,830	6,640	16,560	360	29,390	11,756	41,146	51,433
50B	5,075	413	5,830	6,640	14,940	360	27,770	11,108	38,878	48,598
65A	6,475	413	7,270	6,640	24,240	360	38,510	15,404	53,914	67,393
65B	6,475	413	7,270	6,640	22,620	360	36,890	14,756	51,646	64,558
80A	8,020	413	8,850	6,640	26,940	360	42,790	17,116	59,906	74,883
80B	8,020	413	8,850	6,640	26,400	360	42,250	16,900	59,150	73,938

[1] Two 9 ft spaces + 5 ft ramp = 23 ft; add 30 ft each side = 83 ft; depth of maneuvering area = 80 ft; total maneuvering = 80 x 83 = 6640 sq ft.

[2] Based on maximum post office boxes.

[3] Includes room for a Dumpster™ @ 360 sq ft.

15 Approvals and Signatures

When the Facility Planning Concept is complete, attach a copy of the building plan and the Retail Planning/Start-up Questionnaire to it. Obtain the required signatures for approval listed on page 3 of the FPC. Forward the package to the appropriate facilities service office for appropriate action.

16 Deviation Policy

If deviation from the building size generated by the FPC is desired, the district manager must submit a deviation request to the manager of Facilities Planning and Approval, Facilities Program Management, Facilities, Headquarters. The deviation request must provide written justification with appropriate supporting information. Send deviation requests to:

MANAGER OF FACILITIES PLANNING AND APPROVAL
FACILITIES
UNITED STATES POSTAL SERVICE
4301 WILSON BOULEVARD SUITE 300
ARLINGTON VA 22203-1861

Deviations from the counter and open merchandising requirements must be requested by the district manager and sent to the area manager of Marketing for approval. The deviation request must provide written justification with appropriate supporting information.

2 Preparation of Form 919

21 General

211 Purpose

Chapter 2 provides space requirements, standards, and instructions for completing Form 919, *Facility Planning Data,* for customer service facilities over 9,000 square feet. Appendix B contains a hard copy of the Facility Planning Concept (FPC) and Form 919.

212 Order in Which Form 919 Is Completed

212.1 Preparation of Facility Planning Concept

See Management Instruction AS-520-96-9, Appendix A, for instructions on how to prepare the FPC portion of Form 919.

212.2 Page Sequence

The following sequence for preparing the pages will help the analyst develop a smooth flow of information for completing Form 919:

a. Page 1 — Management summary and approval sheet.

b. Page 2 — Net gross calculations.

c. Page 3 — Public service areas.

d. Page 4 — Workroom areas.

e. Page 5 — Support areas.

f. Page 6 — Platform and maneuvering areas.

g. Page 7 — Parking, miscellaneous outside areas, and fueling.

h. Page 8 — Section A: Local Statistics.

i. Page 8 — Section B: Explanatory Notes.

212.3 Extra Pages

Extra pages should be identified by adding a, b, c, and so forth after the page number. The final page submitted should be identified with the sequential letter “x” (for example, 5a, 5b, 5c, 5dx).

22 General Facility Data

221 Page 1: Management Summary and Approval Sheet

221.1 Section A: Projections

Provide the required information using available local data. Delivery data should include city, rural, and highway contract routes, but not post office (PO) box, caller service, or general deliveries. Present and future route information should agree with totals posted on Form 919, page 8, section A. Present and future totals for post office boxes should agree with totals posted on Form 919, page 3, section C. Indicate sources used for population and delivery data on Form 919, page 8, section B. Operations Program Support at the district supplies the delivery data and the Retail Analysis Program (RAP) study data. The district manager of Retail along with the local postmaster provides PO box projections. A PO box survey may be conducted to determine customer requirements prior to projecting future PO box needs.

221.2 Section B: Building and Site Size Requirements

Provide the required information after completing pages 2 through 8. Present data for section B can be obtained from the Facilities Management System for Windows (FMSWIN). FMSWIN identifies building total square feet (sq ft) and total site size information. The 10-year building area should reflect total building square feet, including the lookout gallery (LOG), from page 2, line 8. The 10-year and 20-year site requirements should agree with the figures posted on page 2, lines 17 and 19.

221.3 Section C: Preferred Site Area

Provide information about the preferred site area as required by the approved Facility Planning Concept.

221.4 Section D: Signatures

Complete the form and circulate it to obtain signatures as appropriate for current organizations.

222 Page 2: Gross Building and Site Size Requirements

Provide the required information for present and 10-year net area requirements after completing pages 3 through 8. Compute 10-year gross area using the factors provided. The calculations through line 21 will provide the total site size required. Consult the local real estate specialist about necessary provisions for setbacks, easements, etc. Complete the calculations for recommended minimums for site length and width as indicated on the form.

223 Page 3: Public Service Areas

223.1 Section A: Retail Module

223.11 Determining the Retail Module

223.111 General

For new facilities, use recent RAP studies from several surrounding and demographically similar offices to determine the workload matrix. (The RAP study must be conducted within 1 year of the Retail Planning/Start-Up Questionnaire, and within 2 years of the Decision Analysis Report (DAR).) For a replacement facility or major renovation, notify Operations Program Support that a current RAP study is needed to determine the present number of peak hour transactions and workload. For new facilities, when the existing facility is being retained, submit a RAP study for the existing facility, projecting impacts of the new facility. The number of transactions to be diverted to the new facility from the existing facility must be projected from RAP and other available information. Entries on the Retail Planning/Start-Up Questionnaire and the FPC must be consistent with the RAP study and this handbook unless a deviation is approved. The number of required full-service retail counters is calculated by dividing peak hour workload (from two consecutive 30-minute segments), obtained from the RAP study, by the number 45. The Retail Analysis Program, Forms RAP 2 and RAP 3, are to be submitted as backup along with the Retail Planning/Start-Up Questionnaire and Form 919.

223.112 Projecting the Move-In and 10-Year Workload

With the district manager of Retail, project the workload for move-in and 10 years after based on the population growth rate. The population growth rate can be based on data provided by outside sources, such as a research firm, or local growth information. Use local growth projections, when justified, for new high growth rate areas when local growth percentages exceed that of research information, which may show past years' growth. Enter this information on Form 919, page 8, section B.

223.113 Determining Retail Counter Configuration

For post offices with open merchandising, determine the number of retail workstations and cash registers needed by applying the number of full-service retail counters required to the chart shown in Exhibit 223.113.

223.12 Recommended Self-Service Equipment

The criterion for the type of initial self-service equipment is based on sales anticipated for this facility according to average accounting period (AP) window stamp sales for last fiscal year (FY) for similar facilities, as shown in Exhibit 223.12. Refer to Handbook PO-102, *Retail Vending Operational and Marketing Programs* (section 230 and Exhibit 231.1), which is the authoritative document to determine the criteria for initial placement of stamp vending equipment at postal locations.

Exhibit 223.113
Retail Counter Configuration for Open Merchandising

Full-Service Retail Counters Required[1]	Equivalent Retail Workstations Needed		Postal Scales Needed	Recommended Vending Machines[2]	Retail Modules and Square Footage			PO Box Sections Provided by Retail Module
	Retail Work-stations	Cash Registers (Point of Sale)			Retail Module	Net Sq Ft	Gross Sq Ft	
2	2	0	1		Retail 1	2600	2740	8
3	2	1	1		Retail 1	2600	2740	8
4	3	1	1		Retail 2	3200	3370	16
5	3	1	1		Retail 2	3200	3370	16
6	4	1	1		Retail 3	3500	3665	14
7	4	2	1		Retail 3	3500	3665	14

[1] Determined from the RAP study (see 223.111).

[2] See 223.12 for this data.

Note: *One accessible full-service retail counter will be provided in each facility.*

Exhibit 223.12
Type of Self-Service Equipment Based on Average AP Window Stamp Sales for Last FY

If Previous FY Revenue Is:	Then the Following Equipment Is Required:
$8,005 to $16,935	Stamp vending machine (PS-53C Mod, PS-53D, PS-22)
$8,005 to $16,935	Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, and PS-22)
$8,871 to $16,935	Booklet vending machine with bill acceptor (PBM-2A, PBM-6, PBM-7)
$16,936 to $34,355	Booklet vending machine with bill acceptor (PBM-2A, PBM-6, PBM-7) and Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, PS-22)
$34,356 to $80,845	Booklet stamp vending machine (PBSM-624)
$80,646 to $88,710	Multicommodity machine with bill acceptor (PCM-1625, A and B)
$88,711 to $115,000	Multicommodity machine with bill acceptor (PCM-1625, A and B) and Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, PS-22)
$115,001 up	Multicommodity machine with bill acceptor (PCM-1625, A and B) and Booklet stamp vending machine (PBSM-624)

223.13 Type of Merchandising

223.131 General

Even though all new or renovated retail areas will follow retail standard designs, whether these stores will use open merchandising, limited open merchandising, or closed display must be considered. Generally, open merchandising is to be used for all medium standard building designs (MSBDs) (defined as customer service facilities between 9,000 square feet and 60,000 square feet).

223.132 Deviations

Limited open merchandising and closed displays are to be used only under the following conditions:

a. High crime statistics warrant limited open merchandising or closed display (requires evaluation by division chief inspector).

b. Historic architecture requires preservation of the existing design.

c. Low revenue (less than $500k walk-in revenue is projected).

d. Staffing for the facility consists of only one person.

District managers must request deviations and send them to Headquarters for approval, and also a copy to the area manager of Marketing, as shown in Exhibit 223.132.

Exhibit 223.132
Type of Deviation and Appropriate Managers for Approval

Type of Deviation	Manager at Headquarters
Deviation from standard building design criteria	MANAGER OF DESIGN AND CONSTRUCTION FACILITIES 4301 WILSON BLVD SUITE 300 ARLINGTON VA 22203-1861
Deviation to open merchandising or number of counters	MANAGER OF RETAIL OPERATIONS MARKETING 475 L'ENFANT PLAZA SUITE 4347EB WASHINGTON DC 20260-2442
Deviation to space standards	MANAGER OF FACILITIES PLANNING AND APPROVAL 4301 WILSON BLVD SUITE 300 ARLINGTON VA 22203-1861

223.14 Module Size Calculation

When the type of merchandising method and the retail module have been approved, enter the square footage required for the module on page 3 of Form 919, section A, on the last line. (Total square footage is entered rather than the length required.)

223.2 Section B: PO Box Sections

223.21 Present Situation

List the number of existing post office boxes (by size) installed and rented in the present facility. This data can be taken from the Retail Planning/Start-Up Questionnaire, which is prepared by the district retail specialist. If a waiting list for PO boxes exists, determine the number of customers currently on the waiting list. A PO box study may be conducted by the district manager of Retail to determine customer requirements. The study would include determining customer preferences for size of box, whether the customer is business or residential, and preferences for a PO box at the new location or at the existing location (when the existing facility is being retained).

223.22 Projections

Determine the number of boxes needed now and then the projected move-in and 10-year needs using the population growth factors, current waiting list information, and PO box study information if done. The district retail specialist provides this information on the Retail Planning/Start-Up Questionnaire.

223.23 Calculations

Complete section B using the following steps:

a. Enter the number of boxes for move-in and 10 years after from the Retail Planning/Start-Up Questionnaire.

b. Calculate the number of modules by dividing the number of boxes by the indicated number of boxes per module.

c. Add sufficient blank panels to the move-in “Modules” column so that its total is equal to the 10-year column.

d. Determine the total number of sections required by dividing the number of modules by 5. **Definition:** A post office box module is 2 feet wide and may contain the following boxes based on local needs: 12 number one boxes, 8 number two boxes, 4 number three boxes, 2 number four boxes, or 1 number five box. A section contains five modules stacked vertically and is 2 feet wide.

e. From the total number of sections required, subtract the number of sections provided by the retail module to determine the net additional sections needed (to be entered on last line of section C). For example, the analyst determines that the facility requires 51 sections. Since the analyst determined in section A that a Retail 2 module is necessary, the analyst checks Exhibit 223.113 for Retail 2 and determines that 16 sections are provided. Therefore, the net total sections needed would be 35, which is the difference between the total sections needed (51) and those provided by the retail module (16). The additional 35 sections are recorded at the bottom of section C on page 3.

f. Once the additional sections are determined, multiply by 2 to determine the linear feet required. Compute the linear feet required for both move-in and 10-year number of PO boxes.

223.3 Section C: Parcel Lockers

The calculation of total parcel locker requirements is described in this paragraph. Divide the total linear feet of post office boxes for both move-in and 10 years by 20 and multiply by 2 feet. Round to the next highest even number. This provides sufficient space to use standard post office boxes (size 4 or 5) as parcel lockers. If more parcel lockers are needed, use a multiplier of 3 or 4 and explain why on page 8. (For example, a count of parcel and bundled mail handled during the Function 4 reviews could be used as the rationale.) The use of other lockers can be arranged during the design phase of the project. Combine the number of PO box sections and parcel locker sections required to determine the box lobby extension (BLE) module needed.

223.4 Section D: Office Space Requirements

Office space requirements for MSBDs can be selected from the matrix shown in Exhibit 223.4. Select the appropriate module that most closely matches the requirements.

Exhibit 223.4
Office Space Requirements

Office Spaces	Sq Ft for Customer Services Modules						Sq Ft for Carrier Annex Admin Modules				
	1	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**
1. Postmaster/installation head	160	160	160	160	160	160	160	160	160	160	160
2. Customer service manager	–	–	–	120	–	120	–	–	–	–	–
3. Conference room	–	–	205	–	205	–	–	–	200	200	200
4. General office	–	–	210	80	230	340	240	–	–	–	–
5. Delivery supv. general	–	210	–	210	–	680	–	565	765	1165	1565
6. Unisex toilet	55	50	50	50	50	50	–	–	–	–	–
7. Janitor's closet	50	30	30	30	30	30	–	–	–	–	–
8. Storage/electric closet	50	30	30	30	30	30	–	75	75	75	75
9. MDF/LAN	–	65	65	65	65	65	–	–	–	–	–
10. Storage	–	70	70	70	70	50	–	–	–	–	–
11. Corridor	145	255	350	355	370	455	–	–	–	–	–
TOTAL	**460**	**870**	**1170**	**1170**	**1210**	**1980**	**400**	**800**	**1200**	**1600**	**2000**

223.5 Section E: Lobby Totals

223.51 Summarization of Sections A Through D

Post the present (from page 2) and 10-year retail area requirements from section A of this page on the first line of section E. On line 2 of section E, enter the present and 10-year PO box section and parcel locker requirements from sections B and C on this page. On line 3 of section E, enter square feet for a public service area if it is appropriate (see 223.52). Section D requirements are to be posted directly to line 1b on page 2. Total 10-year lobby area from section E is to be posted to line 1a on page 2.

223.52 Public Service Area

The Randolph Sheppard Act, as amended in 1974, requires that space be provided for a public service stand to be operated by the visually impaired in the following postal facilities:

a. Buildings that serve the public and have 15,000 or more square feet of usable interior space.

b. Buildings where 100 or more employees work during Tour 2 (excluding carriers).

Provide 250 square feet where applicable, located as agreed upon by the Postal Service and the State Licensing Agency.

23 Page 4: Workroom Areas

231 General

231.1 Proposed Functions

Provide space for proposed functions as outlined in the approved Facility Planning Concept.

231.2 Procedures

If originating and/or destinating mail processing distribution is not performed at the facility being surveyed, provide only the minimal space and equipment necessary to consolidate collection and local postmark cancellations and to perform distribution of residue and throwback mail.

231.3 Now-in-Use Space

Obtain now-in-use square footage for the present operation during the on-site visit. Post only totals, by section, for the column, and record the total on page 2.

231.4 Ten-Year Projections

These projections are based on the present population, post office boxes, and carrier operations escalated by growth factors.

231.5 Operational Space Requirements

Use the following information and the data contained in Chapters 4 and 5 to determine specific operational space requirements.

232 Section A: Originating Mail

232.1 Cull, Face, and Cancel Operations

Determine the operational space and equipment required to process existing cancellation volumes. Ten-year needs should be calculated from this base, using the growth factors. Consult with local officials and adjust the figures if necessary. Review workstation units (WSUs) 420001 through 420008a to determine appropriate space requirements.

232.2 Distribution Operations

Determine the space required for manual distribution operations using the originating (letter and flat) first handling pieces (FHP) mail volumes (determined from local records) and the number of now-in-use cases for each as a base. Calculate 10-year needs using this base multiplied by the population growth factor rounded to the next highest number. Calculate space requirements based on 65 square feet per letter case and 150 square feet per flat case.

232.3 Dispatch Area

Provide space for pouching sack rack, banding, and so forth as required, based on the number of dispatch separations needed for move-in and 10-years (WSUs 433001 through 433006).

233 Section B: Destinating Mail

233.1 Considerations

The analyst must consider present and future distribution scenarios (manual and automation) and associated equipment when projecting space for destinating mail processing operations.

233.2 Manual Distribution

Determine the space required for manual distribution using customer service destinating distribution mail volumes (determined from local records) and the number of now-in-use cases for each as a base. Calculate 10-year needs using this base multiplied by the population growth factor rounded to the next highest number. Calculate space requirements based on 65 square feet per letter case and 150 square feet per flat case.

233.3 Automation Distribution

233.31 Delivery Barcode Sorter Equipment

For those locations that will be installing delivery barcode sorter (DBCS) equipment, appropriate space must be considered in the planning stages for a new or upgraded facility to ensure its safe and efficient operation. Due to the fact that there are different models of this equipment, it is necessary to determine the specific manufacturer and model number of the equipment to be installed before space can be planned accurately. After receiving and confirming the manufacturer's name and the model number of the equipment, refer to section 432 of this handbook for information about the footprint of the machine as well as the square footage required for supporting equipment. WSU 432001 provides space for an electro-com automation (ECA) double-sided DBCS, WSU 432002 contains space for an ECA Phase II single-sided DBCS, WSU 432003 provides space for a Martin Marietta DBCS; and WSU 432012 contains space for an ECA DBCS/optical character reader (OCR).

233.32 Carrier Sequence Barcode Sorter Equipment

For those locations that will be installing carrier sequence barcode sorter (CSBCS) equipment, appropriate space must be considered in the planning stages for a new or upgraded facility to ensure its safe and efficient operation. Since the CSBCS is modular in nature and it is anticipated that all machines will ultimately have 17 stackers, allocate space based on the chart in Exhibit 233.32. It is unlikely that an office will receive only one machine. Generally, CSBCSs are deployed in pairs. If an office is to receive more than seven CSBCSs, the installation of DBCSs should be considered. To

determine the space for four or more CSBCSs, combine the appropriate WSUs.

Exhibit 233.32
CSBCS Space Allocation Chart

WSU Number	No. of Machines	No. of Stackers	Sq Ft Required	Maintenance Area Sq Ft	Bullpen Space Sq Ft	Total Sq Ft Required
542004	1	17	373	100	54	527
542005	2	17	660	100	108	868
542006	3	17	946	100	156	1202
542005(2)	4	17	1319	100	198	1617
542005,6	5	17	1606	100	285	1991
542006(2)	6	17	1892	100	295	2287
542005,6	7	17	2265	100	361	2726

234 Section C: Carrier Section

234.1 Carrier 10-Year Projections

Carrier 10-year projections should be developed using an adjusted baseline total. To determine the new baseline for carrier routes, the analyst must reduce the present route totals using the delivery point distribution scenario, where applicable. To establish the 10-year route projection, the analyst would apply the population or mail volume growth factor to the adjusted baseline figure. In some situations, the growth factors must be adjusted to avoid overestimating or underestimating route requirements due to impending route adjustments. Calculations and assumptions for projecting carrier requirements should be recorded on page 8, section B.

Note: Routes will not grow in direct proportion to population growth.

234.2 Carrier Routes

List the facility's total number of carrier routes. Multiply the number of routes, including special delivery routes, projected for 10 years after by 180 square feet for the number of routes that do not exceed 25. For each additional route over 25, provide 130 square feet per route.

Example: Space requirements are being prepared for a new building to house an existing delivery unit that has 33 carrier routes; the total square footage required for these routes would be calculated as follows:

25 routes x 180 sq ft =	4,500 sq ft
8 routes x 130 sq ft =	+ 1,040 sq ft
Total =	5,540 sq ft

Therefore, a total of 5,540 square feet should be planned for the delivery workroom floor area in a new or renovated building with this number of routes.

This method also provides space for ancillary equipment related to the carrier operation (for example, throwback case, carrier key cage, registry cage, carrier supervisor desks, and parcel post distribution area). For more information see Chapter 5.

235 Section D: Other Workroom Areas

235.1 Business Mail Entry Unit Staging

Specific guidelines to determine space for platform acceptance units can be found in the *Business Mail Entry Unit Prototype Design Manual,* Appendix A (BMEU Estimating Procedure). On page 5 of Form 919, select the business mail entry unit (BMEU) module that most closely matches the requirements. Provide additional space in the workroom equal to one-half of the total business mail entry unit size for staging cleared mail for processing. If no module is selected, provide 200 square feet on the workroom. Post this total on Form 919, page 4, section D.

235.2 Investigative Office Space

If the building complement exceeds 20, a criminal investigative office (CIO) totaling 250 square feet will be located as a mezzanine on the workroom. The 250 square feet are subtracted from the subtotal on line E and are then added into the building total on page 2 of Form 919 so that this space is not included in the factor increases. Lookout galleries will not be constructed in facilities with workrooms less than 50,000 square feet. Instead, a closed-circuit television (CCTV) with a dome and/or track system along with recording and other electronic equipment are to be used. A CIO to view the workroom floor and to operate the surveillance system is included in the design. (See Handbook RE-5, *Building and Site Security Requirements.*) The MSBD plans have these requirements programmed into the modules. The chief postal inspector may request, in writing, a nondomicile office. The bathroom is an option and is at the discretion of the inspector in charge.

235.3 Workroom Extension or Overlap

In MSBDs, it is possible with certain module combinations to add a workroom extension or overlap based on the configuration of the modules. This space identifies the net impact of this overlap.

235.4 Carrier Vestibule

Provide 400 square feet for a carrier vestibule when 15 or more carrier routes are projected for 10 years (WSU 520009). Provide two vestibules for 41 or more carrier routes. One vestibule is included in the workroom modules for MSBDs, except for workroom Module Number 1.

236 Lines E Through K

236.1 General

Complete lines E through K as indicated on the form.

236.2 Line I: Workroom Adjustment Factor

Determine the total net workroom area by applying an adjustment factor from the workroom area adjustment chart shown in Exhibit 236.2. These adjustment factors provide allowances for dedicated aisles and columns. Then compute the final net total as indicated on line K. Total space requirements are posted to the appropriate line on page 2.

Exhibit 236.2
Adjustment Factors for Workroom Areas

Workroom Area	Adjustment
0 to 4,999 sq ft	0.20
5,000 to 49,999 sq ft	0.22
50,000 sq ft and over	0.24

236.3 MSBD Workroom Module

MSBD plans have 12 workroom modules that are available, from which one is selected. Exhibit 236.3 shows the net and gross square feet provided by each module.

Exhibit 236.3
Square Footage Provided in MSBD Workroom Modules

Workroom Module	Net Sq Ft	Gross Sq Ft
Workroom 1	3200	3385
Workroom 2	4800	5088
Workroom 3	6000	6360
Workroom 4	8000	8480
Workroom 5	9600	9970
Workroom 6	12000	12480
Workroom 7	14400	14976
Workroom 8	16000	16640
Workroom 9	19200	19968
Workroom 10	22400	23046
Workroom 11	28000	28840
Workroom 12	35200	35935

24 Page 5: Support Areas

241 General

Obtain now-in-use data during the on-site visit. Post this data on page 5 in the appropriate section. Then post now-in-use totals on page 2.

242 Section A: Office Space Requirements

242.1 Private Offices

Enter only additional requested private office space that is not included on page 3 of Form 919. Determine office space from Exhibit 242.1. A private office is provided for supervisors only as required. Space is shown in square feet. This additional space will be shown in the workroom area.

Exhibit 242.1
Square Foot Space Requirements for Additional Private Offices

WSU Number	Level	Office Space Required	Secretary and/ or Receptionist
493004	Postmaster and/or installation head	160[1]	175[2]
493005	Postmaster and/or installation head	120[3]	–
493005	Supervisor	120	–

[1]When retail module is included.

[2]When position is authorized.

[3]Without retail module.

242.2 General Office

The space for executive and administrative schedule (EAS) staff (100 square feet) and clerical staff (75 square feet) is to be provided in an open (general office) area. Reduce the requirement by 30 percent if system furniture is to be used.

243 Section B: Maintenance and Building Service

Exhibit 243a shows the square footage to be provided for each support module of the MSBDs. Exhibit 243b provides square footage requirements for maintenance and building services for other than MSBDs.

Exhibit 243a
Maintenance and Building Service Space Requirements (MSBD)

Support Module	Janitorial Sq Ft	Custodial Supplies Sq Ft	Building & Grounds Sq Ft
1	50	100	150
2	50	120	140
3	50	160	150
4	50	150	150
5	50	170	100
6	75	200	120
7	75	200	200
8	75	200	200
9	75	200	200
10	100	200	200
11	100	200	200

Exhibit 243b
Maintenance and Building Service Space Requirements (Other)

Maintenance and Building Service Areas	Total Lobby and Workroom Square Footage				
	0 to 5,999	6,000 to 12,999	13,000 to 20,999	21,000 to 40,999	41,000 and Up
Janitor's closet	50	50	50	50	100
Custodial supplies	100	150	175	200	250
Building and grounds[1]	100	100	150	200	250
Postal equipment	–	100	300	500	750
Battery charging room[2]	–	–	75	75	150
Stockroom (parts, tools, materials, and mechanical supplies)	–	–	–	–	900
Area maintenance office shop[3]	–	–	–	350	350

[1]Double the square footage requirements if "ride-on" snow clearance equipment is necessary.

[2]Provide only when battery-powered equipment will be used. Verify with local management.

[3]Provide only when area maintenance office (AMO) technician is included in this facility complement.

244 Section C: Storage

244.1 Storage Provided by Module

Exhibit 244.1 shows the square footage to be provided for each type of storage area based on the chosen support module.

Exhibit 244.1
Storage Space Requirement by Support Module (MSBD)

Support Module	Square Feet Required for Storage Areas			
	Postal Equip	Postal Supply	Postal Records	General Storage
1	–	–	–	100
2	–	–	–	150
3	–	–	–	100
4	120	–	–	75
5	120	100	–	–
6	300	150	100	–
7	320	100	100	–
8	320	100	100	–
9	390	220	150	–
10	480	265	160	–
11	480	220	125	–

244.2 Other Storage

Exhibit 244.2 provides square footage requirements for storage space requirements for other than MSBDs.

Exhibit 244.2
Storage Space Requirement by Support Module (Other)

Other Storage Areas	Total Lobby and Workroom Square Footage				
	0 to 5,999	6,000 to 12,999	13,000 to 20,999	21,000 to 40,999	41,000 and Up
General storage	100–150	150	*	*	*
Postal supplies	*	*	100	250	400
Postal records	*	*	100	150	200

** Not planned for this size facility.*

245 Section D: Employee Facilities

245.1 MSBD Square Foot Requirements

Exhibit 245.1 shows the square footage to be provided for each type of employee facility based on the selected support module. Otherwise, follow the general guidelines given in 245.2 through 245.6.

Exhibit 245.1
Square Footage for Employee Facilities (MSBD)

Support Module	Square Feet Required				
	Men's Locker	Women's Locker	Lunchroom	Men's Restroom	Women's Restroom
1	150	170	150	100	100
2	150	170	200	110	110
3	185	200	220	130	130
4	230	240	235	135	135
5	275	285	280	135	135
6	320	310	340	150	150
7	300	310	450	150	150
8	325	335	400	150	150
9	400	410	400	200	200
10	440	450	520	275	275
11	600	610	600	275	275

245.2 Locker Rooms, Nonsupervisor

If neither the male nor female total complement exceeds 10, provide 6 square feet of space per person on the workroom floor for lockers. If either the male or female complement exceeds 10, provide separate locker rooms based on 6 square feet per person. Include 60 square feet in the female locker room for a cot. The minimum size of any locker room is 120 square feet.

245.3 Locker Rooms, Supervisor

If the total number of supervisors is 10 or less, include the supervisors' lockers with the other employees'. If the total number of supervisors is more than 10, provide both male and female supervisors with a locker room. Use the same criteria as for nonsupervisor locker rooms to determine size.

245.4 Lunchroom and Vending Machines

Exhibit 245.4 shows the square footage to be provided for lunchrooms and their vending machines based on number of employees and vending machines. Provide 25 square feet for each vending machine and up to 100 square feet of storage area for three or more machines.

Exhibit 245.4
Lunchroom Space Requirements Based on Number of Employees and Vending Machines

Number Employees	Square Feet Required
0 to 5	100 (workroom area)
6 or more	15 per employee (separate area) plus 25 per vending machine

Note: When sizing lunchrooms, consult with local management to determine the customary use of the lunchroom by carriers during breaks and lunch.

245.5 Contract Driver Room

Provide a minimum of 130 square feet (including 30 feet for a toilet) for 5 or more contract drivers (peak hour).

245.6 Restrooms

Provide space for restrooms as shown in Exhibits 245.6a and 245.6b when the peak hour employee staff projected for move-in and 10 years exceeds five. For facilities with less than six employees (combined male and female employees during peak hour), provide one restroom of 65 square feet (toilet and sink). These criteria are for space planning purposes. The final design, including accessible requirements, will depend on local codes and ordinances. (See Handbook RE-4, *Standards for Facility Accessibility by the Physically Handicapped*.)

Exhibit 245.6a
Restroom Requirements Based on Number of Female Employees

No. of Peak Hour Employees	No. of Toilets	No. of Sinks	Square Feet Required
0 to 10	2	1	65
11 to 24	3	2	100
25 to 35	4	2	125
36 to 55	5	3	175
56 to 75	6	4	225
76 to 95	8	4	275
96 to 114	9	5	325

Exhibit 245.6b
Restroom Requirements Based on Number of Male Employees

No. of Peak Hour Employees	No. of Toilets	No. of Urinals	No. of Sinks	Square Feet Required
0 to 10	1	1	1	65
11 to 24	2	1	2	100
25 to 35	2	2	2	125
36 to 55	3	2	3	175
56 to 75	4	2	4	225
76 to 95	5	3	4	275
96 to 114	5	4	5	325

246 Section E: Miscellaneous Support Areas

246.1 Electrical Room

Provide 100 square feet for an electrical room.

246.2 Workroom Staging Area

Provide 100 square feet for a workroom staging area to be used for delivery confirmation.

246.3 Recycle

If the total complement of employees exceeds 90, provide 175 square feet for a recycle room. For a complement greater than 139, provide 200 square feet.

246.4 Battery Charging and/or Flammable Liquid Storage

Provide 345 square feet for an area for battery charging and flammable liquid storage only in the largest customer service facilities (more than 139 employees).

247 Section F: Business Mail Entry Unit

Specific guidelines to determine space for a business mail entry unit can be found in *Business Mail Entry Unit Prototype Design Manual,* Appendix A (BMEU Estimating Procedure). For an MSBD, select the business mail entry unit module that most closely matches requirements as shown in Exhibit 247. Provide additional space in the workroom equal to one-half of the total business mail entry unit size for staging cleared mail for processing. If no module is selected, provide 200 square feet on the workroom. Post this total on Form 919, page 4, section D.

Exhibit 247
BMEU Square Footage Requirements Based on Number of Daily Transactions

Number of Transactions	BMEU Module	Net Sq Ft Required	Gross Sq Ft Required	Workroom Sq Ft
0 to 19	0	–	–	200
20 to 54	A	280	355	140
55 to 74	B	450	500	225
75 to 100	C	600	700	300

25 Page 6: Platform and Maneuvering Areas

251 Section A: Platform Size

251.1 MSBD Size Requirements

For MSBDs, choose from the matrix in Exhibit 251.1; otherwise, follow the guidelines in 251.2 through 251.5.

Exhibit 251.1
Square Footage and Number of Dock Spaces Provided by Platform Module (MSBD)

Platform Module	Net Sq Ft	Gross Sq Ft	No. of 30″ High Dock Spaces	No. of 50″ High Dock Spaces
1	1,430	1,720	1	1
2	1,745	2,100	2	1
3	2,165	2,600	2	2
4	2,580	3,100	2	3
5	2,900	3,485	3	3

251.2 Now-in-Use Sizes

Determine the square footage of the existing platform during the on-site visit, or use the area as found in FMSWIN. Record the total square footage and post it on Form 919, page 2, line 6.

251.3 Dock Heights

Provide the number of dock spaces and dock heights needed based on the number and type of vehicles using the platform during the peak hour. A visual survey during peak hour activity usually provides the analyst with the data needed for the now-in-use column. Move-in and 10-year projections should be based on these figures. Consult with local management to identify any planned operational changes.

251.4 Platform Length (Tailboard Space)

Calculate the length of the platform by multiplying the number of 30-inch dock spaces by 9 feet and the number of 50-inch dock spaces by 12 feet. If required, add 5 feet to the platform length for a ramp and 4 feet for steps. For large facilities, add an additional set of steps for each 108 linear feet of platform.

251.5 Platform Width

Determine the platform width based on the chart provided in Exhibit 251.5.

Exhibit 251.5
Platform Width Calculation Based on Platform Length

Platform Length (Feet)	Width to Be Provided (Feet)
10 to 18	15
19 to 45	20
46 to 81	35
Over 81	50

Note: When a dock leveler is specified, the platform width must be at least 35 feet.

252 Section B: Carrier Loading Slab

If 15 or more motorized carrier routes are projected to be required within 10 years, provide a covered carrier loading area sufficient to accommodate one-half of the carrier route vehicles, including rural routes. Calculate the square footage required by multiplying the number of carrier routes at move-in and in 10 years by 250 square feet. The 250 square foot criterion provides space for a vehicle plus 10 feet behind the vehicle for loading. Space for these vehicles is to be included (for site size computation) on page 7, section A. Do not provide this data if the facility meets covered Postal Service vehicle parking criteria (see 261.72).

253 Section C: Special Platform Requirements

253.1 Flip Ramps (Electro-Hydraulic)

Provide a face-mounted flip ramp at each 30-inch dock position.

253.2 Dock Levelers (Mechanical)

Provide a pit-mounted dock leveler (6 feet x 10 feet) at all 50-inch dock positions (minimum platform depth is 35 feet).

253.3 Scissors Lift

Consult with local management as to whether or not a scissors lift is required.

253.4 Other

Provide space as required for miscellaneous platform requirements.

254 Section D: Platform Maneuvering Area

254.1 Current Requirements Calculation

Determine the maneuvering area by using the total length of the platform (for combined dock spaces, include steps and ramp if applicable) plus 60 linear feet for end areas (30 feet for each end). Multiply this total by 120 through 150 feet (depth) for facilities receiving vehicles of up to 55 feet in total length. Facilities destined to receive vehicles greater than 55 total feet in length use the 150 feet (depth) figure for calculating the maneuvering area.

254.2 Future Requirements Calculation

Consult with local district Operations Program Support to identify future vehicle requirements for the platform maneuvering area. A maneuvering depth of 80 feet may be adequate for smaller facilities where it is not anticipated that trucks with trailers will be used.

26 Page 7: Parking, Miscellaneous Outside Areas, and Fueling

261 Section A: Number of Parking Spaces

261.1 Customer

As a guideline, provide the following customer parking spaces (if necessary, adjust the number of parking spaces for local conditions and explain on page 8, section B):

a. Three spaces for each retail workstation.

b. One space for every 120 #1 post office boxes; one space for every 50 #2 post office boxes; one space for every 30 #3, #4, and #5 post office boxes (combined).

c. One space for each self-service unit.

d. One space for every 40 carrier routes.

e. One space for each 15 firm callers.

f. Refer to Handbook RE-4, *Standards for Facility Accessibility by the Physically Handicapped,* and the chart in Exhibit 261.1 to determine accessible parking.

Exhibit 261.1
Number of Accessible Parking Spaces Based on Total Customer Parking Spaces

No. of Customer Parking Spaces	No. of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6

Notes:

(1) For up to eight accessible parking spaces, one of them must be a van accessible parking space. For nine or more accessible parking spaces, two of them must be van accessible spaces.

(2) In accordance with the *Community Relations Guide for U.S. Postal Services Facilities Projects,* the Postal Service may waive normal off-street parking requirements for certain facilities.

261.2 Employee

Provide parking spaces for up to 100 percent peak hour, on-duty employees (excluding rural carriers). Add additional spaces for handling tour turnover as required. Refer to Handbook RE-4 and the chart in Exhibit 261.2 to determine accessible parking spaces. Fewer total spaces may be specified depending on local conditions and statutes. Deviations are to be noted on page 8, section B.

Exhibit 261.2
Number of Accessible Parking Spaces Based on Total Employee Parking Spaces

No. of Employee Parking Spaces	No. of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	*
1001 and over	**

** 2 percent of total.*

*** 20 plus one for each 100 employees over 1000. See Note (1) in Exhibit 261.1.*

261.3 Official

Provide parking space as required (passenger-type vehicles) for the postmaster, inspector, etc.

261.4 Rural Routes

Provide one parking space for each rural route. If long-life vehicles are to be deployed for rural delivery, also provide parking as discussed in 261.5.

261.5 Postal Vehicles

Provide parking spaces based on the number and types of vehicles assigned to this facility. Reduce this number by the number of carrier vehicles provided for in section 252.

261.6 Firm Mailers

Provide parking spaces based on the number of large-volume mailers depositing mail at one time.

261.7 Enclosed Parking and Platform

261.71 Enclosed USPS Vehicle Parking

Any new facility within Zone III (see Appendix D) qualifies for enclosed parking. Any new facility within 100 miles south of the Zone III line may be provided with enclosed parking if approved by the district manager. (This provision recognizes that topography can cause local weather conditions that are more severe than those typical for Zone II.) To determine gross square feet, increase the net calculation by 40 percent to allow for circulation, sidewalks, etc. Post adjusted requirements on page 2 and explain net and gross calculations on page 8, section B.

261.72 Covered USPS Vehicle Parking

Provide covered parking (no walls) if the facility falls within the geographic area for enclosed parking but the local climate typically is moderate. Consult with district managers if covered parking is being considered. Take the amount of parking from page 7.

261.73 Enclosed Platform and Headbolt Heaters

Provide an enclosed platform and/or headbolt heaters only if the facility being surveyed will have a significant increase in platform activities over typical operations (full-tour platform operation) and is in an area that meets at least three of the factors shown in Exhibit 261.73.

Exhibit 261.73
Requirements for Providing an Enclosed Platform and Headbolt Heaters

Weather Factors (Normal Means and Extremes)	Breakpoint
Mean daily minimum temperature, October through March	22°F
Mean number of days 32°F or below, annually	180 days
Mean snowfall and sleet, annually	80 inches
Possible number of days at or below 16°F, annually	145 days
Mean number of days with 1 inch or more of snowfall and sleet, annually	22 days

262 Section B: Miscellaneous Outside Areas

262.1 Trash Container

If trash container space is required, provide 360 square feet and enter the figure on line 1. Consult MI AS-550-92-2, *Waste Reduction*, MI AS-550-91-19, *Pollution Prevention Program*, Handbook AS-552, *Pollution Prevention Guide*, and Handbook AS-550-A, *Paper and Paperboard Recycling Guide,* for policies and procedures concerning the handling of trash.

262.2 Snorkel Lane

Consult with local management about snorkel lane space requirements. Provide 2,500 square feet for this function where applicable.

262.3 LOG Entry Area

If the facility being surveyed will require lookout galleries, provide 250 square feet for an outside Inspection Service entry and approach area.

262.4 Outside Storage

Consult with local management about outside storage space requirements. If outside storage of equipment (snow removal, etc.) is required, enter the square footage required on line 4 and explain on page 8, section B.

262.5 Trash Recycling

Consult Handbook AS-552, *Pollution Prevention Guide*, for policies and procedures concerning this program. When warranted, add a 360 square foot pad adjacent to the recycling door for recycling programs.

263 Section C: Vehicle Fueling

New vehicle fueling requirements must be approved by the appropriate functional vice president or vice president of Area Operations. A cost benefit study must be completed to justify provisions for vehicle fueling. The criteria for the study must include, as a minimum, a review of potential environmentally sensitive site characteristics, off-site contract fueling

opportunities, the use of alternative fuels, and total projected product usage. New tank installation and sizing parameters will be determined using the above outlined parameters.

27 Page 8: Local Statistics and Explanatory Notes

271 Section A: Local Statistics

Provide information on local statistics as required. Use local records, data, and an on-site visit to determine baseline information. Project move-in and 10-year delivery data using appropriate growth factors.

272 Section B: Explanatory Note

Use the explanatory notes section to explain any unique local condition or modification to planning data on Form 919, pages 1 through 7. When an explanatory note is used, place the symbol (N) next to the actual square footage or numerical entry. Arrange the explanatory notes in sequence by the page numbers on Form 919. Confine explanatory notes to facts needed to understand the figures on Form 919. Use additional pages if necessary.

3 Preparation of Form 929

31 General

311 Introduction

This chapter contains planning criteria and instructions for completing the computerized Form 929, *Major Facility Planning Data.* Contact Systems/Process Integration or Facilities Planning and Approval at Headquarters for the most recent version of Form 929. Appendix C contains a hard copy of Form 929. The electronic version of Form 929 provides an "Automate Page" icon to input data via dialog boxes; when this chapter mentions an item being automatically calculated, this occurs only when using the electronic version. Therefore, use of the electronic Form 929 is encouraged.

312 Order in Which Form 929 Is Completed

When using the electronic Form 929, the following sequence for preparing the pages will help the analyst develop a smooth flow of information:

a. Page 1 — Employee complement input.

b. Page 2 — Net to gross calculation.

c. Page 3 — Net building space recapitulation.

d. Page 4 — Parking requirements.

e. Page 5 — Office space requirements.

f. Page 6 — Public service areas.

g. Page 7 — Employee facilities.

h. Page 8 — Support areas (general).

i. Page 9 — Maintenance support.

j. Pages 10 through 14 — Workroom area pages are completed using data generated by the site model for evaluating technology alternatives (META) planning model, barcode automation model (BAM), existing workroom layouts, Facility Planning Concept (FPC), recent requirements calls, and operating plan data.

k. Page 15 — Platform (dock) activity.

l. Page 16 — Explanatory notes.

m. Exhibit 1 — Distribution and delivery.

n. Exhibit 2 — Other delivery service.

o. Page 1 — Net Space Summary and Approval.

313 Extra Pages

Identify extra pages by adding a, b, c, etc., after the page number. The final page submitted should be identified with the sequential letter and “x” (for example, 5a, 5b, 5c, 5dx).

314 Facility Information Recapitulation

Information from completed pages 5 through 15 is posted to page 3, Net Building Space Recapitulation, as required. If the project includes a vehicle maintenance facility (VMF), Form 4551, *Projected Fleet Requirements* (computerized version), along with Form 929, pages 4, 5, 6, 7, 8, 9 (present column only), Exhibit 1, and Exhibit 2 can be sent to the facility being surveyed for completion by local officials. These completed forms should be available and should be verified at the time the analyst visits the site to begin preparing the major facility planning data.

32 General Facility Data

321 Page 1: Summary and Approval Sheet

321.1 Sections 1 Through 6: General Data

Provide information as indicated on the form.

321.2 Section 7: Building Net Square Feet Requirements

The information for move-in space is automatically calculated after completing pages 5 through 15. Present data should be compiled using local records available during the on-site visit.

321.3 Section 8: Total Building Employee Complement

Provide the total employee building complement, both male and female, from all functions domiciled in the existing facility.

321.4 Sections 9 and 10: Signatures

Complete as appropriate for the current organization. By signing this form, all signatories certify that the space meets current 10-year requirements unless otherwise indicated in the notes on page 16.

322 Page 2: Net to Gross Calculation

322.1 Data Entered From Other Pages

After pages 3 through 15 are completed, line items 1 through 6, 10 through 14, 18 through 31, and 32 through 34 are automatically calculated. Complete page 2 with necessary inputs on line items 15 and 17 from Form 4551. Line item 42, 20-year expansion, requires an input from the standardization of 20-year site requirement worksheet that is derived from Standard and Poor's DRI population and mail volume growth projections that are obtained from Facilities Planning and Approval, Facilities Program Management, Facilities, Headquarters.

322.2 Fueling Island

If required, 1,800 square feet (sq ft) for each fueling island are automatically calculated on page 2, line item 40. (If a VMF is to be located on the site, fueling island space is included on Form 4551 and should not be listed on this page of Form 929.)

323 Page 3: Net Building Space Recapitulation

323.1 Data Entered From Other Pages

Information is automatically calculated to this page as specified after individual pages of Form 929 are completed. VMF information should be posted to line item 13 from Form 4551.

323.2 Line 10: Enclosed USPS Parking

Any new facility within Zone III (see Appendix D) qualifies for enclosed parking. Any new facility within 100 miles south of the Zone III line may be provided with enclosed parking if approved by the vice president of Area Operations. (This provision is to recognize that topography can cause local weather conditions to be more severe than that which is typical for Zone II). The program automatically calculates the enclosed postal vehicle parking space if line item 10 on page 3 is answered "YES." Space for ramps is included in the calculation. Verify and adjust the space required with the architect-engineer since single-story versus multi-story parking may be required due to site constraints.

323.3 Line 11: Air Mail Concourse

The program automatically calculates the air mail concourse if line item 11 on page 3 is answered "YES," and the correct concourse module number is displayed. The six module sizes are 5000, 7500, 10000, 15000, 20000, and 25000 square feet. For sizing air mail concourses, obtain guidance from Plant Material Handling, Material Handling, Engineering.

323.4 Line 12: Storage Building

If line item 12 is answered as “YES,” 6 percent of the net workroom area will be calculated for holding equipment to be distributed to other facilities and also for storing infrequently used items. However, if a new storage building is not necessary, enter “NO” on line item 12. Consult with local management officials to determine actual needs. The intent of providing a separate building is to reduce construction costs.

324 Page 4: Parking Requirements

324.1 Parking Space by Size of Vehicle

Exhibit 324.1 shows the standard amount of square footage required for each type of vehicle.

Exhibit 324.1
Standard Square Footage for Vehicle Parking Spaces

Type of Vehicle	Square Feet Required
Passenger and station wagon	270
1-ton truck	300
2-1/2-ton truck	330
5-ton truck	500
7- to 9-ton truck	550
Tractor	350
Trailer (20–30 ft)	400
Trailer (30–40 ft)	600
Trailer (more than 40 ft)	800
Bicycle	24
Motorcycle	40
Accessible	390
Long-life delivery vehicle	250

324.2 Lines 1 Through 13: Postal Vehicles

Provide parking spaces for all vehicles required for postal operations based on on-site observation. Allow enough spaces for reasonable growth. Consult with the local operations manager to project 10-year requirements.

324.3 Lines 14, 15, 23, and 24: Official

Provide parking spaces for the passenger vehicles of the plant manager, postmaster, postal inspectors, and other postal employees required to use their own, Postal Service, or General Services Administration (GSA) vehicles for postal business.

324.4 Line 16: Visitor

In addition to the customer parking spaces provided for in line item 20, provide parking spaces for visitor, credit union, and employee assistance program (EAP) persons as required.

324.5 Lines 17 and 19: Employee

Provide for employee parking spaces as follows:

a. Provide the minimum number of spaces in accordance with local ordinances or customs.

b. Provide for 100 percent of peak hour employment except as noted in *c* and *d* below.

c. Provide additional parking spaces for tour turnover as required.

d. If employee use of mass transit or carpooling is common, reduce the amount of employee parking spaces.

e. Provide space for bicycles and motorcycles, in accordance with local customs, on line 19.

324.6 Line 18: Employee (Accessible)

Provide the minimum number of accessible parking spaces in accordance with Handbook RE-4, *Standards for Facility Accessibility by the Physically Handicapped.* The architect-engineer determines the number of accessible parking spaces based on local codes and ordinances.

324.7 Lines 20 and 21: Customer

Provide for customer parking spacing as follows:

a. Provide three spaces for each service counter station.

b. Provide one space for every 120 #1 post office boxes.

c. Provide one space for every 50 #2 post office boxes.

d. Provide one space for every 30 #3, #4, and #5 post office boxes (combined).

e. Provide one space for each self-service postal center (SSPC) or mini-SSPC.

f. Provide two spaces if the facility will have a philatelic sales center.

g. Provide two spaces if the facility is an acceptance post office for Express Mail. Add one additional space if the facility is designated an Express Mail label pickup point.

h. Provide one space for every 40 carrier routes.

i. Provide one space for each 15 firm callers.

j. See 324.6 for accessible parking requirements.

k. If the new facility is to be located in an urban area where other facilities of a similar type (such as banks) normally do not provide on-site parking, the criteria for customer parking space may be waived.

l. If the facility will house a business center, the analyst should survey for specific requirements.

324.8 Lines 22a and 22b: Business Mail Entry Unit and Firm Caller Customers

Provide the number of spaces needed away from the platform as determined by visual observation. Consult with local management to determine the projected needs for business mail entry unit (BMEU) and firm caller customer parking. See the *Business Mail Entry Unit Prototype Design Manual,* Appendix A (BMEU Estimating Procedure), for present needs.

324.9 Lines 25 Through 31: VMF

If the new project includes a VMF, obtain parking information from the completed Form 4551 (see section 314).

325 Page 5: Administrative Space Requirements

325.1 General

The standard office criteria discussed in the following sections have been developed for administrative offices for area offices, processing and distribution centers (P&DCs), processing and distribution facilities (P&DFs), district offices, Inspection Service, and other facilities requiring administrative space. Using the same criteria, standard office space modules have been developed for plants. The analyst must select the appropriate module for plant administration based on the P&DC or P&DF category or level. Administrative space will then be calculated electronically.

325.2 Office Space

325.21 General

For area offices and office space *not* located with plants, use the data from 325.22. See 325.5 for Inspection Service space *not* included in the plant.

325.22 Private Office Space

As a rule, certain human resources positions require confidentiality due to the nature of their work. Private offices of 120 square feet should be provided for senior labor relations specialists, labor relations representatives, equal employment opportunity (EEO) specialists, counselors and investigators, and senior injury compensation specialists. Provide a conference or meeting room of 120 square feet for remaining human resources staff, who may periodically need a private consultation area. Where remaining staff exceed four human resources staff, provide an additional conference or meeting room of 120 square feet. List private offices individually. All other private office space required by field positions must be justified individually by the installation head. Determine *private* office space from Exhibit 325.22 (space shown in square feet).

Exhibit 325.22
Private Office Space Requirements

Position	Office Space	Secretary[1] and/or Reception Area	Total Square Feet
Vice president of Area Operations	270	225	495
District manager	220	225	445
Postal career executive service (PCES) postmaster	220	225	445
PCES plant manager	220	225	445
PCES air mail center (AMC) manager	220	225	445
Executive and administrative schedule (EAS) plant manager (P&DC)	180	175	355
PCES office manager	160	175	355
EAS postmaster	160	175	335
EAS plant manager (P&DF)	160	175	335
EAS AMC/air mail facility (AMF) plant manager	160	175	335
EAS manager (direct report[2] to district manager or P&DC plant manager)	160	75	235
EAS manager (direct report[2] to P&DF plant manager)	120	–	120
Supervisor (if private office is required)	120	–	120

[1]Where dedicated position exists.

[2]These requirements exclude offices for managers of Distribution Operations and managers of Maintenance, who have space provided adjacent to the workroom and support areas, respectively.

Note: In those leased buildings where there are no workout facilities, space may be allowed for changing rooms with showers and lockers for senior executives.

325.23 General Office Space

Combine general office space requirements by functional area. Provide 100 square feet for each EAS employee having staff or program responsibility. Provide 75 square feet for secretarial or other clerical positions in the general office. List any atypical equipment requiring space, such as drafting tables, blueprint files, computer-assisted drafting (CAD) workstation, etc. Provide 75 to 100 square feet as needed for each atypical equipment area.

325.3 Office Support Space

325.31 Filing Space

Nonessential or infrequently accessed files should be archived or disposed of as prescribed by retention policy. Space for the remaining files needed in the work area should be determined by allowing approximately 1 square foot for every linear foot of files. For example, allow 12 square feet for each 4 to 5 drawer lateral file cabinet. Lektriever® or other file storage and retrieval systems (S&RSs) can reduce floor filing space significantly, but may have floor load restrictions. Allow 150 square feet for each S&RS.

325.32 Office Supplies

Allow 150 square feet for an office supply area for the first 50 administrative employees. Allow another 50 square feet for each additional increment of 50 employees, up to 250 square feet maximum.

325.33 Conference Area

Do not plan designated conference rooms for any individual. Determine the total conference area requirement using the following formula:

No. of Administrative Employees in Office Area x 55% = Total No. of Seats
Total No. of Seats x 25 Square Feet per Seat = Total Conference Area

The total conference area requirement may be satisfied with several satellite conference rooms or one large conference area that can be subdivided.

325.34 Reference Room

Provide 150 square feet for access to manuals, directives, publications, etc., for the first 50 administrative employees. Provide an additional 50 square feet for each additional increment of 50 employees, up to 250 square feet maximum.

325.35 Mail and Copy Room

Provide 200 square feet for a mail room and photocopy center for the first 50 administrative employees. Provide an additional 50 square feet for each additional increment of 50 employees, up to 300 square feet maximum.

325.36 Break and Lunch Area

If an administrative area is located within a plant, provide 100 square feet for a break room. If administrative space is not located at the plant, such as a district office, provide a lunchroom based on the following: multiply 25 percent of administrative employees at peak hours by 15 square feet per person. Add 15 square feet for each vending machine required. This is the total area to be provided for a lunch area.

325.37 Main Distribution Frame and Local Area Network Room

Provide a minimum of 200 square feet for a local area network (LAN) for the first 50 employees. Add an additional 50 square feet when the number of employees exceeds 50, for a maximum of 250 square feet. Provide a main distribution frame (MDF) room of 250 square feet for universal wiring. Provide an additional 40 square feet per floor for an immediate distribution frame. The MDF and LAN room may be combined. This will serve all administrative areas, excluding the Inspection Service, if applicable, which requires a separate LAN room.

325.38 Employee Assistance and Training

325.381 Employee Assistance Program

Determine if an EAP office is to be located in the plant or off-site. Provide space based on the criteria shown in Exhibit 325.381.

Exhibit 325.381
Square Footage Required for EAP Office

Employees Served	Counselors	Square Feet Required
300 to 1,500	1	390
1,501 to 5,000	2	600
5,001 and more	3	750

325.382 **Postal Educational Development Center**

Provide space for a postal educational development center (PEDC) as shown in Exhibit 325.382 when 2,000 or more employees are served. When a PEDC is not required or authorized, provide a study room of 200 square feet, a classroom of 200 square feet, a scheme examination room of 120 square feet, a storage area of 120 square feet, and a training console area calculated as detailed in Exhibit 325.382.

Exhibit 325.382
Square Footage Required for PEDC

Type of Area	Square Feet Required
Manager (if authorized)	120
Secretary (if authorized)	75
Reception area	100
Classroom	440
Library or self-study	420
Storage	225
Scheme examination	120
Training consoles	45 per console

325.4 Credit Union

Provide credit union space only if this function is to be located at the facility. Allow a minimum of 150 square feet, plus 50 square feet for each credit union employee on duty. Provide 90 square feet for an automatic teller machine if one is authorized by the credit union.

325.5 Inspection Service Office Space Standards

325.51 Office Space

This section sets forth the maximum space allowed for Inspection Service offices. The actual requirements will vary from location to location. The chief inspector approves all requests for Inspection Service office space based on need and the number of personnel assigned to an office and its operations. When approved, the following space criteria will apply. 180 square feet for a one-person nondomicile office is automatically provided, which includes office, restroom, and covert entrance to the office. In addition, a criminal investigative office (CIO) is located on the second floor mezzanine level and

has 250 square feet with a connection between both office spaces. Space for stairs to the CIO is provided in addition to the 250 square feet. If the workroom is larger than 50,000 square feet, a spine of gallery is provided to give access to the workroom floor. Determine private office space (shown in square feet) from Exhibit 325.51.

Exhibit 325.51
Inspection Service Office Space Standards

Position	Office Space	Secretary and/or Reception Area	Total Square Feet Required
Inspector in charge	250	225	475
Inspection service operations support group (ISOSG) manager	250	225	475
Assistant inspector in charge	180	–	180
Team leader	160	–	160
Postal inspector	120	–	120
Administrative specialist	120	–	120
Operations coordinator	120	–	120
Shared workstations	45	–	45

Note: Provide nonprivate space for secretarial and clerical positions in accordance with the standards in 325.23.

325.52 Filing Space

Nonessential or infrequently accessed files should be archived or disposed of as prescribed by retention policy. Space for the remaining files needed in the work area should be determined by allowing approximately 1 square foot for every linear foot of files. For example, allow 12 square feet for each 4 to 5 drawer, lateral file cabinet. Lektriever or other file S&RSs can reduce floor filing space significantly, but may have floor load restrictions. Allow 150 square feet for each S&RS.

325.53 Customer Reception Area

Provide up to 150 square feet for a secure waiting area.

325.6 Other Inspection Service Space

325.61 Inspection Systems

325.611 Information Systems and Wiring

Provide a minimum of 200 square feet for a LAN for the first 50 employees. Add an additional 50 square feet when the number of employees exceeds 50, for a maximum of 250 square feet.

325.612 Computer Personnel

If applicable, provide 200 square feet for a computer maintenance area and stockroom plus 55 square feet for each computer systems analyst programmer (CSAP) and computer programmer analyst specialist (CPAS)

requiring office space. For each additional CSAP and CPAS, provide 150 square feet plus 55 square feet for each individual requiring office space.

325.62 Operations

325.621 Criminal Information Processing Center

If applicable, for each terminal in the criminal information processing center provide 45 square feet plus 1 square foot for each linear foot of storage. This is to be a secure area.

325.622 Criminal Processing Area and Holding Area

If applicable, provide 120 square feet for the first five Inspection Service teams for criminal processing, plus 60 square feet for a holding area. Provide another 120 square feet for criminal processing for each additional five teams or increments thereof, plus 60 square feet for a holding area.

325.623 Evidence Room

Provide 1 square foot of storage for each linear foot of evidence, plus 120 square feet of space for reviewing the evidence. Evidence must be kept in a secure area and separate from forfeiture materials.

325.624 Forfeiture Room

If applicable, provide 1 square foot of storage for each existing linear foot of materials plus 120 square feet for reviewing the material. Forfeiture material must be kept in a secured area.

325.625 Interview and Polygraph Room

For the first ten inspectors provide 120 square feet for an interview and polygraph room. Add an additional 120 square feet for each additional ten inspectors or increment thereof.

325.63 Conference Rooms

Provide space for conference rooms based on the standard in 325.33. Inspection Service staff should be counted separately from other administrative staff.

325.64 Break Room and Lunchroom

Provide space for a break room by multiplying 25 percent of administrative employees at peak by 15 square feet per person. Inspection Service staff should be counted separately from other administrative staff. Add 15 square feet for each vending machine required. Add space for a counter and sink if vending machines are not used.

325.65 Administrative

325.651 Reference and Library Room

Provide space for a reference room or library as discussed in 325.34.

325.652 Office Supplies

Provide space for office supplies as discussed in 325.32.

325.653 Mail and Copy Room

Provide space for a mail room and photocopy center as discussed in 325.35.

325.654 **Shredder Room**

If applicable, provide 120 square feet for a shredder room.

325.655 **Test Preparation Room**

If applicable, provide 150 square feet for a test preparation room for each domicile office that has an internal crimes team.

325.656 **Security Engineering Technician Maintenance and Stockroom**

If applicable, provide 300 square feet for the first security engineering technician (SET) maintenance area and stockroom. Provide 150 square feet for each additional SET area and stockroom. Add an additional 55 square feet per individual for office space.

325.657 **Video Taping Room**

Provide 120 square feet for a video taping room for the first 50 inspectors. Provide an additional 50 square feet for each increment of 50 inspectors.

325.658 **Physical Fitness Room**

If applicable, provide 400 square feet for a physical fitness room for the first 50 inspectors. Provide an additional 100 square feet for each increment of 50 inspectors.

325.659 **Shower Room and Lockers**

Provide 100 square feet for each shower facility per 50 female employees. Provide 100 square feet for each shower facility per 50 male employees. Provide 6 square feet for each locker required.

325.7 Threat Management Equipment and Ammunition Storage

Provide space for storage of weapons and threat management equipment based on the equipment currently being stored. Provide 100 square feet for a qualified armorer. Provide 150 square feet in each domicile where large quantities of qualification ammunition are stored. Ammunition and weapons are not to be stored in the same area.

325.8 Security Force Facilities

325.81 Control Center

Provide 500 square feet for the control center for the first 50 inspectors. Provide an additional 250 square feet for each additional increment of 50 inspectors, up to a maximum of 1,000 square feet when inspectors exceed 100.

325.82 Criminal Processing and Holding Areas

Provide 120 square feet for a criminal processing area, plus 60 square feet for a holding room.

325.83 Filing Space

Provide filing space as discussed in 325.31.

325.84 Break Room and Lunchroom

Provide space for a break room and lunchroom as discussed in 325.36.

325.85 Roll Call Area

Provide 10 square feet for each postal police officer on duty during peak hours for a roll call area.

325.86 Mail and Copy Room

Provide space for a mail room and photocopy center as discussed in 325.35.

325.87 Weapons Storage and Loading or Unloading Area

Provide 150 square feet for weapons storage and a loading or unloading area.

325.88 Shower Room and Lockers

Provide 100 square feet for each shower facility per 50 female employees.
Provide 100 square feet for each shower facility per 50 male employees.
Provide 6 square feet for each locker required.

325.9 Computations

325.91 Contingency Space

Page 5...x is used to total all previous page 5 computations. An additional 5 percent of this total is automatically calculated for contingency office space. The minimum contingency space is 200 square feet.

325.92 Net-to-Gross Adjustments

For administrative space in leased buildings, add 25 percent to the total net area to adjust for circulation, aisles, interior partitions, and access within the office area. For new construction, use a 40 percent net-to-gross factor on page 2 of Form 929.

326 Page 6: Public Service Areas

326.1 Assessing the Need for Retail Window Services

It is critical for retail window services to be in an easily accessible site for customers, conveniently located where customers shop. Retail location needs are often not compatible with processing and distribution (P&D) location requirements. Retail window services should neither be routinely planned nor automatically included in new P&D facilities, unless a retail study indicates a need and justification. The retail study would be provided by the district retail office. If there is a retail need, contract postal units (CPUs) and other alternatives should be considered before planning a classified retail unit. Placing retail units in AMCs and AMFs must be considered on a case-by-case basis. If an AMC or an AMF is located near the main terminal or on a main access thoroughfare, then a full window service retail unit may be justified.

326.2 Section A: Retail Module

326.21 Determining the Retail Module

326.211 General

For new facilities, use recent Retail Analysis Program (RAP) studies from several surrounding and demographically similar offices to determine the workload matrix. (The RAP study must be conducted within 1 year of the Retail Planning/Start-Up Questionnaire, and within 2 years of the Decision Analysis Report (DAR).) For a replacement facility or major renovation, notify Operations Program Support that a current RAP study is needed to determine the present number of peak hour transactions and workload. For new facilities, when the existing facility is being retained, submit a RAP study for the existing facility, projecting impacts of the new facility. The number of transactions to be diverted to the new facility from the existing facility must be projected from RAP and other available information. Entries on the Retail Planning/Start-Up Questionnaire and the FPC must be consistent with the RAP study and this handbook unless a deviation is approved. The number of required full-service retail counters is calculated by dividing peak hour workload (from two consecutive 30-minute segments), obtained from the RAP study, by the number 45. The Retail Analysis Program, Forms RAP 2 and RAP 3, are to be submitted as backup along with the Retail Planning/Start-Up Questionnaire and Form 929.

326.212 Projecting the 10-Year Workload

With the district manager of Retail, project the workload for 10 years after based on the population growth rate. The population growth rate can be based on data provided by outside sources, such as a research firm, or local growth information. Use local growth projections, when justified, for new high growth rate areas when local growth percentages exceed that of research information, which may show past years' growth. Enter this information on Form 929, page 6, section A.

326.213 Determining Retail Counter Configuration

For post offices with open merchandising, determine the number of retail workstations and cash registers needed by applying the number of full-service retail counters required to the chart shown in Exhibit 326.213.

326.22 Type of Merchandising

326.221 General

Even though all new or renovated retail areas will follow retail standard designs, whether these stores will use open merchandising, limited open merchandising, or closed display must be considered.

Exhibit 326.213
Retail Counter Configuration for Open Merchandising

Full-Service Retail Counters Required[1]	Equivalent Retail Workstations Needed		Postal Scales Needed	Recommended Vending Machines[2]	Retail Modules and Square Footage			PO Box Sections Provided by Retail Module
	Retail Work-stations	Cash Registers (Point of Sale)			Retail Module	Net Sq Ft	Gross Sq Ft	
2	2	0	1		Retail 1	2600	2740	8
3	2	1	1		Retail 1	2600	2740	8
4	3	1	1		Retail 2	3200	3370	16
5	3	1	1		Retail 2	3200	3370	16
6	4	1	1		Retail 3	3500	3665	14
7	4	2	1		Retail 3	3500	3665	14

[1]*Determined from the RAP study (see 326.211).*

[2]*See 326.3 for this data.*

Note: *One accessible full-service retail counter will be provided in each facility.*

326.222 **Deviations**

Limited open merchandising and closed displays are to be used only under the following conditions:

a. High crime statistics warrant limited open merchandising or closed display (requires evaluation by division chief inspector).

b. Historic architecture requires preservation of the existing design.

c. Low revenue (less than $500k walk-in revenue is projected).

d. Staffing for the facility consists of only one person.

District managers must request deviations and send them to Headquarters for approval, and also a copy to the area manager of Marketing, as shown in Exhibit 326.222.

Exhibit 326.222
Type of Deviation and Appropriate Managers for Approval

Type of Deviation	Manager at Headquarters
Deviation from standard building design criteria	MANAGER OF DESIGN AND CONSTRUCTION FACILITIES 4301 WILSON BLVD SUITE 300 ARLINGTON VA 22203-1861
Deviation to open merchandising or number of counters	MANAGER OF RETAIL OPERATIONS MARKETING 475 L'ENFANT PLAZA SUITE 4347EB WASHINGTON DC 20260-2442
Deviation to space standards	MANAGER OF FACILITIES PLANNING AND APPROVAL 4301 WILSON BLVD SUITE 300 ARLINGTON VA 22203-1861

326.23 Module Size Calculation

When the type of merchandising method and the retail module have been approved, enter the square footage required for the module on page 6 of Form 929, section F under Total Retail SF. (Total square footage is entered rather than the length required.)

326.3 Section B: Recommended Vending Description

The criterion for the type of initial self-service equipment is based on sales anticipated for this facility according to average accounting period (AP) window stamp sales for last fiscal year (FY) for similar facilities, as shown in Exhibit 326.3. Refer to Handbook PO-102, *Retail Vending Operational and Marketing Program* (section 230 and Exhibit 231.1), which is the authoritative document to determine the criteria for initial placement of stamp vending equipment at postal locations.

Exhibit 326.3
Type of Self-Service Equipment Based on Average AP Window Stamp Sales for Last FY

If Previous FY Revenue Is:	Then the Following Equipment Is Required:
$8,005 to $16,935	Stamp vending machine (PS-53C Mod, PS-53D, PS-22)
$8,005 to $16,935	Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, and PS-22)
$8,871 to $16,935	Booklet vending machine with bill acceptor (PBM-2A, PBM-6, PBM-7)
$16,936 to $34,355	Booklet vending machine with bill acceptor (PBM-2A, PBM-6, PBM-7) and Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, PS-22)
$34,356 to $80,845	Booklet stamp vending machine (PBSM-624)
$80,646 to $88,710	Multicommodity machine with bill acceptor (PCM-1625, A and B)
$88,711 to $115,000	Multicommodity machine with bill acceptor (PCM-1625, A and B) and Stamp vending machine with bill acceptor (PS-53C Mod, PS-53D, PS-22)
$115,001 up	Multicommodity machine with bill acceptor (PCM-1625, A and B) and Booklet stamp vending machine (PBSM-624)

326.4 Section C: Post Office Boxes

326.41 Present

List the number of existing post office boxes (by size) installed and rented in the present facility.

326.42 Projected

Determine the number of boxes needed now, and then project 10-year needs using population and business growth factors. Consult with local officials concerning post office box deployment programs and adjust totals accordingly.

326.43 Calculations

Complete section C as follows:

a. Enter the number of boxes for 10 years after.

b. Calculate the number of modules by dividing the number of boxes by the indicated number of boxes per module.

c. Determine the total number of sections required by dividing the number of modules by 5. **Definition:** A post office (PO) box module is 2 feet wide and may contain the following boxes based on local needs: 12 number one boxes, 8 number two boxes, 4 number three boxes, 2 number four boxes, or 1 number five box. A section contains five modules stacked vertically and is 2 feet wide.

d. From the total number of sections required, subtract the number of sections provided by the retail module to determine the net total. For example, the analyst determines that the facility requires 51 sections. Since the analyst determined in section A that a Retail 2 workstation will be necessary, the analyst checks Exhibit 326.213 for Retail 2 and determines that it provides 16 sections. Therefore, the net total sections would be 35, which is the difference between the total sections needed (51) and those provided by the retail module (16). The additional 35 sections are recorded at the bottom of section C on Form 929.

e. Once the additional sections are determined, multiply by 2 to determine the linear feet required. Compute the linear feet required for the 10-year number of PO boxes.

326.5 Section D: Parcel Lockers

The calculation of total parcel locker requirements is described in this paragraph. Divide the total linear feet of post office boxes for 10 years by 20 and multiply by 2 feet. Round to the next highest even number. This provides sufficient space to use standard post office boxes (size 4 or 5) as parcel lockers. If more parcel lockers are needed, use a multiplier of 3 or 4 and explain why on page 16. The use of other lockers can be arranged during the design phase of the project. Combine the number of box sections and parcel locker sections required to determine the box lobby extension (BLE) module needed. Identify the module in the left-hand column.

326.6 Section E: Space Planning Factor

Since Retail Module 1, 2, or 3 was selected in section A, the net square footage for this module was entered under SF 10-yr. There is no need to record the total length of equipment and multiply by the space planning

factor. From sections C and D, however, enter the total BLE and multiply by the space planning factor of 22 to determine the square footage required.

326.7 Section F: Lobby Area Totals

326.71 Miscellaneous Functions

Provide operation space as required for identified miscellaneous needs (window superintendent's office, food stamps, passport, window service technician, philatelic, vending equipment, and photocopy machines). Coordinate with local officials to obtain this information and explain it on page 16. Now-in-use data for present operations should be compiled during the on-site visit.

326.72 Public Service Area

The Randolph Sheppard Act, as amended in 1974, requires that space be provided for a public service stand to be operated by the visually impaired in the following postal facilities:

a. Buildings that serve the public and have 15,000 or more square feet of usable interior space.

b. Buildings where 100 or more employees work during Tour II (excluding carriers).

Provide 250 square feet where applicable, located as agreed upon by the Postal Service and the State Licensing Agency.

327 Page 7: Employee Facilities

Information on the number of employees is used to calculate space required by workroom module size for lockers, lunchroom, multipurpose room, and vending storage. The total locker room square footage is determined by workroom size and employee ratios (male and female) that are entered on page 1. This calculation includes a 17 percent contingency for growth, temporary employees, ratio changes, etc. Carrier lockers are provided automatically based on the number of routes. Enter the present space requirements and employee complement. The space needed to support the workroom module is automatically calculated as shown in Exhibit 327.

328 Page 8: Support Areas (General)

328.1 Criteria

Enter the present space requirements for the workroom's general support areas, and the new space requirements for 10 years (which are available the day of move-in) for these areas are automatically calculated in accordance with Exhibit 328.1.

Exhibit 327

Employee Facility Space Requirements Calculated on Workroom Module Size

Workroom Size ((Sq Ft)	Total No. of Lockers	Lunchroom (Sq Ft)	Multipurpose Room (Sq Ft)	Vending Storage (Sq Ft)
60,000	250	1,200	200	120
75,000	300	1,500	200	120
87,500	360	1,750	300	120
100,000	470	2,000	400	150
112,500	520	2,250	400	150
135,000	560	3,500	500	150
150,000	620	4,500	600	175
175,000	730	5,250	800	175
210,000	870	6,000	1,000	200
240,000	990	6,500	1,200	200
260,000	1,210	6,500	1,400	250
292,500	1,320	7,500	1,400	250
325,000	1,450	8,000	1,600	250
350,000	1,550	8,500	1,800	250
375,000	1,600	9,250	1,800	250
400,000	1,650	10,000	2,000	250

Exhibit 328.1

Support Area Space Requirements Calculated on Workroom Module Size

Workroom Size (Sq Ft)	Archived Paper (Sq Ft)	General Storage (Sq Ft)	Mail Proc. Eqpmnt (Sq Ft)	Express Mail/Firm Caller (Sq Ft)	Platform Supv. (Sq Ft)	MDO (Sq Ft)	SDO (Sq Ft)	Supv. Break Room (Sq Ft)	PSDS (Sq Ft)	Computer Room (Sq Ft)
60,000	240	1,800	3,000	240	240	395	265	265	700	1,000
75,000	300	2,250	3,750	240	240	395	265	265	700	1,250
87,500	350	2,625	4,375	240	240	395	265	265	700	1,500
100,000	400	3,000	5,000	240	240	395	265	265	700	1,500
112,500	450	3,375	5,625	240	240	515	375	375	800	1,500
135,000	540	4,050	6,750	240	240	515	375	375	800	2,000
150,000	600	4,500	7,500	420	420	635	375	375	900	2,500
175,000	700	5,250	8,750	420	420	635	375	375	900	2,500
210,000	840	6,300	10,500	420	420	635	495	495	900	2,500
240,000	960	7,200	12,000	420	420	635	495	495	1,000	2,500
260,000	1,040	7,000	13,000	420	420	635	495	495	1,000	2,500
292,500	1,170	8,775	14,625	420	420	635	495	495	1,000	2,500
325,000	1,280	9,750	16,250	420	420	635	495	495	1,000	2,500
350,000	1,400	10,500	17,500	420	420	635	495	495	1,100	2,500
375,000	1,500	11,250	18,750	660	660	635	605	605	1,100	3,000
400,000	1,600	12,000	20,000	660	660	635	605	605	1,200	3,000

328.2 Section A: Storage

When the present workroom space requirements are entered, the 10-year space requirements (which are available as of the day of move-in) for each of the following storage areas are automatically calculated:

a. Archived paperwork.

b. General supplies (noncustodial).

c. Mail processing equipment.

d. Other.

328.3 Section B: Miscellaneous

328.31 Specific Miscellaneous Spaces

When the present workroom space requirements are entered, the 10-year space requirements (which are available as of the day of move-in) for each of the following miscellaneous areas are automatically calculated:

a. Express Mail and firm caller (combine this space with the BMEU).

b. Platform supervisor and vehicle dispatch (to be elevated on the platform).

c. Manager of Distribution Operations (MDO).

d. Supervisor of Distribution Operations (SDO).

e. Supervisor break room.

f. Postal Source Data System (PSDS) data collection site.

g. Computer room (includes space for process control systems (sack sorting machine (SSM), parcel sorting machine (PSM), and tray system controls), national directory support system (NDSS), air contract data collection system (ACDCS), remote barcoding system (RBCS), and universal wiring mainframe.

328.32 Other Miscellaneous Spaces

When the present workroom space requirements are entered, the 10-year space requirements (which are available as of the day of move-in) for each of the following miscellaneous areas are automatically calculated:

a. Label room: 500 square feet are provided.

b. SSPC clerk or technician: 350 square feet are provided.

c. Contract drivers: 160 square feet (includes 60 square feet for a restroom) are provided.

d. Telephone switching equipment: 250 square feet are provided.

e. Rewrap room: 200 square feet are provided.

328.4 Section C: Business Mail Entry Unit

Space requirements for a BMEU will be determined using the computation model contained in the *Business Mail Entry Unit Prototype Design Manual,* Appendix A (BMEU Estimating Procedure). The analyst must enter the BMEU module that meets or exceeds the computation model results, and the workroom square footage requirements will be automatically calculated in this section of Form 929 (see Exhibit 328.4). The analyst should verify computed square footage with the area office before determining the required BMEU module.

Exhibit 328.4
BMEU Workroom Space Requirements

BMEU Square Feet Required	BMEU Module	Workroom Square Feet Required
2,000	1	500
3,000	2	1,000
4,000	3	1,000
5,000	4	2,000
6,000	5	2,000
7,000	6	3,000
8,000	7	3,000

328.5 Section D: Computerized Forwarding System

The analyst must enter the computerized forwarding system (CFS) module number, and the workroom square footage will be automatically calculated in this section of Form 929 (see Exhibit 328.5). Module layouts are listed in workstation units (WSUs) 482001 through 482005. The analyst should consult with the responsible Headquarters unit before determining the required CFS module.

Exhibit 328.5
CFS Workroom Space Requirements

Square Feet Required	CFS Module	CFS Type	Workroom Square Feet Required
3,000	1	Small	50
4,500	2	Medium	100
6,500	3	Medium-Large	200
8,925	4	Large	300
10,000	5	Jumbo	300

328.6 Section E: Stamp Distribution Office

The analyst must enter the selected Stamp Distribution Office (SDO) module, and the square footage for the office and the space for the vault will be automatically calculated in this section of Form 929 (see Exhibit 328.6). The analyst should consult with the responsible Headquarters unit before determining the required SDO module.

Exhibit 328.6
SDO Space Requirements

SDO Module	Square Feet Required
1	1,000
2	1,600
3	2,500
4	3,000
5	4,000
6	5,000

329 Page 9: Maintenance Support

329.1 Section A: Offices

The total maintenance office space is automatically determined by the maintenance area shops and storage areas supporting the facility (see layout corresponding with maintenance areas when developed).

329.2 Section B: Shops and Storage

329.21 Procedure

The square feet for the shops and storage are based on the workroom module number shown on the bottom right of page 14. Form 929 automatically calculates the required space after the workroom size has been determined. (See layout corresponding with maintenance shops when developed.)

329.22 Criteria

Exhibits 329.22a and 329.22b indicate the square footage allocated for shop and storage areas provided for each workroom module number, which is determined when all workroom space requirements have been completed. These exhibits are presented as a matrix, in which the first two rows are read across. Then when the workroom size needed is selected, read the rest of the table down the selected column.

Exhibit 329.22a

Shop and Storage Space Requirements Based on Workroom Module Numbers 1 Through 8

Workroom Module	1	2	3	4	5	6	7	8
Workroom Size (Sq Ft)	**60,000**	**75,000**	**87,500**	**100,000**	**112,500**	**135,000**	**150,000**	**175,000**
Shop and Storage Areas	**Square Footage Allocated Based on Workroom Size**							
Stockroom	2,100	2,250	2,400	2,500	2,650	2,850	3,000	3,250
Custodial storage	420	470	530	580	630	720	780	880
Custodial closets	250	300	350	400	450	550	600	700
Bldg. and grounds storage	560	640	720	800	880	1,020	1,100	1,260
General shop	1,020	1,120	1,220	1,300	1,380	1,540	1,660	1,820
Electrical shop	–	–	–	400	420	440	460	480
Carpenter shop	–	–	–	–	–	–	–	380
Carpenter shop storage	–	–	–	–	–	–	–	380
Paint shop	–	–	–	–	–	–	–	480
Paint shop storage	–	–	–	–	–	–	–	140
Training room and library	250	300	350	400	450	550	600	700
Flammable storage	250	300	350	400	450	550	600	700
Machine shop	-	-	-	-	-	800	860	920
Area maintenance office shop	350	350	350	350	350	400	400	400
Battery charging room	340	390	460	510	560	640	700	800
Mailbox repair shop	350	350	350	350	350	400	400	400
Electronics room	250	300	350	400	450	550	600	700
Maintenance locker room	360	360	360	400	480	480	600	600
Total Sq Ft	**6,500**	**7,130**	**7,790**	**8,790**	**9,500**	**12,510**	**13,460**	**16,250**

Exhibit 329.22b

Shop and Storage Space Requirements Based on Workroom Module Numbers 9 Through 16

Workroom Module	9	10	11	12	13	14	15	16
Workroom Size (Sq Ft)	**210,000**	**240,000**	**260,000**	**292,500**	**325,000**	**350,000**	**375,000**	**400,000**
Shop and Storage Areas	**Square Footage Allocated Based on Workroom Size**							
Stockroom	3,600	3,900	4,100	4,450	4,700	5,000	5,250	5,500
Custodial storage	1,020	1,140	1,240	1,350	1,450	1,580	1,680	1,780
Custodial closets	850	950	1,050	1,150	1,300	1,400	1,500	1,600
Bldg. and grounds storage	1,460	1,640	1,800	1,960	2,140	2,300	2,460	2,600
General shop	2,080	2,280	2,460	2,640	2,850	3,060	3,220	3,400
Electrical shop	520	540	570	600	630	660	680	700
Carpenter shop	420	440	470	500	530	560	580	600
Carpenter shop storage	420	440	470	500	530	560	580	600
Paint shop	520	540	570	600	630	660	680	700
Paint shop storage	160	180	180	200	200	220	240	260
Training room and library	850	950	1,050	1,150	1,300	1,400	1,500	1,600
Flammable storage	850	950	1,050	1,150	1,300	1,400	1,500	1,600
Machine shop	1,040	1,120	1,200	1,280	1,370	1,460	1,520	1,600
Area maintenance office shop	500	500	500	500	500	500	500	500
Battery charging room	940	1,060	1,120	1,280	1,390	1,500	1,600	1,700
Mailbox repair shop	500	500	500	500	500	500	500	500
Electronics room	850	950	1,050	1,150	1,300	1,400	1,500	1,600
Maintenance locker room	720	720	800	840	840	840	1,000	1,000
Total Sq Ft	**18,760**	**20,440**	**22,000**	**23,760**	**25,640**	**27,300**	**28,950**	**30,440**

33 Workroom Areas

331 Pages 10 Through 14: General Guidelines

331.1 Present Space

Indicate the estimated subtotal for each operation. If the space is used for dual operations, show the figure only in one place.

331.2 Ten-Year Space Requirements

Determine major mechanization and automation equipment required for each management operating data (MOD) operation from the site META model and/or the BAM. Select the appropriate WSUs and enter the quantity and square feet for each. Add staging space in accordance with the criteria in section 332. (Do not itemize rolling equipment.) When calculating equipment requirements, the analyst must consider the Corporate Automation Plan (CAP).

332 Pages 10 Through 14: Criteria

332.1 Cull, Face, and Cancel Equipment

Use the results of the current mail flow simulation model to determine equipment requirements for the cull, face, and cancel operation. If the model is unavailable, follow the guidelines discussed in the following seven sections. There are seven modules which (if applicable) make up the cull, face, and cancel operation;

a. Letter canceling (332.11).

b. Meter mail preparation (332.12).

c. Flats canceling (332.13).

d. Thicks and small parcels and rolls (SPR) canceling (332.14).

e. Advanced facer canceler system (AFCS) thicks reject canceling (332.15).

f. Flyers (332.16).

g. Staging space (332.17).

332.11 Letter Canceling

The following procedure outlines how to select WSUs for letter canceling equipment:

a. Determine the average day, peak hour, letter volume processing requirement.

b. Provide enough canceling equipment to provide an aggregate capacity exceeding the average day peak hour volume processing requirement by 25 percent. Use planning throughputs (35,000 pieces/hour by the AFCS; 19,300 pieces/hour by the Micro Mark II (MMKII) with shingler) to determine the number of units. Match the number of required facer

cancelers to the number of AFCSs indicated in WSUs 420010a through 420010h. For nine or more facer cancelers, add increments of WSU 420010 series (a through h) to a WSU 420010h. Avoid duplicating the dual-pass rough cull (DPRC) portion of the second WSU. (***Note**:* WSUs 420010a through 420010h are space planning guidelines. Configuration and layout will be developed on a site-specific basis.)

c. MMKIIs indicated in these WSUs are provided for AFCS thicks reject canceling and are not to supplement processing capacity (see 332.15.)

d. If two or fewer MMKIIs are required, select from WSUs 420008 through 420009a.

e. Stations and small facilities with canceling operations can select from WSUs 420001 through 420007.

f. Discuss the equipment selected with area and local management as appropriate.

332.12 Meter Mail Preparation

If the WSU selected in 332.11 does not provide sufficient space for meter mail preparation, add WSU 420011, 420012, or 420012a as appropriate.

332.13 Flats Canceling

If the WSU selected in 332.11 does not provide sufficient space for flats canceling, add WSU 420017a or 420017b as appropriate.

332.14 Thicks and SPR Canceling

If the WSU selected in 332.11 does not provide sufficient space for thicks and SPR hand stamp, add WSU 420016a or 420016b as appropriate.

332.15 AFCS Thicks Reject Canceling

If the WSU selected in 332.11 does not provide sufficient space for handling AFCS thicks and flat rejects, add WSU 420008b as appropriate.

332.16 Flyers

Space for flyers is included in the standard Loose Mail System.

332.17 Staging Space

Provide space for staging based on 20 percent of WSU totals for the cull, face, and cancel operation requirements.

332.2 Machine Distribution

332.21 Machinable Letters

The number of optical character readers (OCRs) and barcode sorters (BCSs) planned for a facility must be consistent with the CAP as well as the latest national development and deployment plans. Therefore, the area manager of In-Plant Support is responsible for determining equipment requirements for facility projects using the Corporate Automation Plan and the current mail flow simulation model. The Facility Planning Concept should be reviewed to determine additional secondaries that are to be worked at the new facility.

Determine the space required for machinable letter equipment using WSU 431009 (mail processing barcode sorter), WSUs 431010a through 431010b (OCRs), WSUs 431006 through 431006a (letter mail labeling machine), WSUs 432001 through 432003 (delivery barcode sorter (DBCS)), and WSU 432012 (DBCS/OCR). Add space for staging based on 15 percent of the WSU total. This total includes space for RBCS and associated equipment staging.

332.22 Machinable Flats

Consider the existing number of multiposition flat sorting machines (MPFSMs) and flat sorting machines model 1000 (FSM-1000s) required to process the machinable flat volumes. Consult with the area manager of In-Plant Support for the projected MPFSM and FSM-1000 deployment schedule. Use WSUs 435008 and 435009 to develop space requirements. Add space for staging based on 15 percent of the WSU total.

332.3 Manual Cases

332.31 Equipment Requirements

Determine the number of manual cases required for each operation (by MOD number) using the amount of now-in-use equipment as a base. All equipment requirements must reflect the 95/5 percent corporate automation goals. The net effect will be a reduction in the number of manual cases. As a reference, use 1,300 pieces per hour for letter cases and 1,000 pieces per hour for flat cases in calculating the number of manual cases needed.

332.32 Space Requirements

Determine the space required for each operation based on 65 square feet per letter case and 150 square feet per flat case. (For facility space planning, it is not necessary to forecast the exact type and size of the case to be used.) Add staging space in each operation based on 15 percent of the space required for cases.

332.4 Opening and Dispatch Units

Provide space for a *minimum* of four centralized opening and dispatch units at 1,000 square feet each for outgoing and incoming letters and outgoing and incoming flats. The actual number of opening units needed must be determined. Consider tray opening and banding operations as additional units. If the centralized unit is associated primarily with a particular operation (that is, machinable letters and the like), enter the appropriate section on page 10 or 11. Otherwise, use the blank line on page 13 of Form 929. Chapter 4 includes workstation units for robotics and automated scan-where-you-band systems. Consult with the manager of Automation Equipment, Technology Acquisition Management, Engineering, Headquarters, for equipment requirements and deployment plans.

332.5 Pages 11, 12, and 13: Miscellaneous Mail Processing Areas

Workroom spaces for Express Mail, Priority Mail, Parcel Post, and other operations are primarily a function of the number of separations required rather than volume. In establishing workroom space for Priority Mail, the Priority Mail Center Network must be considered. Forecast requirements based on existing space used for these operations are adjusted for anticipated growth in each category. Allow 20 percent for staging. Use WSUs in section 433 to project specific equipment requirements.

332.6 Page 12: Carriers

332.61 Ten-Year Projection

Carrier 10-year projections should be developed using an adjusted baseline total. To determine the new baseline for carrier routes, the analyst must reduce the present route totals using the delivery point distribution scenario, where applicable. To establish the 10-year route projection, the analyst would apply the population or mail volume growth factor to the adjusted baseline figure. In some situations, the growth factors will need to be adjusted to avoid overestimating or underestimating route requirements due to impending route adjustments. The facility delivery analyst should provide the information to complete Form 929, Exhibits 1 and 2. The space requirements will be automatically calculated based on the number of routes entered onto Form 929.

Note: Routes will not grow in direct proportion to population growth.

332.62 Carrier Routes

List the facility's total number of carrier routes. Multiply the number of routes, including special delivery routes, projected for 10 years after by 180 square feet for the number of routes that do not exceed 25. For each additional route over 25, provide 130 square feet per route.

Example:

Space requirements are being prepared for a new building to house an existing delivery unit that has 33 carrier routes; the total square footage required for placement of these routes would be calculated as follows:

25 routes x 180 sq ft =	4,500 sq ft
8 routes x 130 sq ft =	+ 1,040 sq ft
Total =	5,540 sq ft

Therefore, a total of 5,540 square feet should be planned for the delivery workroom floor area in a new or upgraded building with this number of routes.

This method also provides space for ancillary equipment related to the carrier operation (for example, throwback case, carrier key cage, registry cage, carrier supervisor desks, and parcel post distribution area). For more information see Chapter 5.

332.7 Page 12: Bulk Sorting Equipment

332.71 Multislides

For a facility that processes 2,500 to 8,000 sacks per day, determine the present space requirements based on the current method of handling sacks, parcels, and nonmachinable outsides (NMOs). Base requirements for space on the number of separations, volume, and operating plan; consult with local officials to determine future needs. If multislides are selected, they require 5,000 square feet per slide, and there are 10 separations per slide. If multislides are not selected, reference Chapter 4 and select the type of equipment intended for this operation from WSU series 420, 430, 460, or 470. For facilities that process less than 2,500 sacks per day, allocate space adjacent to the platform for a manual sack breakdown. Use blank lines on page 12 of Form 929 to enter the type of equipment and square foot requirements.

332.72 Universal Sorter

For a facility that processes over 8,000 pieces per day, provide a universal sorting system ranging from 5,000 square feet to 20,000 square feet, with a default of 20,000 square feet. If space requirements exceed 20,000 square feet, a dispatch analysis is required. The analysis is based on the number of separations, volume, and operating plan. Consult with local officials to determine future needs. Reference Chapter 4 and select the equipment equal to the number of separations required from WSU series 420, 430, 460, or 470. This will provide floor space for the universal sorter. Contact Bulk Mail Systems, Material Handling, Engineering, Headquarters, for actual requirements and design of the universal sorter. The sorter, including runouts, sawtooths, etc., will be designed when the layout is developed based on the number of separations and the amount of containerization required.

332.8 Page 14: Other Workroom Areas

332.81 Small Parcel and Bundle Sorter

If the facility being surveyed is scheduled to receive a small parcel and bundle sorter (SPBS), provide the space required for WSUs 440001, 440002, and 440003 (or 440011 and 440021 if a mechanized feed system is included). If the system is WSU 440021 (standard straight-line SPBS with Lockheed Martin feed system), a portion of the staging area is used for forklift and electric pallet jack maneuvering. Options are available that allow the facility to expand its equipment from the standard 100 outputs to either 116 or 132 outputs. This is accomplished by removing the end cap from the sorter and then adding either one or two additional A and B output modules to the SPBS. These additional modules will add either 14.8 feet or 29.6 feet to the overall length of the SPBS. Consult with the area manager of In-Plant Support for the established deployment schedule.

332.82 Miscellaneous Areas

The detailed itemizing of miscellaneous areas on page 14 should be used to identify specialized areas over 200 square feet. Otherwise, for space planning, the workroom adjustment factor includes sufficient space for small, miscellaneous items under 200 square feet in size.

332.83 Carrier Vestibules

Provide 400 square feet for a carrier vestibule when 15 or more carrier routes are projected for 10 years (WSU 520009). Provide two vestibules for 41 or more carrier routes.

332.84 Satellite Vending and Break Areas

For each 20,000 square feet of workroom, one area of 150 square feet for a vending area to serve also as a break area for workroom employees is automatically calculated on page 14 of Form 929. (Combine two or three vending and break areas to provide a 600 or 900 square foot area for locations extremely distant from the cafeteria.)

332.9 Page 14: Workroom Recapitulation

Bring totals forward from pages 10, 11, 12, and 13 (if used). Calculate PSDS and empty equipment spaces using factors indicated on the form. Compute space for aisles and miscellaneous items using the adjustment factors in Exhibit 332.9.

Exhibit 332.9
Adjustment Factors for PSDS and Empty Equipment Spaces

Subtotal	Adjustment Percent
Up to 130,000 sq ft	0.24
130,000 to 230,000 sq ft	0.27
Over 230,000 sq ft	0.30

333 Page 14: Workroom Module Selection

Form 929 will automatically select and enter the workroom module onto page 14 that is greater than or equal to the estimated space required. For workrooms over 400,000 square feet, contact the manager of Facilities Planning and Approval at Headquarters. The workroom module selections are shown in Exhibit 333.

Exhibit 333
Review of Workroom Spaces Provided

Workroom Minimum Space Required (Sq Ft)	Workroom Maximum Space Required (Sq Ft)	Workroom Module Selected	Workroom Space Provided (Sq Ft)
<60,000	60,000	1	60,000
60,001	75,000	2	75,000
75,001	87,500	3	87,500
87,501	100,000	4	100,000
100,001	112,500	5	112,500
112,501	135,000	6	135,000
135,001	150,000	7	150,000
150,001	175,000	8	175,000
175,001	210,000	9	210,000
210,001	240,000	10	240,000
240,001	260,000	11	260,000
260,001	292,500	12	292,500
292,501	325,000	13	325,000
325,001	350,000	14	350,000
350,001	375,000	15	375,000
375,001	400,000	16	400,000

34 Page 15: Platform (Dock) Activity

341 Detailed Procedures

The standard platform (dock) depth is 50 feet. The platform (dock) requirements are based on the workroom modules. The number of 30-inch and 27-inch docks must be entered by the analyst. The trash recycling and compactor docks are already included in the program formulas. When more than these two dock bays are required, documentation and justification are to be provided in writing by the requesting office. The remaining linear footage will be converted to 50-inch docks. Local management should verify the mixture of 50-inch, 30-inch, and 27-inch docks. Form 929 automatically calculates the total dock space requirements as shown in Exhibit 341.

Exhibit 341
Review of Dock Lengths Assigned According to Workroom Module

Workroom Module (Sq Ft)	Length of Dock (Linear Feet)	Workroom Module (Sq Ft)	Length of Dock (Linear Feet)
60,000	300	210,000	600
75,000	300	240,000	600
87,500	350	260,000	650
100,000	400	292,500	650
112,500	450	325,000	650
135,000	450	350,000	700
150,000	500	375,000	750
175,000	500	400,000	800

342 Leveling Devices

To facilitate the trend toward containerization, the standard functional design specifications for all mail processing facilities will provide an electro-hydraulic flip ramp (face mounted) at each 30-inch and 27-inch dock space and an electro-hydraulic dock leveler (pit mounted 6 feet x 10 feet) at each 50-inch dock space.

343 Additional Dock Requirements

If the length of the dock is deemed insufficient based on the selected workroom module (see section 341), additional dock space can be added to the project with the proper justification. The standard method for adding dock doors is to wrap dock modules around to a second side of the building. When this method is selected, two bays at the corner of the building will be for dock transfers. The two bays are located on the long side of the facility. One set of bays, between the workroom wall and the dock, is to be used as support. Another alternative is to use finger docks. Either arrangement requires written justification. The supporting data must be based on actual vehicle arrival information. An arrival profile must be developed that clearly shows the peak hour dock requirements. The inbound and outbound schedules within the transportation information management evaluation system (TIMES) database can be used to support this analysis. This arrival profile, in conjunction with the facility's dedicated dock requirements (i.e., trash, recyclable, BMEU, etc.), should be the basis of justification. Current volume growth projections, as well as the overall growth of destination entry drop shipments entered at the facility directly from its customers, should be considered. The analysis, along with a cover letter signed by the vice president of Area Operations, must be submitted to the manager of Facilities Planning and Approval at Headquarters.

344 Section C: Miscellaneous Vehicle and Platform Requirements

344.1 Covered Carrier Loading Area

If enclosed or covered parking is not provided (see 323.2), provide a covered carrier loading area convenient to the carrier vestibule. Determine the space required by multiplying one-half of the carriers, including rural routes, by 200 square feet. (This established number of square feet provides space for a vehicle plus 10 feet behind the vehicle for loading.)

344.2 Alternative Finger Dock Modules

The modules shown in Exhibit 344.2 are for additional finger dock positions.

Exhibit 344.2
Required Space for Additional Finger Dock Positions

Finger Dock Module	Number of Docks	Required Space (Sq Ft)
1	10	5,700
2	20	11,400
3	30	17,100

344.3 Scales

Indicate if a surface-mounted scale is required on the platform and/or maneuvering area. The type of scale, location, etc., will be determined during the development of the functional design specifications.

344.4 Built-In Scales for Drive-Through Trailers

Indicate if a built-in scale is required on the platform and/or maneuvering area. The type of scale, location, etc., will be determined during the development of the functional design specifications.

35 Page 16: Explanatory Notes

Use this page to provide clarification of any entries on other pages.

36 Distribution and Delivery

361 Exhibit 1: Proposed Facility

361.1 General

Exhibit 1 is to be completed by area Operations Program Support. The information must conform with delivery point sequence (DPS) projections, if applicable.

361.2 Section A: Carriers in Facility

Show the number of routes (by ZIP Code area) to be housed in the proposed facility.

361.3 Section B: Distribution to Carriers

Show the number of routes (by ZIP Code area) housed elsewhere that require secondary distribution at the proposed facility. Use total routes (ZIP Code areas) from sections A and B to complete the space for secondary carrier routes in the workroom (Form 929, page 12).

362 Exhibit 2: Other Delivery Services

Exhibit 2 is optional and is used to provide supplemental data about other delivery services. Show the number of carrier routes for all other station, branch, and associate office delivery units.

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

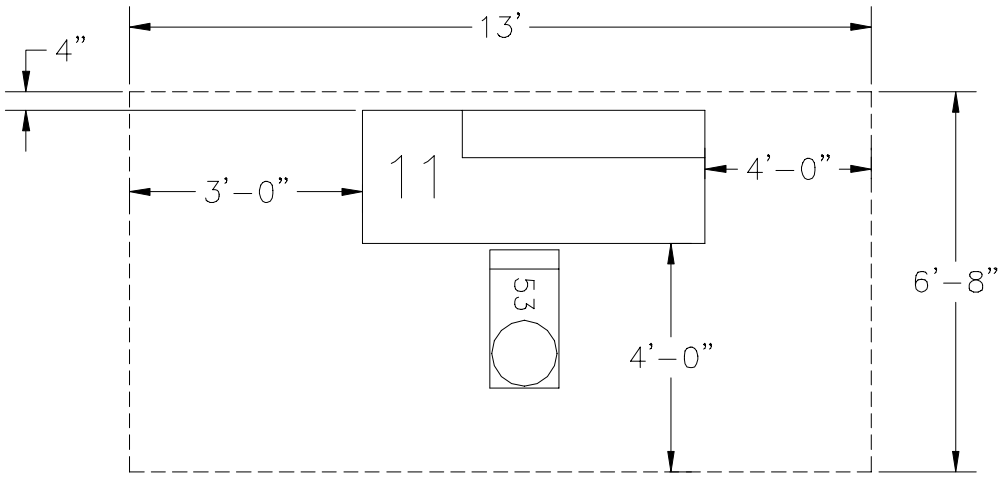


Exhibit 42c
420001a, 36-Separation Canceling Workstation With Cancel Machine

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

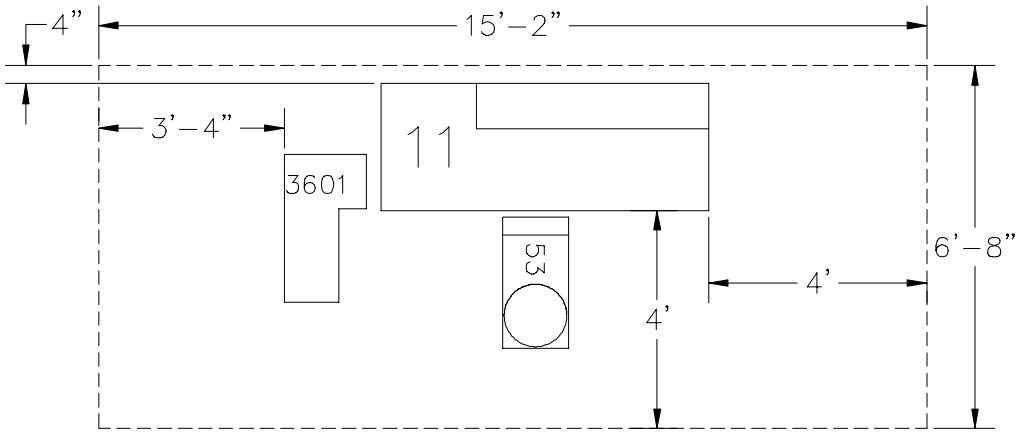


Exhibit 42d
420002, 49-Separation Canceling Workstation With Cancel Machine

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

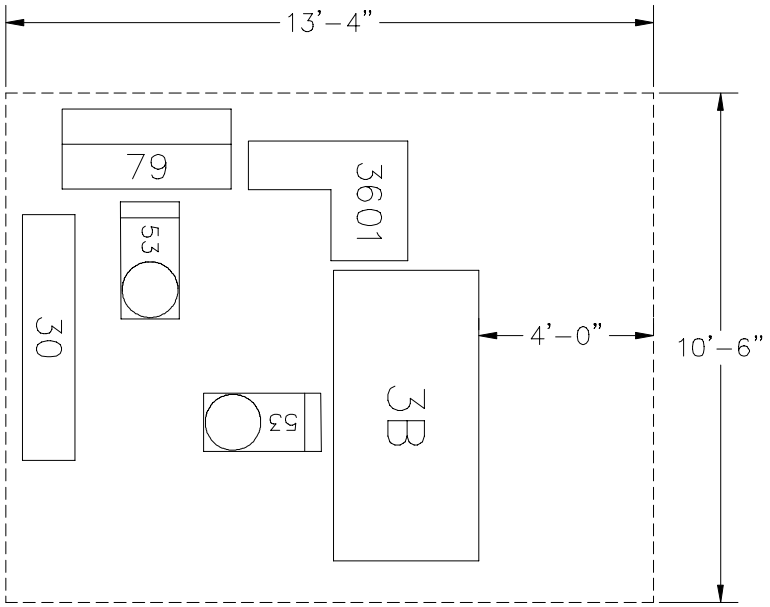


Exhibit 42e
420002a, 77-Separation Canceling Workstation With Cancel Machine

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

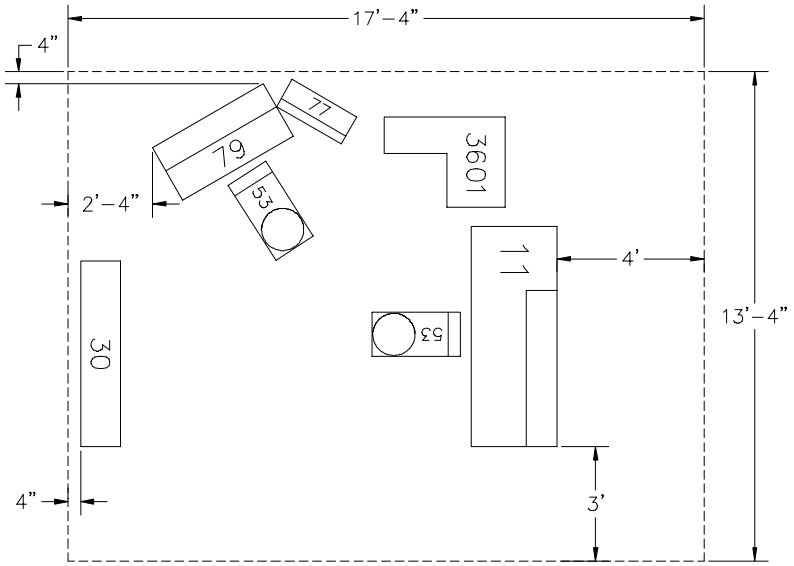


Exhibit 42f
420003, Canceling Workstation With #3B Table Without Cancel Machine

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

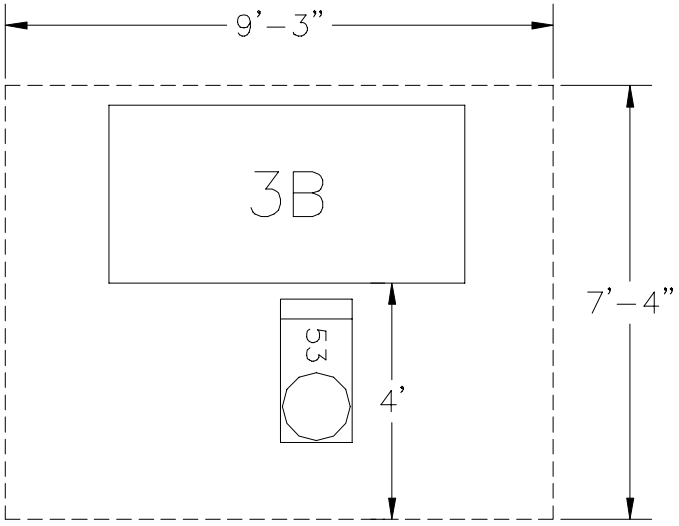


Exhibit 42g
420003b, Canceling Workstation With #3B Table With Cancel Machine

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

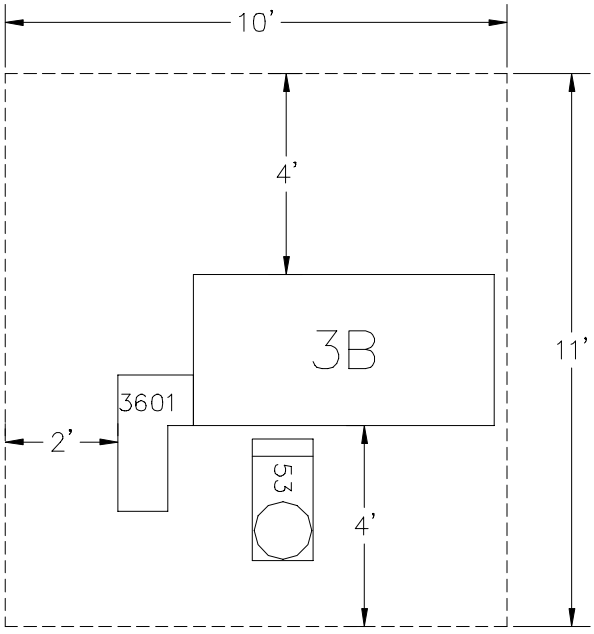


Exhibit 42h

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

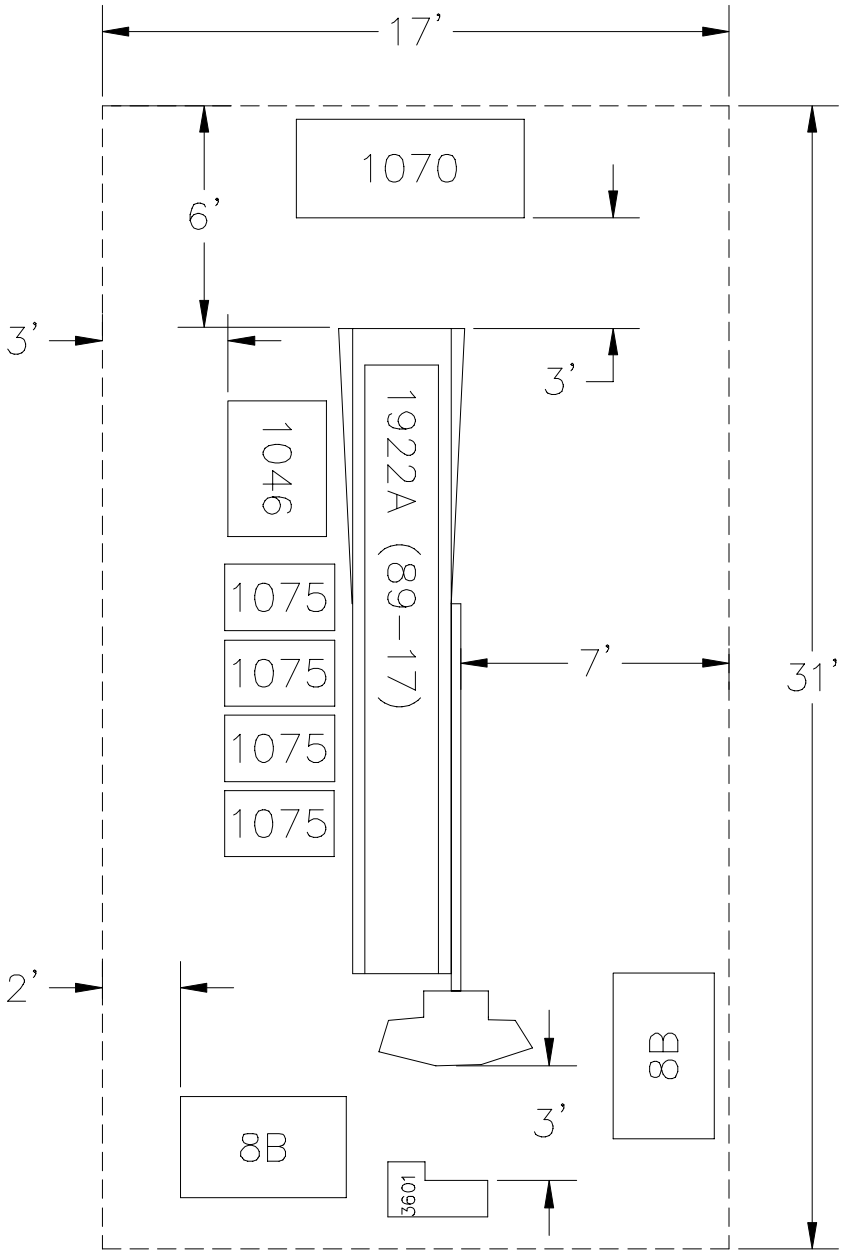


Exhibit 42i

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

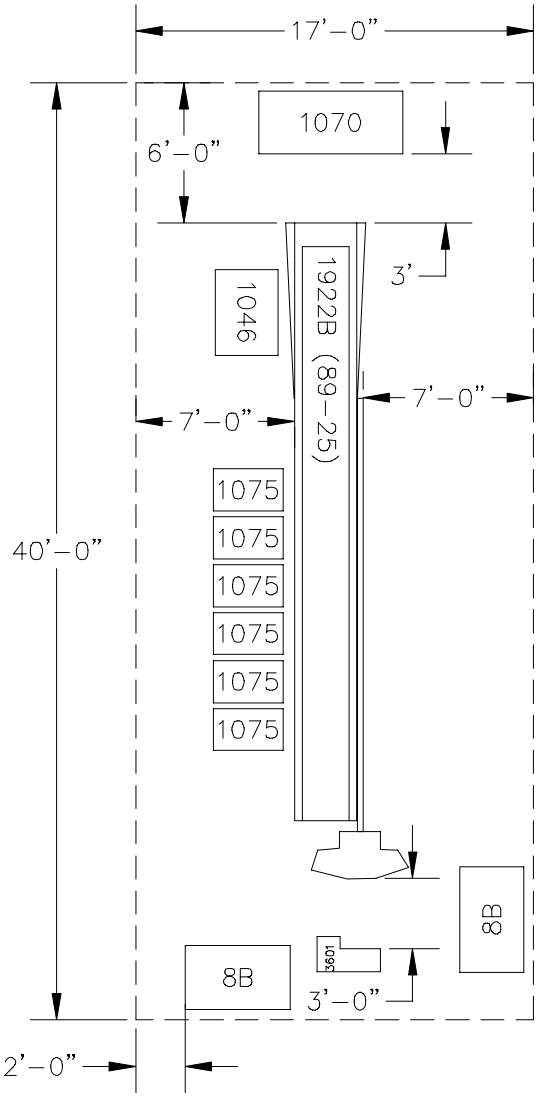


Exhibit 42j

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

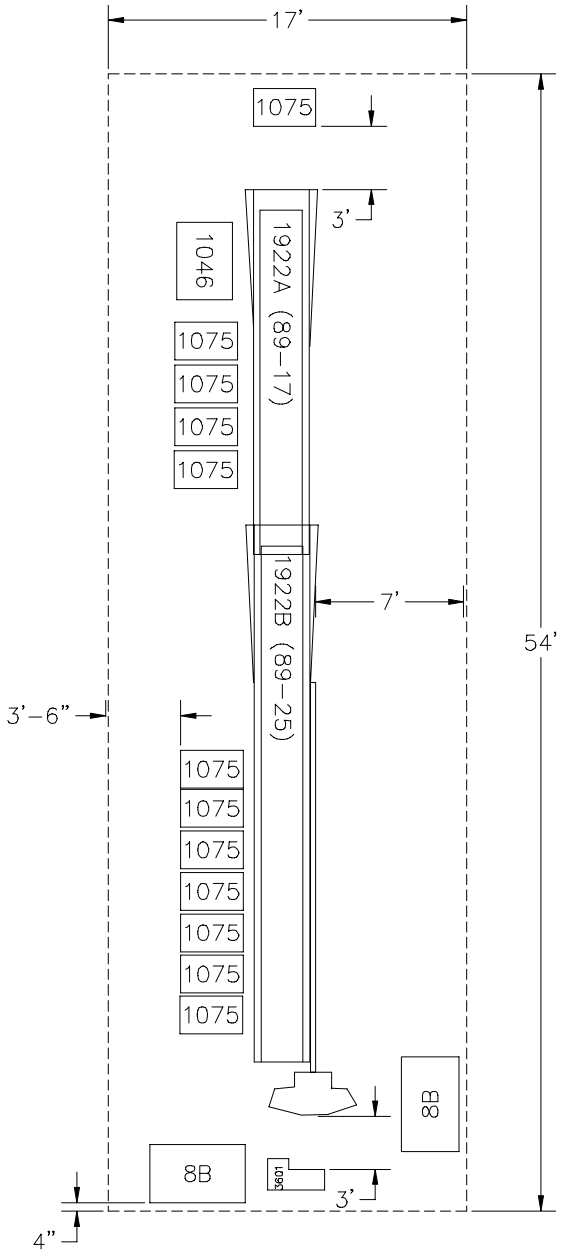


Exhibit 42k

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

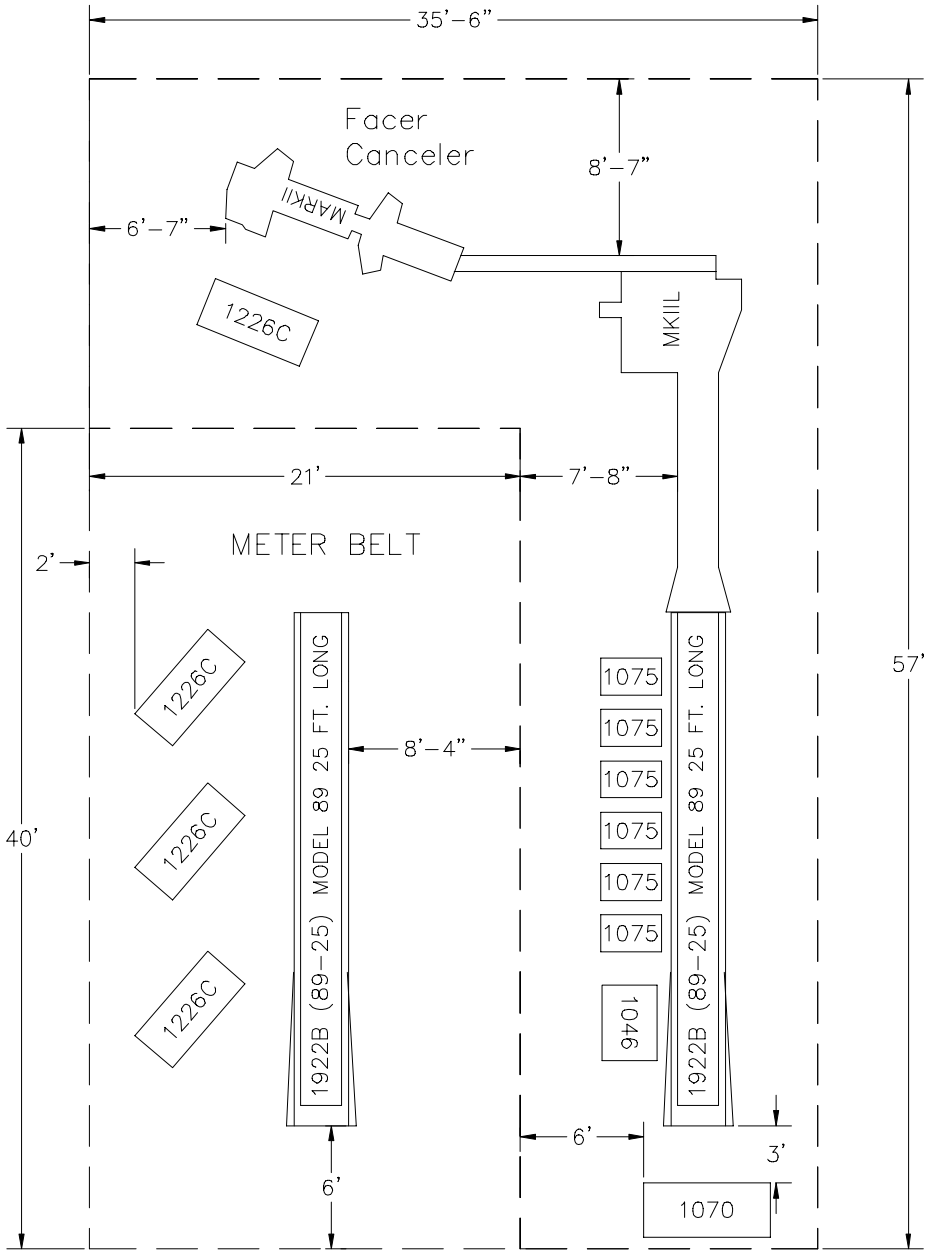


Exhibit 42l
420008a, Micro Mark II Facer Canceler System With Culling Belt

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

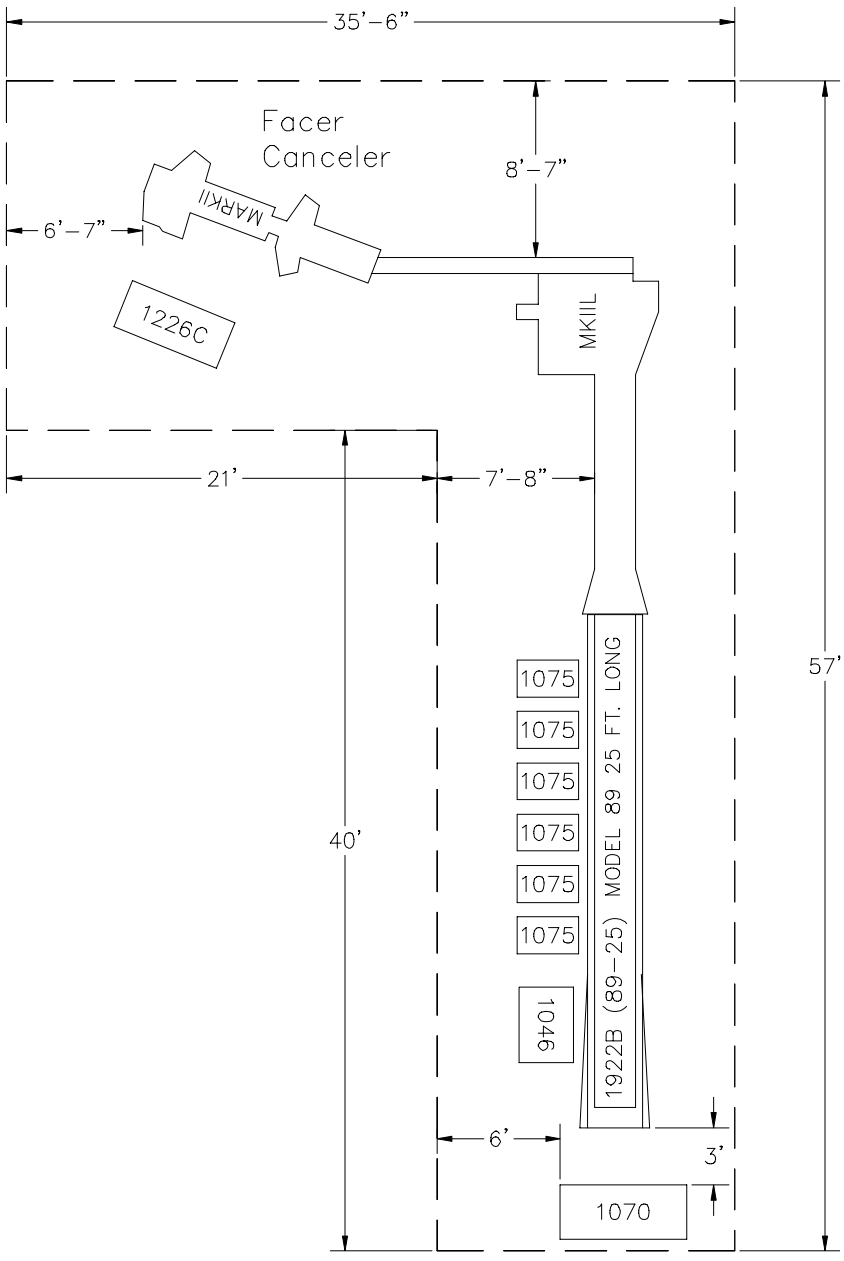


Exhibit 42m

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

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

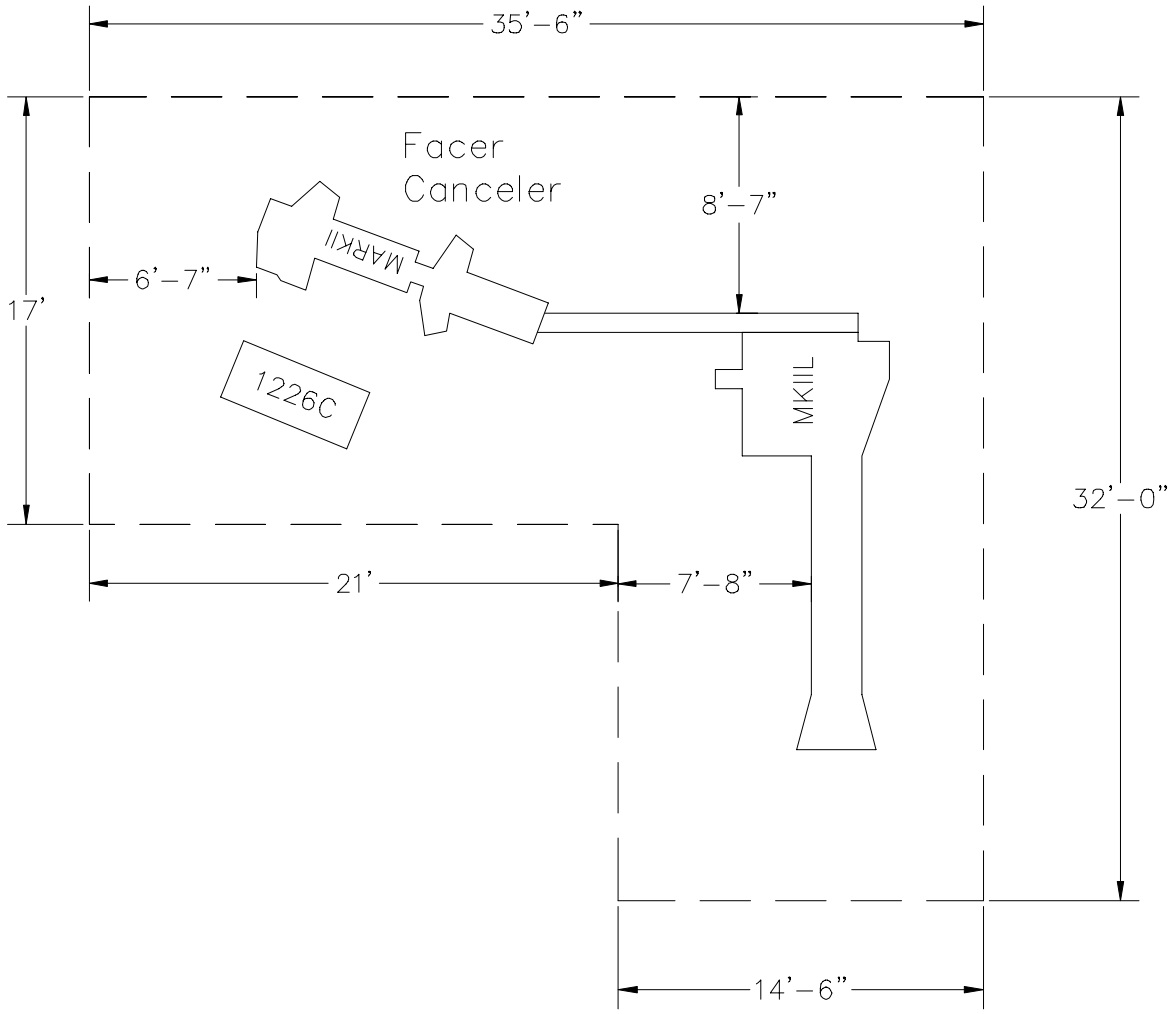


Exhibit 42n

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

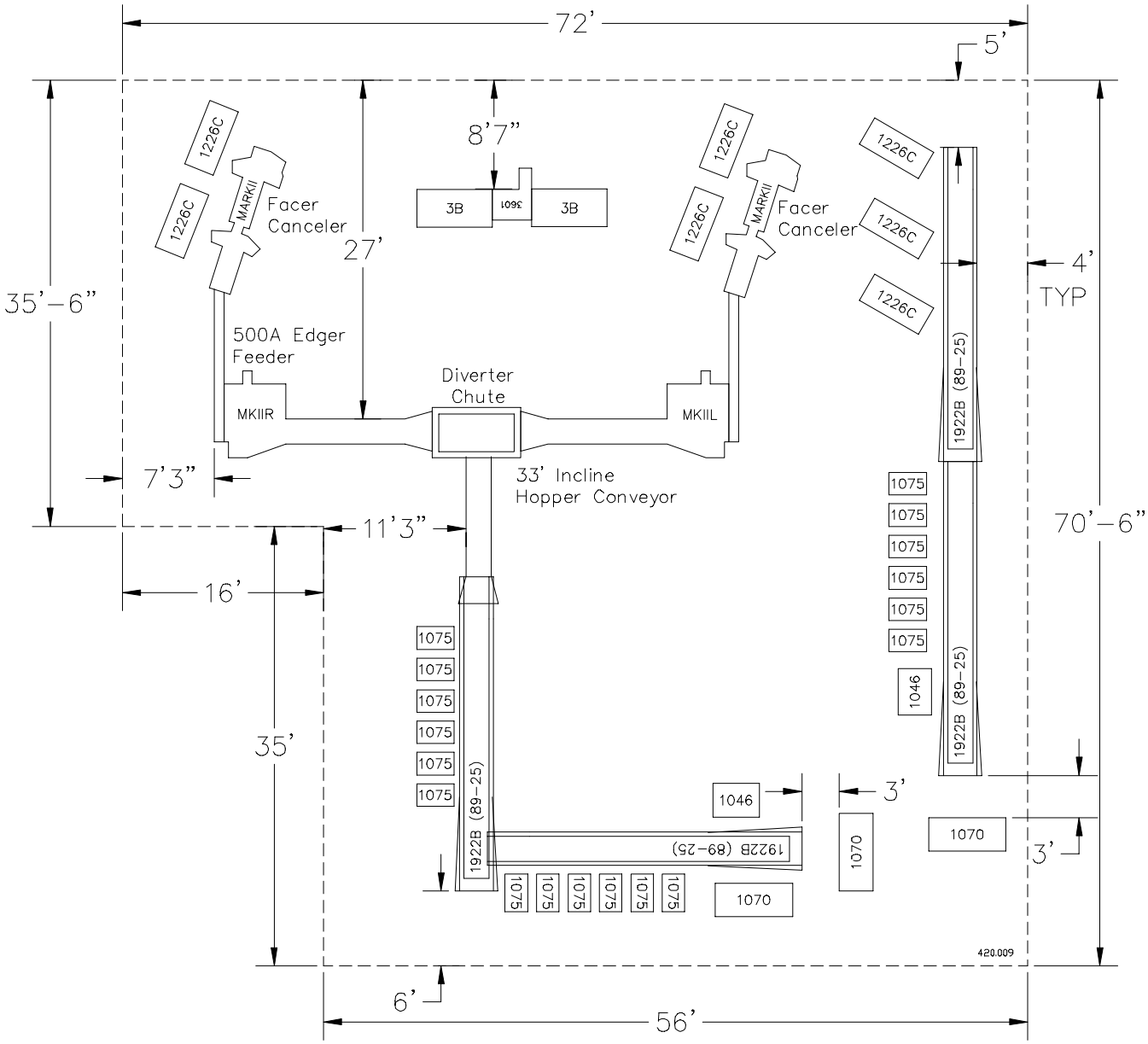


Exhibit 42o

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

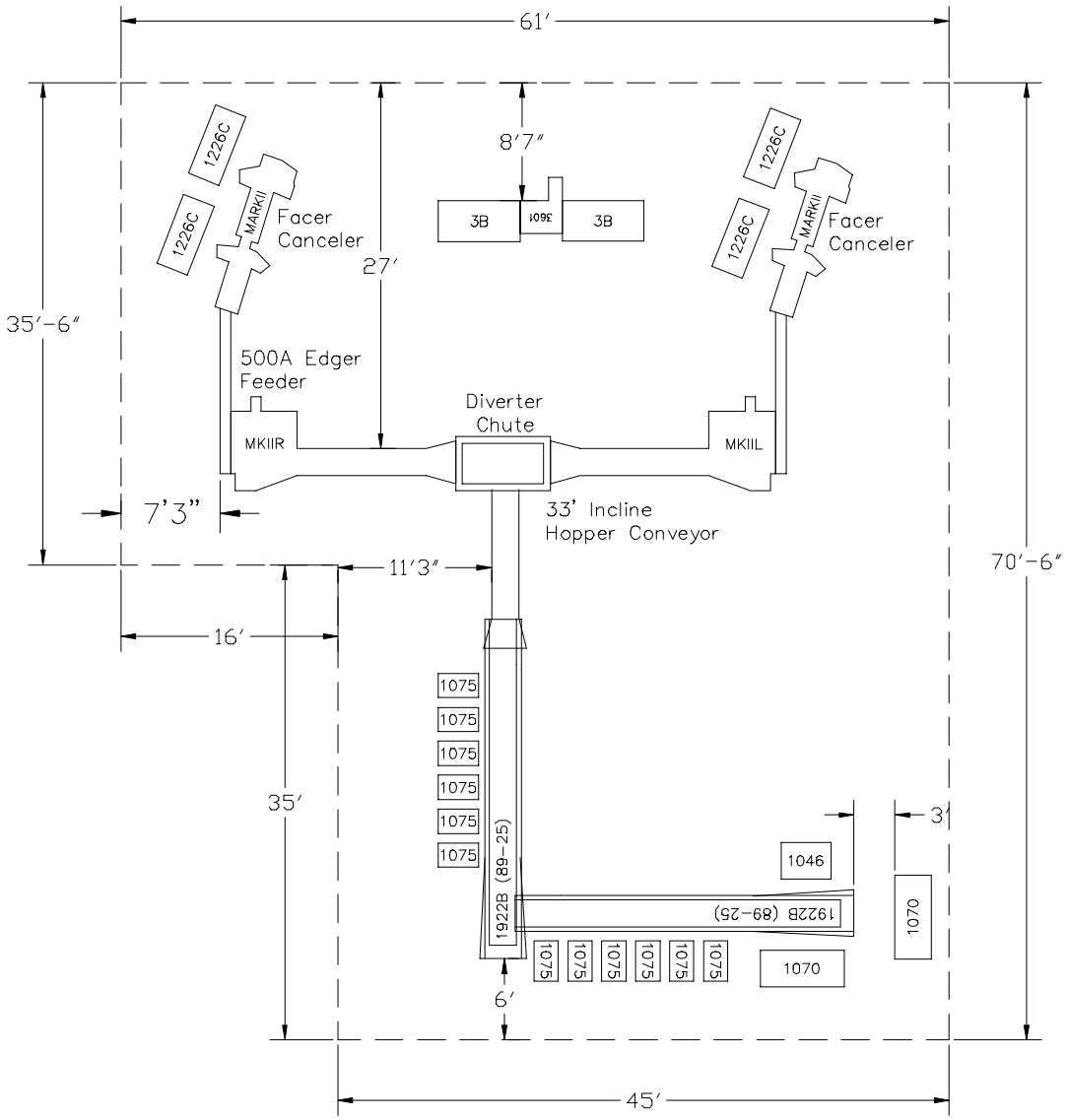


Exhibit 42p
420010a, Advanced Facer Canceler System With Culling Belt

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

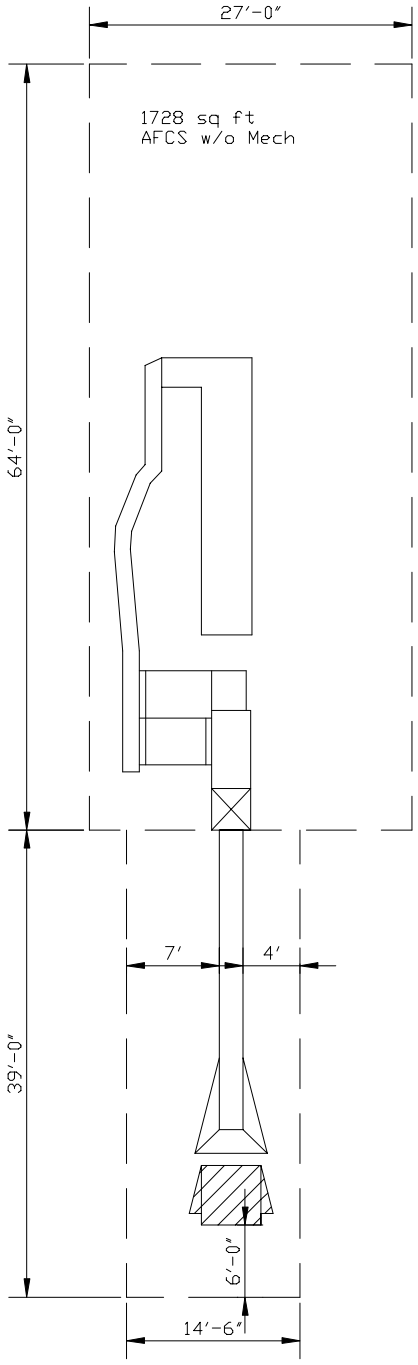


Exhibit 42q
420010b, Two AFCSs With Standard Cull/Feed System

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

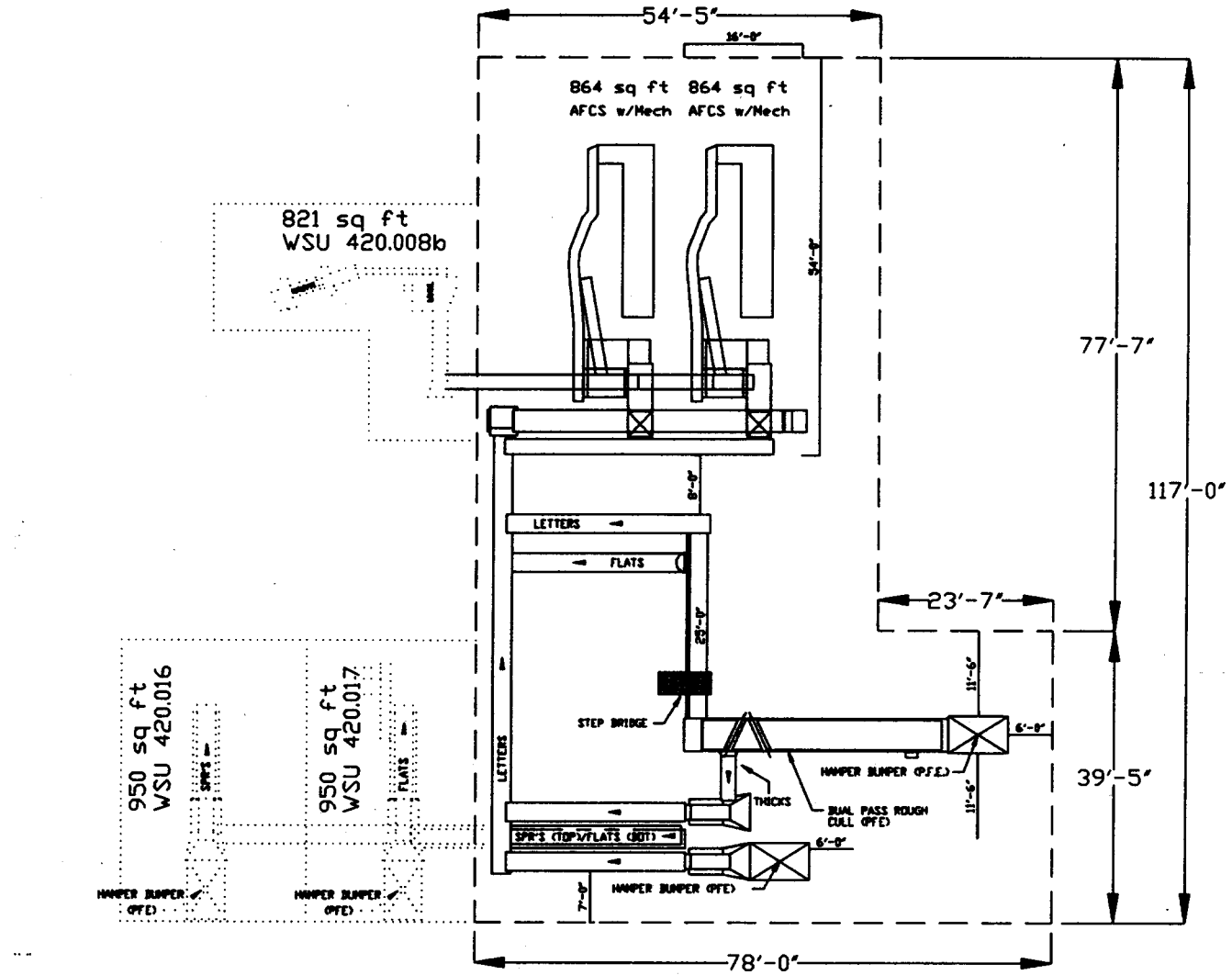


Exhibit 42r
420010c, Three AFCSs With Standard Cull/Feed System

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

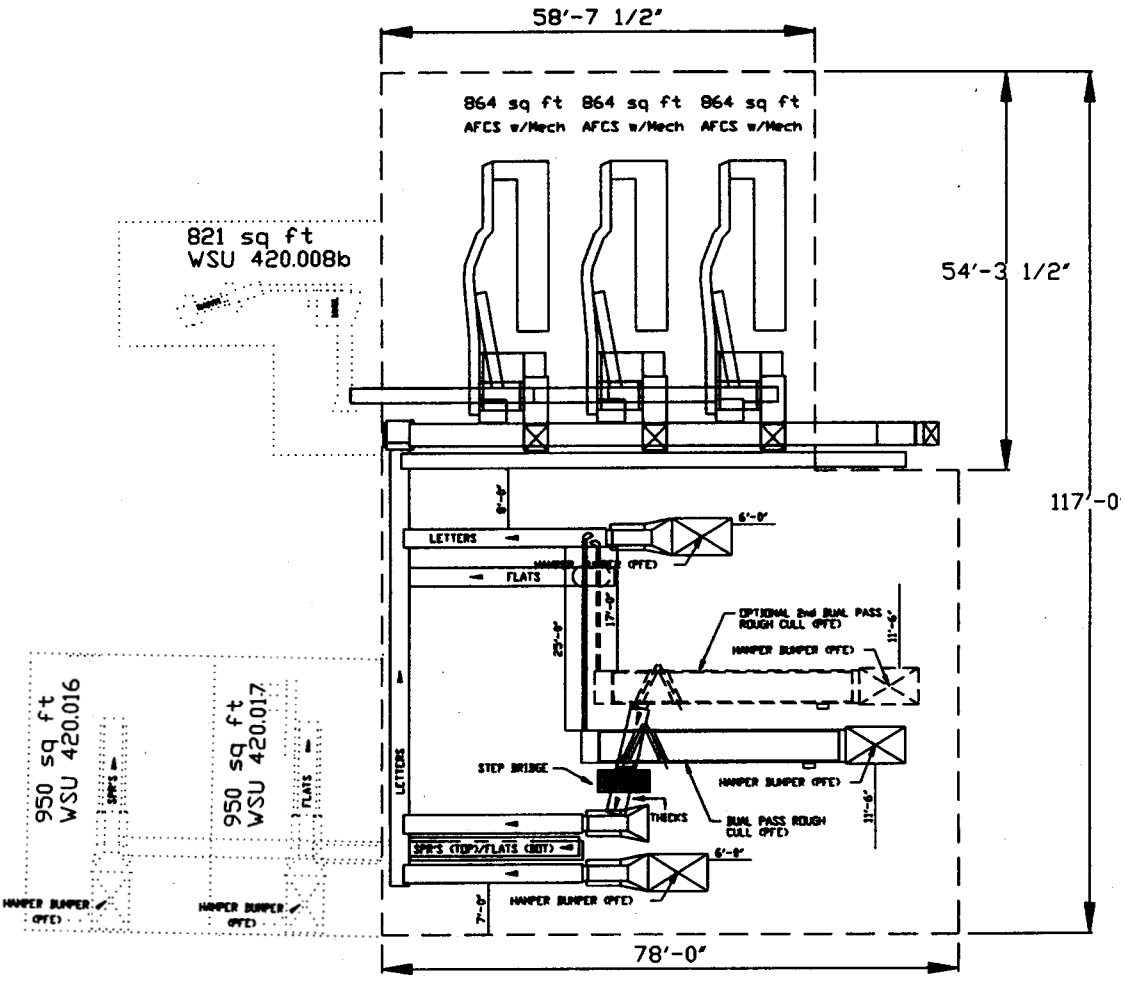


Exhibit 42s

420010d, Four AFCSs With Standard Cull/Feed System

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

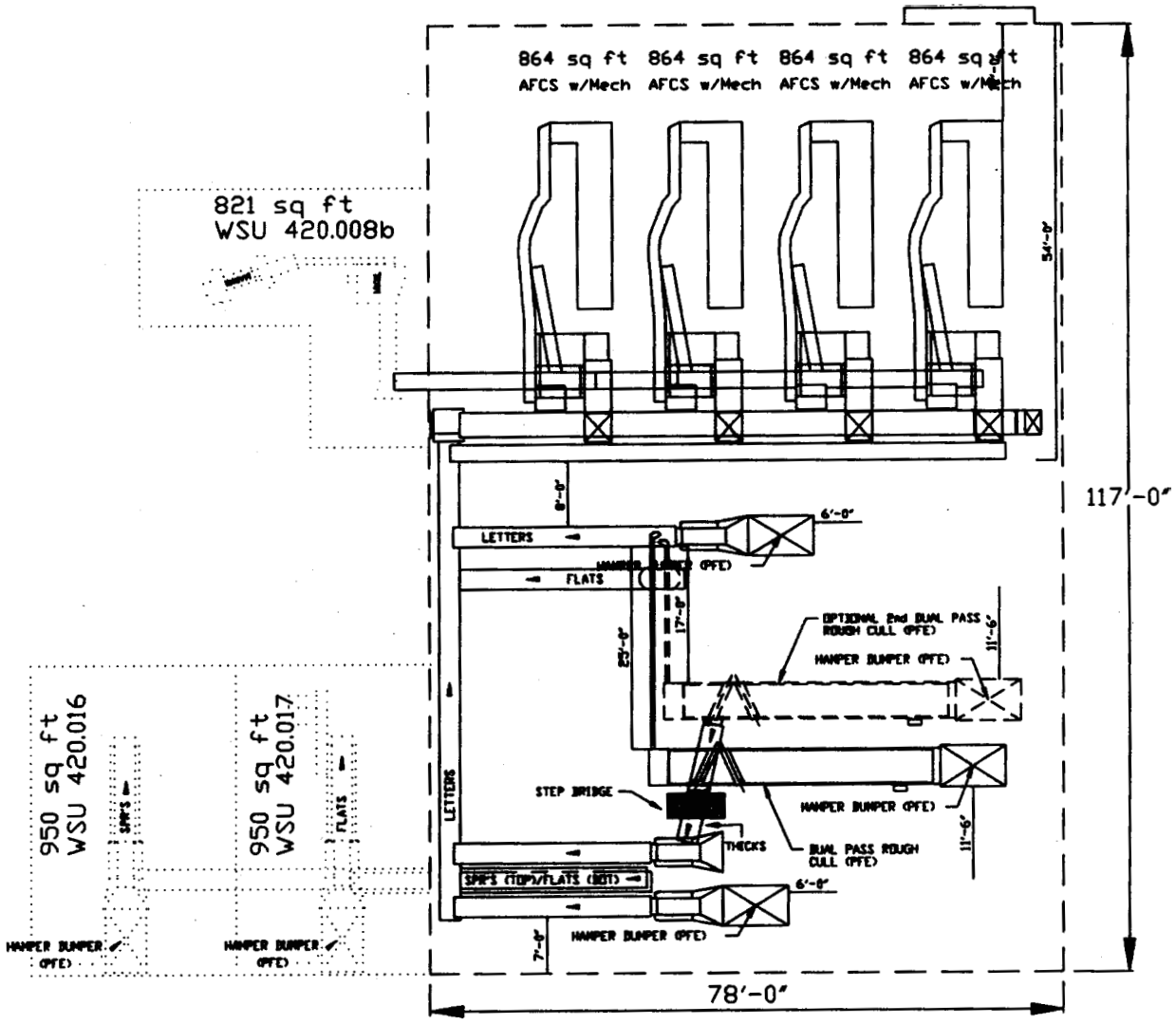


Exhibit 42t
420010e, Five AFCSs With Standard Cull/Feed System

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

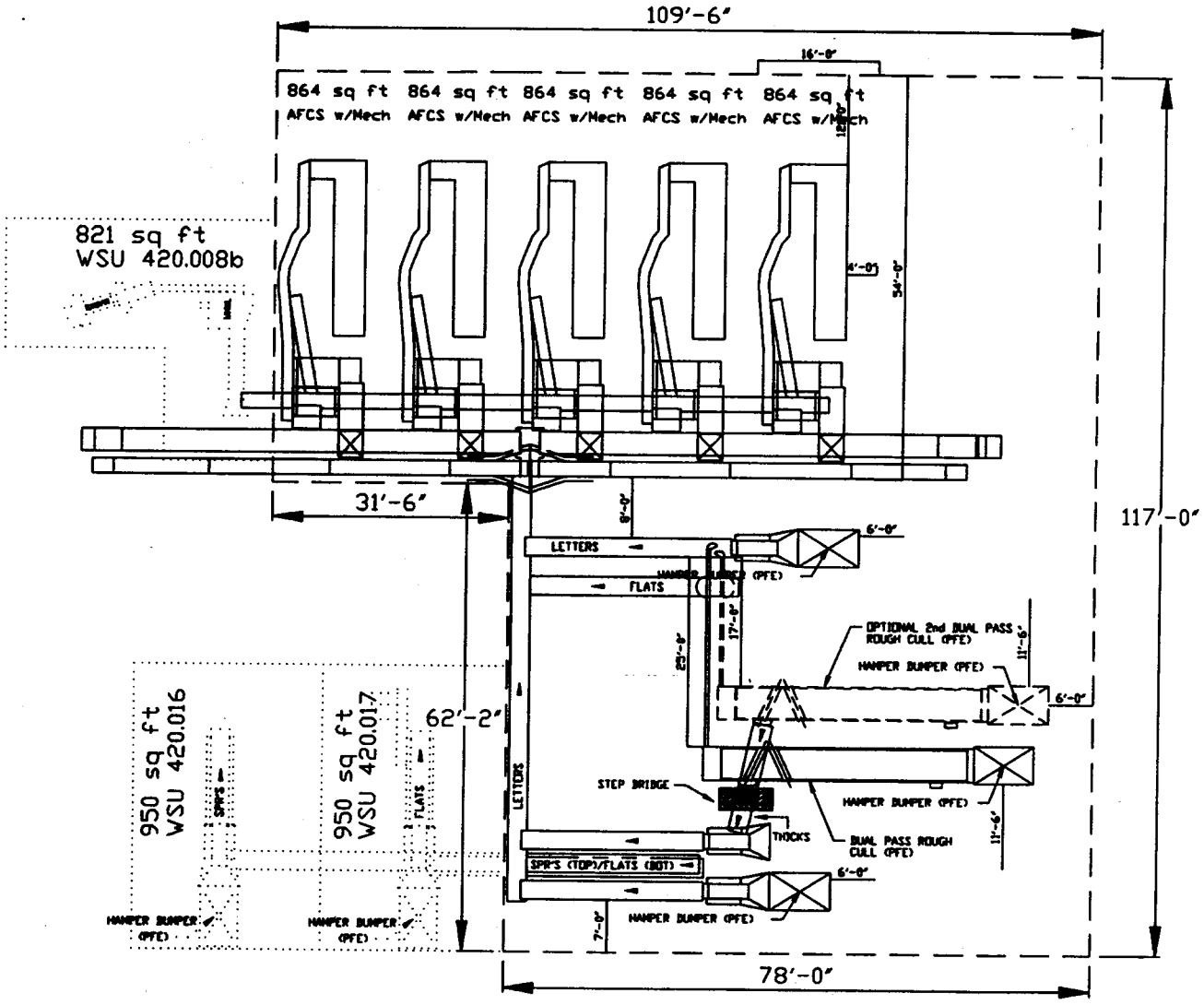


Exhibit 42u

420010f, Six AFCSs With Standard Cull/Feed System

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

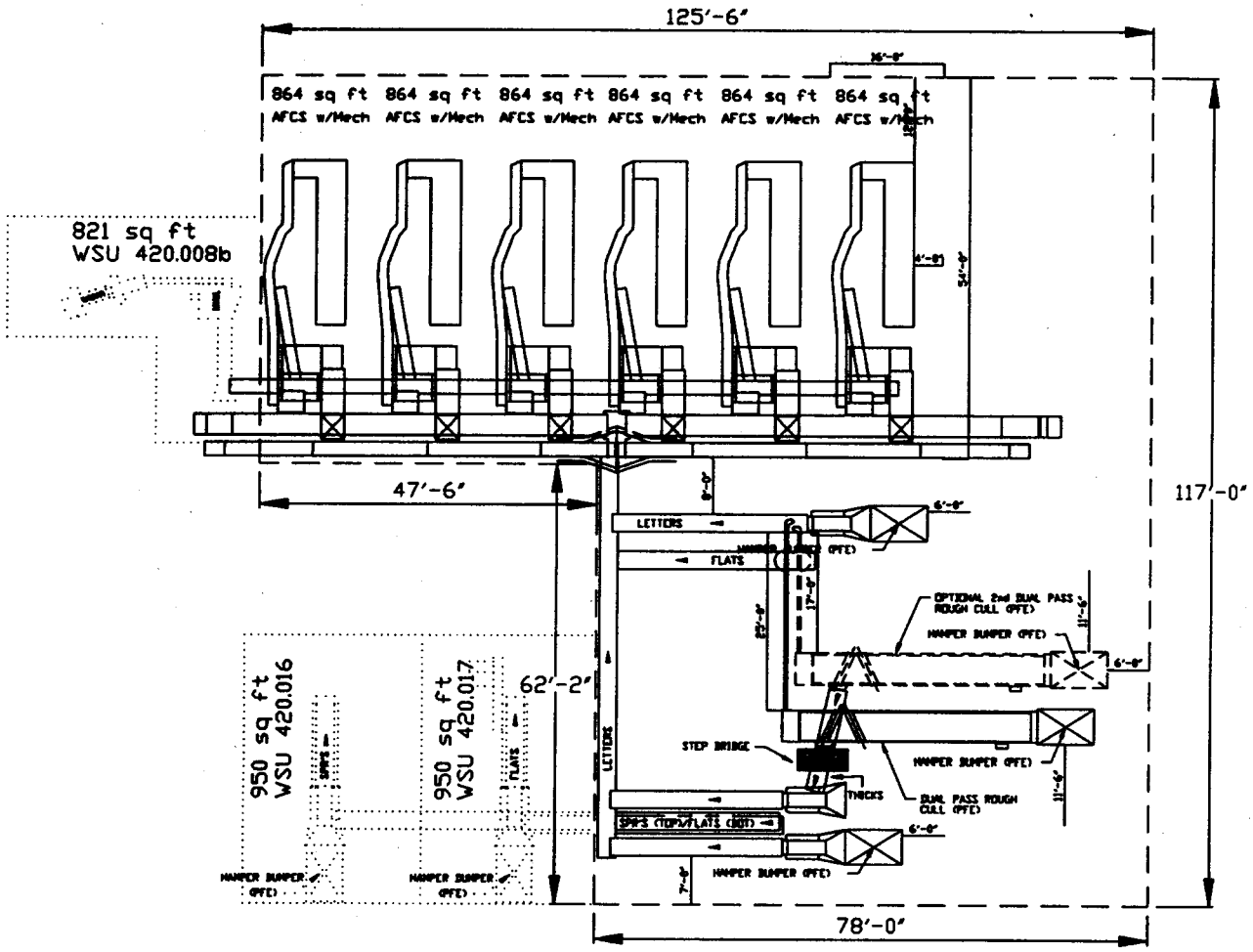


Exhibit 42v
420010g, Seven AFCSs With Standard Cull/Feed System

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

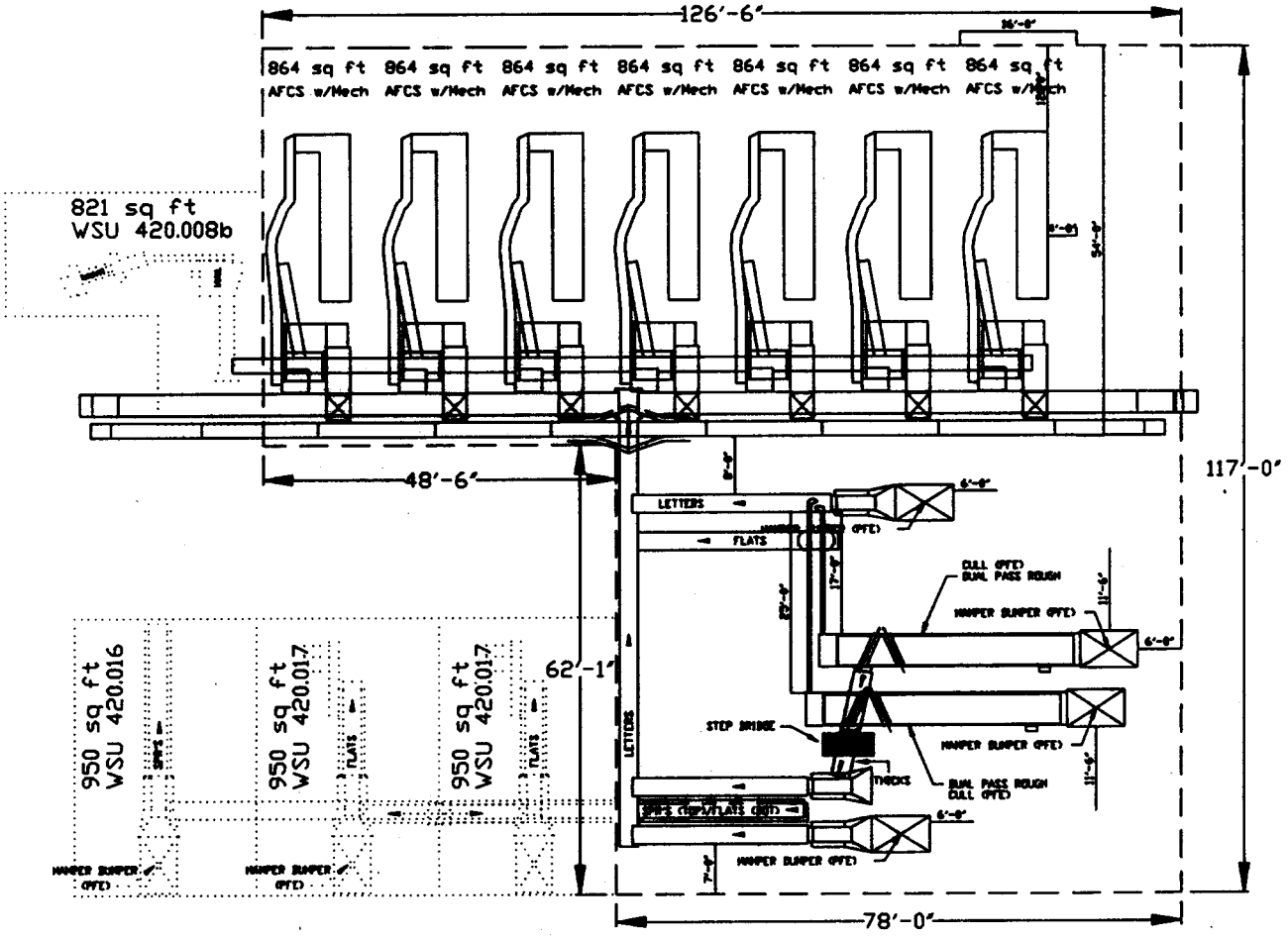


Exhibit 42w

420010h, Eight AFCSs With Standard Cull/Feed System

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

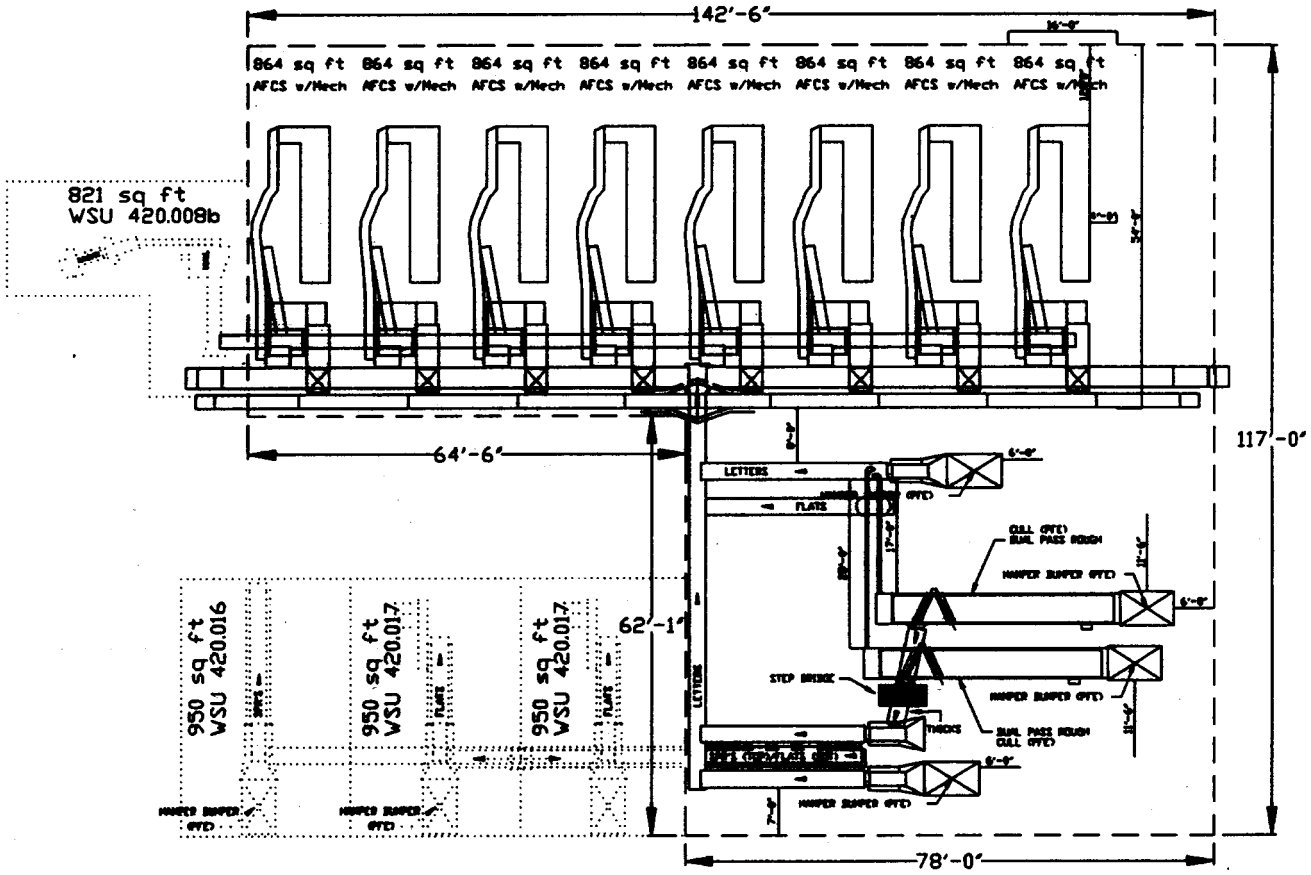


Exhibit 42x
420011, Tandem Meter Mail Setup

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

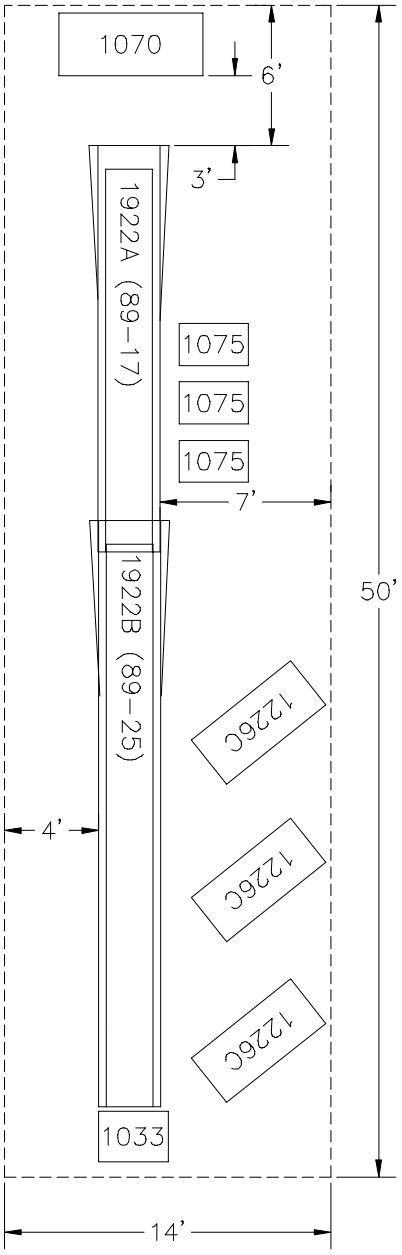


Exhibit 42y
420012, Five-Position Meter Mail Setup

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

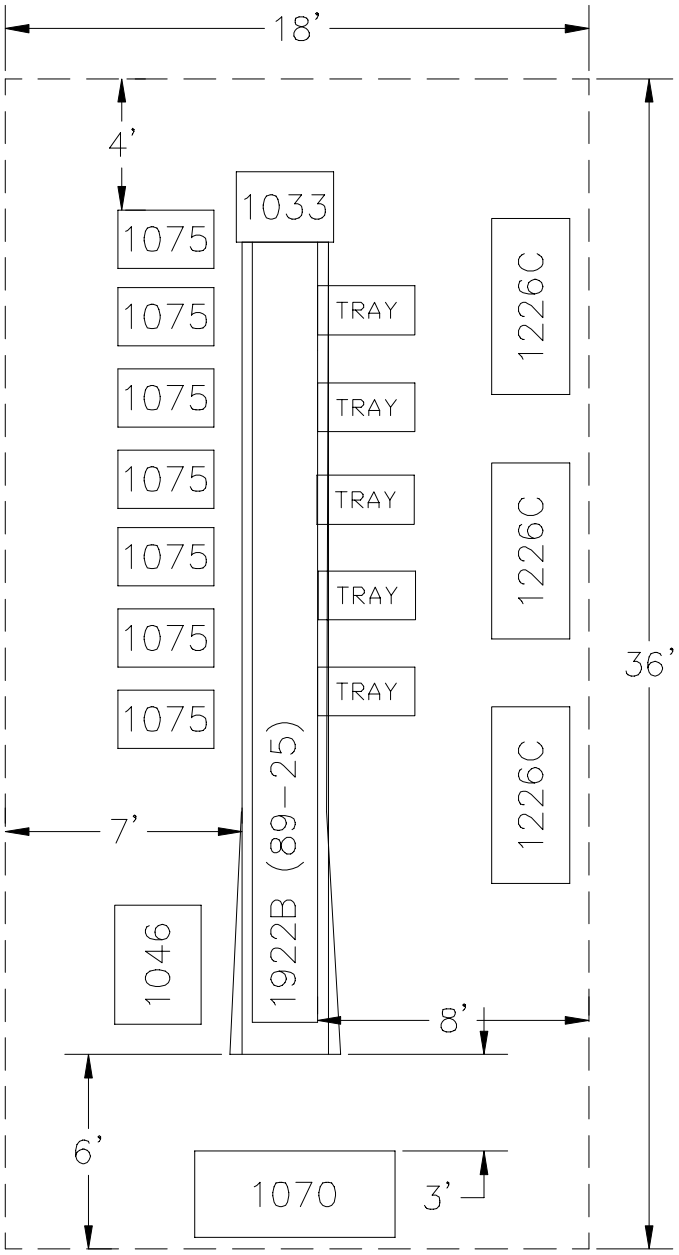
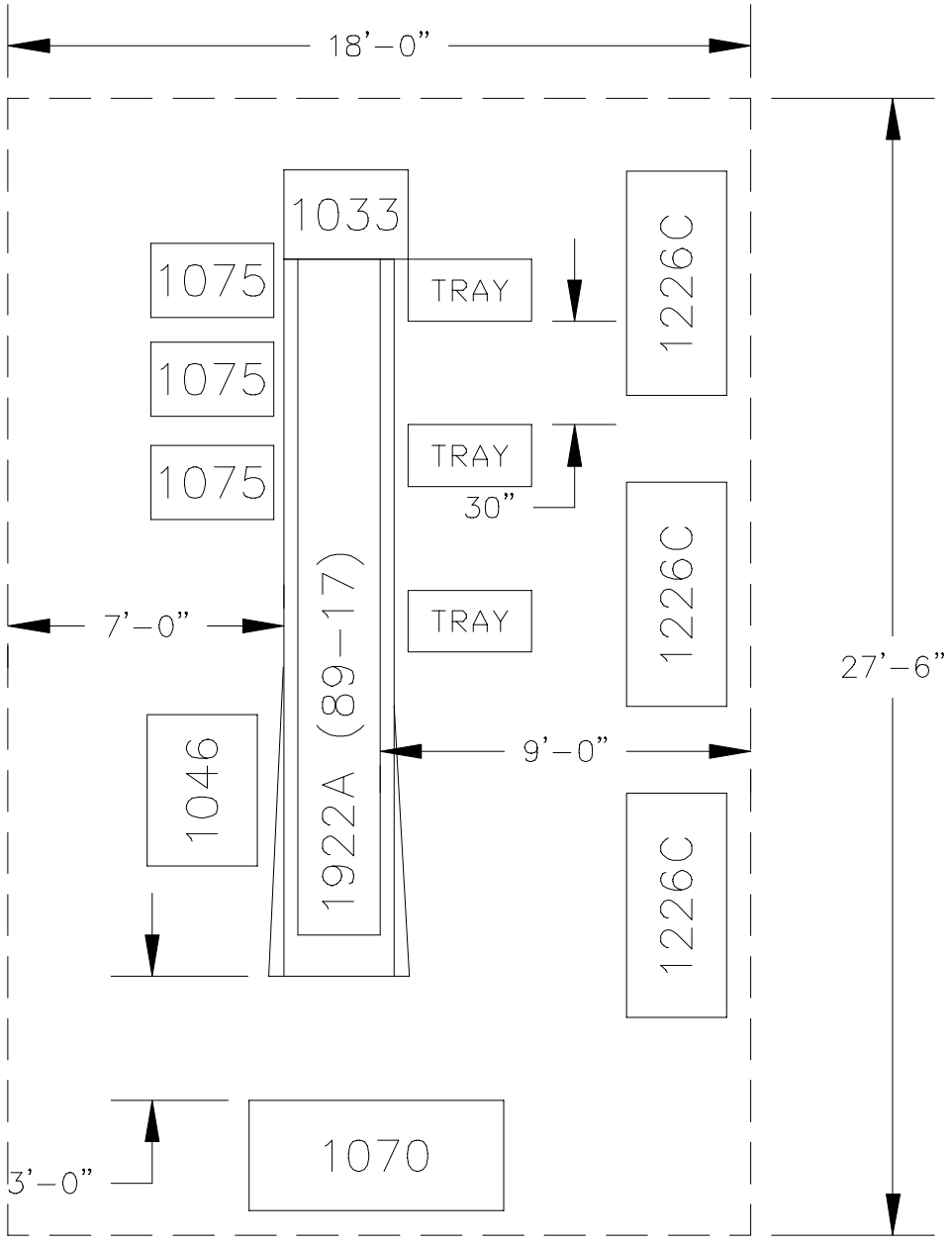


Exhibit 42z
420012a, Three-Position Meter Mail Setup

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

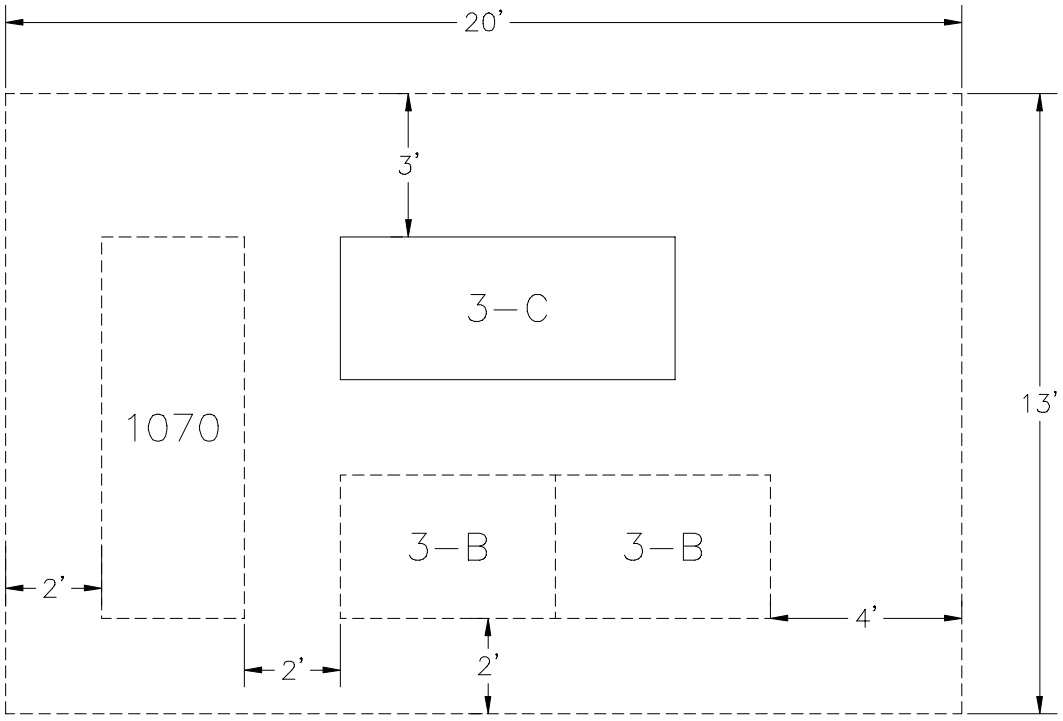


Exhibit 42ab
420014, Pouch Opening With 63 Separations

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

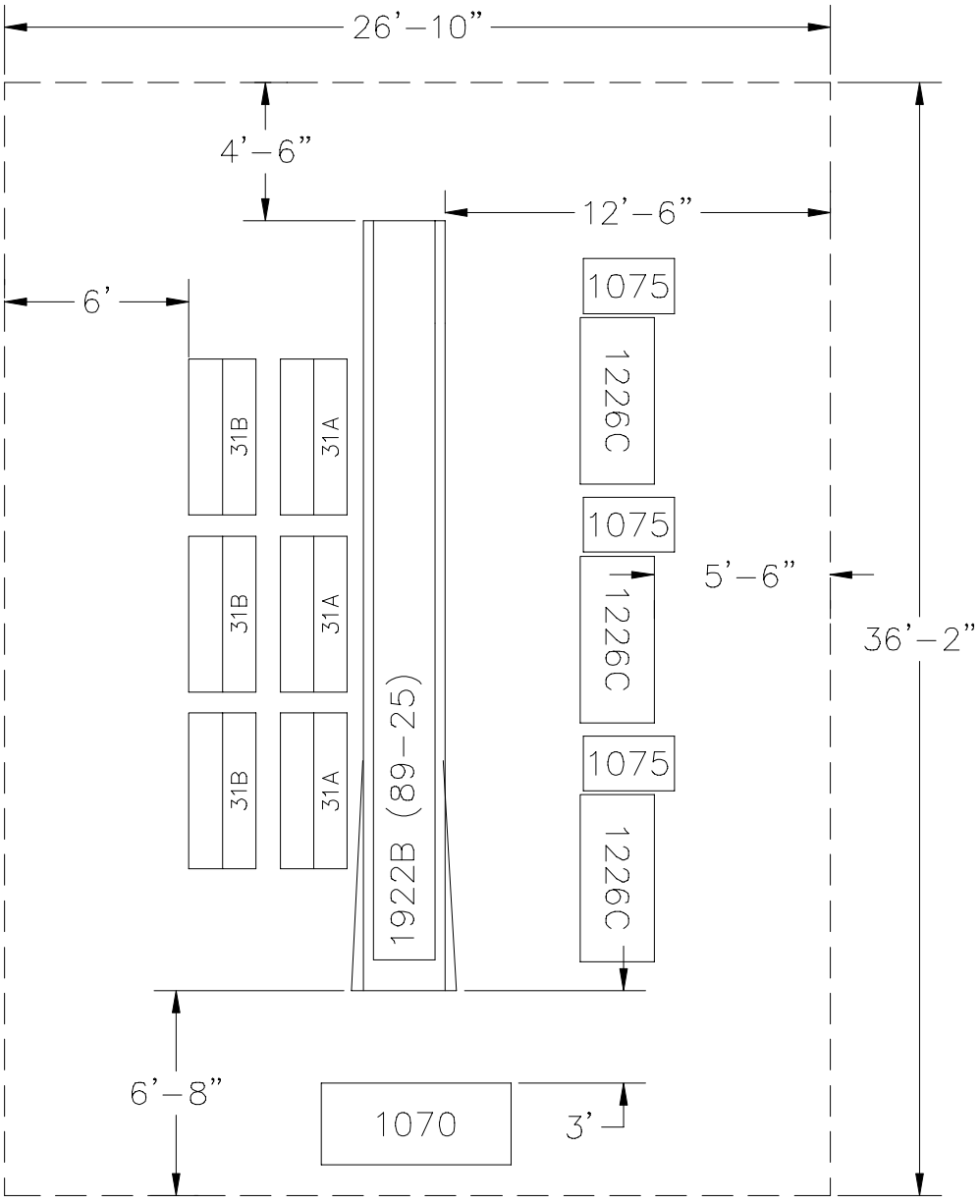


Exhibit 42ac

420014a, Pouch Opening With 48 Separations

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

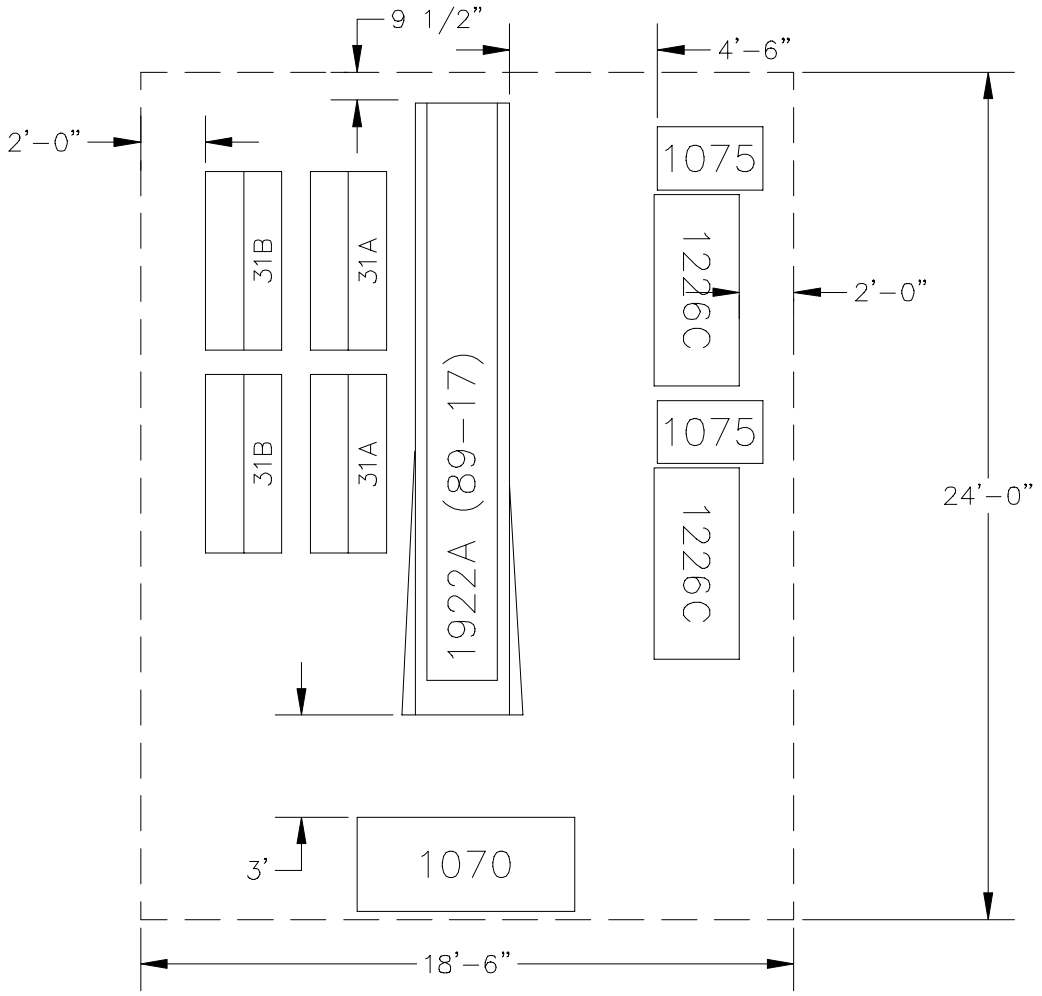


Exhibit 42ad
420015, Sack Opening, Paper, and SPRs — Primary Cutting and Setup (58 Separations)

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

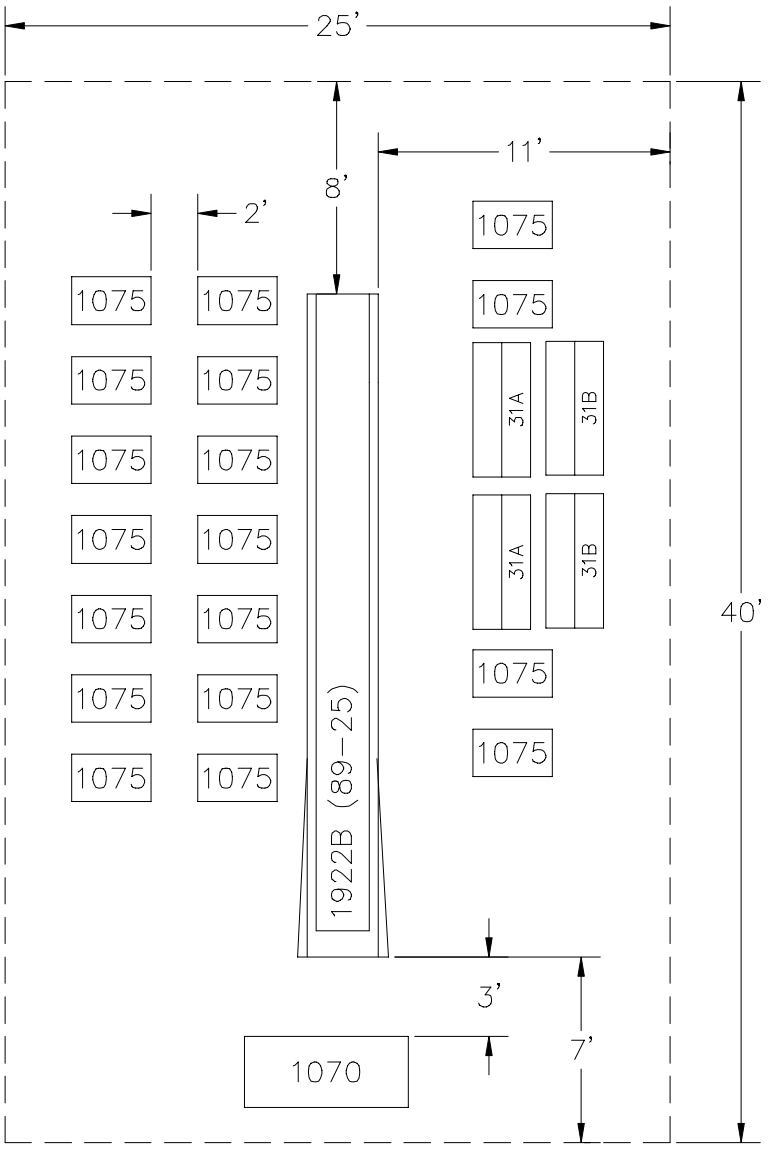


Exhibit 42ae
420016a, SPR and Thicks Canceling (17-Ft Belt)

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

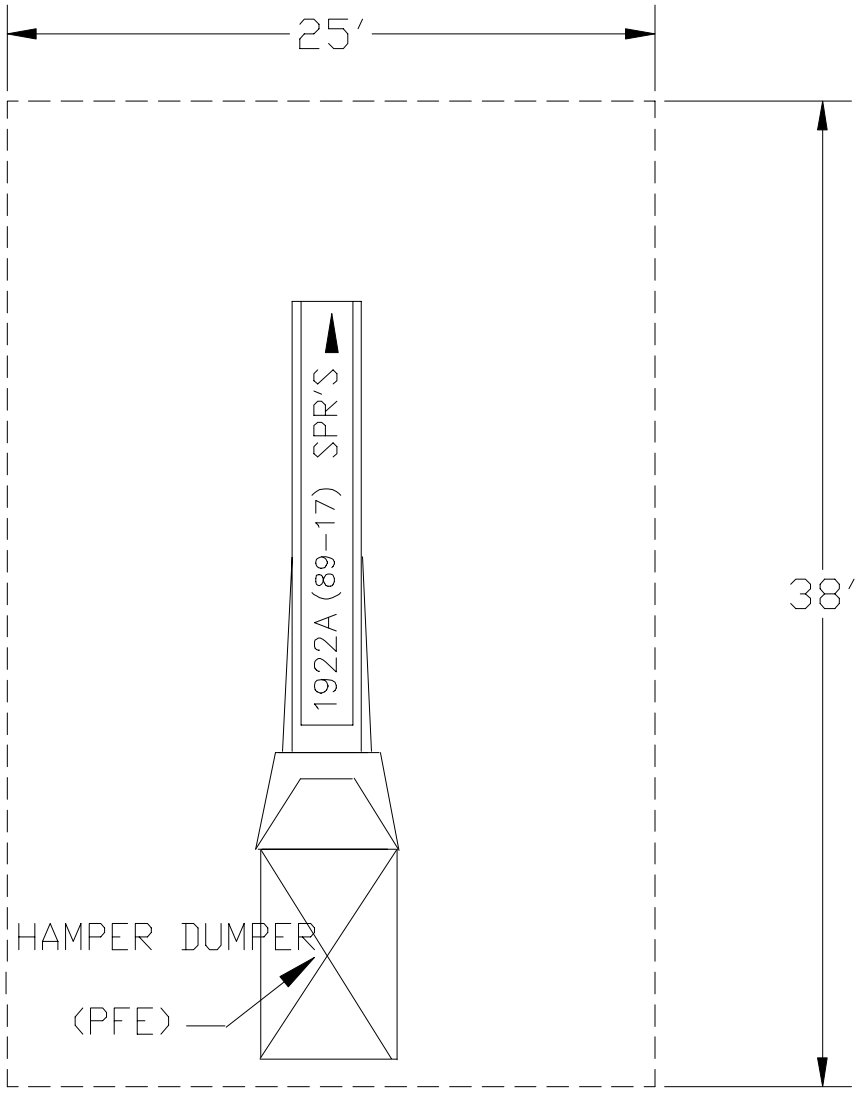


Exhibit 42af
420016b, SPR and Thicks Canceling (25-Ft Belt)

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

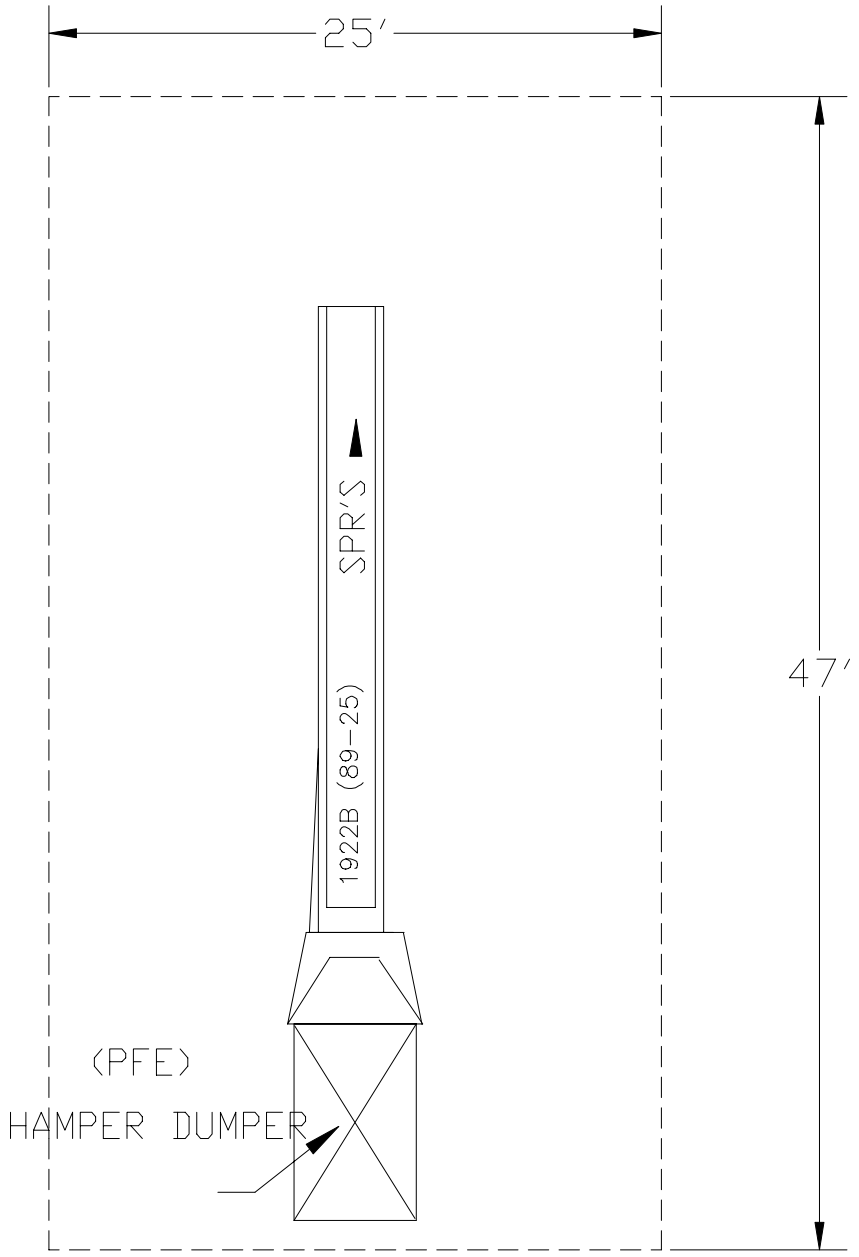


Exhibit 42ag
420017a, Model 15 Flats Canceler/Stacker (17-Ft Belt)

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

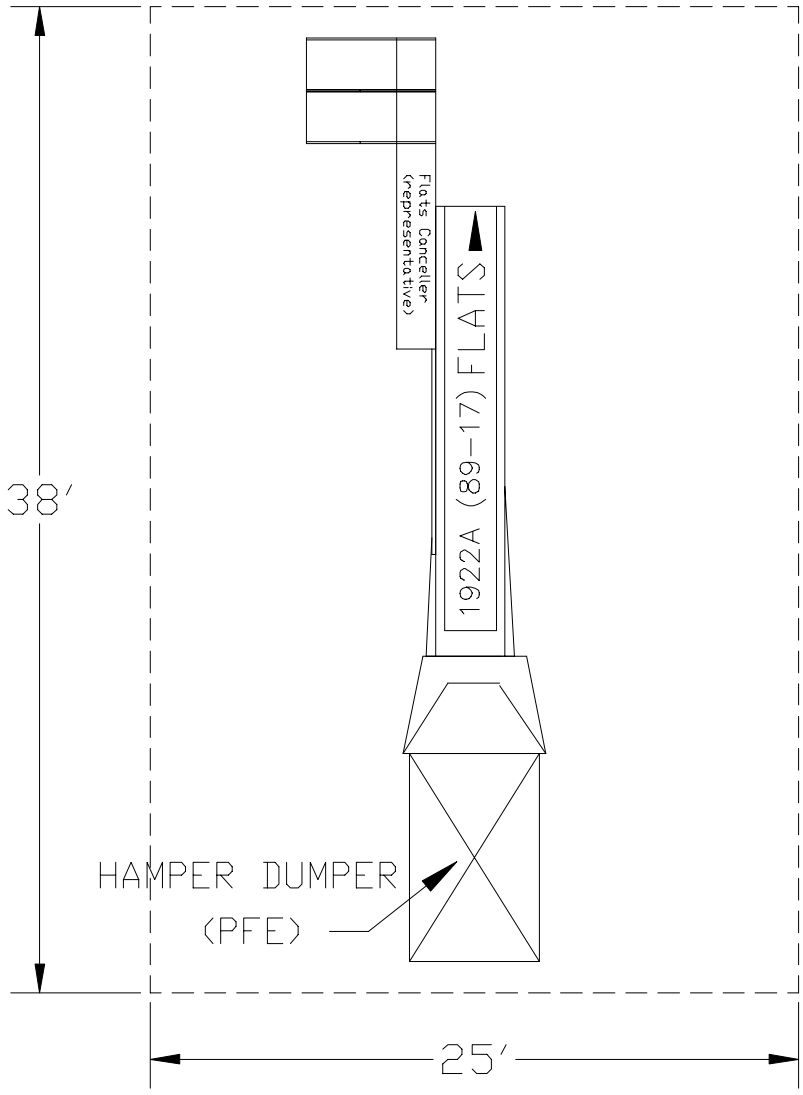
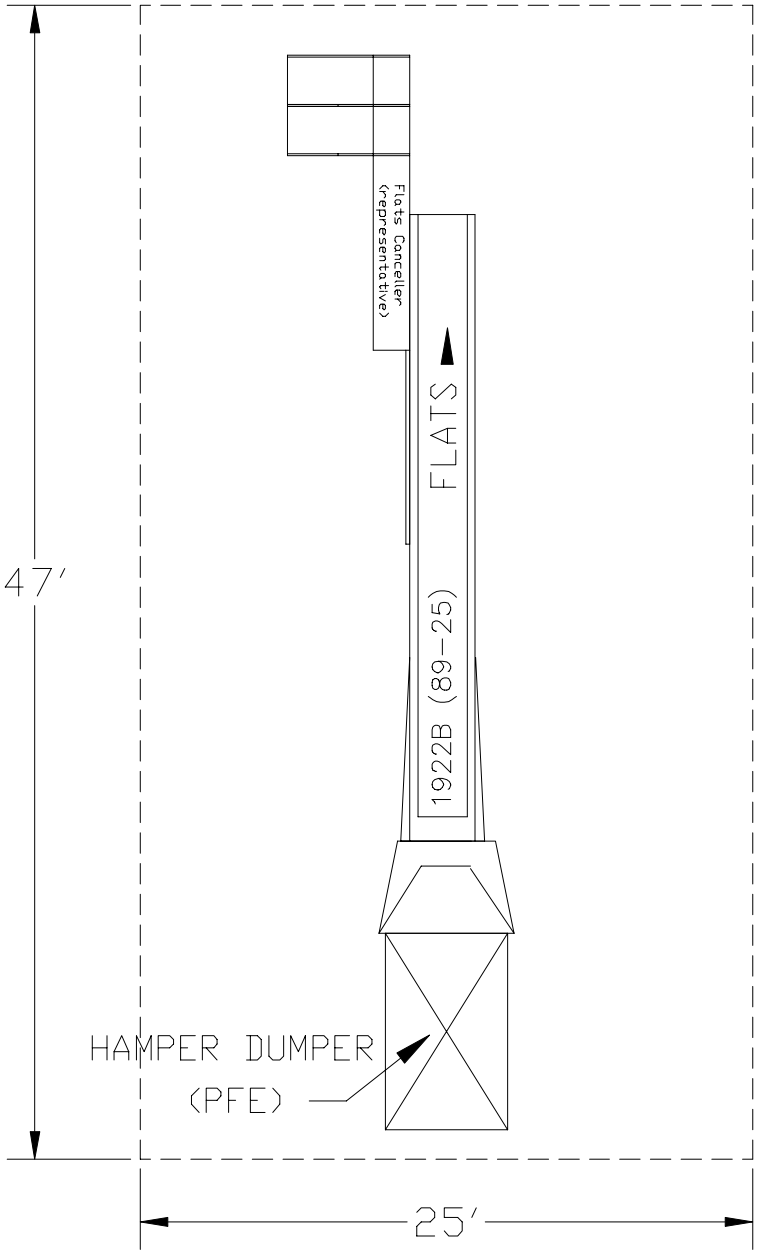


Exhibit 42ah
420017b, Model 15 Flats Canceler/Stacker (25-Ft Belt)

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

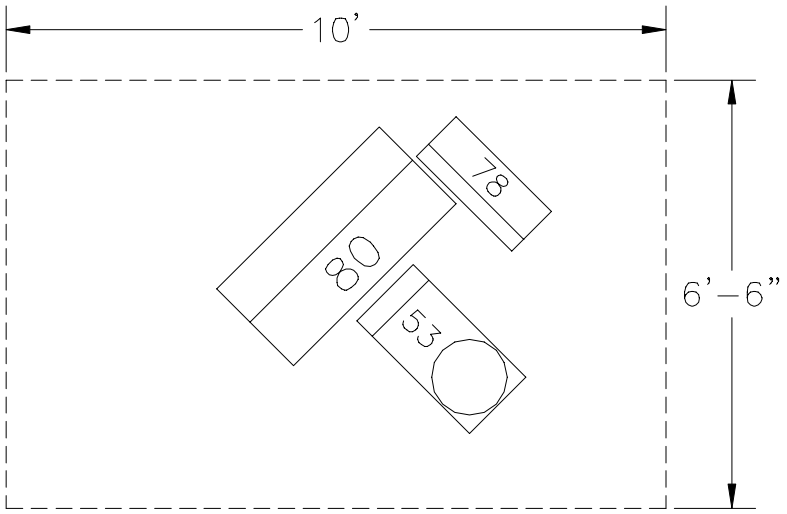


Exhibit 431c
431001a, Letter Distribution Workstation — Closed Back (77 Separations)

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

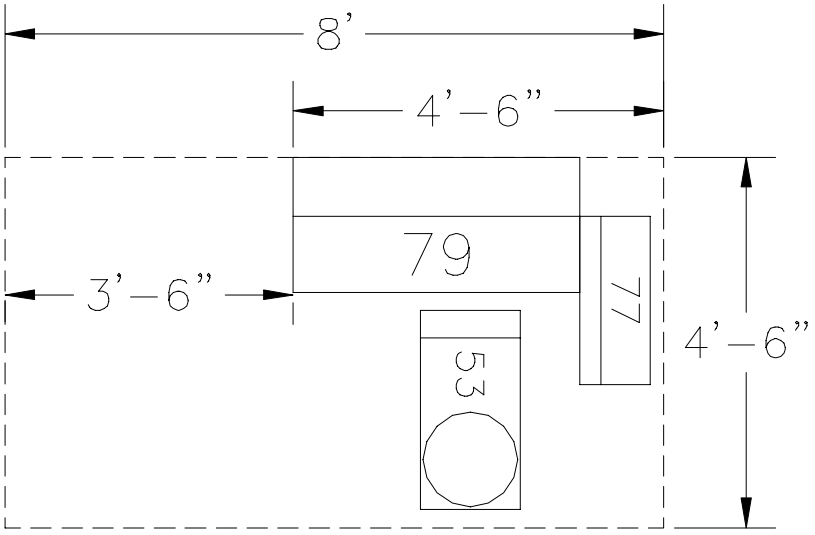


Exhibit 431d
431006, Letter Mail Labeling Machine — 200 (LMLM-200)

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

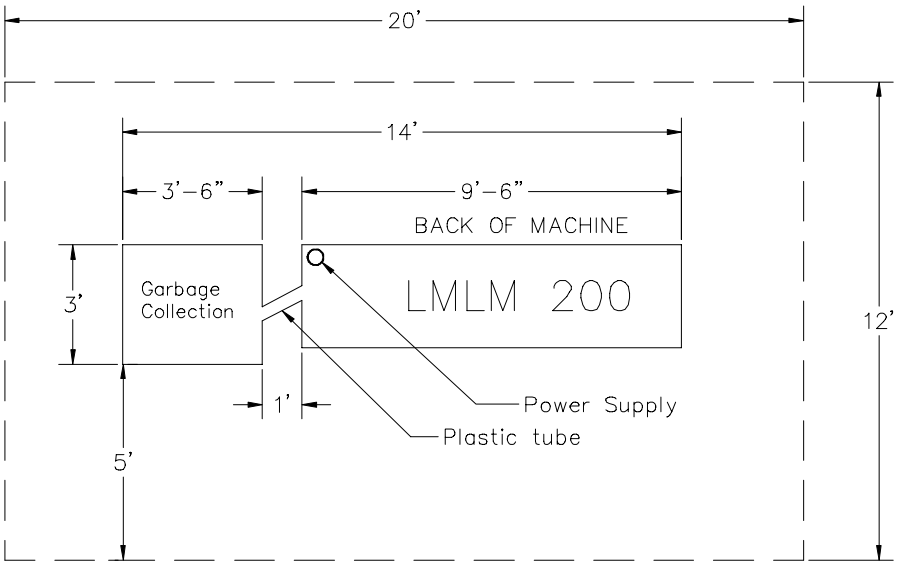


Exhibit 431e
431006a, Letter Mail Labeling Machine — 400 (LMLM-400)

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

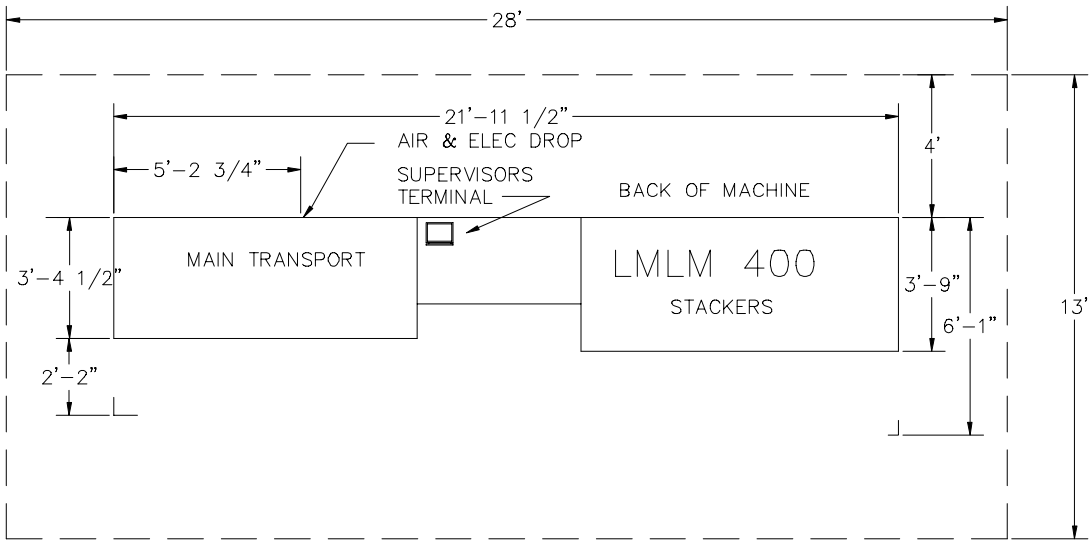
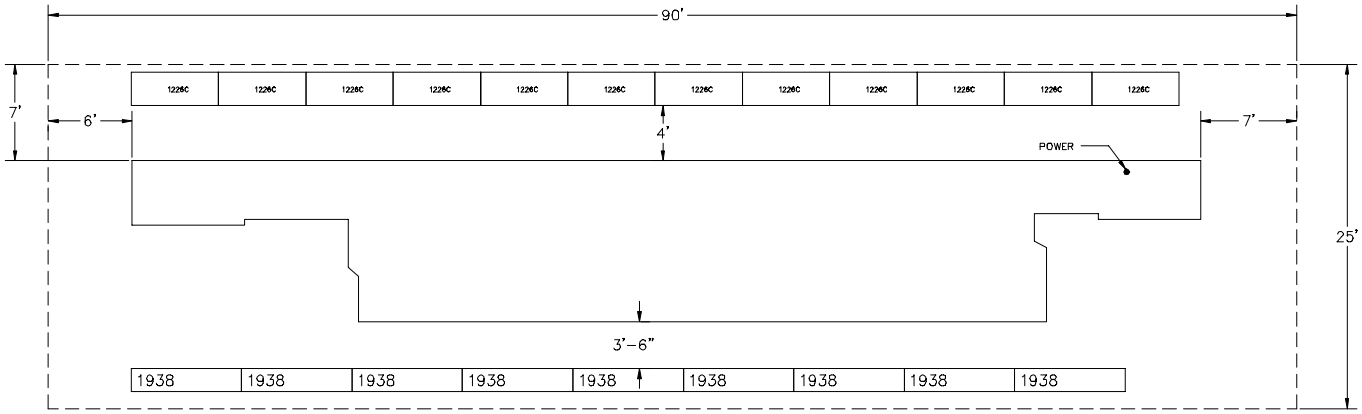


Exhibit 431f

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

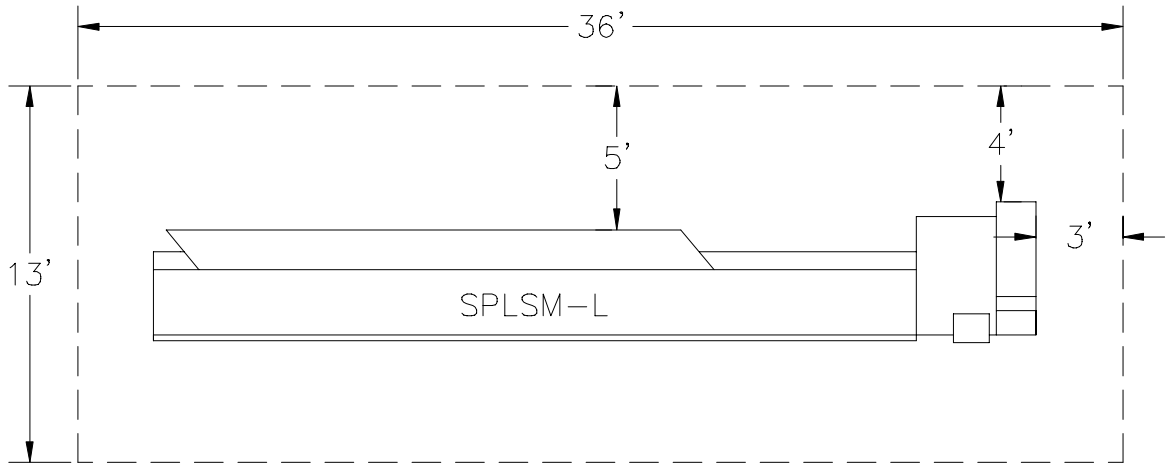


Exhibit 431h
431009, Mail Processing Barcode Sorter (MPBCS) With 96 Stackers

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

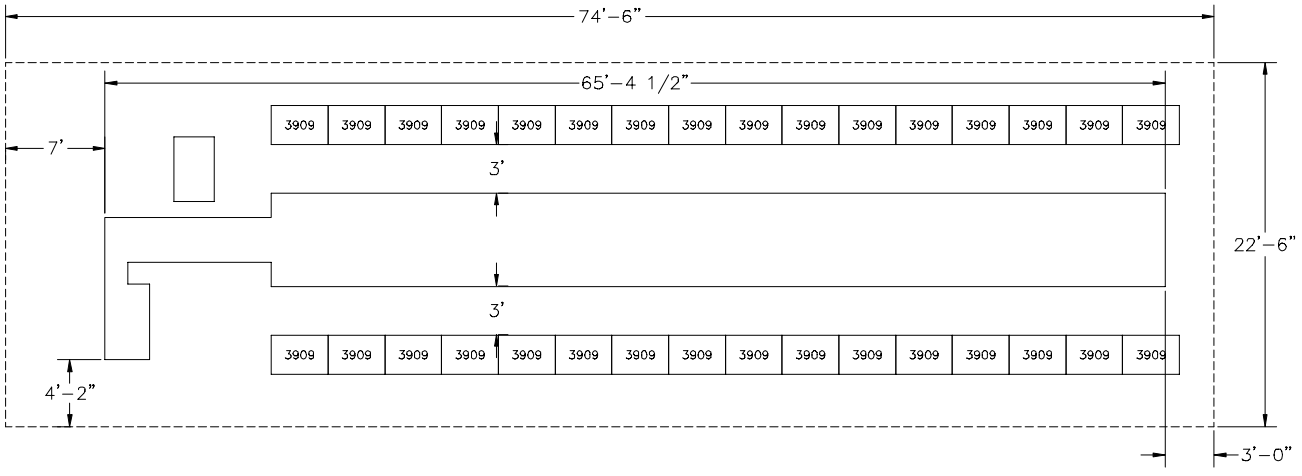


Exhibit 431i
431010a, 44-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit

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

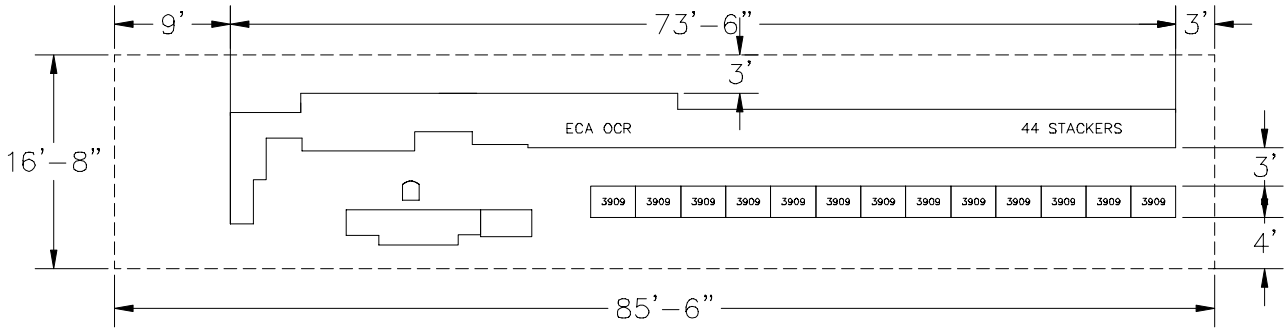


Exhibit 431j
431010b, 60-Stacker Multiline Optical Character Reader (MLOCR) — Base Unit

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

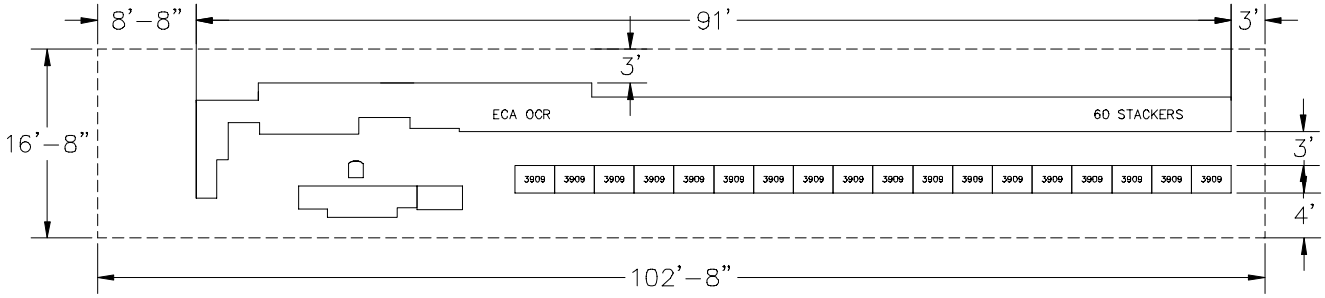


Exhibit 431k

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

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

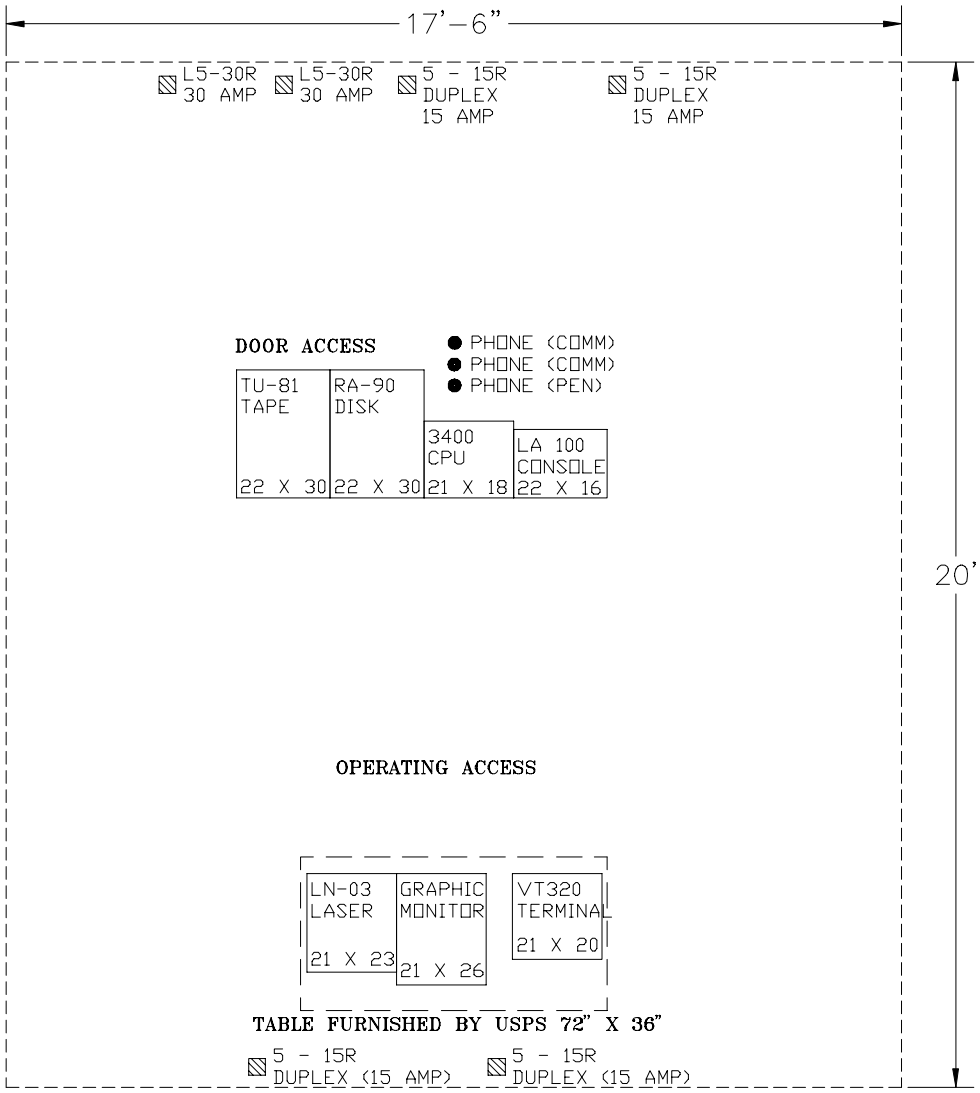
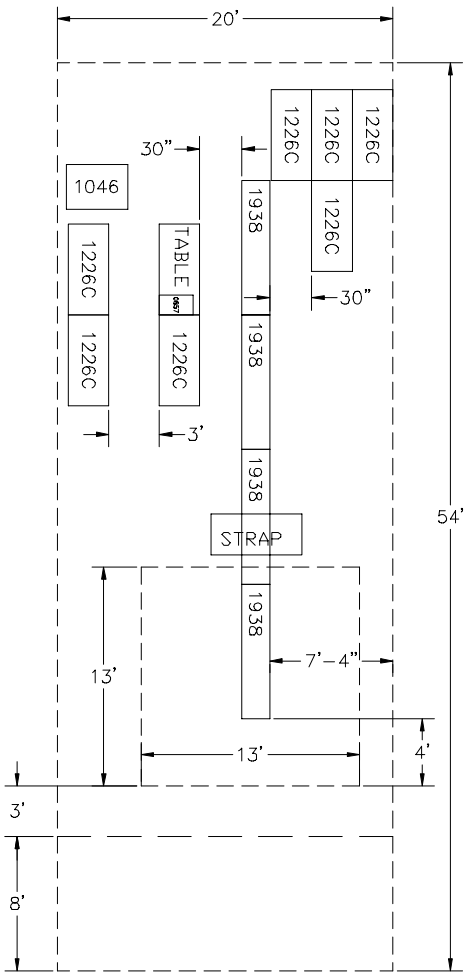


Exhibit 431l

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

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

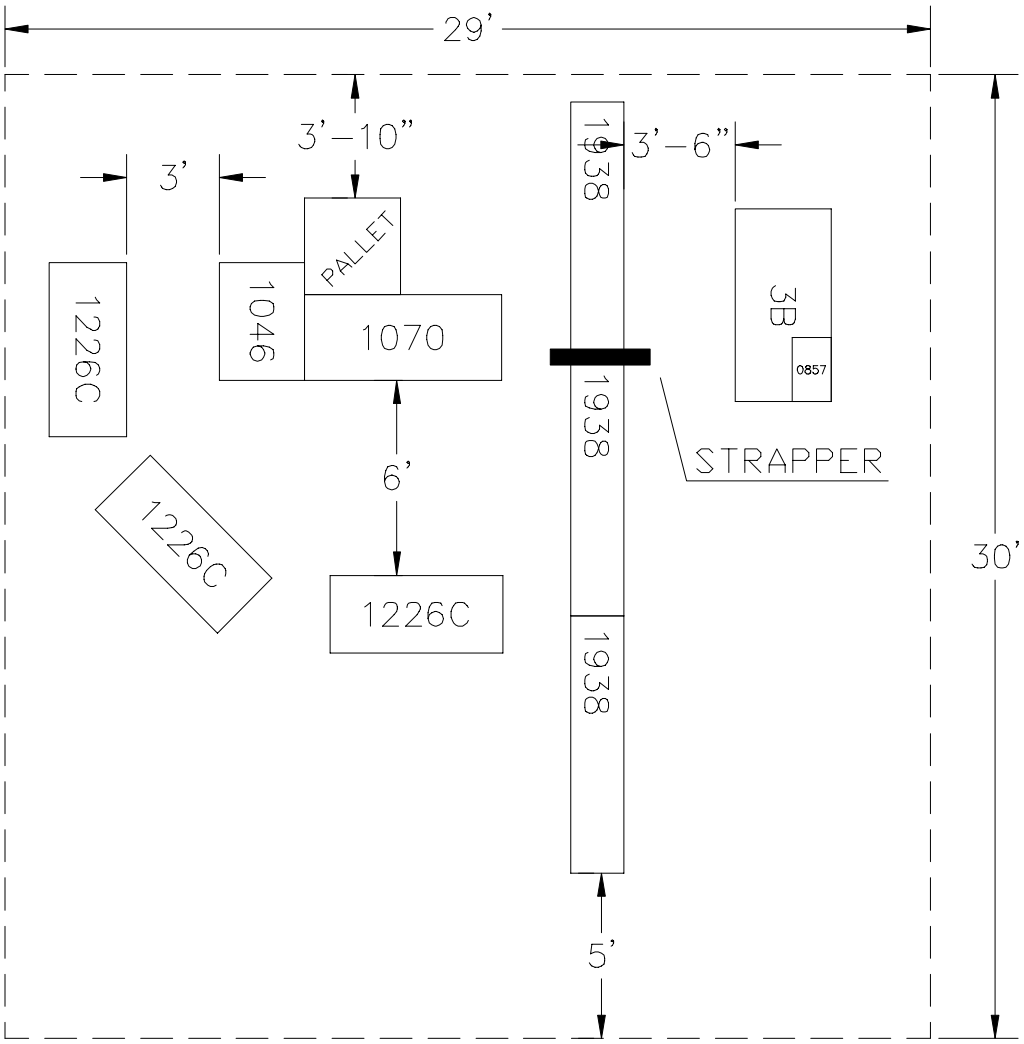


Notes:

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

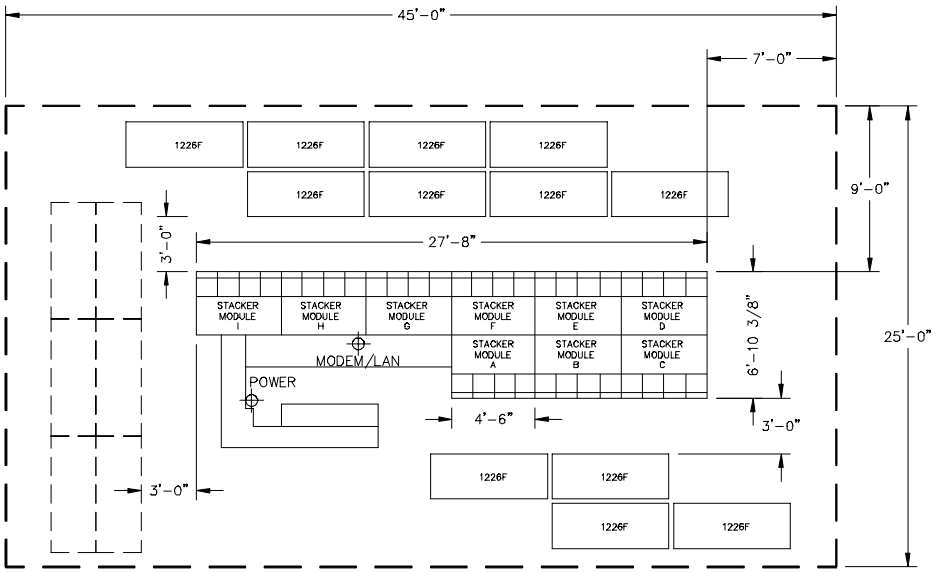


Exhibit 432.1d
432001b, ECA 126 Double-Sided DBCS

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

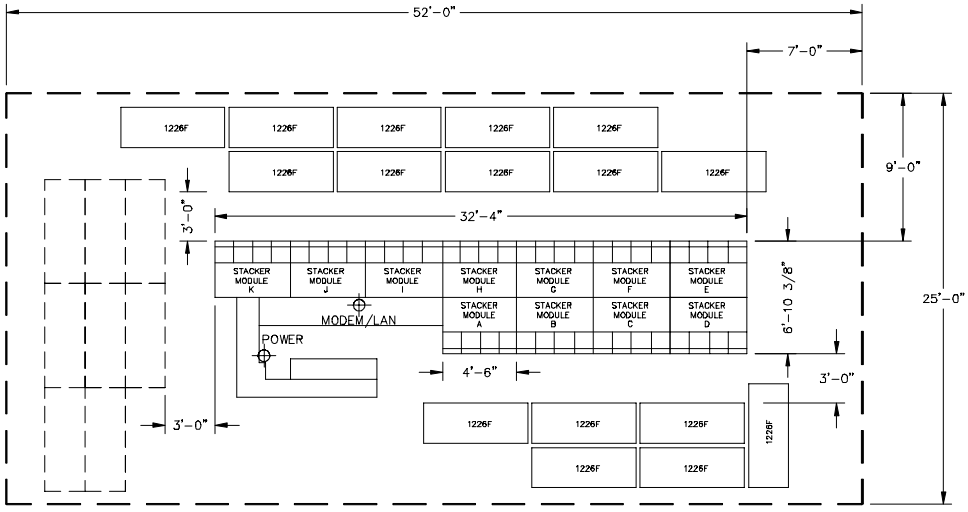


Exhibit 432.1e
432001c, ECA 150 Double-Sided DBCS

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

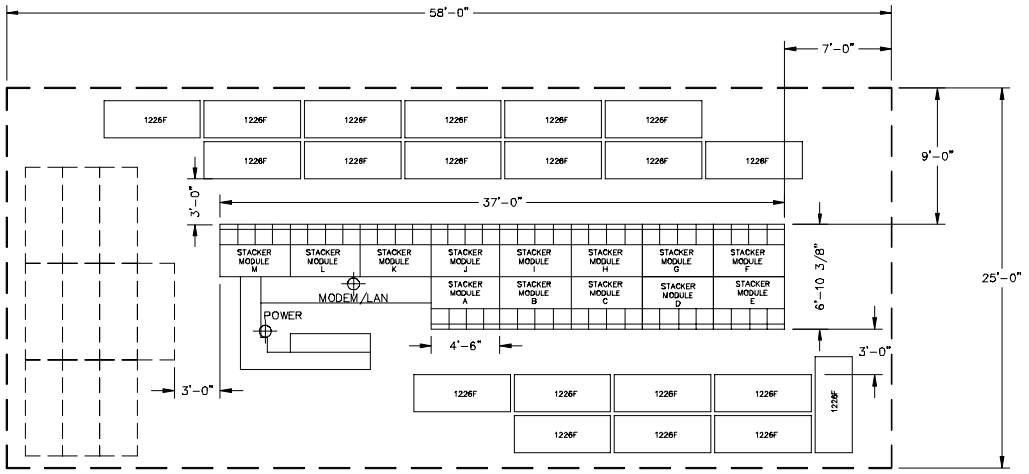


Exhibit 432.1f
432001d, ECA 174 Double-Sided DBCS

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

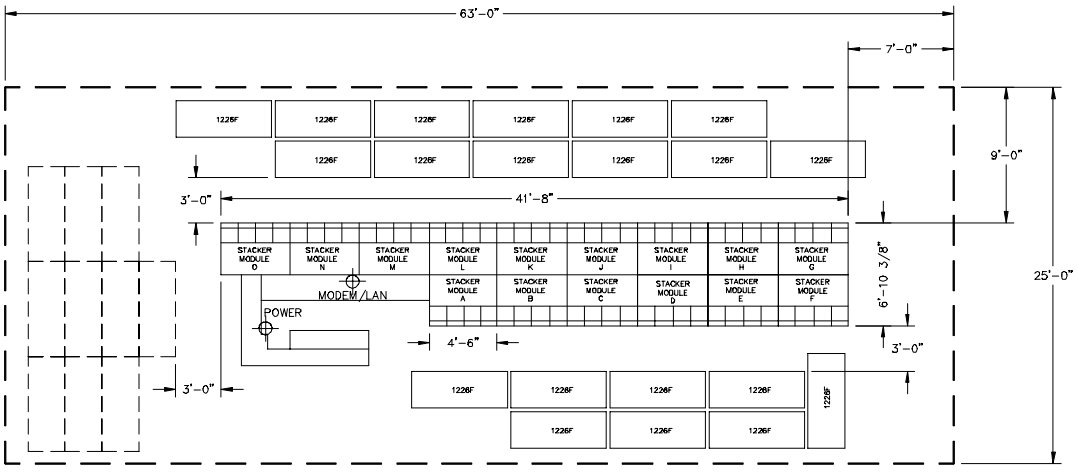


Exhibit 432.1g
432001e, ECA 198 Double-Sided DBCS

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

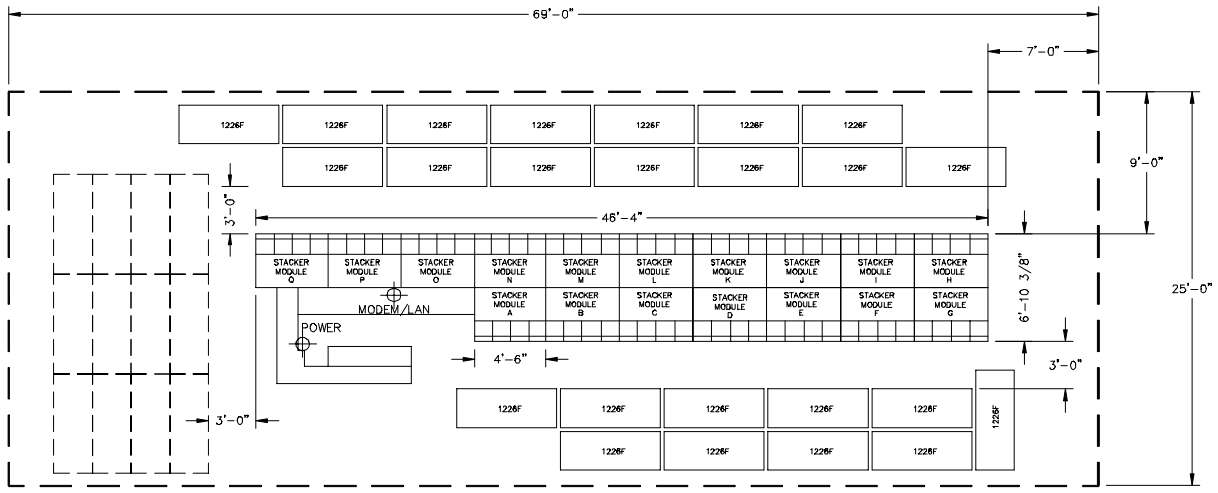


Exhibit 432.1h
432001f, ECA 222 Double-Sided DBCS

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

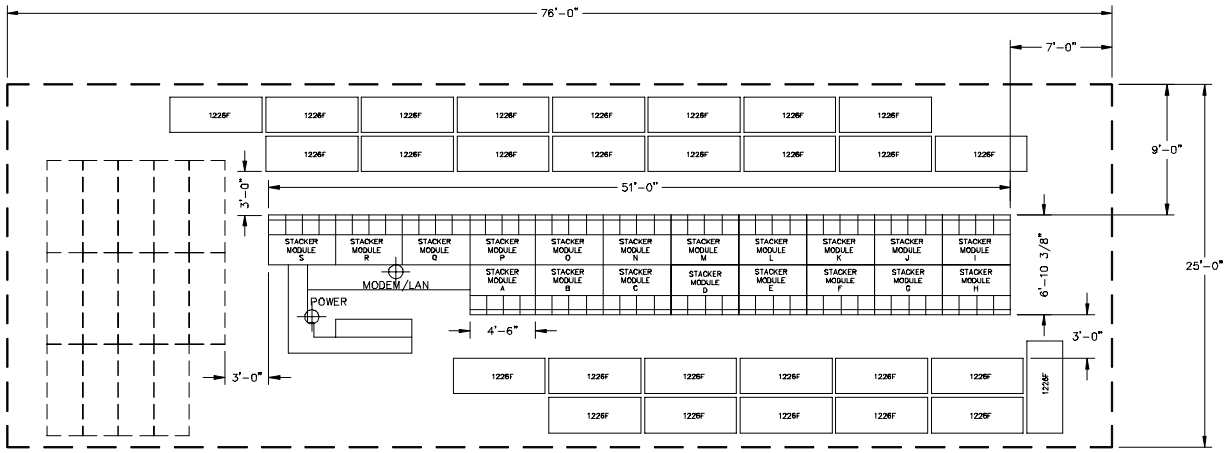


Exhibit 432.1i
432001g, ECA 246 Double-Side DBCS

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

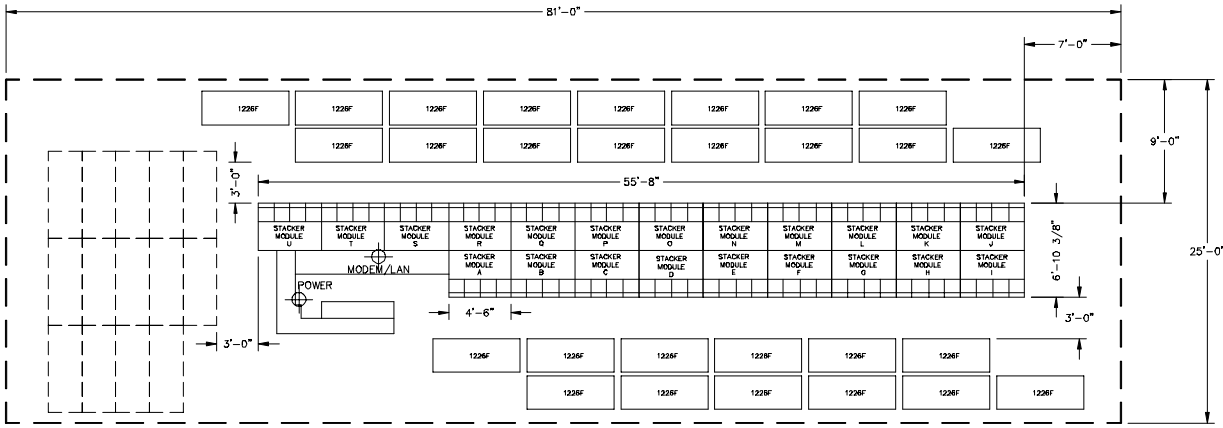


Exhibit 432.1j
432001h, ECA 270 Double-Sided DBCS

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

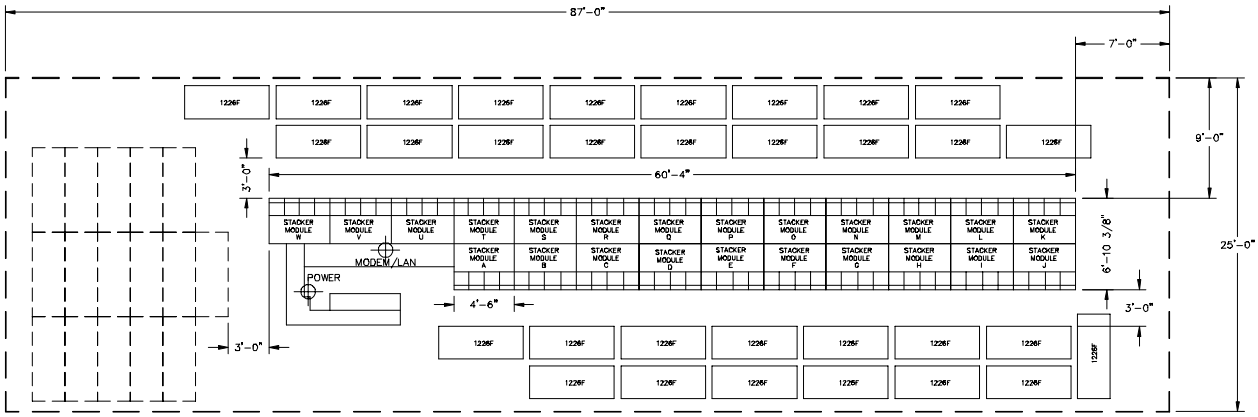
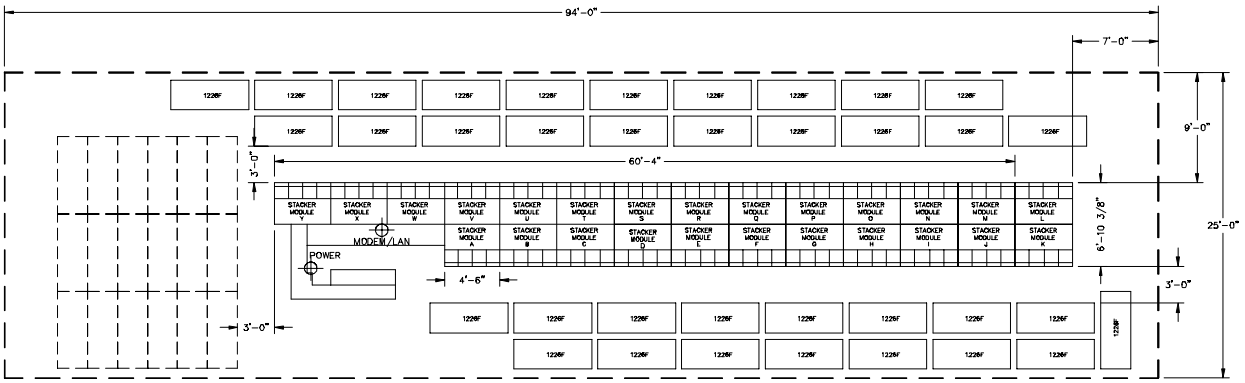


Exhibit 432.1k
432001i, ECA 294 Double-Sided DBCS

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

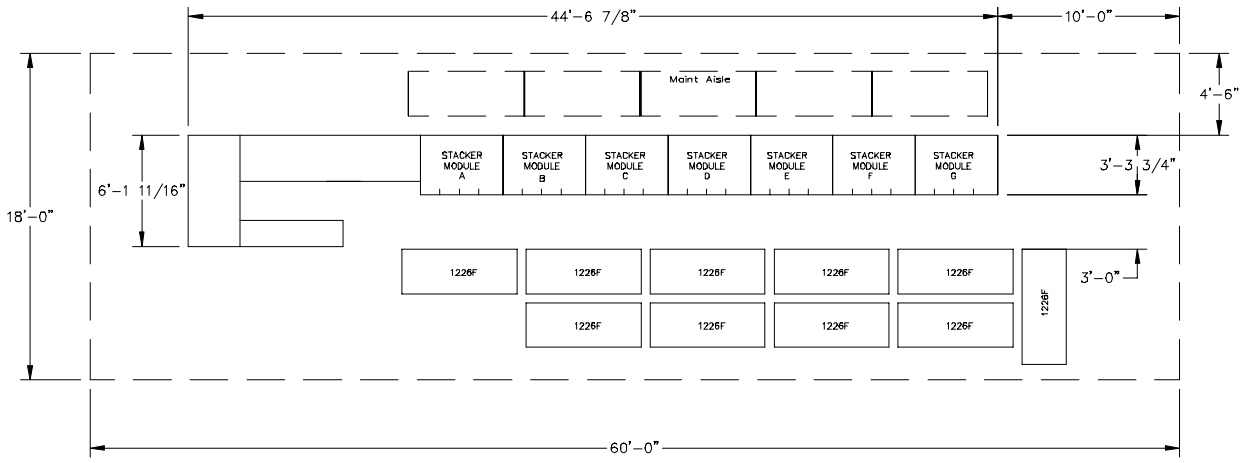


Exhibit 432.2d
432002b, ECA 126 Phase II Single-Sided DBCS

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

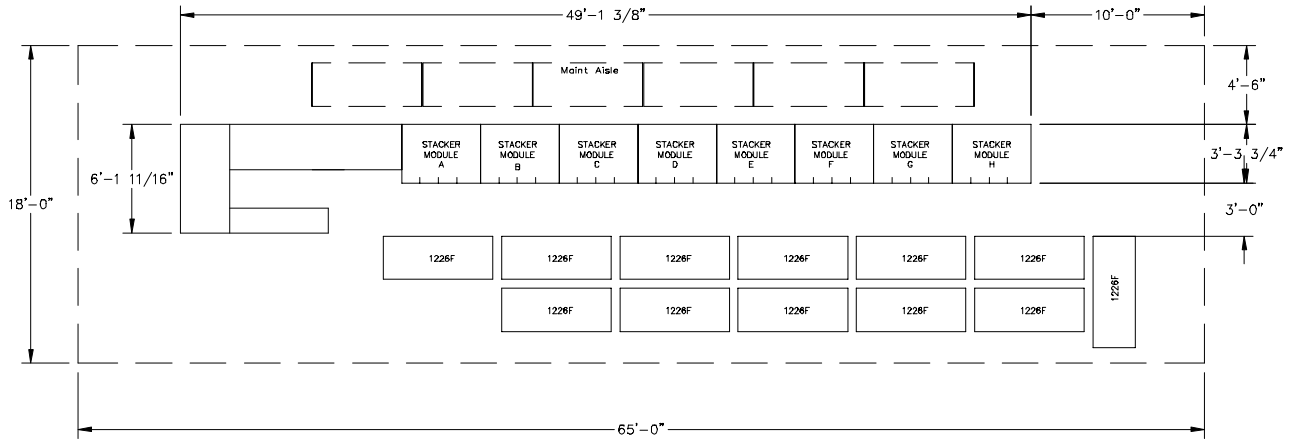


Exhibit 432.2e
432002c, ECA 142 Phase II Single-Sided DBCS

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

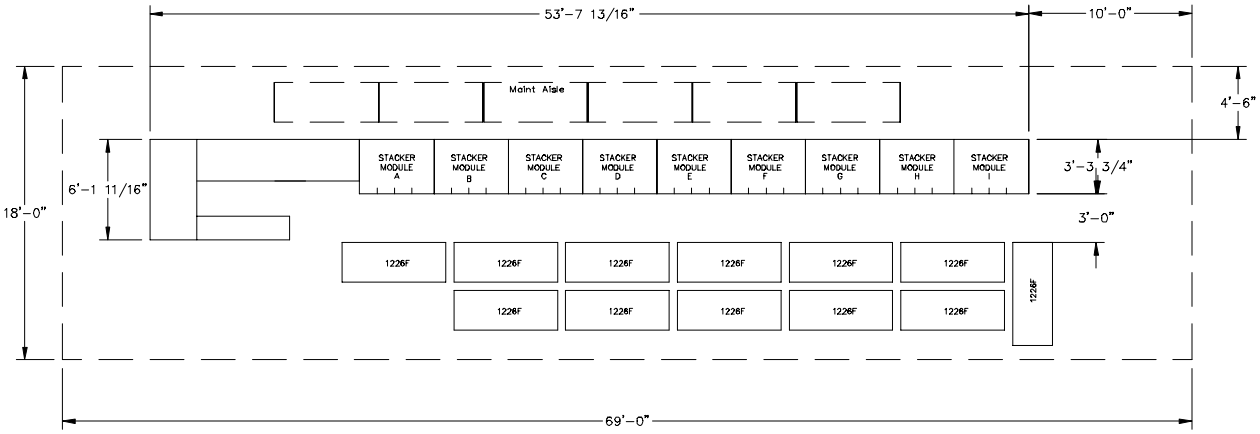


Exhibit 432.2f
432002d, ECA 158 Phase II Single-Sided DBCS

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

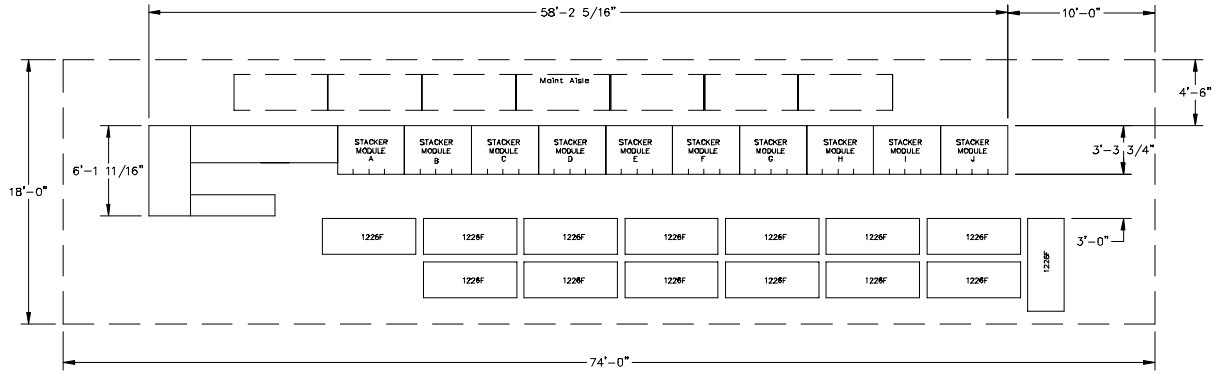


Exhibit 432.2g
432002e, ECA 174 Phase II Single-Sided DBCS

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

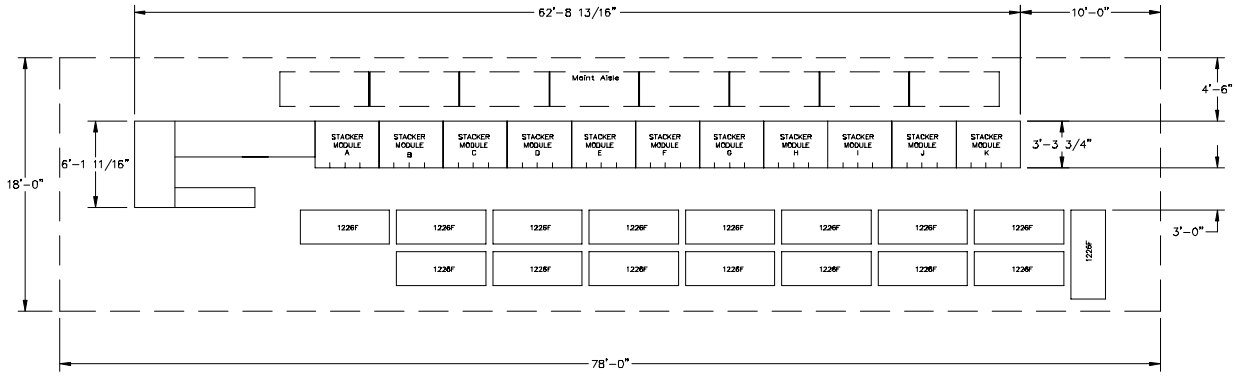


Exhibit 432.2h
432002f, ECA 190 Phase II Single-Sided DBCS

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

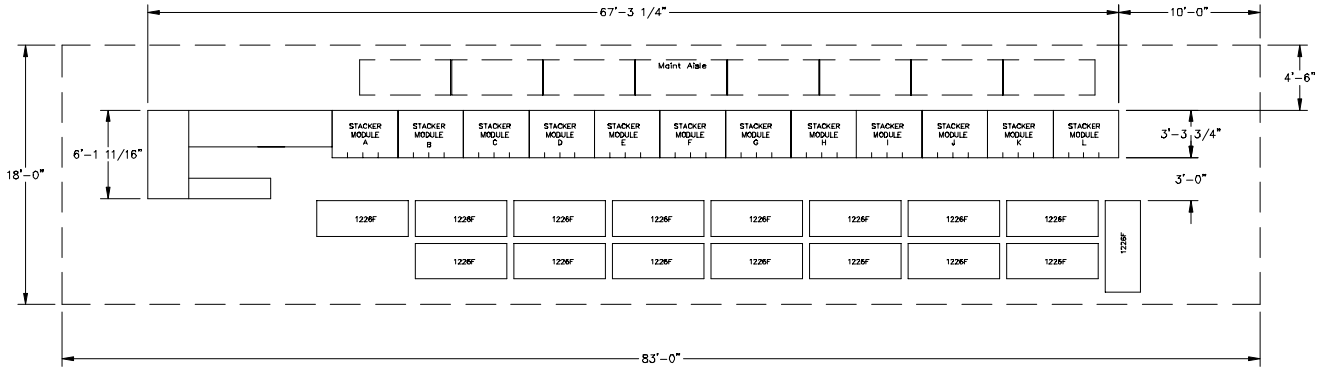


Exhibit 432.2i
432002g, ECA 206 Phase II Single-Sided DBCS

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

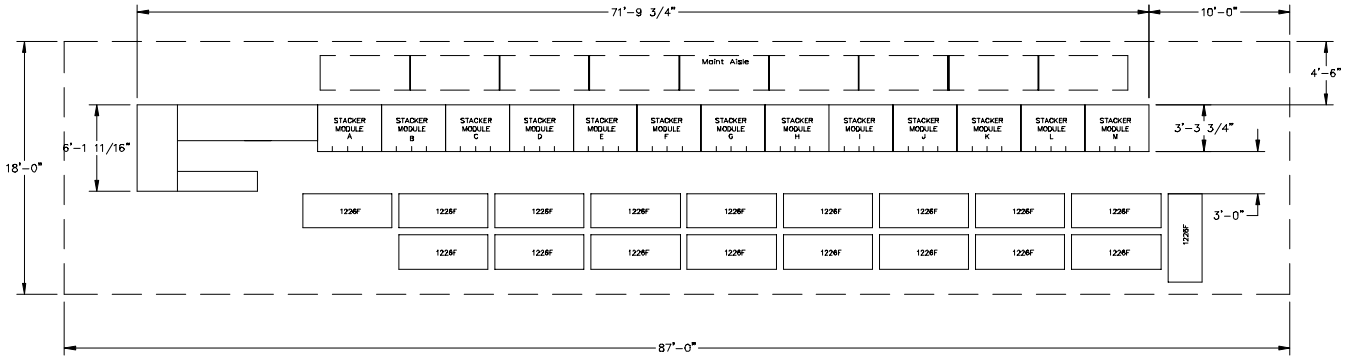


Exhibit 432.2j
432002h, ECA 222 Phase II Single-Sided DBCS

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

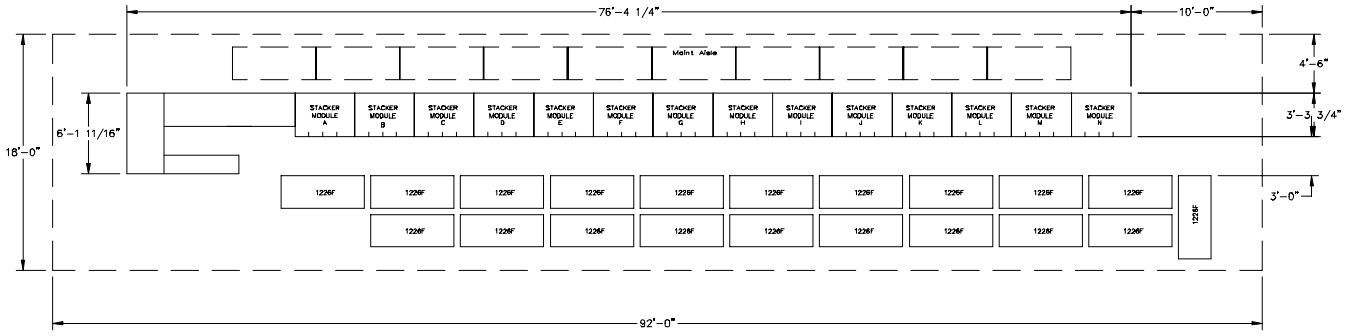
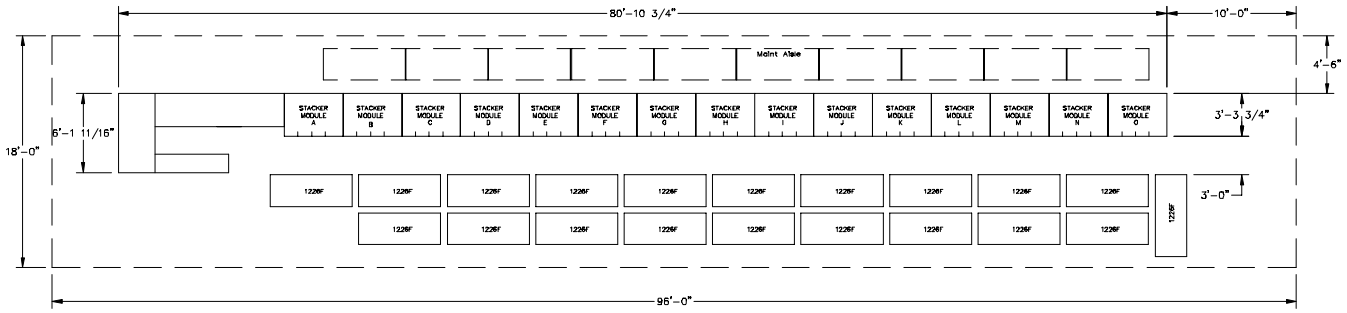


Exhibit 432.2k
432002i, ECA 238 Phase II Single-Sided DBCS

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

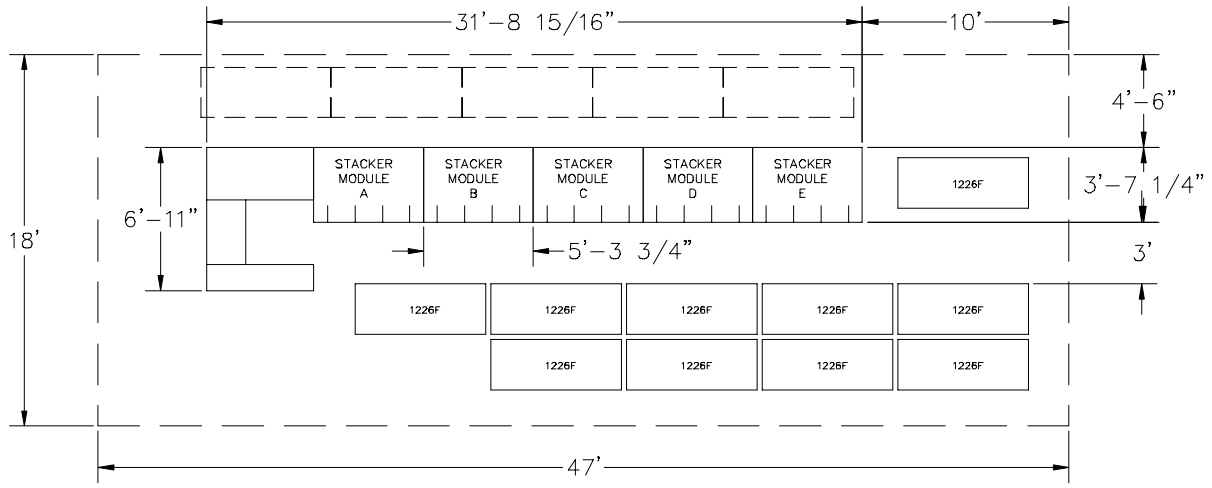


Exhibit 432.3d
432003b, Martin Marietta 120 Single-Sided DBCS

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

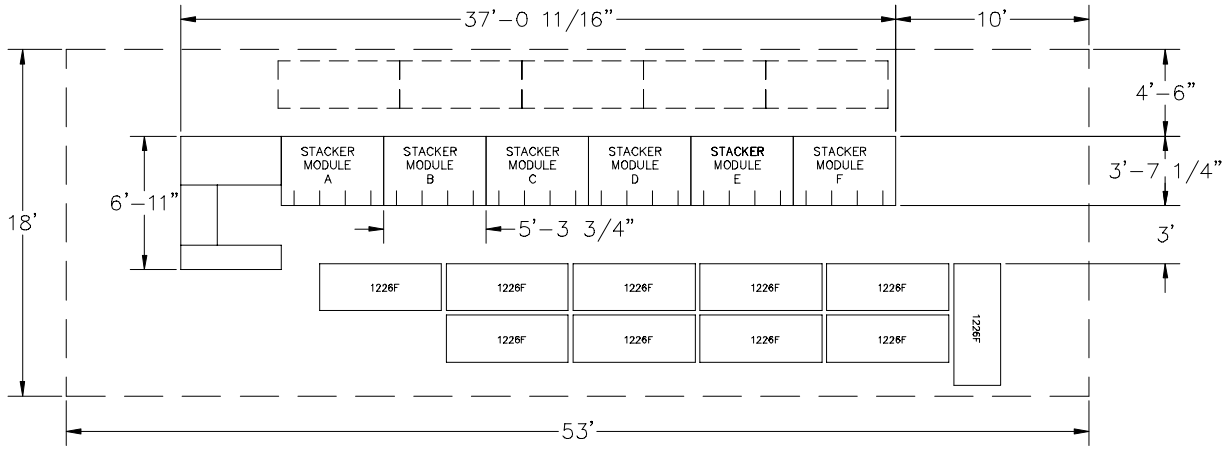


Exhibit 432.3e
432003c, Martin Marietta 140 Single-Sided DBCS

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

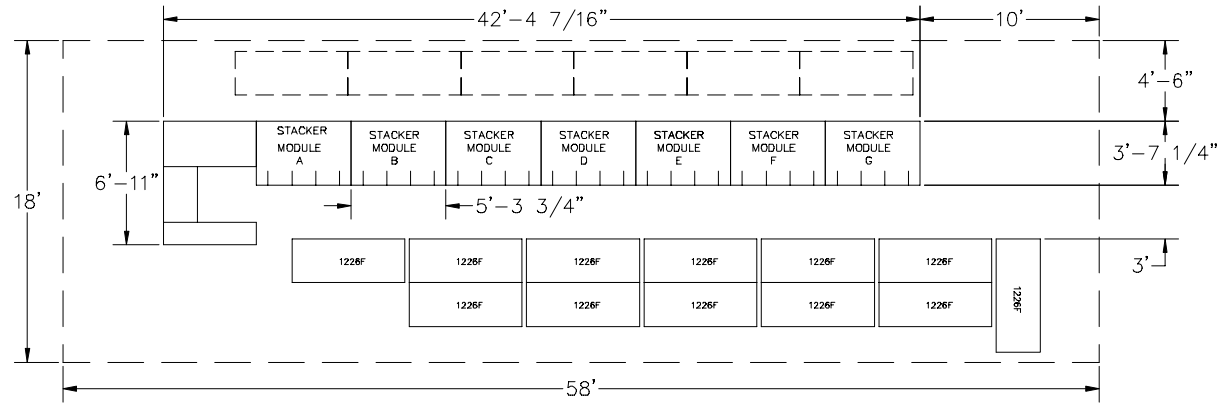


Exhibit 432.3f
432003d, Martin Marietta 160 Single-Sided DBCS

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

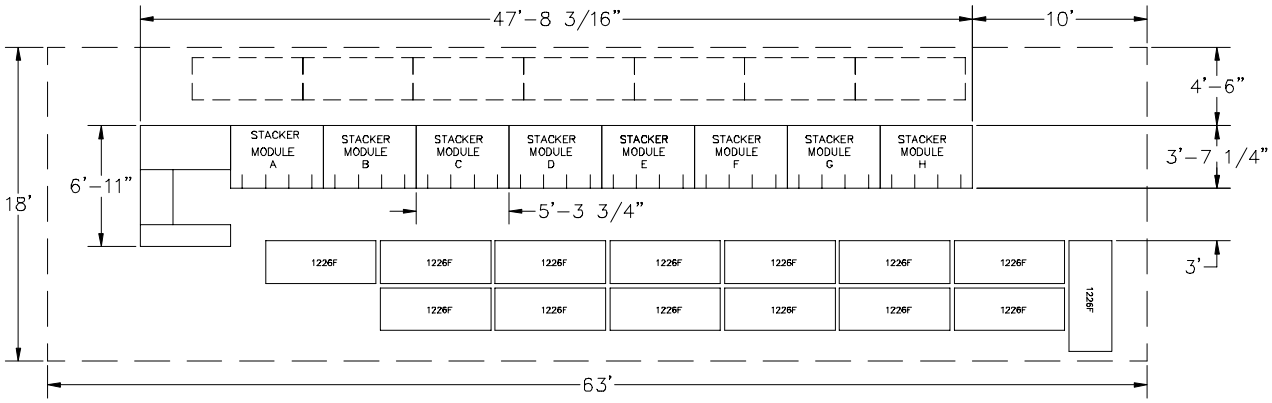


Exhibit 432.3g
432003e, Martin Marietta 180 Single-Sided DBCS

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

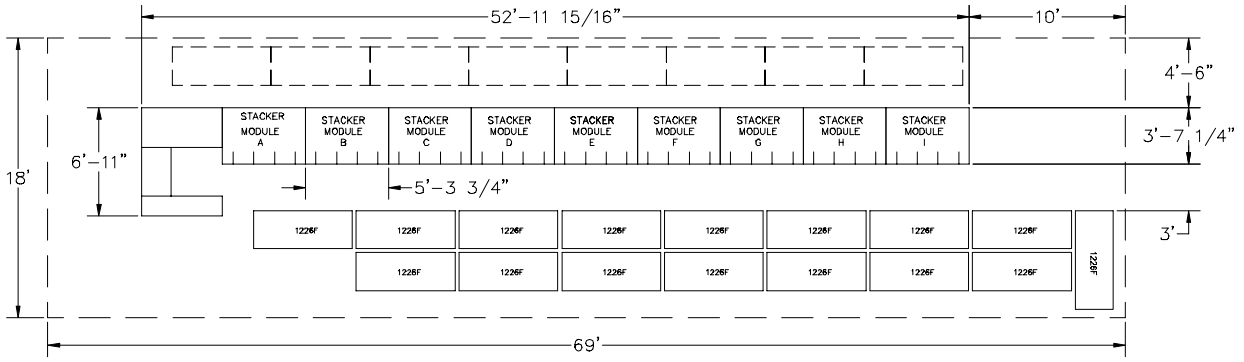


Exhibit 432.3h
432003f, Martin Marietta 200 Single-Sided DBCS

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

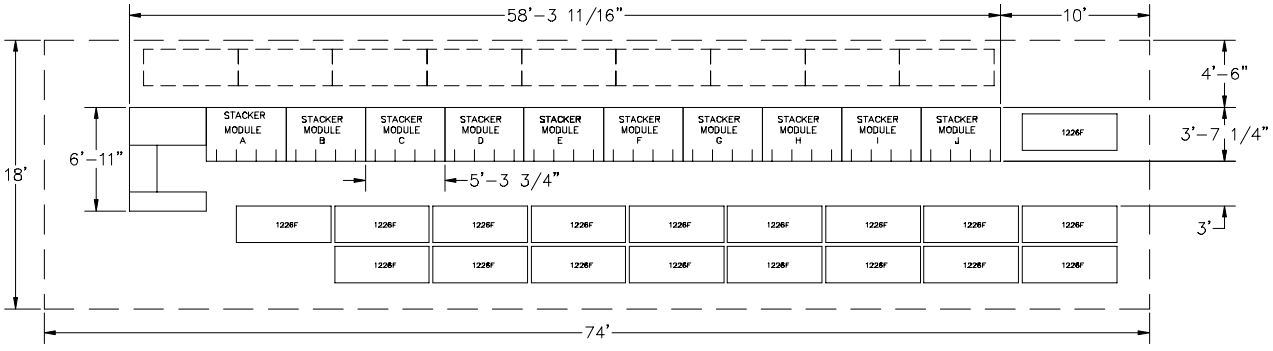


Exhibit 432.3i
432003g, Martin Marietta 220 Single-Sided DBCS

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

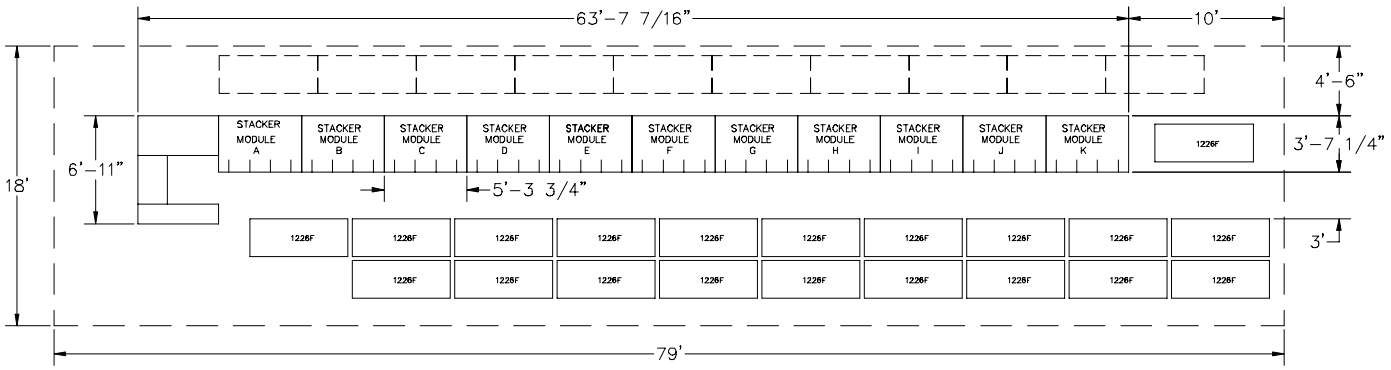


Exhibit 432.3j
432003h, Martin Marietta 240 Single-Sided DBCS

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

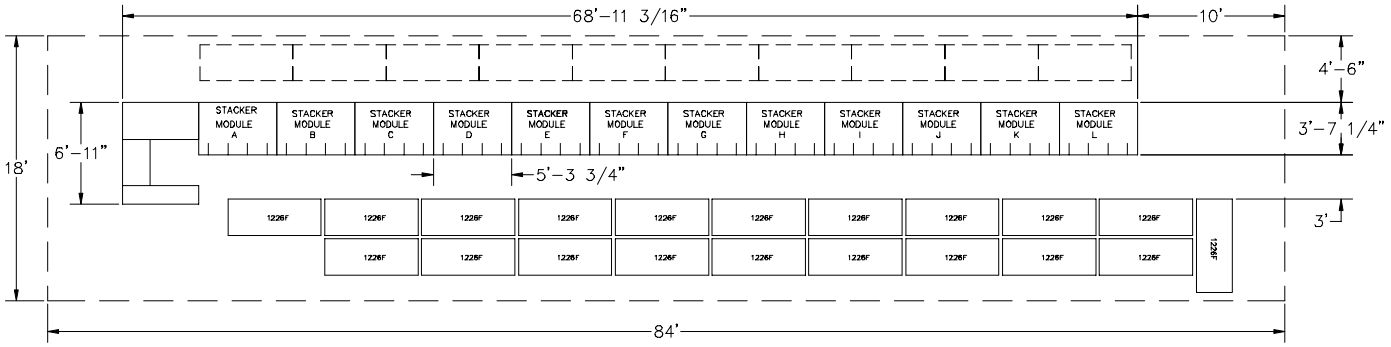
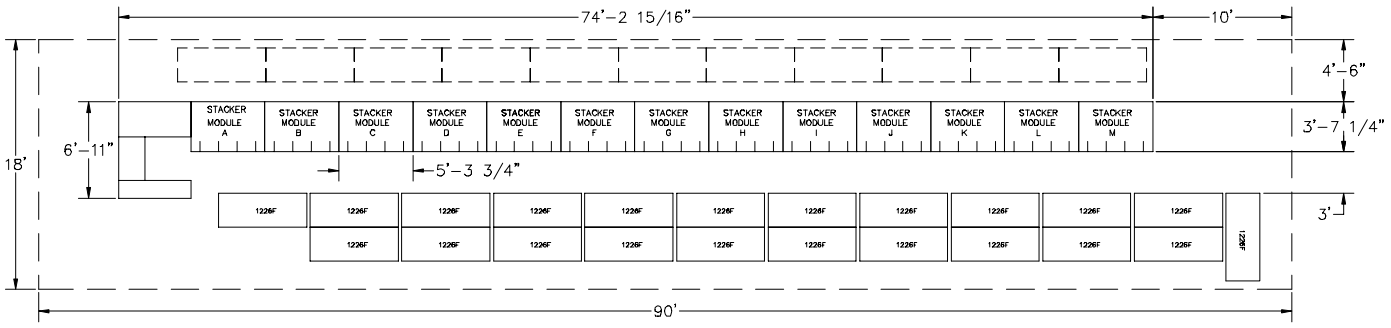


Exhibit 432.3k
432003i, Martin Marietta 260 Single-Sided DBCS

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

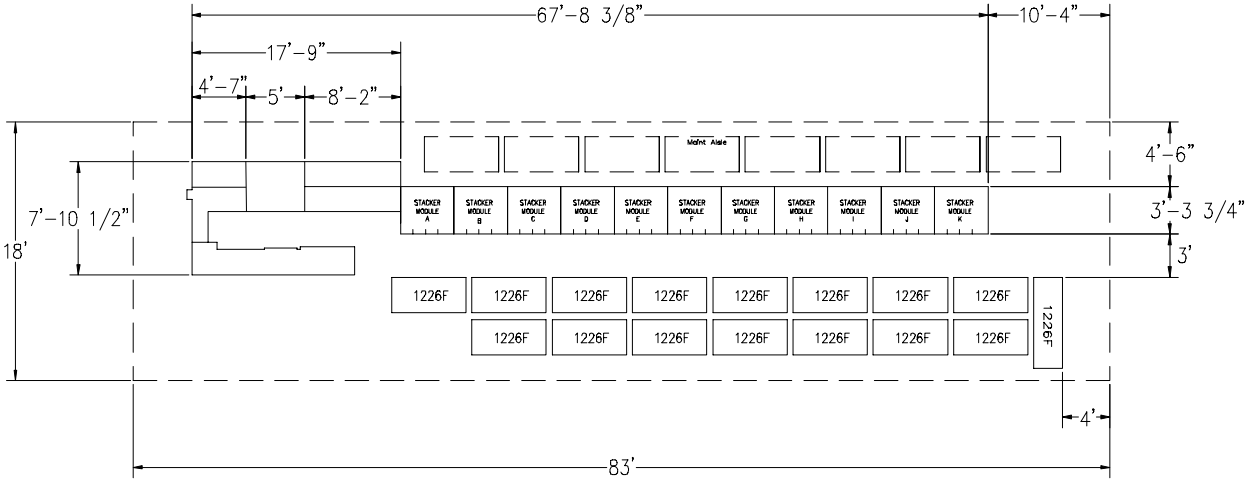


Exhibit 432.4d
432012f, ECA Phase IV 190 Single-Sided DBCS/OCR

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

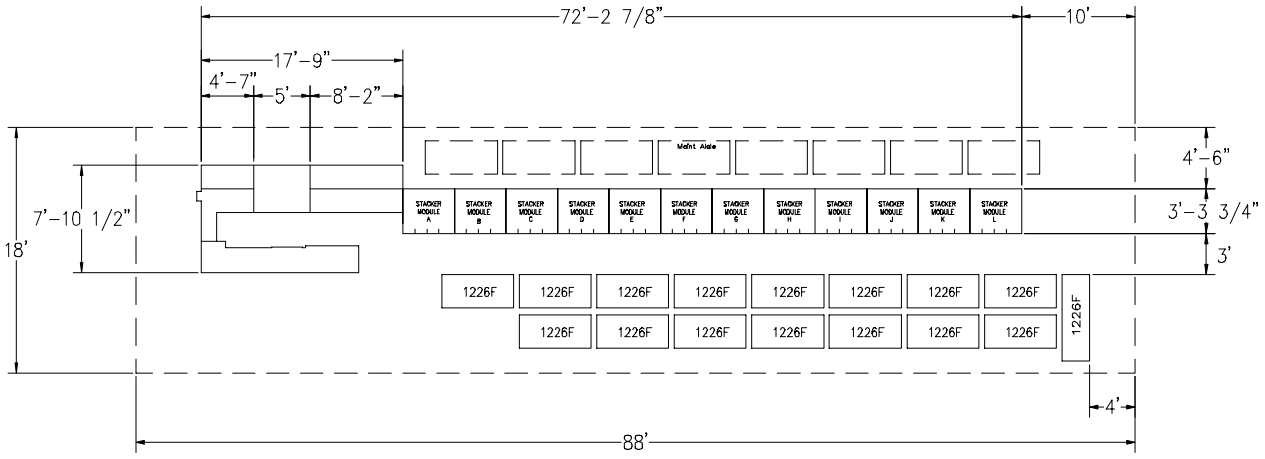


Exhibit 432.4e
432012g, ECA Phase IV 206 Single-Sided DBCS/OCR

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

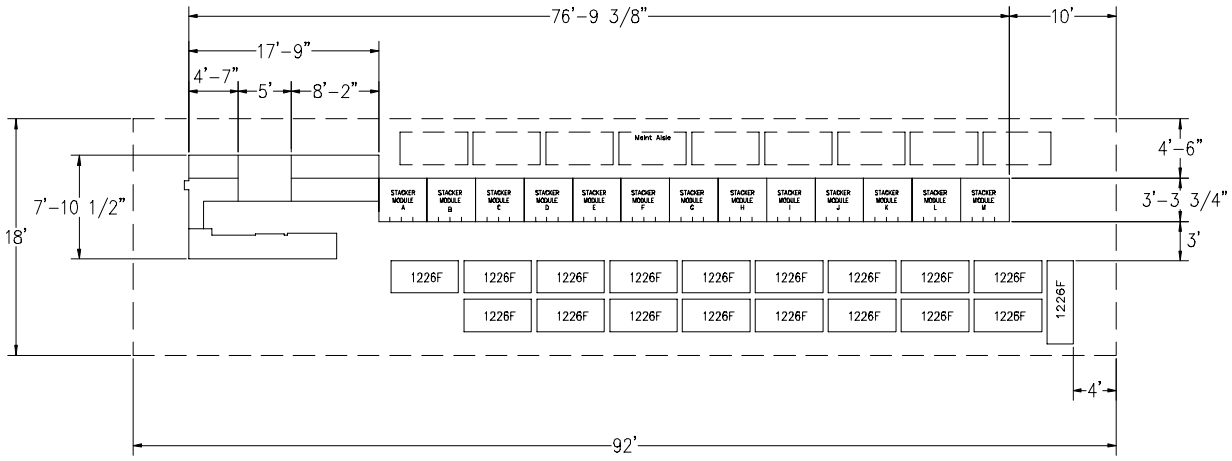
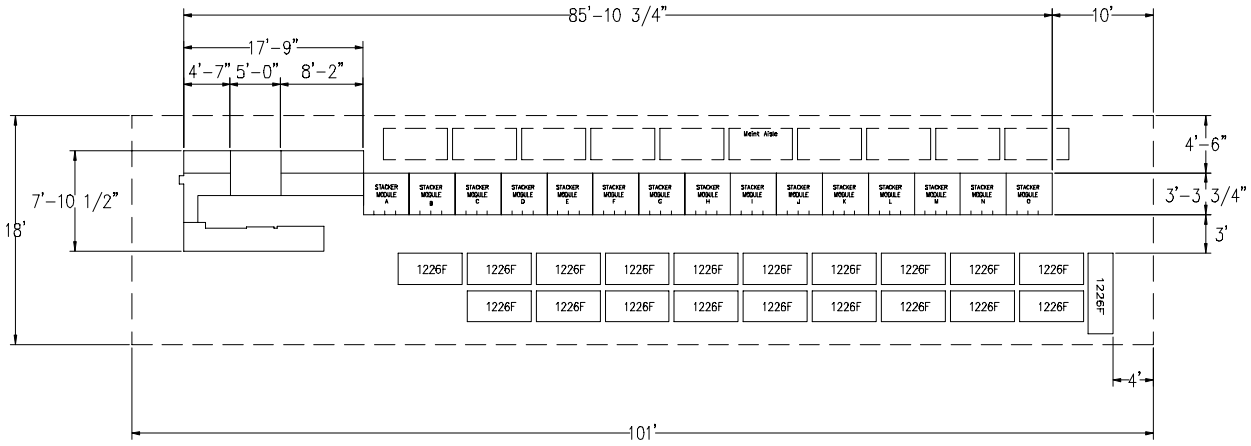


Exhibit 432.4f
432012i, ECA Phase IV 238 Single-Sided DBCS/OCR

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

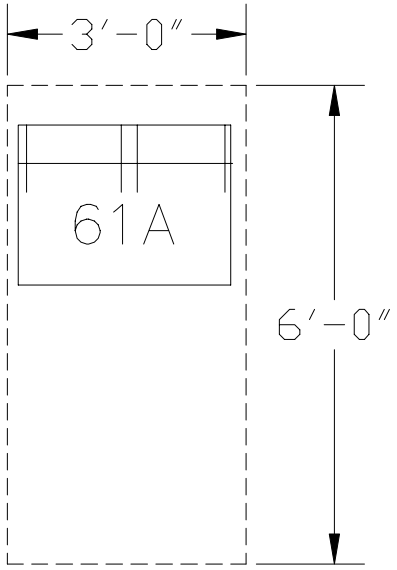


Exhibit 433c

433001a, Loose Pack Rack — 4 Separations

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

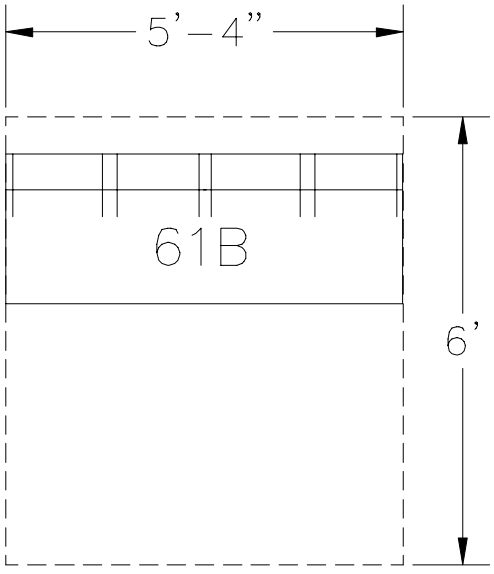


Exhibit 433d
433002, 2 Pouch Racks — 5 Separations Each

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

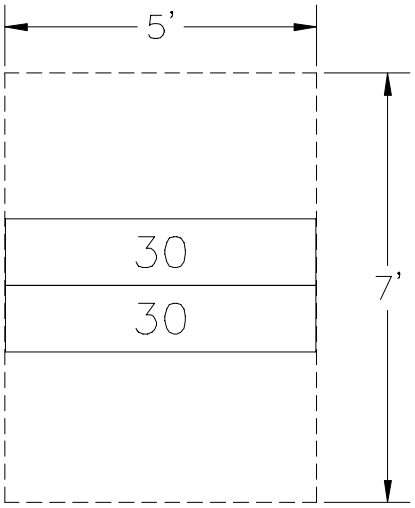


Exhibit 433e
433002a, 2 Pouch Racks — 10 Separations Each

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

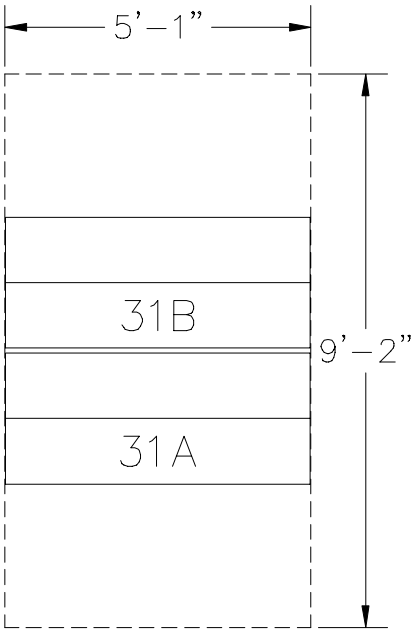


Exhibit 433f

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

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

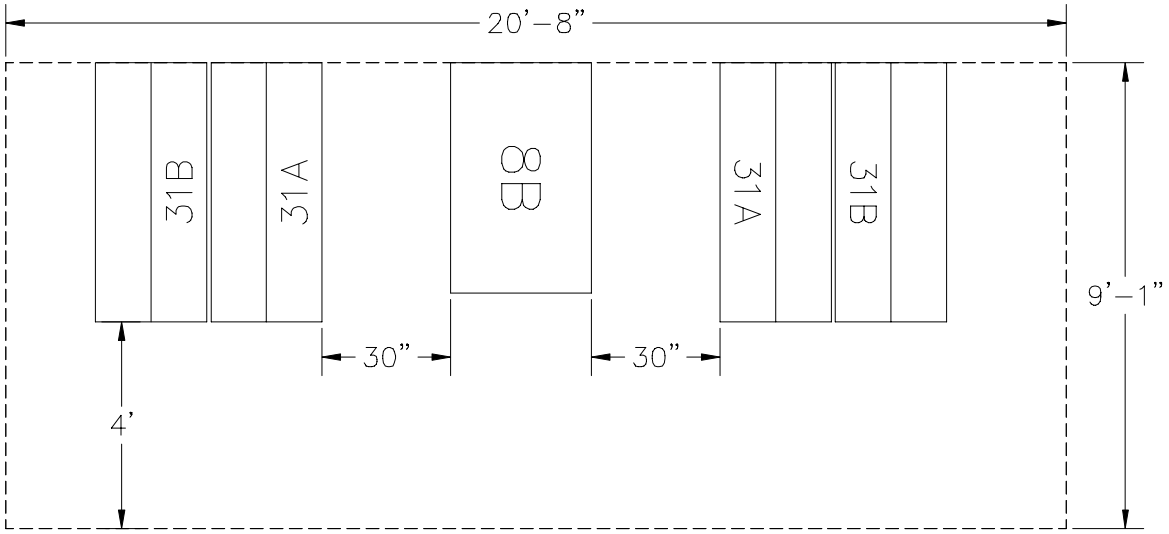


Exhibit 433g

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

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

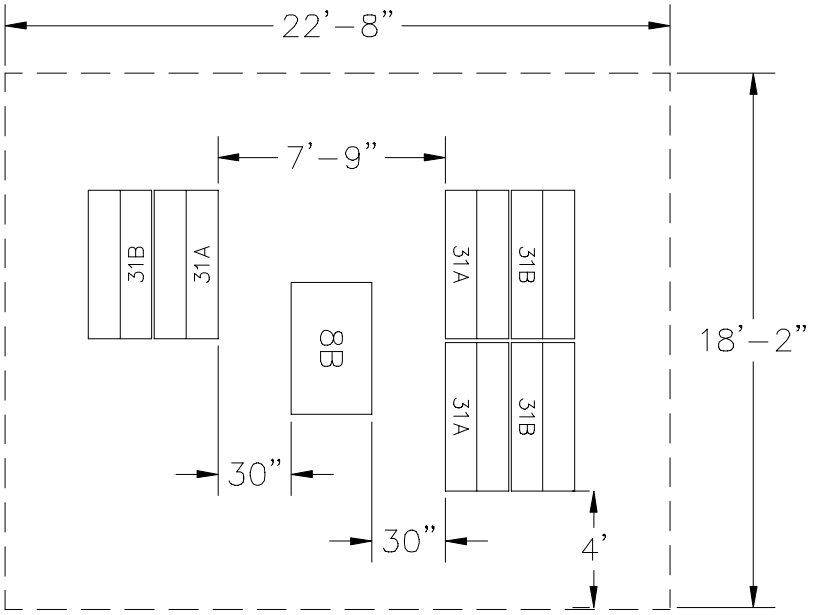


Exhibit 433h
433004b, 8 Pouch Racks — 10 Separations Each, With Canceling Table

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

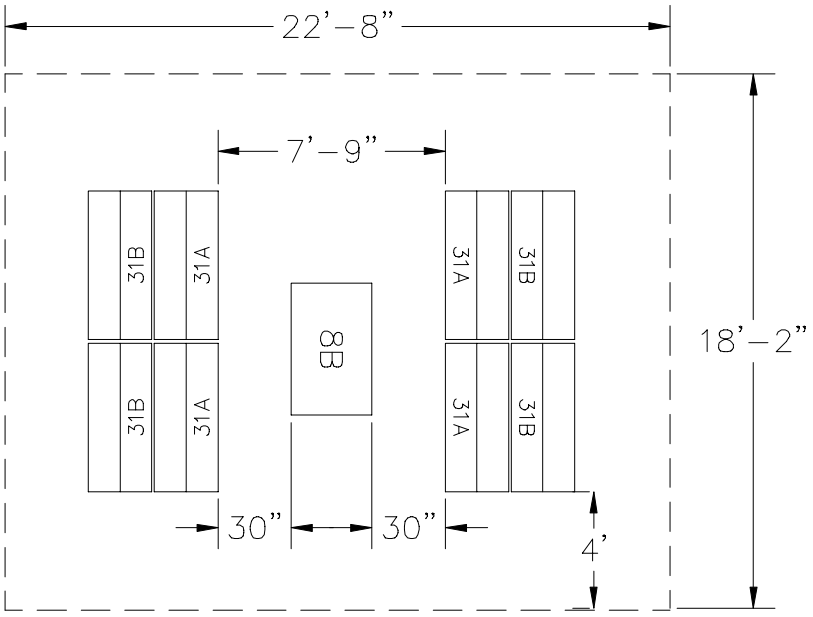


Exhibit 433i
433004c, 10 Pouch Racks — 10 Separations Each, With Canceling Table

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

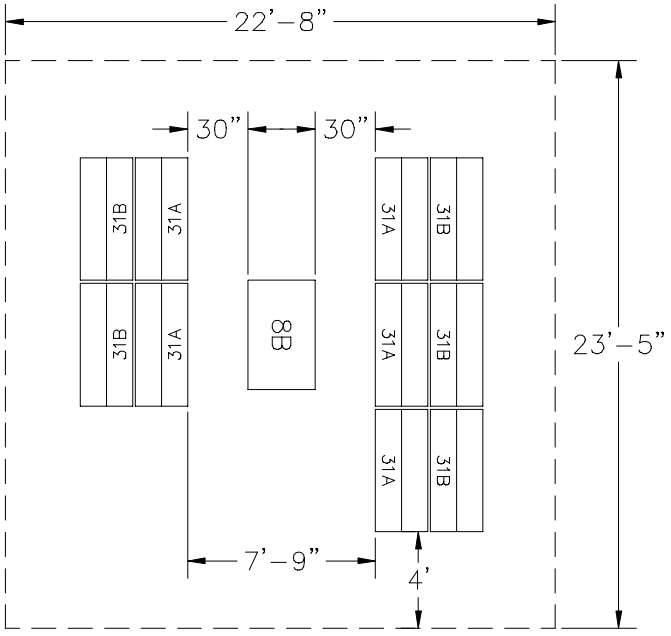


Exhibit 433j

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

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

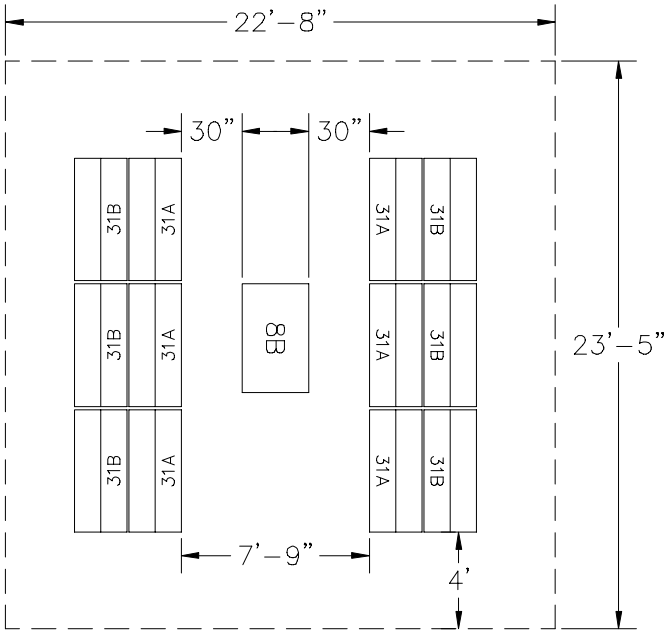


Exhibit 433k

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

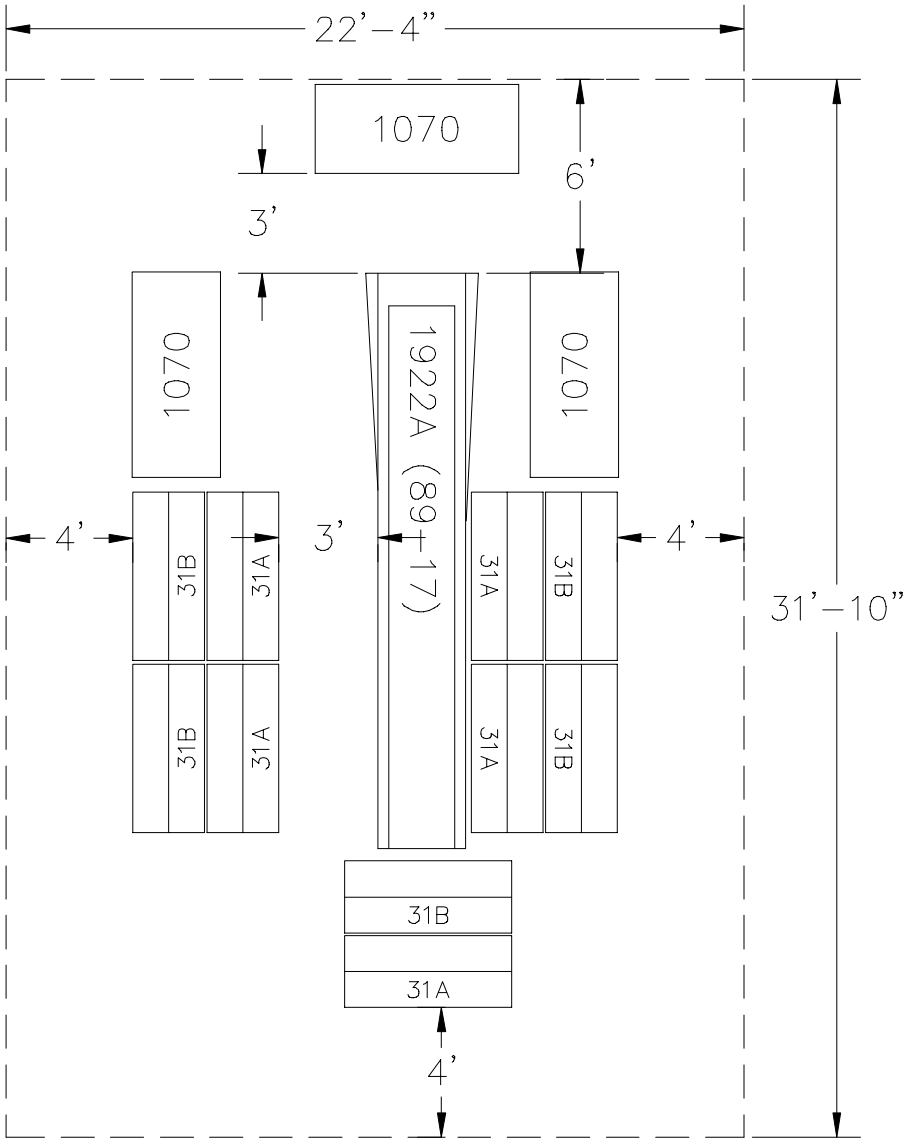
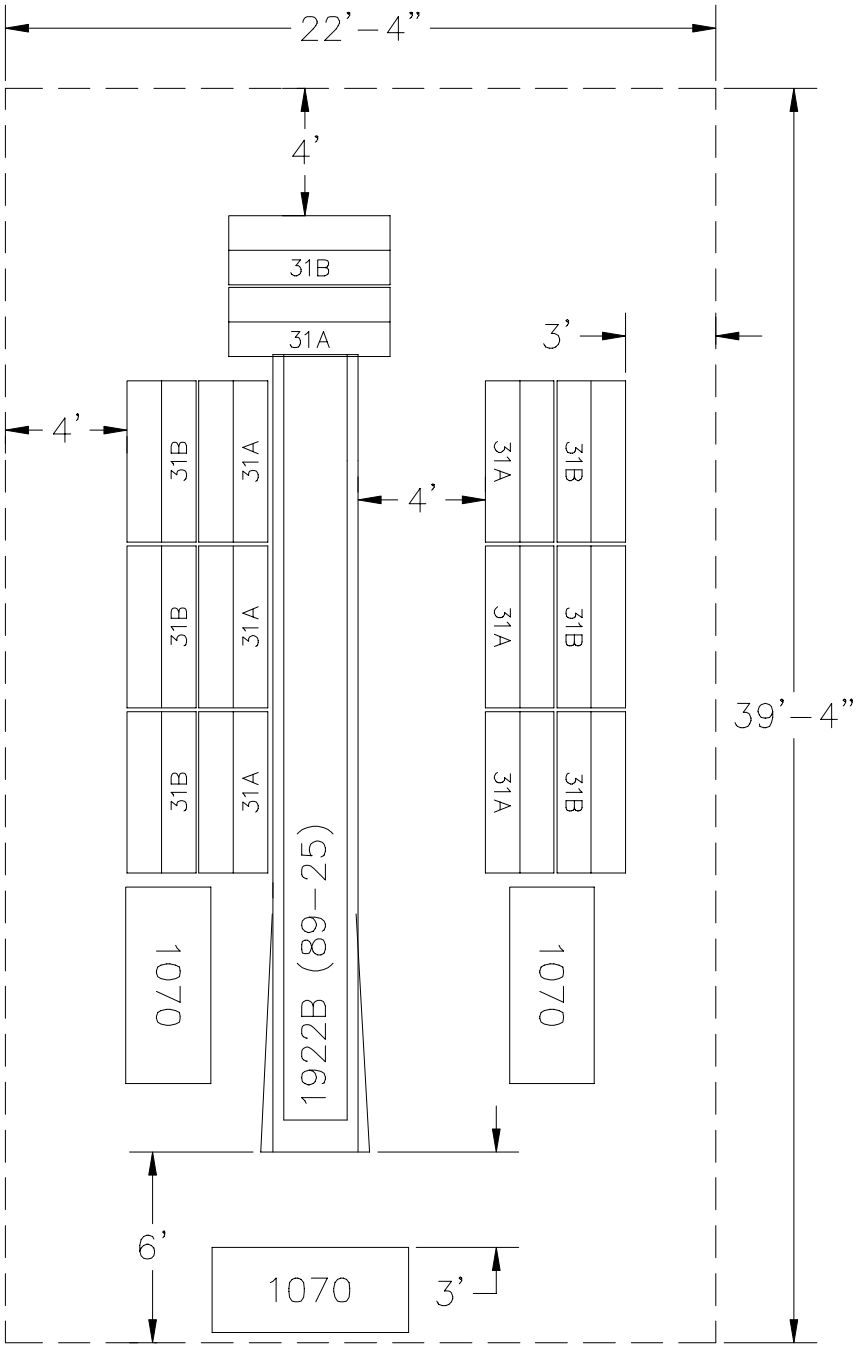


Exhibit 433l

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.

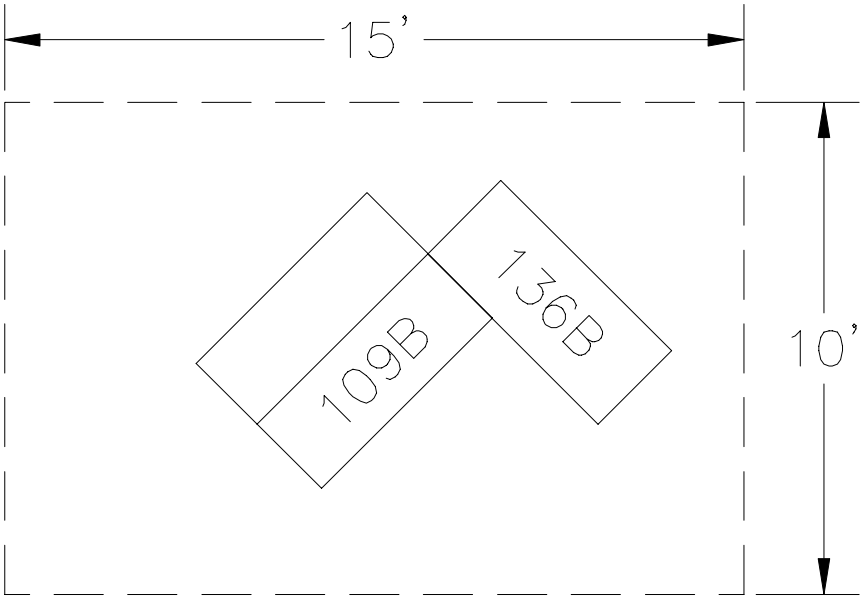
Exhibit 435a
WSUs Used for Flat Mail — Manual Cases and Mechanized Sorting Machines

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

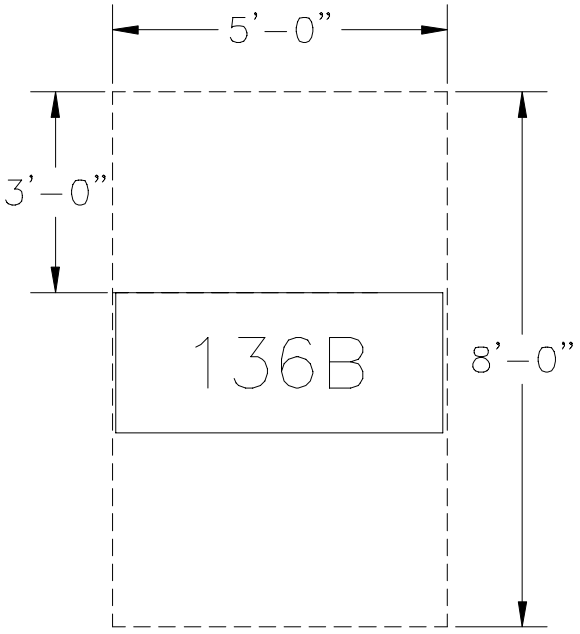


Exhibit 435d
435002b, Flat Workstation — Open Back: 36 to 42 Separations

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

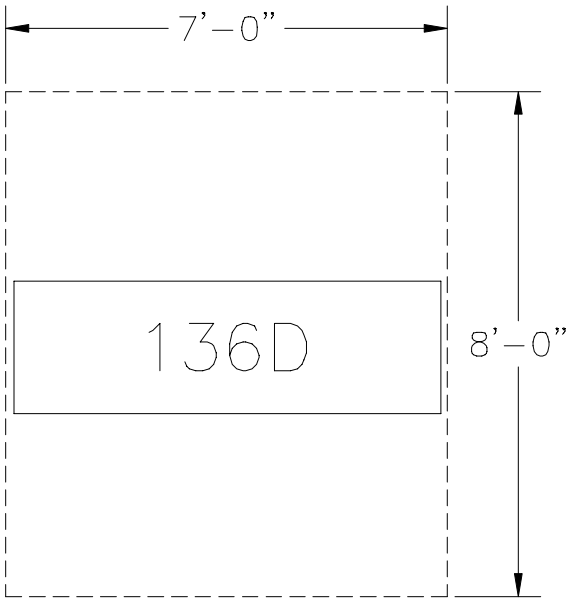
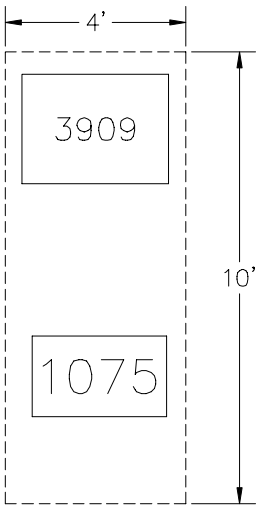


Exhibit 435e

435003a, Flat Distribution Setup: 18 Separations

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



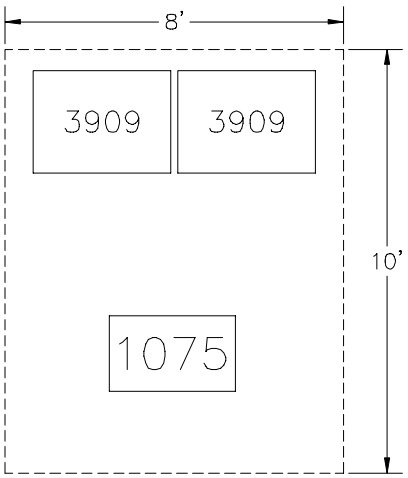
Flats distribution:

- 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

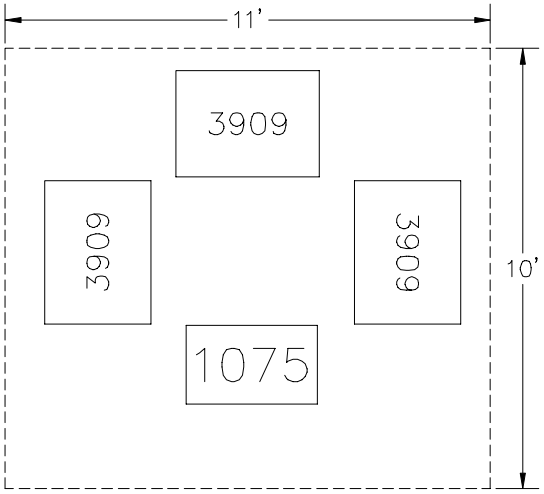


Flats distribution:

- 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

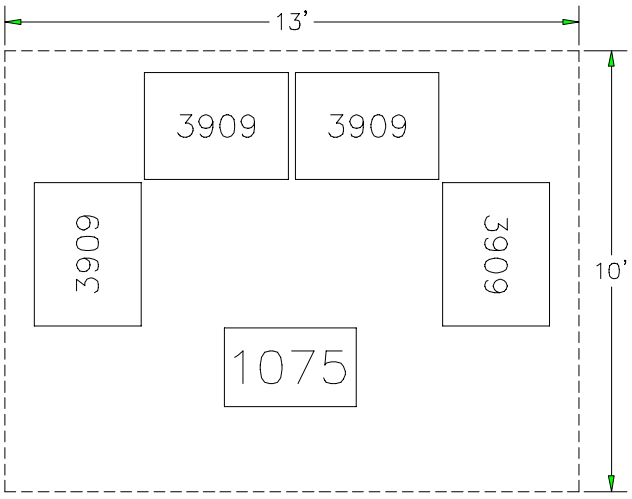


Flats distribution:

- 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

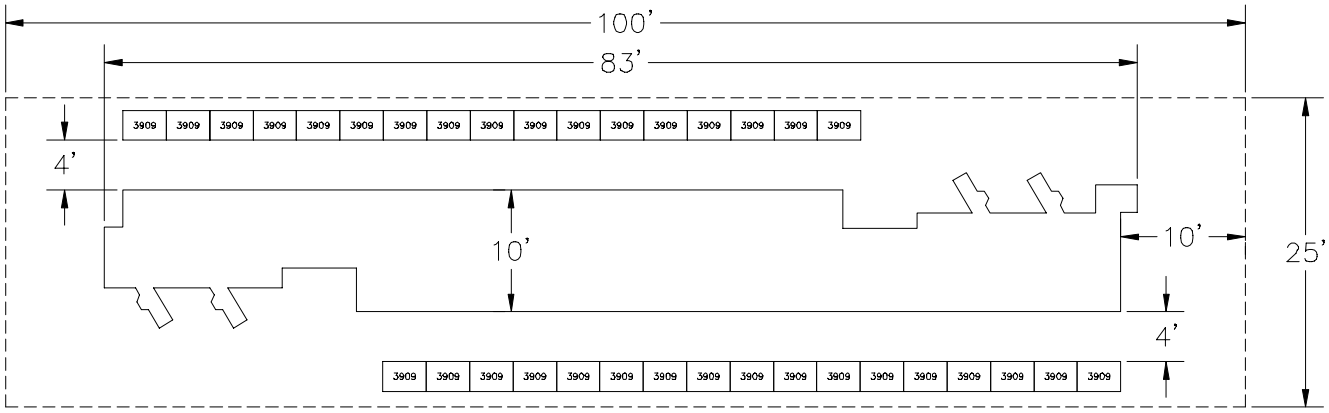


Flats distribution:

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

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

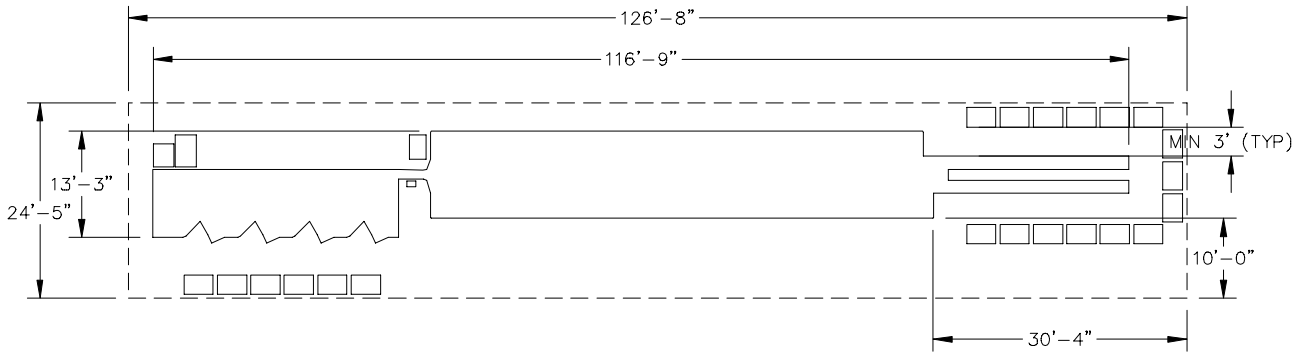
Date: Dec. 1994
Distribution Flat Mail
Scale: No Scale
Area: 2,500 Sq Ft



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

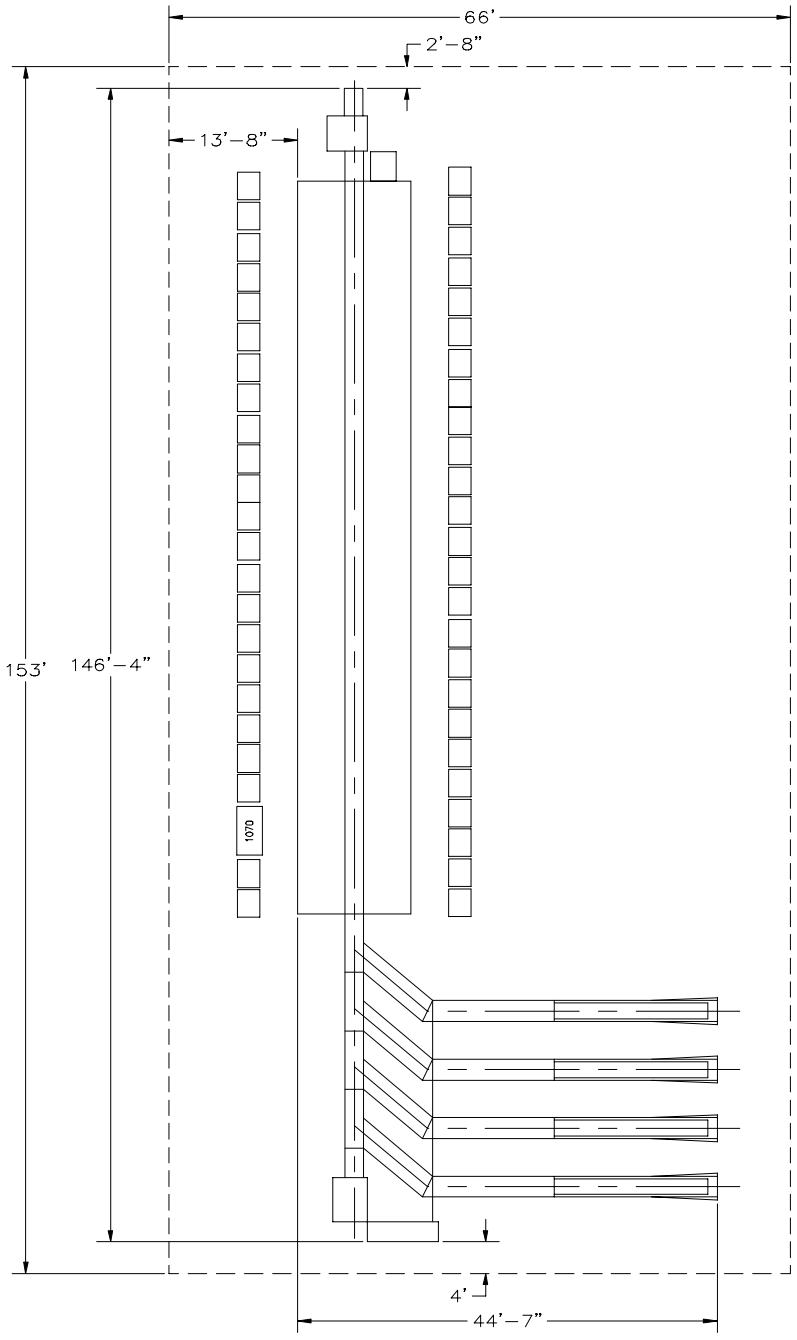


Exhibit 44c

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

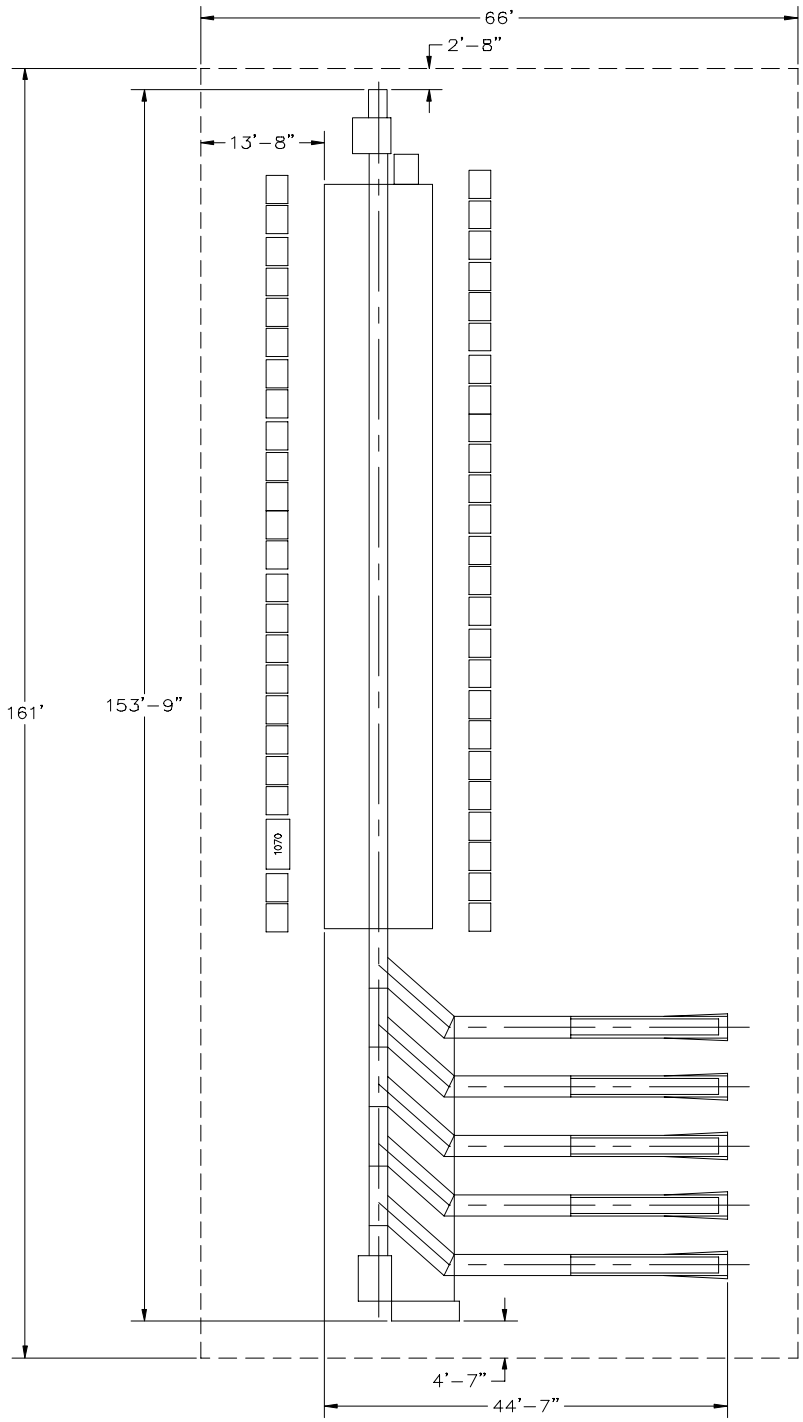


Exhibit 44d

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

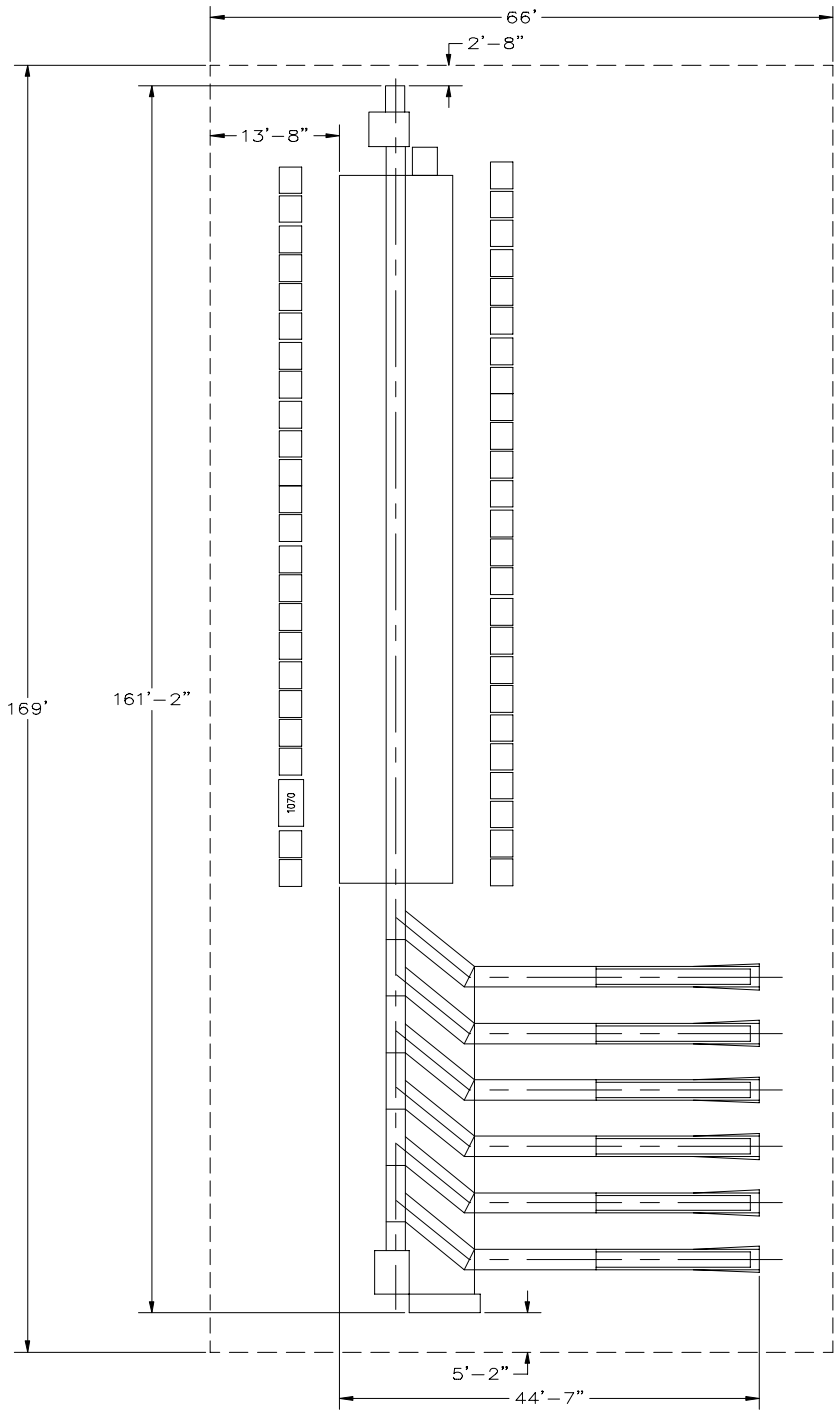


Exhibit 44e
440002a, Small Parcel and Bundle Sorter: U-Shaped — 4 Consoles

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

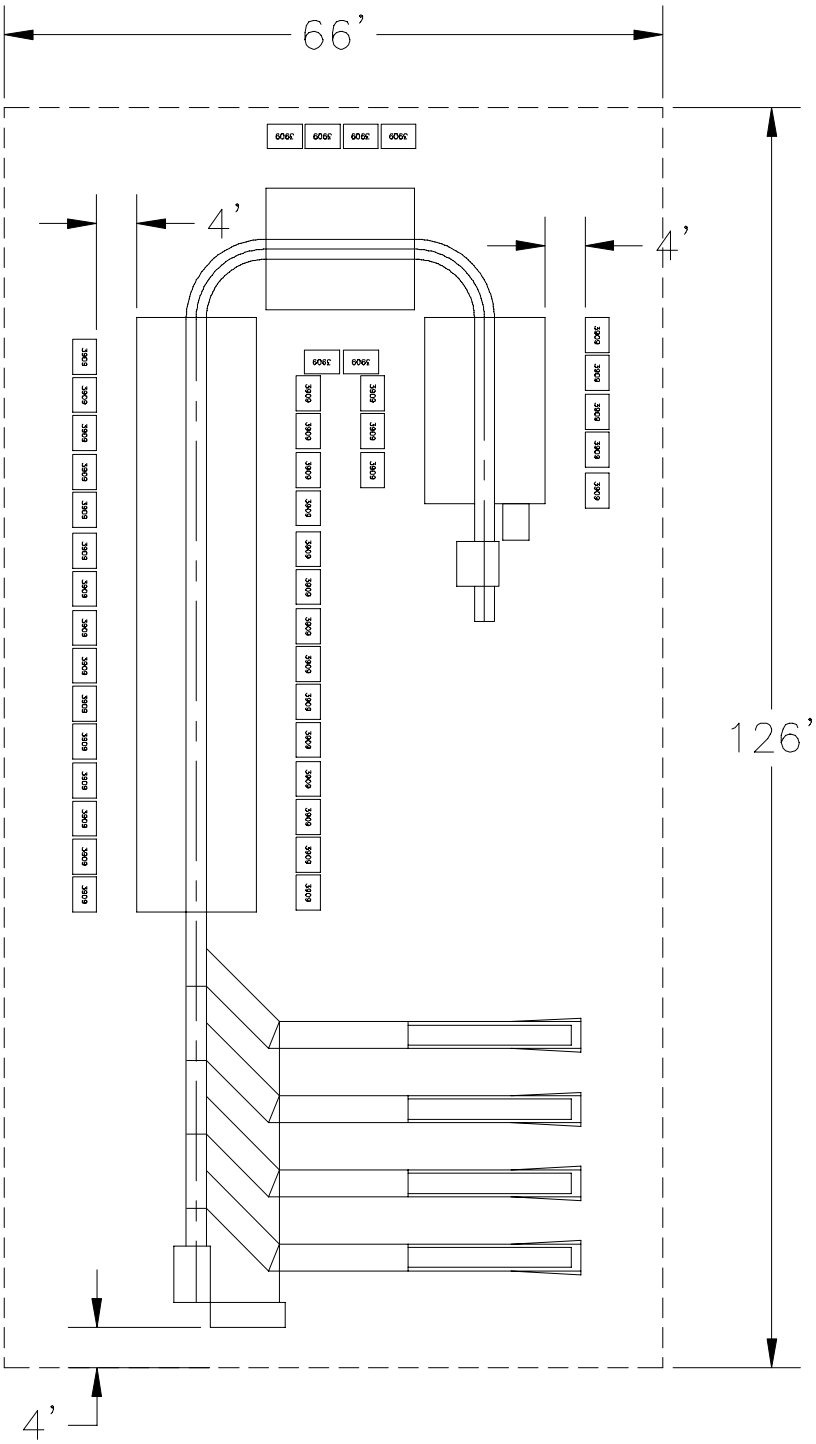


Exhibit 44f

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

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

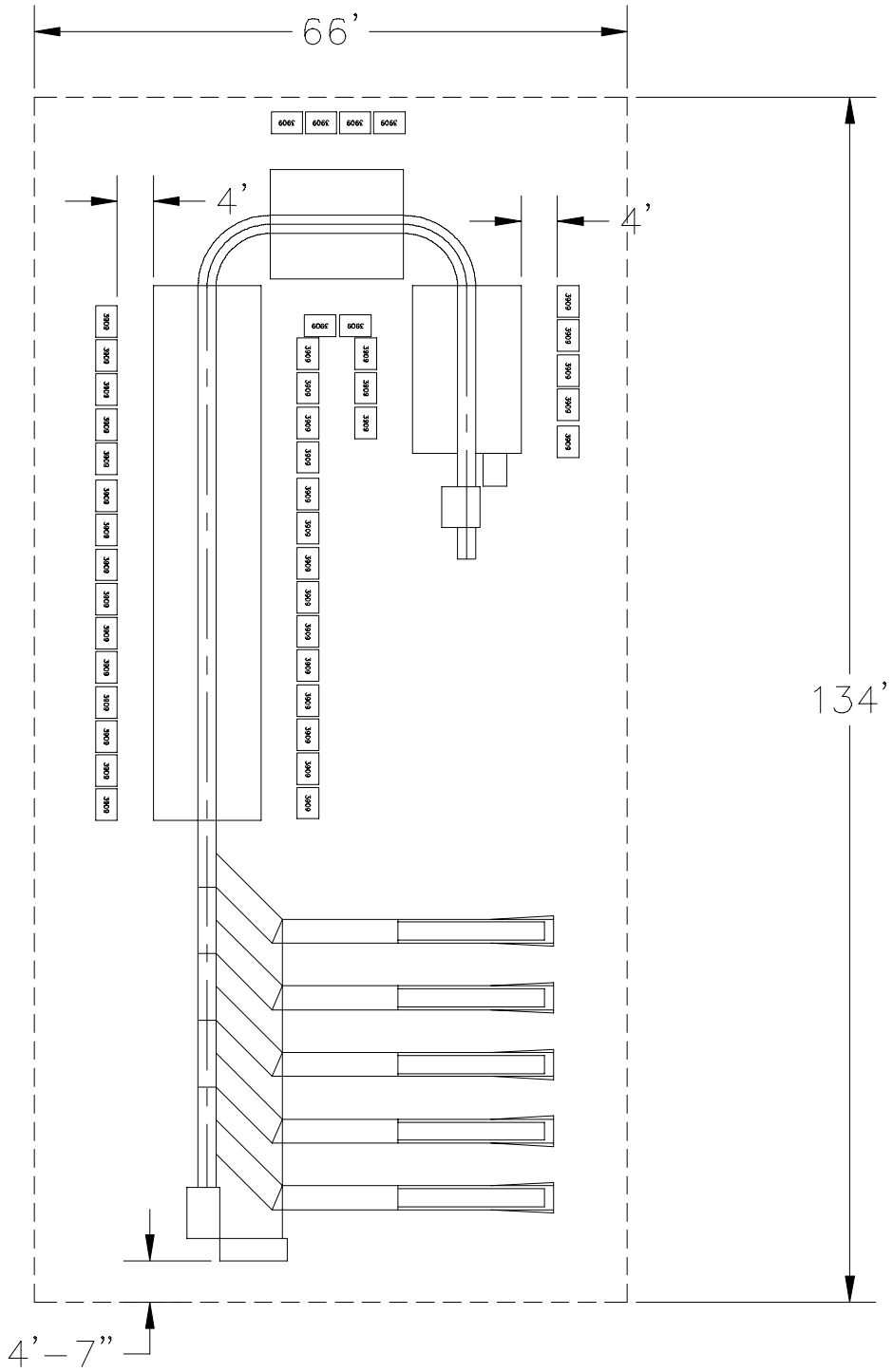


Exhibit 44g
440002c, Small Parcel and Bundle Sorter: U-Shaped — 6 Consoles

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

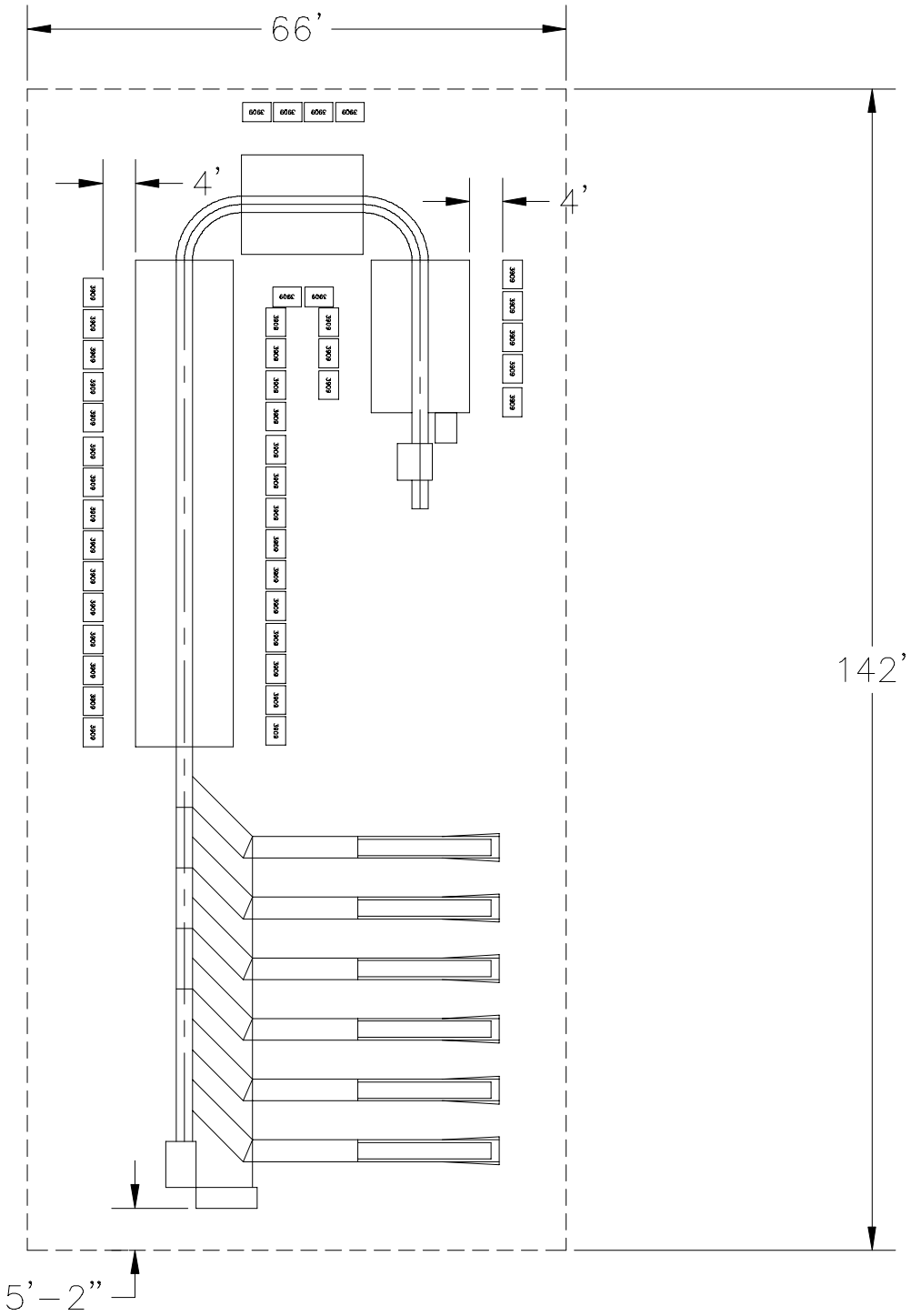


Exhibit 44h

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

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

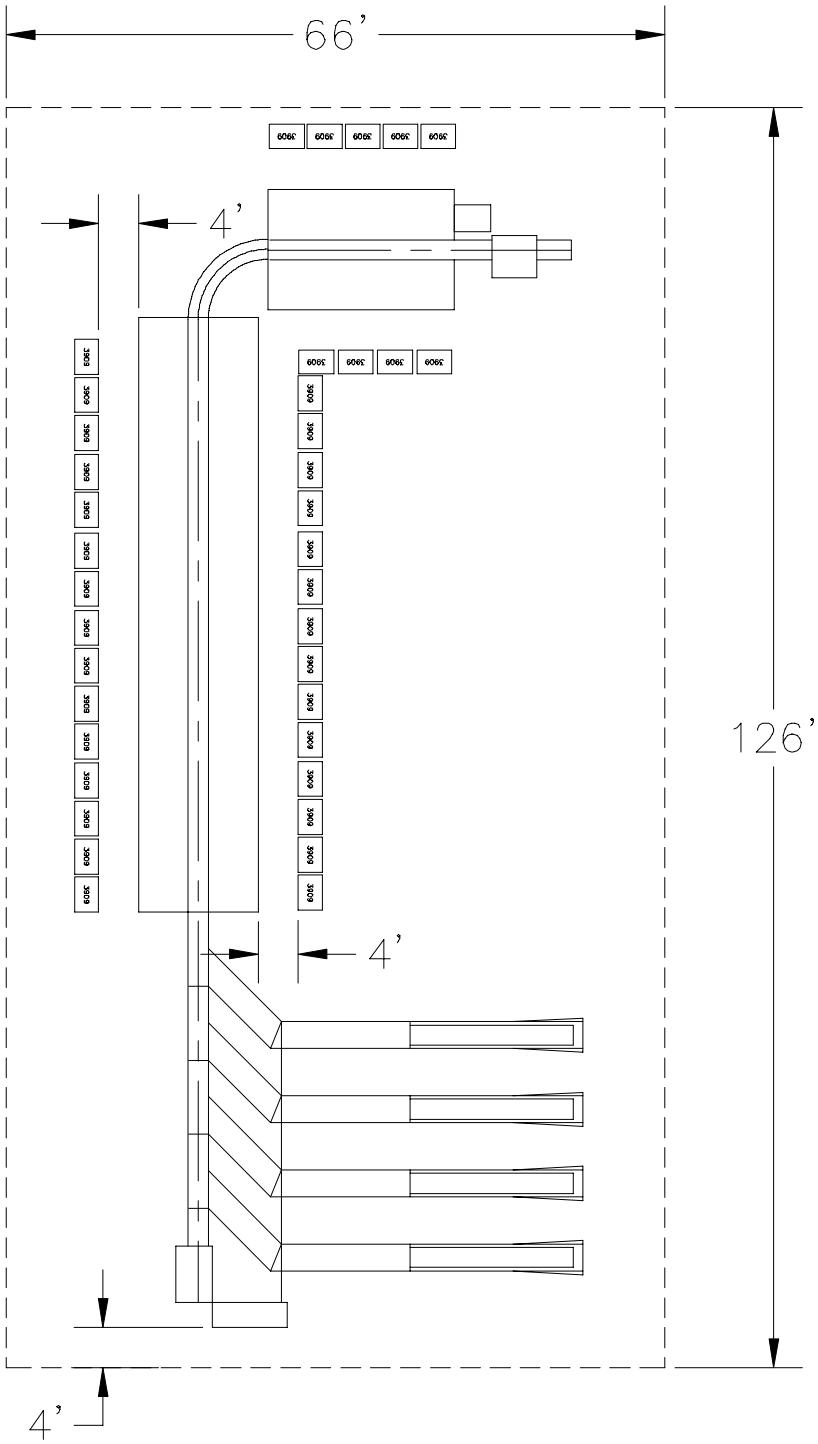


Exhibit 44i
440003b, Small Parcel and Bundle Sorter: L-Shaped — 5 Consoles

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

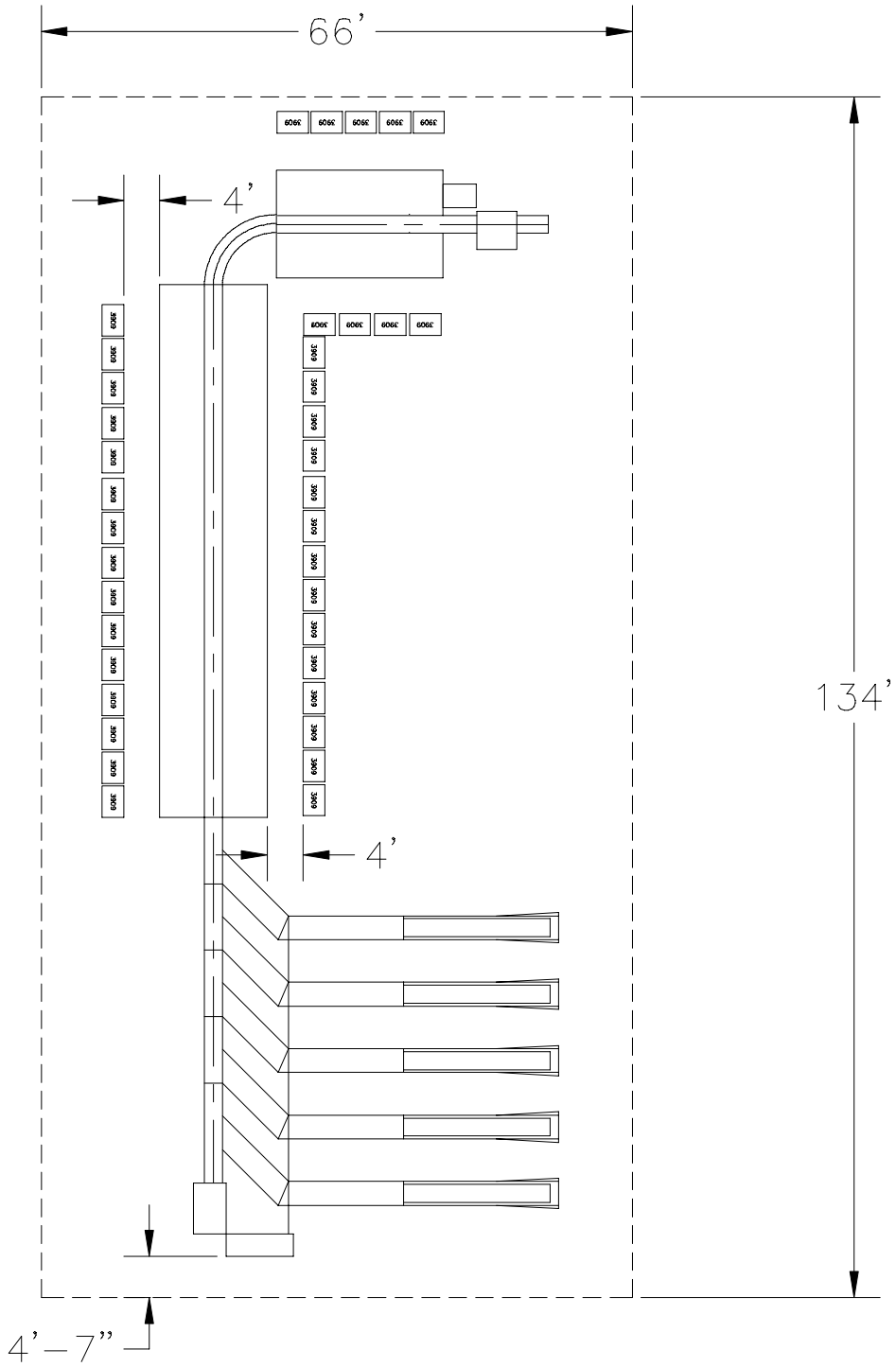


Exhibit 44j

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

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

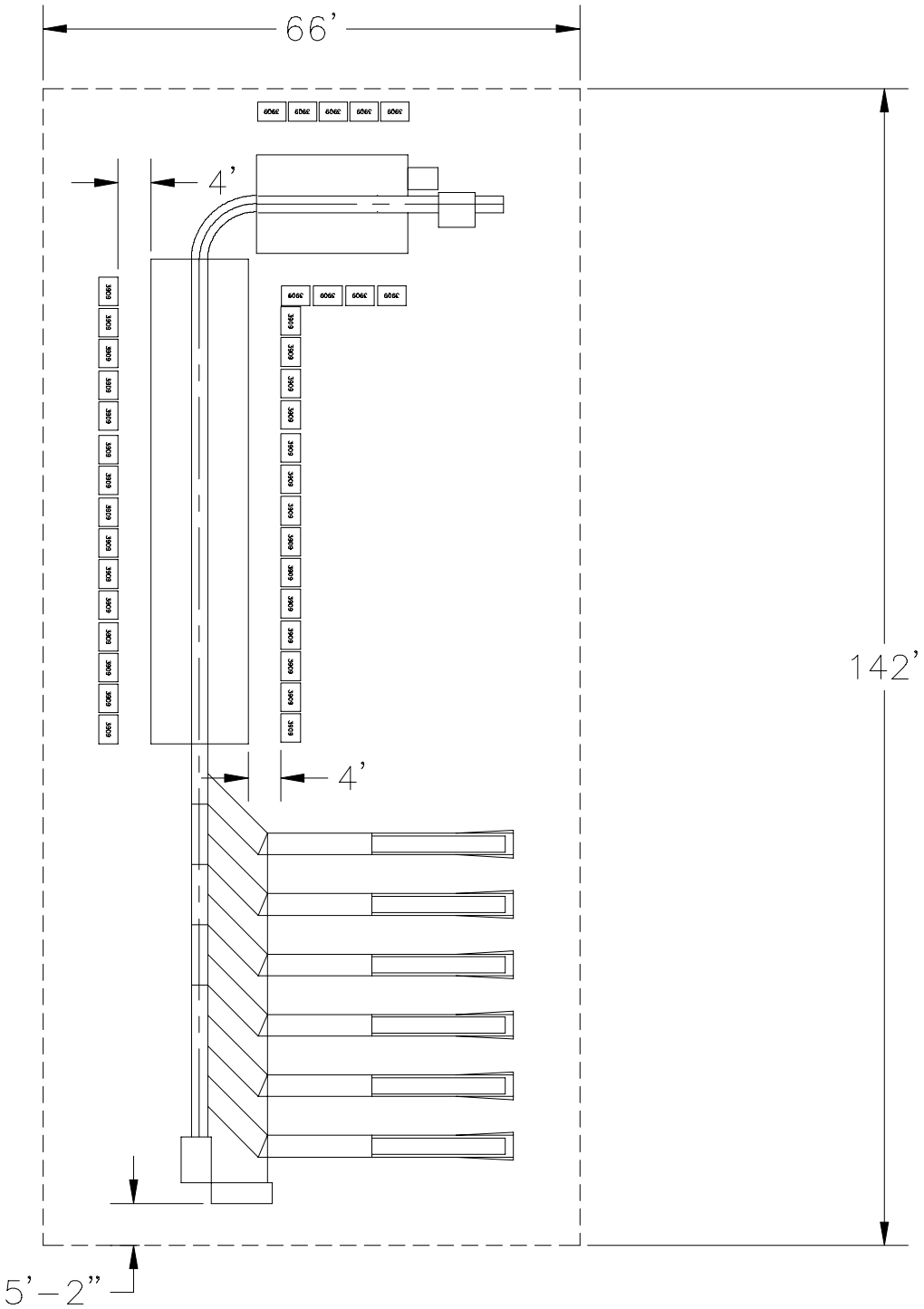


Exhibit 44k

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

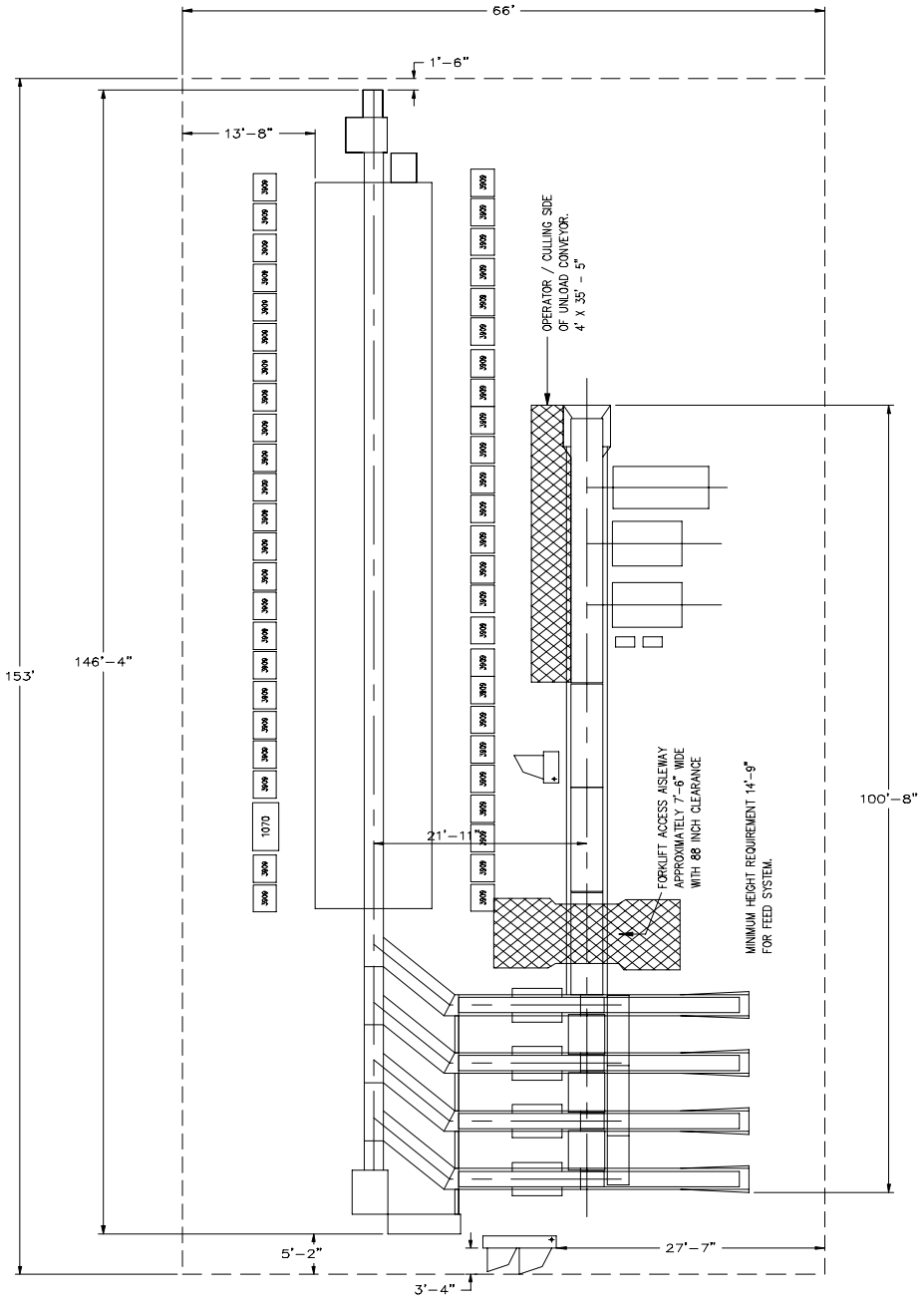


Exhibit 44l

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

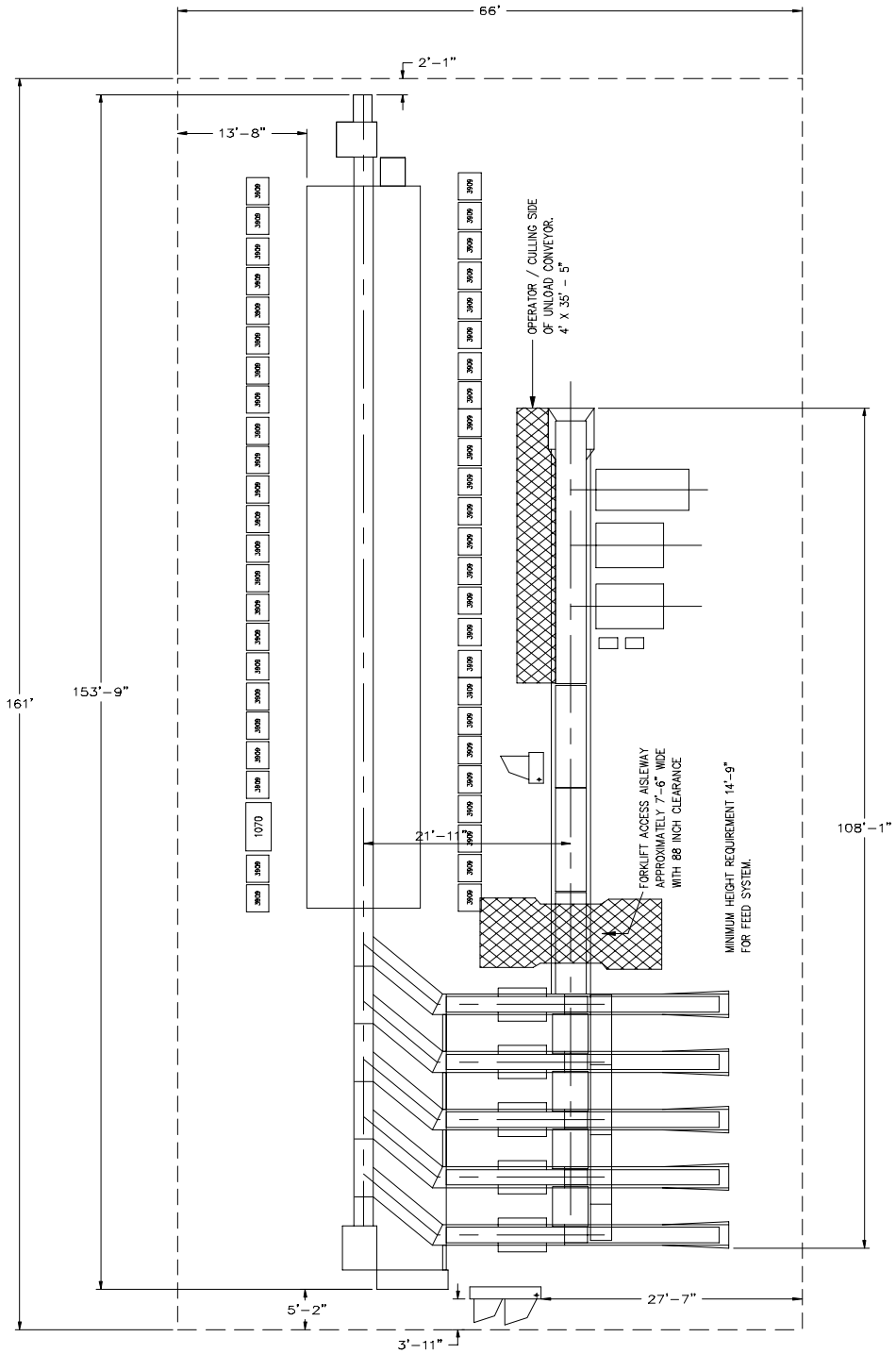


Exhibit 44m

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

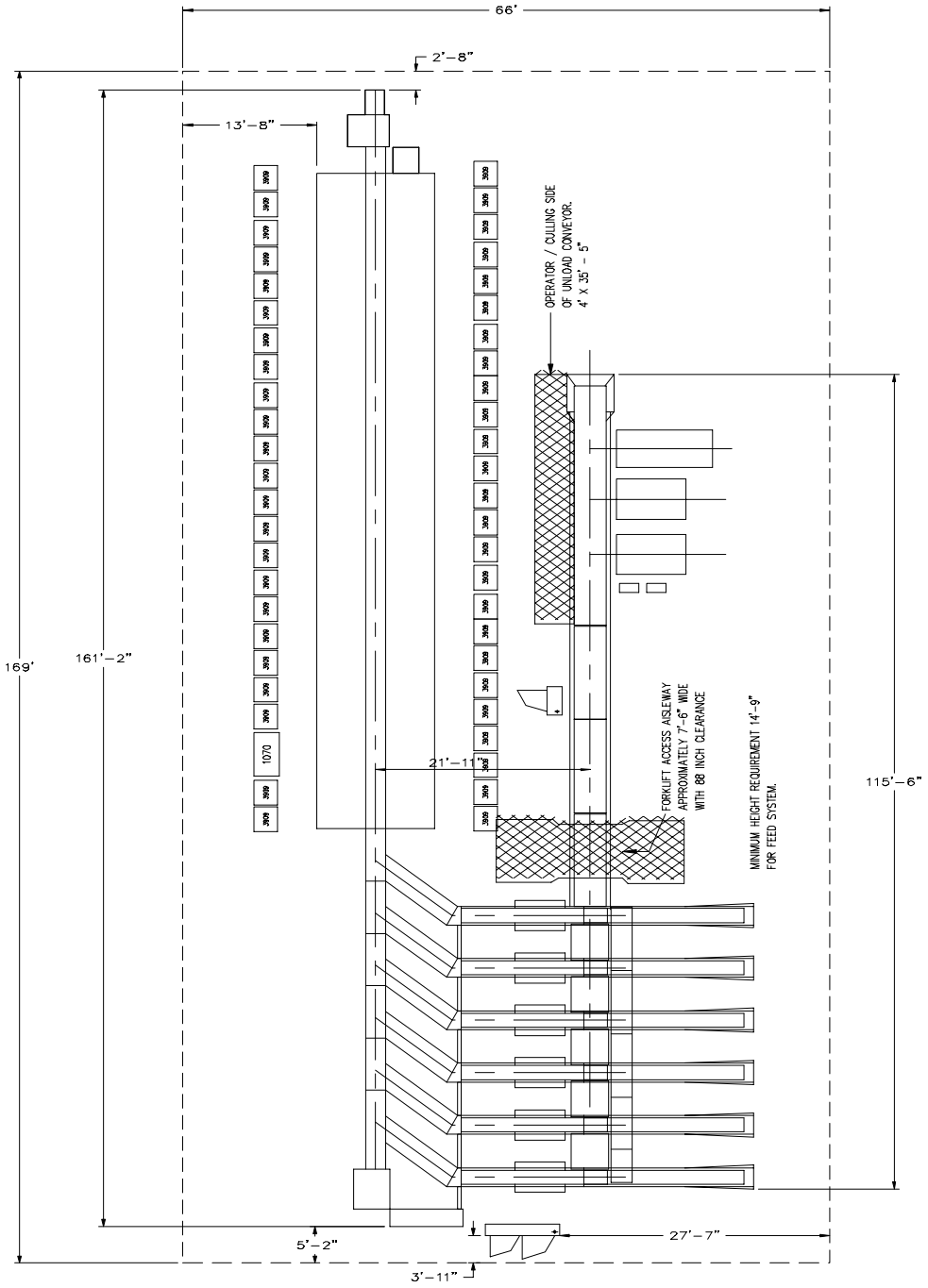


Exhibit 44n

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

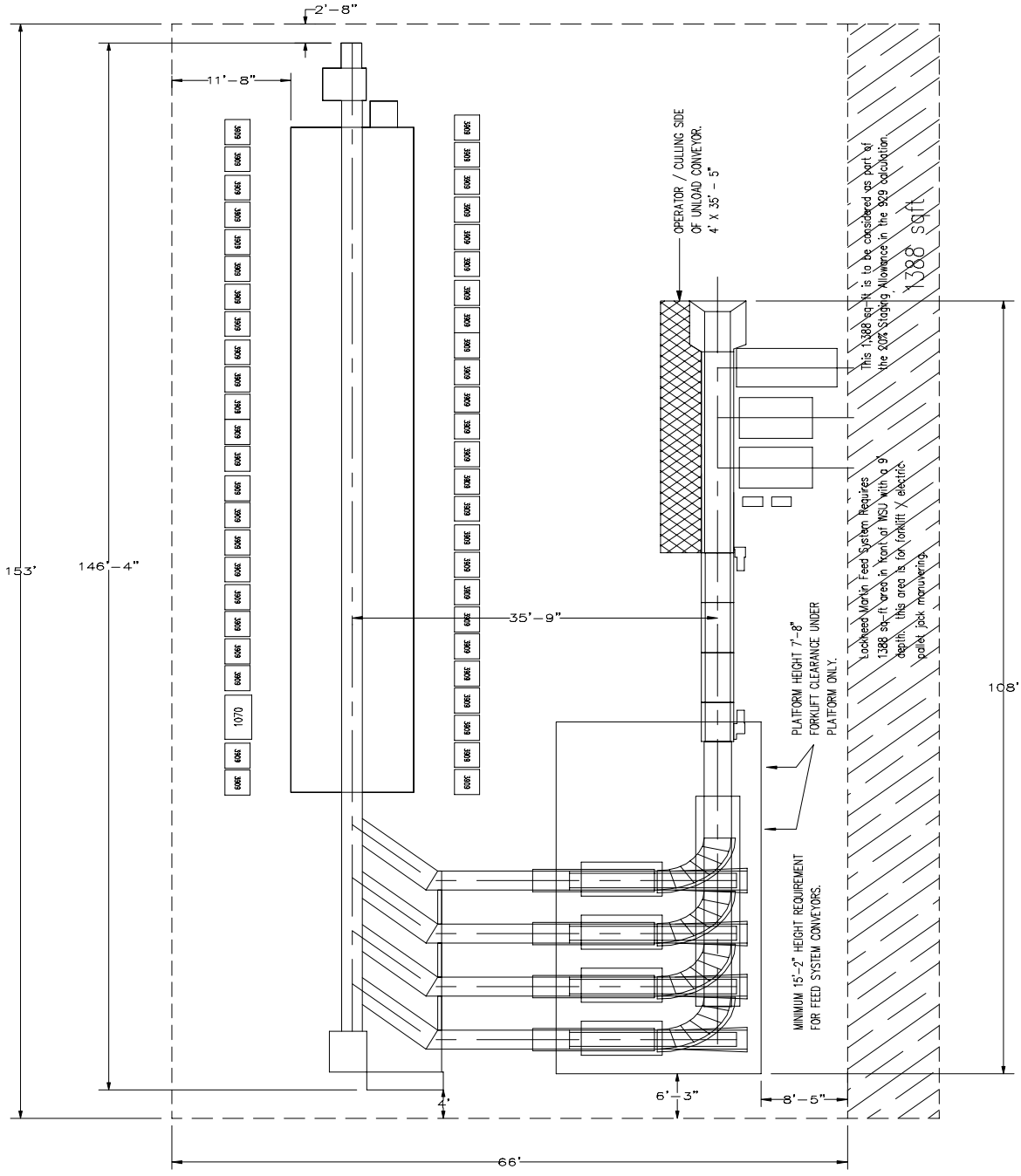


Exhibit 44o

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

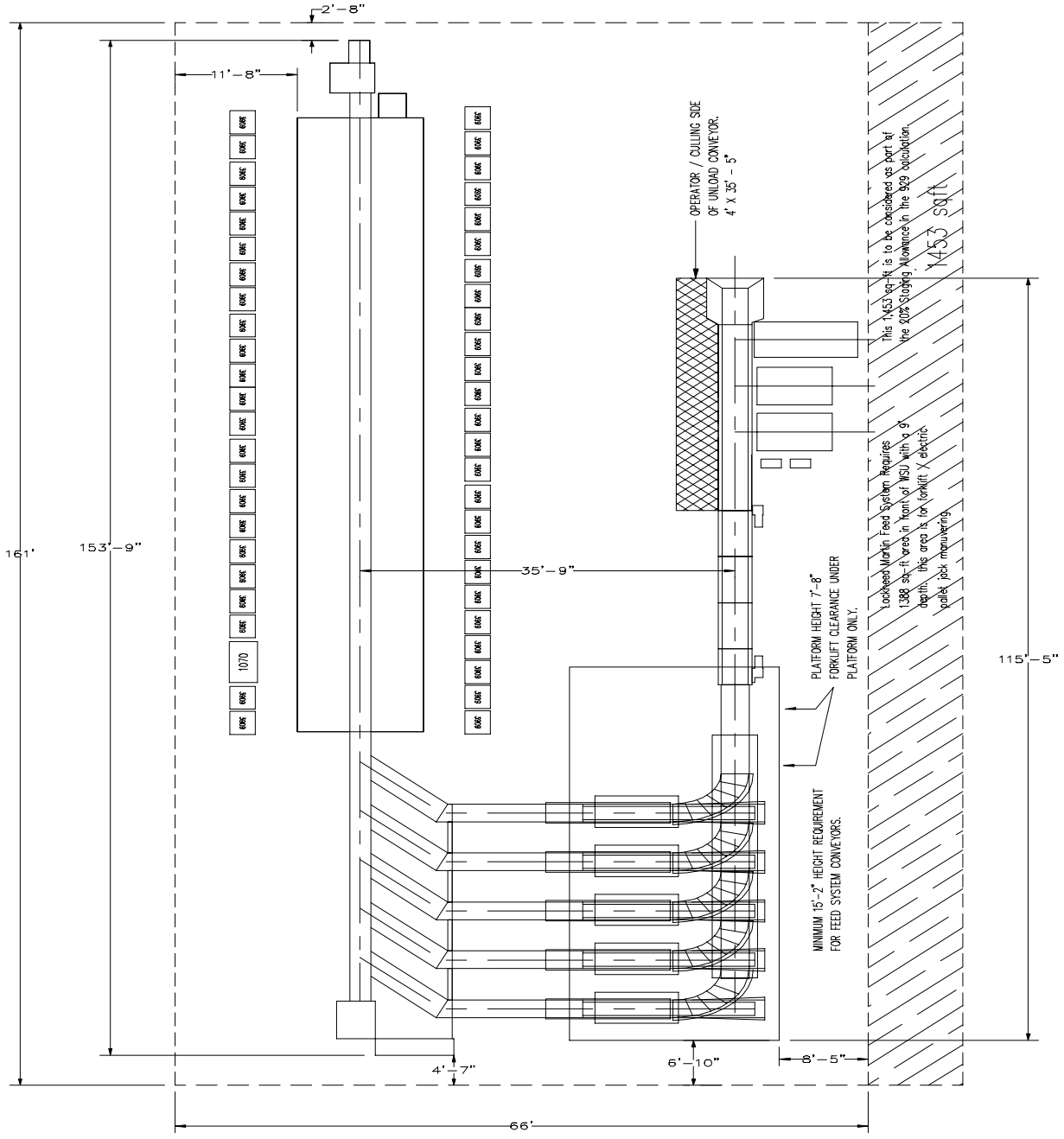
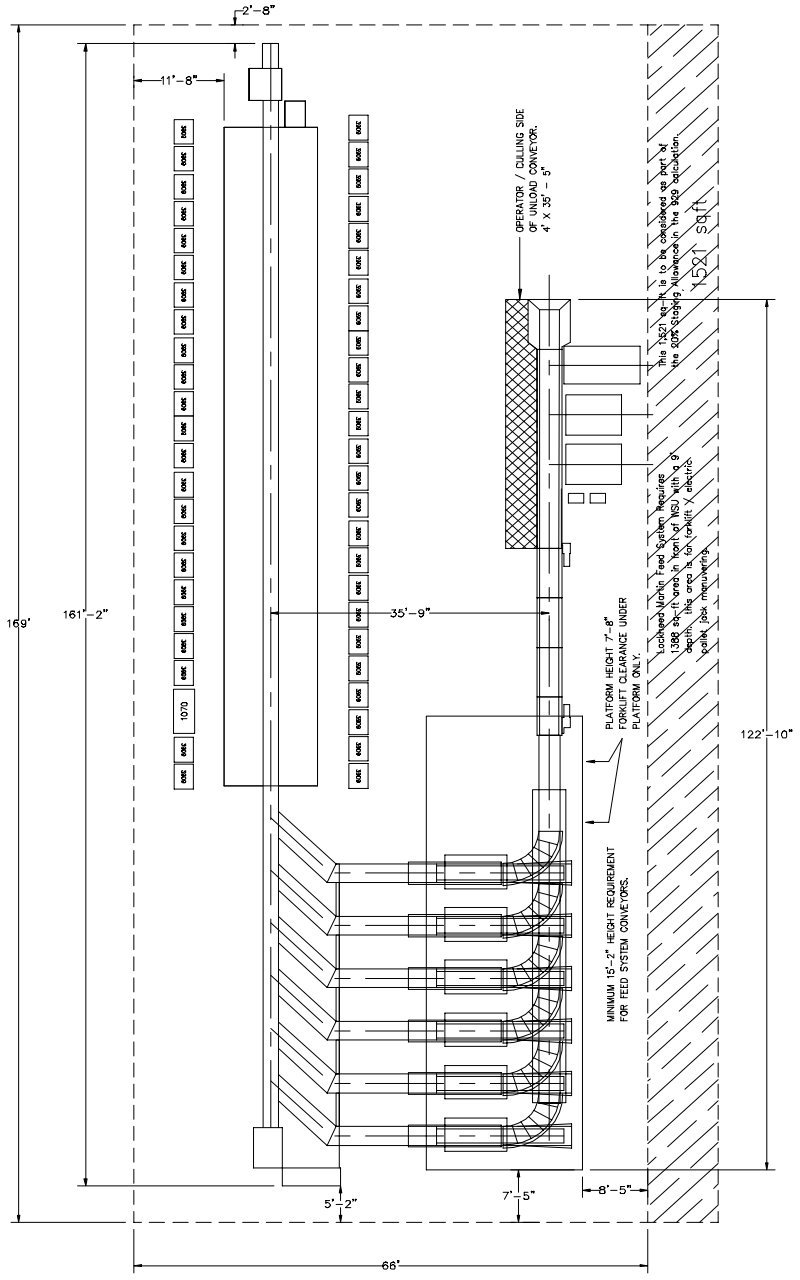


Exhibit 44p

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

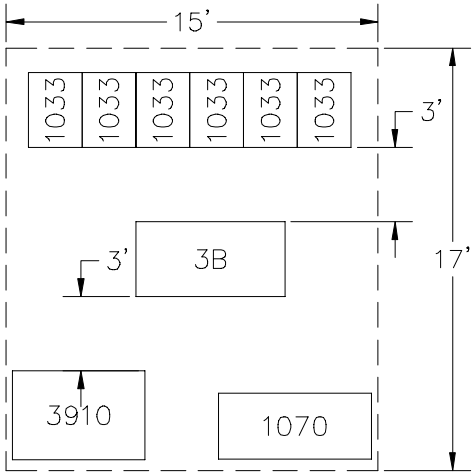


Exhibit 46c
460001b, Sort to 1033 Hampers (10 Separations)

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

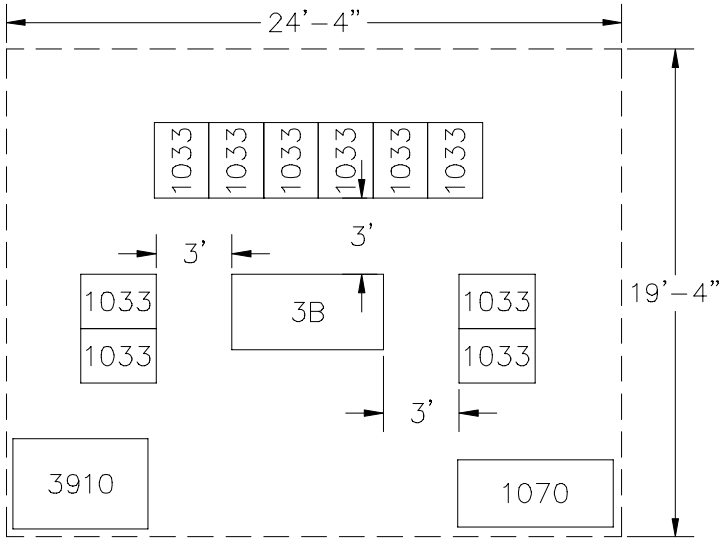


Exhibit 46d

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

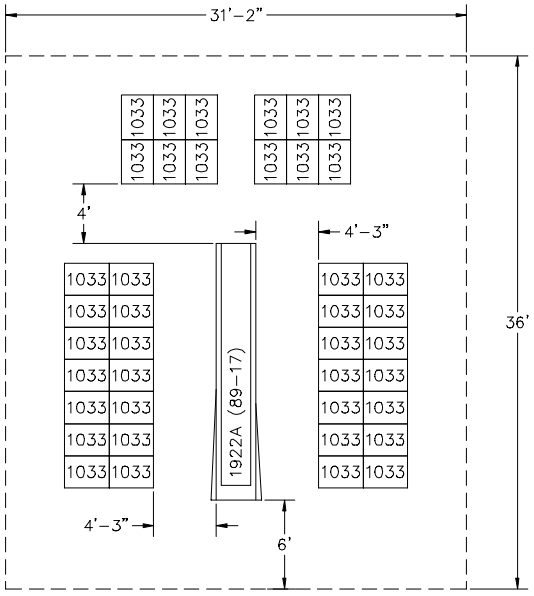


Exhibit 46e

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

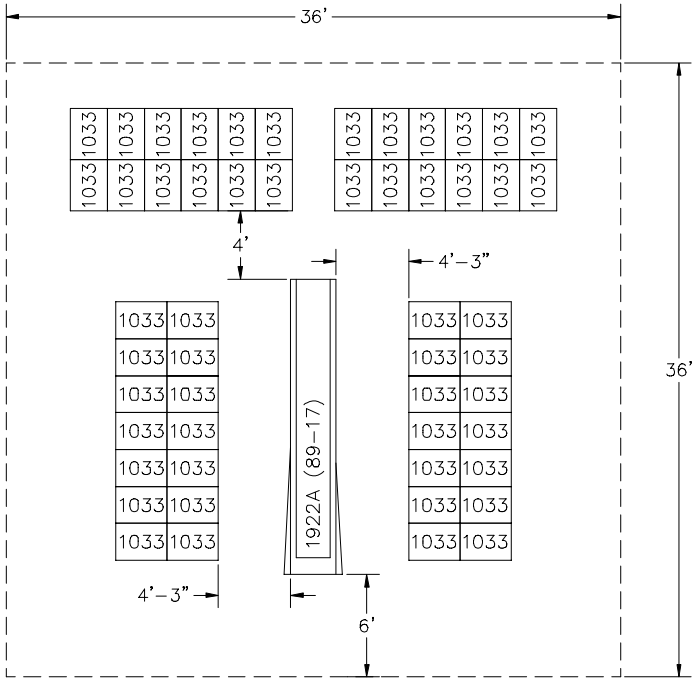


Exhibit 46f

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

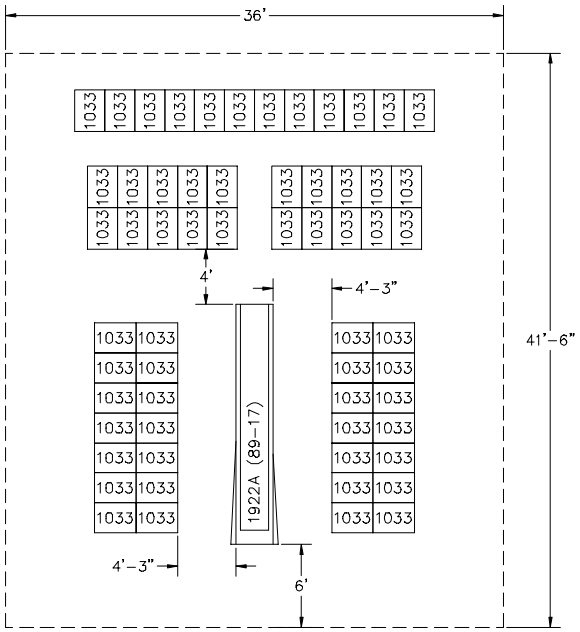


Exhibit 46g

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

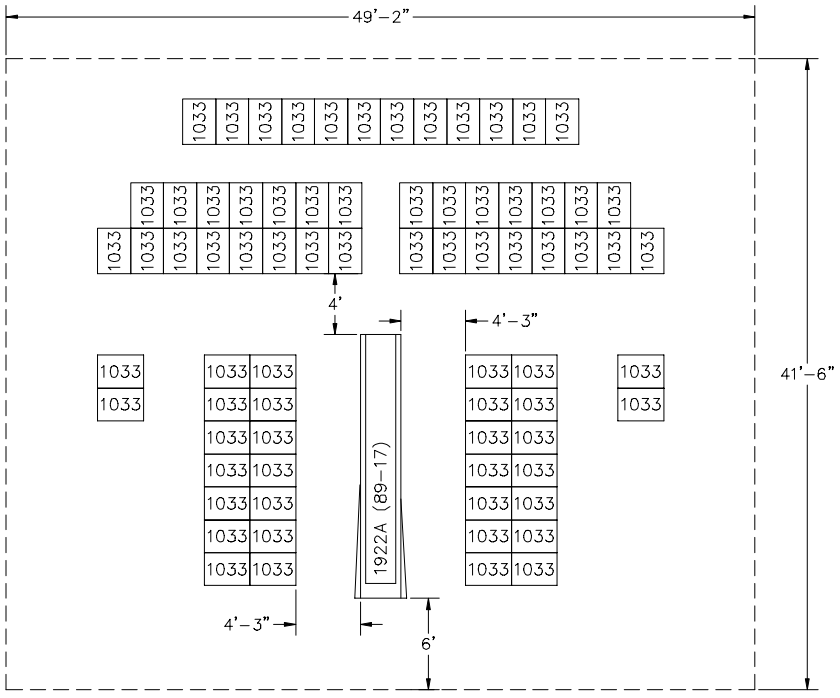


Exhibit 46h

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

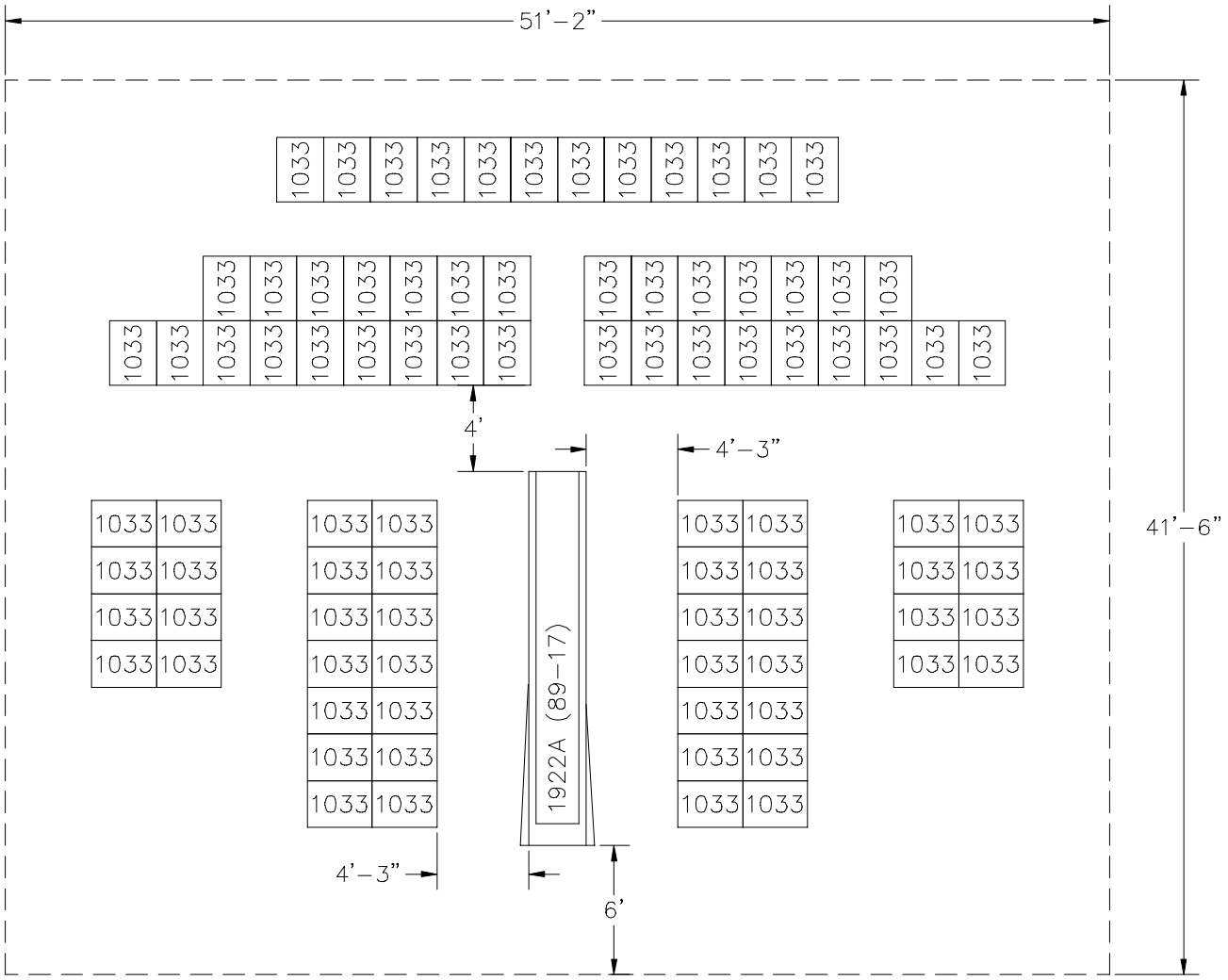


Exhibit 46i

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

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

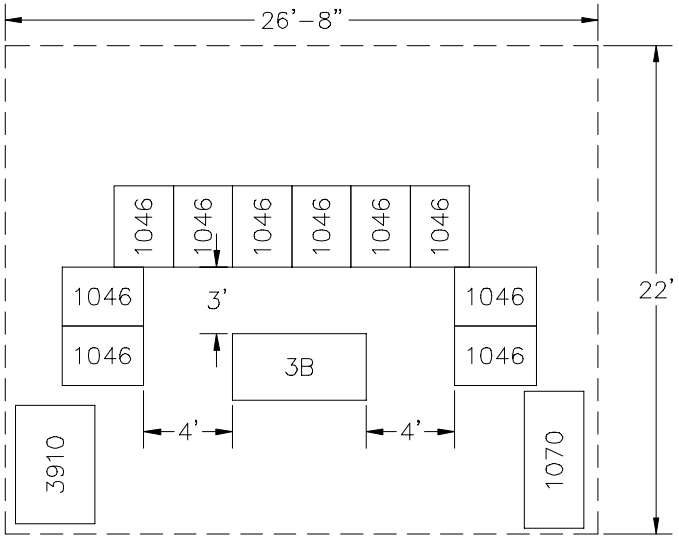


Exhibit 46j

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

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

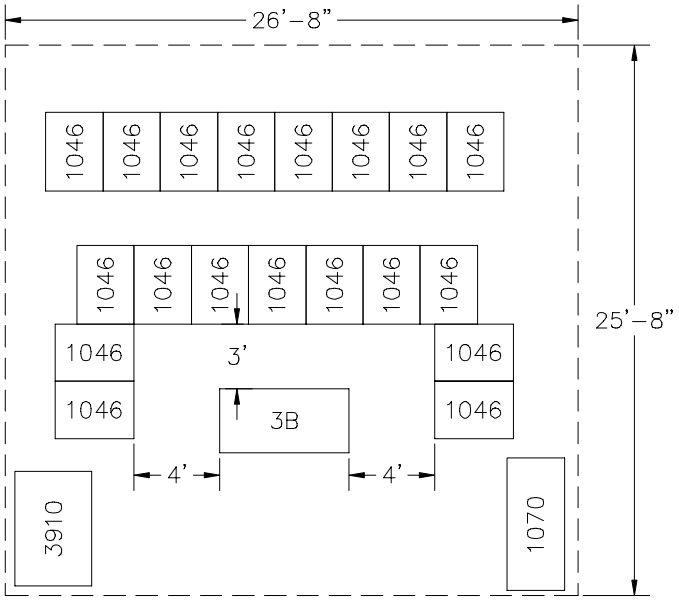


Exhibit 46k

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

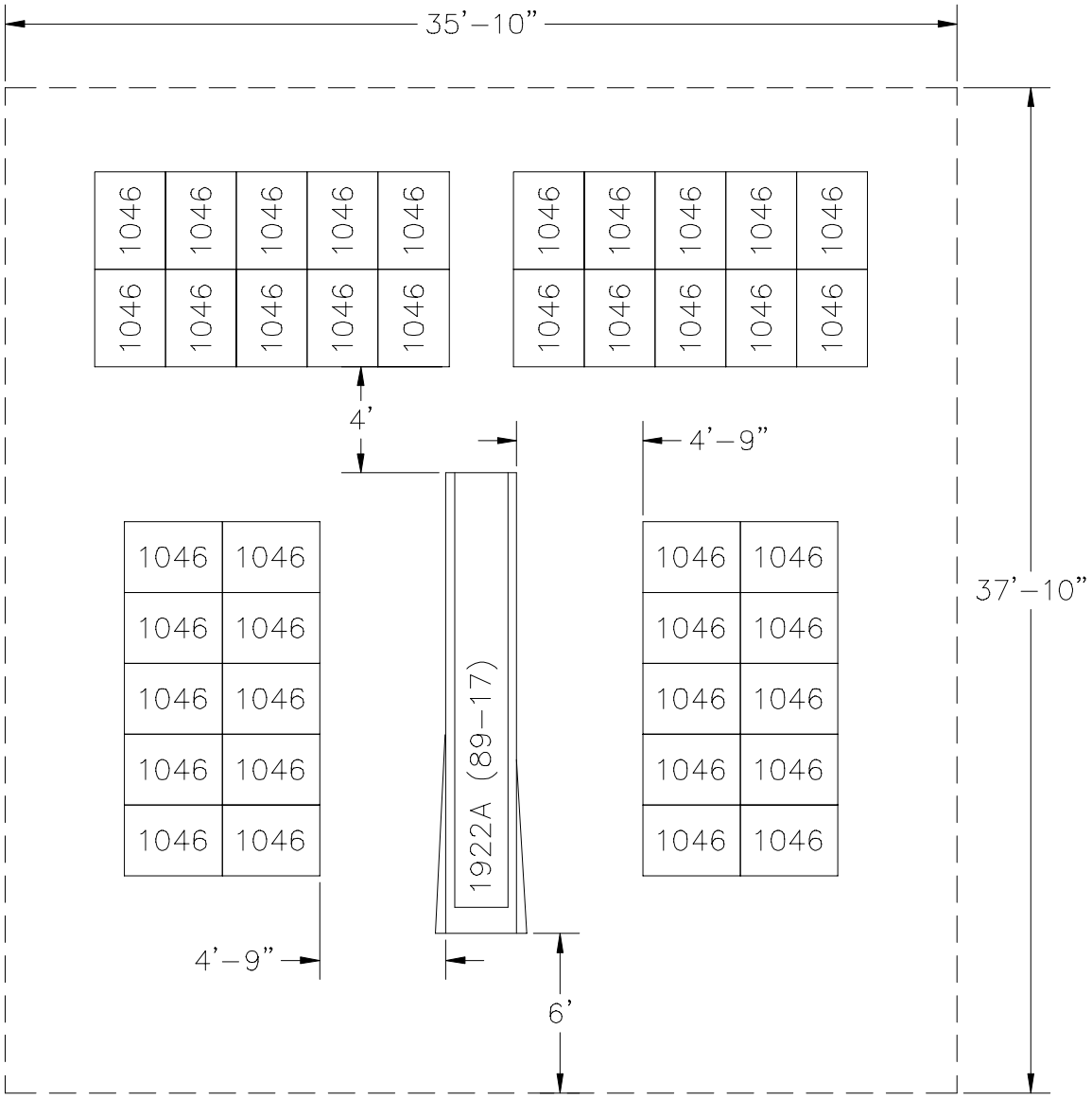


Exhibit 46l
460019a, Sort to Sacks (5–10 Separations)

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

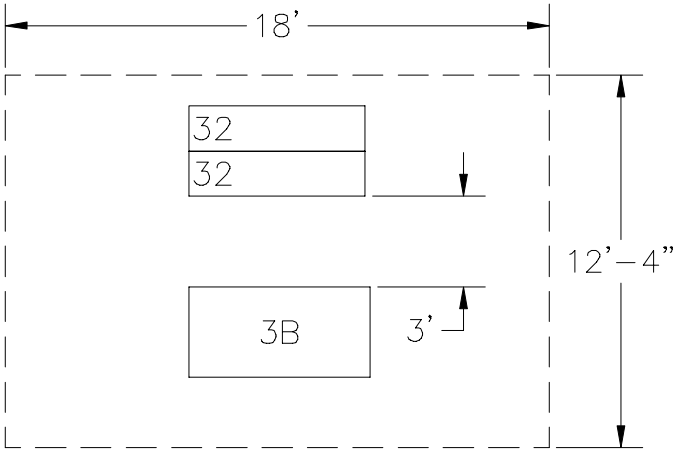


Exhibit 46m
460019b, Sort to Sacks (15–20 Separations)

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

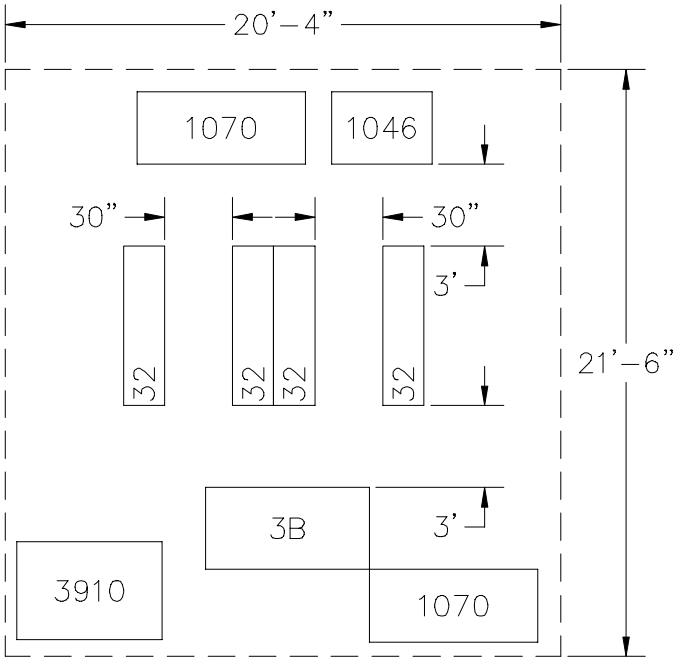


Exhibit 46n
460019c, Sort to Sacks (25–30 Separations)

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

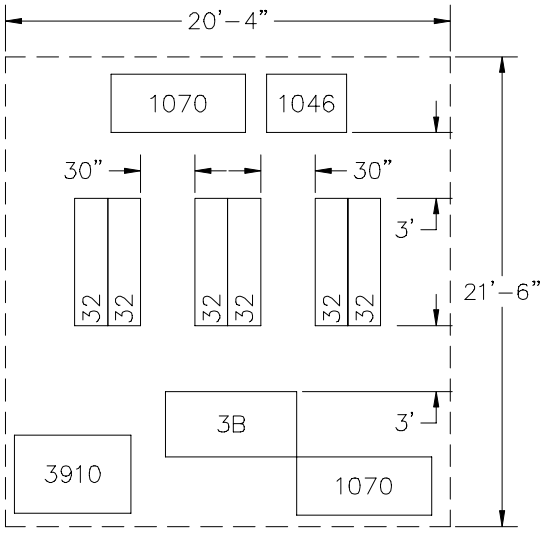


Exhibit 46o
460019d, Sort to Sacks (40–50 Separations)

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

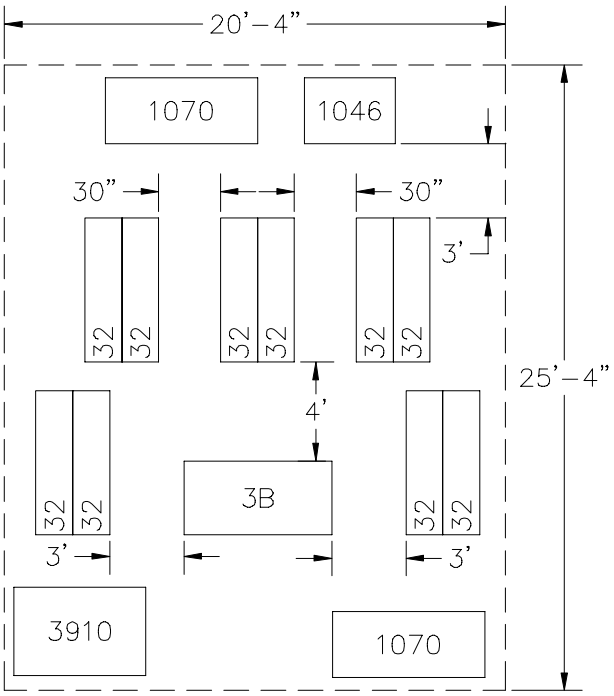


Exhibit 46p
460019e, Sort to Sacks (60–70 Separations)

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

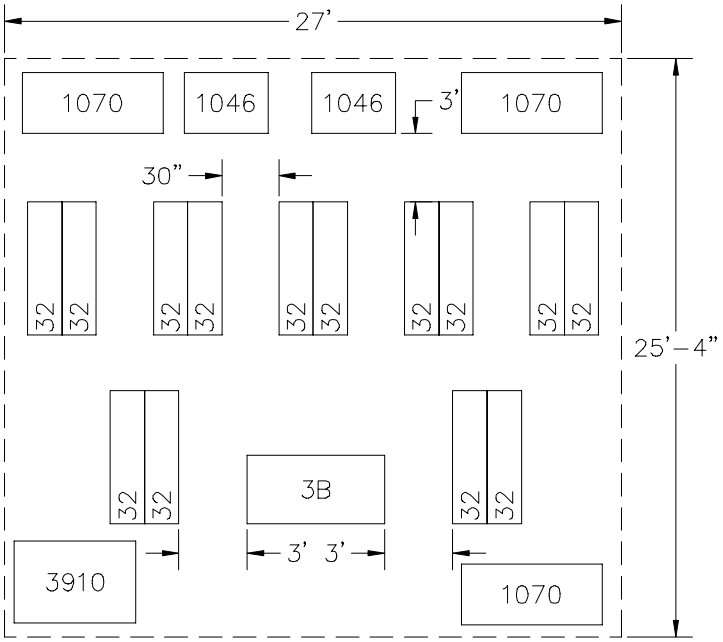


Exhibit 46q
460019f, Sort to Sacks (90 Separations)

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

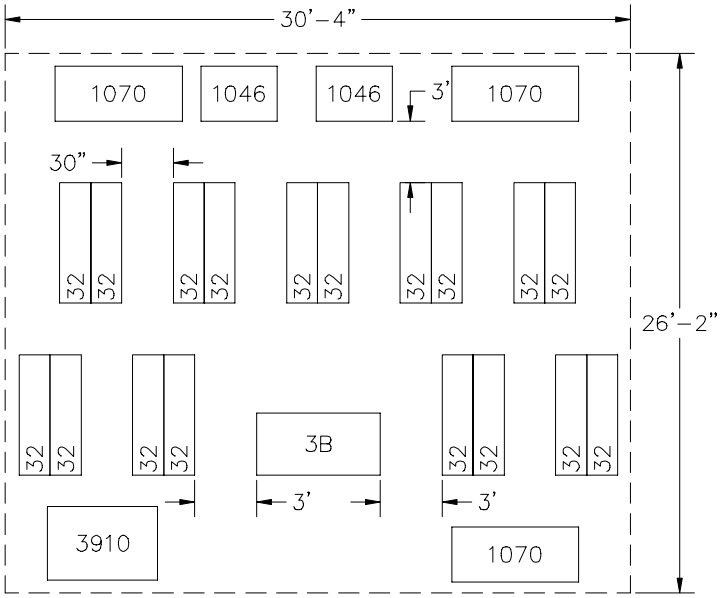


Exhibit 46r

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

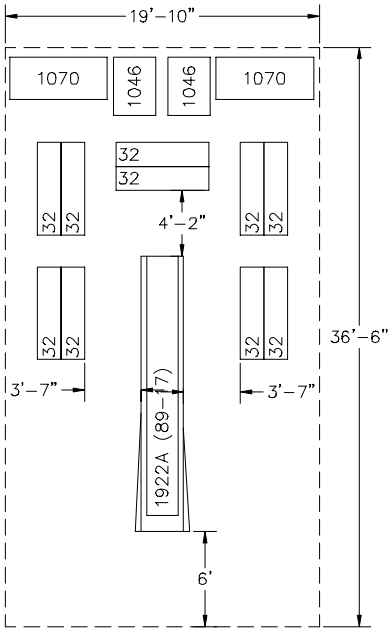
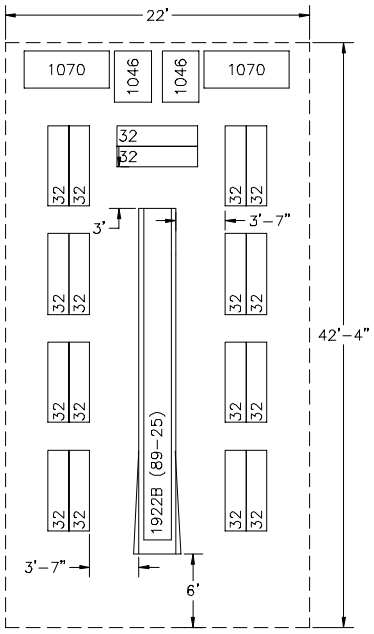


Exhibit 46s

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

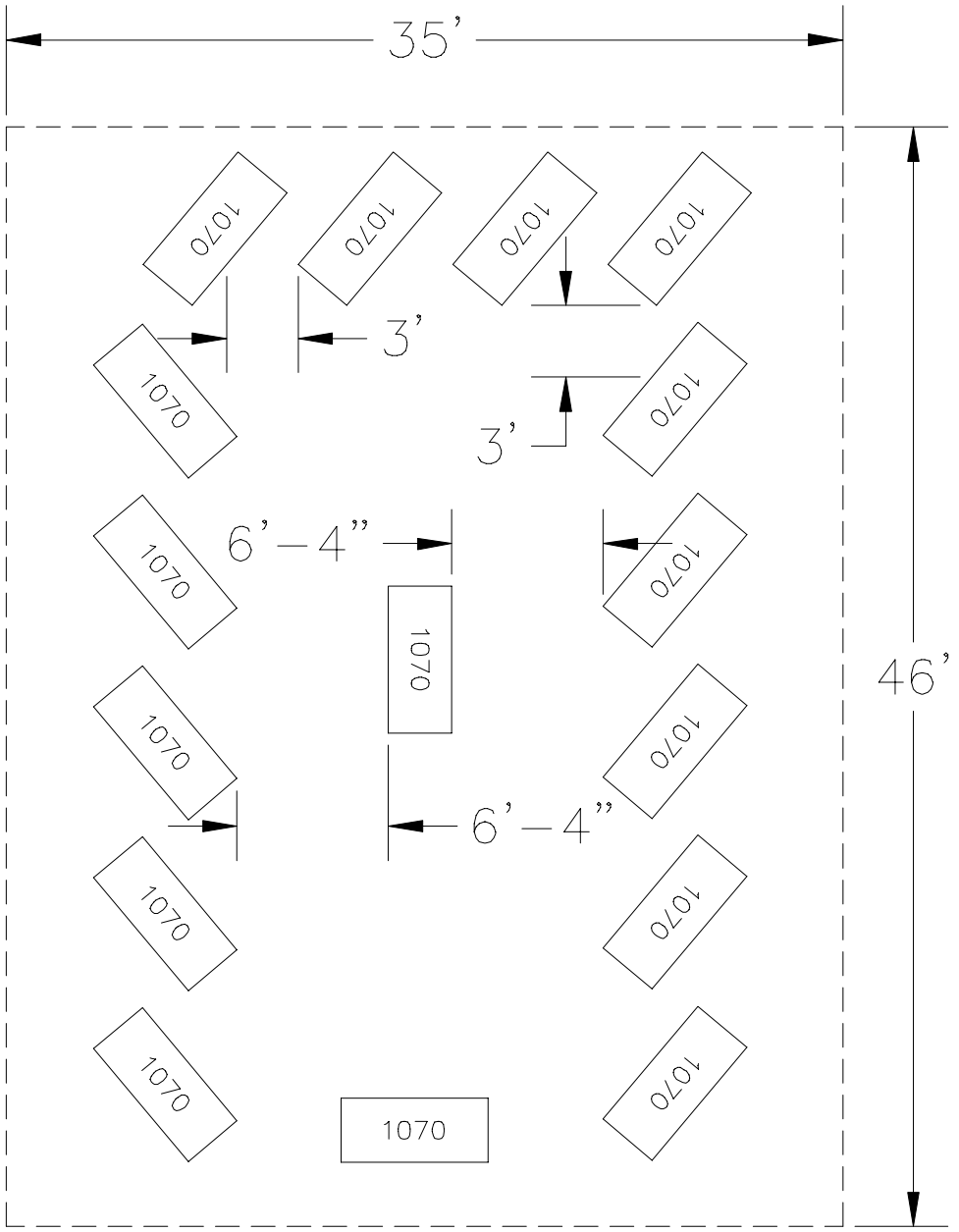


Exhibit 471c

471002, Manual Sort — Multislide (10 Separations)

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

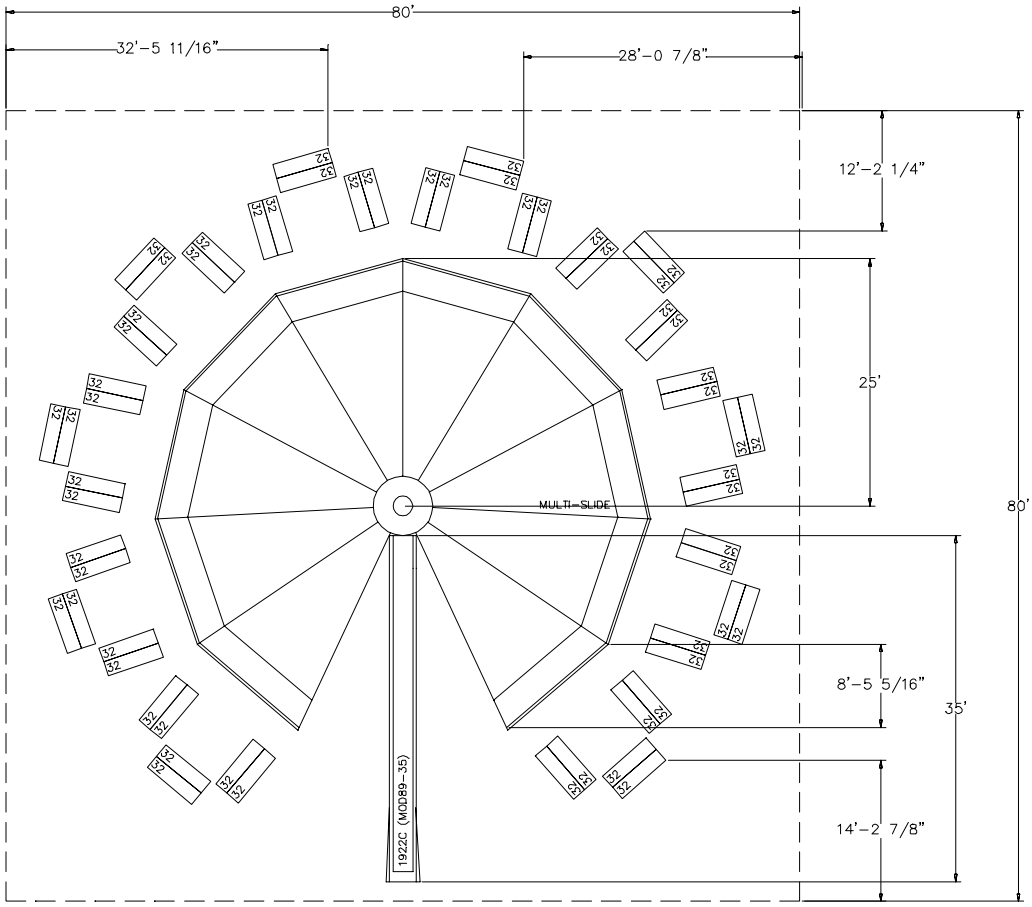


Exhibit 471d
471004, Manual Sack Sort — Sawtooth (15 Separations)

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

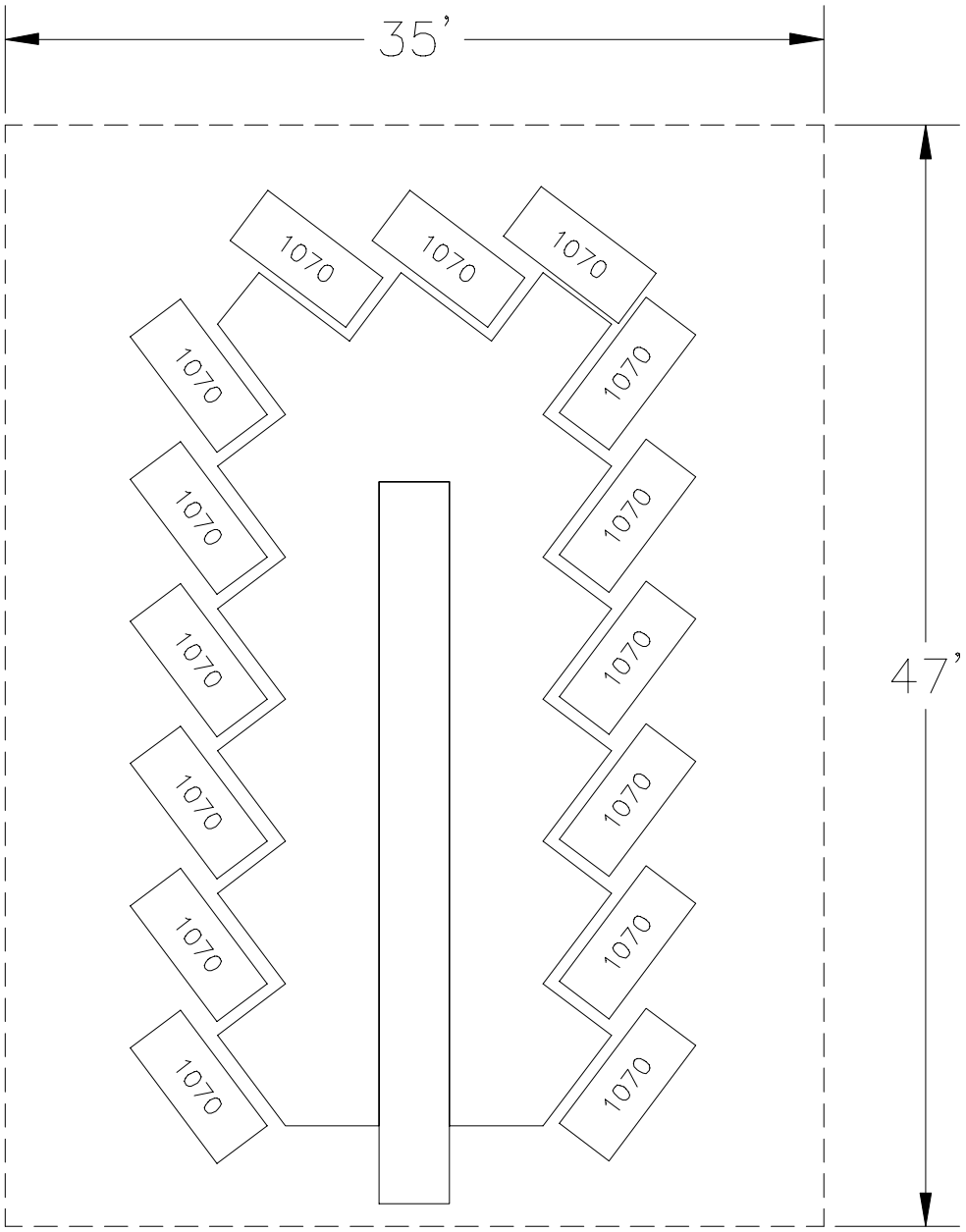


Exhibit 471e

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

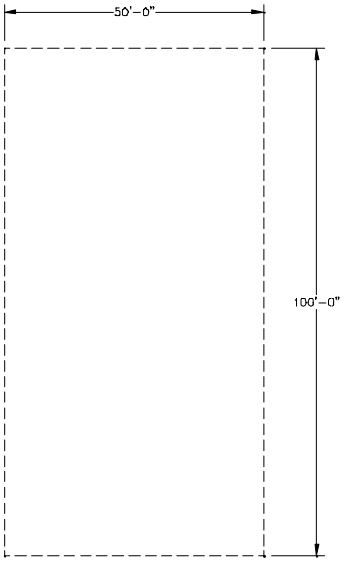


Exhibit 471f

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

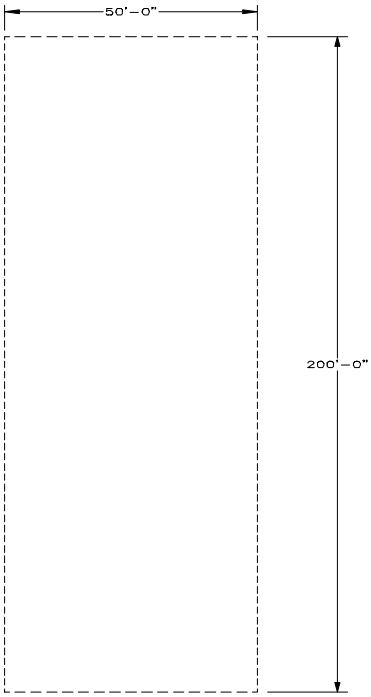


Exhibit 471g
471007, Universal Sorting System: 15,000 Sq Ft

Date: May 1997
Universal Sorting System — Outsides, Sacks, and Trays
Scale: No Scale
Area: 15,000 Sq Ft

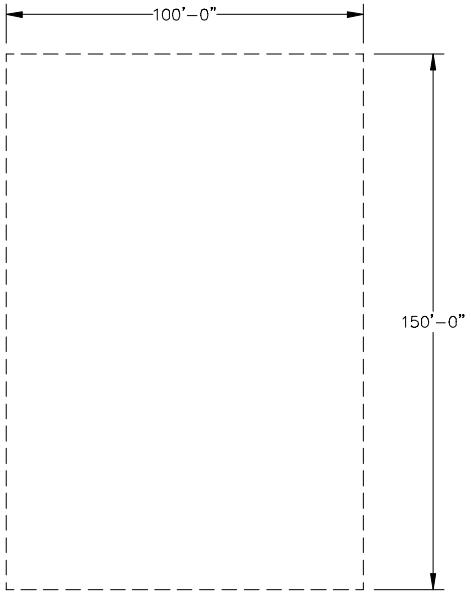
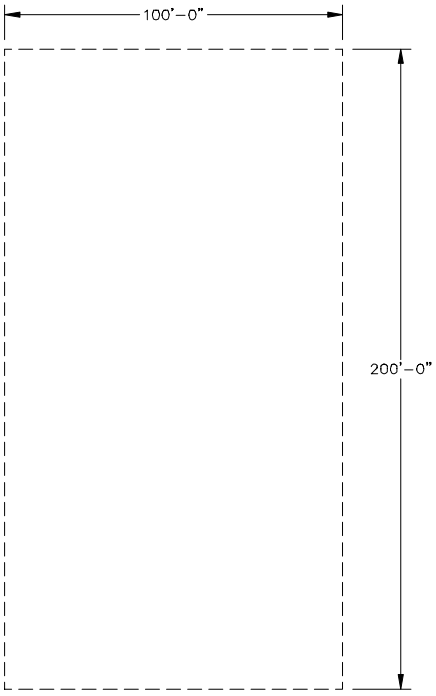


Exhibit 471h
471008, Universal Sorting System: 20,000 Sq Ft

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

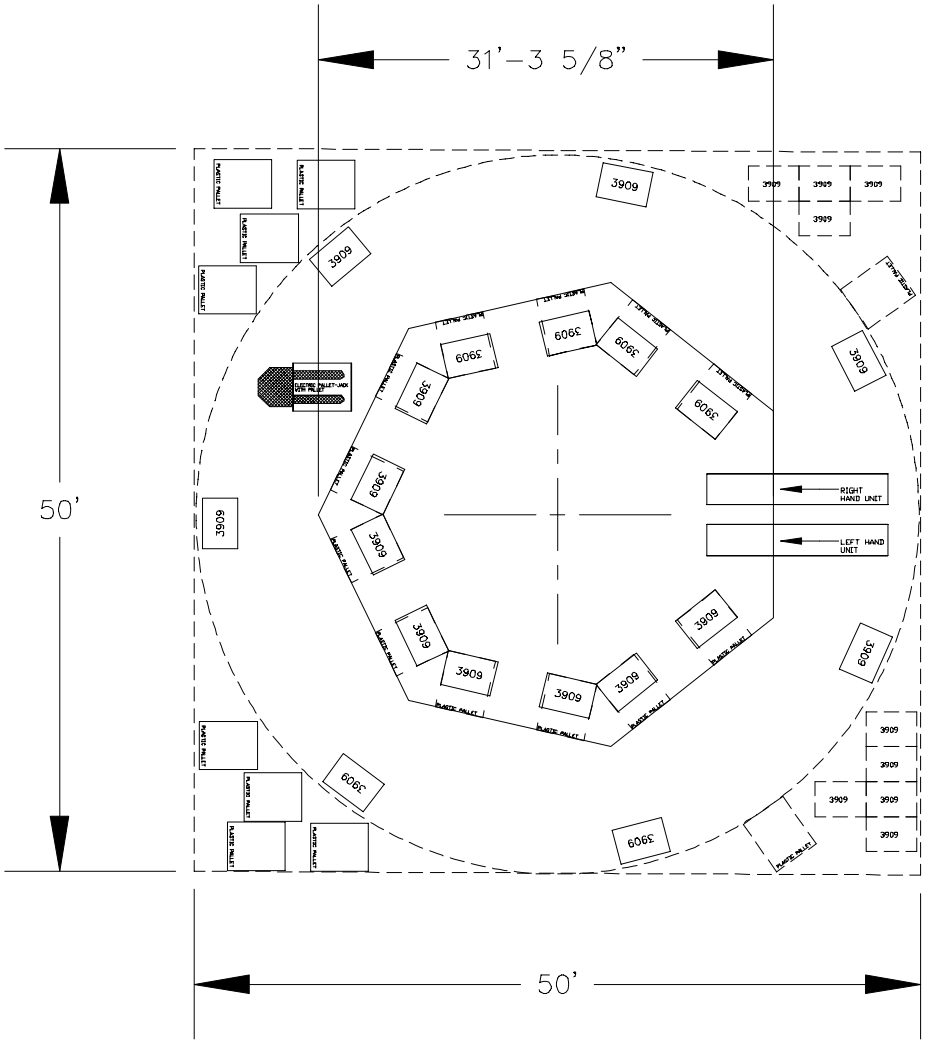
Exhibit 472a lists the WSUs currently used for robotics, sleeving and banding, and scan-where-you-band. Exhibits 472b and 472c illustrate the WSUs for visual reference in planning facility space requirements for robotics. Exhibits 472d and 472e illustrate the WSUs for sleeving and banding of letters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

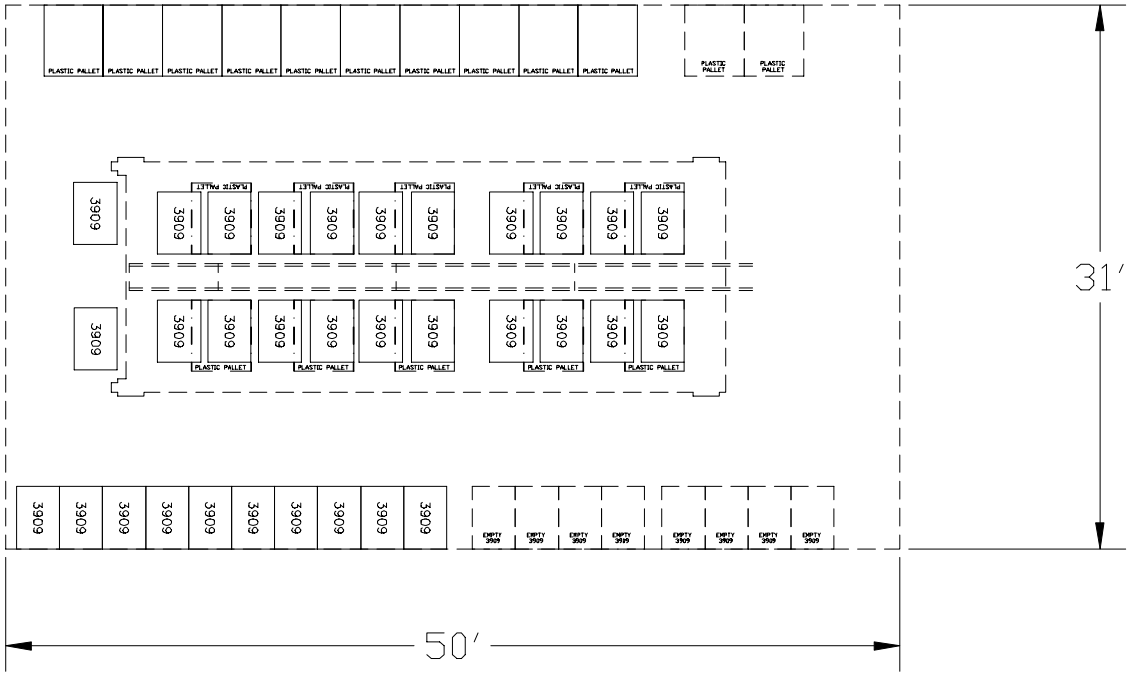


Exhibit 472d
472003, Gantry Robot (Dual)

Date: Sept. 1997
Dual Gantry Robot Trays
Scale: No Scale
Area: 2,500 Sq Ft

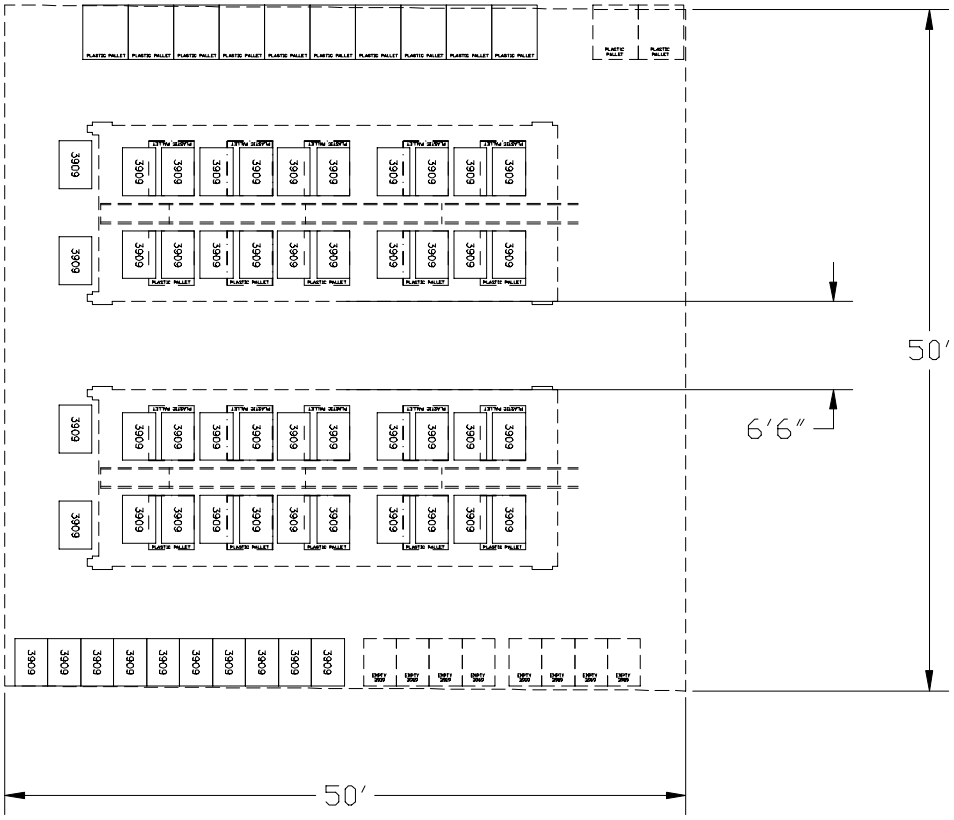


Exhibit 472e

472004, Letter Auto-Sleever and Strap

Date: Sept. 1997

Auto-Sleeve and Strap Letter Trays

Scale: No Scale

Area: 336 Sq Ft

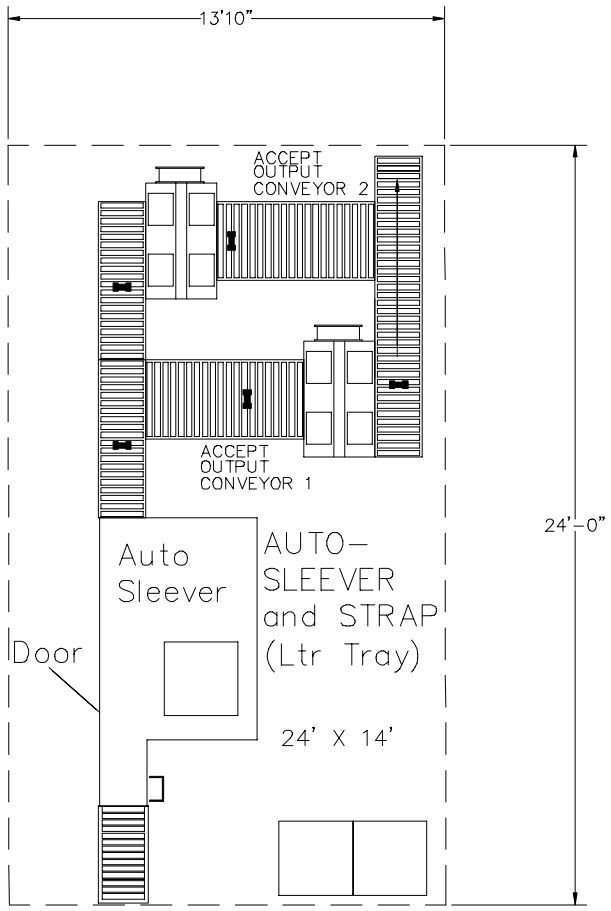


Exhibit 472f
472005, Flat Sleever and Strap

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

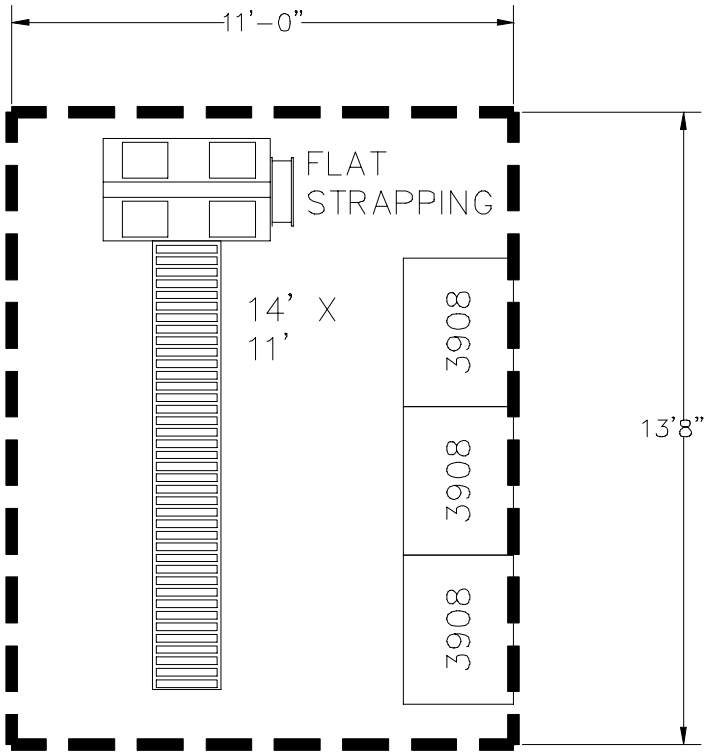


Exhibit 472g
472006, Letter Scan-Where-You-Band

Date: Sept. 1997
Scan-Where-You-Band Letter Trays
Scale: No Scale
Area: 818 Sq Ft

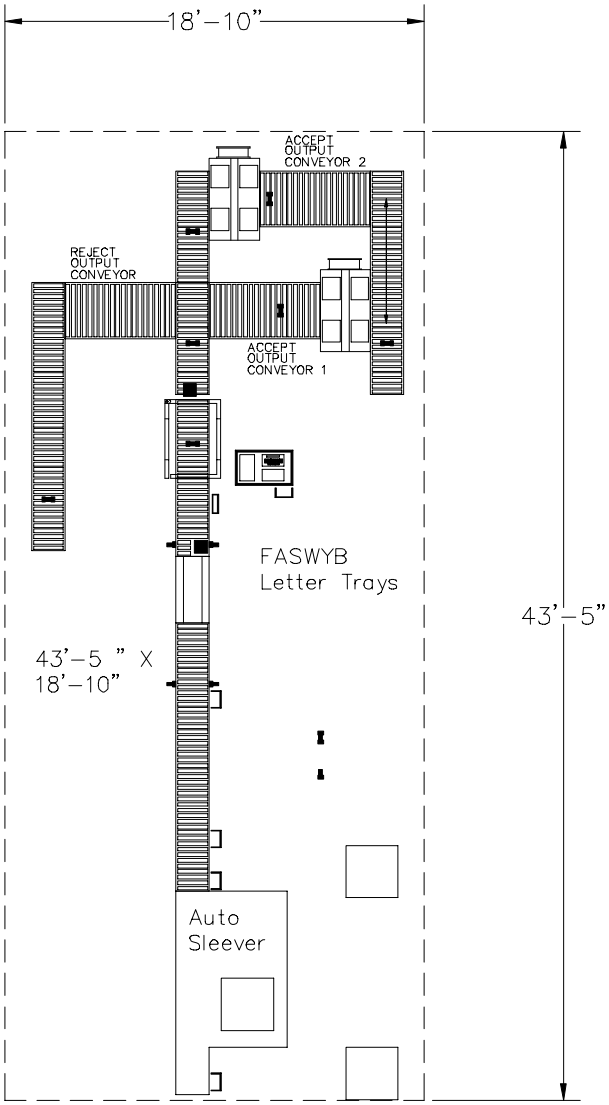
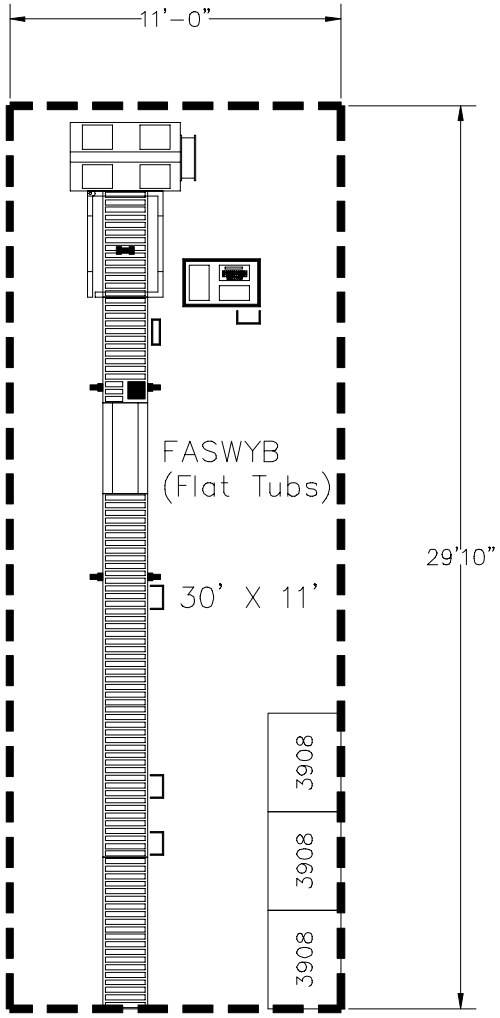


Exhibit 472h
472007, Flat Scan-Where-You-Band

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

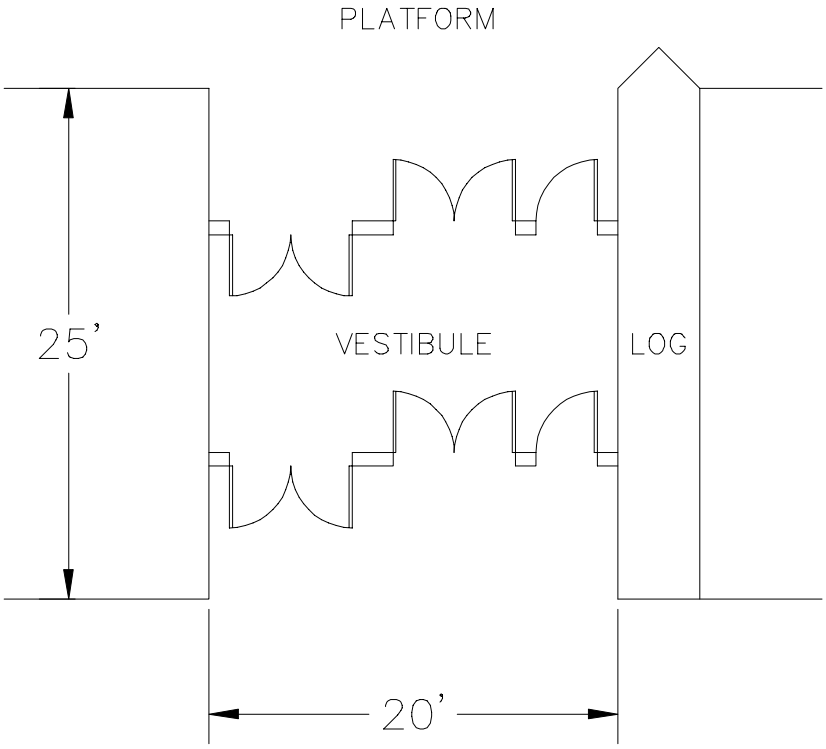
The footprint of the platform vestibule provides for movement of mail and personnel between the platform and the workroom floor. Exhibit 476a lists the WSU for the platform vestibule. Exhibit 476b illustrates the platform vestibule for visual reference in planning facility space requirements. The vestibule 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

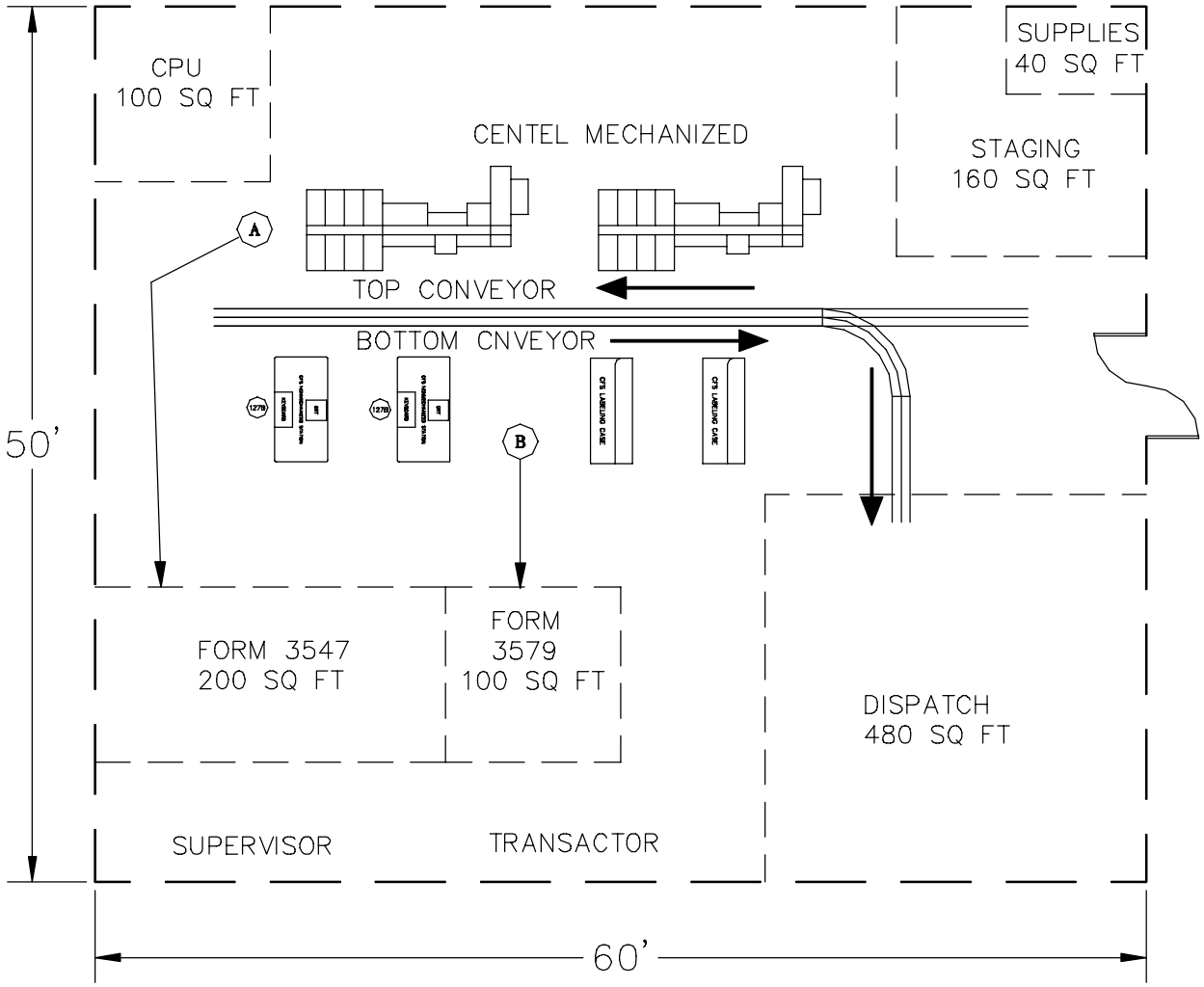


Exhibit 482c
482002, Medium CFS Unit

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

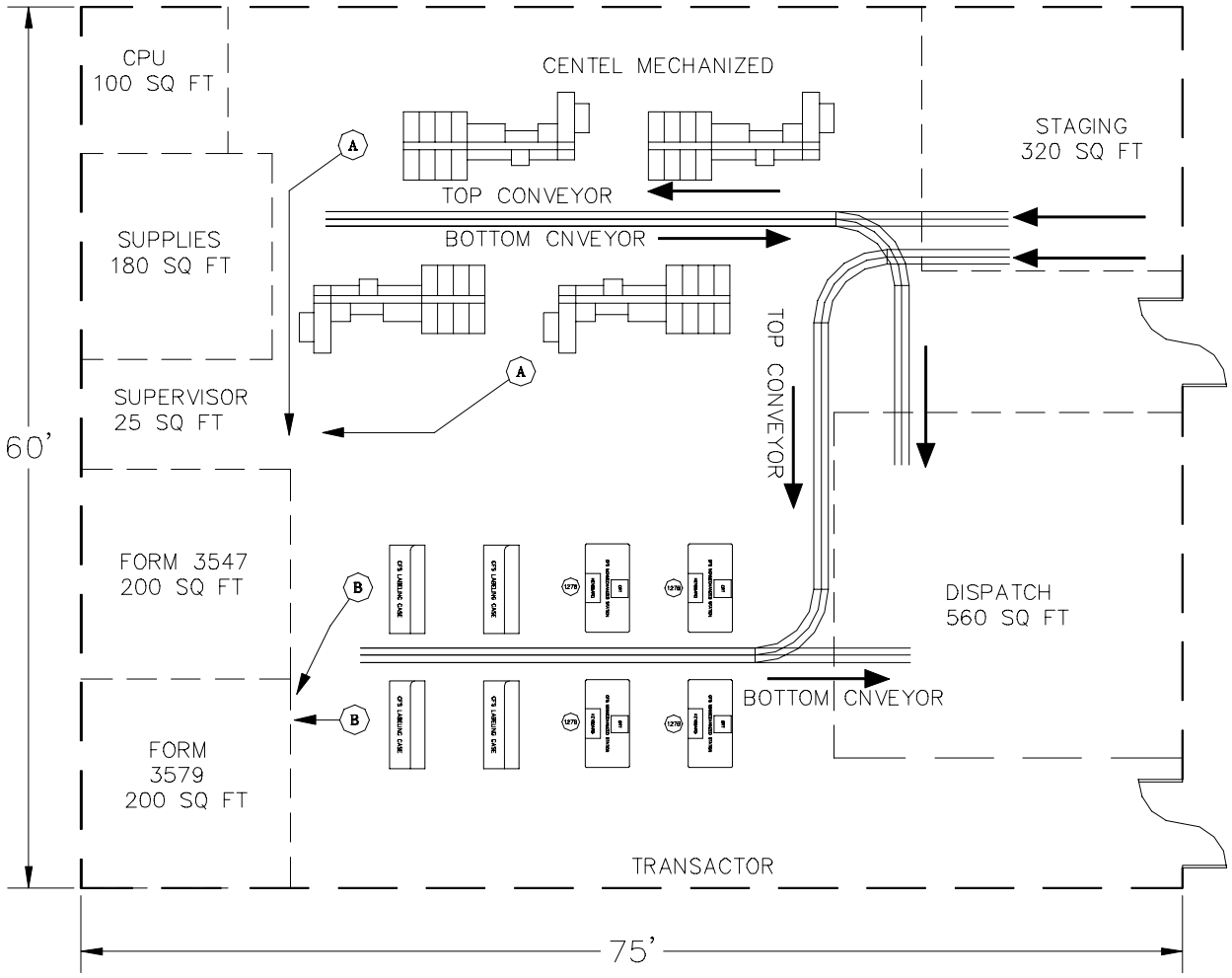


Exhibit 482d

482003, Medium-Large CFS Unit

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

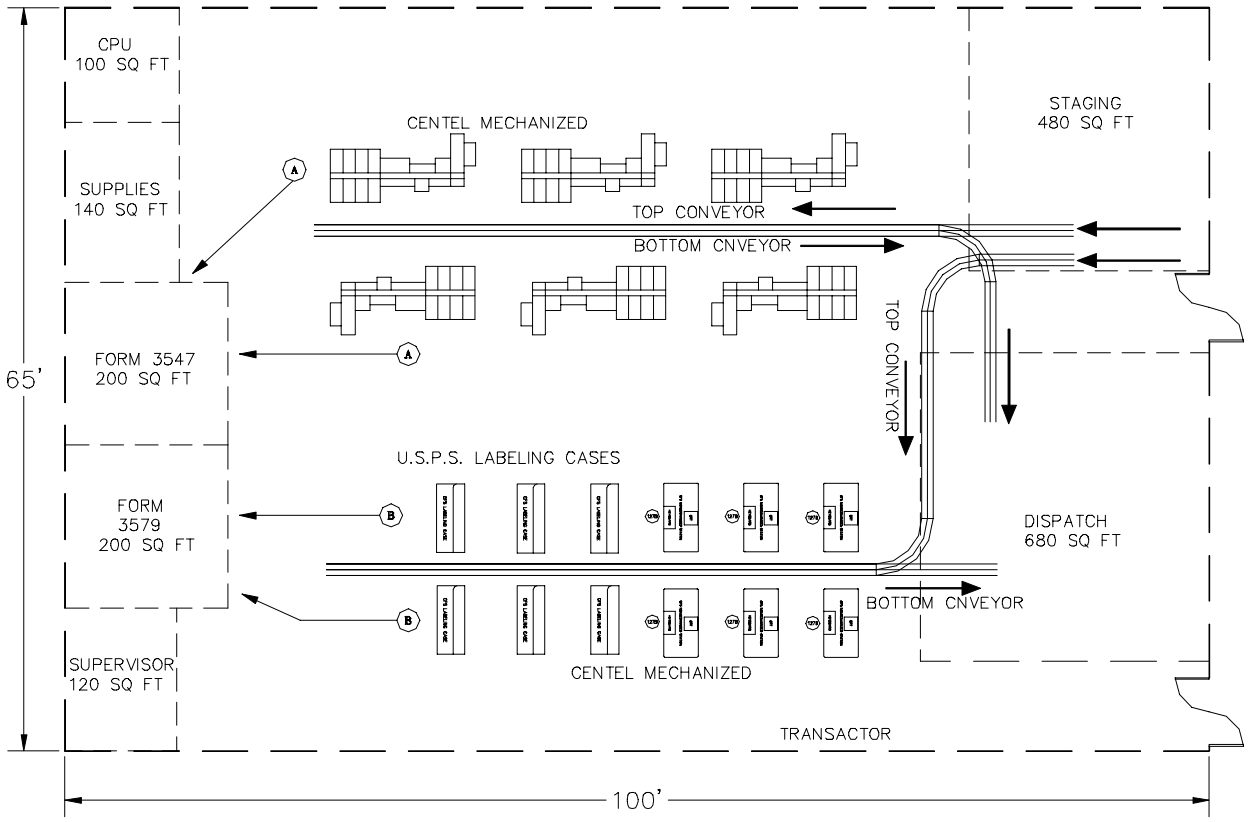


Exhibit 482e
482004, Large CFS Unit

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

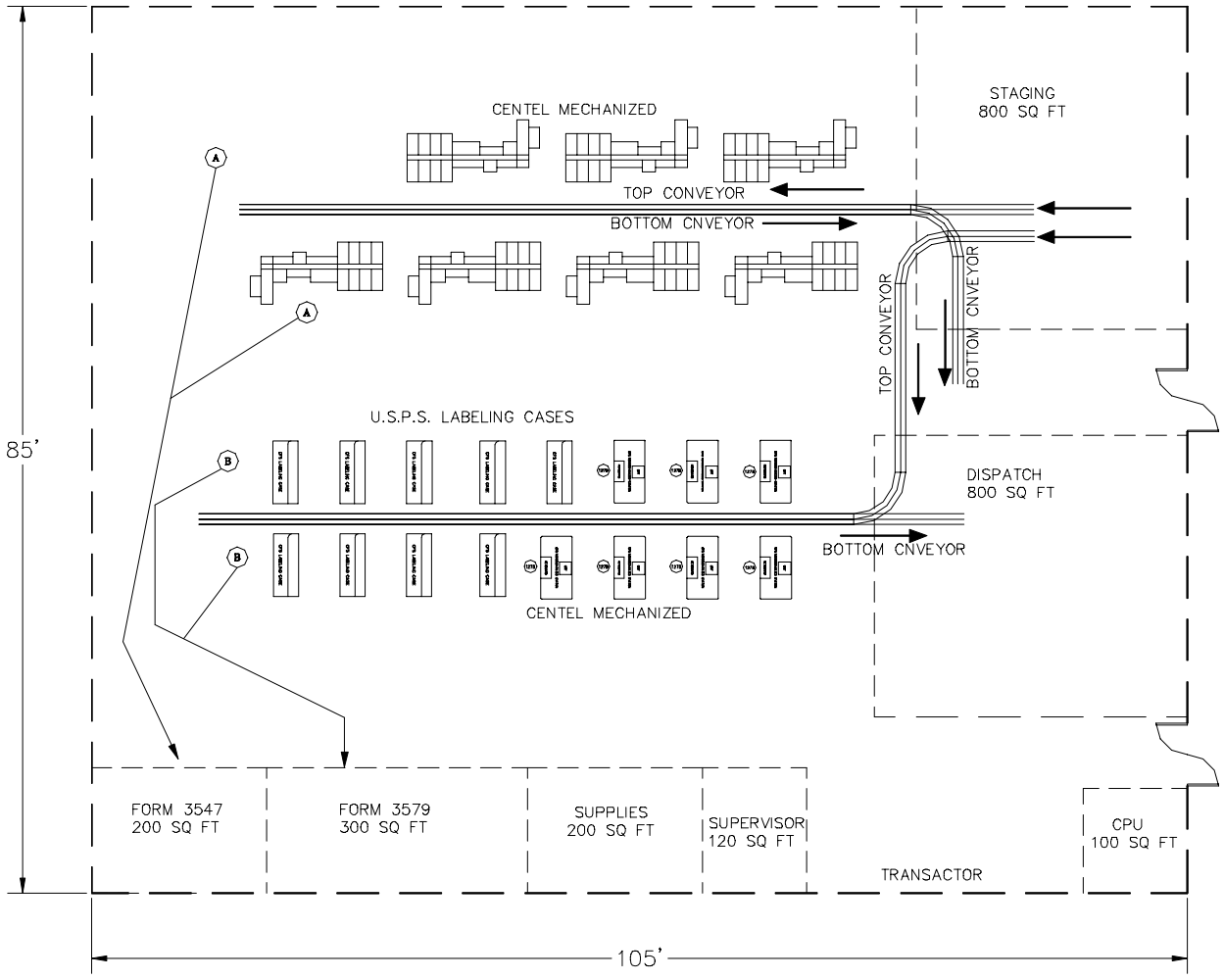
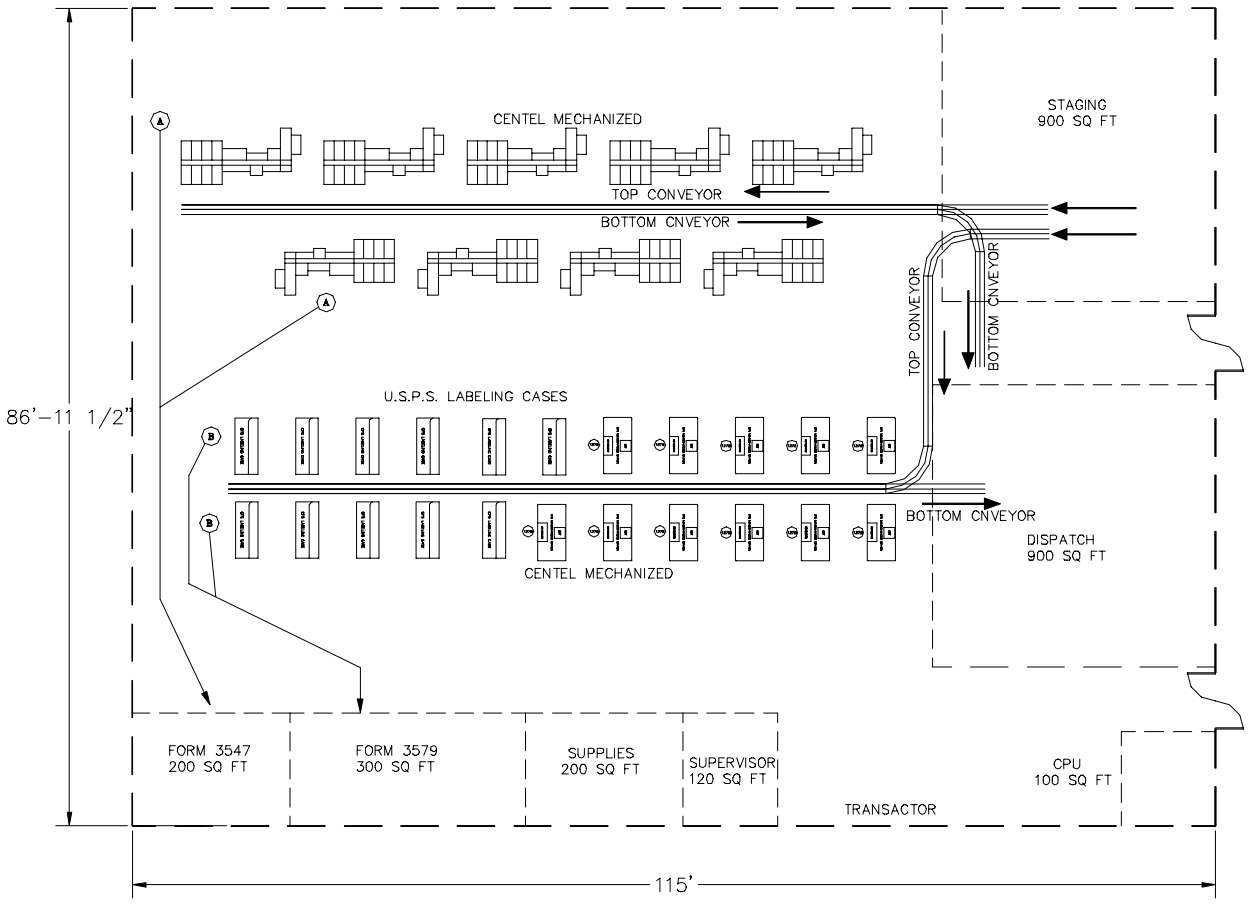


Exhibit 482f

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

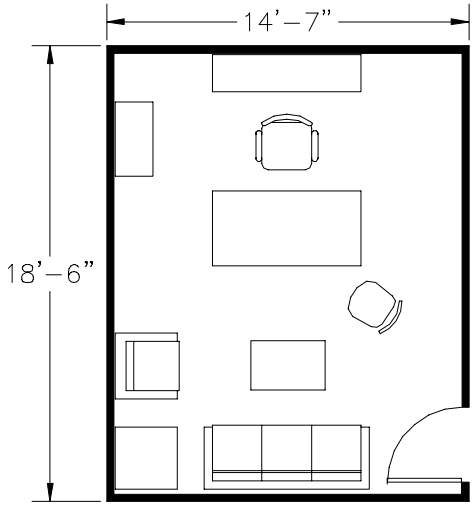


Exhibit 493c
493002, District Manager, PCES Postmaster, PCES Plant Manager, or PCES AMC Manager

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

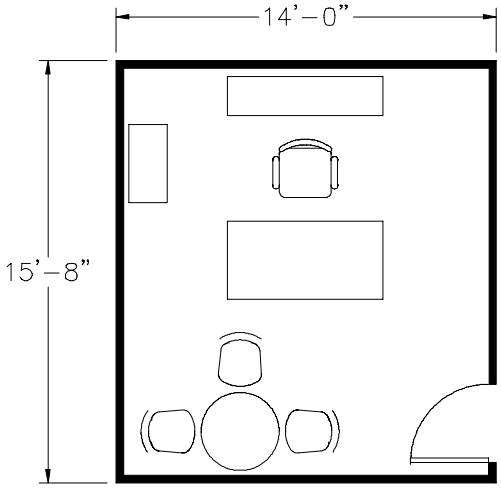


Exhibit 493d
493003, EAS Plant Manager (P&DC)

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

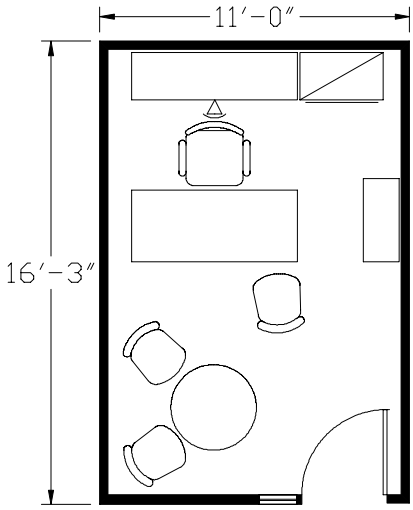


Exhibit 493e
493004, PCES Office Manager, EAS Postmaster, EAS Plant Manager (P&DF), EAS AMC/AMF Plant Manager, or EAS Manager (Direct Report to District Manager or P&DC Plant Manager)

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

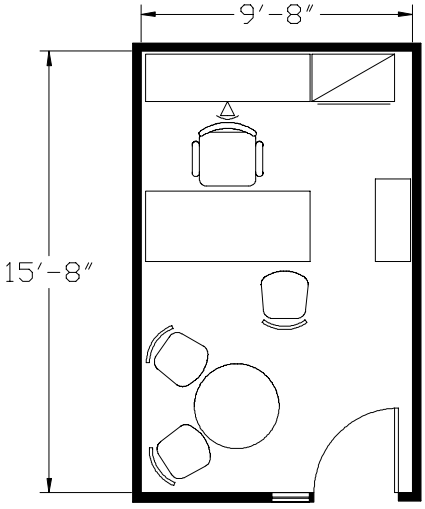
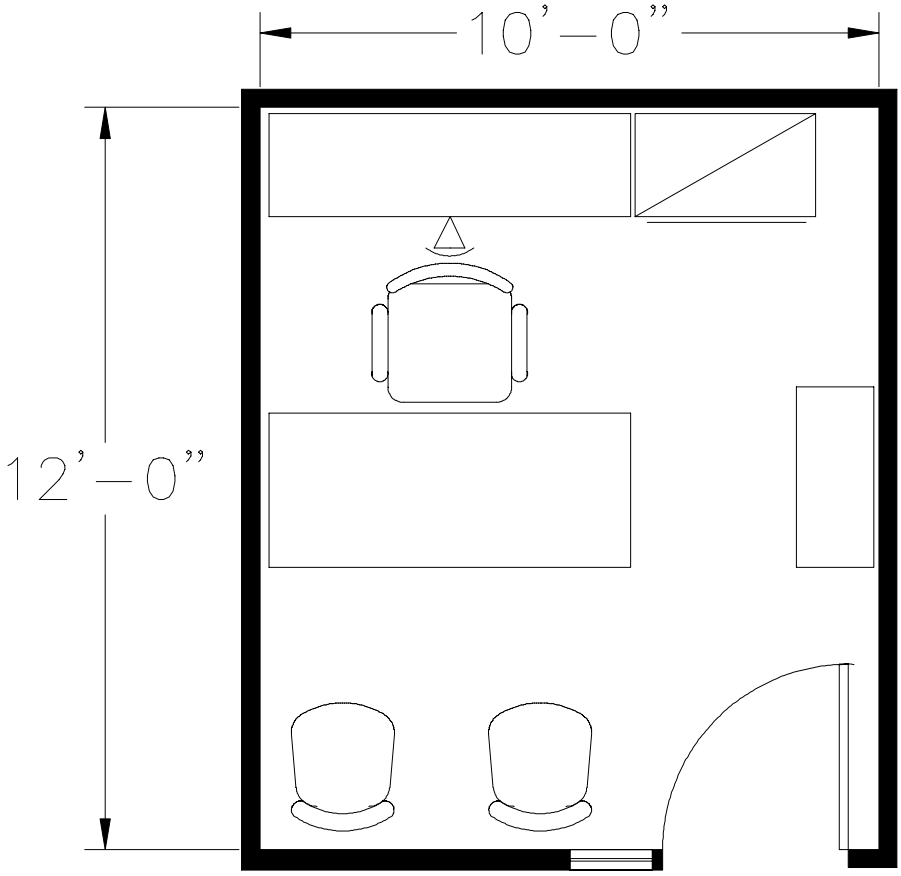


Exhibit 493f

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



5 Delivery Unit Workroom Floor Planning: City, Rural, and Highway Contract Route Delivery

51 General

Chapter 5 contains criteria and instructions for allocation of appropriate workroom floor space to accommodate all city, rural, and highway contract route (HCR) casing equipment when planning for a new or upgraded facility. The basic formula used to determine space requirements for delivery functions (see section 52) has been standardized. The standardized formula takes into consideration modern-day casing equipment and ancillary equipment normally used and found on the carrier workroom floor in a delivery unit environment, i.e., carrier casing equipment, throwback case, clerical letter and flat distribution cases for missorts, registry cage, carrier key cage, parcel post distribution, aisle space, supervisor's standup desk or workstation, etc.

52 Basic Formula

The basic formula to be used in planning for space requirements for a new or upgraded facility is 180 square feet (sq ft) for each city, rural, or highway contract route up to and including the 25th route. For each additional route in excess of 25, a total of 130 square feet should be provided in the planning. This formula is to be applied only to city, rural, and highway contract route delivery workroom floor areas; for all other functions (retail, mail processing, administrative and maintenance, etc.), refer to the appropriate headings in this handbook. Exhibit 52a lists the workstation units (WSUs) currently used for delivery unit space requirements. Exhibit 52b illustrates carrier space planning for the 180 square foot areas; Exhibit 52c illustrates carrier space planning for the 130 square foot areas. Exhibit 52d illustrates the carrier loading vestibule layout.

Example: Space requirements are being prepared for a new building to house an existing delivery unit that has 33 carrier routes; the total square footage required for placement of these routes would be calculated as follows:

25 routes x 180 sq ft =	4,500 sq ft
8 routes x 130 sq ft =	+1,040 sq ft
Total =	5,540 sq ft

Therefore, a total of 5,540 square feet should be planned for the delivery workroom floor area in a new or upgraded building with this number of routes.

This method also provides space for ancillary equipment related to the carrier operation (for example, throwback case, carrier key cage, registry cage, carrier supervisor desks, and parcel post distribution area).

Exhibit 52a
WSUs Used for Carrier Unit Space Requirements

WSU Number	Postal CAD Drawing Name	Square Feet Required	Description
520001	520001.DWG	180	Carrier Space Planning: 180 Sq Ft for First 25 Carrier Routes
520002	520002.DWG	130	Carrier Space Planning: 130 Sq Ft for Each Additional Carrier Route
520009	520009.DWG	400	Carrier Loading Vestibule

Exhibit 52b

520001, Carrier Space Planning: 180 Sq Ft for First 25 Carrier Routes

Date: Dec. 1994
Carrier Space Planning Basic Formula
Scale: No Scale
Area: 180 Sq Ft

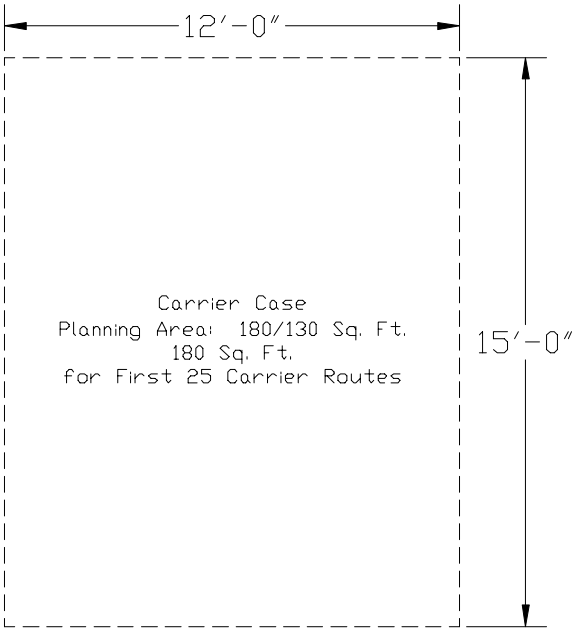


Exhibit 52c

520002, Carrier Space Planning: 130 Sq Ft for Each Additional Carrier Route

Date: Dec. 1994
Carrier Space Planning Basic Formula
Scale: No Scale
Area: 130 Sq Ft

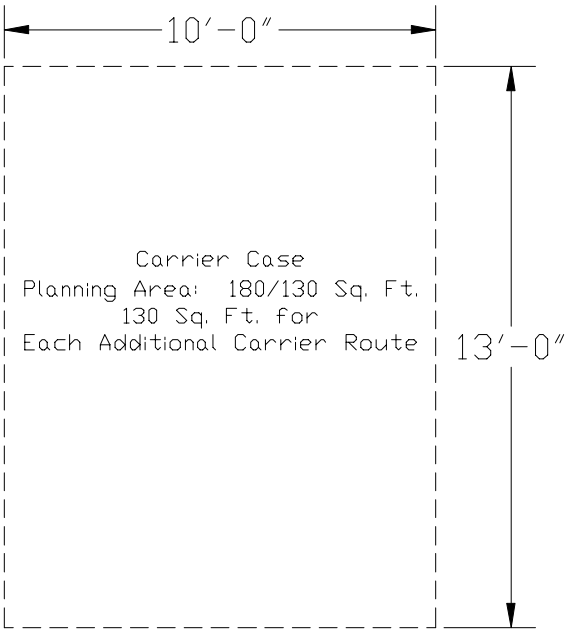
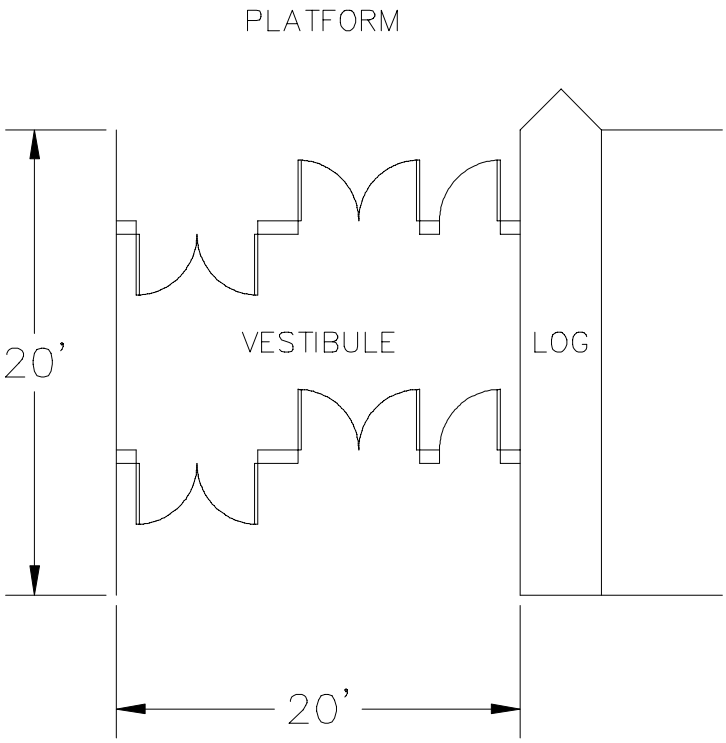


Exhibit 52d
520009, Carrier Loading Vestibule

Date: May 1997
Carrier Loading Vestibule
Scale: No Scale
Area: 400 Sq Ft



53 Carrier Case Configurations: City, Rural, and HCR

531 General

The recommended basic carrier case configurations for a vertical flats environment can be found in this section. To assist in planning for the placement, or arrangement, of equipment on the delivery workroom floor area of the new or upgraded facility, section 532 lists the normally used equipment (inclusive of its square footage displacement).

532 Carrier Case Configurations for Vertical Flats

Local managers are afforded a reasonable degree of flexibility in determining their equipment configurations as long as (a) utilization of space is efficient, (b) their equipment configuration variance is justified by volume or circumstances, and (c) their variances from the recommended equipment configuration are acceptable and approved by their district manager. Examples of variances would be (a) the use of the discontinued rural carrier

case (Items 125 and 126) in lieu of the 124-C/143-C/144-C combination, or (b) use of a 134-A, B, C, or D (flat distribution case) in lieu of or in addition to recommended equipment, etc. In instances where casing equipment different from that recommended above is to be used, local managers should be aware that reasonable equipment variations have been given consideration during the development of the formula allocating 180/130 square feet of space per route. **Therefore, adjustments to the basic formula are not necessary.** Exhibit 532a lists the two WSUs that are the versions of carrier case configurations. Exhibits 532b and 532c illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 532a
WSUs Used for Carrier Case Configurations

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
530001	530001.DWG	68	Carrier Case Configurations for Vertical Flats (Option A)
530002	530002.DWG	74	Carrier Case Configurations for Vertical Flats (Option B)

Exhibit 532b
530001, Carrier Case Configurations for Vertical Flats (Option A) (for Layout Purposes Only)

Date: Dec. 1994
Carrier Case Configuration
Scale: No Scale
Area: 68 Sq Ft

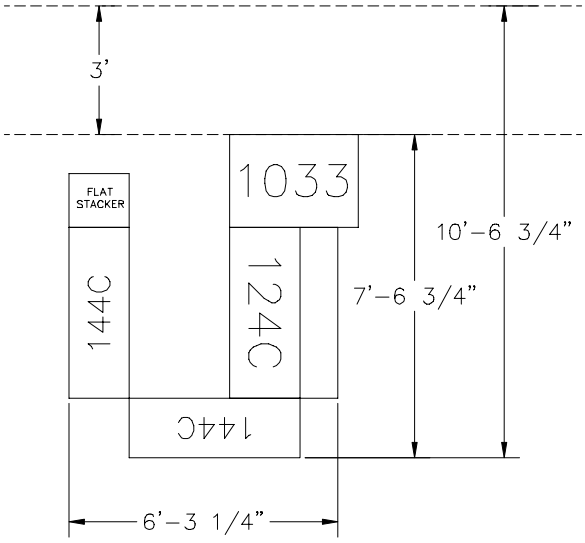
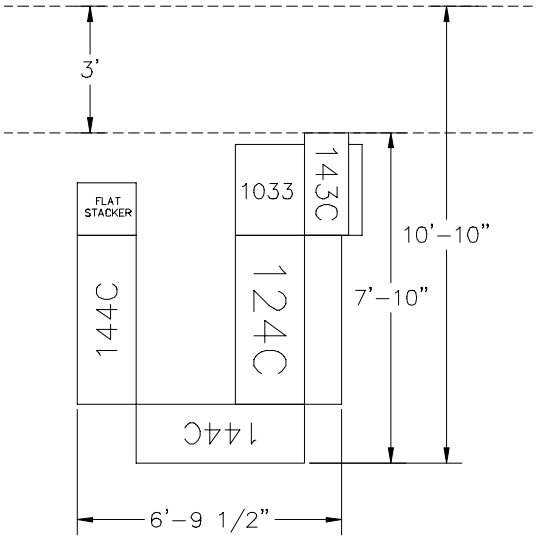


Exhibit 532c
530002, Carrier Case Configurations for Vertical Flats (Option B) (for Layout Purposes Only)

Date: Dec. 1994
Carrier Case Configuration
Scale: No Scale
Area: 74 Sq Ft



533 Casing Equipment and Other Workroom Floor Equipment Square Footage Displacements

The square footage displacements for some of the various pieces of equipment normally found on the delivery workroom floor are listed in Exhibit 533; it should be noted that the figures provided *do not* include any working or aisle space. Due to the diverse casing equipment configurations found in different offices, it was concluded to be nearly impossible to determine an accurate working or aisle space measurement for the equipment individually when it may be placed at right angles to other pieces of equipment utilizing the same working or aisle space. Local managers should pay close attention to this detail when formulating plans for a new or upgraded facility.

Exhibit 533
Item Numbers Included in the Delivery Workroom

Item Number	Description	Square Foot Displacement
21-A	Flat Distribution Case w/Table, 28-Cell	8.67
21-B	Flat Distribution Case w/Table, 42-Cell	12.75
21-C	Flat Distribution Case w/Table, 56-Cell	16.84
21-L	Flat Distribution Case Wing, 28-Cell	3.86
38	Supervisor's Standup Desk	9.34
77/78	Letter Wing Case	1.73
79/80	Letter Case and Table	5.72
109-A*	Flat Distribution Case w/Table, 24-Cell	14.27
109-B	Flat Distribution Case w/Table, 30-Cell	17.65
109-C*	Flat Distribution Case w/Table, 36-Cell	21.03
109-D	Flat Distribution Case w/Table, 42-Cell	18.48
124-C	Carrier Case w/Table, Letters	10.084
129	Throwback Case	3.62
134-A*	Flat Distribution Case, 24-Cell	4.89
134-B*	Flat Distribution Case, 30-Cell	6.05
134-C*	Flat Distribution Case, 36-Cell	7.21
134-D*	Flat Distribution Case, 42-Cell	8.36
136-A*	Flat Distribution Case, 24-Cell	8.33
136-B	Flat Distribution Case, 30-Cell	10.31
136-C*	Flat Distribution Case, 36-Cell	12.28
136-D	Flat Distribution Case, 42-Cell	14.25
143-C	Carrier Case Wing, Swinging	2.550
144-C	Carrier Case Wing	5.590
1033	Canvas Basket (Hamper)	6.50
1046	Canvas Basket (Hamper)	9.78
1075	Basket-Type Utility Cart (U-Cart)	5.32
1226-C	Seven-Shelf Tray Cart	13.10
1226-D	Mail Tray Cart (A-Frame)	5.53
3908	Letter Tray Transporter	7.86
3909	General-Purpose Mail Container	8.46

** Obsolete equipment*

54 Automation

541 Delivery Barcode Sorter Sites

For those locations that will be installing delivery barcode sorter (DBCS) equipment, they must consider appropriate space in the planning stages for a new or upgraded facility to ensure its safe and efficient operation. It will be necessary to determine the specific manufacturer and model number of the equipment to be installed before space can be planned accurately. After receiving and confirming the manufacturer's name and the model number of the equipment, refer to section 432 of this handbook for information on the footprint of the machine as well as the square footage required for supporting equipment.

542 Carrier Sequence Barcode Sorter Sites

For those locations that will be installing carrier sequence barcode sorter (CSBCS) equipment, they must consider appropriate space in the planning stages for a new or upgraded facility to ensure its safe and efficient operation. Due to the fact that there are different models of this equipment, it will be necessary to determine the number of machines, and the number of stackers on each machine, before space can be planned accurately. After receiving and confirming this information, refer to Exhibit 542a below and the drawings in Exhibits 542b through 542g for information on the footprint of the machine. The footprint of the WSUs provides 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 542a
WSUs Used for CSBCS Machines

WSU Number	PostalCAD Drawing Name	No. of Stackers	No. of Machines	Length	Width	Square Feet Required*
542001	542001.DWG	13 stackers	1	24′6″	13′0″	318.5
542002	542002.DWG	13 stackers	2	24′6″	23′0″	563.5
542003	542003.DWG	13 stackers	3	24′6″	33′0″	808.5
542004	542004.DWG	17 stackers	1	28′8″	13′0″	373
542005	542005.DWG	17 stackers	2	28′8″	23′0″	660
542006	542006.DWG	17 stackers	3	28′8″	33′0″	946

Planners should note that the dimensions and square footage figures provided in Exhibit 542a include **only placement of the CSBCS, a minimum of a 3-foot maintenance space around the perimeter of the machine for access to panels, and space for locating minimal support equipment at one end of each machine. It does not include space for maintenance spare parts cabinets immediately adjacent to the machines, space for additional supporting equipment, or access aisle space for equipment movement. Refer to 542.1 for maintenance spare parts storage and 542.2 for bullpen space.*

Note: For layout purposes, allow for a 36″ aisle as shown in WSUs 542001 through 542006.

Exhibit 542b
542001, One 13 Stacker CSBCS

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 318.5 Sq Ft

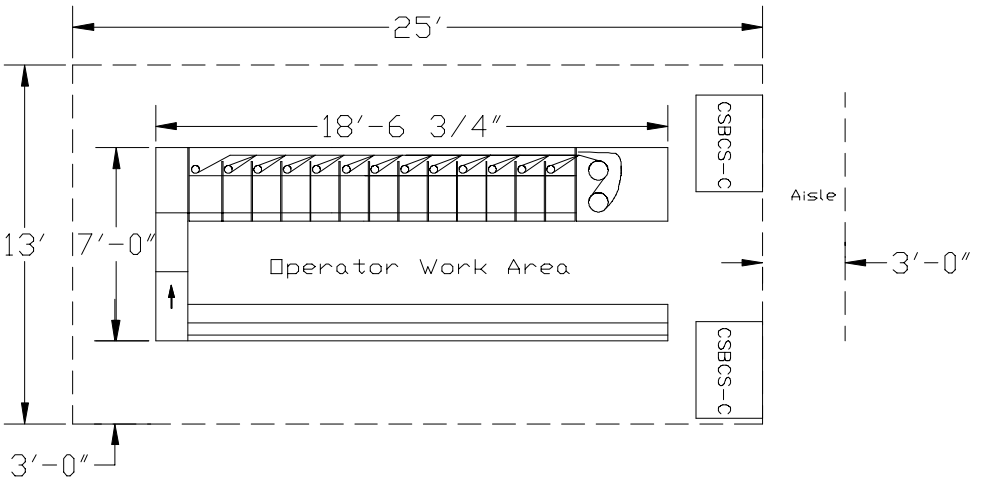


Exhibit 542c
542002, Two 13 Stacker CSBCSs

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 563.5 Sq Ft

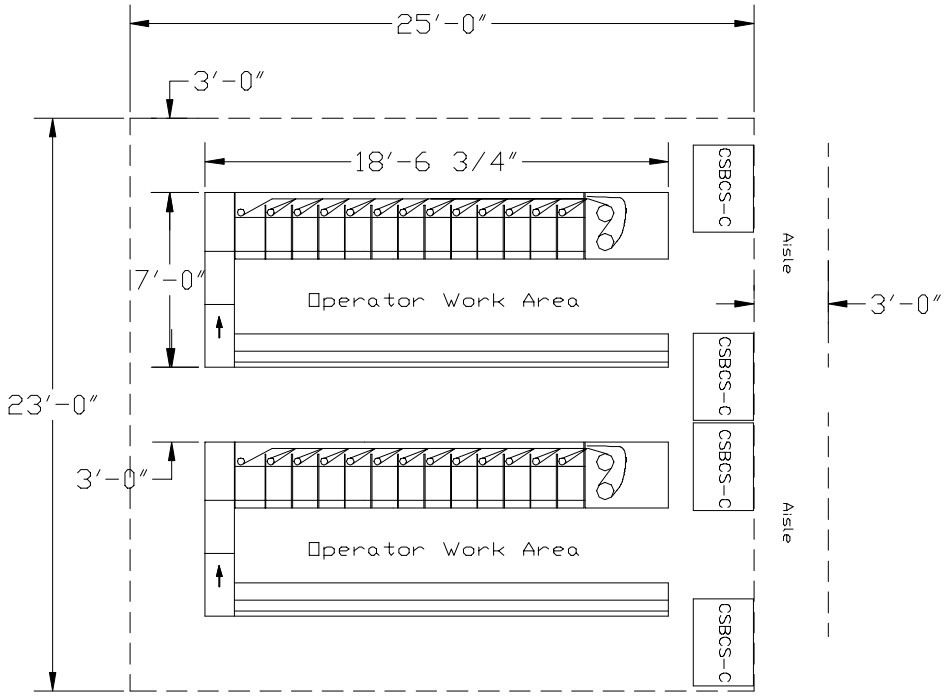


Exhibit 542d

542003, Three 13 Stacker CSBCSs

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 808.5 Sq Ft

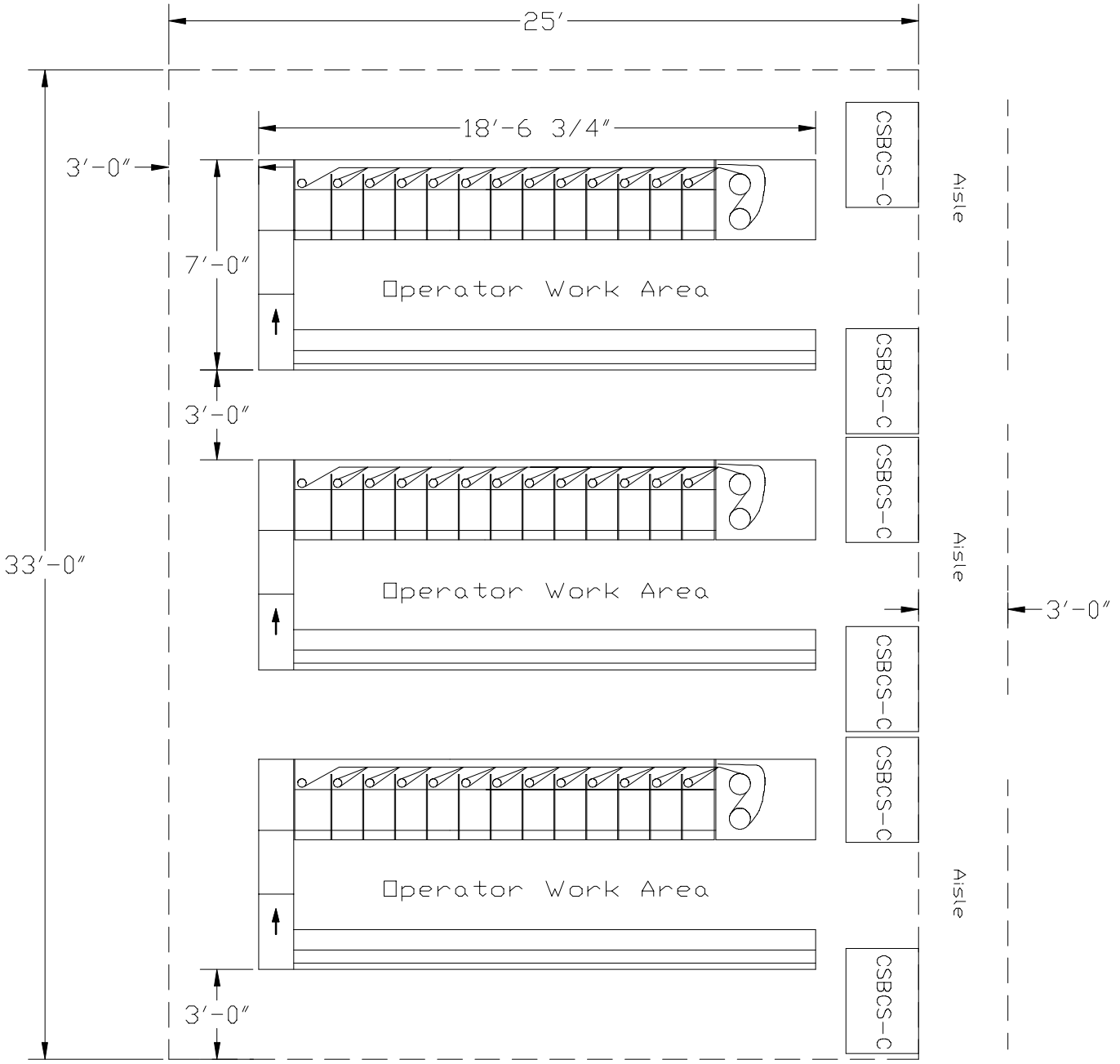


Exhibit 542e
542004, One 17 Stacker CSBCSs

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 373 Sq Ft

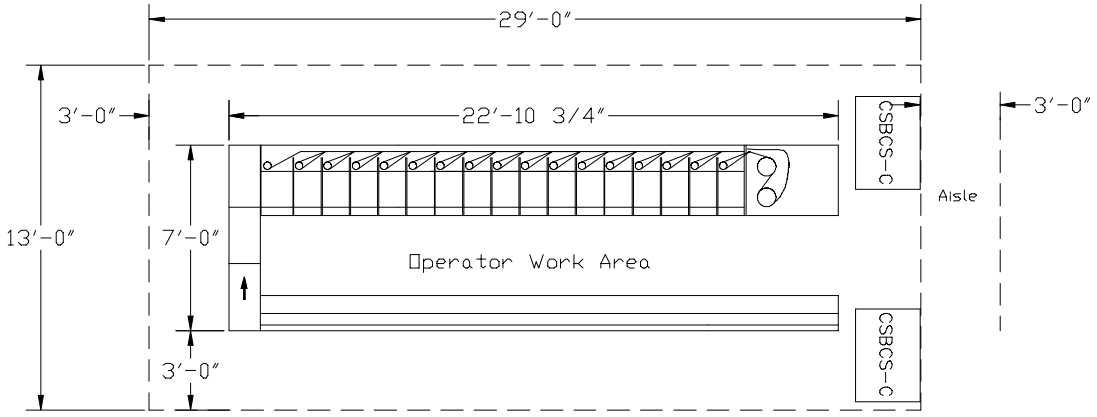


Exhibit 542f
542005, Two 17 Stacker CSBCSs

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 660 Sq Ft

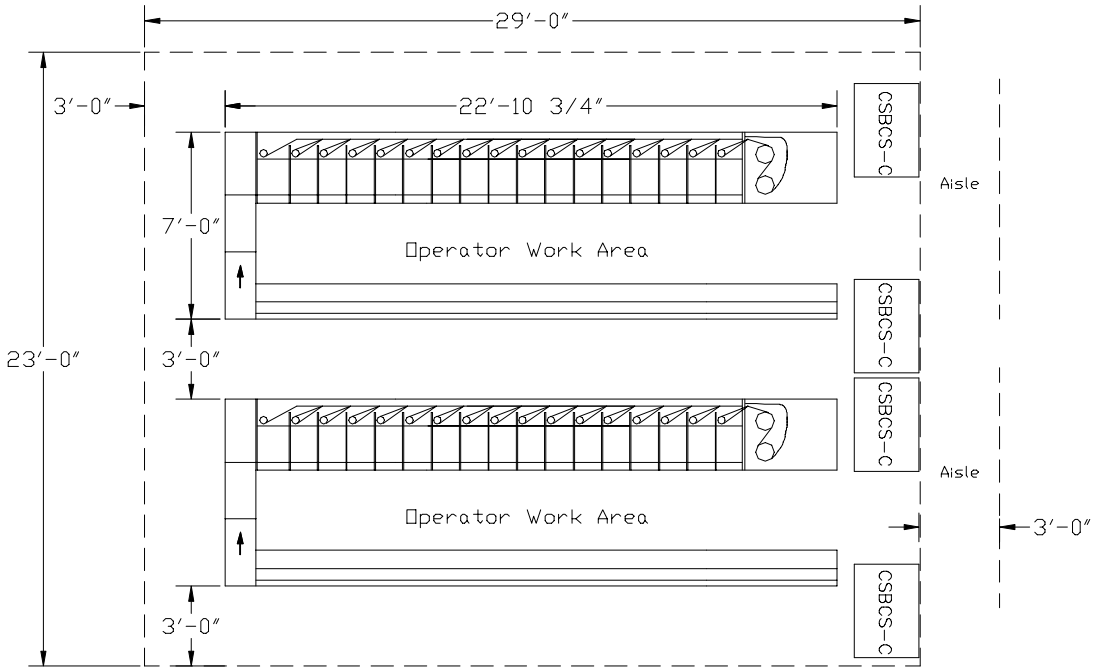
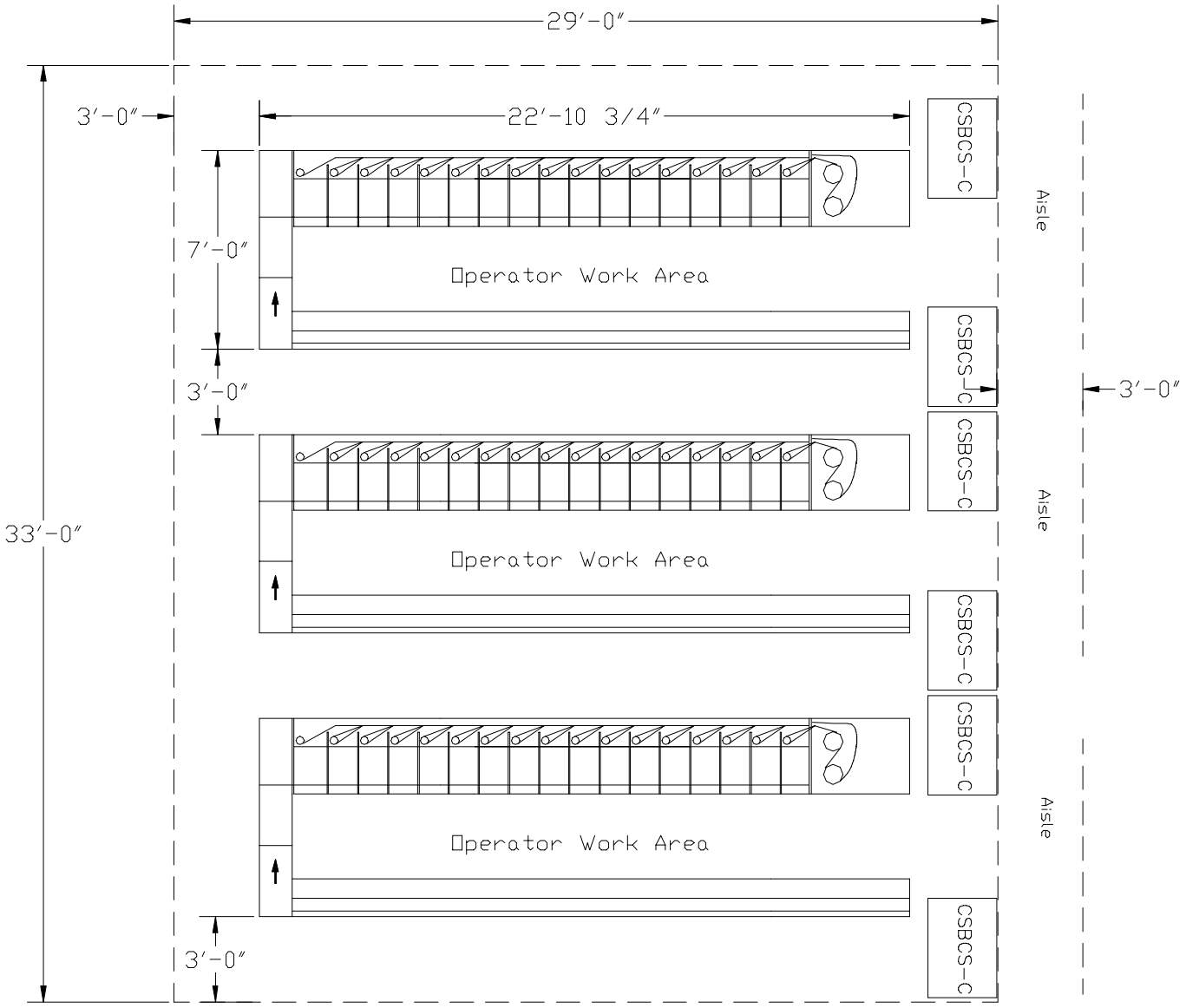


Exhibit 542g

542006, Three 17 Stacker CSBCSs

Date: Dec. 1994
CSBCS Configuration
Scale: No Scale
Area: 946 Sq Ft



542.1 Maintenance Spare Parts Storage for CSBCS

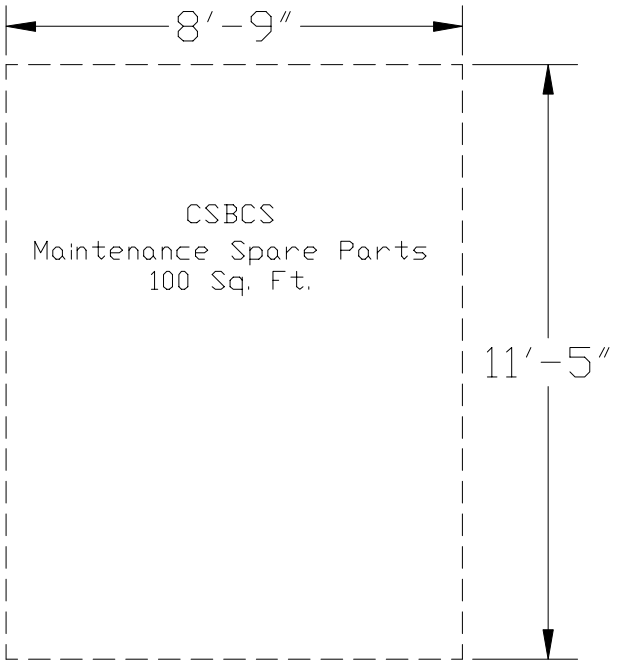
Regardless of the number of machines, 100 sq ft are required for spare parts. Under normal circumstances, it is recommended that this space be provided immediately adjacent to the equipment to expedite access to spare parts as needed. However, due to space configurations and/or as demand for additional workroom floor space in a growing operational environment increases, some locations may elect to identify available space off the workroom floor for storage of this material, perhaps in a side room. This is acceptable as long as the space is adequate and in close proximity to the CSBCS equipment. Exhibit 542.1a shows the WSU used in planning the maintenance spare parts storage for the CSBCS machines. Exhibit 542.1b illustrates the WSU for visual reference in planning facility space requirements.

Exhibit 542.1a
WSU Used for Maintenance Spare Parts Storage for CSBCS

WSU Number	PostalCAD Drawing Name	Square Feet Required	Description
542101	542101.DWG	100	Maintenance Spare Parts Storage for CSBCS

Exhibit 542.1b
542101, Maintenance Spare Parts Storage for CSBCS

Date: Dec. 1994
CSBCS Maintenance Spare Parts Configuration
Scale: No Scale
Area: 100 Sq Ft



542.2 Bullpen Space for CSBCS

Exhibit 542.2a lists the WSUs used for bullpen spaces for CSBCSs. In reviewing Exhibits 542.2b through 542.2g, note that space is included for two eastern region mail containers (ERMCs) (or general-purpose mail containers (GPMCs) or all-purpose containers (APCs)) at one end of each CSBCS. Additional bullpen space should be planned on the open end of each CSBCS. Authorization for any additional space is subject to approval by the district manager. The footprint for each bullpen space makes the following assumptions:

a. 18 routes per CSBCS.

b. Two ERMCs for each CSBCS used for bullpen area.

c. No more than three trays per route, up to a total of 48 trays per CSBCS.

d. Working aisle can be shared with existing aisle space, if necessary.

Exhibit 542.2a
WSUs Used for Bullpen Space for CSBCS Machines

WSU Number	PostalCAD Drawing Number	Number of CSBCSs	Working Aisles Req'd	Length (Ft)	Width (Ft)	Square Feet Required
542202	542202.DWG	2	no	12	9	108
542203	542203.DWG	3	yes	12	13	156
542204	542204.DWG	4	yes	12	16.5	198
542205	542205.DWG	5	yes	19	15	285
542206	542206.DWG	6	no	19	15.5	294.5
542207	542207.DWG	7	no	19	19	361

Exhibit 542.2b
542202, Bullpen Space for Two CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 108 Sq Ft

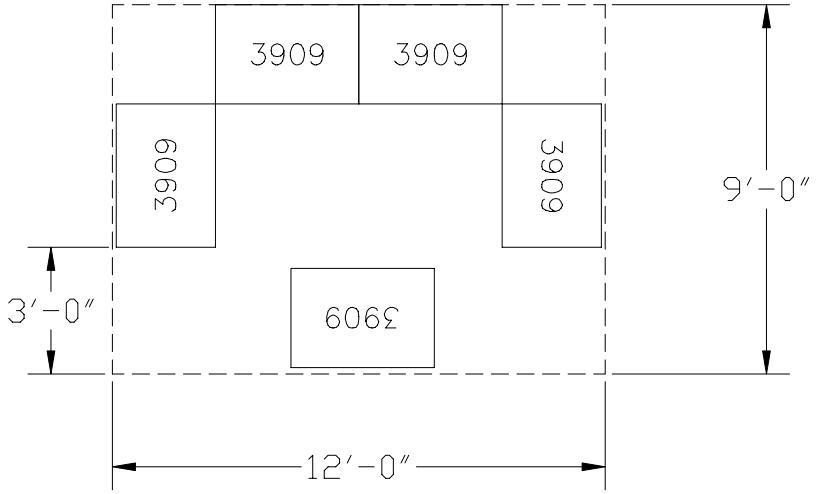


Exhibit 542.2c
542203, Bullpen Space for Three CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 156 Sq Ft

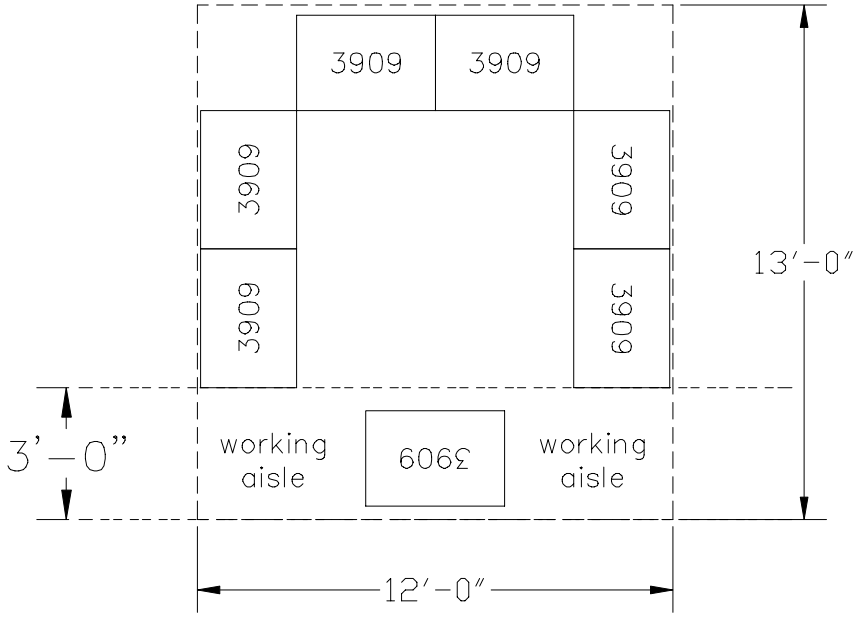


Exhibit 542.2d
542204, Bullpen Space for Four CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 198 Sq Ft

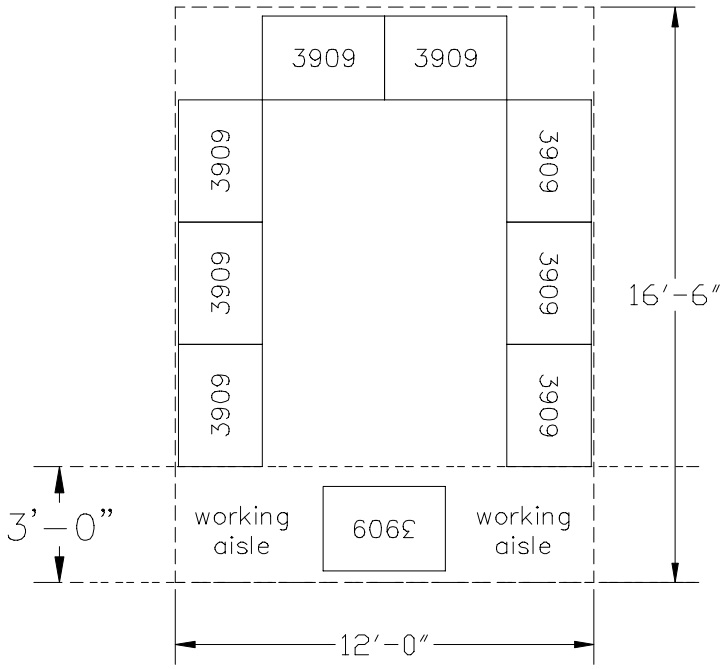


Exhibit 542.2e
542205, Bullpen Space for Five CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 285 Sq Ft

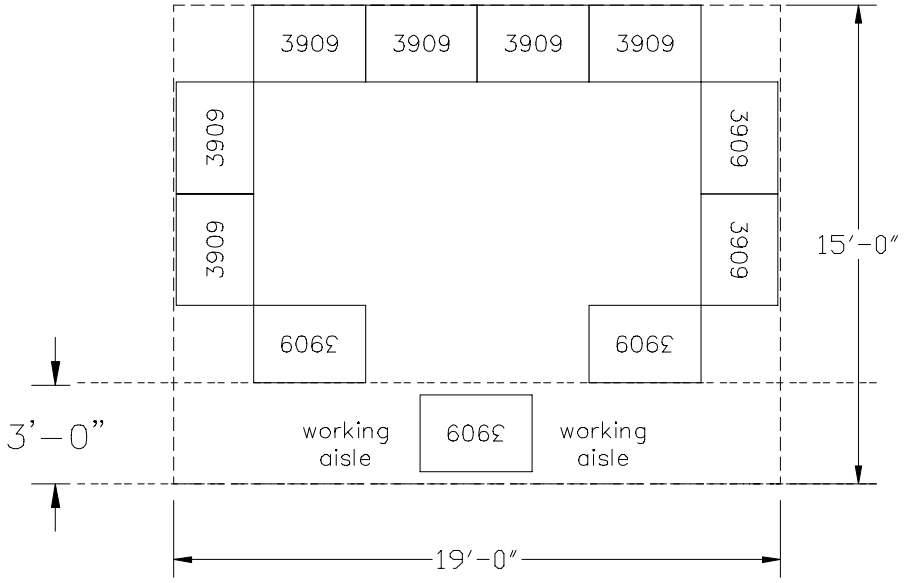


Exhibit 542.2f
542206, Bullpen Space for Six CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 294.5 Sq Ft

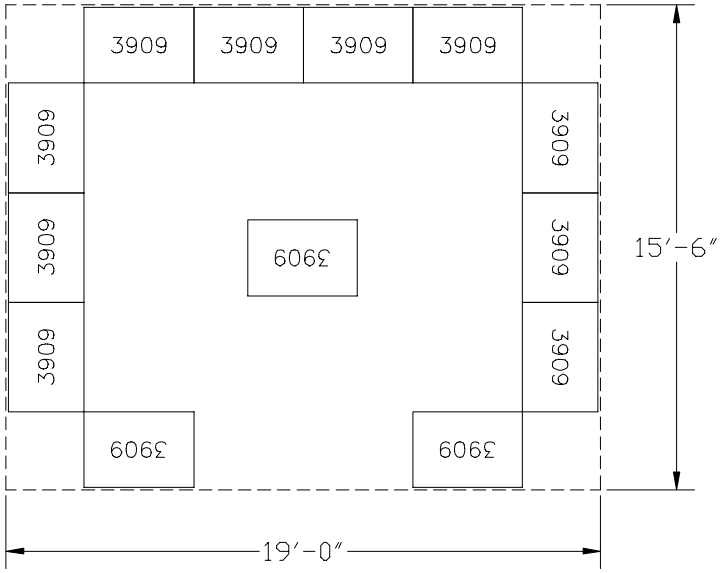
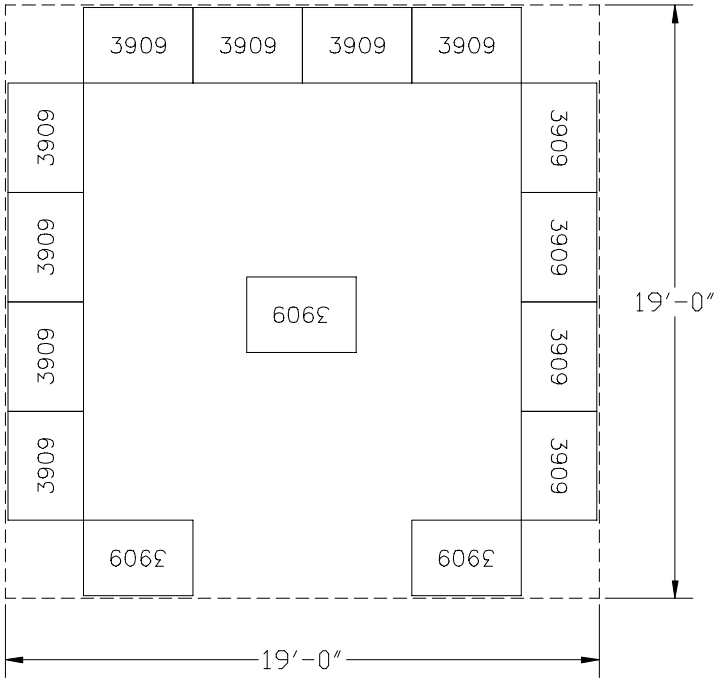


Exhibit 542.2g
542207, Bullpen Space for Seven CSBCSs

Date: Dec. 1994
CSBCS Bullpen Configuration
Scale: No Scale
Area: 361 Sq Ft



542.3 Access Aisle Space for Equipment Movement

Due to the possibility that CSBCS equipment may be installed on a natural aisle or on an existing aisle used for other purposes, no aisle space consideration was included in the drawings. Aisle space is included as part of the workroom adjustment factor, sections 236.2 (for medium size facilities) and 332.9 (for major size facilities). If powered industrial and/or hand vehicles will be used to transport equipment within the facility, allow for an aisle 3 feet wider than the widest vehicle for one-way traffic, and 3 feet wider than twice the widest vehicle for two-way traffic.

55 Approval of Equipment Configuration Variations

Local managers and planners are reminded that, although they are afforded a reasonable degree of flexibility in determining their casing equipment configurations, *they **must** obtain approval from their district manager for all variations from the basic recommended configuration* (see section 53*)*.

56 Analysis Results and Completion of Required Forms

The data developed as the result of instructions in this chapter should now be transferred to the appropriate forms discussed in Chapters 1, 2, or 3, as required, of this handbook. To expedite space requests, follow the instructions as closely as possible and ensure that sufficiently appropriate documentation is attached to justify the request.

6 Remote Encoding Centers

61 Introduction

611 General

Chapter 6 provides space requirements drawings of workstation unit (WSU) layouts for postal remote encoding centers (RECs). These WSUs are provided for visual display terminal (VDT) workroom, administrative office, image processing unit (IPU) room, equipment maintenance space, other support space, and employee facilities. Many of the requirements used for this chapter are based on existing postal standards or handbooks. Most RECs will be housed in space leased by the Postal Service and modified based on the "Design Guidelines for Remote Encoding Center (REC) Facilities," available through Systems Integration Support, Processing Operations, Field Operations Support, Headquarters.

612 Background

612.1 Operational Function

Remote encoding centers are established to process video images of partially resolved or script letter mail for the processing and distribution centers (P&DCs) they support. The actual mail will remain at the P&DC where each piece will get a unique identification (ID) tag so that the employees at the REC, working from a scanned video image of the envelope, can provide the extracted information to determine a barcode for the actual envelope. The extracted information keyed in by the REC employee is then matched against a database to acquire the finest depth of ZIP Code, and this information is sent across telecommunication lines to the P&DC. At the P&DC the ZIP Code information is matched up with the actual letter, and the associated barcode is sprayed on the letter. This letter is then processed and sorted on a high-speed automated barcode sorter.

612.2 Video Display Terminal Operation

The employees at the REC function as data conversion operators (DCOs). DCOs key images at a VDT, which is similar to a personal computer (PC) workstation. The system can operate up to 20 hours a day. The remote barcode sorting (RBCS) system is based on an originating network, and therefore peak workload, which may use up to 100 percent of all VDTs, normally occurs from 3:00 p.m. to midnight. Transitional employees work 70 percent of the workhours, and career employees work 30 percent of the workhours.

612.3 Equipment Configurations

Each remote encoding center is unique in the number of VDTs it contains and the number of P&DCs it supports. The number of IPUs varies by REC. Some IPUs support processing for only one facility. Other IPUs may support processing for multiple facilities, up to a maximum of four P&DCs. The configuration of P&DCs and IPUs is unique for each REC.

62 VDT Workroom

The size of the VDT workroom is based on the expected peak number of VDT consoles required. Space is allocated at 26.5 square feet (sq ft) per console for VDT workstations, with an additional 10 percent for possible future console needs. Space is allocated at 30 sq ft for each supervisor station. The number of supervisor stations is estimated based on a ratio of 1 supervisor station for every 48 consoles.

Example:

No. of Consoles	Sq Ft Required	Future Sq Ft Rqmts	No. of Superv. Stations	Sq Ft Required	Net Sq Ft Required	Additional Sq Ft (5%)*	Total Sq Ft Required
240	6360	636	5	150	7,146	358	7,504
348	9222	922	7	210	10,354	518	10,872
420	11130	1,113	9	270	12,513	626	13,139

**The workroom area has an adjustment factor of 5 percent to provide for dedicated aisles, columns, etc.*

Exhibit 62a lists the WSUs currently used for console video display terminal workstations, without the supervisor station and then with the supervisor station. Exhibits 62b and 62c illustrate these WSUs for visual reference in planning facility space requirements.

Exhibit 62a
WSUs Used for Console Video Terminals

WSU Number	PostalCAD Drawing Number	No. of Terminals	Includes Supervisor Station?	Sq Ft Required
620001	620001.DWG	6	no	160
620002	620002.DWG	12	yes	351

Exhibit 62b
620001, Six Console Video Display Terminals Without Supervisor Station

Date: Dec. 1994
Remote Encoding Center — 26.5 Sq Ft per Console
Scale: No Scale
Area: 160 Sq Ft

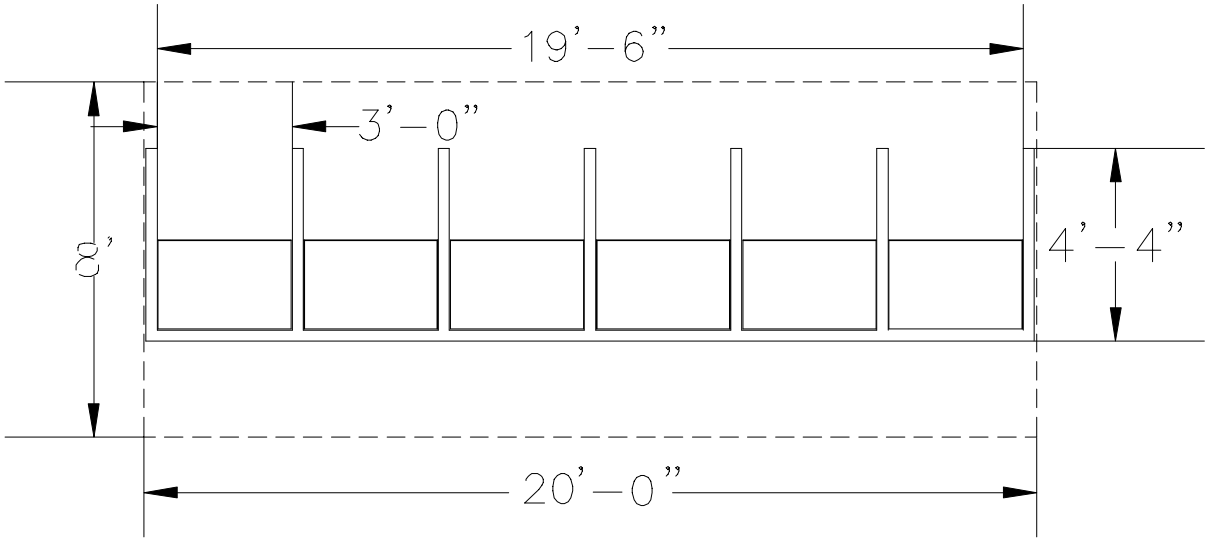
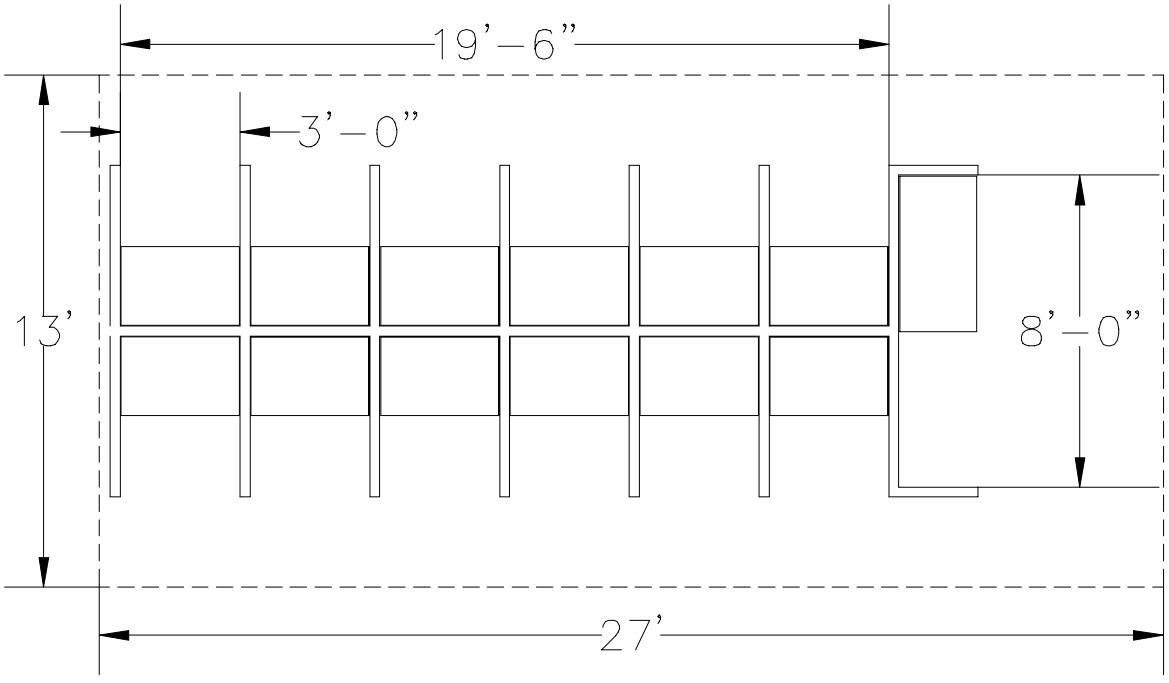


Exhibit 62c
620002, Twelve Console Video Display Terminals With Supervisor Station

Date: Dec. 1994
Remote Encoding Center — 26.5 Sq Ft per Console
Scale: No Scale
Area: 351 Sq Ft



63 Office Space Requirements

631 Administrative Area

Private space is to be provided for the manager of the REC, Human Resources personnel, Time and Attendance personnel, and conference and/or training room, etc. Conference and/or training room sizing is based on 24 employees at 25 sq ft per employee. Exhibit 631 lists the square feet required for the different areas.

Exhibit 631
Administrative Area Space Requirements

Administrative Areas	Square Footage Required	Circulation Space (30% of TOTAL Required)	Gross Sq Ft Required
Manager, Remote Encoding Center	160		
Administrative Support and/or Reception Area	110		
Staff Office Area	280		
Human Resources	180		
Time and Attendance	120		
Conference and/or Training Room	600		
Photocopier Room	150		
Total Administrative Area	**1,600**	**480**	**2,080**

632 Support Areas

632.1 IPU and Associated Equipment Maintenance Rooms

An IPU room and the associated equipment maintenance room is to be provided in accordance with the data in Exhibit 632.1a. Each IPU room size will include, besides the peripheral table, the computer table, the IPU, diagnostic and IPC cabinets, and a 1 ft by 3 ft local area network (LAN) storage cabinet for the REC's LAN system. Exhibits 632.1b through 632.1h illustrate these WSUs for visual reference in planning IPU room space requirements.

Exhibit 632.1a
IPU and Equipment Maintenance Rooms

WSU Number	PostalCAD Drawing Number	IPU Room			Equipment Maintenance Room	
		Number of IPUs	Dimension	Square Feet Required	Dimension	Square Feet Required
632101	632101.DWG	1	13′x27′	351	20′x20′	400
632102	632102.DWG	2	21′x27′	567	20′x30′	600
632103	632103.DWG	3	30′x27′	810	20′x35′	700
632104	632104.DWG	4	38′x27′	1026	20′x40′	800
632105	632105.DWG	5	47′x27′	1269	20′x45′	900
632106	632106.DWG	6	55'x27'	1485	20'x50'	1000
632107	632107.DWG	7	64'x27'	1728	20'x55'	1100

Exhibit 632.1b
632101, IPU Room — One IPU

Date: Dec. 1997
Remote Encoding Center IPU Room
Scale: No Scale
Area: 351 Sq Ft

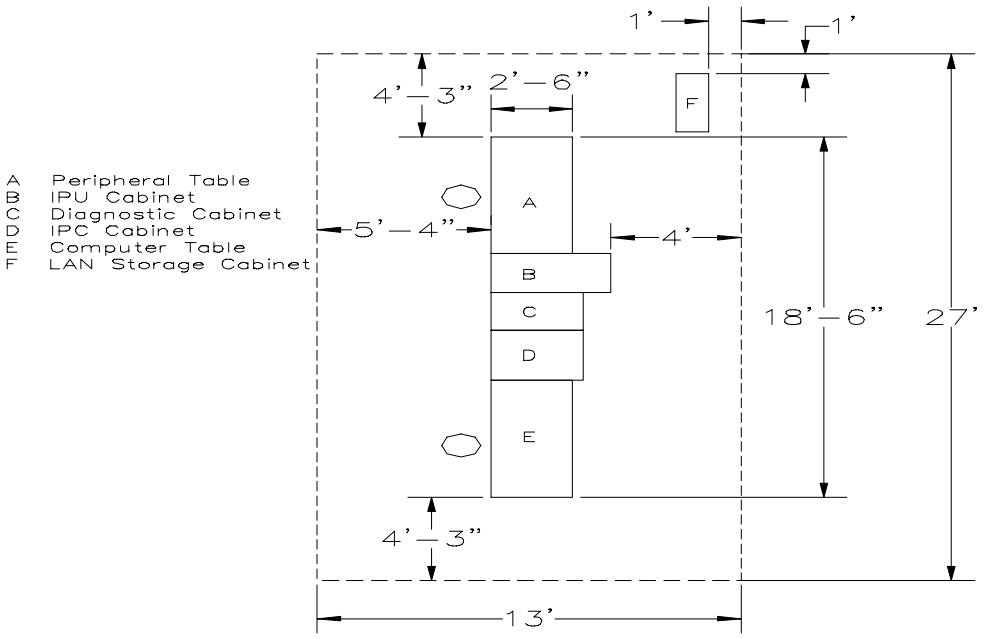


Exhibit 632.1c
632102, IPU Room — Two IPUs

Date: Dec. 1997
Remote Encoding Center IPU Room
Scale: No Scale
Area: 567 Sq Ft

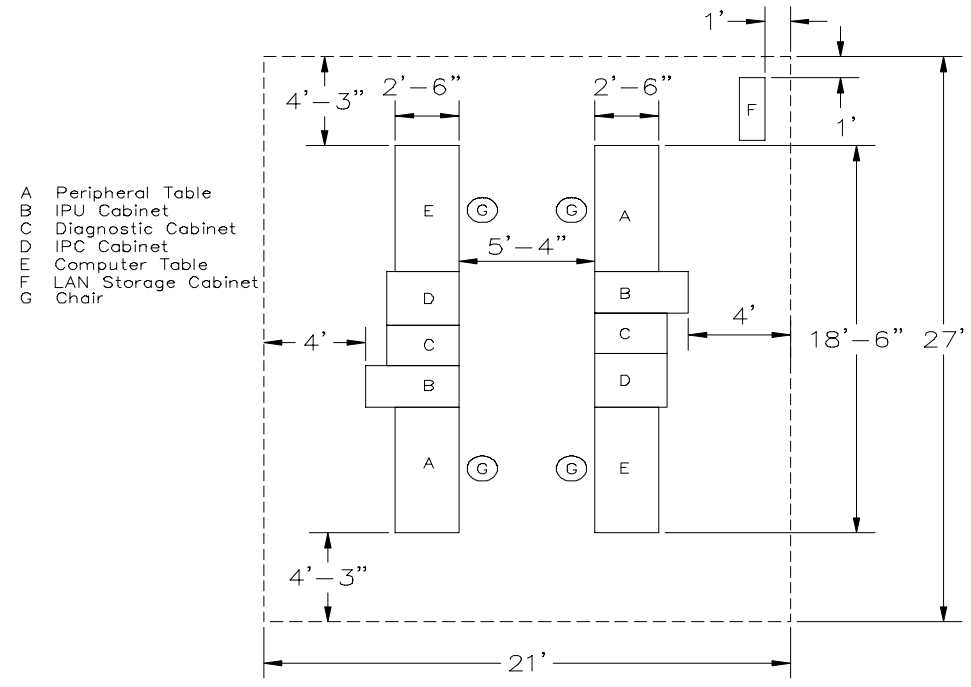


Exhibit 632.1d
632103, IPU Room — Three IPUs

Date: Dec. 1997
Remote Encoding Center IPU Room
Scale: No Scale
Area: 810 Sq Ft

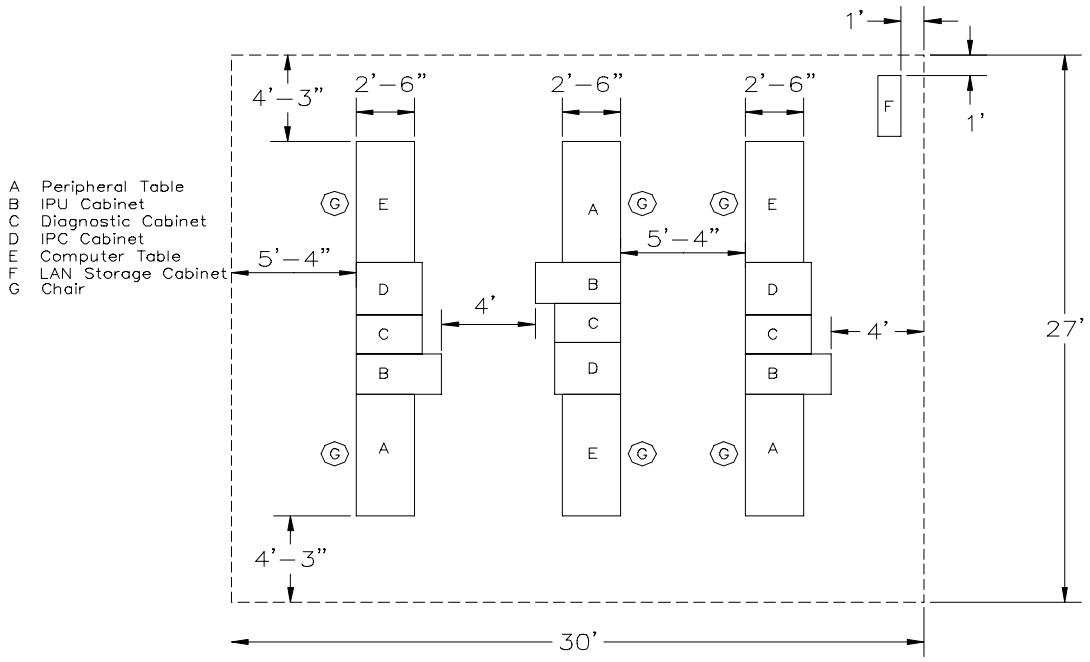


Exhibit 632.1e
632104, IPU Room — Four IPUs

Date: Dec. 1997
Remote Encoding Center IPU Room
Scale: No Scale
Area: 1,026 Sq Ft

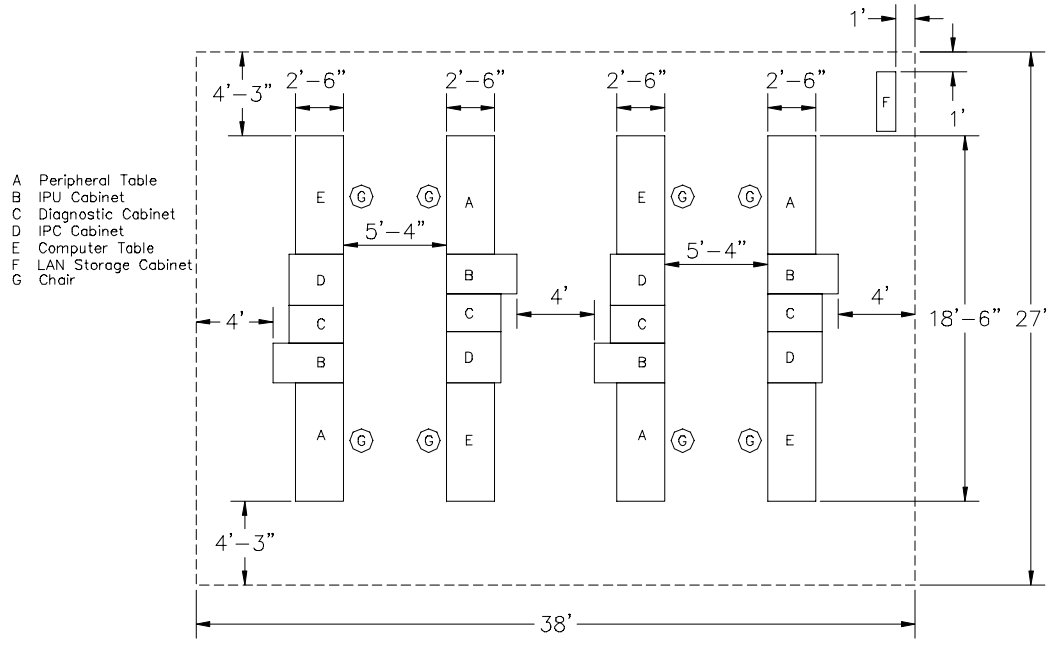


Exhibit 632.1f

632105, IPU Room — Five IPUs

Date: Dec. 1997

Remote Encoding Center IPU Room

Scale: No Scale

Area: 1,269 Sq Ft

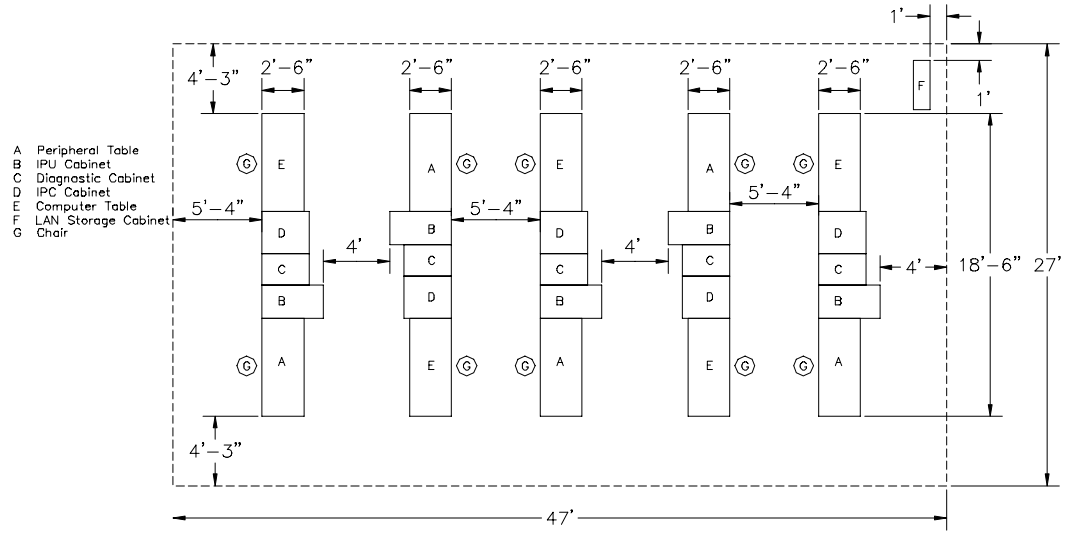


Exhibit 632.1g

632106, IPU Room — Six IPUs

Date: Dec. 1997

Remote Encoding Center IPU Room

Scale: No Scale

Area: 1,485 Sq Ft

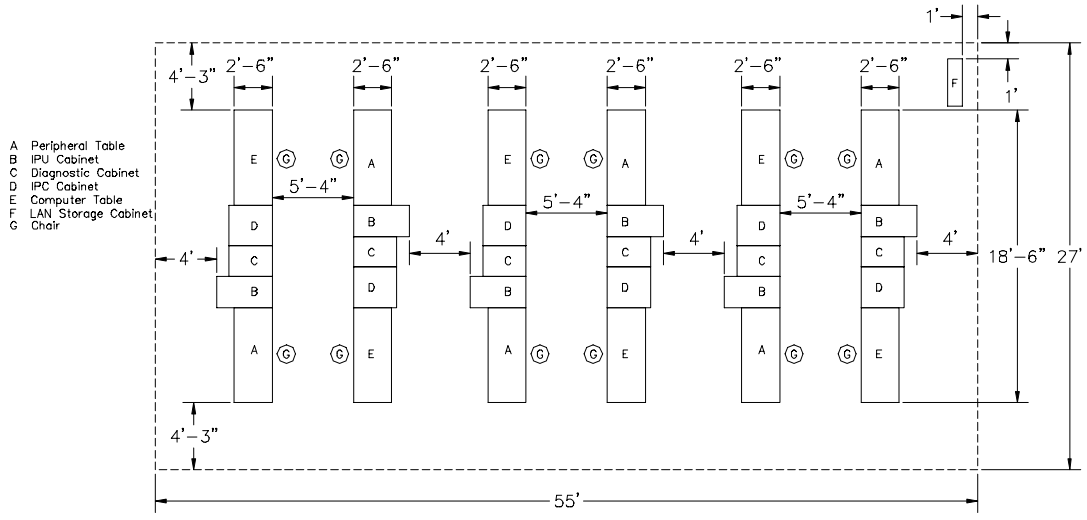
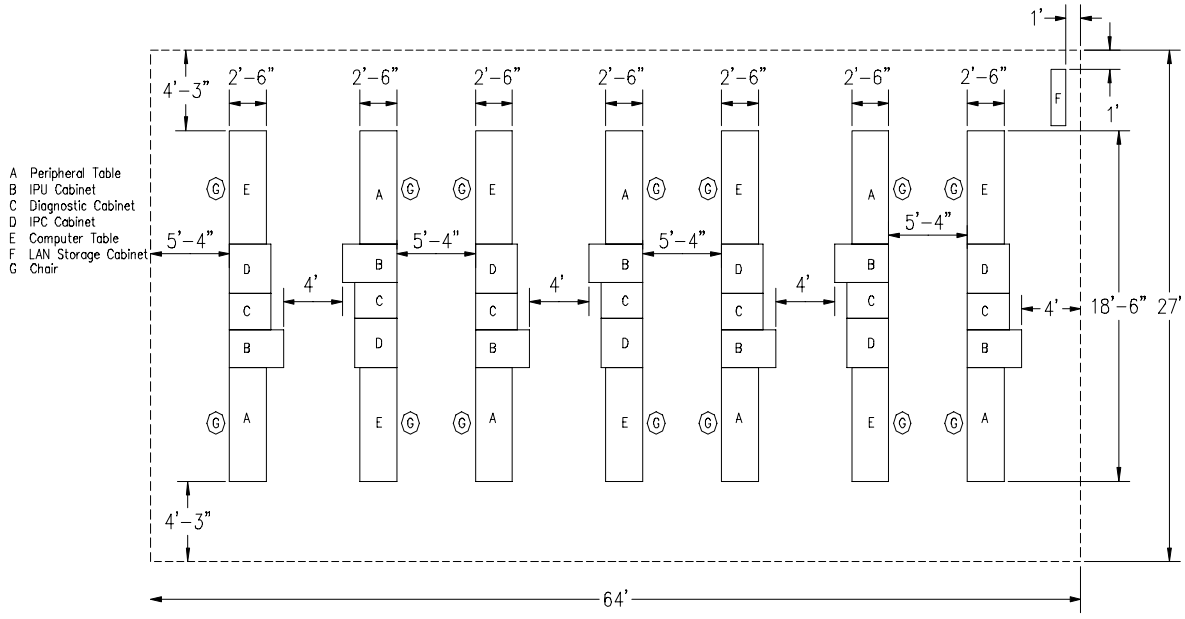


Exhibit 632.1h
632107, IPU Room — Seven IPUs

Date: Dec. 1997
Remote Encoding Center IPU Room
Scale: No Scale
Area: 1,728 Sq Ft



632.2 Other Support Space

Exhibit 632.2a shows the square feet required for the planning of other support area spaces in the office space of a REC.

Exhibit 632.2a
Other Support Area Space Requirements

Other Support Areas	Sq Ft Required
Janitor's Closet	50
Custodial Supplies	85
Postal Supplies and Records	100
Electric and Telephone	200
Vending Supplies	75
Supervisor's Office	200

Example: A REC with 4 IPUs would have the support area requirements as shown in Exhibit 632.2b.

Exhibit 632.2b
Space Requirements for a REC With Four IPUs

Support Areas	Square Feet Required	Circulation Space (30% of Total Sq Ft Required)	Gross Sq Ft Required
Equipment Maintenance	800		
IPU Room	1,026		
Janitor's Closet	50		
Custodial Supplies	85		
Postal Supplies and Records	100		
Electric and Telephone	200		
Vending Supplies	75		
Supervisor's Office	200		
Total Support Area	**2,536**	**761**	**3,297**

64 Employee Facilities

641 Coatroom

The coatroom is sized using the number of VDT consoles times 0.9 sq ft.

642 Lunchroom

The formula for sizing the lunchroom is as follows: use 1/3 of the peak hour complement of employees times 15 sq ft per employee and 15 sq ft per vending machine, microwave, etc.

643 Restrooms

Provide space for restrooms in accordance with the complement sizes in Exhibit 643a. Use 85 percent of the peak hour complement of employees for the women's restroom sizing. Use 15 percent of the peak hour complement of employees for the men's restroom sizing. The peak hour complement is defined as the total number of consoles plus 20.

Exhibit 643a
Restroom Space Requirements

Employee Complement	Sq Ft Required	Employee Complement	Sq Ft Required
Up to 9	65	Up to 233	625
Up to 23	100	Up to 253	675
Up to 34	125	Up to 273	725
Up to 54	175	Up to 293	775
Up to 74	225	Up to 313	825
Up to 94	275	Up to 333	875
Up to 113	325	Up to 353	925
Up to 133	375	Up to 373	975
Up to 153	425	Up to 393	1025
Up to 173	475	Up to 413	1075
Up to 193	525	Greater than 414	1125
Up to 213	575		

Example: A REC with 348 VDT consoles will have a peak hour complement of 368 as stated in this section. An example of how to calculate restroom square footage for this complement size is presented in Exhibit 643b.

Exhibit 643b
Example of Restroom Space Requirements

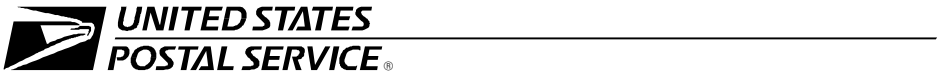
Elements Used for Calculation	No. of Consoles	Square Footage From Table
No. of Consoles	348	–
Peak Hour Consoles	368	–
Restroom sizes:		
Women (85% of Peak Hour Consoles)	276	775
Men (15% of Peak Hour Consoles)	92	275

65 Parking

Parking requirements should be based on the ozone nonattainment restrictions for the area in which the REC is to be located. If no clean air restrictions apply, provide parking for up to 90 percent of the employees working during peak hours. Parking requirements should be estimated using 300 sq ft for each space required.

Appendix A

Facility Planning Concept For Small Standard Buildings Less Than 9,000 Square Feet



Facility Planning Concept

Original:

Revised:

Page 1

CITY, STATE, ZIP Code **POSTAL UNIT** **DATE**

I. JUSTIFICATION: (X all blocks applicable)

A. Eviction: ☐ Service: ☐ Environmental: ☐ Other: ☐
Safety: ☐ Consolidation: ☐
(Specify)

B. Problem Definition:

II. DESCRIPTION OF PRESENT FACILITY:

	A Facility	B Facility	C Facility	D Facility
1. Occupancy/Construction Date:				
2. Net Interior:				
3. Workroom Space				
4. Platform/Slab				
5. Total Site Area				
6. Annual Lease Rate				
7. Lease Expiration Date:				
8. Renewal Options Available:				
9. Renewal Options Annual Rate:				

III. FUNCTIONS IN NEW FACILITY: (X all blocks applicable)

1. Postal Retail Store: ☐ Open Merchandising ☐ Limited Open Displays

	ZIP Code	ZIP Code	ZIP Code	ZIP Code	Total
2. ☐ City Routes (# Now)					
3. ☐ Rural Routes (# Now)					
4. ☐ _____ (# Now)					
(Other) TOTAL					

☐ An (X) in this box represents a consolidation of routes from other offices.**

**Note: If this is a consolidation of routes from other offices, please explain below where all zones are currently located.

FACILITY PLANNING CONCEPT Page 2

CITY, STATE, ZIP Code **POSTAL UNIT** **DATE**

Carrier Route Projections	Present	% of Increase	10 Years
Possible Deliveries		/ Yr.	
Possible Deliveries per Route			
Number of Routes			

Post Office Boxes

Size	Present	Rented	Move-in Rqmts.	% of Increase	10 Yr.	Mdl
1 -12						
2- 8						
3- 4						
4- 2						
5- 1						
Total						

Box Sections Required	
Parcel Locker Sections	
Total Sections	

IV. DISTRIBUTION CONCEPT

1. ☐ Distribution ☐ Carriers ☐ P.O. Boxes ☐ Other _____
2. All originating mail will be dispatched to the nearest plant. Plant Name: _____
3. This facility is not scheduled for automation/mechanization equipment.

V. FACILITIES AFFECTED: (After occupancy of the new facility, all blocks with an X are applicable.)

1. ☐ The existing leased building(s) will be returned to the lessor or subleased.
2. ☐ The existing building(s) will be retained to serve as a: _____
3. ☐ The existing USPS-owned building(s) will be disposed of or outleased.
4. ☐ Disposal sheet attached.

Note: Notification of a disposal must be sent to Facilities, Asset Management at HQ. Forward a copy of the FPC and identify the property for disposal.

VI. PREFERRED AREA BOUNDARIES

North by: _____
South by: _____
East by: _____
West by: _____

VII. ALTERNATIVES: (X all blocks applicable)
(The most advantageous alternatives will be finalized at site selection.)

1. ☐ Can building(s) be expanded?
2. ☐ Is adjacent land available for expansion?
3. ☐ Are existing building(s) available for lease or purchase?
4. ☐ New Construction Leased. Based on Standard Plan ☐
5. ☐ Can present operations be consolidated with adjacent facility or facilities?

FACILITY PLANNING CONCEPT Page 3

CITY, STATE, ZIP Code **POSTAL UNIT** **DATE**

VIII. SUPPLEMENTAL DATA: (X all applicable blocks)

1. [ ] Security fencing is required (will be coordinated with the Inspection Service.)
2. [ ] Scissors lift is required.
3. [ ] Public water supply is not available; a water well will be required.
4. [ ] Public sewerage disposal is not available; a septic system will be required.
5. [ ] Tractor-trailer will be used by Vehicle Services/HCR for delivery of mail.
6. [ ] Parking

Customer	Customer ACC
Employee	Employee ACC
Postal	On street customer

7 [ ] Overnight stamp stock exceeds $100k.

8 [ ] Full-time employees greater than 20.

9 [ ] Vault if five or more security containers would otherwise be used.

10 [ ] Enclosed platform.

11 [ ] Buildings and grounds storage.

12 [ ] Other (specify):

_____

_____

_____

PREPARED BY:

_____
District Facilities Specialist Date

REVIEWED BY:

_____
Manager, Administrative Services Date

APPROVED BY:

_____
District Manager, Customer Services Date

_____
Postmaster Date

_____
Manager, Post Office Operations Date

Appendix B

Form 919, Facility Planning Data

UNITED STATES POSTAL SERVICE

Facility Planning Concept

Original:

Revised:

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE	Original:		Revised:		☐ Notes

A1. GENERAL JUSTIFICATION

1. ™

™

™

™

™

™

2. SPECIFIC JUSTIFICATION

>>> Click here to type in problem definition (See MI AS-520-96-9)

3. POPULATION STATISTICS (from APPENDIX B)

5 years ago	Present	Move-in	10 years	Annual Change

4. DESCRIPTION OF PRESENT FACILITIES

Facility Name				
1 Occupancy Date:				
2 Lobby/Office Area				
3 Workroom Space:				
4 Support:				
5 Platform:				
6 Total Building:				
7 Total Site:				
8 Annual Lease Rate:				
9 Lease Expiration Date:				
10 Renewal Option:				
11 Renewal Rate:				

PS Form 919, June 1999, FPC Pg.1

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE Original:		Revised:		☐ Notes

B. FUNCTIONS

The proposed facility will serve as a(n) _____ and provide:

™

™

™

™ Other(s): _____

C. DISTRIBUTION CONCEPT

1. Originating will be processed at _____
2. Automated distribution will be processed at _____
3. Destinating distribution will be performed for:

™

™

™

™

™

™ Other(s): _____

4. Automation Equipment (10 Year Requirements)

Type of Equipment	Number	Number of ZIP Codes to Be Processed	Number of Routes to Be Processed
DBCS	_____	_____	_____
CSBCS	_____	_____	_____

5. Equipment (10 Year Requirements)

Letter Cases ☐ Opening Unit ☐

Flat Cases ☐ Cancel/Stage Operation ☐

>>>Click here to explain equipment requirements (optional)

PS Form 919, June 1999, FPC Pg.2

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE Original:		Revised:		☐ Notes

D. DELIVERY CONCEPT

ZIP Code

Present City Routes				
Present Rural Routes				
Present HCR/PP Routes				
City Routes - 10 Year				
Rural Routes - 10 Year				
HCR Routes - 10 Year				

E. RETAIL CONCEPT

1. The following service will be provided: _____

>>>Click here to add retail comments (optional)

2. Contract Stations/Other Retail

The following contract stations are within the preferred area:

Name				
Annual Cost				
Annual Revenue				
Disposition				

>>>Click here to add contract station/other retail comments (optional)

PS Form 919, June 1999, FPC Pg.3

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE	Original:		Revised:		☐ Notes

F. VEHICLE MAINTENANCE CONCEPT

Vehicles at this facility will be fueled and washed by: _____

G. FACILITIES AFFECTED

The disposition of the following facilities is:

Facility Name:				
Disposition:				
Description:				

H. SITE INFORMATION

1. Boundaries of preferred area:

North by:
South by:
East by:
West by:

2. This area was selected because:

™
™
™
™
™ Other: _____

3. Map is attached.

PS Form 919, June 1999, FPC Pg.4

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE	Original:		Revised:		☐ Notes

I. ALTERNATIVES

The following preliminary alternatives will be considered in the proposed facility project. Through the process of the DAR, the most beneficial alternative(s) will be selected:

™

™

™

™

™

™ Other(s): _____

K. SUPPLEMENTAL DATA

™

™

™

™

™

™

™

™

™

™

™

™

™

™

™

™

™

™ Other(s): _____

PS Form 919, June 1999, FPC Pg.5

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE Original:		Revised:		☐ Notes

APPENDIX A - EMPLOYEE COMPLEMENT

	Present		Move-in		10 Year	
	Total	**Peak**	**Total**	**Peak**	**Total**	**Peak**
Postmaster (EAS-20)						
Manager, Cust. Serv.						
Supervisors						
Carriers						
City Foot Rts						
City Motorized Rts						
T-6						
PTF						
Rural						
RCR/RCA						
HCR/PP						
Clerks						
Window						
Regular						
PTF						
Distribution						
Regular						
PTF						
CSBCS						
Custodian						
TOTALS						

	Present		Move-in		10 Year	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Total						
Peak						

_____ **%** of complement are female.

_____ **%** of complement will be female at move-in & 10 year

PS Form 919, June 1999, FPC Appendix A

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code | Postal Unit | County

DATE	Original:		Revised:		☐ Notes

APPENDIX B - POPULATION DATA

5 Years Ago
Present Year
Move-in Year

ZIP Code					
Number of Sources					**Totals**
Source 1 - Demographics/CACI					
5 Years before Present					
Present					
Annual Change					
Source 2 - Postal					
5 Years before Present					
Present					
Annual Change					
Source 3 - Local					
5 Years before Present					
Present					
Annual Change					
Averages to Project Delivery					
Five Years Before Present					
Present Average					
Average Change					
Anticipated Growth					
Averages to Project Retail					
No. Zones Reviewed					
Weighted Average					
Anticipated Growth					
Population Totals for All Zones					
5 Years before Present					
Present					
Move-in					
10 Years					

PS Form 919, June 1999, FPC Appendix B

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code | Postal Unit | County

DATE Original: | Revised: | ☐ Notes

APPENDIX C - DELIVERY

ZIP Code					**TOTALS**
Possible City Deliveries					
Number of Present City Routes					
Actual YTD DPH					
Current Street Time (Hrs.)					
Move-in Total Deliveries					
Move-in DPH Goal					
Move-in Projected Street Time					
Move-in Routes					
Ten Year Total Deliveries					
Ten Year DPH Goal					
Projected Street Time (10-Year)					
Ten Year Routes					
Present HCR/PP					
Possible Rural Deliveries					
Number of Present Rural Routes					
Actual YTD DPH					
Current Street Time (Hrs.)					
Move-in Total Deliveries					
Move-in DPH Goal					
Move-in Projected Street Time					
Move-in Routes					
Ten Year Total Deliveries					
Ten Year DPH Goal					
Projected Street Time (10-Year)					
Ten Year Routes					
HCR/PP (10-Year)					

☐ Some of these ZIP Code areas' routes are being consolidated from other offices.

PS Form 919, June 1999, FPC Appendix C

U. S. Postal Service

FACILITY PLANNING CONCEPT

Post Office, State and ZIP+4 Code | Postal Unit | County

DATE	Original:		Revised:		☐ Notes

APPENDIX D - PO BOX DATA

Size	Present	Rented	Move-in Requirements	Annual Increase	10 Year	Module
1-12						
2-8						
3-4						
4-2						
5-1						
Totals						

Walk-in Revenue Projected ($000):

Peak Workload/Hour:

>>>Click here to type in retail details (optional)

PS Form 919, June 1999, FPC Appendix D

U. S. Postal Service

FACILITY PLANNING DATA

Post Office, State and ZIP+4 Code	Postal Unit	County

DATE: Original		Revised Date:		

A. PROJECTIONS

	5-Yrs Ago	Present	Move-In	10 Year	% Change
DELIVERIES					
POPULATION					
NUMBER ROUTES					
NUMBER P. O. BOXES					

B. BUILDING AND SITE-SIZE REQUIREMENTS

	Present Sq. Ft.	10 Year Sq. Ft.	
BUILDING (including platform)			
SITE			

C. PREFERRED SITE AREA

Describe Boundaries:

North -
South -
East -
West -

D. SIGNATURES

Prepared By:

Signature	Facilities Specialist (Title)	Date

Reviewed By:

Signature	Postal Operations Analyst (Title)	Date

Approved By:

Signature	Postmaster (Title)	Date
Signature	Mgr., Administrative Services (Title)	Date
Signature	Mgr., Marketing (Title)	Date
Signature	Mgr., Post Office Operations (Title)	Date
Signature	District Manager (Title)	Date

PS Form 919, June 1999, Pg.1

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

10 YEAR GROSS BUILDING AND 20 YEAR SITE-SIZE REQUIREMENTS

	PRESENT NET S.F.	10 YEAR NET AREA	ADJ. FACTOR	10 YEAR GROSS AREA	MODULE
1a. LOBBY AREA					Retail
1b. OFFICE AREA					Admin
2. WORKROOM					Workroom
3a. SUPPORT 3b. BMEU					Support BMEU
4. SUBTOTAL, NET INTERIOR					CV
5. MECH. EQUIP. ROOM 5% (Present space includes misc. areas)					
6. PLATFORM					Platform
7. INT. LOG AREA@7%					
8. TOTAL BUILDING *(Post to Page 1 Sect. B)*					
9. TOTAL BLDG FLOOR AREA					
9a. Parking Facility Size for cost estimating only - Not in line 17 Total *(Enclosed @ 40% over critieria for all vehicles qualified)*					
10. CARRIER LOADING SLAB - Not in line 17 Total					
11. MANEUVERING AREA					
12. PARKING (Includes covered postal vehicle parking)					
13. MISCELLANEOUS OUTSIDE AREAS					
14. VEHICLE FUELING					
15. SUBTOTAL					
16. CIRCULATION, LANDSCAPING, SIDEWALKS, ETC.					
17. 10 YEAR SITE SIZE			ACRES		
18. 20 YEAR SITE EXPANSION (Not Required)					
19. 20 YEAR USABLE SITE AREA REQUIRED					
20. 20 YEAR MINIMUM SETBACK REQUIRED					
21. TOTAL SITE SIZE REQUIRED			ACRES		
OPTIMAL SITE LENGTH			FEET		
OPTIMAL SITE WIDTH			FEET		

PS Form 919, June 1999, Pg.2

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

Public Service Areas
A. Retail Module

Peak Hour Workload (From FPC)		
Projected Population Increase per Year (From FPC)		
Number of years (10 years less present)		IRT's
Projected Transactions - 10 Years		
RETAIL MODULE:		
Square Feet for the Retail Module		

B. PO Box Sections

Size	Present						
	Boxes Inst.	Boxes Rented	Move-in Boxes	Modules	10 Year Needed	Modules Needed	Sections Required
1 (2901 = 12 per module)							
2 (2902 = 8 per module)							
3 (2903 = 4 per module)							
4 (2904 = 2 per module)							
5 (2905 = 1 per module)							
Blank Modules							
Total --->							
LENGTH OF BOX SCREENLINE - FEET							

C. Parcel Lockers

	Boxes L.F.			Factor	Lockers L.F.	
Move-in		/20 =	x	2 =		
Ten Year		/20 =	x	2 =		
Total sections and PO Box lockers required - 10 years						
Deduct: Sections included with retail module						
Net additional sections needed						

D. Office Space Requirements *Admin Module No.*

1. Postmaster/Installation Head		
2. Customer Service Manager		
3. Conference Room		
4. General Office		
5. Delivery Supv. General		
6. Unisex Toilet		
7. Janitor's Closet		
8. Storage/Electric Closet		
9. MDF/LAN		
10. Storage		
11. Corridor		
Office Space Provided by Admin Module (To page 2)		

E. Lobby Totals

Present	10 YEAR	
Retail Areas		
P.O. Boxes and Parcel Lockers	P.O. Boxes and Parcel Lockers	
	Pub Svc.Area	
Total Area (From page 2) =	Total Area (To page 2) =	

PS Form 919, June 1999, Pg.3

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

Work Station Units	Type Dist.	Sq.Ft. in use now	No. Needed	10 Year Sq.Ft.
	A. Originating Mail			
420.002	49 Separation Canceling Workstation with Cancel Machine			
Staging Factor 20%				
Subtotal --->				
	B. Destinating Mail			
431.001	Letter Distribution Workstation Open Back (77 Separation)			
435.001	Flat Workstation - Open Back, 60 Separations			
420.013	Storage and Cutting			
	17 Stacker CSBCS			
	Bullpen Space for CSBCS			
542.101	Maintenance Spare Parts for CSBCS			
	Delivery Barcode Sorters			
Staging Factor 15%				
Subtotal --->				
	C. Carrier Section			
520.001	Carrier Space Planning for First 25 Routes			
520.002	Carrier Space Planning for additional routes			
Subtotal --->				
	D. Other Workroom			
	BMEU Staging			
	Inspection Service Investigative Office			
	Workroom Extension/Overlap (*From Other Modules;not incl. in line 48)*			
	Office space not in Admin. Module (*From Page 5*)			
	Carrier Vestibule (CV) CV Module			
Subtotal --->				

E. Subtotal *(Sections A, B, C and D-Insp. Svc) --->*			
F. Equipment Staging Factor			
G. Equipment Staging			
H. Subtotal *(E & G) --->*			
I. Workroom Adjustment Factor			
J. Workroom Adjustment			
K. Total *(Sections H and J+ Insp. Svc.) ---> (Post 10 yr to p. 2)* Workroom (*+/- Workroom Extension/Overlap*)			

PS Form 919, June 1999, Pg.4

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

SUPPORT AREAS

A. Office Space Requirements

	Square Feet	
	Now	10-Year
Subtotal --->		

B. Maintenance and Building Service

Janitor Closet		
Custodial Supplies		
Building and Grounds		
Subtotal --->		

C. Storage

Postal Supplies		
Postal Records		
General Storage		
Postal Equipment		
Subtotal --->		

D. Employee Facilities

	No. of Employees				
	Now	M-I	10 Yr		
Locker Room - Male					
Locker Room - Female					
Lunchroom *(40% peak)*					
Lunchroom Vending Machines					
Restroom-Male					
Restroom-Female					
Subtotal --->					

E. Miscellaneous Support Areas

Electrical Room		
Workroom Staging/Delivery Confirmation		
Recycle		
Battery Charge/Flammable Liquid Storage		
Subtotal --->		

F. Business Mail Entry Unit

Type	Now				10 Yr	Module
Business Mail Entry Unit						
Subtotal --->						

Total Support Area ---> Support Module (SM)		SM

PS Form 919, June 1999, Pg.5

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

PLATFORM AND MANEUVERING AREAS

A. Platform Size

Height Above Apron	0 Present 30″	50″		0 10 Years 30″	50″
No. of Spaces *(Not for carrier delivery routes)*			Enclosed Platform		
Platform modules available are listed below					
**(Includes vestibule)*			Sq. Ft.*	30″	50″
Platform 1			1430	1	1
Platform 2			1745	2	1
Platform 3			2165	2	2
Platform 4			2580	2	3
Platform 5			2900	3	3
Present Platform *(Sq.Ft.)*				Square Feet	
Platform Width				Module	

B. Carrier Loading Slab

	Present		0 10 Years Vehicles	Sq. Ft.
Number of Vehicles				
Loading Slab @ 50% *(Post 10-year total to page 2)*				

C. Special Platform Requirements

1. Number of Platform Leveling Devices	Present		10 Year 30″	50″
A. Electro-Hydraulic Flip Ramps				
B. Dock Leveler 6’ x 10’				
C. Scissors Lift				
D. Other				
2. Built-in Platform Scales Location:			Capacity	

D. Platform Maneuvering Area

Dimensions	Present		10 Year
Width			
Depth			
Area *(Sq.Ft.)* *(Post 10-year total to Page 2)*			

PS Form 919, June 1999, Pg.6

Post Office, State and Zip+4 Code	Postal Unit	Date
		☐ Notes

PARKING, MISCELLANEOUS OUTSIDE AREAS, AND FUELING

A. Number of Parking Spaces

Type of Vehicle		Now-in-Use No.	Now-in-Use Sq.Ft.		10 Years No.	10 Years Sq.Ft.
Customer	270					
Customer(Accessible)	390					
Employee	270					
Employee(Accessible)	390					
Official	270					
Rural Routes	250					
Long Life Vehicles	250					
Long Life Reserve	250					
Trucks (1 Ton)	300					
Trucks (2-l/2 Ton)	330					
Trucks (5/7 Ton)	550					
Tractor	350					
Trailer	800					
Firm Mailers	270					
Total *(Post 10-year total to page 2)*						

Enclosed USPS Vehicle Parking *(If required Sq.Ft. factored by 140%)*		(enter yes or no)	Covered USPS Vehicle Parking
			Headbolt Heaters

B. Miscellaneous Outside Areas

				Footprint
1. Trash Container	Y/N			
2. Snorkel Lane	Y/N			
3. LOG Entry Area	Y/N			
4. Outside Storage	Y/N			
5. Trash Recycling				
6. Total Miscellaneous Outside Area			*(Post 10-year total to page 2)*	

C. Vehicle Fueling

	10 Year Sq. Ft.
Vehicle Fueling Island *(Post to Page 2)*	

PS Form 919, June 1999, Pg.7

Post Office, State and ZIP+4 Code	Postal Unit	County	Date
			☐ Notes

LOCAL STATISTICS AND EXPLANATORY NOTES

A. Local Statistics

1. Service Windows		2. Delivery			
Number Existing >	Number Used Peak Hour >	Number Routes	Now	Move-In	10 Years
Enter the Total transactions Per Peak Hour From a Recent RAP study					
		Foot			
		Motorized			
		Rural*			
		HCR/PP			
*Are Postal Vehicles provided to Rural Routes? (Y/N)					
		Total			

3. Number of Employees

	Peak Hour			Total Complement		
Employees	Now	Move-In	10 Years	Now	Move-In	10 Years
Male						
Female						
Total						

4. Quarters Now Occupied Are: ☐ USPS-owned ☐ Leased If leased:	Lease expir. date	Annual Cost

B. Explanatory Notes

Page	Section/ Item No.	
		>>>Click here to type in notes Continued on Page 8AX

PS Form 919, June 1999, Pg.8

Post Office, State and ZIP+4 Code	Postal Unit	Date

EXPLANATORY NOTES

Note	Pg.	Sec.	
1	2	2	Workroom square footages may not match actual module drawings due to extension/overlap of administrative and support modules. >>>Click here to type in other notes

PS Form 919, June 1999, Pg.8AX

United States Postal Service

Facility Space and Condition Evaluation

Post Office Name, State, and ZIP + 4	Postal Unit
	Date

Calculations

Area	10-Year	Now in Use	Per Cent Deficient	Total 10-Year Complement Factor	Constant Factor	Total Points
Workroom				1.00	0.65	
Lobby/Office				1.00	0.20	
Parking/ Maneuvering				1.00	0.15	

	1. Building Subtotal
Preemptive Adjustment	2. Preemptive Adjustment
	3. Subtotal
Area Justification	4. Area Adjustment
	5. Total

Approval Signatures

Evaluator	Date
Manager, Administrative Services	Date
Postmaster	Date
District Manager	Date

Preparation

Facilities Specialist Signature	Date

PS Form **2282,** June 1999

Appendix C

Form 929, Major Facility Planning Data

U. S. Postal Service

Major Facility Planning Data

1. Post Office	2. State and ZIP Code	3. Postal Unit

4. Functions Included in Proposed Facility

☐ Administrative ☐ Retail ☐ Delivery ☐ Mail Processing
☐ Inspection Service

5. Population (000)

When	CITY	COUNTY			
Present					
Est. 3 Yrs. Hence					
Est. 13 Yrs. Hence					

6. Date of PS Form 929

ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:
Rev No. 2:	Rev No. 5:	

7. Building Net Square Feet Requirements

Space	Present	Move-In-Day
Mail Facility Without Platform		
Other Facility Areas		
Platform		
Total Mail Facility		
Storage Building		
Vehicle Maintenance Facility		
Enclosed Parking		
Total Building Space		

8. Total Building Employee Complement:	Present	Move-In-Day
Male:		
Female:		
Total		

9. Prepared By:

Signature	Postal Operations Analyst (Title)	Date

10. Reviewed By/Approved By:

Signature	Mgr., Facilities Planning and Approval (Title)	Date
Signature	Postmaster (Title)	Date
Signature	District Mgr., Customer Service (Title)	Date
Signature	P&D Plant Manager (Title)	Date
Signature	VP, Area Operations (Title)	Date

PS Form 929, March 1999 (Page 1)

Post Office:	State and ZIP Code:	Postal Unit:

MAJOR FACILITY PROJECT SITE SIZE COMPUTATION SHEET

Date: Net to Gross Calculation Prepared By:

Line	Functional Area	Net Area	Adjustment Factor	Gross SF
1	Offices		1.40	
2	Lobbies		1.40	
3	Lockers, Lunchrooms, and Restrooms		1.40	
4	General Support Areas		1.20	
5	Maintenance Support Areas		1.30	
6	Workroom Areas		1.01	
7	Subtotal - Main Interior Areas (P&DC)		xxxx	
8	Mech/Elec Areas (Line 7 + Line 10 Gross Area x .06)	xxxxxx	xxxx	
9	(This line intentionally blank)	xxxxxx	xxxx	
10	Platform Areas		1.00	
11	Air Mail Concourse (AMCs/AMFs Only)		xxxx	
12	LOG Areas (Line 6 Net Area x .063)	xxxxxx	xxxx	
13	Storage Bldg. and/or (Enclosed Pkg.)		1.05	
14	Total M-I-D P&DC Area		xxxx	
15	Total VMF Area (from PS Form 4551)		xxxx	
16	Total - Lines 14 & 15		xxxx	
17	VMF Parking and Maneuvering Area (from PS Form 4551)		xxxx	
18	Tractor Parking — Number of Vehicles			
19	Trailer Parking — ” ”			
20	5 / 7 / 9-Ton Vehicle Parking — ” ”			
21	2-1/2-Ton Vehicle Parking — ” ”			
22	1-Ton Vehicle Parking — ” ”			
23	Long-Life Vehicle Parking — ” ”			
24	Official and Visitor Parking — ” ”			
25	Employee Parking — ” ”			
26	Employee Accessible Parking — ” ”			
27	Employee Motorcycle/Bicycle Parking — ” ”			
28	Inspection Service — ” ”			
29	Customer Parking — ” ”			
30	Customer Accessible Parking — ” ”			
31	BMEU Customer Parking — ” ”			
32	27” Dock Maneuvering Area — LF OF 27” Dock			
33	30” Dock Maneuvering Area — LF OF 30” Dock			
34	50” Dock Maneuvering Area — LF OF 50” Dock			
35	Dock Turning Radius No. Of Places (Est. 150’ x 30’ x 4 Places = 18,000 SF)			
36	Subtotal - Indicated Gross Area To & Including Line 35 (Excludes Line 12 Total)			
37	Subtotal - Est. Circulation, Landscaping, & Sidewalks. Excludes Setbacks, Ponding Easements, Etc. (Line 36 Gross Area x .25)			
38	Subtotal - Carrier Loading Area (.50 x No. Of Carrier Vehicles x 250 SF/Veh.)			
39	Subtotal - Est. M-I-D Site Size (Sum Of Lines 36, 37, and 38)			
40	Subtotal - Other Miscellaneous Requirements: # Fueling Islands [ ]			
41	Total - Estimated Gross M-I-D Site Size (Sum Of Lines 39 and 40)			
42	Subtotal - Estimated Gross 20-Year Expansion (Line 41 Total x Growth) [ ] (10 -Yr. Growth Percentage)			
43	Estimated Detention Ponding * Required Acreage =		= Feet	
44	Estimated Useable 20-Year Site Size (Sum Of Lines 41, 42, and 43)			
45	Usable Site Length: Square Root Of (1.5 x Line 44)		= Feet	
46	Usable Site Width: Line 44 Divided By Line 45 Total Length		= Feet	
47	Optimum Required Site Length: Line 45 + 40’ Front + 10’ Rear Yards		= Feet	
48	Optimum Required Site Width: Line 46 + 20’ + 20’ Side Yards		= Feet	
49	Total - Estimated Gross Area Required: Line 47 x Line 48		= Feet	
50	Site Size To Be Developed:		= Acres	

PLANNING DATA USED FOR CALCULATIONS:

*1.5 (Inches of rain in a 2 hour period) Divided By 12 Inches x Acreage Of Line 36

Divided By 1.5 (18 Inch Deep Pond) = Acre Ft. or Acres (Rounded)

PS Form 929, March 1999 (Page 2)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

NET BUILDING SPACE RECAPITULATION

Space Allocations	Net Square Feet		NOTES
	Present	10 Year (00)	
1. Office Section (From Page 5)			
2. Lobby Areas (From Page 6)			
3. Employee Facilities (From Page 7)			
4. General Support (From Page 8)			
5. Maintenance Support (From Page 9)			
6. Workroom (From Page 14)			
7. Total Mail Facility Without Platform			
8. Total Platform Area (From Section B, Page 15)			
9. Total Mail Facility Including Platform (Total of Lines 7 and 8)			
a. Other			
10. Enclosed USPS Parking			
11. Air Mail Concourse			
Concourse Module Number			
12. Storage Building (6% of Net Workroom Space)			
13. Vehicle Maintenance Facility, Form 4551 (Interior Space)			
14. Total Net Building Space (Total of Lines 9, 10, 11, 12, and 13)			

PS Form 929, March 1999 (Page 3)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

PARKING REQUIREMENTS

Vehicles	Present		10 Year (00)		NOTES
	No.	Sq. Ft.	No.	Sq. Ft.	
1. Tractors					
2. Trailers (20-30 Feet)					
3. Trailers (30-40 Feet)					
4. Trailers (Over 40 Feet)					
5. Trucks - 7/9 Ton					
6. Trucks - 5 Ton					
7. Trucks - 2 1/2 Ton					
8. Trucks - 1 Ton					
9. Trucks - (Longlife)					
10. Other Vehicles					
11. Bicycle (Route Delivery)					
12. Rural Route					
13. Contract Box Delivery Route					
14. Official - Staff Car					
15. Official - Privately Owned					
16. Visitor					
17. Employee					
18. Employee - (Accessible)					
19. Employee - (Bicycle - Motorcycle)					
20. Customer					
21. Customer - (Accessible)					
22a. BMEU Customer					
22b. Firm Caller					
23. Inspection Service (Non-Domicile)					
24. Inspection Service					
VEHICLE MAINTENANCE FACILITY Form 4551 (Parking Spaces)					
25. VMF - Based					
26. VMF - Reserve					
27. VMF - Semi-Trailer					
28. VMF - Service Vehicles					
29. VMF - Waiting Repair					
30. VMF - Waiting Sale					
31. VMF - Employees					
Total					

PS Form 929, March 1999 (Page 4)

Post Office:	State and ZIP Code:	Postal Unit: 1 / 2M

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

OFFICE SPACE REQUIREMENTS

Offices	LEVEL	No. of Employees on Duty In This Office		Square Feet			NOTES
		Present	Move-In-Day (00)	Present	General Office Allocation	Move-In-Day (00)	
Plant Manager	PCES		1			220	
Secretary/Reception Area			1			225	
Total Area			2			445	
Facilities Engineer			1		70		
Architect/Engineer			1		70		
Flat Files (Drawings)					100		
CADD					75		
Drafting Table					100		
General Office						415	
Total Area			2			415	
Mgr., Transportation/Networks			1			160	
Supv., Transportation Oper.			1			120	
Networks Specialist			2		140		
General Office						140	
Total Area			4			420	
Mgr., In-Plant Support			1			160	
General Clerks			2		110		
Industrial Engineer (Sr)			1		70		
Industrial Engineer (Fld)			1		70		
CADD Space					75		
Operations Support Spec.			8		560		
Oper. Quality Improvement			1		70		
Data Collection Technician			2		140		
Directory Analysis Spec.			1		70		
Contract Technician			1		55		
General Office						1,220	
Total Area			18			1,380	
District Domicile General Office					1,000		
Safety Specialist			1		70		
General Office						1,070	
Total Area			1			1,070	
Subtotal (Post to page 5-P&DCB)			27			3,730	

PS Form 929, March 1999 (Page 5-P&DCA)

The General Office Allocation column denotes that the referenced space is to be grouped with the next space that is identified as “General Office”.

Post Office:	State and ZIP Code:	Postal Unit: 1 / 2M

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

OFFICE SPACE REQUIREMENTS

Offices		No. of Employees on Duty In This Office		Square Feet			NOTES
		Present	Move-In-Day (00)	Present	General Office Allocation	Move-In-Day (00)	
Credit Union			4			350	
Automatic Teller Machine						90	
Total Area			4			440	
Inspection Service (Non-Domicile)			1			180	
Filing Space						648	
Office Supplies						150	
Conference Area						514	
Reference Room						150	
Mail/Copy Room						200	
Break Area						100	
MDF/LAN Room						490	
EAP			2			600	
PEDC							
Mgr., PEDC			1			120	
Secretary/Reception			1			155	
Classroom						200	
Library/Self-Study						200	
Storage						120	
Scheme Examination						120	
Training Consoles #	8					360	
Subtotals From:							
Page 5-P&DCA			27			3,730	
Page 5-P&DCB			9			4,747	
Subtotal			36			8,477	
Contingency @ 5%						424	
Total (Post to page 3)			36			8,901	

PS Form 929, March 1999 (Page 5-P&DCB)

The General Office Allocation column denotes that the referenced space is to be grouped with the next space that is identified as “General Office”.

Post Office:	State and ZIP Code:	Postal Unit:
Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

PUBLIC SERVICE AREAS

A. Retail Module

Number Window Positions	Existing		Now in Use		10 Year		NOTES
Required Retail Workstations							
Equivalent Workstations:							
Retail Workstations							
Cash Registers							

B. Recommended Vending Description

Quantity	
	Stamp Vending Unit
	Booklet Vending Unit
	Multi-Commodity Unit
	Weighing & Rating Unit

C. Post Office Boxes

Present			Projected					
Size	Number Installed	Rented	Unit No.	No. Boxes Per Module		Number 10 Year		Modules Required
1			2901	12				
2			2902	8				
3			2903	4				
4			2904	2				
5			2905	1				
					TOTAL NUMBER OF MODULES			
Post Office Box Sections Provided								
Possible Additional Box Sections								
Standard Plan Building Box Lobby Extension (BLE) Sections Required:								
Total Length of Box Section BLE (feet) =								

D. Parcel Lockers

Post Office Boxes Length: (including Box Section BLE)		Parcel Locker Length:		Total Length of BLE (feet) =	

E. Space Planning Factor

Total Length of BLE X Space Planning Factor of 22 feet:		Total BLE SF
		Retail Module SF
		TOTAL RETAIL

F. Lobby Area Totals

Miscellaneous Functions	Present SF	10 Year SF	
Public Service Area			
Total Miscellaneous			
Total Retail SF			
Grand Total (Post to Page 3)			

PS Form 929, March 1999 (Page 6)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

EMPLOYEE FACILITIES

A. Employee Information

		Present		Move-In-Day (00)		NOTES
Employees Requiring Lockers	Male Female Letter Carriers					
	Total					
Employees on Duty at Peak Occupancy	Male Female					
	Total					

B. Lockers, Lunchrooms and Miscellaneous Employee Areas

		Present	Move-In-Day	
Locker-rooms	Male Locker Female Locker Letter Carriers			
Employee Lunchroom Full-Service Kitchen (if required)				
Multi-Purpose Room				
Vending Machine Supply Storage				
Satellite Vending (on Page 14 - Workroom)				
Other Employee Facilities Area(s) not listed above				
Public Service Area (if not included on Page 6)				
Total Sq. Ft. (Post to Page 3)				

PS Form 929, March 1999 (Page 7)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

SUPPORT AREAS (General)

	Areas	Present Sq. Ft.	10-Year (00) Sq. Ft.	NOTES
(A) STORAGE	Archived Paperwork Room General Supplies (Noncustodial) Mail Processing Equipment Storage Other Storage Part A Subtotal			
(B) MISCELLANEOS	Firm/Express Mail Caller Platform Supervisor/Vehicle Dispatch Manager, Distribution Operations (100 SF for interview & 55 SF for general clerk) Supervisor, Distribution Operations (100 SF for files) Label Room PSDS Data Collection Site Area SSPC Clerk-Technician Contract Drivers (Incl. 2 Toilets - 30 Sq. Ft. Ea.) Computer/Process Control Room (NDSS, Tray Systems, RBCS, IDF, RPMS) Telephone Switching Equipment Rewrap Room Supervisors Break/Locker Area Part B Subtotal			
(C) BMEU	Business Mail Entry Unit (BMEU) BMEU Module ☐ Part C Subtotal			
(D) CFS	Computerized Forwarding System (CFS) CFS Module ☐ Part D Subtotal			
(E) SDO	Stamp Distribution Office (SDO) SDO Module ☐ Office Vault Part E Subtotal			
	Total (Parts A, B, C, D,& E) (Post to Page 3)			

PS Form 929, March 1999 (Page 8)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

MAINTENANCE SUPPORT

	Areas	Present		10-Year (00)		
		No. Empl.	Sq. Ft.	No. Empl.	Sq. Ft.	NOTES
(A)	Mgr., Maintenance					
	Maintenance Engineering Specialist					
	Mgr., Maintenance Operations					
	Supv., Maintenance Operations					
	Mgr., Maintenance Operations Support					
O	Supv., Maintenance Operations Support					
F	Mgr., Field Maintenance Operations					
F						
I	General Office					
C	General Office, Maintenance Control					
E						
S	Office Space Subtotal					
	Part A Subtotal					
(B)	Stockroom - Parts, Tools, Materials & Mechanical					
	Custodial Storage					
	Custodial Closets					
S	Buildings and Grounds Storage					
H	General Shop (Including Welding)					
O	Electrical Shop					
P	Carpenter Shop					
S	Carpenter Shop Storage					
	Paint Shop					
/	Paint Shop Storage (Flammable)					
	Training Room/Library					
S	Storage - Flammable (Other)					
T	Machine Shop (Large Facilities Only)					
O	Area Maintenance Office Shop					
R	Battery Charging Room					
A	Mailbox Repair Shop					
G	Electronics Room					
E	Maintenance Locker Room					
	Other Maintenance Not Listed Above					
	Part B Subtotal					
	Total, Parts A & B (Post to Page 3)					

PS Form 929, March 1999 (Page 9)

Post Office:	State and ZIP Code:	Postal Unit:

Date:
ORIGINAL:
Rev No. 1:
Rev No. 2:
Rev No. 3:
Rev No. 4:
Rev No. 5:
Rev No. 6:
Rev No. 7:

WORKROOM AREAS (Operation, Number of Workstations and Square Footage)

Workstation Units		MOD Number		Present		10-Year		WSU Description	NOTES
				Number	Sq. Ft.	Number	Sq. Ft.		
Cull Face	Staging @20%								1
Cancel	Subtotal								
Mach Dist Letters	Staging @15%								
	Subtotal								
Mach Dist	Staging @15%								
Flats	Subtotal								
Orig Pref Manual Letters	Staging @15%								
	Subtotal								
Orig Pref Manual Flats	Staging @15%								
	Subtotal								
Orig BBM	Staging @15%								
Manual	Subtotal								
Orig	Staging @20%								
Priority	Subtotal								
Grand Total (Post to Pg. 14)									

Incl. sacking, pouching, etc., for disp. only if to be located within operation. Otherwise use Page 13.

PS Form 929, March 1999 (Page 10)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

WORKROOM AREAS (Operation, Number of Workstations and Square Footage)

Workstation Units		MOD Number		Present		10-Year		WSU Description	NOTES
				Number	Sq. Ft.	Number	Sq. Ft.		
Orig Express Mail	Staging @20%								
	Subtotal								
Orig Parcel Post	Staging @20%								
	Subtotal								
Dest Pref Manual	Staging @15%								
	Subtotal								
Dest Bulk Business Manual	Staging @15%								
	Subtotal								
Dest Priority	Staging @20%								
	Subtotal								
Dest Express Mail	Staging @20%								
	Subtotal								
Grand Total (Post to Pg. 14)									

Incl. sacking, pouching, etc., for disp. only if to be located within operation. Otherwise, use Page 13.

PS Form 929, March 1999 (Page 11)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

WORKROOM AREAS (Operation, Number of Workstations and Square Footage)

Workstation Units		MOD Number		Present		10-Year		WSU Description	NOTES
				Number	Sq. Ft.	Number	Sq. Ft.		
Dest Parcel Post	Staging @20%								
	Subtotal								
Carrier Section	Staging @ 15%								
	Subtotal								
Special Delivery	Subtotal								
SPBS	Staging @20%								
	Subtotal								
	Subtotal								
Grand Total (Post to Pg. 14)									

Incl. sacking, pouching, etc., for disp. only if to be located within operation. Otherwise, use Page 13.

PS Form 929, March 1999 (Page 12)

Post Office:	State and ZIP Code:	Postal Unit:

Date:
ORIGINAL:
Rev No. 1:
Rev No. 2:
Rev No. 3:
Rev No. 4:
Rev No. 5:
Rev No. 6:
Rev No. 7:

WORKROOM AREAS (Operation, Number of Workstations and Square Footage)

Workstation Units		MOD Number		Present		10-Year		WSU Description	NOTES
				Number	Sq. Ft.	Number	Sq. Ft.		
Pouch/ Stage									
	Staging @20%								
	Subtotal								
Opening									
	Staging @20%								
	Subtotal								
Other									
	Subtotal								
Tray Opening/ Banding									
	Subtotal								
Grand Total (Post to Pg. 14)									

PS Form 929, March 1999 (Page 13)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

OTHER WORKROOM AREAS

Other Workroom Areas (List additional, as required)	Square Feet				NOTES
		Present	10-Year		
Reg. Disp. Security Cage Satellite Label Areas BMEU Cleared Mail Staging CFS Mail Staging Satellite Maint Shops (Cage) Parking - Forklifts, etc. Nixie Section Carrier Vestibules @ 460 SF/ea. Satellite Vending Areas Satellite Restrooms					
Total					

WORKROOM RECAPITULATION

Total, Other Areas (From above)				
Total (From Page 10)				
Total (From Page 11)				
Total (From Page 12)				
Total (From Page 13)				
First Subtotal				
PSDS (.005 of First Subtotal)				
Empty Equipment (.04 of First Subtotal)				
Second Subtotal				
Adjustment (Use table, USPS HBK. AS-504, Sect.342.9)				
Net Workroom Area				
Standard Workroom Net Area				Workroom Module Number
(Post to Page 3)				

PS Form 929, March 1999 (Page 14)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

PLATFORM/DOCK ACTIVITY

A. Vehicle Activity (Tailboard) Spaces Required at Peak

Develop Peak Requirements Separately for Each Platform Height	Vehicles Needing 27 inch Dock		Vehicles Needing 30 inch Dock		Vehicles Needing 50 inch Dock		NOTES
Type of Service	Present	10-Year	Present	10-Year	Present	10-Year	
Star/Truck Route							
Inter-GMF							
BMC/ASF							
Parcel Post							
Relay							
Collection							
Interstation							
Airport Mail Center							
Maintenance							
Cross Dock Operations							
Trash Recycling						1	
Trash Compactor						1	
Total							

B. Platform Size and Leveling Devices

Measurements	Present			10-Year					
Heights Above Apron	27″	30″	50″	27″	30″	50″			
Length (Tailboard only)									
Total Length			Ft.			Ft.			
Total Width			Ft.		50	Ft.			
Total Platform Area			Sq.Ft.			Sq.Ft.			
Platform Leveling Devices				27″	30″	50″			
A. Flip Ramp (Edge of Dock Leveler)									
B. Dock Leveler (Electro-Hydraulic) [1]									
C. Scissors Lift									

C. Miscellaneous Vehicle and Platform Requirements

1. Covered Carrier Loading				10-Year		Sq.Ft.
2. Finger Dock	Module Number		Number of Docks	10-Year		Sq.Ft.
3. Wrap Around Dock	Module Number		Number of Docks	10-Year		Sq.Ft.
4.				10-Year		Sq.Ft.
5.				10-Year		Sq.Ft.
6. Built-In-Scales for Platform:						
7. Built-In-Scales for Drive-Thru Trailers:						

1 - Platform steps and ramp will be provided in the design of the building.

PS Form 929, March 1999 (Page 15)

Post Office:	State and ZIP Code:	Postal Unit:
Date: ORIGINAL: Rev No. 1:	Rev No. 2: Rev No. 3: Rev No. 4:	Rev No. 5: Rev No. 6: Rev No. 7:

EXPLANATORY NOTES

Page	Section and/or Item Number	
10	1	The Projected Number of Advanced Facer Cancellers Required for the Workroom is ___.
2	1	Provide 150 Square Foot Manifest Room in Concourse Area.

PS Form 929, March 1999 (Page 16)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

DISTRIBUTION AND DELIVERY

A. Carriers In Proposed Facility - Number of routes that will be housed in proposed facility. Show present location in "Name of Unit" column.

5 Digit ZIP Code	Name of Unit	Present						10-Year				NOTES
		FT [1]	MT [2]	RU [3]	PP [4]			FT [1]	MT [2]	RU [3]	PP [4]	

B. Carrier Distribution - Proposed Facility - Show routes housed elsewhere that will be given secondary distribution (down to carrier route) at the proposed facility. Do not include routes already listed in Section "A"

5 Digit ZIP Code	Name of Unit	Present						10-Year			
		FT [1]	MT [2]	RU [3]	PP [4]			FT [1]	MT [2]	RU [3]	PP [4]
Subtotal-B Above											
Subtotal-A Above											
Total (Post to Exhibit 2)											

1-FT=Foot Routes, including bicycle routes. 2-MT=Mounted Routes. 3-RU=Rural Routes, including Star Route Box Delivery Routes. 4-PP=Parcel Post, including Special Delivery, Collection, Relay and Combination Routes.

PS Form 929, March 1999 (Exhibit 1-A)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
ORIGINAL:	Rev No. 3:	Rev No. 6:
Rev No. 1:	Rev No. 4:	Rev No. 7:

DISTRIBUTION AND DELIVERY

B. Carrier Distribution - Proposed Facility (Continued)- Show routes housed elsewhere that will be given secondary distribution (down to carrier route) at the proposed facility. Do not include routes already listed in Section "A"

5 Digit ZIP Code	Name of Unit	Present						10-Year				NOTES
		FT [1]	MT [2]	RU [3]	PP [4]			FT [1]	MT [2]	RU [3]	PP [4]	
Subtotal-From Exhibit 1-BX												
Subtotal-From Exhibit 1-A												
Total (Post to Exhibit 2)												

1-FT=Foot Routes, including bicycle routes. 2-MT=Mounted Routes. 3-RU=Rural Routes, including Star Route Box Delivery Routes. 4-PP=Parcel Post, including Special Delivery, Collection, Relay and Combination Routes.

PS Form 929, March 1999 (Exhibit 1-BX)

Post Office:	State and ZIP Code:	Postal Unit:

Date:	Rev No. 2:	Rev No. 5:
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DISTRIBUTION AND DELIVERY

C. Other Delivery Service - Show all routes in distribution area not already included in Sections "A" and "B".

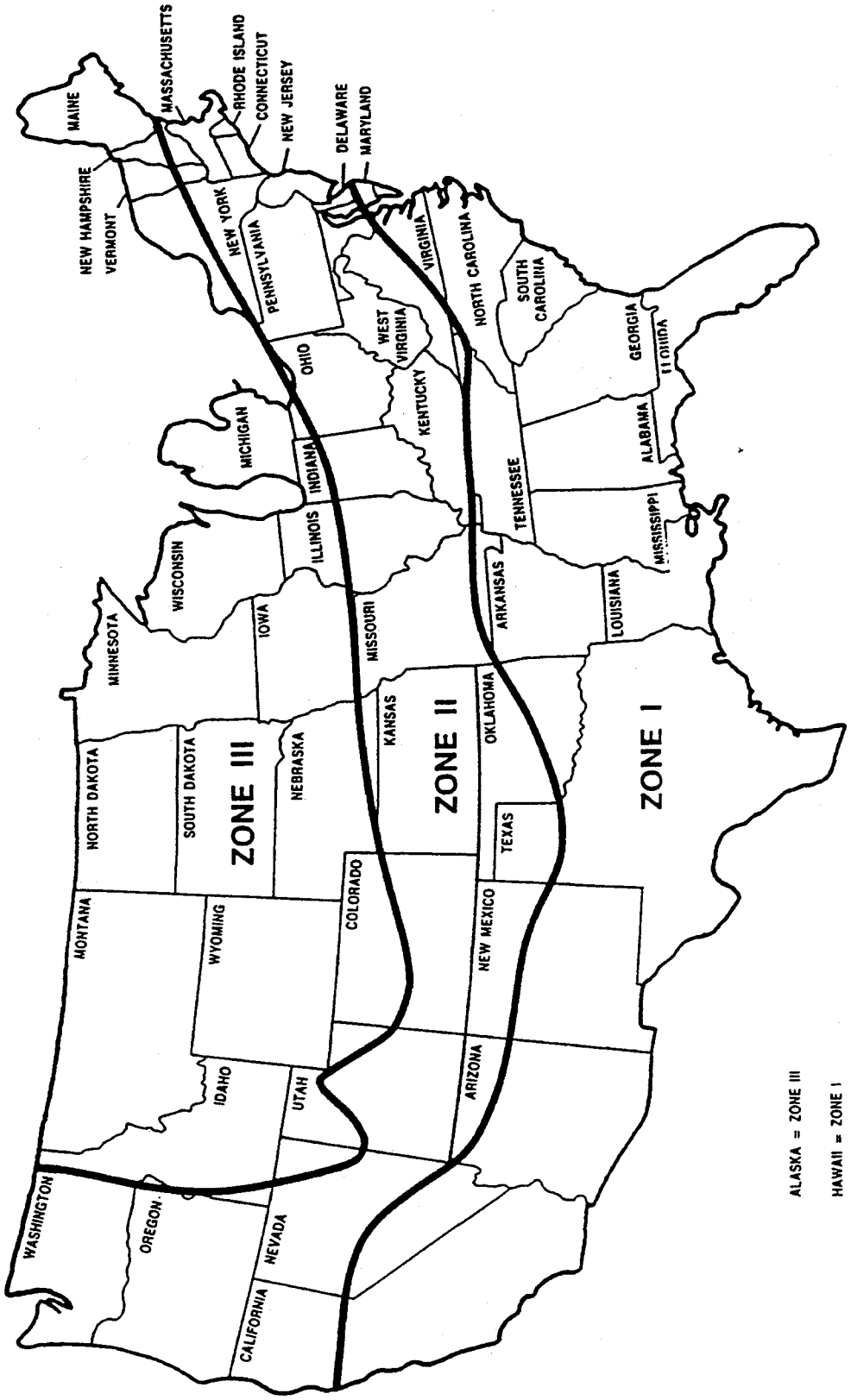
5 Digit ZIP Code	Name of Unit	Present						10-Year				NOTES
		FT [1]	MT [2]	RU [3]	PP [4]			FT [1]	MT [2]	RU [3]	PP [4]	
Subtotal												
Page 10 (Total)												
Total												

1-FT=Foot Routes, including bicycle routes. 2-MT=Mounted Routes. 3-RU=Rural Routes, including Star Route Box Delivery Routes. 4-PP=Parcel Post, including Special Delivery, Collection, Relay and Combination Routes.

PS Form 929, March 1999 (Exhibit 2)

Appendix D

Zone Map


MAINE
MASSACHUSETTS
RHODE ISLAND
CONNECTICUT
NEW JERSEY
DELAWARE
MARYLAND
NEW HAMPSHIRE
VERMONT
NEW YORK
PENNSYLVANIA
VIRGINIA
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
FLORIDA
WEST VIRGINIA
OHIO
KENTUCKY
MICHIGAN
INDIANA
ILLINOIS
TENNESSEE
ALABAMA
MISSISSIPPI
WISCONSIN
IOWA
MISSOURI
ARKANSAS
LOUISIANA
MINNESOTA
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
ZONE III
ZONE II
ZONE I
MONTANA
WYOMING
COLORADO
NEW MEXICO
IDAHO
UTAH
ARIZONA
WASHINGTON
OREGON
NEVADA
CALIFORNIA
ALASKA = ZONE III
HAWAII = ZONE I