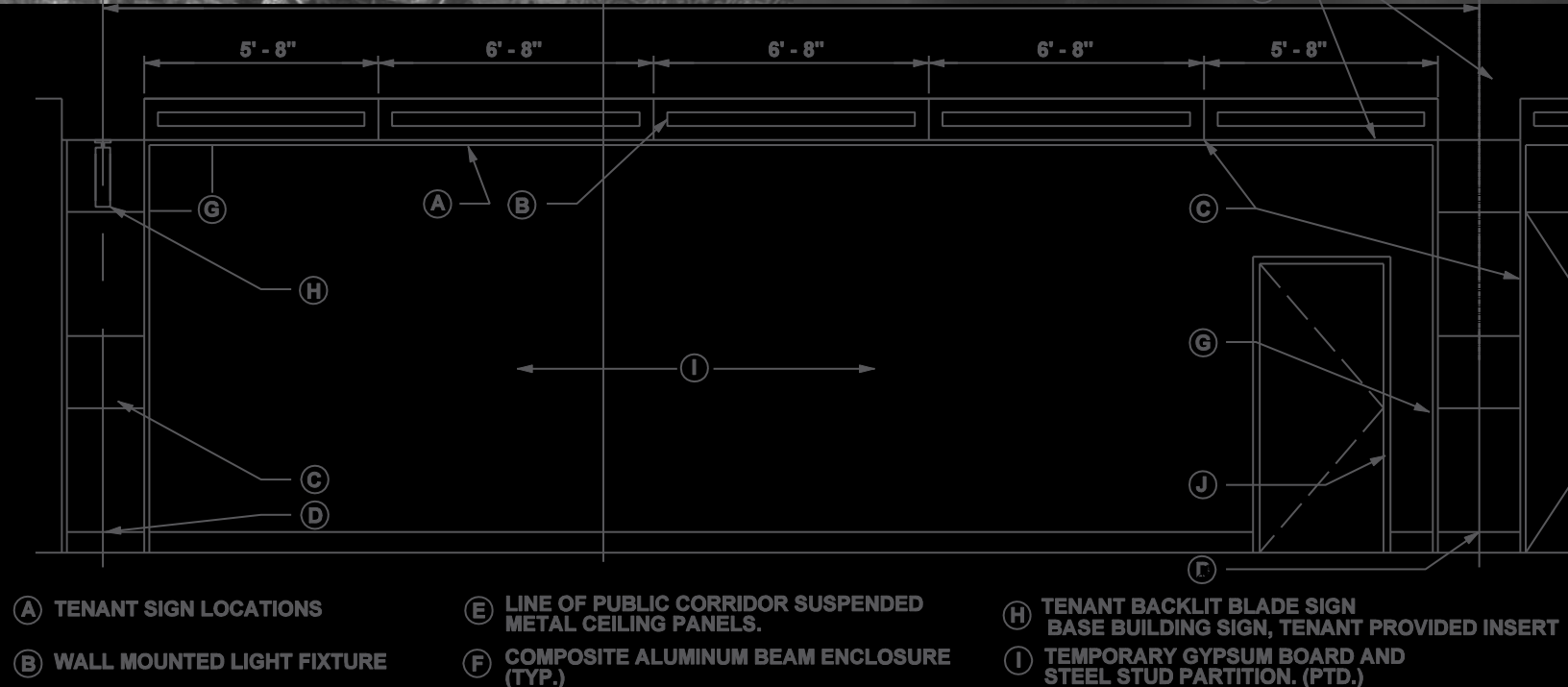


# 2014

## Main Terminal/Concourse Z Tenant Design Standards

Washington Dulles International Airport

Design Manual: IAD Vol. 2



METROPOLITAN WASHINGTON AIRPORTS AUTHORITY



## **PREFACE**

### **THE *DESIGN MANUAL***

As part of the ongoing design and construction programs at Ronald Reagan Washington National Airport and Washington Dulles International Airport, the Metropolitan Washington Airports Authority (the Authority), Office of Engineering, has developed and adopted a series of documents that describe the codes, standards, details, products, and practices to be followed by Architect/Engineers (A/E's). These documents apply to all design of construction at all facilities on property owned by the Authority. Facilities constructed or modified on the site occupied by the National Air and Space Museum located at Washington Dulles International Airport are exempt from the requirements of the Authority *Design Manual*.

The *Design Manual* has been developed to assist Architects/Engineers (A/E's) in understanding the practices and policies that must be incorporated into each project. The *Design Manual* contains a number of specific requirements that must be followed on all projects, as described above. These can be either Authority contracted projects, Authority direct-constructed projects, and tenant contracted projects.

### **APPLICABILITY OF THE *DESIGN MANUAL***

The requirements for design and construction incorporated into the *Design Manual* and Supporting Volumes are regulations approved by the Metropolitan Washington Airports Authority Board of Directors and shall be considered contract requirements for all A/E's who are performing services under contract to the Authority. Although A/E's who are under contract to tenants of the Authority may not be working under contract provisions that make compliance with these requirements mandatory, the Authority reserves the right, as Owner of all airport facilities, and land on which tenant buildings are constructed, to reject any design or work that does not comply with the requirements of the *Design Manual* and its supporting volumes. It is, therefore, required that all A/E's performing work that will be constructed on airport property shall perform services consistent with the Authority policies, standards, procedures, and construction requirements contained in the *Design Manual* and its supporting volumes. The *Design Manual* should be considered equivalent to the building codes. The *Design Manual* in effect at the 30% Submittal will remain the *Design Manual* of record up to the 100% Final Submittal.

### **ORGANIZATION OF THE *DESIGN MANUAL***

The *Design Manual* is made up of seven volumes.

Basic policies, procedures and standards for both Airports:

- *Design Manual*

Requirements for Ronald Reagan Washington National Airport:

- DCA Vol. 1 - Airport Design Standards and Signing Guidelines
- DCA Vol. 2 - Tenant Design Standards

Requirements for Washington Dulles International Airport:

- IAD Vol. 1 - Airport Design Standards and Signing Guidelines
- IAD Vol. 2 - Main Terminal/Concourse Z Tenant Design Standards **[THIS DOCUMENT]**
- IAD Vol. 3 - Concourse B Tenant Design Standards

#### Requirements for All Projects:

- CADD - CADD Design Standards

The seven volumes are intended to supplement each other and must be used together, as appropriate for each airport, to achieve the desired goals of the Authority.

An electronic version of the *Design Manual* and Supporting Volumes is available on CD-ROM, which may be obtained by contacting the Authority Office of Engineering. It is also available on the Authority website at [www.mwaa.com](http://www.mwaa.com) under "Publications".

#### OTHER DOCUMENTS

In addition to the *Design Manual*, the Authority also requires compliance for design and construction with additional policies, procedures, and standards that are published by other departments. These documents include:

- Construction Safety Manual
- Owner Controlled Wrap-Up Insurance Program Manual
- Building Codes Manual
- Contractors Safety and Security Information (Washington Dulles International Airport)
- Safety Policy, Procedures, and Practices by the Risk Management Department
- MASTERSPEC© Specifications Sections specifically edited for Authority projects (primarily Division 01, but including specific technical specification sections)
- Ronald Reagan Washington National Airport and Washington Dulles International Airport Survey Control Data "To-Reach" Descriptions (two separate volumes) Note that the "To-Reach" documents for Washington Dulles International Airport are no longer provided on the CD-ROM version of the *Design Manual*. These documents are available through the Authority. The CD-ROM contains information directing the A/Es to the proper group within the Authority to obtain this document.

## ACCEPTABLE STANDARDS

The standards established by the above referenced documents, together with Federal Aviation Administration (FAA), National Fire Protection Agency (NFPA), Virginia Uniform Statewide Building Code (USBC), Construction Specifications Institute (CSI), and other referenced materials establish the minimum level of quality and detail required of all Authority projects. These standards in many instances may exceed those used in non-Authority design and construction projects and are often above those established as “code minimums”, “standards of the industry”, or “generally accepted practices.”

## DESIGN MANUAL REVISIONS

This edition of the *Design Manual* incorporates the modifications and additions that were developed during the Authority annual review of the previous year's *Design Manual*. This review includes an analysis of the existing standards and an evaluation of the suggested revisions.

If you feel that a standard or procedure stipulated in this edition of the *Design Manual* should be revised, we would like to know. To facilitate this, we have included a *Design Manual* review form that will place your idea in the appropriate hands. All suggestions received will be reviewed and researched and a written response will be provided.

**DESIGN MANUAL REVISION FORM**

**SUGGESTED REVISION TO THE *DESIGN MANUAL***

**Date:** \_\_\_\_\_ **Log Number:** 14-

**To:** Ms. Diane R. Hirsch, PE  
Manager of Design  
Metropolitan Washington Airports Authority  
Ronald Reagan Washington National Airport  
Washington, DC 20001

**From:** \_\_\_\_\_  
\_\_\_\_\_

***Design Manual* Volume & Section:**

***Design Manual* Paragraph:**

***Design Manual* Page:**

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**2014 *Design Manual* Text:**

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**Proposed 2015 *Design Manual* Text:**

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## **INTRODUCTION**

### **GUIDE TO THIS VOLUME OF THE *DESIGN MANUAL***

**Washington Dulles International Airport** consists of the following sections:

IAD Vol. 1 - Airport Design Standards and Signing Guidelines

IAD Vol. 2 - Main Terminal/Concourse Z Tenant Design Standards: **[THIS VOLUME]**

IAD Vol. 3 - Concourse B Tenant Design Standards

This volume consists of design standards, design criteria, procedures, and products for Washington Dulles International Airport and relates to the Main Terminal/Concourse Z Tenant Design Standards.

This volume consists of one section:

<b><u>Section III</u></b>	<b><u>Main Terminal/Concourse Z, Tenant Facilities Standards</u></b>
Chapter 1:	General
Chapter 2:	Airline Shell Spaces
Chapter 3:	Retail Shell Spaces
Chapter 4:	Food and Beverage Shell Spaces
Chapter 5:	General Design Standards
Chapter 6:	Airline Tenant Design Standards
Chapter 7:	Retail Tenant Design Standards
Chapter 8:	Food-and-Beverage Tenant Design Standards
Chapter 9:	Advertising Tenant Design Standards
Chapter 10:	Miscellaneous Commercial Standards

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## SECTION III: Main Terminal Design Standards

### OVERVIEW

These tenant guidelines have been prepared to assist all tenants at Washington Dulles International Airport in developing planning and design strategies that will interact in a harmonious way with the existing Main Terminal architecture and spaces.

The primary intent of this document is to provide a comprehensive framework of aesthetic criteria and standards that draw on the design strengths of the existing Main Terminal building while enhancing the efficiency and visual accessibility of the concourse areas for service oriented activities.

These guidelines describe both general and specific criteria for developing tenant spaces. Tenants should ensure that these guidelines are shared with the tenants design professionals at the outset of the design process.

All tenant work will be required to conform to the criteria as set forth in this document and will be reviewed by the Authority for conformance to these standards. A review process, including description of materials required for design submission is referenced in **Section III, Chapter 6** of this Manual.

### DESIGN PHILOSOPHY

The common feature of Washington Dulles International Airport from both a planning and an architectural perspective is the straightforward organization of the Main Terminal building volume and service spaces into simple, parallel, linear zones. Refer to **Exhibits III-1-1, III-1-2 and III-1-3**. These zones provide for a clarity and predictability to the primary circulation pattern and give the building much of its architectural character. The outward expression of this organization is best seen in the monumental linear rhythm of the main concourse roof and structural system.

Many of the standards contained herein have been created to ensure that the basic integrity of the plan organization and the architectural expression of Washington Dulles International Airport are maintained as originally designed. It is the belief of the Authority that by maintaining and extending the high aesthetic standards of the original building that the experience of travel and the accessibility of the services that are a vital and fundamental part of that experience will continue to be enhanced.

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## CHAPTER 1 General

### 1.1 Introduction

**1.1.1 Overview:** This chapter defines the basic level of expected finish and construction completion for spaces, facilities, and systems provided by the Authority prior to construction of the new tenant areas. Descriptions of these spaces are organized by corresponding terminal level. Systems servicing the different space types are described by system type in the following chapter. Tenants should consult the current *Design Manual* of Washington Dulles International Airport Standards, with appendix, for further information on technical parameters of the building systems.

### 1.2 Building Description

**1.2.1 General:** The Washington Dulles International Airport Terminal Complex consists of three interconnected terminal facilities. **Exhibit III-1-1** illustrates the relationship of the three terminal facilities. The facilities consist of a base building, (known as the Main Terminal), **Exhibits III-1-2 and III-1-3**, a connector facility, (known as the South Finger), **Exhibit III 1-4**, and a new apron level concourse facility built at the southeast area of the base building (known as Concourse Z), **Exhibit III-1-5**. Passenger access to Concourse Z occurs through a portal in the east wall of the ground level of the South Finger. Building module plans for Concourse Z are provided in **Exhibits III-1-6 and III-1-7**. The existing airport traffic control tower is located at the South Finger of the base building. The Main Terminal consists of a Main Concourse and South Concourse (known as the Ticketing Level), a Ground Level, (known as the Baggage Claim Level), a Ground Transportation Level, (where the Ground Transportation Center is located), and an underground Automated People Mover Level (APM Level), currently under construction.

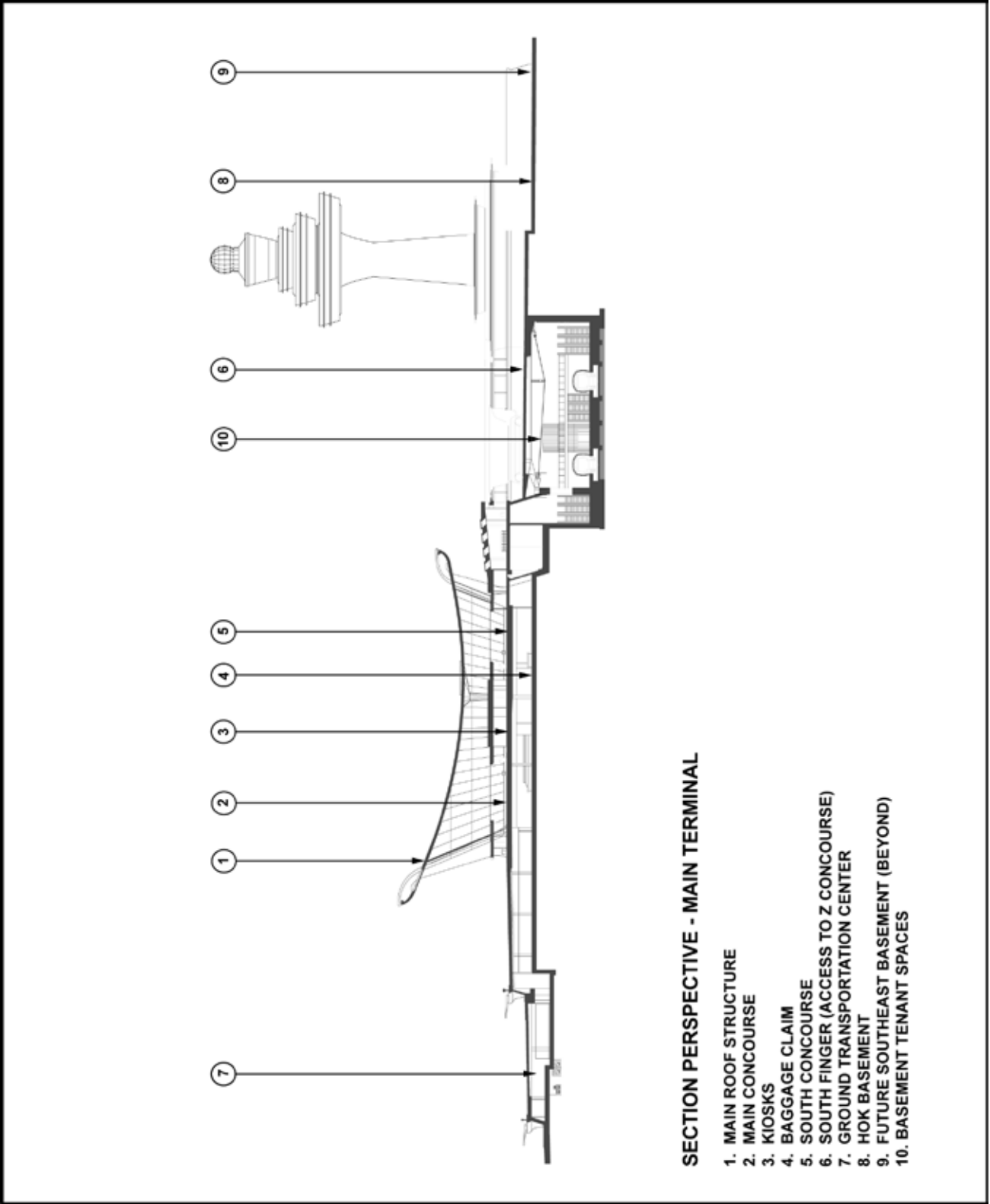
**1.2.2 Main Terminal:** The primary building envelope is poured in place concrete with a catenary roof consisting of perimeter beams supporting a cable reinforced, poured in

place concrete rib beam and precast joist system. The primary building envelope glazing system, spanning in curved sections between the main columns, is clear tempered glass framed in resinous-coated metal profiles, used in conjunction with metal panels. At the east and west ends of the main concourse, special steel mullion trusses on a radial geometry support clear tempered glass panels.

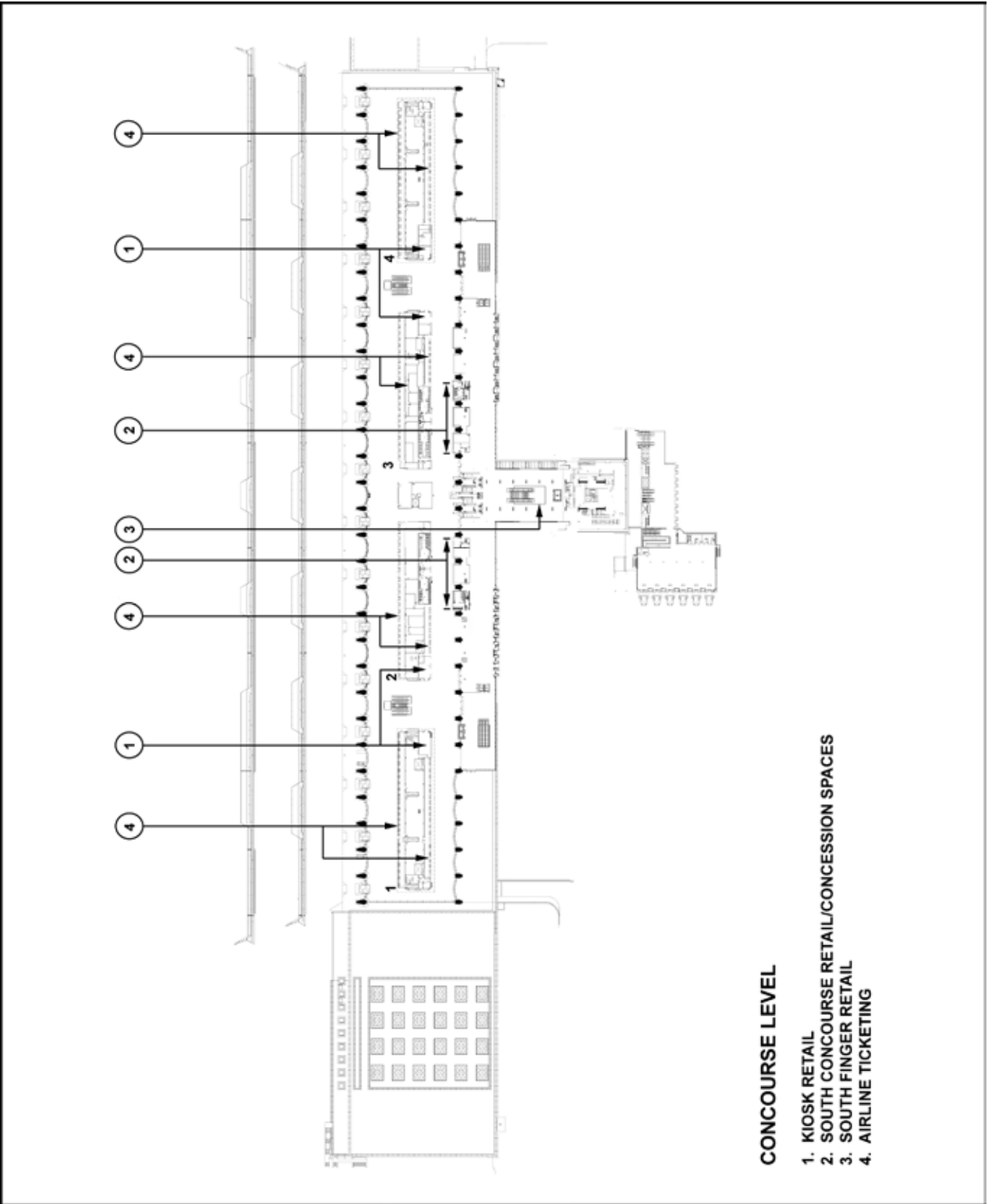
**1.2.3 South Finger:** The South Finger is composed of a steel frame structure supported by a concrete base. The exterior walls are bush-hammered pre-cast concrete panels furnished to match the base building exterior finish.

**1.2.4 Concourse Z:** The primary building envelope is a concrete base with a steel frame structure similar to the South finger. The wall glazing of the concourse consists of laminated safety glass insulation units with “Low-E” coating clear laminating interlayer. Concourse Z includes a total of 10 departure gates with passenger boarding bridges for domestic travel. The ultimate program includes building a west expansion in the future to accommodate an additional 10 gates. The concourse is located on the apron level and includes departure lounges, public restrooms, concession space, airline operations space, and electrical and communications rooms. Mechanical rooms and storage rooms are located in the basement. All passenger activities occur on the apron level.

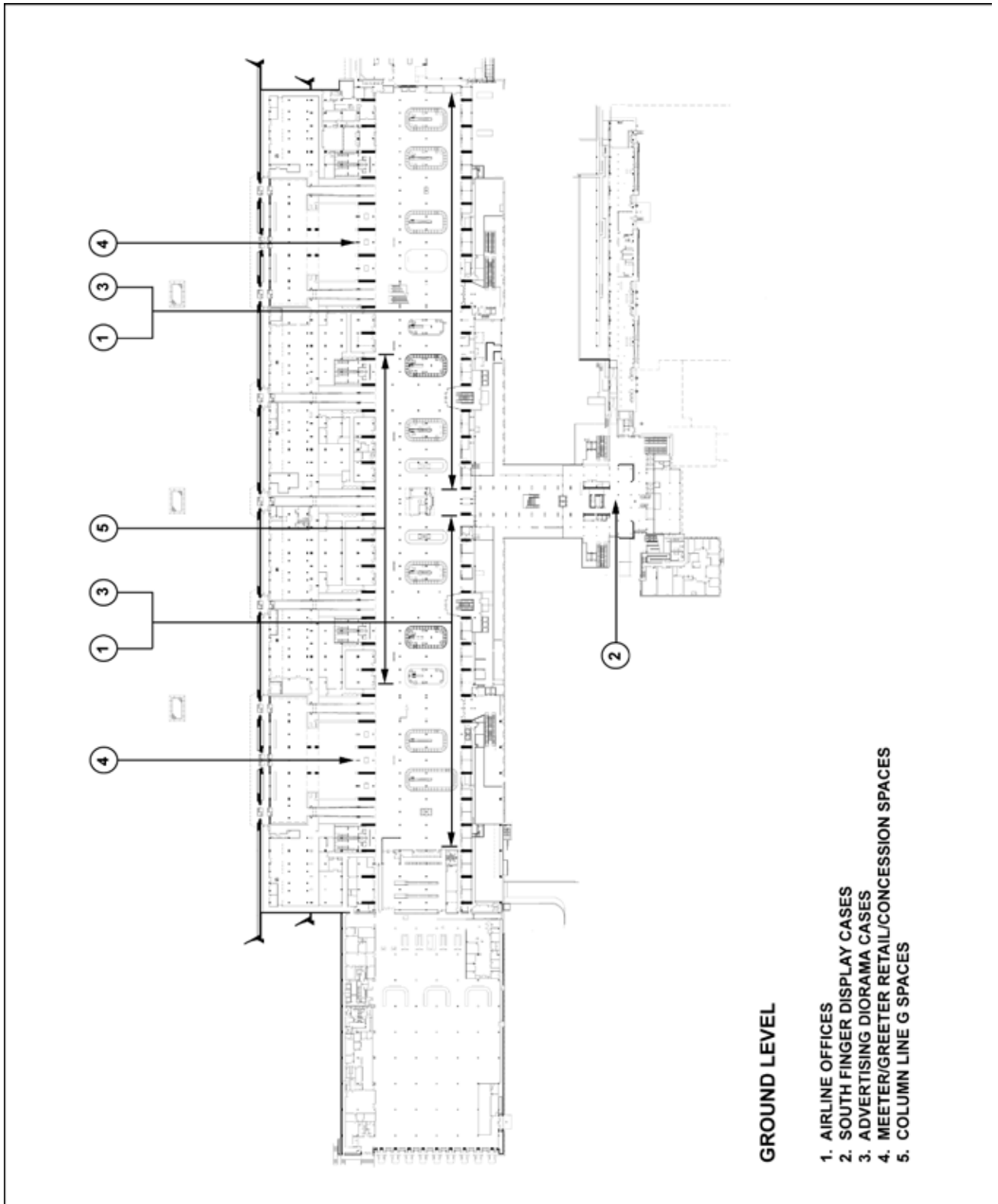
**1.2.5 Vertical Circulation:** The Main Terminal east and west extensions provide four new passenger elevators and eight new escalators in addition to stairs connecting the public areas of the Main Concourse and Ground Levels. A series of public ramps connect the ground floor to the deplaning ramp and parking level elevations at the north side of the building. Stairs link the Ground Level to the deplaning ramp through the two Ground Transportation meeting and greeting spaces to the east and west of the building centerline. Stairs and escalators also link the Concourse Level to the South Finger area adjacent to the base of the Control Tower.



Section Perspective      Exhibit III-1-1

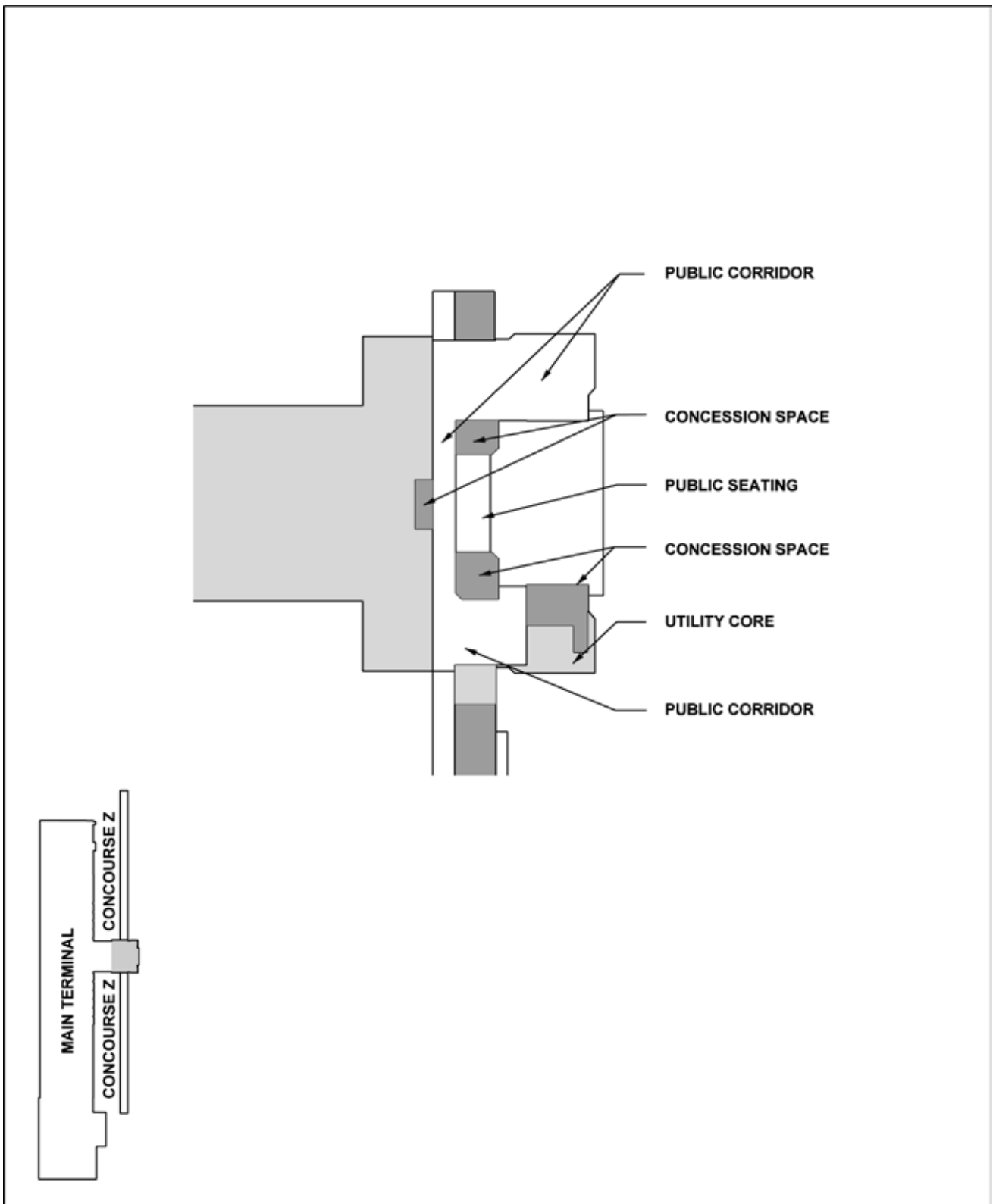


Main Concourse Level Plan Exhibit III-1-2



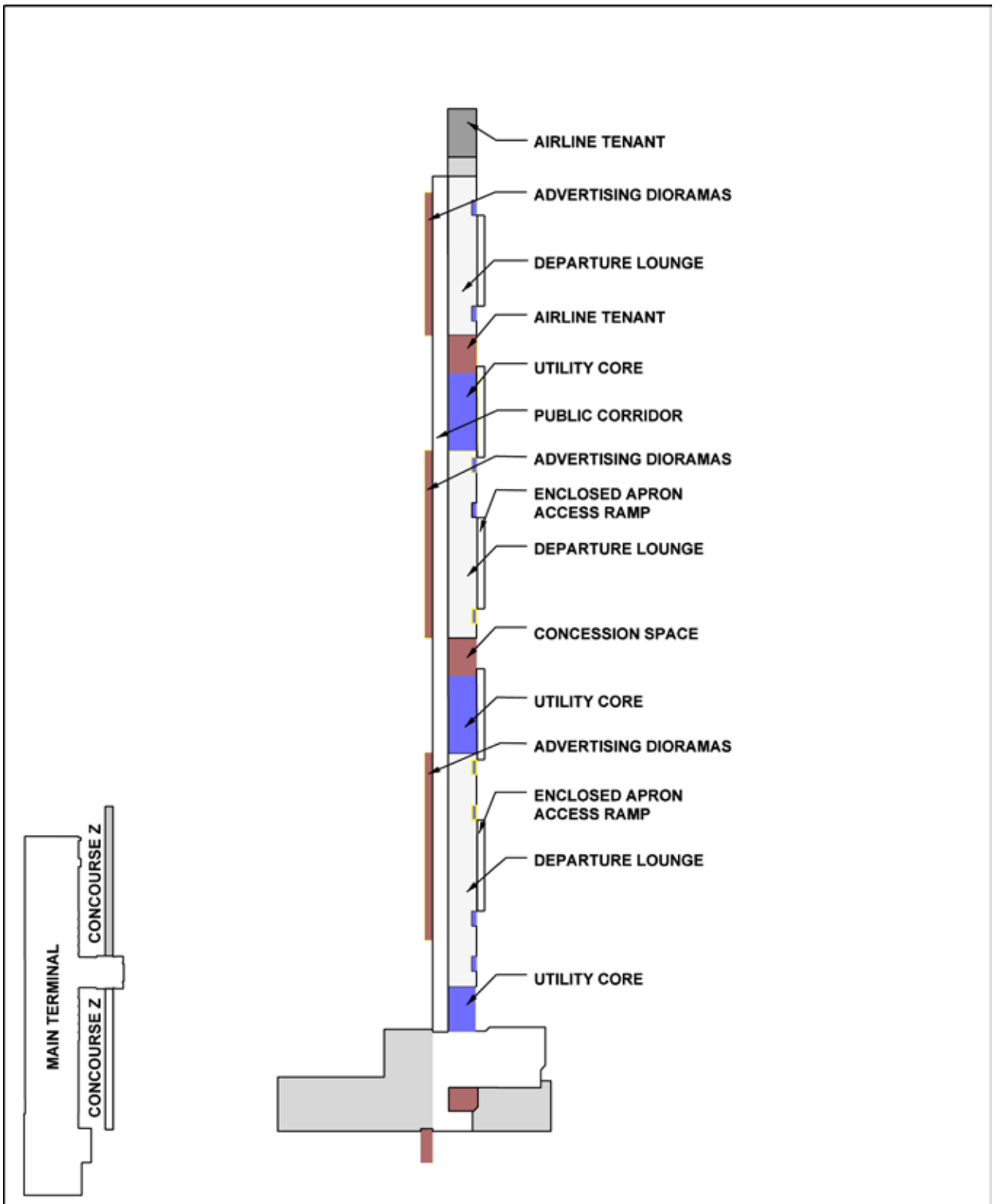
Ground Level Plan

Exhibit III-1-3



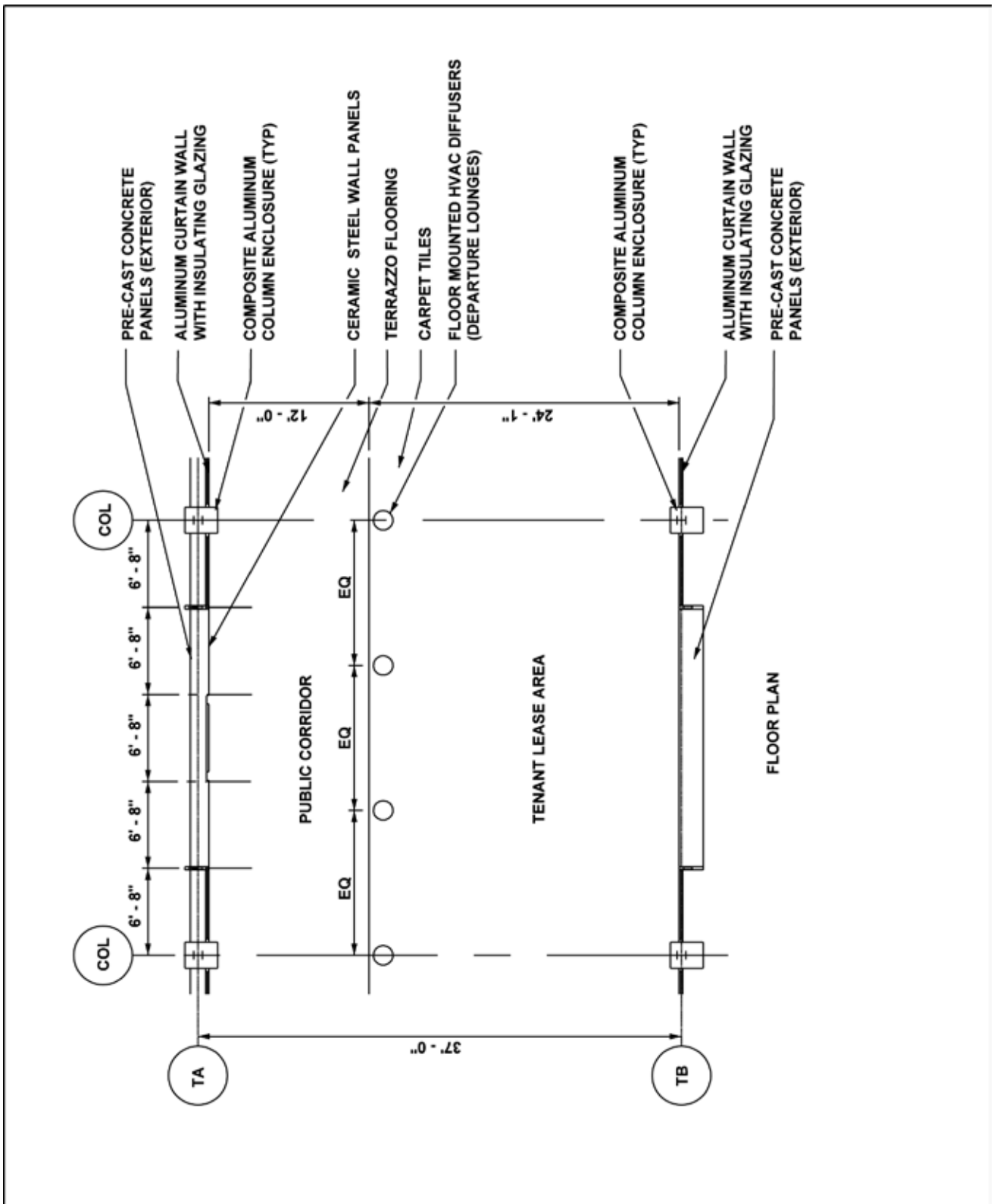
South Finger Plan

Exhibit III-1-4



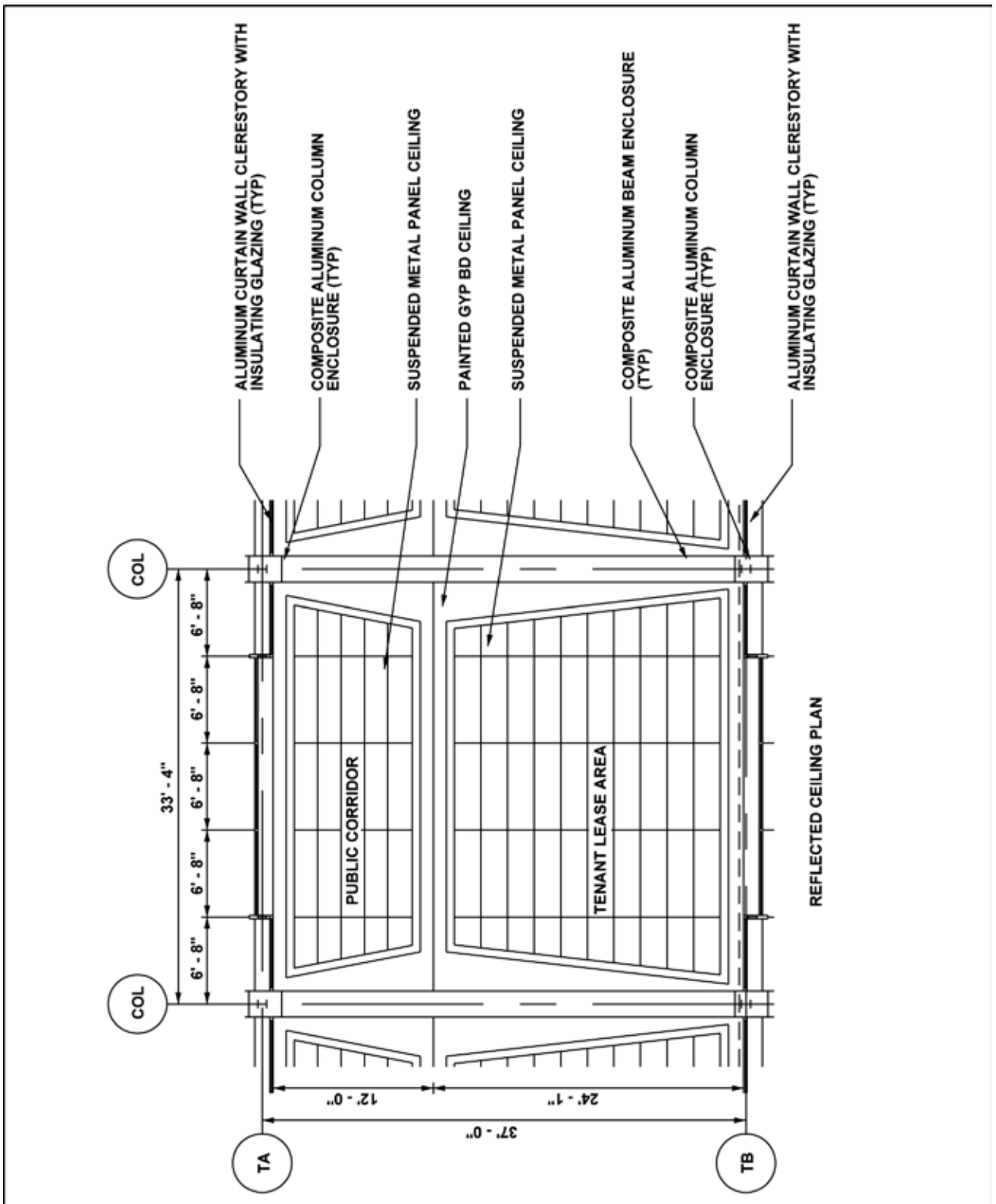
Concourse Z Plan

Exhibit III-1-5



Concourse Z Typical Floor Plan Building Module

Exhibit III-1-6



Concourse Z Typical Reflected Ceiling Plan Building Module

Exhibit III-1-7

The entrance doors at Ground and Main Concourse Levels are automatic swing doors organized in pairs. At the Main Concourse, automatic doors are organized in pairs at vestibules located in every other column bay. These vestibules have projecting soffits that provide protection from weather. At the Ground Level, automatic exit doors are located at regular intervals adjacent to ramp locations. Concourse Z has enclosed ramps to the aircraft apron from each departure lounge, and service elevators and stairs provide access to the basement.

**1.2.6 Materials:** The Main Terminal and Concourse Z are characterized by a limited, highly coordinated palette of materials and colors. Tenants should select materials and finishes that will compliment this design context. All materials and finishes selected shall be of first quality and installed to an appropriately high standard of workmanship. Care should also be given to material scale and module sizes, to ensure that installations can be rationally integrated into base building dimensioning. The Authority encourages early consultation on all matters pertaining to materials and finishes and close coordination with existing detailing of base building finish conditions.

**1.2.7 Concourse Z:** The primary building envelope is composed of a curtain wall with insulating glazing and pre-cast concrete panels. The palette of materials for Concourse Z has been limited to match the South Finger: exposed bush-hammered concrete, "Dulles" gray metal trim and structural elements, and clear or gray-tinted glass set into simple framing. No contrasting materials or finishes are proposed. The resulting structure forms an extension of the ground level of the South Finger and a visual base for the Main Terminal.

**1.2.7.1 Solid Walls:** Bush-hammered pre-cast concrete panels (finish and color to match base of South Finger and Main Terminal).

**1.2.7.2 Roof Fascia, Soffits, and Column Enclosures:** Composite aluminum panels pre-finished "Dulles" gray.

**1.2.7.3 Curtain Walls:** Pre-finished custom profile aluminum stick system.

**1.2.7.4 South Wall Glazing:** Laminated safety-glass insulating units with "Low-E" coating and gray tinted laminating interlayer.

**1.2.7.5 North Wall Glazing:** Laminated safety-glass insulating units with "Low-E" coating and clear laminating interlayer.

**1.2.7.6 Roof:** White "TPO" single-ply membrane roof, fully adhered to roof substrate.

**1.2.7.7 Public Corridors Floor:** The floor finish in the public corridors is a thin-set epoxy terrazzo with ¼" aluminum divider strips installed on a reinforced concrete slab. There are two colors of terrazzo flooring: a border and a field color. The color selections indicated below are provided by the Roman Mosaic and Tile Company (Telephone: 717-665-2991):

#### **Concourse Z Terrazzo #1**

Sample 6000 #1

50% China White #1

10% China White#2

20% China White #0

20% Heritage Clear Glass #2

(match to MB 96-W-964 – White)

#### **Concourse Z Terrazzo #2**

Sample 6000 #4

40% China White #1

10% China White #2

30 % China White #0

20% Mother of Pearl #3

Morricite MTT 717 - Gray

(match to MB 95-W-665 – White)

**1.2.7.8 Walls:** Interior partitions and interior faces of exterior walls are finished with ceramic steel panels installed in 6'- 8" modules with ½" aluminum divider strips. Panels are typically mounted on steel studs. The base is

stainless steel. Column enclosures are fabricated from composite pre-finished aluminum panels; color: "Dulles Gray".

**1.2.7.9 Ceilings:** Ceilings are composed of perforated, pre-finished metal panels with acoustical backing. Ceiling panels are supported by a concealed suspension system in a series of inclined planes. Contrasting reveals surround each sloped plane; the building structure is expressed by pre-finished composite aluminum beam enclosures located between the sloped planes.

**1.2.7.10 Public Telephones.** Wall-mounted phones are permanently located at service core nodes on the north face of the public toilet rooms.

**1.2.7.11 Public Toilet Rooms Floor:** The floor finish in each public toilet room is ceramic tile installed on a reinforced concrete slab. Floor tiles are nominal 1" x 1" units with corresponding cove base units.

**1.2.7.12 Public Toilet Room Walls:** Interior partitions are finished with 3" x 3" ceramic tile. Overall wall tile is white with a contrasting green tile installed on one wall in each toilet room. Toilet partitions are stainless steel.

**1.2.7.13 Public Toilet Room Ceilings:** Ceilings are constructed of painted gypsum board mounted on a concealed suspension support system. Lighting coves are provided at the ceiling perimeters.

**1.2.8 Colors:** A palette of colors has been established for Terminal Complex facilities. Detailed information about colors and materials is contained in the Architectural Color and Finish Submittal Volumes that are available through the Authority. A brief summary of colors and their use on exterior and interior surfaces are available upon request from the Authority.

### 1.3 Applicability

**1.3.1 General:** The design standards contained in this section are applicable to a variety of tenants and facilities

within the Terminal Complex. Some facilities may be provided fully completed or turnkey, there may be specific elements within spaces that are made available to tenants, and tenants may have to comply with criteria applied to specific zones in their facilities. In any case, these standards are applicable to tenants or occupants as outlined below:

**1.3.1.1** Lease tenants who will design and construct new spaces in the Terminal Complex, or Connector to Authority specified criteria or standards.

**1.3.1.2** Lease tenants who will design and construct alterations to existing spaces in Terminal Complex to Authority specified criteria or standards.

**1.3.1.3** Lease tenants who will occupy spaces or facilities in the Terminal Complex, all of which have been constructed or otherwise provided by the Authority.

**1.3.1.4** Lease tenants who will occupy spaces or facilities in the Terminal Complex, portions or elements of which have been provided or constructed by the Authority.

**1.3.1.5** Authority employees or other agents thereof, who will occupy spaces constructed or otherwise provided by the Authority.

### 1.4 Family Of Design Related Documents

**1.4.1 General:** The Metropolitan Washington Airports Authority has developed a family of documents that describes procedures, codes, standards, details, and practices to be followed in the design and construction of any and all facilities on the Airport. All tenant design and construction will be in accordance with the requirements of the latest edition of these documents. Each document is reviewed by the Authority and updated on a regular basis as necessary. It is the responsibility of the tenant to ensure that the current edition of each document is referenced during the design and construction process. The documents and a brief description of their contents are described below. These tenant design standards are to be used in

conjunction with these other documents. Where different levels of restriction are referenced, tenants will be required to follow the most restrictive requirements.

**1.4.2 Design Manual:** The *Design Manual* is a compilation of comprehensive architectural and engineering guidelines for all facilities and structures, new and existing, as well as guidelines for the development of specific land use areas on both airports controlled by the Authority, Ronald Reagan Washington National Airport and Washington Dulles International Airport. The *Design Manual* is a mandatory guide and has the force of law on the Airport. This document is issued by the Authority Office of Engineering and is updated annually. The *Design Manual* is supplemented by separate supporting volumes for each airport and contains a series of standards or guidelines.

**1.4.3 Tenant Work Document:** This document contains a comprehensive listing of the specific tenant requirements for each tenant contract entered into by the Authority. It contains a physical description, including dimensions, of the particular area to be used, any information with regard to the specific financial agreement reached with the tenant, and any other items which are specific to each tenant project. This document contains both standard and tenant-specific text, and therefore, is individually prepared for each tenant lease area. This document is prepared by the Authority's Concessions and Property Development Department.

#### 1.4.4 Terminal Complex and Related Facilities

**Documents:** The contract documents used by the Authority to construct the Terminal Complex facilities and procure interior casework and furnishings are the basis for these standards. A complete description of the facilities, including the new Concourse Z, built at the apron level, can be found by request to the Authority with reference to terminal complex facilities.

**1.4.5 Historic Preservation Design Guidelines:** Historic Preservation Design Guidance for Development at Washington Dulles International National Airport is available through documentation provided by the Authority. Tenants

are directed to review Section I of **IAD Vol. 1** for background on historic preservation issues related to the Main Terminal Complex and related facilities.

## 1.5 Commercial Programs

**1.5.1 Overview:** The Authority desires to provide the users of Washington Dulles International Airport with commercial facilities that match the user's wants and needs. It is also the intent of the Authority to provide attractive, well-designed Tenant facilities. These design standards are intended to ensure that the design and execution of commercial tenant spaces occur in a manner that enhances their visibility and viability while supporting the architectural quality of the exterior and interior public spaces. The marketing of products and services in the terminal complex will be enhanced by the use of these standards and the creation of a Commercial Identity Program (C.I.P.). This C.I.P. is reinforced through the application of the theme name, color, and logo, as well as through the use of signing, custom directory standards, and other elements that are incorporated into the overall design. Advertising opportunities to further promote marketing have also been considered by the Authority in the form of commercial directories and advertising wall and floor units.

**1.5.2 Provisions/Restrictions:** Provisions to allow opportunities for a flexible mix of retail and food and beverage concessions have been considered for the terminal complex and related facilities. Specific commercial areas have been allocated to accommodate either a Retail or Food and Beverage tenant occupant. Refer to detailed descriptions of shell space contained in subsequent chapters for specific provisions.

## 1.6 Architectural Enhancement Program (AEP)

**1.6.1 Architectural Enhancement Program Inventory:** The Architectural Enhancement Program for the Main Terminal and related facilities is under development by the Metropolitan Washington Airports Authority.

**1.6.2 Prohibitions/Restrictions:** Refer to **Chapter 1, Paragraph 1.5.1**, regarding status of Architectural Enhancement Program.

## **1.7 General Building Shell Spaces**

**1.7.1 General:** The purpose of this chapter is to define the level of expected finish and construction completion for facilities and systems that are provided by the Authority for all tenant areas. Descriptions are provided for the areas in chapters noted below.

**1.7.1.1 General Building Shell Spaces – Chapter 1**

**1.7.1.2 Airline Shell Spaces – Chapter 2**

**1.7.1.3 Retail Shell Spaces – Chapter 3**

**1.7.1.4 Food and Beverage Shell Spaces – Chapter 4**

Tenants shall reference the provisions of the following subsections for overall applicability and subsections located in **Chapters 2, 3 and 4** for particulars by tenant type.

**1.7.2 Walls, Main Terminal:** Enclosing walls will have finished surfaces on the non-tenant side only. Demising walls between tenants will be provided by the Authority as part of the base building construction. Demising walls will terminate at the storefront façade. Tenants shall be responsible for completing their respective sides of the demising partition. The existing enclosures at the south side of the Main Terminal concourse level, opposite the mobile lounge hold rooms, are aluminum and glass walls. Tenant spaces located between the main cast in place concrete columns have metal stud rear walls with gypsum board and resinous-coated metal panels.

**1.7.2.1 Walls, Concourse Z:** Apron level exterior walls are composed of a combination of pre-cast concrete panels and aluminum curtain wall sections with insulating glass. The interior face of the concrete panels is backed with steel studs and batt insulation. Tenants are responsible for the

application of gypsum board and/or other finish materials onto the tenant side of the steel studs.

**A. Curtain Wall:** Since ramp fueling is provided for aircraft as close as 100 feet from the south face of the building, all apron-level glazing sills are set 5'-0" above grade and are protected with fire suppression systems in accordance with NFPA requirements. Tenants are prohibited from installing any assemblies or devices that could interfere with the functioning of the fire suppression systems. Similarly, changes by tenants to the existing curtain wall are limited to the replacement of glazed openings with metal panel inserts, if opaque, (rather than transparent), panels are required by the tenant. The curtain wall framing may not be altered and the finish on the tenant-supplied metal panel inserts must match similar inserts installed in the curtain wall. The curtain wall sections of the south wall are glazed with tinted glass; no other sun control devices are provided.

**B. Service Door:** A single stainless steel swing door is provided in the exterior pre-cast concrete panel for each enclosed tenant space on the apron level. No knock-outs or other provisions have been made in the concrete panels for additional openings, since additional exterior openings are not permitted. The service door provides apron access to the tenant space. An exterior pre-cast concrete landing and stair is provided at each apron access door.

**1.7.3 Storefronts:** Interior façades or storefronts facing public areas will be completed by the tenant except as noted in individual Chapters. For the purpose of using this document, "storefront" shall be defined as the area measuring the width of tenant frontage between demising walls and between the floor and building structure above, which provides the separation between the tenant-lease space and the public space.

**1.7.3.1 Concourse Z Security Grilles:** If the tenant elects to install security grilles in any portion of the tenant area that is visible to the public areas of the Concourse, only

overhead coiling grilles may be used. Side-coiling, side stacking, or portable units are not permitted.

**A.** Overhead coiling grilles shall be clear anodized aluminum, with a "stacked" grille pattern made up of 5/16" minimum diameter horizontal rods spaced approximately 2" on center. The horizontal rods shall be interconnected with vertical links approximately 5/8" wide spaced approximately nine inches apart and rotating on the rods. Bottom bars shall be fitted with protective astragal to prevent damage to floor surfaces during use. Interior overhead rolling grilles of patterns and material noted above from the following manufacturers are acceptable:

- 1) Atlas Door; Division of Clopay Building Products Company, Inc.
- 2) Cookson Company.
- 3) Cornell Iron Works Inc.
- 4) Dynamic Closures Corporation.
- 5) Dynaflair Corporation.
- 6) McKeon Rolling Steel Door Company, Inc.
- 7) Metro Door
- 8) Overhead Door Corp.
- 9) R&S Manufacturing, Inc.

**1.7.4 Ceilings:** There are no finished ceilings or soffits provided by the Authority in enclosed tenant spaces, except as required for fire-rated floor, wall or roof assemblies. All base building construction, including HVAC and utility lines, are installed to accommodate a minimum ceiling height of 8'-3". Unless specifically approved by the Authority, all tenant-installed ceilings visible from the public areas of shall be set at a minimum height of 8'-3".

**1.7.5 Doors:** Where enclosing walls around tenant areas are provided, hollow metal doors and frames are also provided. Where required, door assemblies are fire-rated and labeled in order to comply with all criteria for the fire rating. Doors and door frames have a painted finish on both surfaces.

**1.7.6 Floors and Roof Structure:** Floor slabs are provided by the Authority. Except as noted in individual chapters, no finishing flooring is provided. Tenants are responsible for core drilling the floor and/or cutting the slab where required, installing equipment (drains, pipes, raceways, etc.), repairing and providing a watertight, fire-rated seal at the floor slab. All necessary precautions shall be taken to ensure floor slabs are made watertight. A minimum three foot diameter waterproofing membrane shall be applied to slabs around and incorporating the floor drain installations to prevent leakage to floors below. Floor drain waterproofing details shall be provided in the Contract Drawings as early as practical, but no later than the 60% design submittal. All construction penetrations will be coordinated with tenants above and below as necessary, and shall be approved by the Authority. No coring may be undertaken without prior written approval from the Authority. Where capped connections occur below the slab, a valve will be provided. X-Ray will be required to verify conditions in existing slabs such as conduits and other utility installations. Certain slabs will also require structural investigation, again requiring X-Ray techniques.

**1.7.6.1 Concourse Z Roof Structure:** The roof of Concourse Z is nominally flat, set 15' above the apron level floor. The roof is supported by a steel frame structure composed of main north-south girders positioned 33'- 4" on center; a series of east-west roof beams spans are mounted above each of the girders to form the support for a metal roof deck. The roofing system is composed of a single-ply elastomeric roofing membrane installed over tapered insulation.

**A.** Restrictions. In compliance with agreements established with state and federal historic preservation agencies, no roof-mounted equipment is permitted on

the roofs of Concourse Z. Any Tenant equipment with significant concentrated loads suspended from the roof structure shall be suspended from either beams or purlins. Tenants shall provide auxiliary supports for any tenant-provided equipment or systems that may result in a concentrated load of 200 lbs or greater suspended from the structure.

#### **1.7.7 Telecommunications and Special Systems:**

A Premise Distribution System (PDS) interface will be provided by the Authority, with cabling terminating on a demarcation panel in the tenant space. Cable to the demarcation panel and termination hardware on the panel will be provided by the Authority. The demarcation panel itself, and conduit from the panel to the building's cable tray, shall be provided by the tenant. The demarcation panel should be a ¾" thick, 4' – 0" x 4' – 0" fire-retardant-treated plywood board. The conduit should be 1½" size. Size of the demarcation panel and the conduit may need to be modified for very large or very small requirements. Tenants will be responsible for conduit and wiring within their leased areas, and terminations on the termination hardware. Dial tone service and cross connects will be provided by the Authority's Airport Communications System contractor following request from the tenant.

##### **1.7.7.1 Concourse Z:**

**A. Premise Distribution System (PDS):** The Authority has provided a (PDS) to interconnect with remote telecommunications rooms and closets. The PDS backbone cabling consists of multi-pair copper for voice and fiber optic cable for higher speed data or other special applications. The Authority has provided each tenant space with an interface to the PDS backbone as follows:

- 1) Airline Tenants: A 2" empty conduit from the telecom room to the tenant space.
- 2) Concessions Tenants: A 2" empty conduit from the telecom room to the tenant space.

**B. Demarcation Point:** The tenant is responsible for all cabling and termination hardware for tie-in to the premise distribution system. The Tenant shall also provide a 4'x 2'x 5/8" fire-rated plywood backboard at the demarcation point and conduit from a J-box in the ceiling of the tenant space to the demarcation point.

**C. Leasehold Cabling:** Tenants are responsible for installing telecommunications cabling within each enclosed tenant exclusive-use space. Cabling shall comply with EIA/TIA 568 specifications. Tenants may elect to utilize unshielded twisted pair (UTP) and/or shielded twisted pair (STP). All telecommunications cable must be installed in conduits and / or cable trays; no exposed cable will be permitted above ceilings or within walls.

**D. Cabling Outside Leaseholds:** Tenants must obtain Authority approval for routing of telecommunications conduit through non-tenant spaces. In addition, Airlines/Tenants must provide documentation/information on any cabling leaving the Airport. Connectivity between these locations shall be via the Authority provided cable system.

**E. Uninterruptible Power Service (UPS)** is not provided in Concourse Z. UPS systems required by the Tenant shall be provided by the Tenant.

**F. Master Clock System** is provided by the Authority in public areas of the concourses. Master clock display units are located in each MUFIDS enclosure.

**G. Background Music** is not provided by the Authority in tenant areas. Tenants may provide background music on either a temporary or permanent basis, provided it is not audible in adjacent tenant or public areas. In keeping with a professional and service-oriented environment, personal portable televisions, radios, tape or compact disk players are not allowed in commercial locations or other sales or service counters.

**H. Cable Television Distribution System (CATV)** is provided by the Authority to each tenant area. In departure lounges, an operating system, complete with television monitors, is provided. In commercial tenant areas and airline offices and operations areas, cable access television service is delivered to the tenant demised premises; distribution within the tenant areas, as well as the televisions and related equipment, is provided by the tenants.

**1.7.8 Metering:** Meter locations shall be easily accessible by the Authority personnel. Meter locations shall not be more than 5' – 0" above finished floor. In no case shall a meter be located behind shelving, displays, or above dropped ceilings.

**1.7.8.1 EMCS:** The base EMCS is provided by Siemens Building Technologies, Inc. All meters shall have provisions to allow interface with the Siemens Technologies, Inc system. Refer to "**Design Manual Section III, Chapter "Heating, Ventilating, and Air Conditioning for general control system requirements."**

**A. HVAC Water:** Food and Beverage Tenants shall provide thermal meters at utility connections to the base building chilled and hot water systems. Coordinate thermal metering requirements at Washington Dulles International Airport with Engineering and Maintenance. The installation shall include thermal meter programming and required cables, interface points, and programming for connection to the EMCS. Sensor shall be selected with a range centered on average temperature of the system in which the sensor is to be installed.

**B. Domestic Cold Water:** Tenants shall be responsible for servicing their own spaces with cold water via insulated copper piping. All Tenants shall include provisions for the installation of water meters and backflow prevention devices. The Tenant connection to the base building shall include a 24" long removable spool pipe with a shut-off valve at both ends of the spool pipe. Food service tenants will be required to

install a water meter in a location that has been approved by the Authority. Tenants shall obtain this approval in writing from the Authority.

**1.7.8.2 Electrical:** The Authority has provided a C/T cabinet in the Authority electrical closet for future metering provisions. Food and Beverage tenants shall loop power wiring through the C/T cabinet, and provide a watt hour demand meter adjacent to the C/T cabinet. Meter shall be ANSI approved, socket type with bypass type base. Tenants other than food and beverage tenants shall loop power through the C/T cabinet for future metering.

**1.7.8.3 Natural Gas:** Tenants who desire natural gas service shall arrange with the Authority for setting of a natural gas meter in their leased space. Tenants are responsible for installing all required pressure regulating devices and their associated vent piping.

**1.7.9 Electrical/Lighting:** Electric power will be made available to tenants at electrical panelboards in reasonable proximity to the tenant space. The Authority will determine which panelboard is to be utilized. The voltage provided will be 480 volts, 3 phase. For some locations, conduit from the Authority panelboard will be existing and will be stubbed up in the tenant space. The tenant shall provide all electrical wiring, conduit, panel boards, transformers, and any other work necessary to complete the installation within their space. Where an Authority C/T cabinet is provided, tenant feeders shall be looped through it. Food and Beverage tenants shall provide a watt hour demand meter adjacent to the Authority C/T cabinet or adjacent to the Authority electrical panelboard if there is no C/T cabinet. Meter shall be ANSI approved, socket type with by-pass type base. The electrical system has been generally designed to support a load of six watts per square foot in the tenant areas. Tenants requiring more than this amount shall coordinate with the Authority for additional capacity. The electrical system is not designed to support fully electric kitchen installations. Major items of cooking equipment shall be natural gas fueled.

**1.7.9.1 Main Terminal:** The Authority has provided a C/T cabinet in the Authority electrical closet for future metering provisions. Food and Beverage tenants shall loop power wiring through the C/T cabinet, and provide a watt hour demand meter adjacent to the C/T cabinet. Meter shall be ANSI approved, socket type with bypass type base. Tenants other than food and beverage tenants shall loop power wiring through the C/T cabinet for future metering.

**1.7.9.2 Concourse Z:** Distribution Systems - Electrical distribution panelboards (with breaker provisions) and facilities for normal electrical power supply for tenant spaces have been provided by the Authority in Authority electrical closets. Tenants are responsible for installation of circuit breaker and power wiring from the electrical closet to the tenant leasehold. The Authority has provided each tenant space with one 1 ½" diameter empty conduit from a 480/277 volt Authority electrical panel via a CT cabinet located in an Authority electrical closet. The total calculated electrical load for each tenant space located on the apron level is based on the leasehold area square footage, utilizing the following factors:

**A. Concessions Spaces:** 30 watts per square foot for lighting and power combined.

**B. Airline Operations Spaces:** 15 watts per square foot for lighting and power combined.

**C. Exclusions:** The following are not included in the distribution systems provided by the Authority to each tenant space:

**1)** Kitchen equipment shall be installed by the tenant and the tenant shall be responsible for determining actual capacity of electrical supply as related to kitchen equipment.

**2)** Emergency power is not provided by the Authority. Each tenant shall provide emergency power equipment (batteries or similar) as required.

**D. Temporary Lighting** for each enclosed tenant space is provided by the Authority. These temporary installations shall be completely removed as the permanent lighting system is completed by the Tenant. After removal, temporary lighting shall be returned to the Authority. Tenants shall be responsible for maintaining temporary power, fire safety and security systems to adjacent, unoccupied Tenant areas as part of the configuration of permanent Tenant system.

**E. Fixtures Selection and Layout:** Tenants are encouraged to select lighting fixtures, equipment and accessories that are in keeping with the level of high quality of design, materials, finishes and accessories installed throughout the Concourse. Daylight levels along the public corridor and through the southern-exposed, largely-glazed departure lounges may vary due to the availability of natural light.

**F. Restrictions:** Luminous ceiling or wall treatments are prohibited. No manufacturer labels or other identification are permitted on exposed surfaces. All lighting equipment selected by the Tenant is subject to review and approval by the Authority. Exposed conduit, extension cords or other exposed wiring is prohibited.

**1.7.9.3 Temporary Systems:** Some temporary lighting has been provided by the Authority for inspection purposes. Any additional temporary lighting required shall be provided by the tenant. The fixtures may be used during the construction phase if desired.

**A.** Unused temporary lighting shall be returned to the Authority.

**B.** Tenants shall be responsible for maintaining temporary power, fire-safety and security systems adjacent unoccupied tenant areas as part of the permanent tenant system.

**1.7.10 Fire Suppression:**

**1.7.10.1 Main Terminal:** Fire sprinkler systems with upright heads are typically installed in tenant shell spaces. Tenants are responsible for reconfiguring sprinkler layouts, if necessary, to conform to their architectural layout. Sprinkler systems should be calculated per NFPA 13, based on the following criteria:

**A. Airlines:**

- 1) 0.2 GPM/sq. ft. over 3,000 sq. ft. for baggage storage and handling, storage and kitchen areas.
- 2) 0.15 GPM/sq. ft. over 3,000 sq. ft. for all other spaces.
- 3) Additional 500 GPM for inside and outside hose stream demand.

**B. Commercial:**

- 1) 0.2 GPM/square foot over 3,000 sq. ft. for concession, storage and kitchen areas.
- 2) 0.15 GPM/square foot over 7,000 sq. ft. for all other spaces.
- 3) Additional 500 GPM for inside and outside hose stream demand.

**1.7.10.2 Concourse Z:** Each enclosed tenant lease area is provided with fire sprinkler systems installed for "Ordinary Hazard" Group 2 occupancy, with upright heads. Tenants are responsible for revising sprinkler layouts and replacing sprinkler heads to conform to their architectural layout. Tenant sprinkler system shall be hydraulically calculated in accordance with NFPA 13. All Tenants are required to provide sprinkler shop drawings with calculations for review and approval by the Airport Authority' Engineering & Maintenance Department before a "Certificate of Occupancy" is granted.

**A. Airlines.**

- 1) Airline Clubs: 0.10 gpm/sq. ft. over 1500 sq. ft. (light hazard).
- 2) Holding Areas: 0.15 gpm/sq. ft. over 3500 sq. ft. (ordinary group 1).
- 3) Additional 500 gpm for inside and outside hose stream demand for ordinary hazard.
- 4) Additional 350 gpm for inside and outside hose stream demand for light hazard.

**B. Concessions.**

- 1) Additional 500 gpm for inside and outside hose stream demand for ordinary hazard.
- 2) Additional 350 gpm for inside and outside hose stream demand for light hazard.

**1.7.10.3 Shut-Off Valves:** A dedicated tenant area shut-off valve with a tamper switch is provided by the Authority in each tenant space to allow for tenant sprinkler work to be performed. The sprinklers serving each tenant space shall be dedicated to that space only without any interconnection to any other tenant or public spaces. Tenant construction shall not block access to the tenant shut-off valve. If deemed absolutely necessary, the relocation of the tenant shut-off valve shall be subject to approval by the Authority. Tenants shall be responsible for all costs associated with the relocation and re-connection of the tamper switch (at tenant shut-off valve) to the base building fire alarm system.

**1.7.10.4 Fire Alarm Systems:** The tenant shall be responsible for additions and modifications to the building's fire alarm system, including both hardware and software, to meet code and *Design Manual* requirements. Tenant shall arrange to have the work performed by an Authority approved Fire Alarm Contractor, with cost borne by the tenant. Any existing equipment within the tenant space may

be reused, if in operational condition and if compatible with the base building system.

**A. Concourse Z: Smoke Detectors** are provided by the Authority within each tenant space as a part of the base building. The installation of additional smoke detectors and/or fire alarm devices is the tenant's responsibility. When tenant construction requires removal/relocation of the existing smoke detectors and/or fire alarm devices, tenants shall be responsible for all costs associated with the relocation and re-connection to the base building Fire Alarm System. Alterations to any existing alarm devices must be reviewed and approved by the Authority.

#### 1) System Compatibility

**a) Building Standards:** All smoke detectors and/or fire alarm devices shall be compatible with existing fully addressable central Airport Fire Alarm System. The base building fire alarm system provides for both visual (strobe lights) and audible (horns) notification.

**i) The base building fire alarm system** is provided by Ellenco.

**ii) All Tenant systems** shall be coordinated and installed by Ellenco.

**iii) All components** shall be Cerberus Pyrotronics.

**1.7.11 Fire /Life Safety/Smoke Exhaust System:** Smoke evacuation systems in all public/non-tenant areas will be provided by the authority in accordance with the Virginia Uniform Statewide Building Code (USBC) and International Mechanical Codes.

**1.7.11.1 Smoke Detectors:** A smoke detector will be provided by the Authority in the return air duct ahead of the outdoor air intake and at the fan discharge of each air handling system having a capacity of greater than 2,000

cfm. When tenant construction requires removal/relocation of the existing smoke detectors and/or fire alarm devices, tenants shall be responsible for all costs associated with the relocation and re-connection to the base building Fire Alarm System. Alterations to any existing alarm devices must be reviewed and approved by the Authority

**1.7.12 Mechanical (HVAC), Main Terminal:** Conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional configuration of supply air ducting to service individual partitioned spaces within the tenants overall lease area.

**1.7.12.1** The building HVAC system has been designed to support a tenant area lighting and miscellaneous equipment load of 4.5 watts per square foot with an anticipated occupancy of 100 square feet per person. Tenants requiring more than this amount shall coordinate with the Authority for additional capacity.

**1.7.12.2** Ventilation air is provided at the rate of 20 CFM per person through the primary air distribution system. Conditioned 45° F supply air and 180° F heating water shall be provided in the tenant areas for distribution by the tenant.

**1.7.12.3 Control Sequencing:** The tenant will provide a unitary control module to control tenant provided equipment that shall be compatible with the concourse control systems. The module can be connected to the network at the Authority provided termination box. It is the tenant's responsibility to revise the programming per Authority standards to accept additional points. The tenant shall provide a series fan powered VAV terminal box with hot water heating coil. The box shall be designed for low temperature air applications and shall be designed to mix 45° F primary air with plenum return air to provide 55° F supply air to the space. The terminal box shall be provided with a unitary control module compatible with the building energy management and control system. The controller shall be connected to the control system network at the

authority provided termination panel. The terminal box control sequence shall be as follows:

- A. Unoccupied:** When the building is indexed for unoccupied operation, the fan powered terminal boxes shall be shut down and their primary air dampers closed.
- B. Night Setback:** The terminal controller shall start the unit fan, the primary air damper shall remain closed and the unit shall control the hot water heating coil valve to prevent the space temperature from falling below 60° F. The unit shall stop when the space temperature rises to 63° F. The air-handling unit shall remain off.
- C. Night Setup:** The terminal controller shall start the unit fan, and control the primary air damper to prevent the space temperature from exceeding 90° F. The damper shall remain fully open until the space temperature reaches 85° F, at which time the fan shall be stopped and the damper closed. The terminal controller shall signal the air-handling unit to start and operate as described in the building Air-Handling Unit control system.
- D. Warm Up:** When the building is indexed for warm up operation, the terminal controller shall start the fan, the primary air damper shall remain closed and the unit shall control the hot water heating coil valve to bring the space temperature up to the heating design temperature.
- E. Cool Down:** When the building is indexed for cool down operation, the terminal controller shall start the fan, open the primary air damper to deliver the design maximum air quantity, place the unit under control and signal its air-handling unit to start and operate as described in the building Air-Handling Unit control system. On a drop in space temperature, below the cooling set point of 76° F, the primary air damper shall be modulated closed. The damper shall be allowed to continue to modulate closed until it reaches the

minimum design air quantity, which is that required for ventilation.

- F. Occupied:** When the unit is indexed for occupied operation the unit fan shall continue to run. The unit shall control at the heating set point of 70° F. The primary air damper shall be positioned to its minimum airflow, as scheduled, and the heating coil hot water valve shall be modulated as required to maintain the space temperature. On a rise in temperature the heating coil valve shall be modulated closed. On a continued rise in space temperature, after the space has reached the cooling set point of 78° F, the primary air damper shall be modulated open. The unit fan is Pressure Independent Operation: The controls shall be arranged for pressure independent operation, such as the damper position shall be set by the flow sensor, and the space temperature will reset the flow sensor so that primary air flow will be constant at any set point, regardless of changes in primary duct pressure.

- G. Pressure Independent Operation:** The controls shall be arranged for pressure independent operation, such as the damper position shall be set by the flow sensor, and the space temperature will reset the flow sensor so that primary air flow will be constant at any set point, regardless of changes in primary duct pressure.

#### H. Control point Description:

Point	Type	Description
1	AI	Space Temperature (T)
2	AI	Primary Air Flow (CFM)
3	AO	Primary Air Damper Control (M)
4	DO	Fan Start Stop (S/S)
5	AO	Heating Coil Valve Control (V)
6	AI	Discharge Air Temperature (T)

**1.7.12.4 Exhaust:** Toilet exhaust ducts, if required, should be installed in the tenant space by the tenant between the toilet exhaust fan and the outside. All equipment, ducts,

fans and accessories shall be supplied and installed by the tenant.

**1.7.12.5 Temporary Heat:** Temporary unit heaters will be provided by the Authority in all tenant areas exposed to perimeter building walls until areas are leased. Tenants shall turn over unit heaters to the Authority prior to construction and/or occupancy.

**1.7.12.6 Chilled Water:** Chilled water is the source for all building cooling systems. Chilled water supply temperature at air handling units is 36° F with a minimum return temperature of 56° F.

**1.7.12.7 Hot Water:** Hot water is the source for building heating systems. Hot water is supplied at 380° F and returned at a minimum temperature of 240° F with a maximum 20° F temperature difference.

**1.7.12.8 No Smoking Facilities:** All public areas of the Main Concourse Level, Ground Level, Deplaning Level and South Finger are non-smoking. There are no designated smoking lounges in the Main Terminal complex. For specifically designated smoking lounges in the Concourses, the following must be considered:

**A.** All tenant areas have limited chilled water and hot water available for the installation of supplementary small air handling units by tenants that could be utilized to supply designated smoking areas if they are required.

**B.** No provisions are included in the base building systems serving the major public areas for additional outdoor air capacity to make up for 100 % exhaust required for designated smoking areas.

**C.** A gas phase filtration system has been provided in all Authority air handling units with cooling coils that serve both public and exclusive use tenant areas, which will tend to reduce any tobacco smoke odor or presence that may migrate into any system.

### **1.7.13 Mechanical (HVAC), Concourse Z:**

**1.7.13.1 Conditioned Air:** Conditioned air supply air ducts are provided by the Authority to each tenant lease space. Conditioned air is provided to tenant areas via a constant volume air handling system. The air quantity is based on the space cooling load calculation using the Design Criteria. The supply air provides the required outside air based on the estimated occupancy. The air is supplied at a temperature of 64° F; the tenant shall provide a supplemental air conditioning unit to cool the air down to 55° F. The return air temperature is 75° F. The air distribution system has been terminated (with a capped duct connection) within each Tenant lease space.

**1.7.13.2 Mechanical Water:** Chilled and hot water distribution piping systems are provided by the Authority with valved and capped terminations in each tenant lease space for supplemental air tempering. When supplementary chilled and/or hot water connections are utilized, Tenants shall include provisions to allow flushing of all Tenant chilled and hot water piping before connections are made to the base building piping system. Chilled water is provided to accommodate cooling required from 64° F to 55° F. In addition, 10% of this cooling requirement will be provided for the tenant's use. The chilled water is provided at a rate of the greater of the required cooling load or 0.003 gpm/sq. ft. and a temperature of 37° F. Hot water is provided at a rate of 0.003 gpm/sq. ft. and a temperature of 200° F. Design temperature differential for both chilled and hot water systems is 20° F.

### **1.7.13.3 HVAC Design Conditions:**

**A. General:** All tenant area space loads are calculated based on the following criteria:

#### **1) Outdoor Conditions:**

**a)** Summer: 90° F (Dry Bulb) - 74° F (Wet Bulb).

**b)** Winter: 14° F.

**2) Indoor Conditions:**

- a)** Summer: 75° F and 50 relative humidity (plus or minus 10%)
- b)** Winter: 70° F “dry bulb” (no humidity control).

**3) Building Envelope Design Criteria:**

- a)** Pre-Cast Concrete Walls:  $U = 0.052 \text{ Btu/H-Ft}^2\text{-}^\circ\text{F}$
- b)** Insulated Metal Roof Deck:  $U = 0.058 \text{ Btu/H-Ft}^2\text{-}^\circ\text{F}$
- c)** Concrete on Metal Deck Floor:  $U = 0.06 \text{ Btu/H-Ft}^2\text{-}^\circ\text{F}$
- d)** Insulating Glass w/ Mullions:  $U = 0.33 \text{ Btu/H-Ft}^2\text{-}^\circ\text{F}$
- e)** Shading Coefficient (SC): 0.37

**4) Occupancy Loads:**

- a)** Offices: 100 sq. ft./person
- b)** Mercantile: 50 sq. ft./person
- c)** Kitchen: 8 people

**5) Outdoor Air Quantity:**

- a)** Offices: 20 cfm/person
- b)** Other areas: 15 cfm/person

**6) No-Smoking Facility:** All public areas of Concourse Z are designated non-Smoking.

**B. Exhaust:** Roof-mounted units are not being permitted. All exhaust fans and ducts, if required, shall

be installed in the tenant space by the tenant. Any Tenant exhaust fans installed must be reviewed and approved by the Authority prior to installation.

- 1) Restrictions:** Only heat exhaust systems are permitted in Concourse Z; no kitchen exhaust (grease) systems are allowed. Exterior louvers / grilles for heat exhaust are permitted in the clerestory on the south demising wall of each enclosed tenant space. Kitchen exhaust (grease) systems are permitted only in the South Finger tenant areas. Kitchen exhaust (grease) ductwork shall terminate at the exhaust shaft provided by the Authority in the South Finger.

**C. Temporary Heat:** Temporary unit heaters are not provided by the Authority in tenant areas; areas exposed to perimeter building walls are provided with permanent heating convector units. If perimeter heating convector is removed by the tenant, the tenants shall be responsible for capping the piping feeds to the removed units and for ensuring that the hot water supply to other convector units is not interrupted. Tenants shall turn over all removed perimeter convection units to the Authority prior to construction and/or occupancy.

**D. Controls:** Each Tenant shall provide a unitary control module to control tenant provided equipment. The control module shall be compatible with the building energy management and control system (EMCS) installed by Siemens Building Technologies. This module shall be connected to the EMCS network at a termination point specified by the Authority. It is the tenant's responsibility to provide control hardware and software which is the same as the base building system as provided by Siemens Building Technologies.

**1.7.14 Plumbing, Main Terminal:** Domestic cold water supply is provided to main concourse kiosk areas, and Ground Level support areas, and is distributed through mains, risers and branches to fixtures and equipment or to

valved/capped connections at the utility shafts, depending on location.

#### 1.7.14.1 Plumbing, Concourse Z:

**A. Cold Water.** Each Apron Level Tenant lease space has been provided with a single 2" domestic cold water line. Rough-in piping terminates at accessible shut-off valves and caps at or near the perimeter walls. The tenant shall verify the exact location of the termination. Each tenant shall extend the domestic cold water via insulated copper piping to tenant plumbing fixtures within the leased space. Refer to metering requirements.

**B. Hot Water.** Electricity shall be used as the heating medium for domestic hot water. Tenants are responsible for providing their own water heaters. Hot water heaters shall be located within the tenant spaces. Note: Hot water heaters shall not be located in ceiling space nor below the floor slab (that is, in the crawl space below the tenant areas).

**C. Sanitary Sewer:** Each apron level tenant lease space has been provided with one 4" sanitary connection and one 4" vent connection. Apron tenants may tap into sanitary sewer drain lines capped below the floor slab. Locations of under slab piping are identified by periodic clean-out covers set flush with the floor. Remove and repair portions of the slab where connections are made. The existing clean-outs may be relocated if required, but cannot be eliminated. Tenants shall be responsible for the relocation of the existing clean-outs.

**D. Grease Removal:** Discharge from kitchens, bars, and other food preparation areas drain into the public sewer system. All discharge from kitchen and/or bar equipment must pass through a grease interceptor. Grease interceptors shall be installed and maintained by the Tenant. The outlet of food waste grinders shall not discharge to the sanitary system through a grease interceptor. The grease interceptors shall be located

within the tenant area and be connected directly to the drainage system.

**E. Natural Gas:** Natural Gas shall be used only as cooking fuel. Natural gas service is provided only in the South Finger leasehold areas in the form of a single 2 inch capped and valved connection in the crawl space below each South Finger leasehold. It is the responsibility of each Tenant to extend the gas service to the point of use. Refer to metering requirements.

**1.7.14.2 Cold Water Servicing:** Tenants will be responsible for servicing their own spaces with cold water via insulated copper piping. The Authority's standard backflow preventer manufacturer is Watts. All tenants shall include provisions for the installation of water meters. The tenant connection to the base building shall include a 24" long removable spool pipe with a shut-off valve at both ends of the spool pipe. Food service tenants will be required to install a water meter in a location approved by the Authority. Water meters shall be located in an accessible location with meter face no more than 5' – 0" above the finished floor. In no case shall a meter be located behind shelving, displays or above dropped ceilings. The Authority's standard water meter manufacturer is Badger.

**1.7.14.3 Domestic Cold Water and Sanitary Drain:** Each tenant lease space can connect to the building domestic cold water line and the sanitary drain system. Installation and pipe routing are to be coordinated with the Authority.

**1.7.14.4 Food Preparation Discharge:** Discharge from kitchens and other food preparation areas and bars will be into the public sewer system.

**1.7.14.5 Grease Interceptors:** All discharge from kitchens and/or bar equipment must pass through a grease interceptor. Grease interceptors shall be installed and maintained by the Tenant.

**1.7.14.6 Backflow Preventers:** Tenant shall provide backflow preventers for coffee machines and refrigerators

installed in the Tenant's space. The Authority's standard backflow preventer manufacturer is Watts.

**1.7.14.7 Domestic Hot Water Heater:** Use electric water heaters.

**1.7.15 Signing Systems:** Washington Dulles International Airport is provided with a comprehensive signing program that communicates essential wayfinding information to the traveling public using exterior and interior signs and graphics. Signs using standard terminology fall into five categories as noted below:

**1.7.15.1 Directional.**

**1.7.15.2 Identification.**

**1.7.15.3 Information.**

**1.7.15.4 Regulatory.**

**1.7.15.5 Warning.**

**1.7.15.6 Graphic Symbols:** Selected international graphic symbols have been used throughout the complex to reinforce text messages.

**1.7.15.7 Messages:** Messages appear in the airport standard typeface – Saarinen or Helvetica Neue Roman 55.

**1.7.15.8 Letter Size:** Letter sizes may vary depending on location.

**1.7.15.9 Building Directories:** Building directories are located throughout the Main Terminal. There are also commercial directories located at designated locations. These directories are provided by the Authority for the exclusive use of commercial tenants.

**1.7.16 Trash Storage:** Trash rooms are not provided by the Authority for tenants. Trash and recycling compactors are located at the loading dock areas. Trash compactors and dumpsters are located on the aircraft apron at the east

end of Concourse Z. There is no trash rooms located within Concourse Z.

## 1.8 Ada Compliance

**1.8.1 General:** The Main Terminal complex facilities are designed to meet both the requirements and the spirit of the Americans with Disabilities Act (ADA). The Authority requires that all tenant facilities constructed for public use, both exterior and interior, be designed to accommodate people with disabilities. The design for all projects accomplished by tenants shall conform, as a minimum, to the Americans with Disabilities Act (ADA), enacted July 26, 1990, and the Federal guidelines developed there from.

## 1.9 Indoor Environmental Quality

**1.9.1 General:** It is the goal of the Authority to provide a healthy indoor environment for employees, tenants and patrons. The indoor environment is affected by a large number of different factors and forces that need to be balanced, minimized, or eliminated at the design and construction stages before these factors produce an indoor environmental quality problem. Special attention to issues of design specification relative to ventilation, air filtration, and material selection as they may impact on the internal environment is required. Design professionals undertaking improvement projects for tenants or the Authority shall consider guidelines, standards, and issues, including, but not limited to the following so that a healthy building environment is maintained.

### 1.9.2 Guidelines/Standards:

**1.9.2.1** ASHRAE Standard 62-1989 Ventilation of Acceptable Indoor Air Quality.

**1.9.2.2** Clean Air Act of 1990.

**1.9.2.3** ASHRAE Standard 52-1976 Atmospheric Dust Spot Efficiency Test.

**1.9.2.4** California Architectural Coatings Suggested Control Measure (SCM).

**1.9.2.5** Building Air Quality; a Guide for Building Owners and Facilities Managers. US EPA/BOMA, 1991.

**1.9.2.6** US EPA National Ambient Air Quality Standards for Carbon Monoxide (CO), Lead (Pb), Ozone (O<sub>3</sub>), Particulate Matter (PM-10), and Sulfur Dioxide (SO<sub>2</sub>).

**1.9.3 Potential Volatile Organic Compound Sources:**

**1.9.3.1** Plastics.

**1.9.3.2** Laminated materials.

**1.9.3.3** Carpets.

**1.9.3.4** Carpet Pads and seam sealants.

**1.9.3.5** Glazing Compounds, caulks, joint fillers.

**1.9.3.6** Wall coverings.

**1.9.3.7** Chemically treated textiles.

**1.9.3.8** Adhesives.

**1.9.3.9** Resilient Floor or base materials.

**1.9.3.10** Fireproofing materials.

**1.9.3.11** Paints, stains, varnishes, and lacquers.

**1.9.4 HVAC Issues:**

**1.9.4.1** Airborne concentrations of volatile organic chemicals.

**1.9.4.2** Air intake containing exhaust fumes from jet or diesel engines, service vehicles and other carbonaceous or

chemical particulates requiring chemical and mechanical filtration.

**1.9.4.3** Designated smoking areas.

**1.9.4.4** Air filtration.

**1.9.5 Bacteriological:**

**1.9.5.1** Thermal and acoustical insulation, including duct insulation.

**1.9.5.2** Acoustic Panels.

**1.9.5.3** Ceiling Tiles.

**1.9.5.4** Anti-microbial agents.

**1.9.6 Potential Chemical Toxicity Issues:**

**1.9.6.1** Wood preservatives or composite wood products.

**1.9.6.2** Waterproofing products.

**1.9.7 Other Indoor Environmental Issues:**

**1.9.7.1** Artificial Lighting.

## CHAPTER 2 Airline Shell Spaces

### 2.1 All Space Types

**2.1.1 Walls:** The walls on the public side of the airline ticketing kiosk areas at the Main Concourse Level are metal stud with gypsum board and resinous-coated metal panels and teak veneer panels. Typical kiosk plans and elevations are shown in **Exhibits III-2-1, and III-2-2**. The teak veneer panels form a continuous backdrop surface behind the ticketing counters. In airline support spaces the walls are of metal stud construction without the inner layer of gypsum board, which is to be applied by the tenant. Concourse Z interior partition walls are finished with ceramic steel panels installed in 6' - 8" modules with 1/8" aluminum divider strips. Panels are typically mounted on steel studs. The base is stainless steel. Column enclosures are fabricated from composite pre-finished aluminum panels. (The Authority will install all tenant separation partitions between unimproved, adjacent tenants throughout the terminal. Tenants shall be responsible for completing their respective sides of the demising partition. Demising walls shall comply with the criteria set forth in **Chapter 5**.)

**2.1.2 Storefronts:** The glass storefronts located at the Ground Level are not allowed to have window blind systems. Glass storefronts have a consistent tinted finish to create a semi-private condition. Tenants shall submit drawings of their storefront construction to the Authority for approval. Subsequent alterations to these storefronts required by existing or new tenant occupancy shall be completed by the tenant, subject to Authority review.

**2.1.3 Floors and Floor Structure:** Concrete floors will be provided in airline tenant areas at elevations relative to established finished floor levels. Airline ticketing kiosk common use hallways are carpeted. The floor, at airline ticketing counters, is polished aggregate concrete terrazzo.

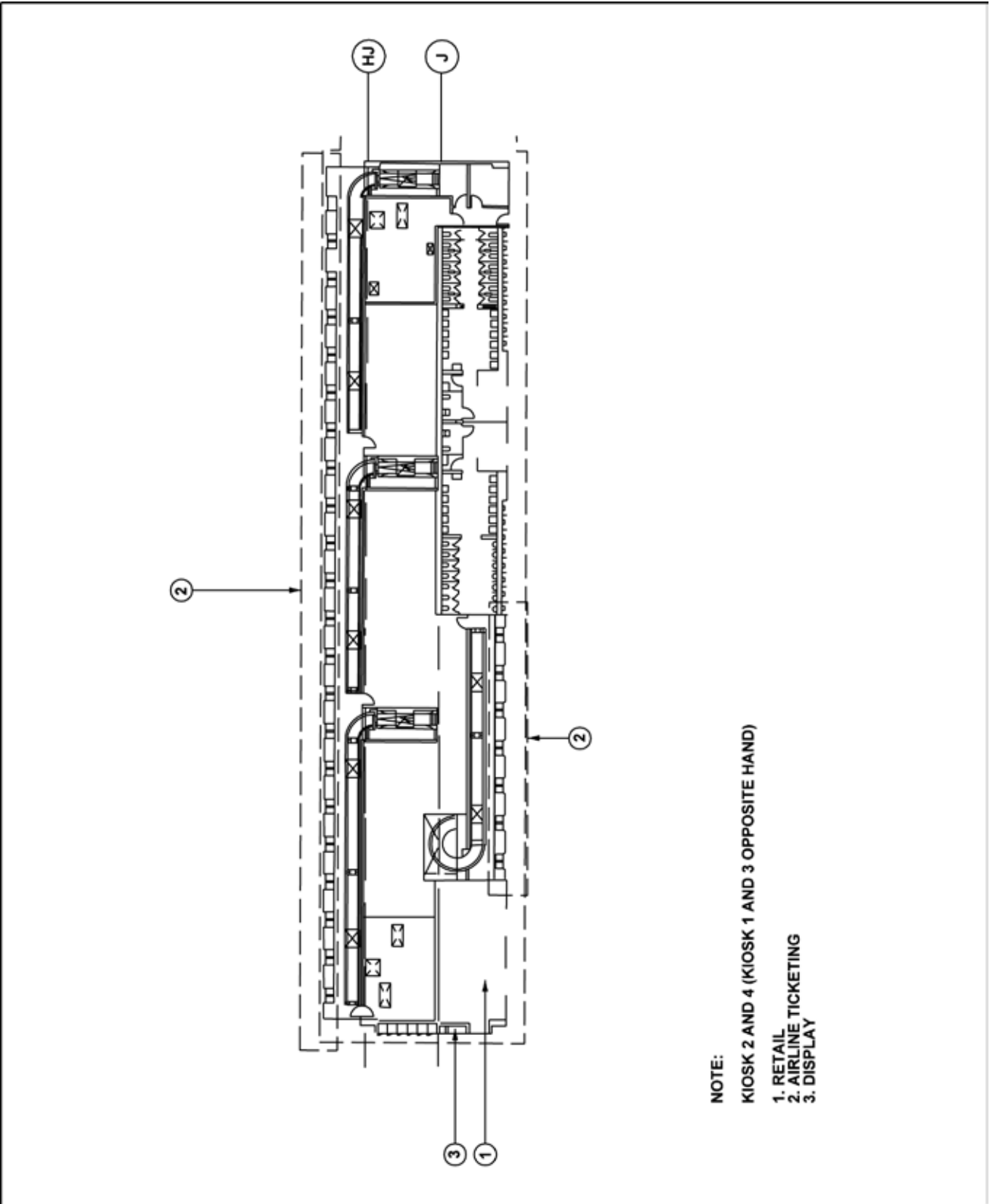
**2.1.4 Telecommunications and Special Systems:** In addition to provisions in **Chapter 1**, the following will apply:

**2.1.4.1 Telecommunications:** Airline tenants shall be responsible for cabling their own spaces. Airline tenants may cable within their own conduit and within airline contiguous lease space. Airline tenants may not route conduit or cable outside of their contiguous lease spaces without Authority permission. Airline cabling within Authority conduit is not permitted. The Authority will also install a cabling system to all gates and ATO check-in positions. Airline tenants may elect to utilize the Authority cabling system as an alternative to installing their own.

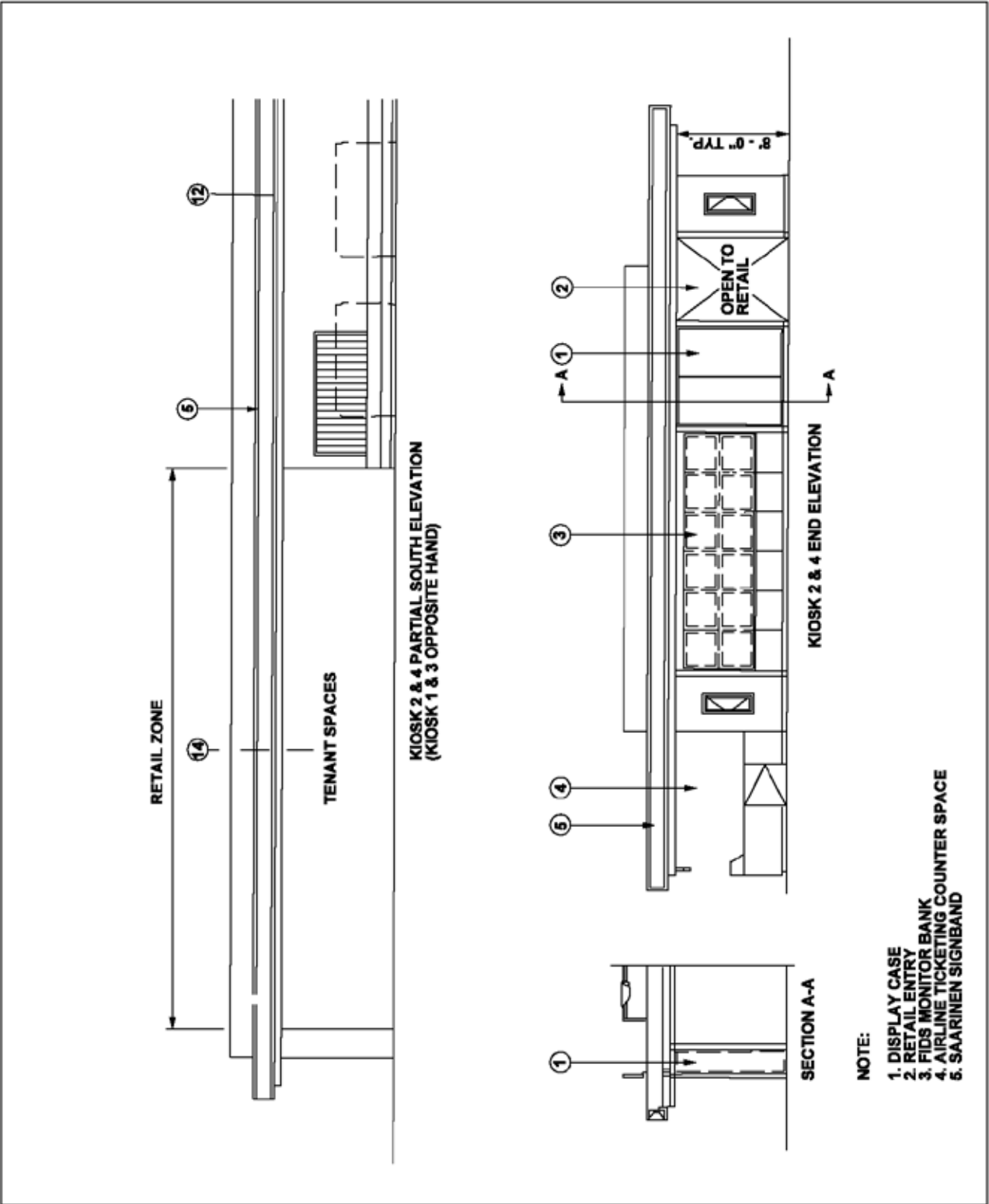
**2.1.4.2 Multi-User Flight Information Display System (MUFIDS):** The MUFIDS system will be provided by the Authority. MUFIDS monitors will be mounted in a custom Authority provided enclosure and/or rack. The Authority will provide carrier specific Flight Information Displays (FIDS) at check-in areas. Specific Baggage Information Displays (BIDS) will be provided by the Authority at baggage claim devices. BIDS monitors will display baggage information and the airline logo.

**2.1.5 Metering:** In addition to the requirements in Chapter 1, the following shall apply: Electrical meters and meter enclosures for the three power circuits to each airline gate, such as Pre-Conditioned Air (PCA), 400 Hertz Aircraft Ground Power, and Boarding Bridge, have been provided and wired complete by the Authority. Tenants shall be responsible for the reimbursement of the cost of their electrical meters to the Authority.

**2.1.6 Electrical/Lighting:** In addition to provisions in **Chapter 1**, airline tenant work shall provide the distribution panels, local transformers, and distribution system. Emergency power for minimum life safety requirements shall be provided by the airline tenant in the form of unit equipment.



Kiosk Plan      Exhibit III-2-1



Kiosk End Elevations      Exhibit III-2-2

**2.1.6.1 Standby Power:** Standby power capacity for minimum airline tenant operations during an extended normal power outage will be provided by the Authority in the form of power to:

- A. Out/In Baggage Systems.
- B. FIDS/BIDS.
- C. Airline Computers.
- D. Airline Ticket Counters.
- E. Airline Gate Counters.
- F. Security Check-In.
- G. Apron Lighting.
- H. Boarding Bridges.

**2.1.6.2 Equipment and circuitry:** Equipment and circuitry served by standby power will be approved by the Authority.

**2.1.7 Signing Systems:** In addition to provisions in **Chapter 1**, the following will apply: Directional airline signing will be provided by the Authority in exterior areas on the roadways, at the terminal curbside, at terminal vestibules, at entries from the garages. Inside the terminal, signs will be provided above the ticket counters, at shuttle counters, and at airport directories. Airline names will appear in the Airport standard typeface .

**2.1.8 Equipment:** Inbound and outbound baggage equipment will be provided by the Authority.

**2.1.8.1 Boarding Bridges:** Boarding bridges will be provided by the Authority.

**2.1.8.2 Baggage Scales:** The Authority will procure and install scales at baggage wells at selected locations along the ticket and shuttle counters. Tenants shall be

responsible for the reimbursement of the cost of their scales to the Authority.

**2.1.8.3 Queue Control Devices:** The Authority will procure queue control devices for use by airline tenants. Tenants shall be responsible for the reimbursement of the cost of their queue control devices to the Authority.

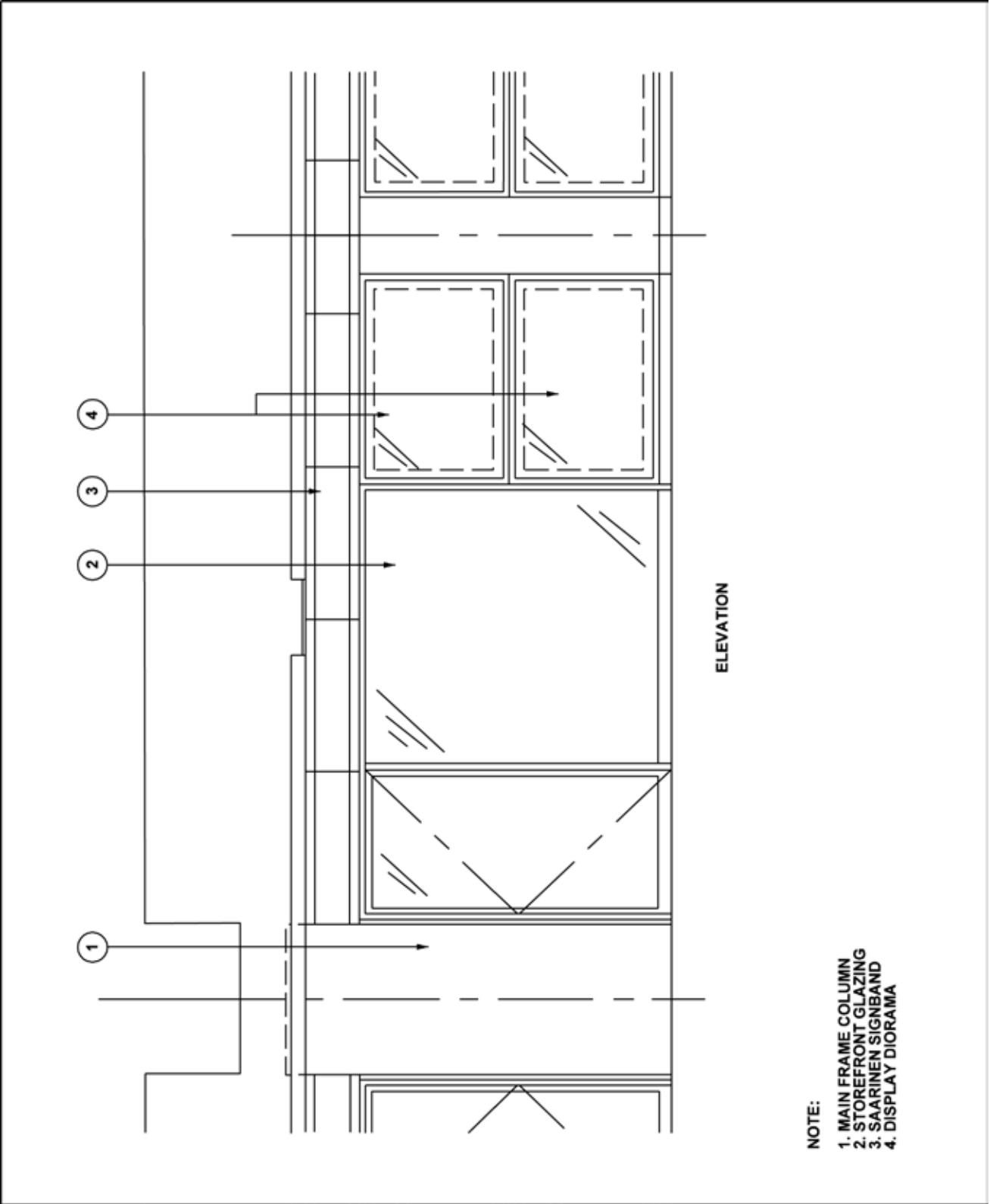
**2.1.9 Transmission:** Air to ground and ground to ground radios for airline operations, maintenance or emergency services shall be provided by the airline tenant. These systems may be installed by the tenant individually if as a part of a shared trunk service as those provided by AR Inc. or a similar communications service company.

**2.1.9.1 Radio Antennas:** Antennas mounted on the roof of Concourse Z will not be permitted. Antennas are permitted only at Authority-designated locations; antennas for radio communications may be mounted on exterior apron light poles. All Tenant-installed antennas shall be reviewed and approved by the Authority. Cable trays and conduit will be provided by the Authority from the tenant operations areas to each antenna location for the routing of coaxial cable. Each airline tenant shall provide and install all antenna hardware within the tenant area and antennae cable from the tenant area to the antennae location(s).

## **2.2 Offices, ATOs (Ground Level/Main Concourse Level)**

**2.2.1 Walls, Baggage Service Offices:** Interior demising walls between adjacent tenants will be provided by the Authority. The bag service offices on the south wall, ground level of the Main Terminal, consist of resinous-coated metal and glass storefronts. Storefronts shall be as described in **Paragraph 2.1.2** and as shown in elevation, **Exhibit III-2-3**.

**2.2.2 Walls, Airline Ticket Offices (ATO):** Interior demising walls between tenants will be provided by the Authority. These walls shall be metal studs with gypsum board finish on interior surfaces. There are no other interior finishes provided. The tenants shall confirm actual location of all demising walls with the Authority prior to construction.



Airline Offices, Ground Level Elevation Exhibit III-2-3

**2.2.3 Flooring, Airline Ticket Counter:** The Authority will initially provide continuous black anti-fatigue mats behind the ticket counters over polished aggregate concrete terrazzo floors. Airlines shall maintain and/or replace anti-fatigue mats to match the original standards.

**2.2.4 Mechanical (HVAC):** Conditioned air supply and return air ducts are provided to each tenant lease space. The air distribution system is sized for the estimated total heating and cooling requirement of the tenant lease space and is terminated with capped duct connections within each tenant lease space. In addition, a chilled water and hot water distribution piping system is provided by the Authority to each tenant lease space. In general, mechanical HVAC systems shall be as described in **Chapter 1**.

**2.2.4.1 No Designated Smoking Areas:** All public areas of the Main Terminal are non-smoking.

**2.2.5 Plumbing:** Each airline tenant lease space is provided with a 1" or 1¼" domestic hot water line. Water is delivered at 110° F. Each tenant lease space is provided with a 1½" domestic cold water line. Rough-in piping terminates at accessible shut-off valves and caps at the perimeter walls.

## 2.3 Airline Operations

**2.3.1 Walls, Main Terminal:** In airline support spaces the walls are of metal stud construction without the inner layer of gypsum board, which is to be applied by the tenant. In general the Authority will install tenant separation partitions between unimproved adjacent tenants.

**2.3.1.1 Interior Partitions, Basement Level, Concourse Z:** In the basement of Concourse Z, demising partitions consist of nominal 8" masonry units extended to the underside of the concrete slab above; the demising partitions are constructed to comply with a UL design for a fire-separation rating of one-hour

**2.3.1.2 Interior Partitions, Apron Level, Concourse Z:** On the apron level of Concourse Z, demising partitions are

composed of 3½" steel studs. Demising partitions between tenant spaces are scheduled to comply with a UL design for a fire-separation rating of one-hour; however, gypsum board finishes are not installed by the Authority on the tenant side of demising partitions. Metals studs will be left exposed on the tenant side of the demising partitions to facilitate installation of tenant utility distribution infrastructure.

### 2.3.1.3 Exterior Walls, Apron Level, Concourse Z:

Exterior walls are pre-formed metal panels supported by vertical structural steel channels spaced at 8' – 0" on center. There is a continuous 10½" high cast-in-place concrete curb and a panel module of two in the vertical direction. The space between the channels is filled with blanket (batt) insulation. No other interior finishes are provided. Openings in the exterior wall that may be required by tenant construction walls will be permitted provided that they are coordinated with the structural spacing and 2' – 0" panel modules. Subsequent alterations to exterior walls required by existing or new tenant occupancy shall be completed by the tenant.

**2.3.2 Ceilings, Concourse Z:** No finished ceilings or soffits are provided by the Authority in enclosed tenant spaces, except as required for fire-rated floor, wall or roof assemblies. All base building construction, including HVAC and utility lines, are installed to accommodate a minimum ceiling height of 8' - 3". Unless specifically approved by the Authority, all tenant-installed ceilings visible from the public areas of the Concourse shall be set at a minimum height of 8'-3". Minimum ceiling height of 8 feet will be acceptable within the following terminal plan coordinates:

**2.3.3 Electrical:** In addition to the requirements in **Chapter 1**, the following shall apply: The Authority will provide up to 30 KVA additional electrical capacities for a maximum of two tug chargers per aircraft gate in the airline tenant apron operations level main panelboard. Conduit, disconnects, junction boxes, wiring and battery chargers for baggage tug charging circuits shall be provided by the tenant.

**2.3.4 Mechanical (HVAC):** As referenced in **Chapter 1, Paragraph 1.7.12**, conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional configuration of supply air ducting to service individual partitioned spaces within the tenants overall lease area.

**2.3.4.1 Water Distribution:** A chilled water and hot water distribution piping system is provided in each tenant lease space for HVAC and is terminated with a valved and capped connection to serve air handling units that shall be provided by the tenant. Chilled and hot water piping will be designed for 120% of the total requirements.

**2.3.5 Plumbing:** Each tenant space is provided a 1¼" domestic hot water line. Water is delivered at 110° F. Each tenant is provided a 1½" domestic cold water line. Rough-in piping will terminate at accessible shut-off valves every 100' – 0" along the perimeter wall of the tenant space. Capped vents 2" in diameter are provided by the Authority at predetermined intervals. Tenants shall coordinate specific locations with the Authority. Six inch sanitary Y drain connection with steel cover plates are provided by the Authority below the concrete floor slab at predetermined intervals.

## 2.4 Airline Casework

**2.4.1 General:** The Authority has provided casework as described in Casework Construction Package and electrical service as follows:

**2.4.2 Airline Ticket Counters:** The Authority provides airline ticket counters and bagwells in the ticketing lobby and at shuttle locations. Refer to **Exhibit III-2-4** for counter elevations. The airline ticket counters are provided with two empty conduits from two empty junction boxes located at each bay at the ticket counter to the demising wall of the adjacent airline ticket office (ATO) Tenant space. This is provided for future connection to tenant panels. In addition,

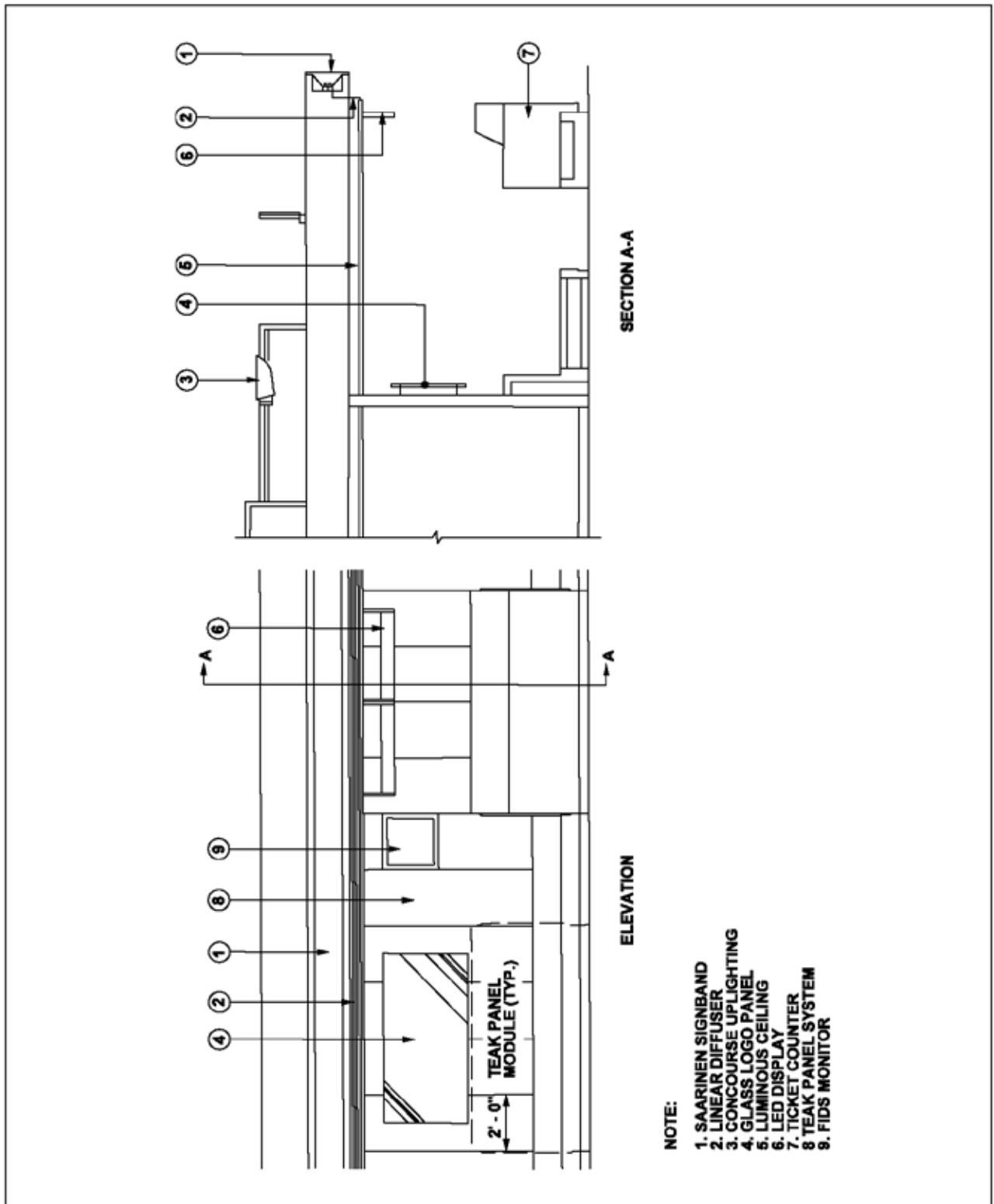
standby power is provided by the Authority, 120 volt, terminating in two junction boxes located at each bay. All wiring within the ticket counter casework and connection to the tenant panel shall be the responsibility of the tenant. The airline shall be responsible for providing inserts; equipment and agent-side counter tops as required for their individual operations.

**2.4.3 Gate Counters and Backscreens:** A two-position gate counter with turret top and complementary backscreen is provided by the Authority for each departure gate within the passenger departure lounges. Common Use Terminal Equipment (CUTE) is provided within each check-in podium. MUFIDS monitors are provided in backscreens. The Authority has also provided normal power terminating in 120V receptacles at the locations in the casework plans. All associated conduit, data outlets, and data cabling have also been provided.

**2.4.4 Lift Podiums:** Lift Podiums have been provided by the Authority, including Common Use Terminal Equipment (CUTE) installed within each boarding bridge podium. All associated conduit, data outlets, and data cabling have also been provided.

**2.4.5 Service Podiums:** A limited number of mobile service podiums with a single drawer and lower compartment are provided by the Authority for airline use at locations such as the ticketing lobby, bag claim lobby, and at security check points. Airlines shall be responsible for reimbursement of the cost of their podiums to the Authority.

**2.4.6 Poster Brochure Racks:** A limited number of poster brochure racks are provided by the Authority for use by the airlines in Authority approved locations. Airlines shall be responsible for reimbursement of the cost of their poster brochure racks to the Authority.



Airline Ticket Counter Partial Elevation

Exhibit III-2-4

**2.4.7 Communications at Casework Locations:** Each casework location that requires a data connection is provided with a cable feed from the Authority provided PDS system. Tenants may elect to utilize the Authority provided PDS or install their own cabling from a contiguous exclusive use space. Tenants electing to install their own cable shall be responsible for providing all cable and conduit/cable trays. Communications cable must be installed in conduits and/or cable trays.

**2.4.8 Airline Self Service Kiosk Design Standards:** This document shall serve as interim design guidance for the placement of Airline Self Service Kiosks at Washington Dulles International Airport. Airline Self Service Kiosks shall include any free standing or installed electronic device operated by the public that issue tickets, boarding passes, or other airline media. This design standard is now in effect and will be incorporated into the Metropolitan Washington Airports Authority's *Design Manual* in the near future.

#### **2.4.8.1 Placement:**

- A.** Self Service Kiosks shall be 4 inches from the front face of the wall, ticket counter, or other vertical surface.
- B.** At the ticket counters, generally, Self Service Kiosks shall be centered in front of each individual ticketing position unless approved otherwise by the Authority.
- C.** Airline proposals for freestanding or other installations of Self Service Kiosks not covered by this document shall be reviewed and approved by the Authority on a case-by-case basis.

**2.4.8.2 Size:** Self Service Kiosks shall be no higher than 4' - 4<sup>5</sup>/<sub>8</sub>", and shall have a footprint of no more than 6 sq. ft.

**2.4.8.3 Materials and Colors:** Self Service Kiosks shall be either stainless steel, aluminum (clear anodized), or painted metal which looks like either of those metals, with colors in either light gray, charcoal gray, or black. If paint is used, the powder coat process is required for durability. Plastic laminates are not permitted due to limited durability.

#### **2.4.8.4 Graphics and Brochure Racks:**

**A.** Corporate identification in the form of logos, signs, colors, and graphics may be placed in three locations on the Self Service Kiosks. An area of 64 square inches on each side and on the front of the Self Service Kiosks may be used for this purpose. All such identification shall be subject to the prior review and approval of the Authority.

**B.** Self Service Kiosks may incorporate racks to hold ticket folders and brochures, which provide instructions, or materials that help facilitate the electronic transaction. All such brochure racks shall be reviewed on a case-by-case basis and subject to the prior approval of the Authority.

**C.** The airline shall be responsible for providing the federally mandated passenger Information Signs, either within the Self Service Kiosk program, or through another method approved by the Airport.

**D.** For Self Service Kiosks installed in front of the ticket counters as provided herein, the airline shall remove the existing signage on the face of the ticket counters and return them to the Authority. In place of the existing signage, the airline shall install a stainless steel panel, number four finish – horizontal grain, applied over the face of the existing sign band, secured with vandal proof fasteners identical to the original.

#### **2.4.8.5 Installation:**

**A.** Self Service Kiosks shall be stabilized in place and not easily moved. Kiosks shall be fastened in place by means acceptable to the Authority, by securing the shroud to the rear facing vertical surface base and the Self Service Kiosk to the shroud, or other means which will ensure that the units will not be subject to moving, shifting, or misalignment.

**B.** Any damage to the floor or the rear facing vertical surface or ticket counter caused by the placement

and/or fastening of the Self Service Kiosk shall be repaired by the airline to a condition acceptable to the airport if the kiosks are removed.

**C.** Utility and communication wiring shall exit at the bottom rear of the Self Service Kiosks and shall be shielded from view.

**D.** Self Service Kiosks installed adjacent to a vertical surface (other than glass) such as a wall or ticket counter shall incorporate a casework shroud (hood) the full width of the Kiosk to shield wiring. At the ticket counters, this shroud shall be built up to the bull-nose of the ticket counter face. The shroud shall be made of number four (No. 4) stainless steel finish and match the ticket counter base height or wall based board height. The width shall equal the width of the Self Service Kiosk. The shroud shall cover power and telecom utilities exiting the Self Service Kiosks. Shrouds shall be secured in place.

**E.** The airline shall propose a method of shielding for consideration by the Authority for installations in other areas where the Kiosks are not placed against a vertical surface.

queuing plans, and color photographs of the Self Service Kiosks for Airport review and issuance of a Construction Permit.

**D.** Self Service Kiosks shall be accessible to all passengers including the disabled. The airline shall certify with its request to install Self Service Kiosks that the Kiosks meet all applicable ADA standards.

**E.** The submission shall include six sets of drawings and specifications covering the installation of the Self Service Kiosks. Such drawings and specifications shall be signed and sealed by a Virginia licensed architect or engineer, accompanied by a completed Airport Construction Permit Application, Authority Form ED-01 (1/02) and copies of the Virginia licenses for the General Contractor, and the Electrical, Mechanical, Plumbing, and Fire Suppression Subcontractors, as applicable.

#### **2.4.8.6 Submittal Requirements:**

**A.** Airlines shall make a written request to the Airport Manager for approval to install Self Service Kiosks prior to any installation.

**B.** The airline shall accompany with the written request its methodology or rationale for the number of Self Service Kiosks requested as related to the airline's market at the Airport and, for installations at the ticket counter, as related to the existing number of leased ticket positions.

**C.** The request shall also include drawings, specifications, details, material samples, colors,

## CHAPTER 3 Retail Shell Spaces

**Chapter 3** provides a general overview of the Authority Commercial Programs. The following Chapter pertains to the Retail component of the Commercial Program. Retail areas fall into four categories:

1. Kiosks at the South Concourse
2. Enclosed areas at the Ground Level
3. Enclosed areas at the mobile lounge hold rooms, Mezzanine Level
4. South Finger

### 3.1 South Concourse

**3.1.1 Walls:** In the retail kiosk area, the interior walls are metal stud construction with gypsum board. Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority. Kiosk retail spaces are shown in **Exhibits III-3-1 and III-3-2**.

**3.1.2 Storefronts:** Teak screens in both sliding and stationary applications were part of the original Saarinen Design for the concession spaces in the Kiosks at the Main Concourse. New teak screens were installed as part of the Main Terminal extensions project in Kiosks 1 and 4. The design of these teak screens followed the original Saarinen design. Retail tenants at the South Concourse Level are required to incorporate Teak screens into their layouts for individual concession spaces within the ticketing kiosks. Original teak screens are available for tenant adaptation or the guidelines **as indicated in Chapter 7 of this Volume** may be used to procure high quality teak screens that are consistent with the standards of workmanship established in the original Saarinen construction. Refer to **Paragraph 3.4.1**, for other provisions.

**3.1.2.1 Layout:** Teak screen units may only occupy concession areas on the south side of the main concourse

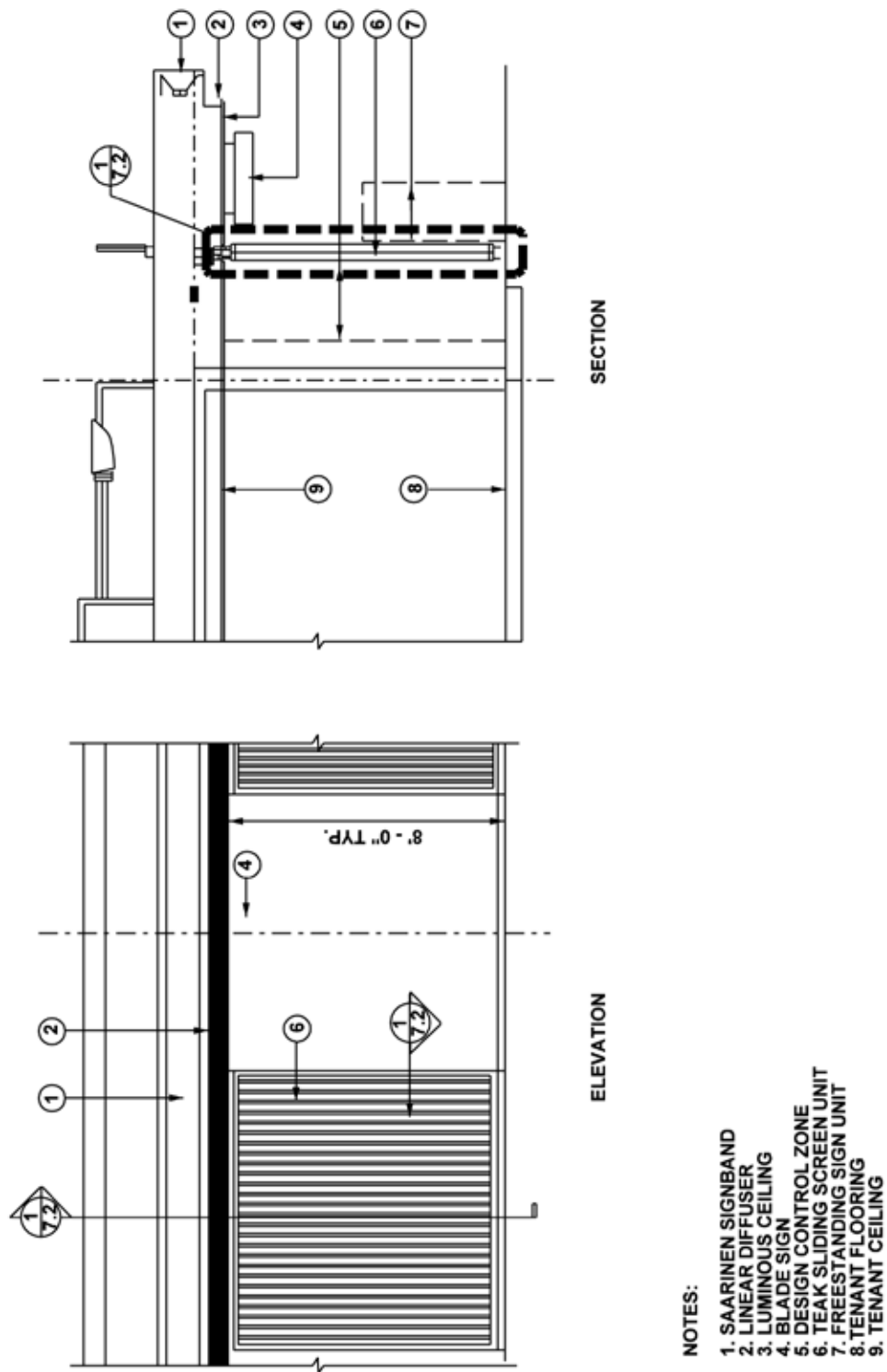
kiosks. Where concession spaces occupy corner spaces, screens will not be permitted to turn the corner. Tenants will be required to submit a dimensioned plan of any installation. A module of 8' – 0" is recommended for all installations both in sliding and structural applications. Under no circumstances should a single unit exceed 10' – 0" in length. It has been shown in the past that modules that exceed 8' – 0" in length are extremely difficult to control in terms of constructability.

**3.1.3 Ceilings:** A one-module band of acoustic tile ceiling matching module dimensions and details of the luminous ceiling will extend into the Design Control Zone. This band will form the transition from luminous ceiling to tenant ceiling finishes. Tenants may choose to continue and match the existing luminous ceiling system into their spaces. Ceiling surfaces in tenant spaces are to be high quality ceiling systems that are compatible with the detailing of base building conditions. All abutting ceiling conditions shall have flush white metal splines that line through the ceiling level. No projecting edge or visible unfinished surfaces will be permitted. Dropped ceiling surfaces will not be permitted. Ceilings in kiosk areas must line through luminous ceiling plane.

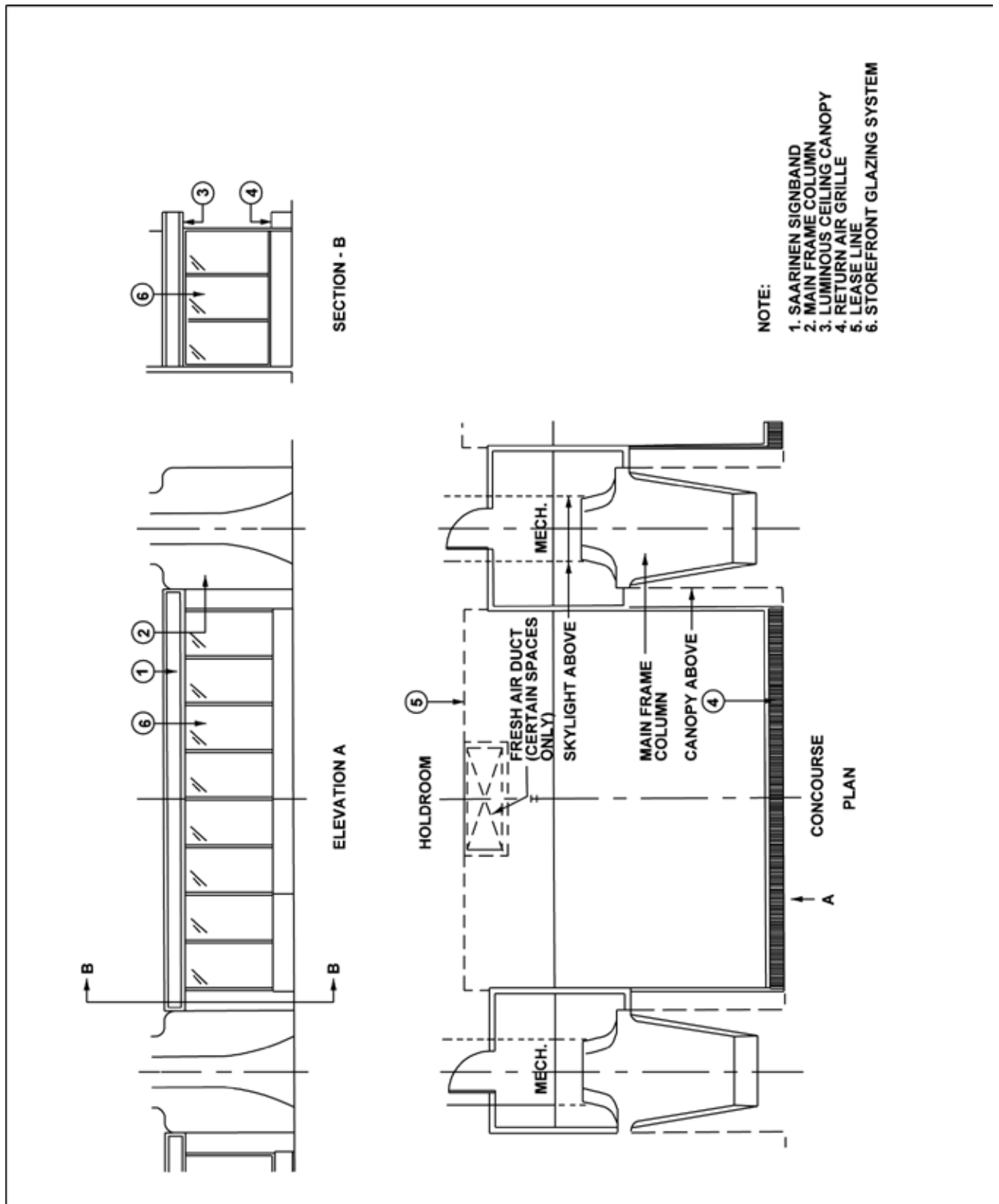
**3.1.4 Flooring:** The flooring at retail spaces throughout the Main Terminal is exposed concrete.

**3.1.5 Telecommunications/Point-of-Sale:** All retail locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be by the tenant via the Premise Distribution System as described in **Chapter 1**.

**3.1.6 Mechanical (HVAC):** Conditioned air supply and return air ducts are provided to each tenant space. The air distribution system will be sized for the estimated total heating and cooling requirement of the tenant space and will be terminated with a capped connection within each tenant space.



Kiosk Retail Part Elevation and Section Exhibit III-3-1



Retail South Concourse Level

Exhibit III-3-2

**3.1.7 Plumbing:** Domestic cold water supply is provided to kiosk areas, and is distributed through mains, risers and branches to fixtures and equipment or to valved/capped connections at the utility shafts, depending on location.

**3.1.7.1** Natural gas stub-ins **are** not provided to any retail tenant lease areas.

**3.1.8 Signing Systems:** The primary base building signage system is the "Saarinen Sign Band" found above canopies at the kiosks and canopies at the South Concourse level. The sign band fascia with integrated luminous lettering forms a continuous datum that is echoed at the building perimeter canopies. At the Sign band above retail areas, generic designation of retail type (such as "Gifts", "Newsstand", etc.) or individual airline or retail names may be displayed, but must be in the standard Saarinen typeface. No individual commercial logos are to be displayed at the fascia level.

**3.1.8.1** For detailed information on the Saarinen typeface, lettering and color standards, tenants should consult "Signing Design Guidelines" in the **IAD Vol. 2**.

**3.1.8.2 Signage Systems - Blade Signs:** The Authority has developed a blade signage system in addition to the Saarinen Sign Band. Blade signs are affixed to the underside of the luminous ceiling soffits and other ceiling conditions immediately adjacent tenant spaces. The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line. Sign dimensions are 7" x 2" – 11" at Concourse Level locations and 9" x 18" on the Ground Level locations. 9" x 9" C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format. Signs are to be aligned as close as possible to centerline of entry to tenant space. If space is enclosed by glazing system, no decals, graphics or other signage will be permitted on interior or exterior glazing surfaces.

**A.** Placement of these signs will be absolutely uniform with respect to dimension offsets from primary wall surfaces where signs appear together or in series.

**B.** A stainless steel cable hanging system is exclusively employed for hanging of blade signs.

**C.** Blade sign cables will be perfectly plumb and perpendicular to ceiling surfaces.

**D.** No blade signs of the hanging type will be permitted to abut ceiling surfaces.

**E.** Signs will hang 1" from finished surface of ceiling.

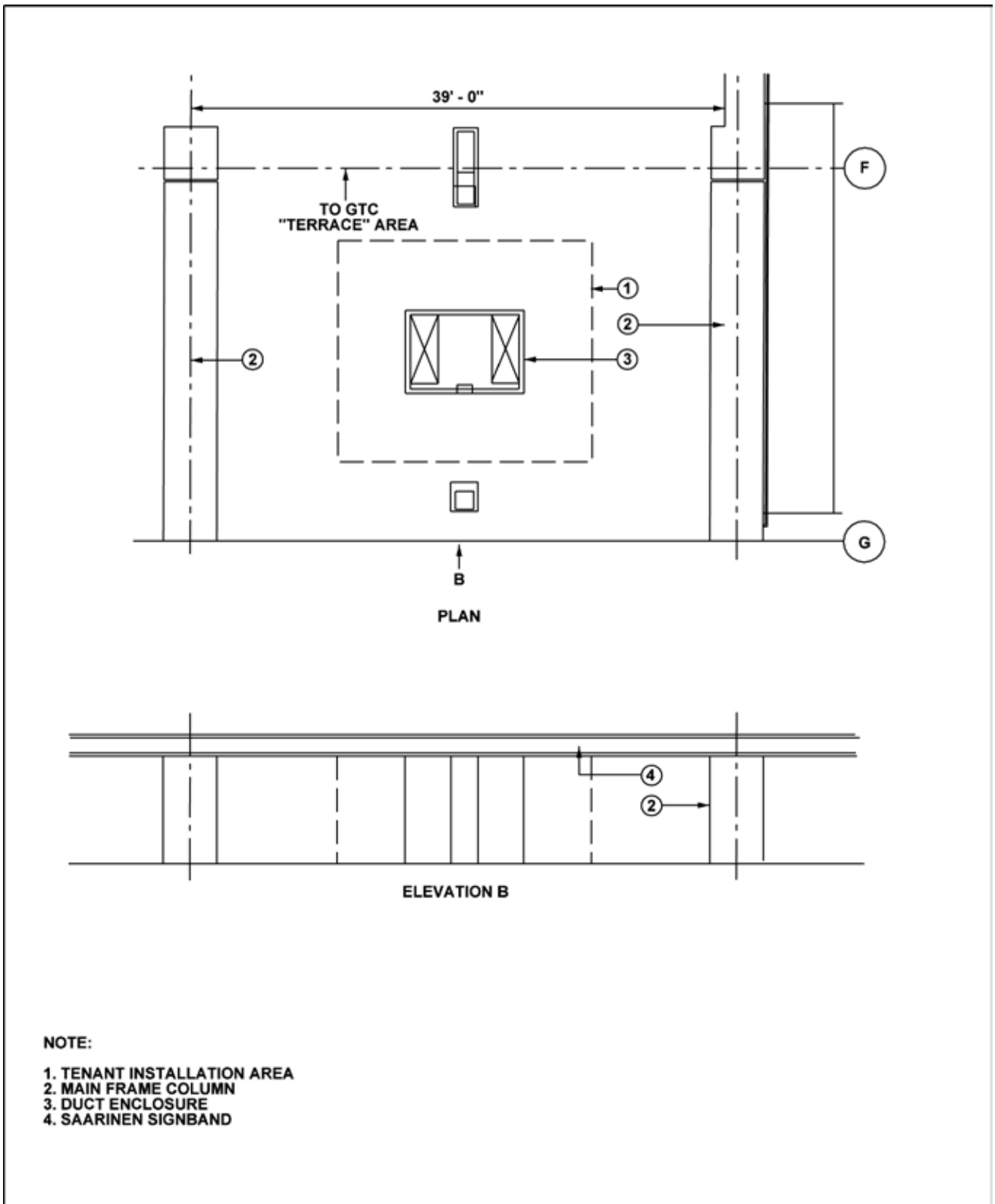
**F.** No alternate method of hanging these signs will be permitted.

**G.** The Authority will review and approve the placement of these signs.

## 3.2 Ground Level

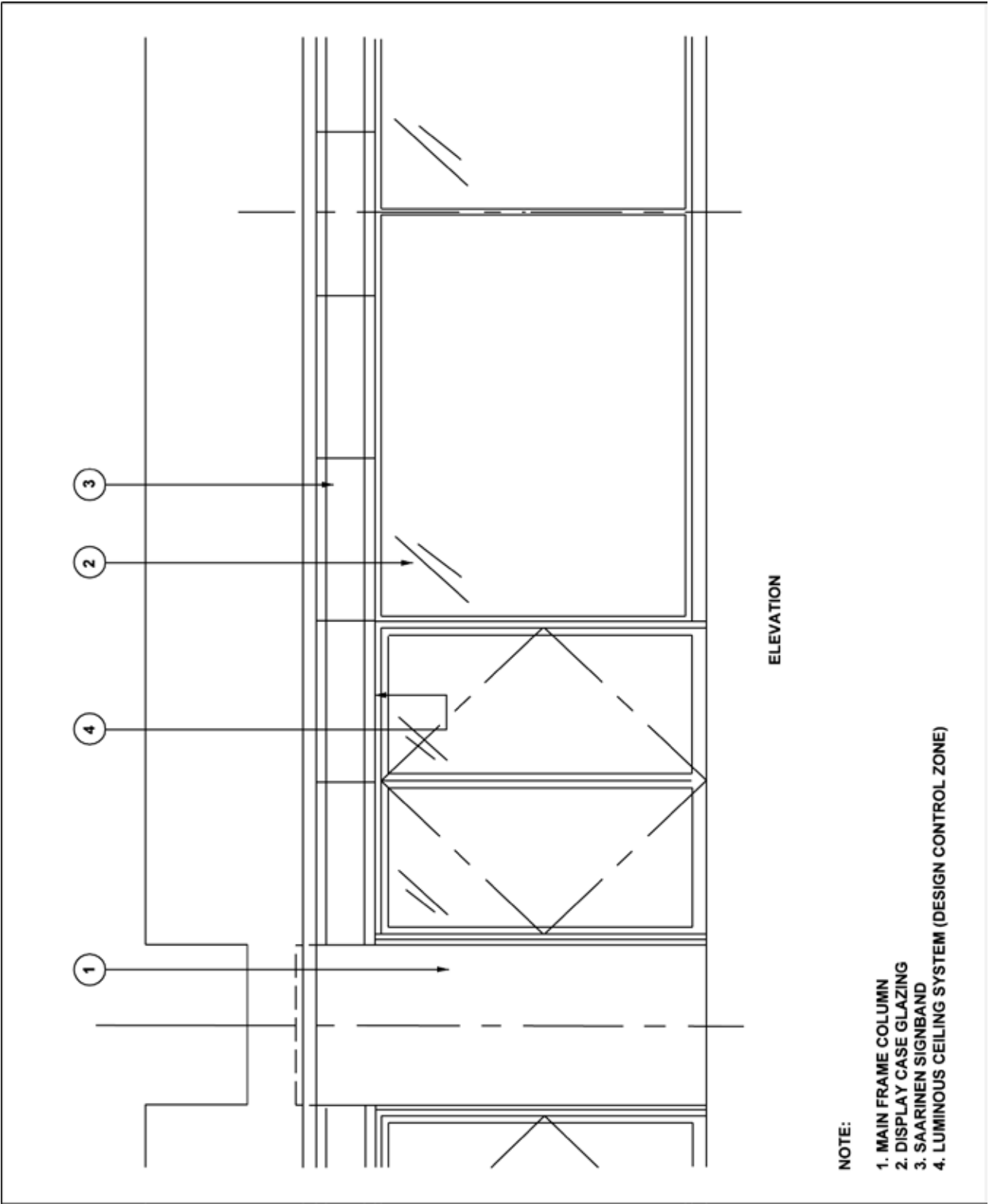
**3.2.1 Walls:** Retail shell spaces at the ground level are shown in **Exhibits III-3-3 and III-3-4**. The north wall series of spaces and display cases are standard Dulles Storefronts with aluminum mullions in Dulles Gray framing large-scale glass panels. The display cases, which have solid rear walls, form a linear zone that is marked by open eggcrate lighting above. Doorways are inset with respect to the front plane of the display cases, and have the same eggcrate ceiling on the concourse side. In these areas along **Column Line G**, in cases where spaces are to be used for retail activity, two options will apply to the modification of the storefronts:

**3.2.2 Storefront, Option 1:** The rear wall of the display case may be removed, but the eggcrate lighting, inset doorway and glass and mullion storefront must be maintained.



Retail Ground Level

Exhibit III-3-3



Column Line G Elevation Ground Level Exhibit III-3-4

**3.2.3 Storefront, Option 2:** In option 2, the storefront may be removed entirely to leave this space completely open. In this case, the eggcrate lighting zone must be maintained. In the case where the storefront will be removed in entirety, a roll-up grille is to be used which shall be concealed flush in the ceiling plane to the north of the eggcrate lighting band.

**3.2.4 Storefront Removal:** If the storefronts are to be removed, they will be removed in such a way as to absolutely minimize damage to the units themselves and the eggcrate ceiling systems. All exposed edges and surfaces resulting from this removal of the storefront will be properly capped and detailed such that ceiling surfaces are flush, and mainframe column surfaces are preserved in their original condition.

**3.2.5 Ceilings:** Ground level ceiling is 12" x 12" acoustical tile with recessed lighting.

**3.2.6 Flooring:** The existing floor in the Ground Level/Baggage Claim area and the Ground Transportation Center areas are polished aggregate terrazzo in all main public areas. The tenant areas are exposed concrete. The bag service offices and other offices on the south side along column line K are exposed concrete.

**3.2.7 Telecommunications/Point of Sale:** All retail locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be by the tenant via the Premise Distribution System as described in **Chapter 1**.

**3.2.8 Mechanical (HVAC):** As referenced in **Chapter 1**, conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional configuration of supply air ducting to service individual partitioned spaces within the tenants overall lease area.

**3.2.9 Plumbing:** Domestic cold water supply is provided to ground level retail areas, and is distributed through mains, risers and branches to fixtures and equipment or to

valved/capped connections at the utility shafts, depending on location.

**3.2.10 Signage Systems:** Refer to **Chapter 3**.

### **3.3 Mobile Lounge Hold Rooms, Mezzanine Level**

**3.3.1 Walls:** Refer to **Chapter 1**.

**3.3.2 Storefronts:** Retail spaces with concourse display capability are located between the main frame columns on the south side. Due to the extensive construction phasing for the Terminal APM Station area, very limited retail areas will be available to tenants during this period. The glazing system has been designed to accept Alucobond metal panels in lieu of glazing units.

**3.3.2.1 Metal Panels:** Metal panels may be substituted for glass panels in a symmetrical pattern only about the centerline of the space.

**3.3.2.2 Solid Panel In-Fill:** No more than 50 % of the total may be solid panel in-fill; a minimum of 50 % of the panels facing the Terminal Concourse shall be glazed.

**3.3.3 Ceilings:** Ceiling surfaces in tenant spaces are to be high quality ceiling systems that are compatible with the detailing of base building conditions.

**3.3.4 Flooring:** Refer to **Chapter 3**.

**3.3.5 Telecommunications/Point of Sale:** All retail locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be by the tenant via the Premise Distribution System as described in **Chapter 1**.

**3.3.6 Mechanical (HVAC):** As referenced in **Chapter 1**, conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional

configuration of supply air ducting to service individual partitioned spaces within the tenants overall lease area.

**3.3.7 Plumbing:** Domestic cold water supply is provided to retail spaces at the mezzanine level, and is distributed through mains, risers and branches to fixtures and equipment or to valved/capped connections at the utility shafts, depending on location.

**3.3.8 Signing Systems:** Refer to **Paragraphs 3.1.8 and 3.1.8.2.**

### 3.4 Retail Storefronts

**3.4.1 Exceptions and Additions:** Within the concourse areas, a Commercial Identity Program (C.I.P.) has been established to further promote the marketing presence for airport goods and services. Commercial participants in the program will be identified by a special logo, with a theme name and color. The logo will appear on blade signs adjacent to commercial spaces and in concourse commercial directories for airport services.

**3.4.1.1 Kiosk:** Kiosks at the main concourse level have sliding teak screen panels as described above, refer to **Exhibits III-3-1, III-3-2 and III-3-3.** The luminous ceiling systems and Saarinen sign band run continuously above the retail kiosks. Within the Design Control Zone, which extends into the space from the lease line, the following finish standards shall apply:

**3.4.1.2 Modifications:** No modifications to the teak screens will be permitted without Authority approval. Tenants are responsible for positioning their displays without damaging the teak screens.

**3.4.1.3 Teak Screen Panels:** Teak screen panels must be fully lockable. The Authority will provide a master-keyed BEST lock core for the compatible locking hardware of the teak screen panels.

**3.4.1.4 Elevation/Section:** No variation will be permitted to the height, head or sill condition of the screens as set

forth in this appendix. The luminous ceiling forms a uniform height limit for all of the teak units.

**3.4.1.5 Operation of Screens:** Tenants may propose moving/stationary partition relationships in any combination provided that the use of such units in no way interferes with the operation of an adjacent concession space, and does not violate established lease line boundaries when in an open position.

**3.4.1.6 Layout:** Teak screen units may only occupy concession areas on the south side of the main concourse kiosks. Where concession spaces occupy corner spaces, screens will not be permitted to turn the corner. Tenants will be required to submit a dimensioned plan of any installation. A module of 8' – 0" is recommended for all installations both in sliding and structural applications. Under no circumstances should a single unit exceed 10' – 0" in length. It has been shown in the past that modules that exceed 8' – 0" in length are extremely difficult to control in terms of constructability.

### 3.5 Retail Kiosks

**3.5.1 Flooring:** At the kiosk threshold, extending into the space from the terrazzo edge, an 18" band of material will form a consistent transition from terrazzo to tenant selected interior finishes. This material is currently being studied by the Authority.

**3.5.2 Signing:** The Authority will provide a blade sign for each kiosk area as described in **Chapter 3.**

**3.5.3 Casework:** The Authority provides casework at retail kiosk locations. The point-of-sale casework units are designed to be accessible on the customer side to comply with the Americans with Disabilities Act. Authority provided casework consists of the following elements as described below.

**3.5.3.1** Floor mounted display/storage units (lockable) with interior display lighting and one adjustable glass shelf.

**3.5.3.2** Floor mounted point-of-sale (POS) units (lockable).

**3.5.3.3** Reduced depth, floor mounted display/storage units (lockable) with interior display lighting and one adjustable glass shelf.

**3.5.3.4** Filler panels.

**3.5.3.5** Filler panels with light stanchion.

**3.5.3.6** Wall display/storage units (lockable), vertically divided with integral signband and four adjustable glass shelves each side.

**3.5.3.7** Additional shelves and shelf supports, if required by the tenant, shall be provided by the tenant to meet the existing standard:

**3.5.3.8** A retail kiosk may be configured in the options described below:

- A.** For one retail tenant, kiosk casework will consist of a maximum of eight floor units, light stanchions.
- B.** For two tenants, a demising panel will be provided. Each tenant kiosk casework will consist of three floor units, one wall unit, filler panels, and two light stanchions. **A minimum of one floor unit shall be a point-of-sale unit, and one shall be a reduced depth unit.** The center wall unit is divided vertically internally so that it may be shared. Separate locking mechanisms will be provided.

**3.5.4 Lighting:** General lighting for interior of tenant spaces shall be recessed type. Recessed fixtures shall be located and installed in coordination with the existing ceiling finish module and design.

**3.5.5 Metering:** Retail kiosks are not separately metered.

## 3.6 Retail Support Spaces

**3.6.1 Loading Dock:** Loading docks have access to secure service elevators and stairs that provide transition to secure service circulation corridors.

**3.6.2 Other Support Spaces:** Other support spaces may be available. Identification of such areas is currently under development.

## 3.7 Vacated Spaces

**3.7.1 Main Terminal:** All tenants will ensure that all base building conditions, including servicing elements, materials, finishes and equipment are handed over undamaged. Finish surfaces in particular, including terrazzo floors, luminous ceiling areas, teak screens and metal panel wall systems should be maintained and returned in good working condition, ready-for-use by subsequent tenants. In retail kiosks, the following conditions will be required:

**3.7.1.1 Removal:** Removal of all display units, lighting, ceiling systems, flooring materials and wall treatments.

**3.7.1.2 Capping:** All service hookups shall be capped as found.

**3.7.1.3 Cleaning:** Tenant shall clean and remove all grease traps.

### 3.7.1.4 Ground Transportation Center Retail Areas:

- A.** Remove all installations and restore all building surfaces.
- B.** Repair terrazzo.
- C.** Repair metal panels of shaft enclosure.
- D.** Marks, wear edges in floors or ceilings shall be eliminated.

**3.7.1.5 Vacating Premises:**

- A.** The tenant shall review and confirm the above conditions with the Authority before vacating premises.

**3.7.2 Concourse Z:** Required Procedures. When vacating commercial lease areas, the tenant shall strictly comply with the following procedures:

**3.7.2.1** Remove the tenant-provided sign from the overhead sign-band, allowing the existing sign support brackets to remain.

**3.7.2.2** Construct a temporary steel stud and gypsum board partition directly in front of the tenant-supplied storefront. The partition shall extend from floor to the existing signband at 8" - 3" above the floor and for the full width of the storefront. The public corridor side of the partition shall be taped, spackled smooth and painted. The temporary partition shall be independently supported without penetration or attachment to the public corridor floor, wall, or soffit finishes.

**3.7.2.3** In lease area with open façades and overhead grilles, the tenant shall locate the temporary partition clear of the overhead grille. The tenant shall lower and lock the grilles and return the keys to the Authority.

**3.7.2.4** Provide a single 3' - 0" wide by 7' - 0" high flush steel door and frame, flush with the face of the temporary partition and swinging inward toward the leasehold, not outward to the concourse. The door shall have brushed chrome hardware: three hinges and a lockset with a key lock with "Best Lock" core. Padlock and chain enclosures are not permitted. The door is located adjacent to a building column line whenever possible.

**3.7.2.5** Thoroughly clean the premises.

**3.7.2.6** Remove all grease traps from the premises and cap all cut plumbing lines.

**3.7.2.7 Exceptions:** In certain locations and under certain circumstances, by prior review and approval of the Authority, Tenants may be permitted to add or substitute the following for the general requirements listed above:

**A.** Apply a white, opaque, vinyl film to the inside surface of all glazed panels in lieu of constructing a temporary metal stud partition.

**B.** Apply advertising or directional signs to the temporary partition constructed to enclose a vacated lease area. Any direct applications of advertising or signs to such partitions shall comply with the Signs and Graphics requirements.

## CHAPTER 4 Food-And-Beverage Shell Spaces

**Chapter 4** provides a general overview of the Authority Commercial Programs. The following sub-sections pertain to the food-and-beverage component of the Commercial Program. Food-and-beverage areas fall into these categories:

1. Enclosed areas at South Concourse
2. Enclosed areas at Ground Level/Ground Transportation Center
3. Enclosed areas at the mobile lounge hold rooms, Mezzanine Level
4. Enclosed areas at South Finger
5. Enclosed areas at Concourse Z
6. Food-and-Beverage Support Spaces

### 4.1 South Concourse

**4.1.1 Walls:** In the food-and-beverage kiosk area, the interior walls are metal stud construction with gypsum board. All finishes are to be reviewed and approved by the Authority. Location plans for food and beverage shell spaces are under development. Refer to kiosk plan and elevations as shown in **Chapter 2, Exhibits III-2-1 and III-2-2.**

**4.1.2 Storefronts:** Teak screens in both sliding and stationary applications were part of the original Saarinen Design for the concession spaces in the Kiosks at the South Concourse. New teak screens were installed as part of the Main Terminal extensions project in Kiosks' 1 and 4. The design of these teak screens followed the original Saarinen design. Food and beverage tenants at the South Concourse Level are required to incorporate Teak screens into their layouts for individual concession spaces within the ticketing kiosks. Original teak screens are available for tenant adaptation or the guidelines as indicated in Chapter

**7 of this Volume** may be used to procure high quality teak screens that are consistent with the standards of workmanship established in the original Saarinen construction. Refer to **Paragraph 4.4.1.1**, for other provisions.

**4.1.3 Ceilings:** A one-module band of acoustic tile ceiling matching module dimensions and details of the luminous ceiling will extend into the Design Control Zone. This band will form the transition from luminous ceiling to tenant ceiling finishes. Tenants may choose to continue and match the existing luminous ceiling system into their spaces. Ceiling surfaces in tenant spaces are to be high quality ceiling systems that are compatible with the detailing of base building conditions. All abutting ceiling conditions shall have flush white metal splines that line through the ceiling level. No projecting edge or visible unfinished surfaces will be permitted. Dropped ceiling surfaces will not be permitted. Ceilings in kiosk areas must line through luminous ceiling plane.

**4.1.4 Flooring:** The flooring at food-and-beverage spaces throughout the Main Terminal is exposed concrete.

**4.1.5 Telecommunications/Point-of-Sale:** All food-and-beverage locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be via the Premise Distribution System described in **Chapter 1.**

**4.1.6 Electrical/Lighting:** In addition to provisions in **Chapter 1**, the following will apply: Kitchen areas have been designed to support electrical loads of approximately 50 watts/square foot based on approximately 25% of the total lease space being dedicated to food preparation. Electrical provisions will not support installation of kitchen equipment that is fully electric. Kitchen equipment shall be installed by the tenant and the tenant shall be responsible for determining actual capacity of electrical supply as related to kitchen equipment.

**4.1.7 Mechanical (HVAC):** Conditioned air supply and return air ducts are provided to each tenant space. The air distribution system is sized for the estimated total heating and cooling requirement of the tenant space and is terminated with a capped connection within each tenant space.

**4.1.7.1 Water Distribution:** In addition, chilled water and hot water distribution piping systems is provided in each tenant space for supplemental air tempering and is terminated with a valved and capped connection to serve future air handling units that may be provided by the tenant. Chilled and hot water piping will be designed for 10% of the aforementioned total requirement. Tenants located in lease spaces contiguous with the perimeter wall are provided with additional hot water for perimeter heating.

**4.1.7.2 Exhaust:** Unless otherwise noted, provisions for kitchen hood exhaust ducts are provided in each food-and-beverage tenant space for connection of tenant-supplied hoods and exhaust fans. Design and configuration of all tenant provided exhaust systems shall be coordinated with the Authority and shall comply with **Chapter 5**.

**4.1.8 Plumbing:** Domestic hot water or cold water is provided to food-and-beverage lease spaces. Refer to **Chapter 1** for specifics.

**4.1.9 Signing/Graphics:** The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line. Sign dimensions are 7" x 2' – 11" at Concourse Level locations and 9" x 18" on the Ground Level locations. 9" x 9" C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format. Signs are to be aligned as close as possible to centerline of entry to tenant space. If space is enclosed by glazing system, no decals, graphics or other signage will be permitted on interior or exterior glazing surfaces.

## 4.2 Ground Level/Ground Transportation Center

**4.2.1 Walls:** Meeter/Greeter Spaces, Column Lines 018, 021, 023, 18, 21, and 23: Food service establishments may be located at Ground Level to serve the Ground Transportation Center meeter greeter spaces. Refer to **Exhibit III-4-1**. No storefront wall enclosures are in place at these locations. The Authority anticipates that these locations will be available at each meeter greeter space at the designated column lines. Each retail area will be centered on metal panel shaft enclosures at these locations. For these spaces, the following guidelines will apply:

**4.2.1.1 Dimensional Restrictions:** The Authority will designate dimensional restrictions for the plan foot print of each space.

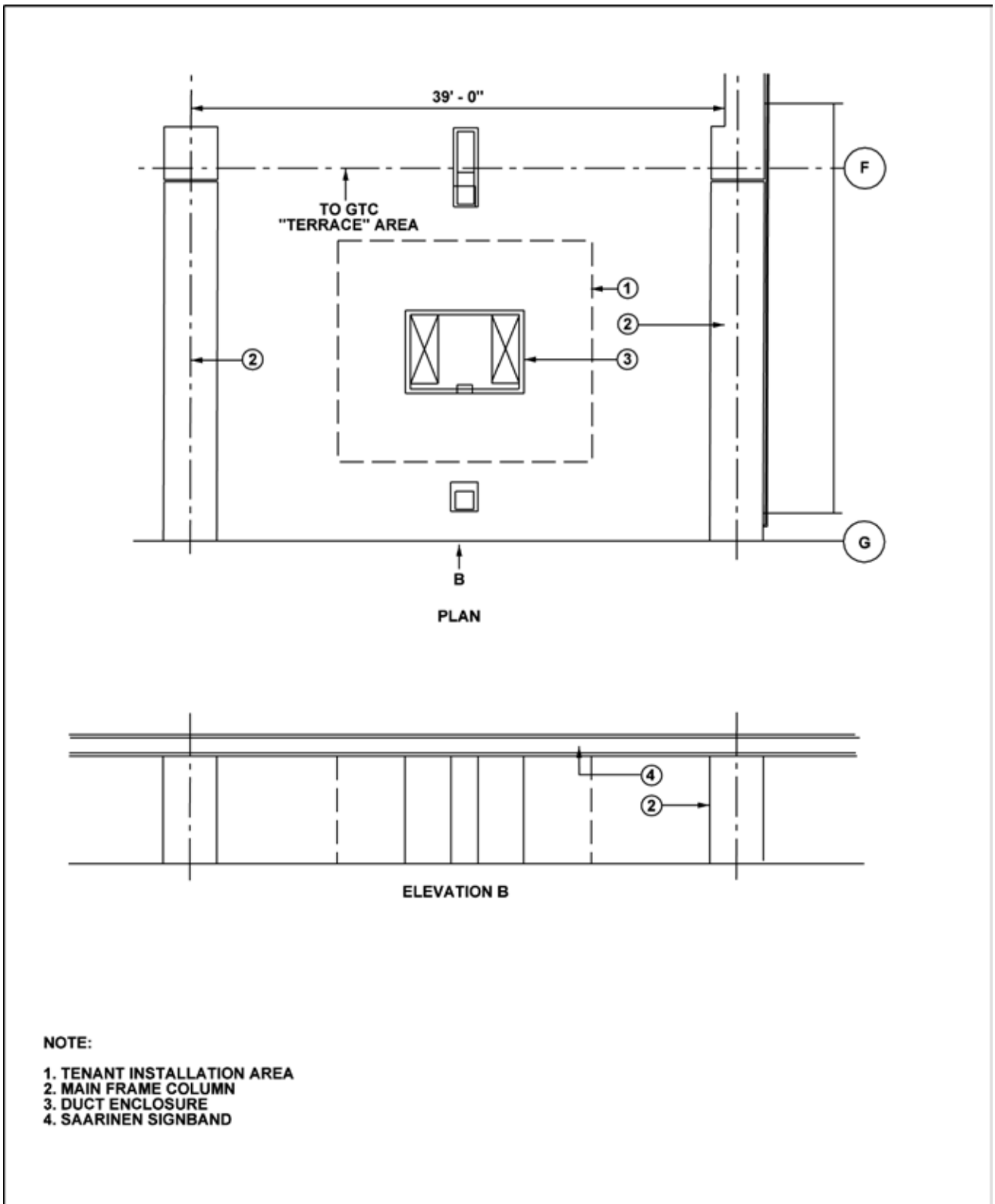
**4.2.1.2 South Face:** Walls, countertops or soffits on the south face of the space will align with the wall plane established at Column Line G. No elements will be permitted to project into the primary circulation space.

**4.2.2 Storefronts:** Storefronts are not allowed for food and beverage spaces.

**4.2.3 Ceilings:** Ground level ceiling is 12" x 12" acoustical tile with recessed lighting.

**4.2.4 Flooring:** The existing floor in the Ground Level/Baggage Claim area and the Ground Transportation Center areas are polished aggregate terrazzo in all main public areas. The tenant areas are exposed concrete. The bag service offices and other offices on the south side along column line K are exposed concrete

**4.2.5 Telecommunications/Point of Sale:** All retail locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be by the tenant via the Premise Distribution System as described in **Chapter 1**.



Food and Beverage Ground Level Exhibit III-4-1

**4.2.6 Mechanical (HVAC):** As referenced in **Chapter 1**, conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional configuration of supply air ducting to service individual partitioned spaces within the tenants overall lease area.

**4.2.7 Plumbing:** Domestic cold water supply is provided to ground level retain areas, and is distributed through mains, risers and branches to fixtures and equipment or to valved/capped connections at the utility shafts, depending on location.

**4.2.8 Signage Systems:** Refer to **Chapter 1, Paragraph 1.7.15.**

### 4.3 Concourse Z

**4.3.1 General:** Certain leasehold demising partitions are provided by the Authority as part of the base building construction. The Authority will install tenant separation partitions between unimproved adjacent tenants.

**4.3.2 Walls, Basement Level:** In the basements, demising partitions consist of nominal 8" masonry units extended to the underside of the concrete slab above; the demising partitions are constructed to comply with a UL design for a fire-separation rating of one-hour. Refer to **Exhibit III-4-2** for concession support space.

**4.3.2.1 Walls, Apron Level:** On the apron level, demising partitions are composed of 3 5/8" steel studs. Demising partitions between tenant spaces are scheduled to comply with a UL design for a fire-separation rating of one-hour; however, gypsum board finishes are not installed by the Authority on the tenant side of demising partitions. Metal studs will be left exposed on the tenant side of the demising partitions to facilitate installation of tenant utility distribution infrastructure. Refer to **Exhibit III-4-3** for concession space. Locations of apron level demising partitions are determined by the following general criteria:

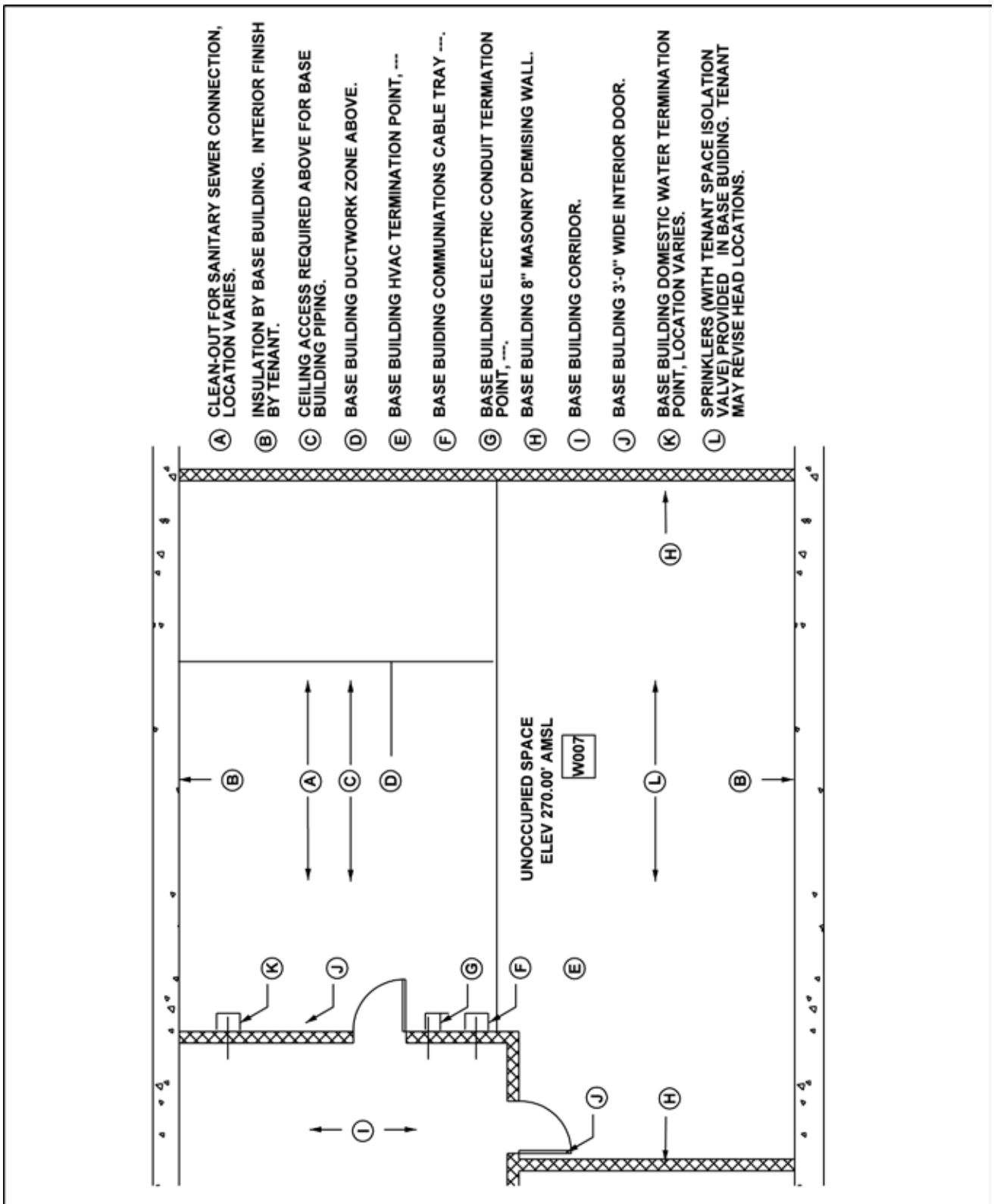
**A.** Demising partitions terminate on a building plan module when ever possible. The building plan modules are located 6' - 8" apart in an east/west direction.

**B.** A 6" setback from the edge of the public corridor has been established by the Authority for a storefront offset. Other dimensional setbacks may be established as mutually agreed upon between adjacent Tenants and the Authority.

**C.** Tenant Construction at Apron Level Demising Partitions: Tenants are responsible for the application of gypsum board and/or other finish materials onto the tenant side of the exposed steel stud partitions to ensure compliance with a UL one-hour design rating. Partition surfaces shall be sealed where they meet the finished floor and structure or ceiling surfaces. For sound control, tenants shall install blanket insulation in all interior demising partitions enclosing the tenant lease area, from the finished floor to a point 8 inches above the tenant ceiling.

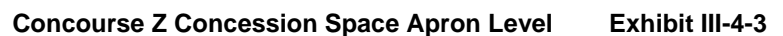
**4.3.3 Storefronts:** For the purpose of using this document, "storefront" is defined as the area measuring the width of the tenant's frontage on the apron level public corridor between demising partitions, from the floor to the building structure above, which provides the separation between the Tenant's lease space and the public corridor. The width of each storefront is based on a 6' - 8" module, which is derived from the building structural grid of 33' - 4", measured east to west. The Authority has provided permanent ceramic steel panels, stainless steel base and corner guards on the public corridor side of each storefront. Refer to **Exhibits III-4-4, III-4-5, and III-4-6** for provisions at apron level storefronts.

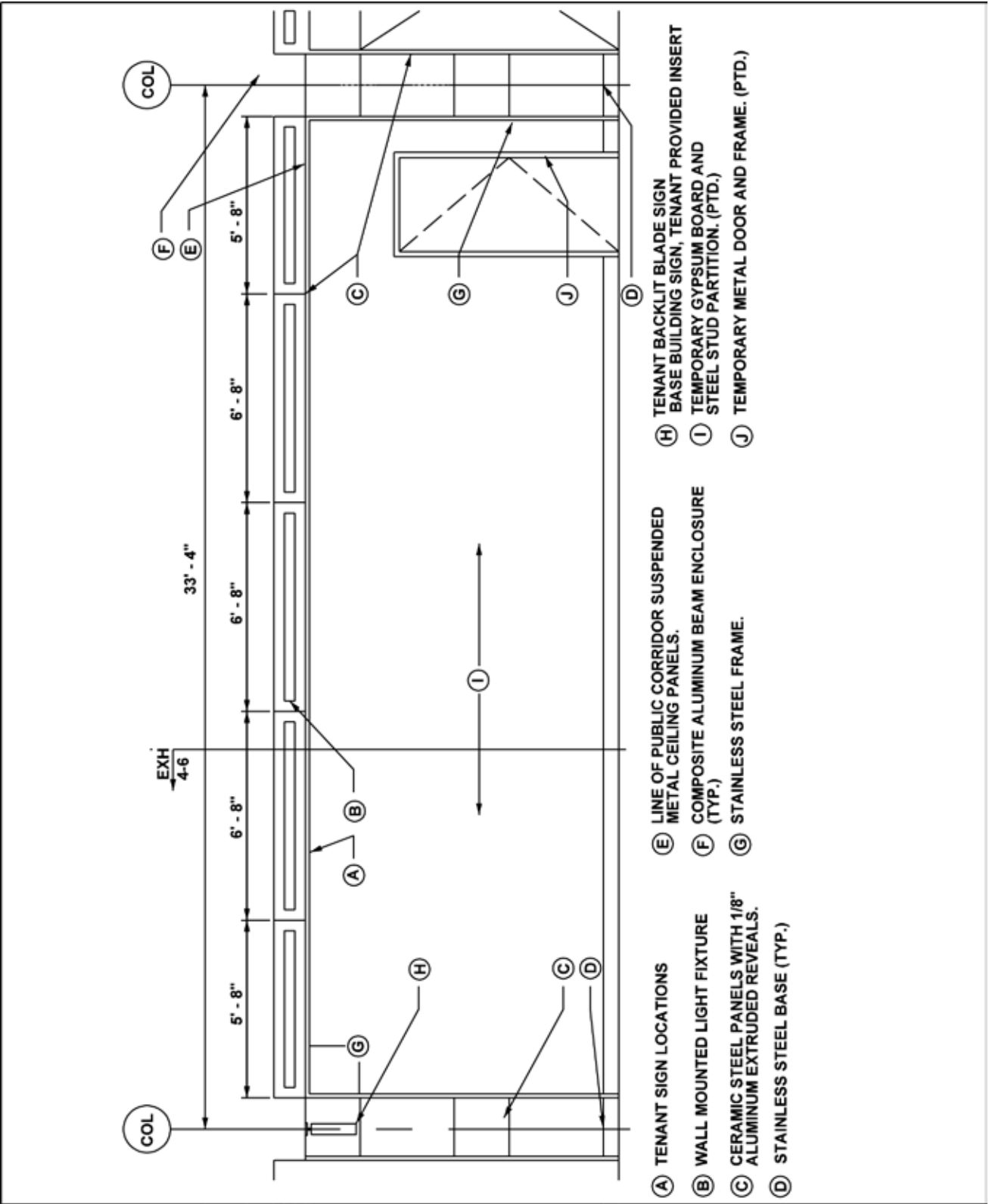
**4.3.3.1 Temporary Partition:** A temporary partition of 5/8" gypsum board (single-sided) on steel studs, with a temporary standard steel access / egress door, has been constructed to cover the center section of each storefront.



Concourse Z Concession Support Space Basement Level

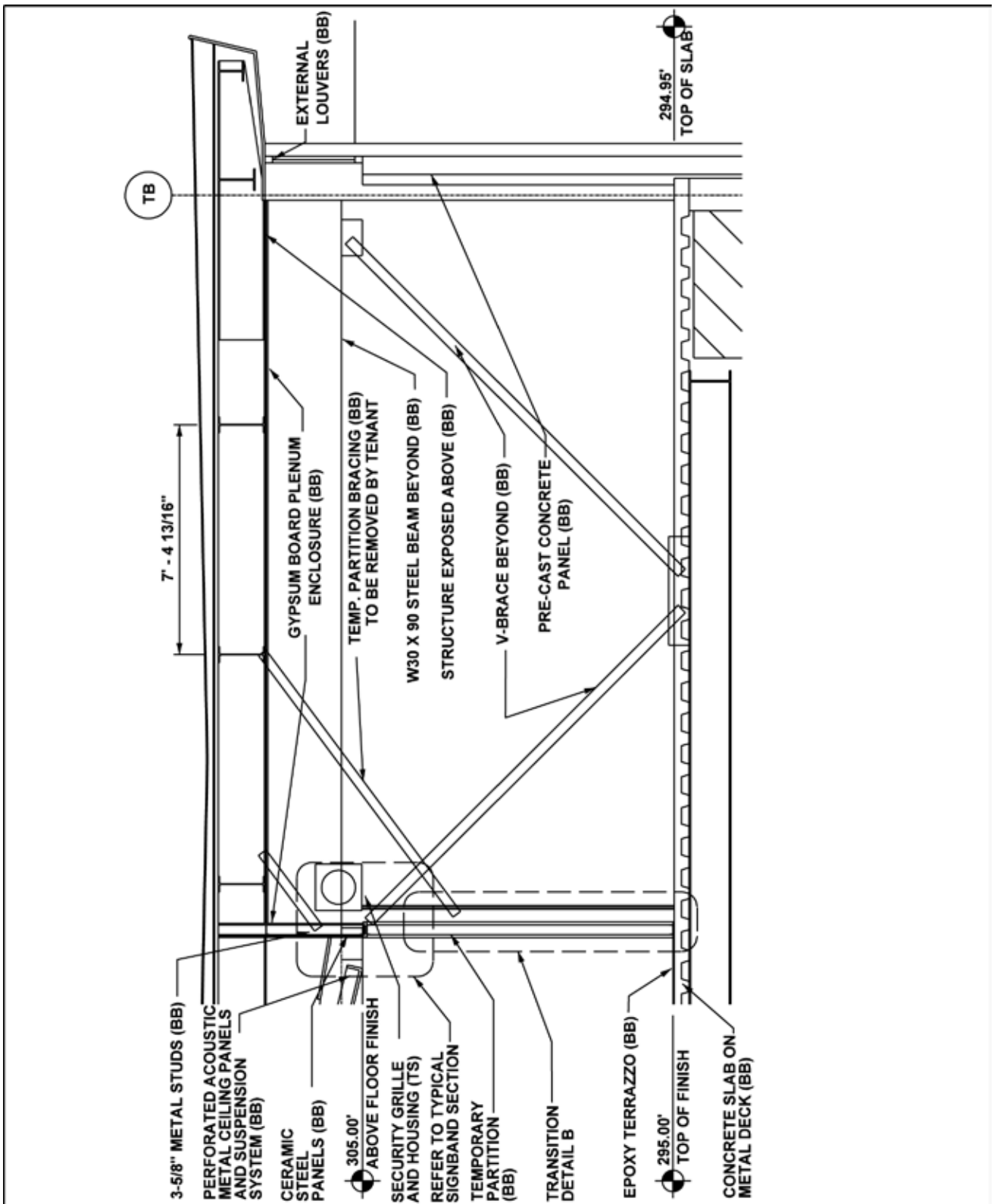
Exhibit III-4-2





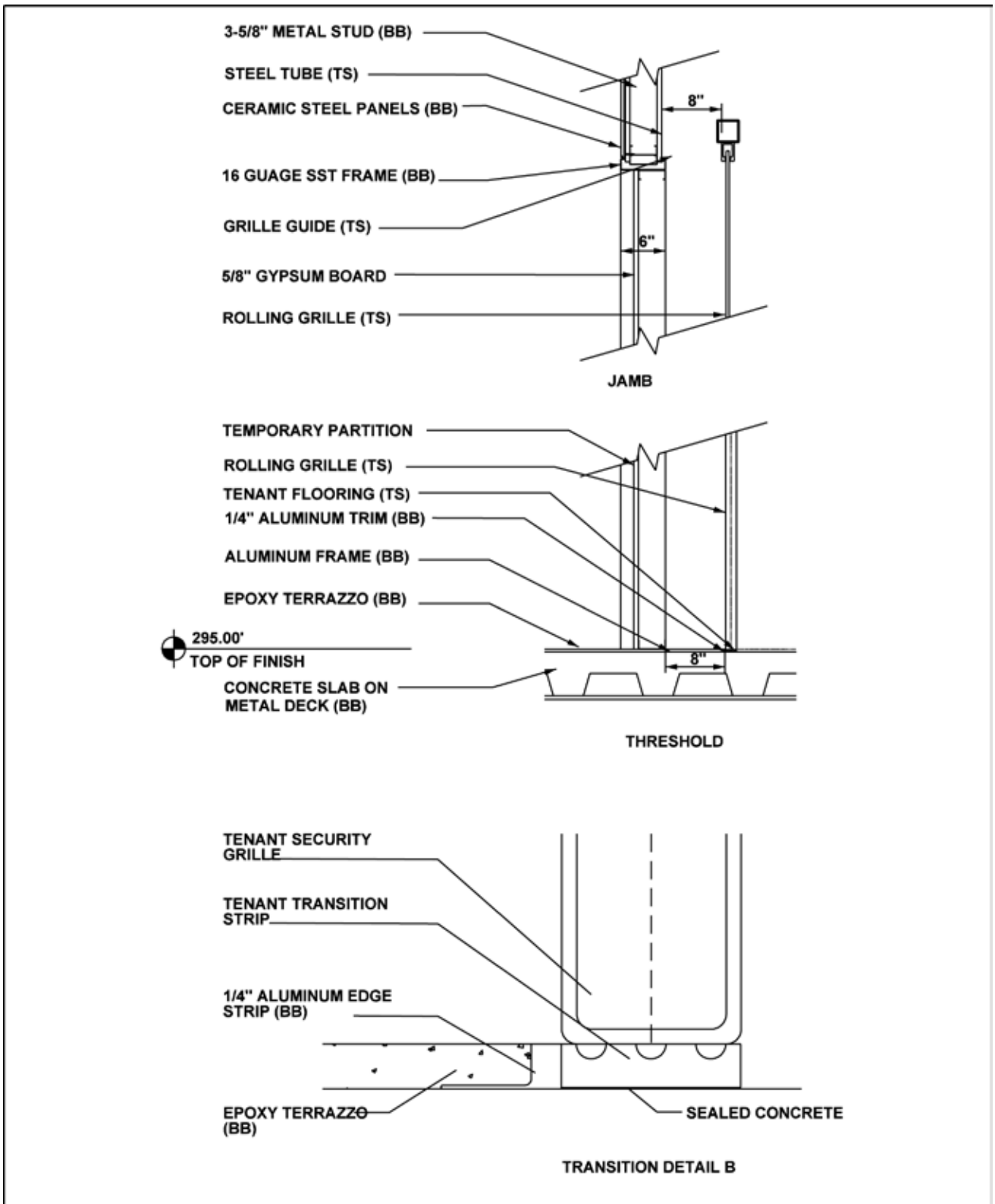
Concourse Z Storefront Elevation

Exhibit III-4-4



Concourse Z Concession Space Section

Exhibit III-4-5



Concourse Z Storefront Wall Section

Exhibit III-4-6

The tenant is responsible for removing the temporary partition and installing permanent storefront materials. The temporary door, frame and hardware shall be returned to the Authority, the gypsum board and stud partition shall be disposed of by the tenant.

**4.3.3.2 Tenant Storefront Construction:** The design and construction of the infill storefront, including all visible details, is the tenant's responsibility, and is subject to review and approval by the Authority. The tenant is also responsible for completing the finishes on the tenant side of the existing permanent storefront. All tenants must comply with the following minimum requirements for the design and construction of storefronts:

- A.** A minimum of 80% of the tenant-furnished storefront must remain open or be constructed of transparent materials, such as glass.
- B.** Reducing the existing portal size to the tenant lease area is not permitted. With the exception of the temporary partition, all base building finishes shall remain.

**4.3.3.3 Overhead Security Grilles:** If the tenant elects to have a totally open storefront, then the Tenant shall procure and install a manually- or electrically- operated overhead coiling grill to secure the premises. The overhead coiling grille shall be concealed behind the 1'- 9" sign band when in a fully open position. The operating mechanism shall be fully screened from the public view.

**4.3.3.4 Side-Stacking Glass Panels:** If the tenant elects to install side-stacking glass panels, the tenant shall confirm the location of any HVAC diffuser or grille that occurs as part of the base building construction. Tenant construction shall not compromise the public corridor air supply and return system. The proposed installation of any storefront element adjacent to a base building HVAC diffuser or grille must be approved by the Authority.

**4.3.4 Ceilings:** Ceilings installed by apron level commercial tenants may vary but shall be a minimum of

8' - 3" above the finished floor. The tenant ceiling at the entry portal shall be set at 8' - 3" above the floor to match the bottom of the existing sign-band fascia.

**4.3.5 Flooring:** On the apron level, tenants shall provide a transitional floor adjacent to the existing flooring in the public corridor to ensure a smooth transition from the corridor terrazzo to overall tenant floor surface. Tenants shall make provisions to align the top of the floor transition with the existing ¼" metal strip set at the edge of the corridor terrazzo flooring. The tenant-supplied storefront, including security grilles (if provided), shall be centered on the floor transition so that no portion of the tenant-supplied flooring is visible on the public corridor side of the storefront or security grille.

**4.3.6 Telecommunications/Point-of-Sale:** All retail locations are provided with communications conduit for possible connection to the Authority future point-of-sale (POS) system. Connections to the Authority POS system will be by the tenant via the Premise Distribution System as described in **Chapter 1**.

**4.3.7 Electrical/Lighting:** Lighting fixtures installed in areas visible to the public shall be furnished with lamps in with ratings of 3500 degree Kelvin (maximum) and 70 CRI (minimum). Acceptable lighting fixtures for general lighting in areas visible to the public include the following:

**4.3.7.1** Recessed linear fluorescent troffers or wall washers (low brightness or white louvers)

**4.3.7.2** Pendant mounted linear fluorescent troffers (indirect/indirect)

**4.3.7.3** Recessed compact fluorescent downlight or wall wash fixtures with semi-specular low brightness reflectors.

**4.3.7.4** Display Lighting shall be provided for the expressed purpose of highlighting merchandise. The use of energy efficient fluorescent, HID or LED fixtures is encouraged. Low voltage lighting such as MR16 type lamps may also be used. Lighting equipment selected by tenants for display

lighting for merchandise areas is subject to review and approval by the Authority.

**4.3.7.5 Decorative Lighting:** The use of decorative neon accent lighting within tenant displays may be approved by the Authority in limited installations. Design review and approval will be required prior to fabrication and installation.

**4.3.7.6 Adjustable Lighting fixtures** must be positioned, or shall have accessories, to eliminate glare into public areas of the Concourse. Special attention to the use of mirrored surfaces is also being required to prevent reflected light and/or the reflection of exposed lamps.

**4.3.8 Mechanical (HVAC):** Conditioned air supply and return air ducts are provided to each tenant space. The air distribution system will be sized for the estimated total heating and cooling requirement of the tenant space and will be terminated with a capped connection within each tenant space. Refer to **Chapter 1** for specific guidelines.

**4.3.9 Plumbing:** Refer to **Chapter 1** for specific guidelines.

**4.3.10 Signing/Graphics:** The Authority has furnished a sign-band fascia on the public corridor side of apron level lease areas. The top of the fascia is 10' - 0" above the floor and the bottom of the fascia is 8' - 3" above the floor. The sign-band has been furnished as a substrate for the installation of tenant-provided signs, and is finished on the public corridor side with ceramic steel panels. The ceramic steel panel joints are located in alignment with the 6' - 8" building module. Exposed mounting pins have been provided along the face of the fascia for the attachment of the tenant sign(s); no other attachment devices are permitted. Signs that conflict with the existing suspended metal panel ceiling will not be permitted. Accent lighting has been provided by the Authority to "front-light" the fascia and tenant-provided signs; no internally illuminated signs are permitted. The proposed size, position, layout, and design of the tenant-provided signs must be approved by the Authority prior to fabrication.

## 4.4 South Concourse Storefronts

**4.4.1 Exceptions and Additions:** Within the Main Concourse areas, a Commercial Identity Program (C.I.P.) has been established to further promote the marketing presence for airport goods and services. Commercial participants in the program will be identified by a special logo, with a theme name and color. The logo will appear on blade signs adjacent to commercial spaces and in concourse commercial directories for airport services.

**4.4.1.1 Kiosk:** Kiosks at the main concourse level have sliding teak screen panels. Refer to **Chapter 3, Exhibits III-3-1 and III-3-2** for kiosk provisions. The luminous ceiling systems and Saarinen sign band run continuously above the retail kiosks. Within the Design Control Zone, which extends into the space from the Lease Line, the following finish standards shall apply:

**4.4.1.2 Modifications:** No modifications to the teak screens will be permitted without Authority approval. Tenants are responsible for positioning their displays without damaging the teak screens.

**4.4.1.3 Teak Screen Panels:** Teak screen panels must be fully lockable. The Authority will provide a master-keyed BEST lock core for the compatible locking hardware of the teak screen panels.

**4.4.1.4 Elevation/Section:** No variation will be permitted to the height, head or sill condition of the screens as set forth in this appendix. The luminous ceiling forms a uniform height limit for all of the teak units.

**4.4.1.5 Layout:** Teak screen units may only occupy concession areas on the south side of the main concourse kiosks. Where concession spaces occupy corner spaces, screens will not be permitted to turn the corner. Tenants will be required to submit a dimensioned plan of any installation. A module of 8' - 0" is recommended for all installations both in sliding and structural applications. Under no circumstances should a single unit exceed 10' - 0" in length. It has been shown in the past that modules that

exceed 8' – 0" in length are extremely difficult to control in terms of constructability.

## 4.5 Kiosks

**4.5.1 Walls:** Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority.

**4.5.2 Ceilings:** A one-module band of acoustic tile ceiling matching module, dimensions and details of the luminous ceiling will extend into the Design Control Zone. This band will form the transition from luminous ceiling to tenant ceiling finishes.

**4.5.3 Flooring:** At the kiosk threshold, extending into the space from the terrazzo edge, an 18" band of material will form a consistent transition from terrazzo to tenant selected interior finishes. This material is currently being studied by the Authority.

**4.5.4 Signing/Graphics:** The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line; refer to "General Building Systems, Signage Systems", Section I of this document.

**4.5.4.1** Sign dimensions are 7" x 2' – 11" at Concourse Level and 9" x 18" on Ground Level.

**4.5.4.2** 9" x 9" C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format.

**4.5.4.3** Signs are to be aligned as close as possible to centerline of entry to tenant space.

**4.5.5 Case Work:** The Authority provides casework at the main concourse Kiosks. The point-of-sale casework units have been designed to be accessible from the customer side to comply with the Americans with Disabilities Act. Authority-provided casework will consist of the following elements as described below.

**4.5.5.1** Floor mounted, non-refrigerated, display/storage units (lockable) with interchangeable side and top panels, interior display lighting, and one adjustable glass shelf.

**4.5.5.2** Floor mounted non-refrigerated, point-of-sale units (lockable) with interchangeable front panels.

**4.5.5.3** Stainless steel filler panels.

**4.5.5.4** Stainless steel filler panels with light stanchion.

**4.5.5.5** Floor mounted rear cabinet.

**4.5.5.6** Additional shelves and shelf supports, if required by the tenant, shall be provided by the tenant to meet the existing standard. Kiosks at the main concourse may be configured with four floor units and two point-of-sale units, or five floor units and one point-of-sale unit. The rear counter surface, back wall of the alcove, and associated equipment and/or cabinets shall be provided by the tenant and coordinated with the rear cabinet casework provided by the Authority. The tenant shall field verify location of the Authority-provided security grilles to ensure that tenant-provided counter surfaces, tenant-procured and installed equipment do not interfere with proper closing of the grilles.

**4.5.6 Security Grilles/Closure System:** Security grilles for the purpose of securing the rear counter/preparation areas during non-operational hours are not provided at Kiosks.

**4.5.7 Electrical/Lighting:** MR" or other low voltage incandescent lamp fixtures may be utilized for highlighting of "Feature" merchandise displays. All other lighting, including general display lighting, shall be fluorescent, HID or LED, subject to approval by the Authority, as required by the *Design Manual*. General lighting for interior of tenant spaces shall be recessed type. Recessed fixtures shall be located and installed in coordination with the existing ceiling finish module and design. Whenever possible, track elements shall be installed flush to wall or ceiling surfaces. At retail kiosks, ceiling mounted track lighting will not be permitted in the 24" Design Control Zone at the concourse

side of the space except by special review of the Authority. The Authority recommends a standard finish of white semi-gloss or matte for all exposed fixture types. All lighting units shall be positioned to avoid direct beams or glare in concourse areas.

**4.5.8 Mechanical (HVAC):** Conditioned air supply and return air ducts will be provided to each tenant. Beyond the primary supply to the tenant area, tenants will be responsible for any additional configuration of supply air ducting to service individual portioned spaces within the tenants overall lease area. Refer to **Chapter 1** for additional requirements.

**4.5.9 Plumbing:** Domestic cold water supply is provided to main concourse kiosk areas, and Ground Level support areas, and is distributed through mains, risers and branches to fixtures and equipment or to valved/capped connections at the utility shafts, depending on location. Refer to **Chapter 1, Paragraph 1.2.8**, for additional requirements.

**4.5.10 Furniture/Fixtures:** Furniture, casework, millwork, display units, registers and mobile equipment shall all be given careful consideration by the tenant for appropriateness to base building conditions. Furniture and display fixtures, wherever possible, should attempt to match the materials of the base building, particularly in the Main Concourse kiosk areas.

## 4.6 Food And Beverage Support Spaces

**4.6.1 Loading Dock/Storage:** Loading docks have access to secure service elevators and stairs that provide transition to secure service circulation corridors.

**4.6.2 Other Support Spaces:** Other support spaces may be available. Identification of such areas is currently under development.

**4.6.3 Tray Wash Room:** Not Applicable

**4.6.4 Tray Return Carts:** Not applicable

## 4.7 Vacated Spaces

**4.7.1 Main Terminal:** All tenants will ensure that all base building conditions, including servicing elements, materials, finishes and equipment are handed over undamaged. Finish surfaces in particular, including terrazzo floors, luminous ceiling areas, teak screens and metal panel wall systems should be maintained and returned in good working condition, ready-for-use by subsequent tenants. In retail kiosks, the following conditions will be required:

**4.7.1.1 Removal:** Removal of all display units, lighting, ceiling systems, flooring materials and wall treatments.

**4.7.1.2 Capping:** All service hookups shall be capped as found.

**4.7.1.3 Cleaning:** Tenant shall clean and remove all grease traps.

### 4.7.1.4 Ground Transportation Center Retail Areas:

**A.** Remove all installations and restore all building surfaces.

**B.** Repair terrazzo.

**C.** Repair metal panels of shaft enclosure.

**D.** Marks, wear edges in floors or ceilings shall be eliminated.

### 4.7.1.5 Vacating Premises:

**A.** The tenant shall review and confirm the above conditions with the Authority before

**4.7.2 Concourse Z:** Required Procedures. When vacating commercial lease areas, the tenant shall strictly comply with the following procedures:

**4.7.2.1** Remove the tenant-provided sign from the overhead sign-band, allowing the existing sign support brackets to remain.

**4.7.2.2** Construct a temporary steel stud and gypsum board partition directly in front of the tenant-supplied storefront. The partition shall extend from floor to the existing signband at 8' - 3" above the floor and for the full width of the storefront. The public corridor side of the partition shall be taped, spackled smooth and painted. The temporary partition shall be independently supported without penetration or attachment to the public corridor floor, wall, or soffit finishes.

**4.7.2.3** In lease area with open façades and overhead grilles, the tenant shall locate the temporary partition clear of the overhead grille. The tenant shall lower and lock the grilles and return the keys to the Authority.

**4.7.2.4** Provide a single 3' - 0" wide by 7' - 0" high flush steel door and frame, flush with the face of the temporary partition and swinging inward toward the leasehold, not outward to the concourse. The door shall have brushed chrome hardware: three hinges and a lockset with a key lock with "Best Lock" core. Padlock and chain enclosures are not permitted. The door is located adjacent to a building column line whenever possible.

**4.7.2.5** Thoroughly clean the premises.

**4.7.2.6** Remove all grease traps from the premises and cap all cut plumbing lines.

**4.7.2.7 Exceptions:** In certain locations and under certain circumstances, by prior review and approval of the Authority, tenants may be permitted to add or substitute the following for the general requirements listed above.

**A.** Apply a white, opaque, vinyl film to the inside surface of all glazed panels in lieu of constructing a temporary metal stud partition.

**B.** Apply advertising or directional signs to the temporary partition constructed to enclose a vacated lease area. Any direct applications of advertising or signs to such partitions shall comply with the Signs and Graphics requirements included in Article 2: "General Tenant Standards" regarding quality of execution, message and media.

## CHAPTER 5 General Design Standards

### 5.1 Applicability

**5.1.1 General:** The standards contained in this chapter will apply to all Airline, Commercial and Advertising tenants in the Main Terminal building and Concourse Z facility. The intent of these general standards will be to identify key areas within the Main Terminal and Concourse Z where special attention is needed to coordinate the design criteria of all tenant types, and to identify general tenant responsibility for finishes and fit out of tenant spaces.

### 5.2 General Criteria/Prohibitions

**5.2.1 Demising Wall:** Demising walls will be constructed on building module centerlines wherever possible. Where demising walls are perpendicular to storefronts and/or surfaces with an expressed modulation, walls will be centered on mullion/module lines.

#### 5.2.1.1 Tenant Construction at Demising Walls:

Tenants shall be responsible for completing the open metal stud wall provided by the Authority. The finished wall assembly shall include sound attenuation insulation to match the stud wall thickness and fill the entire wall cavity. Wall surfaces shall be sealed at the intersection with the finished floor and structure or ceiling surfaces above. Blanket insulation is recommended, extending 4' – 0" into the tenant lease area from the center of the demising walls enclosing the tenant lease area, installed above suspended acoustical ceilings.

**5.2.1.2 Dimensional Setbacks:** Dimensional setbacks from lease lines, if applicable, will be mutually agreed to by the Authority and the tenant.

**5.2.1.3 Interior Finishes:** Tenants will provide interior finishes to metal stud and gypsum board demising walls. Gypsum board on non-rated walls shall extend 4" above finish ceiling. Gypsum board on rated walls shall extend to the structure above, and be fully sealed with rated materials to UL design standards.

**5.2.2 Design Control Zones:** The Design Control Zone is defined as the area of tenant space which fronts the lease line and which can be viewed fully by passengers and visitors as they move through and use the Terminal facilities. The Design Control Zone extends from the floor plane three-dimensionally to the walls and ceiling surface. Design Control Zones are three dimensional and have been established for each tenant type. The zones vary depending on specific space type and location. Tenants shall pay special attention to the design of permanent fixtures, displays, graphics and signage within this zone.

**5.2.3 Lease Line/Control Zones:** The lease line will be strictly observed. Except as noted, no signing, graphics, merchandise or displays of any kind are allowed outside the lease line. Any unauthorized signing, graphics, merchandise or displays placed outside the lease line will be removed by the Authority at tenant expense. Tenant finishes shall terminate at the locations indicated in the plan, elevation, and section exhibits contained in this document. Unless otherwise noted, no tenant finishes shall be designed or constructed to overlap or cover the base building structure or finishes that can be viewed from public areas and that are part of the architectural expression of the Terminal. Tenants may not permanently alter controlled materials or base building elements that fall within the Design Control Zone or base building provided Casework counter tops. This includes columns within the lease line, horizontal structural elements above storefronts, floors, walls or ceiling surfaces. Any such elements altered during construction of tenant storefronts or fit-out of tenant areas shall be returned to their original condition prior to Tenant initiation of operations. Storage of supplies, merchandise, equipment or furnishings associated with administrative or business functions is not permitted within the Design Control Zone. Tenants shall be responsible for securing all merchandise and their lease premises.

**5.2.4 Materials:** The following description of exterior and interior materials and treatment is provided as context for the benefit of the tenant planning and design professionals responsible for preparing design documents in support of tenant construction within the Terminal Complex.

**5.2.4.1 Main Terminal:** The existing enclosures at the south side of the main concourse, opposite the mobile lounge hold rooms are aluminum and glass walls, in a dark warm gray ("Dulles Gray"; K-48) finish. Tenant spaces located between the main cast in place concrete columns have metal stud rear walls with gypsum board and resinous-coated metal panels. Display systems, schedule boards, and security check point areas have a consistent finish of Dulles Gray in the south concourse area. Aluminum in-fill panels in the curtainwall are composite aluminum panels, 6 mils. thick, comprised of two sheets of 0.5 mils. thick aluminum bonded to a fire-rated thermoplastic core, as manufactured by Alucobond Technologies ("Alucobond") or Reynolds Building Products ("Reynobond PE"); color to be Dulles Dark Gray, K-48, Duranar (Fluoropan finish or equivalent).

**A. Walls - Ticketing Kiosks:** The walls on the public side of the airline ticketing kiosk areas are metal stud with gypsum board and resinous-coated metal panels and teak veneer panels. The teak veneer panels form a continuous backdrop surface behind the ticketing counters. In airline support spaces the walls are of metal stud construction without the inner layer of gypsum board, which is to be applied by the tenant.

**B. Walls - Retail Kiosks:** In the retail kiosk area, the interior walls are metal stud construction with gypsum board.

**C. Walls - Central Kiosk:** The perimeter walls north of the freight elevator are aluminum and glass and are to match the original Saarinen storefront system.

**D. Floors – General:** The existing floor at the Concourse Level is polished aggregate concrete terrazzo of a light gray tone with zinc hairline divider strips in all public areas and in a 6" zone at the entry side of all kiosk retail areas. The floors within the remaining portion of the tenant areas including the retail spaces and airline ticketing offices are exposed concrete. Airline ticketing kiosk common use hallways are carpeted. The floor, at airline ticketing counters, is

polished aggregate concrete terrazzo. The existing floor at the Ground Level and the Ground Transportation Level is polished aggregate terrazzo in all main public areas and the tenant areas are exposed concrete.

**5.2.4.2 South Finger:** At the South Finger, a reflecting pool forms the visual focus of the Terminal. Along the concourse, between exposed, cast in place aggregate concrete columns, and beneath a deep fascia of the same material, a series of display vitrines extend from floor to ceiling.

**A. Floor:** The primary floor surface is polished aggregate terrazzo. Accent material of railings and elevator enclosures is all of #8 stainless steel standard.

**B. Ceiling:** Ground level ceiling is 12" x 12" acoustical tile with recessed lighting. Concourse Level ceiling is 12" x 12" acoustical tile with recessed lighting and skylights over a central two-story space.

**5.2.4.3 Concourse Z:** Description. When referenced as either an Authority- or tenant- provided material, the following materials shall be provided with the indicated finishes:

**A. Stainless Steel:** No. 4 directional polish finish. When used as a base, the polish direction shall be horizontal. On vertical elements, the polish direction shall be vertical.

**B. Aluminum:** Satin finish, clear anodized aluminum.

**C. Painted Aluminum:** Match painting systems used on the base building elements.

**D. Spandrel Glass:** For interior storefront panels, shall be of a single manufacturer and type.

**E. Requirements:** Considerations in the selection of materials shall be given to accessibility, durability, sanitation, and safety as well as compliance with all

applicable health and building codes. While there are no specific restrictions to the application of colors, they will be reviewed and approved by the Authority to assure compatibility with the concourse environment.

**F. Recommendations:** Materials and finishes that are recommended for use in tenant areas include, but are not limited to the following:

- 1) Stainless steel, painted steel, or chromed steel
- 2) Aluminum - clear anodized or painted
- 3) Glass - clear, tinted, translucent, or etched
- 4) Plastic laminate - solid & patterned (Laminates simulating other materials are prohibited)
- 5) Solid surface materials
- 6) Gypsum wall board - painted or finished with vinyl wallcovering
- 7) Tile - ceramic or natural stone (Structure restricts floor tile to thin-set installation)
- 8) Terrazzo - thin-set epoxy (Structure prohibits use of sand-bed terrazzo)
- 9) Acoustical ceiling panels - concealed spline suspension system
- 10) Metal ceiling units - metal panels or metal slats
- 11) Carpet - broadloom or tile

**G. Restrictions:** The following materials will not be permitted in the Design Control Zone except by special review and approval by the Authority:

- 1) Brick, concrete masonry units, glazed facing units

- 2) Simulated brick, stone, or other masonry
- 3) Plywood, hardboard, or pegboard
- 4) Simulated wood, stone, or metal laminates
- 5) Sheet, formed or molded plastic
- 6) Stucco or simulated stucco

**5.2.5 Color:** Tenants should consult the **IAD Vol. 1 - Exhibit "Color Chart"** for information on the basic building color scheme. As described above, the base building color palette is limited to a highly coordinated range of colors in the warm gray category. While there are no specific exclusions as to color, within the Design Control Zone colors selected by the tenant will be approved by the Authority to assure compatibility with the concourse environment.

#### **5.2.6 Storefront Enclosures:**

**5.2.6.1 Lease Line:** Lease lines establish the absolute outer envelope of tenant space within which tenant activity is permitted. The Design Control Zone falls within the lease line to varying depths, depending on tenant type and locations. Lease lines are to be strictly observed.

**5.2.6.2 Lease Line Geometry:** Specific lease line geometry will be established for each tenant space.

**A. Concourse Z: Tenant Signs and Displays:** The lease line shall be strictly observed. Except as noted, no signing, graphics, merchandising or displays of any kind are allowed outside the lease line. Unauthorized signing, graphics, merchandise or displays placed outside the lease line will be removed by the Authority at the Tenant's expense.

**1) Tenant Finishes:** Tenant finishes shall terminate at the locations indicated in exhibits contained in this document. Unless otherwise noted, no tenant finishes shall be designed or

constructed to overlap or cover the base building structure or finishes that can be viewed from public areas and that are a part of the architectural expression of the building.

**2) Base Building Materials:** Tenants may not permanently alter controlled materials, base building elements that fall within the Design Control Zone, or base building casework units. This restriction includes columns within the lease line, wind bracing or structural elements above storefronts, floor, walls or ceiling surfaces. Any such elements altered or damaged during the construction of tenant storefronts or the fit-out of tenant areas shall be returned to their original condition prior to the initiation of tenant operations.

**5.2.6.3 Base Building Conditions:** Base building conditions, such as columns, and base building systems may not be altered within tenant lease lines.

**5.2.6.4 Teak Screens:** Teak screens are to be built facing the concourse public spaces. The screens are to be in a track system that allows the screens to move laterally to an open position. The screens are to be fully lockable. A 4" metal base is typical at the kiosk ends. Refer to **Chapter 7, Paragraph 7.1** for more detailed information regarding teak screen requirements.

**5.2.6.5 Wall Surfaces:** Wall surfaces shall be sealed at finished floors and ceiling systems.

**5.2.6.6 Blanket Insulation:** Provide quality sound attenuation in tenant demising walls.

**5.2.7 Lighting:** General Lighting for interior of tenant spaces shall be recessed type. Recessed fixtures shall be located and installed in coordination with the existing ceiling finishes module and design. Lighting will not project glare, or direct beams into main circulation areas.

**5.2.8 Signing/Graphics:** Inside Lease Line, all proposed signage shall be reviewed and approved by the Authority.

The overall intent is to ensure that the graphic materials communicate a high quality-marketing image consistent with the concourse ambiance. Tenants are encouraged to integrate signage and lighting systems into a visually coherent whole that will enhance tenant identification within concourse areas. Specific design standards for commercial, airline and advertising tenants will be discussed in subsequent sections.

**5.2.8.1 Signing Design Guidelines:** Tenants should review "Signing Design Guidelines" in IAD Vol. 1 for specific signage information and guidelines including typeface and colors of base building systems.

**5.2.8.2 General Criteria/Permanent Signage:** Signing, graphics and/or display of corporate logos shall be consistent with the ambiance created by the architectural design of the Terminal. Graphics design shall be lively yet clear and readable. Tenants shall be required to submit graphic materials to the Authority for Design Review and Approval to ensure the preservation of a high quality image. Materials submitted shall include size, materials, lighting, method of attachment, colors and typography for all sign bands, blade signs, wall or casework mounted graphic materials. Signage shall meet all applicable code criteria. The tenant shall use a professionally trained graphic designer to develop signage, graphics and corporate identities. These professionals shall have at least a degree in graphic design or a related design field and five years experience in the field of graphic design, preferably in the area of corporate image development/enhancement, print graphics, or environmental graphic design. Professionals shall communicate competently on issues of contrast, legibility, typefaces, viewer recognition factors, proportion and semantics of visual communication. Graphic materials submitted directly by sign fabricators will not be accepted.

**5.2.8.3 Temporary Signing:** Any tenant or Authority temporary signing which can be viewed from public areas shall be designed, constructed and executed with quality and professional standards of fabrication. Temporary signs will be reviewed and approved by the Authority. Temporary signs may be reviewed for sign type and/or layout

depending on the application. Such signs at tenant locations include, but are not limited to, signs specifying prices, schedules, cancellations, national or local promotion, "sale" or "specials," menu, order here, queuing instructions and designation of condiment bars, trash and/or recycling receptacles and maintenance signs or stanchions. Tape, push pins, velcro or other similar methods of attachment for temporary signs is prohibited. Method of attachment or display will be reviewed and approved by the Authority. Commercially produced graphics for nationally produced and merchandised products, including cardboard "dumps," "pop-ups," "standees," "cut-outs" or other temporary promotional displays are generally unacceptable and may not be displayed at point of sale.

**5.2.8.4 Prohibitions:** The following are not permitted in signing, graphic or corporate identity applications except by special review and approval by the Authority:

- Exposed Neon
- Strobe, flashing or blinking lights
- Iridescent or luminous signs
- Externally illuminated signs
- Inflatable objects
- Mechanical, animated or kinetic signs
- TV monitors or any other kind of picture screen
- Dioramas
- Formed or molded plastic signs
- Hand-prepared or lettered placards
- Ceiling hung signs, banners, or objects

**A.** Tenants may not paint or adhere permanent or temporary decals, art work or signing indicating product line, credit card acceptability or security system warnings to columns, spandrel, or glazed storefront elements.

**5.2.8.5 Manufacturer Labels:** No manufacturer labels are permitted on display fixtures, lighting equipment, sign boxes or other pre-manufactured units.

**5.2.8.6 Internally Illuminated Signs:** No exposed ballasts are permitted.

**5.2.8.7 Room Numbering:** No signs, other than terminal standard room numbering and labeling, are permitted within the public view. All sign applications to interior and exterior Tenant doors will be subject to review and approval by the Authority. All tenant spaces must be shown in plan and physically labeled with permanent room numbers. This is critical for both fire-fighting and emergency medical service staff at the Airport and for general building management. Where a tenant subdivides a numbered space, all interior spaces, corridors and rooms shall be identified with the specified permanent room number, followed by a unique alphabetic suffix to identify each separate space within the overall leasehold area. Within tenant leasehold areas, legible, permanent room numbering plaques or signs must be provided, displayed both the assigned permanent room number and room function, but each tenant may determine their own standard for such signs.

**5.2.8.8 Letter Size:** Minimum lettering size is 5/8" capital letters. Maximum proposed letter height will be reviewed and approved by the Authority.

**5.2.8.9 Hours of Operation:** Presentation of "Hours of Operation" shall be standard application of vinyl to glass sub-surface signing.

**5.2.8.10 Credit Card Acceptability:** Credit card acceptance signs shall be displayed at cash registers/point of sale. Silk-screened or vinyl art work on clear acrylic shall be mounted to the register or on a low profile adjacent surface. Maximum sign area shall be 8" x 10".

**5.2.8.11 Brochure Displays:** Tenants who wish to offer or display brochures, bag tags or other literature at any location shall procure clear acrylic easels or holders. Maximum overall dimension shall be 8½" x 11". Such fixtures may not be affixed to any casework either on a permanent or semi-permanent basis. Tenants shall review samples of their brochure displays with the Authority prior to procuring for terminal-wide use.

**5.2.8.12 Sign Bands:** Use of internally illuminated sign application is limited to storefront sign bands and blade signs. No permanent or temporary signing, graphic and/or displays or corporate logos may be fastened to the base building elements by the tenant.

**5.2.8.13 Blade Signs:** Blade signs shall be used for display of corporate logos. Refer to tenant specific Chapters for particulars.

**5.2.8.14 Advertising:** Refer to **Chapter 9** for additional information.

**5.2.9 Merchandising Displays:** Materials used in displays within the Design Control Zone shall conform to the criteria set forth above except by special review and approval by the Authority.

**5.2.9.1** Display lighting shall be provided for the express purpose of highlighting merchandise in display windows. Acceptable lighting equipment for display lighting includes:

- A.** Recessed or track mounted incandescent adjustable fixtures for MR 16 or PAR 36 low voltage lamps with integral step down transformer and accessories.
- B.** Recessed or track mounted incandescent adjustable fixtures for PAR-20 or PAR-30 lamps and accessories.

**5.2.9.2** Adjustable lighting equipment within the Design Control Zone and remaining tenant areas must be positioned or shall have accessories to eliminate glare into public areas of the Terminal. Special attention to the use of mirrored surfaces will also be required to prevent reflected light and/or reflection of exposed bulbs. Use of decorative neon accent lighting within tenant displays may be approved by the Authority. Design review and approval will be required prior to fabrication and installation. Lighting equipment selected by tenants for display lighting for merchandise areas will be subject to design review and approval by the Authority.

**5.2.10 Fixtures/Furnishings/Equipment:** Fixtures, furnishings and equipment, including, but not limited to, furniture, casework, millwork, kitchen and other equipment, display units, hand or guard rails and other accessories are visual elements whose placement, either within the Design Control Zone or in other lease areas which can be viewed from public circulation areas, should be given special consideration by the tenant. Fixtures and furnishings shall have a custom integrated appearance. Unfinished, exposed surfaces on any off-the-shelf or custom fabrication or construction are unacceptable. Selection, design of, and placement of such items, whether permanently affixed or movable, will be reviewed and approved by the Authority. Mobile equipment shall have factory or manufacturer installed bumpers on all exposed edges and semi-inflatable tires to prevent damage to interior wall and floor finishes. Casework and millwork construction shall comply with criteria contained in the *Design Manual*. Casework or millwork used to display or store goods shall be lockable. Loose fixtures or equipment shall be securable or storable. No used furnishings, fixtures or equipment are permitted if they can be viewed from public areas. Furnishings, fixtures and equipment shall be maintained in good working order.

**5.2.10.1 Anti-fatigue Mats:** Anti-fatigue mats provided by the Authority at locations noted shall be replaced by the tenant to match the original standard.

**5.2.10.2 Miscellaneous Mobile Equipment:** Any loose equipment used by any tenant or contract employee thereof within public areas in and around the Terminal will be reviewed and approved by the Authority. Such equipment includes, but is not limited to hand carts, "bellman" carts, luggage carts, dollies, bus carts or stations, and wheelchairs. Such mobile equipment shall have factory or manufacturer installed bumpers on all exposed edges and semi-inflatable tires to prevent damage to interior and exterior wall and floor finishes.

**5.2.10.3 Vending Machines:** Vending machines that are viewed from public areas are prohibited.

**5.2.10.4 Window Treatments:** Treatments shall be mounted in sections that match the vertical mullion spacing. Window treatments shall be surface mounted. Tenant construction shall create horizontal pockets to receive the mounting. Proposed installation details must be reviewed and approved by the Authority.

**5.2.11 Floor and Roof Structure:** Tenants shall verify loading conditions created by the installation or suspension of tenant provided equipment or systems that may result in concentrated loads greater than, 200 lbs on the roof and 500 lbs on the floor structures. The indicated concentrated load shall be assumed to occupy an area of 2' – 6" x 2' – 6" square (6.25 sq.ft.). Any concentrated loads suspended from the overhead structure shall be suspended from either beams or purlins.

**5.2.11.1 Antennas:** Antennas shall only be permitted at Authority designated locations associated with equipment rooms dedicated to radio communications. All tenant installed antennas shall be reviewed and approved by the Authority.

**5.2.12 Mechanical (HVAC):** Tenants shall not use refrigeration equipment utilizing water cooled condensers that reject heat to cooling towers or to potable water systems. Refrigeration equipment shall be served by air-cooled condensers or condensers that utilize the building chilled water system. The chilled water system may be used in water cooled condenser, where chilled water is available, with the prior approval of the Authority. All tenant installed outside air systems and exhaust fans shall be coordinated with the Authority. Tenants shall balance their air distribution system to meet Authority requirements. Each space, other than kitchen and toilet facilities shall be designed to maintain a 5% positive pressure. All areas approved by the Authority as designated smoking areas shall be independently served and exhausted by the tenant such that no tobacco contaminated air is returned to Authority/base building air handling units. This requires that 100% of the return air from the dedicated smoking area be exhausted to the outside. Exhaust ducts shall be installed in the tenant space by the tenant between the exhaust fan

and the exterior wall. All equipment, ducts, fans and appurtenances shall be supplied and installed by the tenant. Any tenant exhaust fans and systems installed on exterior walls must be reviewed and approved by the Authority prior to installation. All air supplied or transferred to designated smoking areas shall be exhausted directly to the outdoors without recirculation. Tenants may not install roof-mounted exhaust fans or packaged mechanical units without approval of the Authority. The location of, method of attachment, penetration and visual appearance of any mounted exhaust fans installed on exterior walls shall be reviewed and approved by the Authority.

**5.2.13 Fire Suppression/Life Safety/Smoke Exhaust:** Where independent or supplemental HVAC systems are provided by the tenant, the following criteria shall apply:

**5.2.13.1 Smoke evacuation systems:** Smoke evacuation systems in all tenant areas shall be provided by the tenant in accordance with VCC Building and International Mechanical Codes and as approved by the Authority. The smoke evacuation exhaust system shall be designed to maintain a minimum of 4 air changes per hour.

**5.2.13.2 Tenant Provided Fire Life Safety Systems:** Tenant provided fire life safety system shall be compatible with the system provided by the Authority for the terminal.

**5.2.13.3 Smoke Detectors:** A smoke detector shall be provided by the tenant in the return air duct ahead of the outdoor air intake for systems of 2,000 cfm or greater and at the fan discharge of each air handling system having a capacity of 15,000 cfm or greater along with a smoke damper. When a smoke detector or fire life safety system is energized, the supply fan will stop. The return fan will go into exhaust mode. The fire marshal may manually energize the system from the fire alarm panels.

**5.2.13.4 Tenant Provided Smoke Exhaust Systems:** Tenant provided smoke exhaust systems shall function as follows. When a fire occurs within any area, the air handling system shall operate at 100% exhaust and the supply air system shall shut down.

**5.2.13.5 Fan Coil Units:** For tenant areas served by Fan-Coil Units, such units shall be designed to shut down when a fire occurs in the area. Tenant provided smoke exhaust fans will be activated to provide 100% exhaust. Tenants shall provide visual and audible notification devices for connection to the building fire alarm system complying with NFPA 72 and ADA. Tenant provided fire suppression system shall be connected to the building fire alarm system for annunciation. Tenants shall be responsible for all tie-in connections to the building life safety system.

**5.2.13.6 Tenant Fire Extinguishers:** Tenants shall provide and install ABC type portable fire extinguishers for every 3,000 sq. ft. of Tenant lease area. The extinguishers shall be multi-purpose chemicals, 20 BC: 10 C, UL rated.

**5.2.13.7 Commercial Kitchen Hoods:** All cooking surfaces, grills, ranges, ovens and similar equipment shall be provided with a **commercial kitchen** Error! Objects cannot be created from editing field codes. hood. The hood shall be provided with a pre-engineered approved type fire suppression system automatically and manually activated.

**5.2.13.8 Hood Electrical Control:** The hood electrical control panel shall be provided with two sets of dry contacts for remote alarm and controls that shall interface with the building fire alarm system. Tenants shall provide required cables, devices and interface point to the fire alarm system.

**5.2.14 Decorations:** The Authority will be responsible for seasonal and holiday decorations within the terminal. Individual seasonal or holiday displays, if desired by the tenant for installation inside the tenant space, shall be professionally designed and reviewed with the Authority prior to installation.

**5.2.15 Interior Landscaping:** Living and artificial plants in tenant spaces which can be viewed from public areas are prohibited. Other tenant provided interior landscaping, including living and artificial trees, plants and flowers, shall be approved by the Authority.

**5.2.16 Music:** Background music is permitted in tenant areas on either a temporary or permanent basis provided it is not audible in adjacent public or Tenant areas.

**5.2.17 Queue Control/Stanchions:** Tenants shall be responsible for controlling individual queues within or immediately adjacent to their lease premise so that customer queues do not interfere with circulation. Tenants shall procure, store and have available for immediate use queue control devices. Such devices shall be employed any time that excessive queues may form.

**5.2.17.1** Queue control devices shall be of one type and shall be as follows or approved equal:

A. Beltway Magnum Queuing System by Brass Smith.

**5.2.17.2** The stanchion shall be a satin finish stainless steel post with a satin finish stainless steel head except at the Ticketing Level lobby. Tenants may select any solid color for the tape with the exception of green. No stripes, graphics or typography will be permitted on the tape. The Authority will provide queue stanchions and tape for the Ticketing Level lobby. Plexiglass signs attached to the post head shall be the same color as the tape chosen. Sign frame and attachment shall be from same manufacturer. No mixing and matching of stanchions and sign applications are permitted. Signs shall conform to the criteria noted above.

**5.2.18 Signing/Graphics Outside of Lease Area:** Where ad stanchions, sign stanchion or poster/brochure racks are available or used, Tenants shall be required to use a professionally trained graphic designer to develop their advertising inserts. Graphic materials will be approved by the Authority prior to installation in the stanchion unit.

**5.2.19 Aesthetic Treatment of Exposed Pipe:** Where box building exposed piping occurs in a tenant space, tenants shall **cover** these pipes with uniformly sized metal pipe sleeves or shroud.

### 5.3 Enforcement

**5.3.1 General:** Any tenant installed items that do not conform to this criteria or for which prior authorization through the Authority review and approval process was not received may be removed by the Authority. Any costs associated with removal of installed items will be reimbursed to the Authority by the Tenant.

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## CHAPTER 6 Airline Tenant Design Standards

### 6.1 Locations Governed By Tenant Design Standards

**6.1.1 General:** Airline tenant locations are identified in the most current version of the Space Assignment Drawings. Terminal departures or Ticketing Level spaces include exclusive use ticket counter frontage and backwall area, adjacent airline ticket office spaces, and curbside check-in areas located on the curb. At Concourse Z Level, which serves the aircraft gates, locations governed by the standards include hold rooms (departure lounges), gate counters, backscreens and ticket lift podiums, airline support spaces. Locations on the arrivals or Baggage Claim Level include baggage service offices, common-use baggage claim areas, and airline operation spaces at the apron level of Concourse Z, and the inbound and outbound baggage areas.

### 6.2 General Criteria/Prohibitions

#### 6.2.1 Telecommunications and Special Systems:

Airline tenants shall be required to route all low voltage communications cable in conduits or on cable trays. No exposed cable will be permitted in ceilings or walls. Airline tenants shall not be permitted to use Authority installed cable trays for installation of airline cable. Airlines must obtain Authority approval for routing of conduit through non-airline spaces.

##### 6.2.1.1 Multi-User Flight Information Display System

**(MUFIDS):** Airline tenants shall update their own flight information in the MUFIDS system. Updates may be made via a MUFIDS edit terminal, a host interface or an interface from another FIDS system. Airline tenants shall be responsible for the procurement of edit terminals or MUFIDS interface. Airline tenants shall provide camera-ready art work of their corporate logo, appropriate for scanning, for insertion into the MUFIDS system. Should airline tenants elect to install additional monitors serviced from the Terminal MUFIDS system in their exclusive areas of use areas, the Authority will provide the MUFIDS data

signal to the network demarcation point in their space. The airline tenant shall be responsible for the procurement and installation of monitors and associated interface equipment that is compatible with the Terminal system.

#### A. Multi-User Flight Information Display Systems

**(MUFIDS):** Are provided by the Authority to provide flight information to passengers and visitors in public areas. MUFIDS monitors are mounted in custom fabricated, floor-mounted enclosures also provided by the Authority. MUFIDS monitors have been located to provide information at points where passengers are most likely to seek information; they have been positioned within the departure lounges so as not to impede passenger flow through the public corridors. The MUFIDS CPU is located in the main telecommunications room located on the Apron Level of Concourse Z. The CPU is provided with a redundant backup CPU. Both units are supplied with uninterruptible power service UPS.

#### B. Carrier-Specific Flight Information Displays

**(FIDS):** Are provided by the Authority at the check-in podium backscreens and at the doors to the boarding bridges. Monitors at the check-in podium backscreens display the alpha-numerical gate designation, the flight status, and the tenant airline logo. Monitors at the boarding bridge doors may display destination information and serve as an ADA monitor to provide boarding information to the hearing impaired. A keypad is provided to input or modify information on the monitors located in the gate counter backscreen and the boarding bridge door. Actual location of the keypad relative to the Tenant inserts shall be field modified.

**C. Departure Door Displays:** Gate designations and automated flight description displays are located above each departure gate door. The display above the departure gate door may display destination information and serve as an ADA display to provide boarding information to the hearing impaired as desired by the tenant. No other airline designation will be

permitted on or adjacent to the door to the passenger boarding bridge.

**D. Baggage Information Displays (BIDS):** Are not provided in Concourse Z, as the destination for all baggage is the Main Terminal.

**6.2.2 Music:** Background music is permitted in tenant areas on either a temporary or permanent basis provided it is not audible in adjacent public or tenant areas.

**6.2.3 Signing/Graphics:** Tenants shall be responsible for individual signing and/or corporate logo application at the following locations as specified in these standards:

**6.2.3.1** Backwall within curbside check-in alcove.

**6.2.3.2** Curbside Check-in Podium.

**6.2.3.3** Bridge Check-in Podium.

**6.2.3.4** Backwall behind ticket counter.

**6.2.3.5** Gate Counter Backscreen.

**6.2.3.6** At elevator, stairs and other entrances to airline clubs.

**6.2.3.7** BID screen at baggage claim.

**6.2.3.8** Baggage service office storefront.

**6.2.3.9** In poster/brochure racks.

**6.2.3.10** On advertising under separate agreement.

**6.2.3.11 Airline Name:** Airline name may appear in corporate typeface with logos and corporate colors. Only one airline name per sign panel will be allowed. Materials and mounting provisions vary by location. Tenants shall submit all proposed graphic materials indicating the location, size, materials, lighting, colors, typography, and method of attachment for all tenant provided signing,

graphics or corporate logos to be used within the tenant area to the Authority for review and approval. Any display of permanent or temporary signing at any tenant location specifying special airline promotions, pricing or schedule must be designed, constructed and executed with quality and professional standards of fabrication and shall comply with **Chapter 5**. Such temporary signing will be reviewed and approved by the Authority prior to fabrication or display. Corporately produced graphics and proposed location and method for display for national or local promotions will be reviewed and approved by the Authority prior to permanent or temporary display.

### 6.3 Curbside Check-In

**6.3.1 General Criteria:** Curbside Kiosks have been designed for the curbside check-in areas between the mainframe columns. These kiosks are intended to harmonize with the entrance canopies, signage and materials of the curbside areas. The kiosks also serve to facilitate the check-in process and give structure to curbside check-in activity. Airline tenants will be required to adhere to the following guidelines for these areas:

**6.3.1.1 Individual Airline Name Lettering:** Individual airline name lettering in Dulles Gray will be provided by the Authority for the backlit Sign Band fascia on the Kiosk canopy.

**6.3.1.2 Airline Logo Graphic Panel:** Airline tenants will be permitted to affix an airline logo graphic panel in color to the face of each baggage check-in unit (2 panels maximum).

**6.3.1.3 Airline Graphics:** Airline graphics shall be in the form of a rectangular acrylic panel with concealed adhesive fastening measuring 10" x 3' – 6".

**6.3.1.4 Panel:** Panel shall be centered on the upper section of the baggage counter, such that a 2" border is visible on all sides.

**6.3.1.5 Graphics:** Graphics or color fields shall fill the panel such that no blank areas are visible.

**6.3.1.6 Additional Graphics:** No additional graphics will be permitted on the sides of the baggage counters or any area on the canopy or canopy structure with the exception of the authority provided graphics described above.

**6.3.1.7 Airline Paraphernalia:** No equipment or other airline paraphernalia may be attached to the canopy structure and surfaces of the baggage counters.

**6.3.2 Podium Locations:** Curbside kiosks have been designed for the curbside check-in areas between the mainframe columns. These kiosks are intended to harmonize with the entrance canopies, signage and materials of the curbside areas. The kiosks also serve to facilitate the check-in process and give structure to curbside check-in activity.

#### **6.3.3 Signing/Graphics: Individual Airline Name**

**Lettering:** Individual Airline Name lettering in Dulles Gray will be provided by the Authority for the backlit Sign Band fascia on the Kiosk canopy.

**6.3.3.2 Airline Logo Graphic Panel:** Airline tenants will be permitted to affix an airline logo graphic panel in color to the face of each baggage check-in unit (2 panels maximum).

**6.3.3.3 Airline Graphics:** Airline graphics shall be in the form of a rectangular acrylic panel with concealed adhesive fastening measuring 10" x 3' – 6".

**6.3.3.4 Panel:** Panel shall be centered on the upper section of the baggage counter, such that a 2" border is visible on all sides.

**6.3.3.5 Graphics:** Graphics or color fields shall fill the panel such that no blank areas are visible.

**6.3.3.6 Additional Graphics:** No additional graphics will be permitted on the sides of the baggage counters or any

area on the canopy or canopy structure with the exception of the authority provided graphics described above.

**6.3.3.7 Airline Paraphernalia:** No equipment or other airline paraphernalia may be attached to the canopy structure and surfaces of the baggage counters.

**6.3.4 Casework:** Curbside podiums shall be constructed by the airlines to meet the design criteria established by the Authority. Airlines shall refer to the Casework Construction Documents for further similar details.

**6.3.5 Anti-fatigue Mats:** Anti-fatigue mats shall be provided by the airlines at the employee or agent side of the podium if desired by the airlines. Anti-fatigue mats shall be reviewed and approved by the Authority prior to installation. Airlines shall refer to the Casework Construction Documents for anti-fatigue mat options.

#### **6.4 Airline Ticket Counters And Backwalls**

**6.4.1 General Criteria:** Ticket counter frontage and baggage wells have been developed in the ticketing lobby along the kiosks. All tenant provided counter tops shall be installed to ensure that unfinished interior surfaces of the casework at the sides and back are enclosed from view. Tenants shall verify the specific conditions of their individual lease area at ticket counter locations with the most current Terminal Casework Construction Package documents available through the Authority and/or through inspection of field conditions to ensure suitability of their individual inserts. Tenants shall control the queue of airport patrons in the ticketing lobby so that general circulation is maintained beyond the line of passengers using the ticket counter. The airline must have available queue control stanchions to employ during any and all scheduled peaks or unanticipated delays when excessive queues may form. Queuing stanchions shall conform to the criteria established in **Chapter 5**.

**6.4.1.1 Ticketing Counters:** The ticketing counters have stainless steel end panels, enclosing dark gray plastic laminate counters with radiused edges and reveal band

detailing. The casework ticket counter base condition and front surface of the baggage weighing structure are integrated to form a continuous stainless steel surface. The profile has been standardized. Above each ticketing station an amber LED sign panel is aligned within the luminous ceiling zone. The finish is Dulles Gray.

**6.4.2 Signing/Graphics: Main Terminal:** As the ticketing space behind the counters is continuous and uninterrupted by partitions, it is imperative that airline corporate signage follow standards that ensure visual coherence of all elements within this Design Control Zone.

**6.4.2.2** Airline logos up to 3' – 0"x12' – 0" total maximum length will be applied to a sign panel in modules of 3' – 0"x6' – 0". This glass panel has a frosted (sand blast) finish on the wall side, and is affixed to the teak panel system with stainless steel satin finish barrel fasteners such that the glass panel sits off the wall surface 2".

**6.4.2.3** Panels may be fabricated of glass or other appropriate solid material suitable for the method of fixing to the wall system described above. Airline tenants will be free to apply logos to the panel surface in any configuration.

**6.4.2.4** "Visiontron" status boards will be permitted on the teak panel wall.

**6.4.2.5** FIDS monitors may be installed flush to the teak panel surface by special permission of the Authority. Any installation will observe the standard detail alignment established by the authority. Tenants are to review alignments of new work to existing local detail conditions with an Authority Representative on site.

**6.4.2.6** Monitors and other airline tenant equipment installed in the ticket counters shall not be visible to the public from the front or sides of the ticket counter area.

**6.4.2.7** No antennae or other tenant-associated equipment shall be visible above the Saarinen Sign Band on the kiosk roof area.

**6.4.2.8** Additional lighting systems are prohibited within the airline ticket counters Design Control Zone.

**6.4.2.9** FAA signs will be provided by the Authority at Authority casework locations, security checkpoints and backscreens at ticket podia. Refer to the *Design Manual* for placement information.

**A.** FAA Type A signs will be centered on the ticket counter top band, so that sign does not overlap the reveal joints.

**B.** FAA Type B signs shall not be placed on backscreen walls. Type B signs shall be displayed at sidewall of baggage well.

**C.** FAA Type D signs shall be placed on side of ticket podium. All sign positions must conform to FAA Guidelines.

**6.4.2.10 Concourse Z:** Tenant signing or graphics of any kind are not permitted on gate counters, backscreens, or lift podiums. Airline tenants may display airline promotional materials within the common use departure lounge areas only. Promotional materials shall be displayed in a poster rack. All proposed promotional materials must be reviewed and approved by the Authority before tenant display is permitted.

**A. Temporary Signs:** Any display of temporary signs at any tenant location specifying special airline promotions, pricing or schedule must be designed, constructed and executed with quality and professional standards of fabrication and shall comply with the "Signs and Graphics" entry of Article 2: "General Tenant Standards". The design and proposed location of temporary signage, including corporately-produced graphics, shall be reviewed and approved by the Authority prior to fabrication or display.

**6.4.2.11 Backwall:** The back wall behind the ticket counter will be a teak panel system on a 2' – 0" module system from floor surface to ceiling soffit provided by the

Authority. Airline logos and corporate identities may be developed on a Tenant provided panel of the dimensions indicated. The tenant provided panel shall be inserted into the panel system grid using the panel system grid. The corporate image panel or panels will be uniformly flush mounted. Such signs shall be non-illuminated with materials, typography, logo size or colors to be selected by the tenant and developed within the panel dimensions indicated. The airline identification and/or corporate logo may be displayed in as many panels as are contained in tenant lease area. Display of Airline identification behind the ticket counter at the baggage belt decline enclosure (doghouse) may be considered on a case-by-case basis with review and approval of the Authority. Airlines with marketing partners or code share agreements may display more than one Airline name per sign panel; however, the primary Airline name must appear in at least 50% of the overall sign area. Such shared Airline identification or signage shall be reviewed and approved by the Authority. No additional signing, graphics and/or display of corporate logos will be permitted on the ticket counter casework, baggage wells or baggage belt decline enclosures in the ticketing lobby. Monitors may not be incorporated into the backwall at the ticket counter.

**6.4.2.12 Queue Control:** Airline tenants on the Concourse Level will be responsible for controlling individual queues such that they do not interfere with general circulation, designated security queues, or adjacent counter areas. Queue control stanchions from airline to airline shall follow a standard deployment along the concourse area, such that stanchions align neatly in continuous rows parallel to the ticket counters.

**6.4.2.13 Stanchions:** Airlines shall procure stanchions of Authority design and finish.

**6.4.2.14 Stanchion Tapes:** Tenants are free to select solid colors for stanchion tapes. Patterns or typography other than individual corporate logos will not be permitted on tapes.

**6.4.2.15 Sign Frames:** Sign frames of the same manufacturer and standards of finish may be permitted above post heads of stanchions. The field color of Plexiglas™ shall match the color of the stanchion tapes, lettering to be white. The standard sign frame size is 12" x 12".

**6.4.2.16 Logos:** Credit card logos and other corporate logos shall not be applied to stanchion, signs, or any other surface within the Design Control Zone.

**6.4.2.17 Countertop Display Systems:** No countertop display systems, cardholders or brochure racks will be permitted on countertops. Alternate freestanding systems will be considered for special approval by the Authority.

**6.4.3 Automatic Ticket Sales Machines:** Tenants who desire Automatic Ticket Sales Machines at the Ticket Counter shall review proposed locations and treatment of same with the Authority.

## 6.5 Baggage Service Offices

**6.5.1 General Criteria:** Baggage service offices occur on the south side of the baggage claim lobbies in the Main Terminal. Public access to the baggage service offices will occur from the baggage claim lobby. Where baggage conveyors are located adjacent to baggage service offices, the design documents for the Baggage Service Offices fit out must incorporate appropriate sound attenuation to mitigate conveyor noise. The sound attenuation system shall have a minimum sound transmission class of 45 and shall consist of a framed drywall ceiling with acoustic insulation. The system shall allow maintenance access to all equipment above the ceiling as required.

**6.5.2 Design Control Zone:** In an effort to provide aesthetic consistency in the claim lobby while allowing the Tenants to address their individual needs relative to their use of this airline storage and public interaction office, the following criteria have been established for these storefronts and the baggage service office.

**6.5.2.1** The storefront shall be centered on the architectural column line. The entry to the baggage service office may not project into or be recessed back from the claim lobby.

**6.5.2.2** Entry doors from public spaces shall swing in.

**6.5.2.3** The division of storefronts between tenants shall occur at an 8' – 0" horizontal module.

**6.5.2.4** If the Tenant floor plan calls for a counter at which transactions with the public will occur, the front face of the counter may become the location of any directional change of the demising wall.

**6.5.2.5** Counters, backwalls, and opening in backwalls shall be developed by the tenant. If the counter, backwall and openings can be viewed by the public from the baggage claim lobby, the design of these elements shall be subject to review and approval by the Authority.

**6.5.2.6** If the interior of the baggage service office can be viewed by the public from the claim lobby, wall materials and colors, ceiling materials and color, floor materials and color and light fixtures shall be subject to design review and approval by the Authority.

**6.5.2.7** If the interior of the baggage service office can be viewed by the public from the claim lobby, any permanent or temporary display fixtures intended for use on top of the counter for brochures or other airline literature, as well as any advertising, promotional materials, posters and other wall mounted material shall be subject to review and approval by the Authority.

**6.5.2.8** The baggage service office lighting shall not exceed 100 footcandles. This is to maintain consistent light levels within the baggage claim lobby and prohibit any appearance of these service offices as bright spots when viewed from the public claim area.

**6.5.2.9** No window treatment is permitted in glazed storefront options.

**6.5.3 Storefront Options:** Window blind systems are not allowed on the glass storefronts. Glass storefronts have a consistent tinted finish to create a semi-private condition. For replacement of damaged or removed tinted finish, the following product (or Authority-approved equal) shall be used: 3M Image Graphics, Controltac Plus, 180-201 Slate Metallic, and Scotchcal Plus Film 3650-201. Film shall be installed in accordance with manufacturer's instructions

**6.5.4 Signing/Graphics:** Airline logos and other graphics of any description will not be permitted on the interior or exterior surfaces of the glass door or storefronts. The Authority requires that airline logos be applied to the rear interior wall facing the concourse and that airline logos from office to office are placed at the same height. Concealed fastening is recommended for all signage.

**6.5.4.1 Main Building Columns:** No signage or graphics may be applied to the exterior surface of the main building columns.

**6.5.4.2 Window Blind Systems:** Window blind systems are not allowed on the glass storefronts. Glass storefronts have a consistent tinted finish to create a semi-private condition.

**6.5.4.3 Luminous Signage:** The Authority will supply airline name luminous signage for the Saarinen sign band above airline bag offices.

**6.5.5 Queue Control, Office/Claim Device Areas:** Stanchions shall be available as at other airline tenant areas for passenger queue control. Stanchions shall be deployed in a rational manner so as not to interfere with primary circulation through the claims area.

**6.5.6 Lighting:** No additional lighting fixtures are permitted in the Design Control Zone. Specific proposals for interior lighting of offices will be reviewed and approved by the Authority.

**6.5.6.1 Interior Office Lighting System:** No interior office lighting system will be permitted that projects concentrated

beams of light or creates glare conditions in the Design Control Zone or the claims area.

**6.5.7 Baggage Claim - Claim Device Areas:** The Authority will provide electronic Baggage Information Device System (BIDS) type sign at dedicated claim device locations. These signs will be positioned in close proximity to the main axis of circulation for immediate visual accessibility.

**6.5.7.1 Signage on Columns:** No additional airline graphics or advertising signage will be permitted on columns or wall surfaces in the claims areas.

**6.5.7.2 Life Safety Signs:** Special signs that pertain to the life safety of the public may be placed on columns in the claims area.

- A. This signage must be aligned at a standard height established by the Authority.
- B. Signage will have a concealed fastening system of a self-adhesive type.
- C. Signs shall be fabricated to the same exact standards of material, finish and dimensions as established by the Authority. Variations in height, finish, method of fastening and workmanship will not be tolerated.

Signage that does not meet these standards shall be promptly replaced with compliant installations.

## 6.6 Apron Operations Areas

**6.6.1 General Criteria:** Tenant Access Doors from the aircraft apron with metal stairs have been provided by the Authority. Tenants shall review the most current Concourse Z Contract Documents available from the Authority and inspect actual conditions to ensure that the design of the apron access to the tenant space is coordinated with anticipated use.

**6.6.2 Additional Lighting:** Aircraft apron lighting as well as personnel task lighting is provided by the Authority at the aircraft apron adjoining the concourses. If the airline tenant desires additional exterior lighting adjacent to airline apron operations areas, the additional lighting shall be provided by the tenant and shall match the existing exterior lighting. Tenant-installed conduit at all exterior areas shall be concealed.

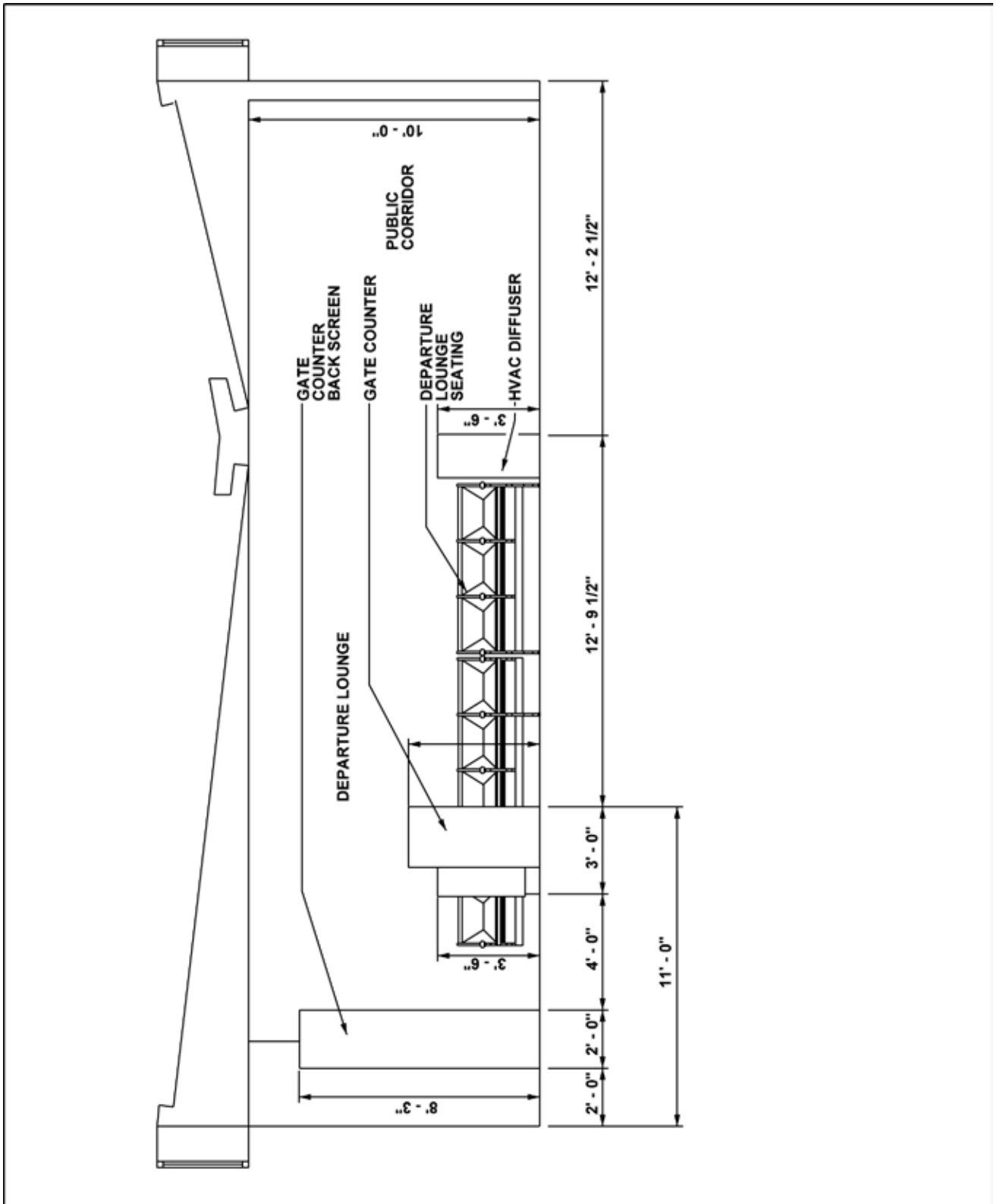
**6.6.3 Signing/Graphics:** Airline tenant Signs desired at exterior doors to identify airline operations areas to airline employees shall be provided by the tenant. Tenant signs on the building exterior shall match the airport standard for base building room identity. Tenant-supplied signs may not be illuminated. Additional signing, graphics and / or display of tenant corporate logo will not be permitted on the building exterior. Display of airline logos, decals or other airline displays will not be permitted on windows or in view of windows.

## 6.7 Hold Rooms

**6.7.1 General Criteria:** Airline departure lounges are located on the apron level, south of the public corridor at Concourse Z. Refer to **Exhibit III-6-1** for detailed provisions. The departure lounges are completely finished, including lighting and wayfinding signing. Tandem seating units, passenger service counters, MUFIDS units and incidental furnishings have been provided by the Authority. Since the air conditioning units are floor mounted, layouts have been prepared to identify seating configurations and to locate casework elements. The following criteria apply to use of the departure lounge areas with regard to public circulation paths, queuing, and seating arrangements.

**6.7.1.1 Public Circulation.** The following minimum clear aisles shall be maintained:

- A. 5'- 8" between departure lounge seating units
- B. 4'- 6" around check-in counters
- C. 5'- 6" for accessible routes to egress ramps



Concourse Z Departure Lounge Section

Exhibit III-6-1

**6.7.1.2 Seating:** Seating shall be arranged perpendicular to the curtain wall, and shall not occupy the zone immediately adjacent to the curtain wall. A minimum clearance of 2' - 0" between seating units and the curtain wall is recommended. Seating arrangements shall allow clear access to exits and life safety equipment.

**A.** Eames Tandem Sling seating units have been provided by the Authority as the standard for all departure lounges. Convenience table units are not provided. All departure lounge seating units shall remain in the departure lounge area.

**6.7.1.3 Trash Receptacles:** Trash receptacles will be provided by the Authority. No tables or ash urns will be provided. Hold rooms are designated "no smoking" areas.

**6.7.1.4 The following minimum clear aisles will be maintained:**

- A.** 3 feet to 6 feet between hold room seating.
- B.** 6 feet will be maintained around all gate counters.
- C.** 6 feet clear for all accessible routes to egress stairs.

**6.7.1.5 Seating arrangements:** To the maximum extent possible, seating arrangements and podium locations shall occur so that an adequate space is reserved to accommodate departing queues, including simultaneous departures at closely adjacent gates. If possible, queuing should be perpendicular to the departure gate door. Tenants are responsible for controlling passenger queuing so that it does not interfere with the general circulation in the public corridor and departure lounge seating areas. The tenant shall have available queue control devices to employ during any and all scheduled peaks or anticipated delays when excessive queues may form, to prevent the queue from extending into the public corridor. Seating arrangement shall allow clear access to exits and life safety equipment.

**6.7.1.6 Hold Room Seating:** Hold room seating shall remain in the hold room area defined by the structural column line and demarcation created by the change in flooring material.

**6.7.1.7 Passenger Queuing:** Tenants shall be responsible for controlling passenger queuing at the gate counter so that it does not interfere with general circulation. The Tenant shall have available queue control devices to employ during any and all scheduled peaks and during unanticipated delays, when excessive queues may form. The queue is to be prevented from extending into adjacent circulation or public seating areas.

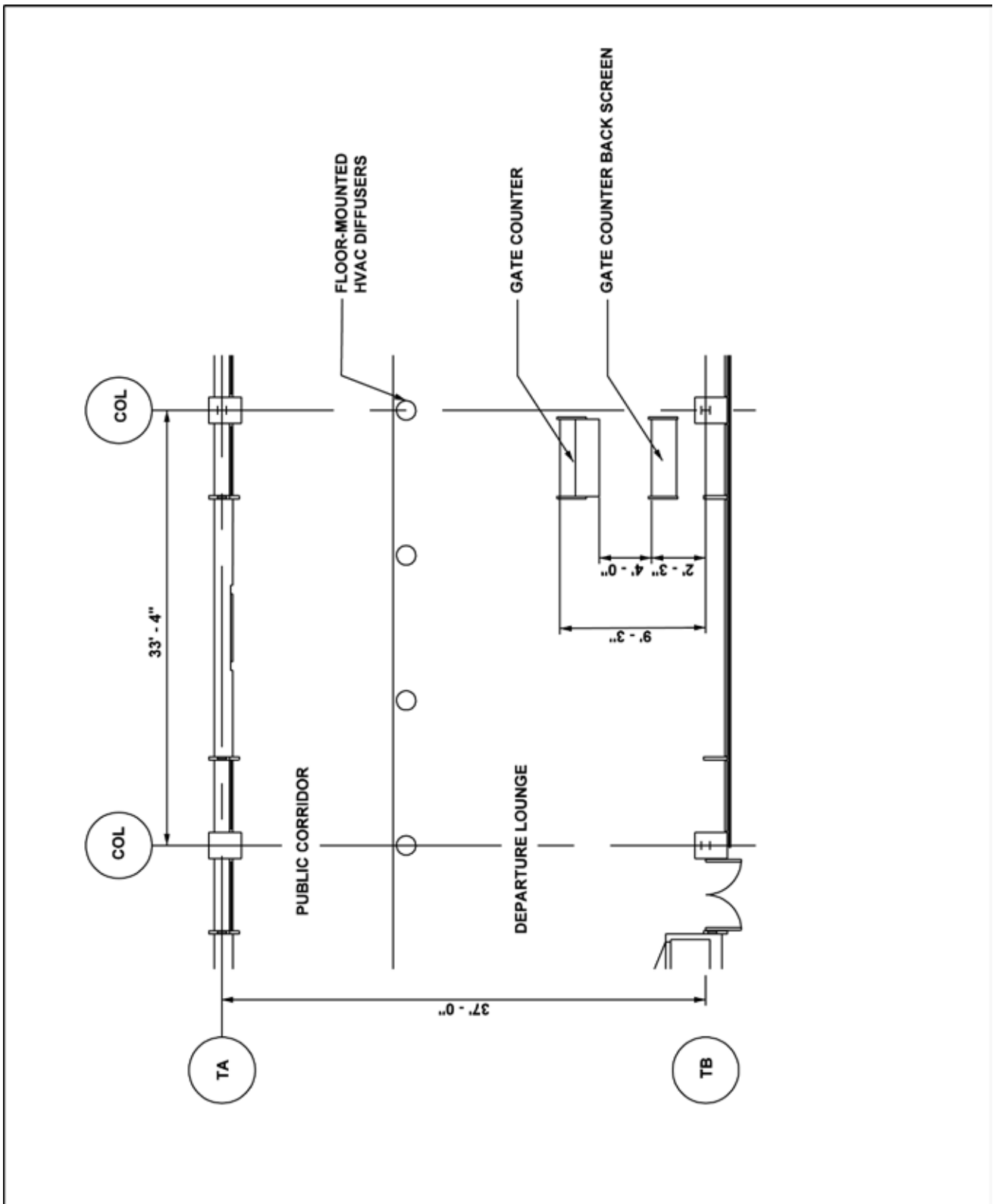
**6.7.1.8 Gate Designations:** Gate designations will be provided at each gate. No other airline designation will be permitted on or adjacent to the door to the loading bridge.

**6.7.1.9 Seating Arrangements:** Seating will be arranged perpendicular to the curtainwall. Diagonal arrangements are prohibited.

**6.7.2 Casework, Gate Counters:** A two-position check-in podium with turret top and complementary backscreen is provided by the Authority for each departure gate within the passenger departure lounges. Common Use Terminal Equipment (CUTE) is provided within each check-in podium. MUFIDS monitors are provided in backscreens. The Authority has also provided normal power terminating in 120V receptacles at the locations in the casework plans. All associated conduit, data outlets, and data cabling have also been provided. Refer to **Exhibits III-6-2, III-6-3, and III-6-4** for gate counter details.

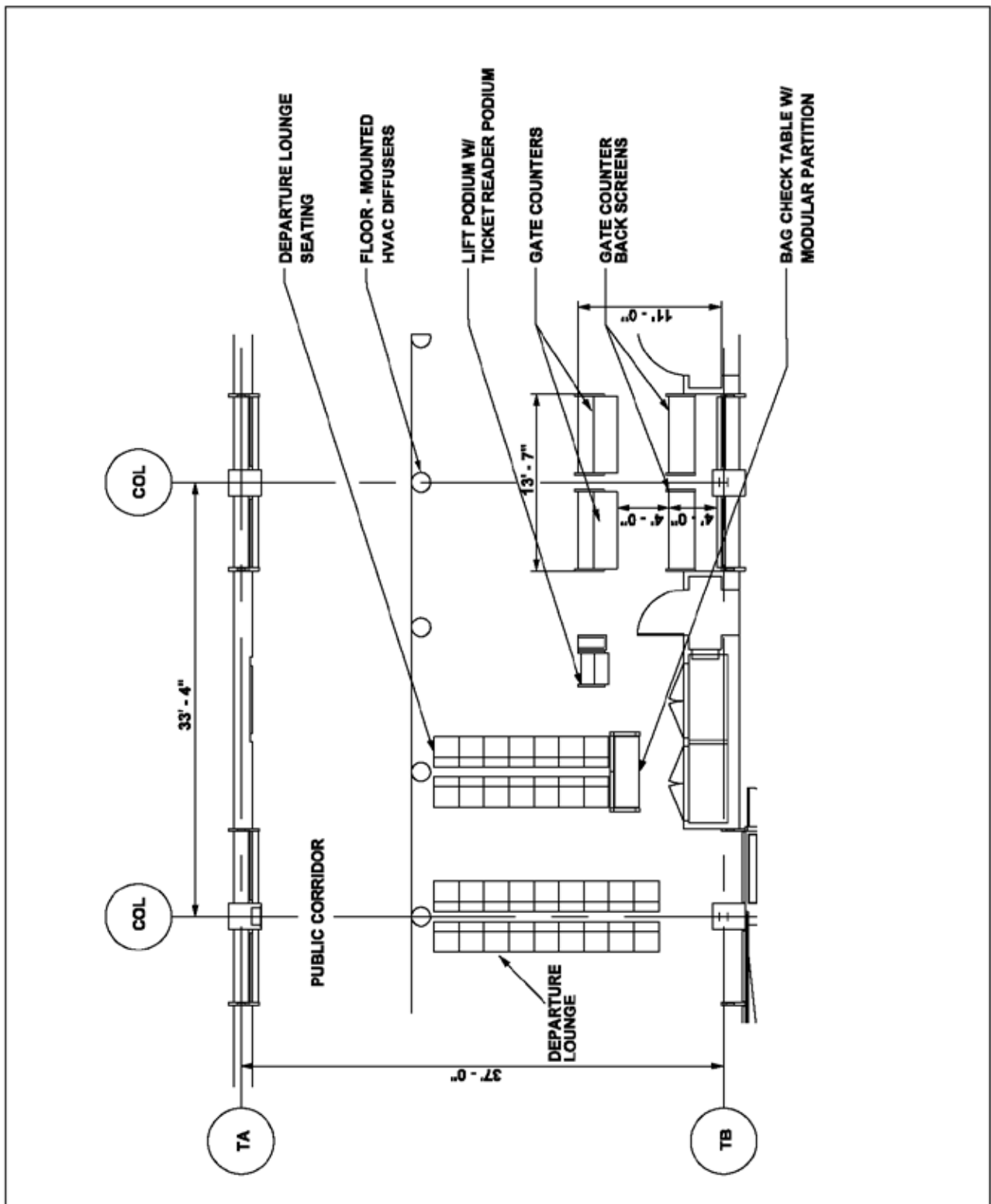
**6.7.2.1 Backscreens:** Complimentary backscreen will be provided by the Authority for each departure gate. Refer to **Exhibit III-6-5** for gate counter backscreen details.

**6.7.2.2 Ticket Lift Podiums:** Podiums will be provided by the Authority at each gate and include Common Use Terminal Equipment (CUTE). All associated conduit, data outlets, and data cabling have also been provided. Refer to **Exhibits III-6-6 and III-6-7** for lift podium plans and details.



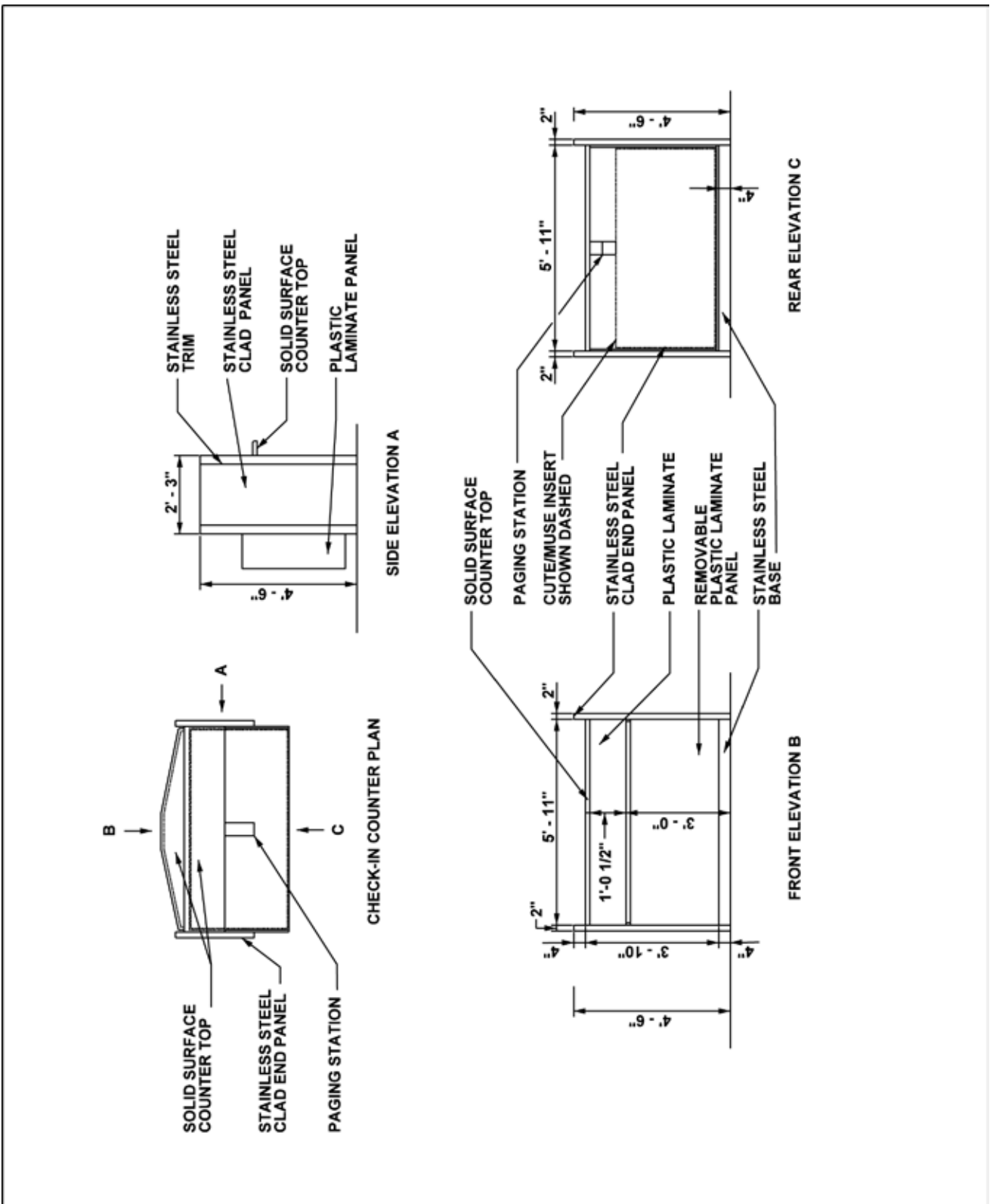
Concourse Z Gate Counter Single Layout

Exhibit III-6-2



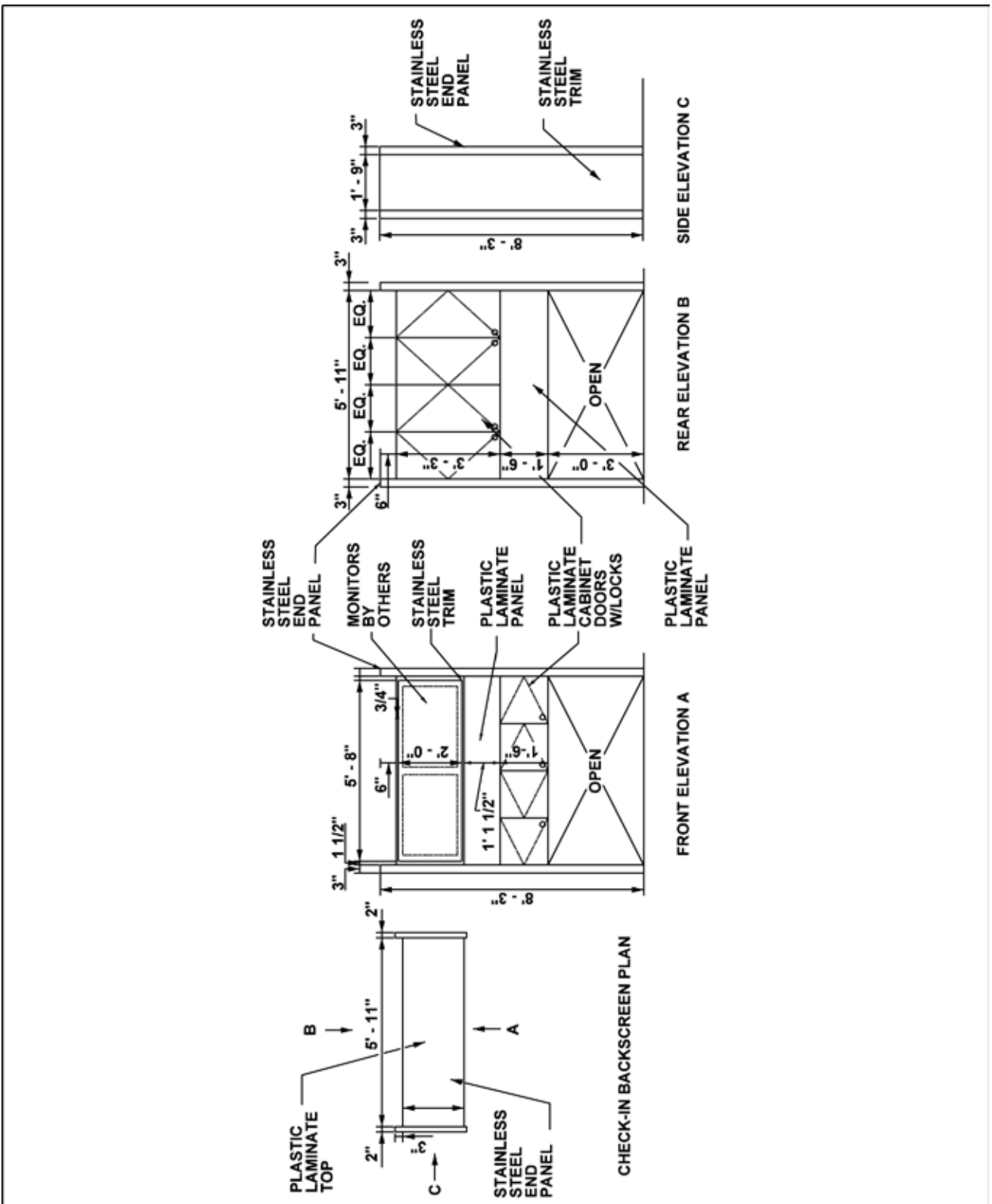
Concourse Z Gate Counter Double Layout

Exhibit III-6-3



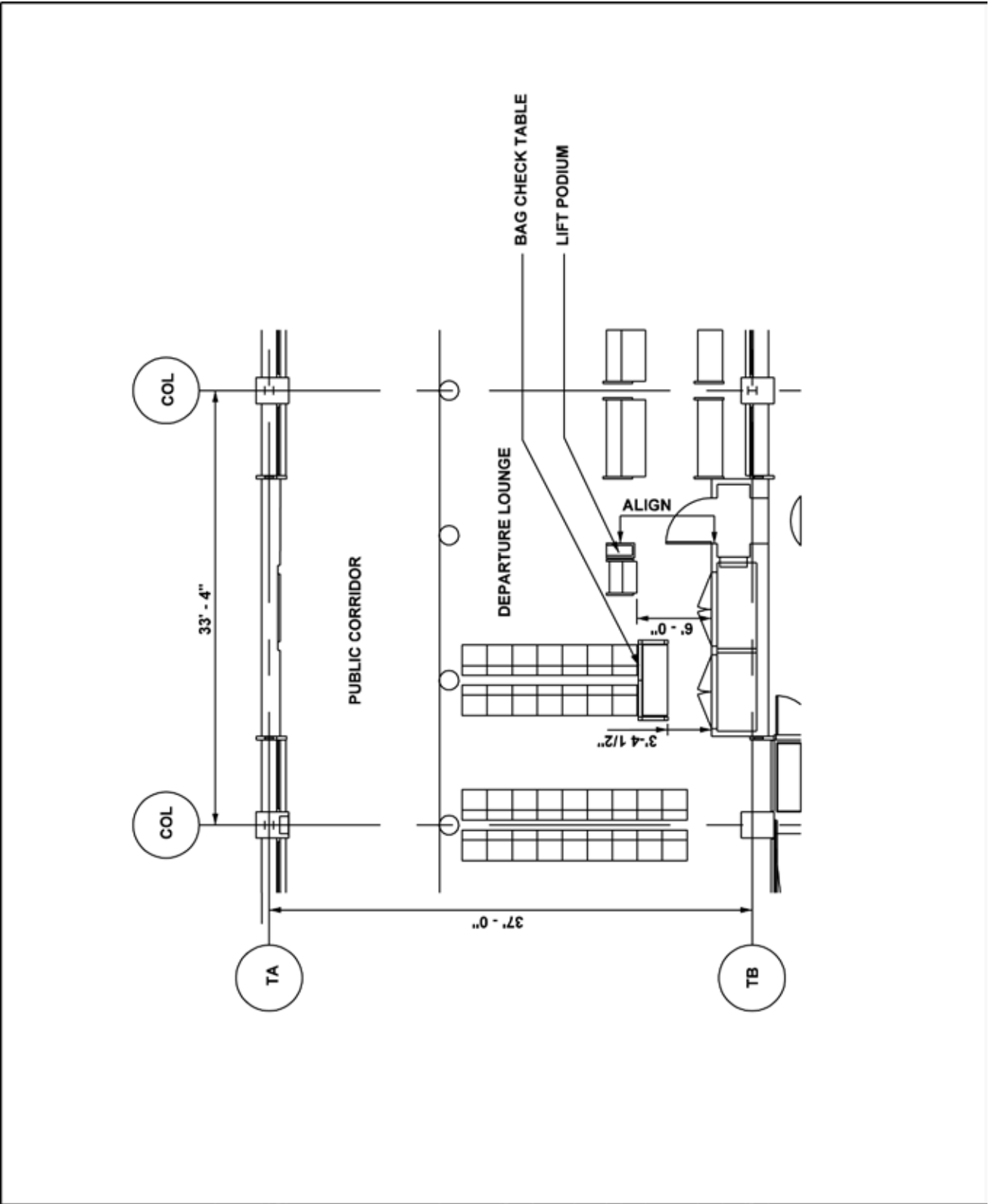
Concourse Z Gate Counter Details

Exhibit III-6-4



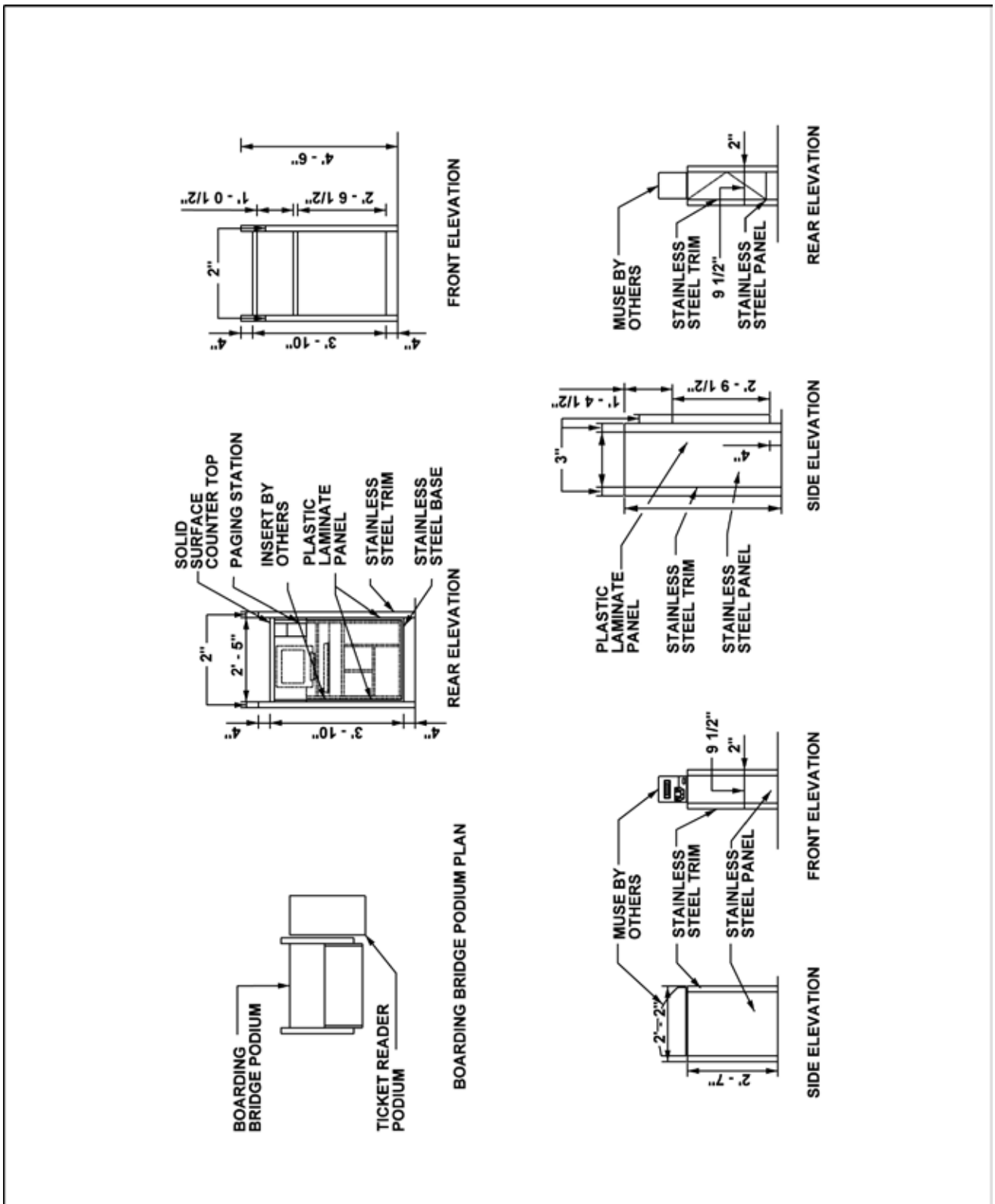
Concourse Z Gate Counter Backscreen Details

Exhibit III-6-5



Concourse Z Lift Podium Floor Plan

Exhibit III-6-6



Concourse Z Lift Podium Typical Details

Exhibit III-6-7

**6.7.2.3 Luggage Sizing Boxes:** Luggage sizing boxes, if desired by the tenant, shall be procured by the Tenant. Construction documents that may be used by the tenant to procure luggage sizing boxes are available from the Authority.

**6.7.2.4 Poster Brochure Racks:** Construction documents that may be used by the tenant to procure additional poster brochure racks are available from the Authority.

**6.7.3 Signing/Graphics:** Departure Door Displays. Gate designations and automated flight description displays are located above each departure gate door. The display above the departure gate door may display destination information and serve as an ADA display to provide boarding information to the hearing impaired as desired by the tenant. No other airline designation will be permitted on or adjacent to the door to the passenger boarding bridge.

## **6.8 Baggage Claim Lobby**

**6.8.1 General Criteria:** Except for airline identification at a baggage service office, no logo, signing or other graphics may be applied to any other surfaces, equipment or appurtenances within the claim area, including baggage claim devices, MUFID racks or monitors, or positive claim railing system if employed.

## **6.9 Other Airline Equipment/Fixtures**

**6.9.1 Advertising:** Airlines may display airline promotional materials within the common use hold room areas only. Promotional materials shall be displayed in the Poster Brochure Racks. All promotional materials will be reviewed and approved by the Authority before airline display will be permitted.

**6.9.2 Baggage Chutes:** As desired by the airline, helical baggage chutes may be erected and installed at each airline gate for late baggage. Plan locations will be reviewed and approved by the Authority and coordinated with other apron features. Tenants shall review the most current Contract Documents and specifications for particulars.

**6.9.2.1 Door operation:** Door operation shall be by a card reader.

**6.9.3 Loading Bridges:** Airlines may not attach or install any temporary or permanent decals, graphics, signing, advertising posters or other fixtures within the loading bridge, on either side of the door to the loading bridge, or the door itself or on the exterior of the bridge, bridge support or equipment attached thereto. Tenants are not allowed to alter these base building elements, or any materials or fixtures that fall within them. This includes floors, walls, doors or ceiling surfaces.

**6.9.4 Miscellaneous:** Any loose equipment used by any air carrier or contract employee thereof within public areas in and around the Terminal will be reviewed and approved by the Authority. Such equipment includes, but is not limited to hand carts, "bellman" carts, tubs, and wheelchairs. Such mobile equipment shall have factory or manufacturer installed bumpers on all exposed edges and semi-inflatable tires to prevent damage to interior and exterior wall and floor finishes. Used equipment from other station locations is unacceptable. Airline Tenants shall review selections of such equipment with the Authority prior to procurement and use.

**6.9.4.1 Airside Dumpsters:** Airside dumpsters are permitted at exterior apron locations. Locations shall be coordinated to maintain access to fire department connections, hydrants and fire lanes and fire exit routes from the Terminal complex. Airside dumpsters are recommended to be of one type, size and color. Tenants shall coordinate requirements with the Authority prior to installation.

**6.9.5 Queue Control/Stanchions:** Airline tenants shall employ queue control devices during any and all scheduled peaks and unanticipated delays when excessive queues may form. Queue control in the Ticketing Level lobby shall follow the guidelines established by the Authority.

**6.9.6 Other Casework:** Individual airline tenants may have specific requirements for special custom casework to

support their individual operations in connection with “ticket-less” travel or other similar programs. Such casework shall be coordinated with the Authority and developed in a design vocabulary consist with other casework. All such casework design and fabrication documents shall be reviewed and approved by the Authority prior to procurement.

**6.9.7 Federally Regulated Sign Guidelines:**

Transportation Security Administration (TSA) and Federal Aviation Administration (FAA) signs will be provided by the Authority at casework locations including ticket counters, gate podiums, check-in podiums, and security check-points. Signs shall conform to the criteria and language established by the most current federal specifications.

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## CHAPTER 7 Retail Tenant Design Standards

### 7.1 Locations Governed By Standards

**7.1.1 General:** Commercial retail space is an integral part of the Design concept of the Main Terminal building at Washington Dulles International Airport. The accessibility and accommodation for these facilities must be arranged so that maximum exposure to the passenger can be accomplished without interfering with the flow of passenger traffic in the Terminal. Retail areas include the following:

**7.1.1.1** Kiosks at the South Concourse

**7.1.1.2** Enclosed areas at the Ground Level

**7.1.1.3** Enclosed areas at the mobile lounge hold rooms, Mezzanine Level

**7.1.1.4** South Finger

**7.1.1.5** Enclosed support areas located at Loading Docks

### 7.2 General Criteria/Prohibitions

**7.2.1 Lighting:** Retail Tenants are encouraged to provide a "transparent" show window with merchandise highlighted in it instead of an opaque window display that blocks the view of the store interior. In addition, the rear wall of the Retail areas should be designated for feature displays.

**7.2.1.1 General Lighting:** Interior of tenant spaces shall be recessed type. Recessed fixtures shall be located and installed in coordination with the existing ceiling finish module and design.

**7.2.1.2 Lighting Equipment:** Shall be selected by Retail tenants for general lighting will be subject to design review and approval by the Authority.

**7.2.2 Merchandising:** Materials used in merchandised displays within the Design Control Zone will conform to the

criteria set forth in **Chapter 5** except by special review and approval by the Authority.

**7.2.2.1 Display Lighting:** Shall be provided for the express purpose of highlighting merchandise in the display window. Acceptable lighting equipment for display lighting for merchandise areas include:

**A.** Recessed or track mounted incandescent adjustable fixtures for MR 16 or PAR 36 low voltage lamps with integral step down transformer and accessories.

**B.** Recessed or track mounted incandescent adjustable fixtures for PAR-20 or PAR-30 lamps and accessories.

**7.2.2.2 Display Lighting Equipment:** Selected by Retail tenants for merchandise areas will be subject to design review and approval by the Authority. Recommended display illumination levels, including ambient light from external sources, should not exceed the following footcandle criteria on the merchandise:

**A.** Feature Displays (Daytime): 300-500 fc.

**B.** Feature Displays (Nighttime): 150-300 fc.

**C.** General Displays (Daytime and Nighttime): 30-100 fc.

**7.2.2.3 Adjustable, Merchandise Lighting Equipment:** Within the Design Control Zone and remaining Retail areas must be positioned or shall have accessories to eliminate glare into public areas of the Terminal or Retail circulation areas. Special attention to the use of mirrored surfaces in display will also be required to prevent reflected light and/or reflection of exposed bulbs. Use of decorative neon accent lighting within Retail displays may be approved by the Authority. Design review and approval will be required prior to fabrication and installation.

**7.2.3 Music:** Background music is permitted in tenant areas on either a temporary or permanent basis provided it is not audible in adjacent public or tenant areas.

**7.2.4 Signing/Graphics Outside of Lease Area:** The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line.

**7.2.4.1** Sign dimensions are 7" x 2' – 11" at Concourse Level and 9" x 18" on Ground Level.

**7.2.4.2** 9 inches x 9 inches C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format.

**A.** Signs are to be aligned as close as possible to centerline of entry to tenant space.

### **7.3 South Concourse Storefronts:**

#### **7.3.1 The Storefront Design For South Concourse**

**Retail Spaces:** Teak screens in both sliding and stationary applications were part of the original Saarinen Design for the concession spaces in the Kiosks at Concourse Level. New teak screens were installed as part of the Main Terminal extensions project in Kiosks' 1 and 4. The design of these teak screens followed the original Saarinen design. Commercial tenants on the Concourse Level are required to incorporate Teak screens into their layouts for individual concession spaces within the ticketing kiosks. Original teak screens are available for tenant adaptation or the following guidelines may be used to procure high quality teak screens that are consistent with the standards of workmanship established in the original Saarinen construction.

**7.3.1.1 Detailing:** For specification sections, elevations, plans, and detail drawings, refer to **Exhibits III-7-1 and III-7-2**, set forth the necessary detail requirements for construction of the teak screens. Site-specific detail conditions, such as at jambs and at joints with metal panel

systems will be reviewed and approved by the Authority on a case-by-case basis. The overall design intent is to have an attractive and unified concession elevation. Tenants are advised to consider how an individual installation relates to adjacent spaces, and if possible employ a standard 8' – 0" module.

**7.3.2 Wood Screen Specifications:** Wood screens shall be as specified in **Paragraph 7.3.3 through 7.3.6**.

#### **7.3.3 Quality Assurance, Manufacturer Qualifications:**

Award the Contract to a single firm specializing in architectural woodwork similar to that required for this Project, with sufficient production capacity to produce required units without causing delay in the work.

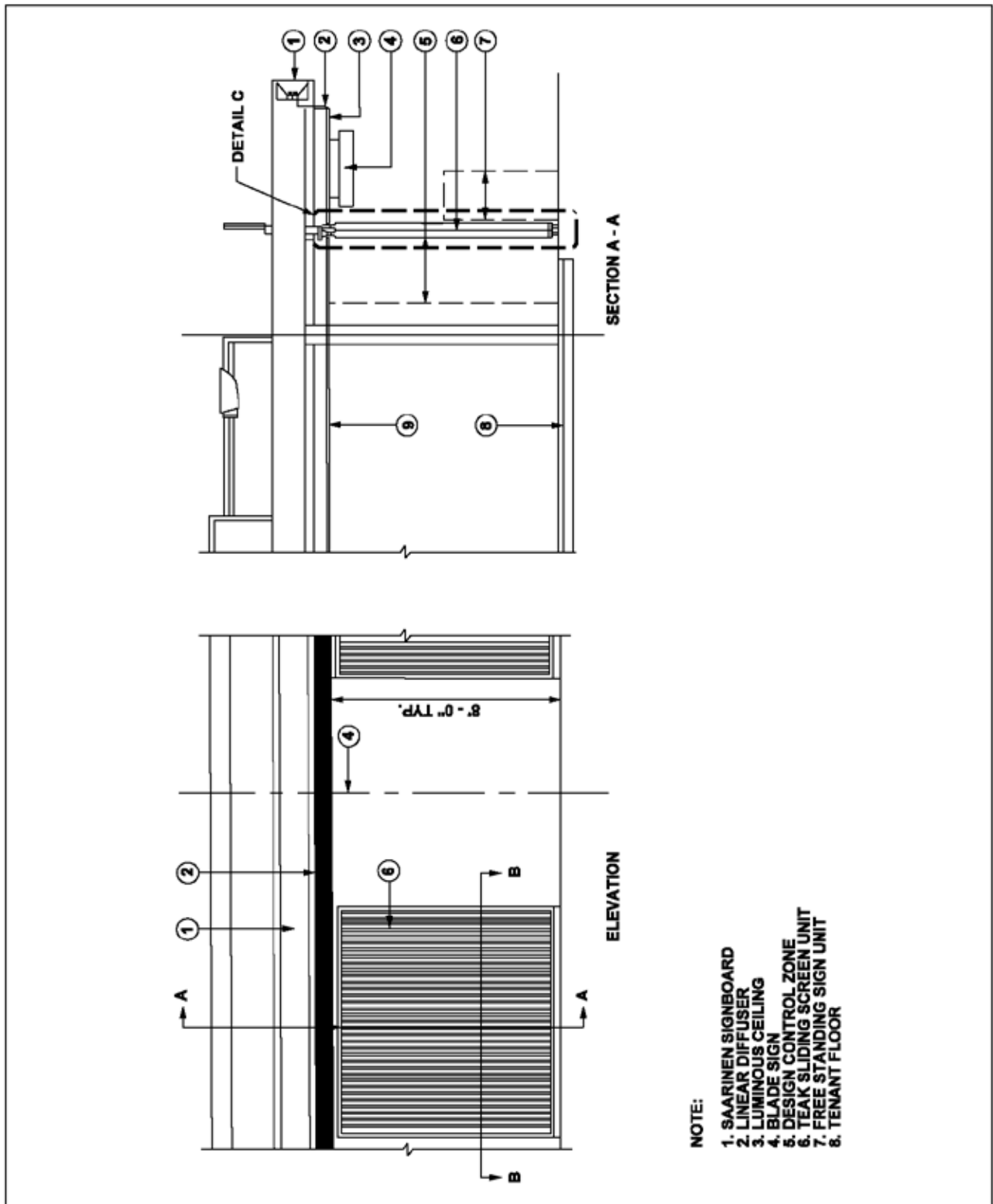
**7.3.4 Materials, Lumber:** AWI Section 100 with the following requirements:

**7.3.4.1 Hardwood for Transparent Finish:** AWI Section 100-S-1, Grade 1, as shown or specified, and free from cats eyes, bird eyes, burls, spits, shakes, sap wood, wind checks, resin deposits, mineral discolorations; hand selected to be uniform in color and grain characteristics and to match contiguous wood planning.

**7.3.4.2 Wood Type W-1:** Solid Teak, with transparent finish to match Flitch No. as selected; sample on file in the COTR's office.

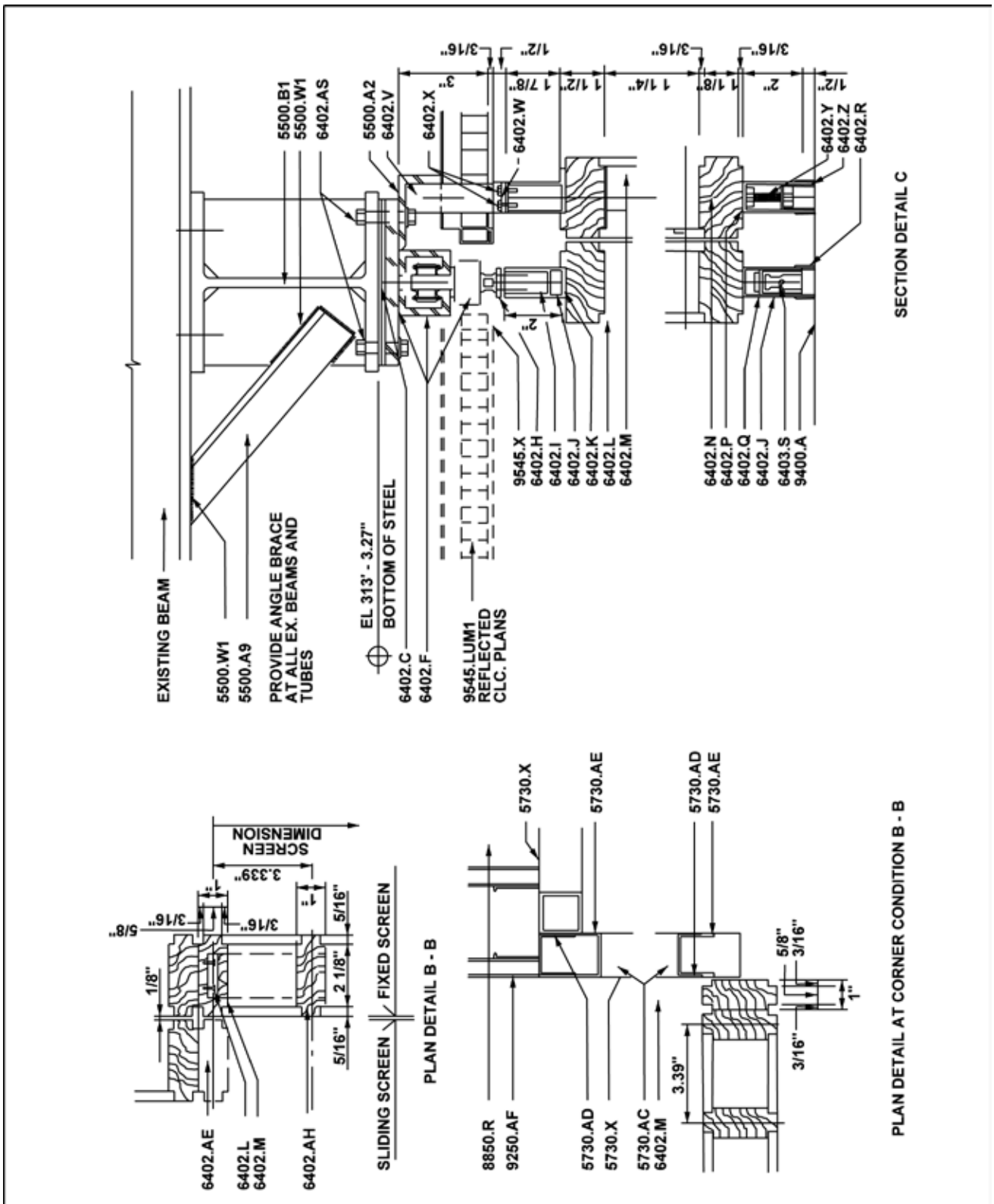
**7.3.5 Fabrication:** Fabricate architectural woodwork to AWI Quality Standards for Premium Grade Construction, to profiles and dimensions shown.

**7.3.5.1 Wood Screens:** Constructed of solid teak hardwood, grid size as shown, and surrounding teak hardwood frame, joined to form a rectangular lattice with stain and transparent finish to match existing similar teak wood screens in the Terminal.



Kiosk Retail Space, Concourse Level Elevation and Sections

Exhibit III-7-1



Teak Screen Details

Exhibit III-7-2

**7.3.5.2 Stile and Rail Wood Panels with Teak Slats:**

Provide teak stile and rail wood panels with teak slats of dimensions and profiles shown. Provide fixed panels and sliding panels where shown on drawings. Provide sliding panels, complete with track system, carriers, and fasteners. Finish of Stile and rail teak wood panels with teak slats shall match existing similar items in the Main Terminal.

**A. Hardware:** "Model NO. 103H/150 HAWA"

(HAFELE) or as acceptable to the Authority. Overhead track system shall be extruded structural aluminum designed to sustain weight of all imposed teak wood panels. Support each panel on two multi-roller carriers each equipped with four ball bearing steel wheels capable of universal movement turning on a central bearing without requiring radius turns or switching mechanisms. Provide where shown track system capable of stacking four or more panels behind a fixed wood panel. Provide bottom guide pin for centering of panels. All track stops and end stops shall align as shown stacking behind the fixed element. At bottom of each panel provide male and female locking pins as required to secure doors when closed to each other and to the floor.

- 1) No exposed fasteners shall be permitted. Panel support bolts shall be of fail-safe design that prevents loosening or backing out, after the panels have been installed. Design track and carrier system for smooth quiet operating and as required accommodating dead load deflections at any point in the span while maintaining operational qualities. Compensate for live load deflections.
- 2) Movement of system shall not mar floor or ceiling finishes and shall not contact floor or track during movement of panels.
- 3) Provide bottom rail deadlock mortised in panel edge as shown with cylinder x cylinder configuration for securing panels from both interior and exterior. Provide matching dustproof strike to

installer of polished aggregate concrete flooring for recessed floor installation.

**7.3.6 Installation:** Shall be as specified in the following paragraphs.

**7.3.6.1 Quality Standard:** Install woodwork to comply with AWI Section 1700 for same grade specified in **Paragraph 7.3.2**, for type of woodwork involved. Install woodwork plumb, level true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of  $\frac{1}{8}$ " in 8' – 0" for plumb and level (including tops) and with no variations in flushness of adjoining surfaces. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where pre-finished matching fastener heads are required, use fine finished nails for exposed nailing, countersunk and filled flush with woodwork and matching final finish where transparent finish is specified or shown.

**7.3.6.2 Backwalls/Sidewalls/Curtainwalls:** No provisions are provided for these areas of retail spaces at the South Concourse.

**7.3.6.3 Ceilings:** Refer to **Chapter 3**, for ceiling module, luminous ceiling systems, and dropped ceiling surfaces.

**7.3.6.4 Storefront Signing/Graphics:** The Authority has developed a blade signage system in addition to the Saarinen Sign Band. Blade signs are affixed to the underside of the luminous ceiling soffits and other ceiling conditions immediately adjacent tenant spaces. The Authority provides these signs to tenants.

**A.** Placement of these signs will be absolutely uniform with respect to dimension offsets from primary wall surfaces where signs appear together or in series.

**B.** A stainless steel cable hanging system is exclusively employed for hanging of blade signs.

**C.** Blade sign cables will be perfectly plumb and perpendicular to ceiling surfaces.

**D.** No blade signs of the hanging type will be permitted to abut ceiling surfaces.

**E.** Signs will hang 1" from finished surface of ceiling.

**F.** No alternate method of hanging these signs will be permitted.

The Authority will review and approve the placement of these signs.

## 7.4 Ground Level Storefronts

### 7.4.1 The storefront design for Column Line G Spaces:

The north wall series of spaces and display cases are standard Dulles Storefronts with aluminum mullions in Dulles Gray framing large-scale glass panels. The display cases, which have solid rear walls, form a linear zone that is marked by open eggcrate lighting above. Doorways are inset with respect to the front plane of the display cases, and have the same eggcrate ceiling on the concourse side. In these areas along Column Line G, the following standards will apply:

**7.4.1.1 Retail Activity:** In cases where spaces are to be used for retail activity, two options will apply to the modification of the storefronts:

**7.4.1.2 Storefront, Option 1:** The rear wall of the display case may be removed, but the eggcrate lighting, inset doorway and glass and mullion storefront must be maintained.

**7.4.1.3 Storefront, Option 2:** In option 2, the storefront may be removed entirely to leave this space completely open. In this case, the eggcrate lighting zone must be maintained. In the case where the storefront will be removed in entirety, a roll-up grille is to be used which shall be concealed flush in the ceiling plane to the north of the eggcrate lighting band.

**7.4.2 Backwalls/Sidewalls/Curtainwalls:** No provisions are provided for these areas of retail spaces at the Ground level.

**7.4.3 Ceilings:** Ground level ceiling is 12" x 12" acoustical tile with recessed lighting.

**7.4.4 Storefront Signing/Graphics:** The primary base building signage system is the "Saarinen Sign Band" found above the kiosks and canopies at the Terminal Concourse and Ground Levels. The sign band fascia with integrated luminous lettering forms a continuous datum that is echoed not only at the kiosks, but also the building perimeter canopies. This signage, which is a unifying element of the design at the Concourse Level, is always integrated with the luminous ceiling system. At the ticketing kiosks, individual airline names appear in the standard Saarinen typeface. At the Sign band above retail areas, generic designation of retail type (such as "Gifts", "Newsstand", etc.) or individual airline or retail names may be displayed, but must be in the standard Saarinen typeface. No individual commercial logos are to be displayed at the fascia level.

**7.4.4.1** For detailed information on the Saarinen typeface, lettering and color standards, tenants should consult "Signing Design Guidelines" in the **IAD Vol. 1**.

**7.4.4.2** At the Claims Level, a similar sign band is found above the south side of the airline bag offices, where it is integrated flush to the wall surface. This wall also contains flush mounted diorama panels for individual advertisers. Most building signage for wayfinding and services at Claim Level is of the blade type, and projects downward from the ceiling surfaces.

**7.4.4.3** The Authority has developed a blade signage system in addition to the Saarinen Sign Band. Blade signs are affixed to the underside of the luminous ceiling soffits and other ceiling conditions immediately adjacent tenant spaces. The Authority provides these signs to tenants.

- A.** Placement of these signs will be absolutely uniform with respect to dimension offsets from primary wall surfaces where signs appear together or in series.
- B.** A stainless steel cable hanging system is exclusively employed for hanging of blade signs.
- C.** Blade sign cables will be perfectly plumb and perpendicular to ceiling surfaces.
- D.** No blade signs of the hanging type will be permitted to abut ceiling surfaces.
- E.** Signs will hang 1" from finished surface of ceiling.
- F.** No alternate method of hanging these signs will be permitted.
- G.** The Authority will review and approve the placement of these signs.

## **7.5 Enclosed Areas At Mobile Lounge Hold Rooms, Mezzanine Level**

**7.5.1 The storefront design for mobile lounge hold rooms:** This requirement is currently under review and development by the Authority.

**7.5.1.1 Ceilings:** No change of ceiling plane is permitted within 24" of Design Control Zone.

**7.5.1.2 Storefront Signing/Graphics:** No signage or materials may be affixed to the interior or exterior glass surfaces of these spaces.

**7.5.1.3 Outside of Lease Line:** No signage will be permitted outside of Lease Line on ceiling surfaces, except for the C.I.P. blade signs.

## **7.6 Kiosks**

**7.6.1 Exception and Additions:** Design Control Zones for Retail kiosks extend from the front face of the forward most display unit to the back of the wall units.

**7.6.2 Floors at Kiosks:** The terrazzo floor material within the lease line may not be altered. Anti-fatigue mats will be provided by the Authority. Tenants shall maintain and replace these mats to match the original Authority provided standard. Tenants may not alter or affix signs or other display fixtures to the floor surface.

**7.6.3 Backwalls/Sidewalls at Kiosks:** The kiosk wall units are designed to include opaque storage areas, as well as transparent display units. A tack surface is provided on the interior of the upper cabinets. Tenants may not alter Authority provided casework or adjacent base building surfaces. Tenants may not alter or affix signs or other display fixtures to any exterior surfaces of any of the display units. Long stemmed aluminum push pins or adhesive-backed or Velcro strips are recommended for affixing items or signs to the tack surface provided.

**7.6.4 Kiosk Lighting:** Ambient lighting at kiosks is provided by the overall terminal lighting. The Retail light stanchions that are integral to the kiosk floor units also provide additional lighting and may be used to highlight items on the kiosks within the limits of the fixtures mechanisms. The kiosk floor and wall units themselves have standard interior lighting to illuminate items on display within glazed cases. No additional task lighting may be affixed to the kiosk units. No freestanding lighting will be permitted within the lease area.

**7.6.5 Kiosk Signing/Graphics: Blade Signs - Authority Provided:** The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line.

**7.6.5.2** Sign dimensions are 7" x 2' – 11" at Concourse Level and 9" x 18" on Ground Level.

**7.6.5.3** 9" x 9" C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format.

**A.** Signs are to be aligned as close as possible to centerline of entry to tenant space.

**7.6.6 Kiosk Merchandising:** Materials, signing and graphics used in merchandise displays within the Design Control Zone shall conform to the criteria set forth in **Chapter 5** except by special review and approval. Displays and/or display fixtures intended for use on top of kiosk units, including, but not limited to, counter stands, literature holders, price tag holders, and easels shall be clear acrylic. Displays and display fixtures shall be limited to a height of 18" and of an overall size which will allow the display fixtures to be locked into the kiosk casework when the kiosk is closed. All displays must be removed from counter tops when the kiosk is closed. Suction cup attachments are prohibited. Signing associated with display fixtures is limited to small labels, easel backed, of metallic finish. Sign dimensions are a maximum of 5" x 7" horizontally oriented. Copy minimum is 5/8" letters in black, silk-screened or applied vinyl. Typography will be professionally prepared. Hand lettering is not acceptable. These small format signs shall be used for logo recognition, special pricing information or special feature information only. Cash registers/point-of-sale equipment must be contained within the kiosks point-of-sale units. Displays may not overhang the edge of the counters. Suction cup attachments are prohibited. Stacking of merchandise on kiosk cabinet top will not be permitted.

**7.6.7 Kiosk Furniture:** Seating for kiosk attendants shall be provided by the Tenant. Acceptable seating is limited to a stool with an adjustable height range from 20" to 50" as manufactured by:

**7.6.7.1 Herman Miller,** Style to be determined.

**7.6.8 Queue Stanchions at Kiosks:** Use of queuing stanchions at kiosks is not recommended.

## CHAPTER 8 Food-And-Beverage Tenant Design Standards

### 8.1 Locations Governed By Standards

**8.1.1 General:** Food-and-beverage tenant locations are generally identified in the Main Terminal include spaces dispersed along the main Concourse kiosks, specific locations at the ground level, South Finger, and Concourse Z. Tenants are encouraged to provide a “transparent” storefront or show window with dining, beverage service, or food service highlighted in it. Opaque window displays that block the views of the tenant space interiors from the public corridor are discouraged. Food-and-Beverage spaces include:

**8.1.1.1** Enclosed areas at South Concourse

**8.1.1.2** Enclosed areas at Ground Level/Ground Transportation Center

**8.1.1.3** Enclosed areas at the mobile lounge hold rooms, Mezzanine Level

**8.1.1.4** Enclosed areas at South Finger

**8.1.1.5** Enclosed areas at Concourse Z

**8.1.1.6** Food-and-Beverage Support Spaces

### 8.2 General Criteria/Prohibitions

**8.2.1 Lighting:** Food-and-beverage space lighting will not project glare, or direct beams into the main circulation areas.

#### 8.2.1.1 Food-and-Beverage illumination levels:

Illumination levels for Food-and-beverage establishments shall comply with the following footcandle criteria by area during daytime and nighttime hours:

**A. Circulation Areas:** 10-30 fc horizontal at 3' – 0" above the finished floor.

**B. Dining Areas:** 5-10 fc.

**C. Cashier:** 20-50 fc.

**8.2.1.2 Display lighting:** Display lighting shall be provided for the express purpose of highlighting merchandise and food at food service or food display areas. Acceptable lighting equipment for display lighting for merchandise areas include:

**A. Recessed or track mounted incandescent adjustable fixtures for MR 16 or PAR 36 low voltage lamps with integral step down transformer and accessories.**

**B. Recessed or track mounted incandescent adjustable fixtures for PAR-20 or PAR-30 lamps and accessories.**

**8.2.1.3 Display illumination levels:** Recommended illumination levels for Food-and-beverage displays include the following footcandle criteria by area during daytime and nighttime hours:

**A. Food Service:** 25-75 fc.

**B. Food Selection Areas:** 25-75 fc.

**8.2.1.4 Adjustable merchandise lighting:** Adjustable merchandise lighting equipment within the Design Control Zone and remaining Food-and-beverage areas must be positioned or shall have accessories to eliminate glare into public areas of the Terminal or food-and-beverage circulation areas. Special attention to the use of mirrored surfaces will also be required to prevent reflected light and/or reflection of exposed bulbs. Use of decorative neon accent lighting within food-and-beverage displays may be approved by the Authority. Design review and approval will be required prior to fabrication and installation. All lighting equipment selected by Food-and-beverage tenants shall be subject to design review and approval.

### 8.2.2 Signing/Graphics Inside Lease Line

**8.2.2.1 Menu Boards:** Menu boards shall be used to provide menu and price information for restaurant, café and fast food establishments. Menu boards shall be specifically designed for use in the Terminal. Food-and-beverage boards provided to tenants by distributors, vendor product advertising and photographs of food are not acceptable. Tenant corporate standard graphic programs for menu boards, if reviewed and approved by the Authority, may be acceptable for installation. Size, mounting height and method of attachment will be reviewed and approved by the Authority. Backlit or illuminated menu boards are recommended at all locations. Materials shall be non-glare and illumination must not interfere with readability. Accent lighting shall be concealed. Menu board materials, size, placement, means of attachment and proposed accent lighting will be reviewed and approved by the Authority. Menu boards may be located above food service counters and/or at a backwall of the food service preparation or service area.

**8.2.2.2 Miscellaneous Signs:** Miscellaneous signs, including, but not limited to liquor license, occupancy posting, manager-on-duty, and employee of the month shall comply with **Chapter 5**.

**8.2.3 Fixtures/Millwork/Furniture/Equipment:** Food-and-beverage areas shall maintain a “clutter-free” appearance of spaces that are visible to the general public. To the maximum extent possible dispensers for cups, straws, stirrers, cup covers, napkins, utensils and/or condiments shall be integrated into the design of casework for counters or wait stations. No used fixtures, furnishings or equipment are permitted if they can be viewed from public areas.

**8.2.3.1 Food Service Counters/Displays:** Food service counters and tray rails shall be developed with a uniform appearance. Counters shall be clad with ceramic enamel panels in 2' – 0" horizontal modules and have black rubber bases and stainless steel counter tops with a continuous stainless steel bullnose. The ceramic enamel fascia panel may be executed in colors and motifs selected by the Tenants. The counter top beyond the continuous stainless

steel bullnose may be executed in colors and materials selected by the Tenants. Counters may be 32", 34" or 42" high. A maximum of 54" is permitted inclusive of food displays areas or sneeze guards which may be integrated into the counter design. A continuous stainless steel bullnose shall be incorporated at the vertical locations indicated.

**8.2.3.2 Tray Rails:** Where tray rails are incorporated into the counter frontage, tray rails shall be fabricated entirely of stainless steel. Tray rail supports shall be located on the 2' – 0" horizontal module.

**8.2.3.3 Sneeze Guards/Food Display Cases:** Sneeze guards and food display cases shall be constructed of clear glass or acrylic materials free from patterns, decals or applied colors. Frames shall be stainless steel, chrome or clear anodized aluminum. If contiguous with the food service counter frontage and terminating at a demising wall, sneeze guards and display cases shall be a maximum of 4' – 6" high.

**8.2.3.4 Other Display Cases:** Cases for the display of souvenirs and/or related retail merchandise, including, but not limited to T-shirts, cups, and packaged foods, shall comply with **Chapter 5**.

**8.2.4 Music:** Background music is permitted in tenant areas on either a temporary or permanent basis provided it is not audible in adjacent public or tenant areas.

**8.2.5 Queue Control/Stanchions:** Tenants shall be responsible for controlling individual queues within or immediately adjacent to their lease premise so that the customer queue does not interfere with either internal circulation or circulation through public areas. The food-and-beverage Developer shall have available queue control devices to provide to food-and-beverage tenants for their use when excessive queues may form.

**8.2.6 Signing/Graphics Outside of Lease Area:** Food-and-beverage locations shall comply with requirements for

signing systems and graphics outside leasing areas as outlined in **Paragraph 8.3.5.1**.

### 8.3 South Concourse Storefronts

#### 8.3.1 The storefront design for Kiosks 1, 2, 3, and 4:

Kiosks at the main concourse level have sliding teak screen panels as described above, refer to **Chapter 2 Exhibits III-2-1, III-2-2, and III-2-3**. The luminous ceiling systems and Saarinen sign band run continuously above the retail kiosks. Within the Design Control Zone, which extends into the space from the Lease Line, the following finish standards shall apply:

**8.3.1.1 Modifications:** No modifications to the teak screens will be permitted without Authority approval. Tenants are responsible for positioning their displays without damaging the teak screens.

**8.3.2 Floors:** At the kiosk threshold, extending into the space from the terrazzo edge, an 18" band of material will form a consistent transition from terrazzo to tenant selected interior finishes. This material is currently being studied by the Authority.

**8.3.3 Backwalls:** Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority.

**8.3.4 Ceilings:** A one-module band of acoustic tile ceiling matching module, dimensions and details of the luminous ceiling will extend into the Design Control Zone. This band will form the transition from luminous ceiling to tenant ceiling finishes.

**8.3.4.1 Luminous Ceiling System:** Tenants may choose to continue and match the existing luminous ceiling system into their spaces.

**8.3.4.2 Ceiling Surfaces:** Ceiling surfaces in tenant spaces are to be high quality ceiling systems that are compatible with the detailing of base building conditions.

**8.3.4.3 Abutting Ceiling Conditions:** All abutting ceiling conditions shall have flush white metal splines that align through the ceiling level. No projecting edge or visible unfinished surfaces will be permitted.

**8.3.4.4 Dropped Ceiling Surfaces:** Dropped ceiling surfaces will not be permitted. Ceilings in kiosk areas must align through luminous ceiling plane.

**8.3.5 Storefront Signing/Graphics:** Tenants shall be able to freely display and market within the lease areas and within the Design Control Zone within the material limitation of the criteria set forth in **Chapter 5**. Sign bands and blade signs shall be incorporated into the storefront using the prototypical details contained in **Chapter 5**.

**8.3.5.1 Blade Sign:** The Authority will provide blade signs for each tenant space. These signs are attached to the luminous ceiling with a stainless steel wire system from a fixed offset from the lease line.

**A.** Sign dimensions are 7" x 2' – 11" at Concourse Level and 9" x 18" on Ground Level.

**B.** 9" x 9" C.I.P. logo will be provided by the Authority. Tenant shall provide specific commercial logo for placement within established format.

Signs are to be aligned as close as possible to centerline of entry to tenant space.

### 8.4 Ground Level/Ground Transportation Center

**8.4.1 Column Lines 018, 021, 023, 18, 21, and 23:** Food service establishments may be located at Ground Level to serve the Ground Transportation Center meet/greeter spaces. No storefront enclosures are in place at these locations. The Authority anticipates that these locations will be available at each meet/greeter space at the designated column lines.

**8.4.2.1 Backwalls/Sidewalls:** Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority.

**8.4.2.2 Ceilings:** Ground level ceiling is 12" x 12" acoustical tile with recessed lighting.

**8.4.2.3 Signing/Graphics:** Signage and graphics shall be provided by the Authority.

## **8.5 Mobile Lounge Hold Rooms Storefronts**

**8.5.1 The storefront design for Hold Room Commercial Spaces:** Food service establishments are permitted at the Mezzanine Level. The following standards apply to retail spaces in this area:

**8.5.1.1 Hanging Signage:** No hanging signage will be permitted from the ceiling plane.

**8.5.1.2 Glazing Surfaces:** If space is enclosed by glazing system, no decals, graphics or other signage will be permitted on interior or exterior glazing surfaces.

**8.5.1.3 Freestanding Stanchions:** No freestanding signage stanchions will be permitted for primary logo display. Individual tenant signage will be wall mounted and lit by dedicated fixtures.

**8.5.1.4 Lighting:** Lighting will not project glare, or direct beams into main circulation areas.

**8.5.1.5 Seating Layouts:** Seating layouts may not interfere with primary circulation, adjacent tenant areas or emergency access/egress.

## **8.6 South Finger Storefronts**

**8.6.1 General:** South Finger airline, commercial and advertising spaces are currently being studied by the Authority. Standards for those spaces will be forthcoming.

## **8.7 Concourse Z Storefronts**

**8.7.1 Floors:** On the apron level, tenants shall provide a transitional floor adjacent to the existing flooring in the public corridor to ensure a smooth transition from the corridor terrazzo to overall tenant floor surface. Tenants shall make provisions to align the top of the floor transition with the existing ¼" metal strip set at the edge of the corridor terrazzo flooring. The tenant-supplied storefront, including security grilles (if provided), shall be centered on the floor transition so that no portion of the tenant-supplied flooring is visible on the public corridor side of the storefront or security grille.

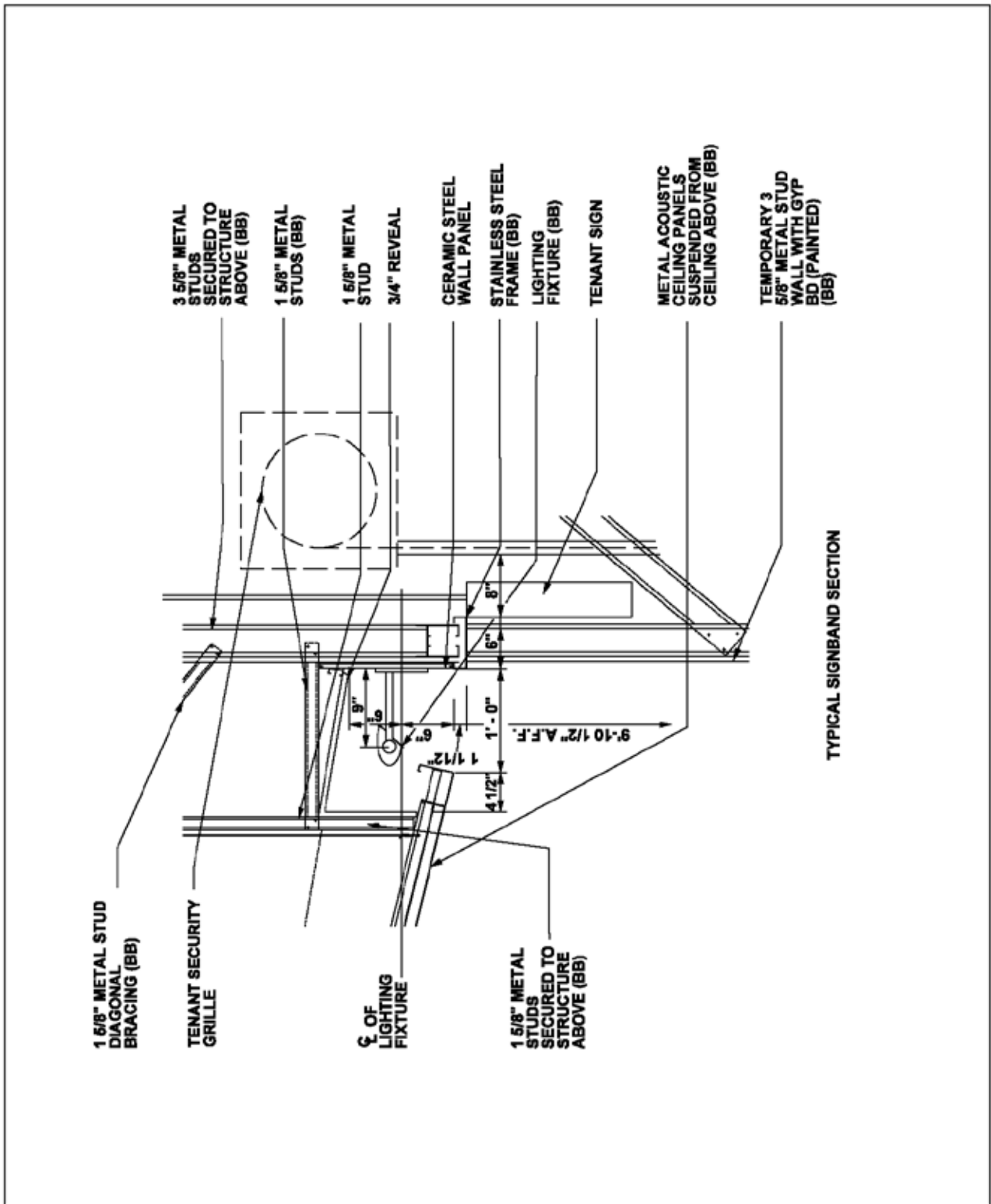
**8.7.2 Backwalls/Sidewalls:** Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority.

**8.7.2.1 Public View:** Commercial tenants are encouraged to provide a "transparent" storefront or show window with merchandise, dining, beverage service, or food service highlighted in it. Opaque window displays that block the views of the tenant space interiors from the public corridor are discouraged. In addition, the rear wall of retail areas should be designated for feature displays.

**8.7.3 Ceiling:** Ceilings installed by apron level commercial tenants may vary but shall be a minimum of 8'-3" above the finished floor. The tenant ceiling at the entry portal shall be set at 8'-3" above the floor to match the bottom of the existing sign-band fascia.

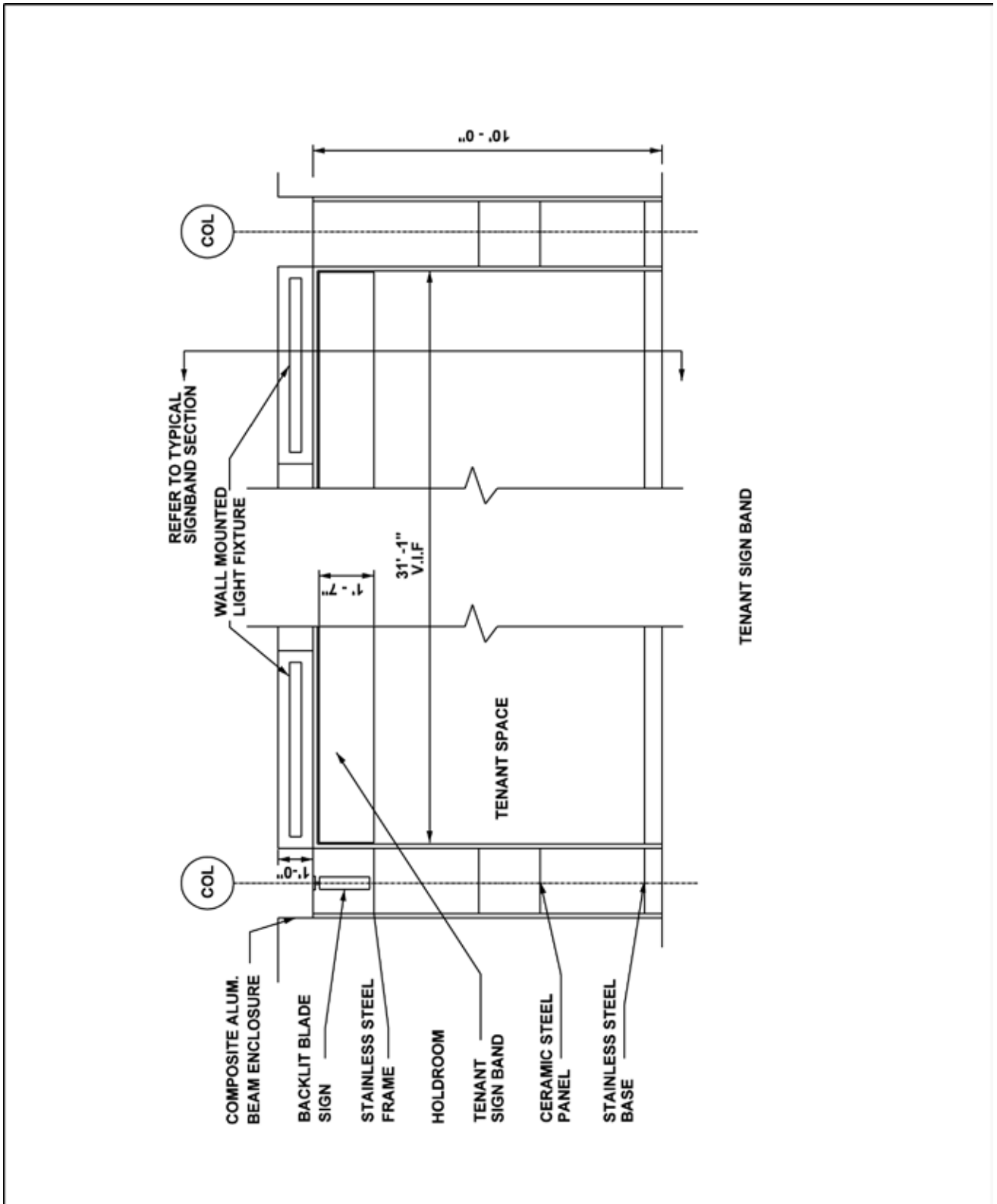
**8.7.4 Storefront/Signing Graphics:** Blade Signs are not permitted in Concourse Z.

**8.7.4.1 Sign Bands:** Commercial tenant signage outside of the tenant lease area shall be located on designated sign bands only. If there is insufficient space on the signband for adequate tenant identification, the Authority will consider other signage options. All signage must be reviewed and approved by the Authority prior to fabrication and delivery. Refer to **Exhibits III-8-1, III-8-2, III-8-3, and III-8-4.**



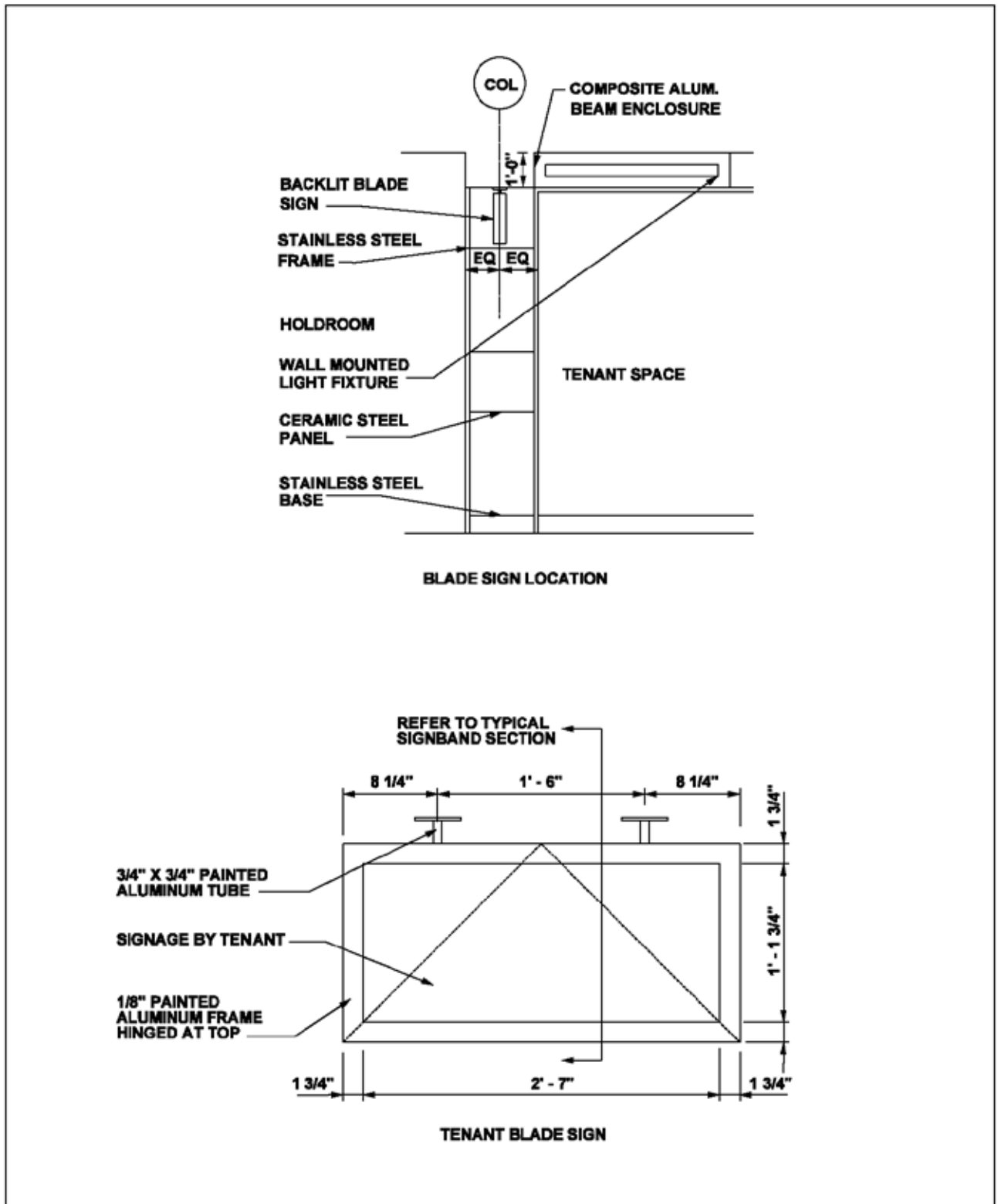
Concourse Z Sign Band Detail

Exhibit III-8-1



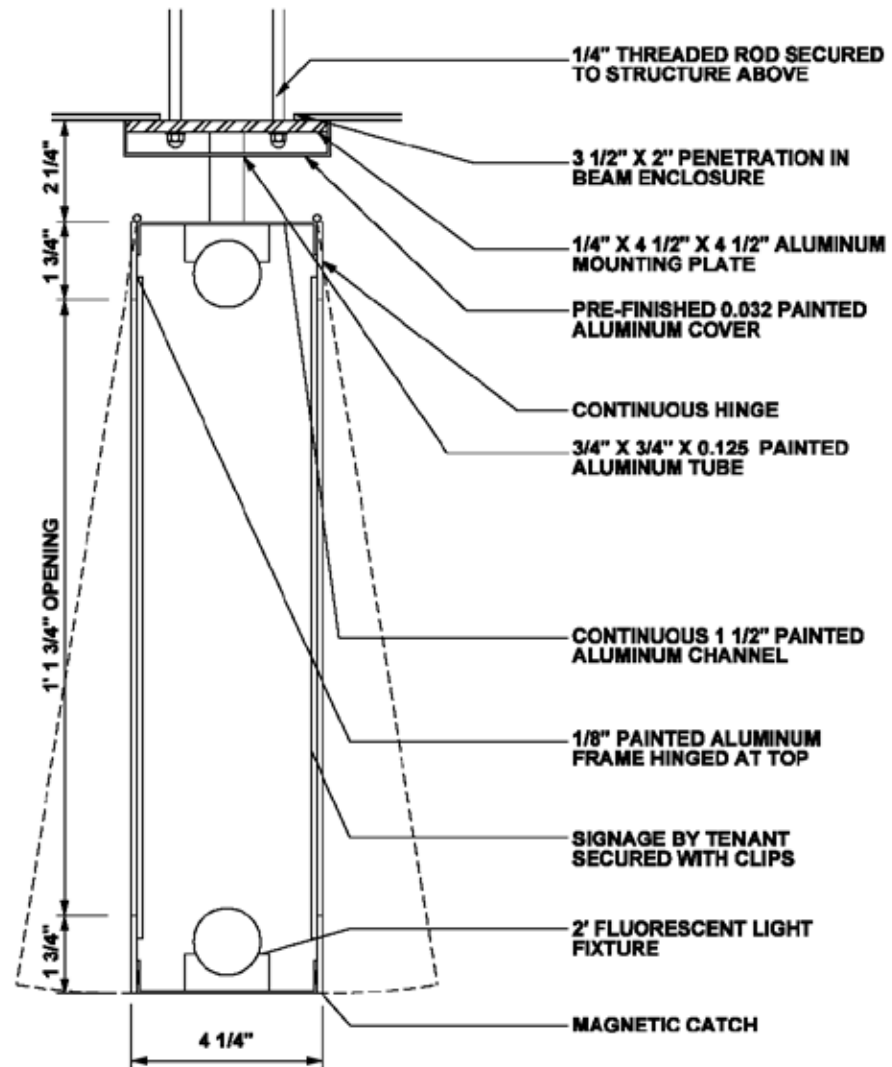
Concourse Z Signband Elevation

Exhibit III-8-2



Concourse Z Blade Sign Elevation

Exhibit III-8-3



BLADE SIGN SECTION

Concourse Z Backlit Blade Sign Section

Exhibit III-8-4

## 8.8 Kiosks

**8.8.1 Floors:** At the kiosk threshold, extending into the space from the terrazzo edge, an 18" band of material will form a consistent transition from terrazzo to tenant selected interior finishes. This material is currently being studied by the Authority.

**8.8.2 Backwalls/Sidewalls:** Tenants may propose a variety of finishes for wall surfaces. All finishes are to be reviewed and approved by the Authority.

**8.8.2.1 Public View:** Commercial tenants are encouraged to provide a "transparent" storefront or show window with merchandise, dining, beverage service, or food service highlighted in it. Opaque window displays that block the views of the tenant space interiors from the public corridor are discouraged. In addition, the rear wall of retail areas should be designated for feature displays.

**8.8.3 Kiosk Lighting:** General lighting for interior of tenant spaces shall be recessed type. Recessed fixtures shall be located and installed in coordination with the existing ceiling finish module and design.

**8.8.4 Storefront/Signing Graphics:** The primary base building signage system is the "Saarinen Sign Band" found above the kiosks and canopies at the Terminal Concourse and Ground Levels. The sign band fascia with integrated luminous lettering forms a continuous datum that is echoed not only at the kiosks, but also the building perimeter canopies. This signage, which is a unifying element of the design at the Concourse Level, is always integrated with the luminous ceiling system. At the ticketing kiosks, individual airline names appear in the standard Saarinen typeface. At the Sign band above retail areas, generic designation of retail type (such as "Gifts", "Newsstand", etc.) or individual airline or retail names may be displayed, but must be in the standard Saarinen typeface. No individual commercial logos are to be displayed at the fascia level.

## 8.9 Prohibitions

**8.9.1 General:** Storefront verticals provided by the Authority may not be removed or altered. Signing and graphic materials may be displayed within the Authority provided sign advertising stanchions only. Signing, graphics and any other displays or elements are prohibited outside the lease area and may be removed by the Authority at tenant expense.

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## CHAPTER 9 Advertising Tenant Design Standards

### 9.1 Locations Governed By Standards

**9.1.1 General:** Several formats exist in the Main Terminal Complex for commercial advertising. The predominant mode of advertising displays is the back-lit diorama unit. These units can be found outside the Main Concourse Level in the mobile lounge hold rooms and at the Ground Level claims areas. To the greatest extent possible, the Authority wishes to integrate advertising signage and displays into base building conditions by mounting back-lit dioramas flush to wall surfaces.

### 9.2 Advertising Shell Space

**9.2.1 Dioramas:** Dioramas are found at the Main Concourse, South Concourse, Ground Level, Ground Transportation Center and Concourse Z. Existing diorama units are of varying sizes and are either surface or flush mounted. All have integral lighting. Typical diorama size at Ground Level is 5' – 6" x 3' – 10" inside frame dimension. Refer to **Exhibit III-3-4** for details. Advertising location plans are under development for the main concourse and south concourse. Refer to **Exhibit III-1-3** for ground level location plan.

**9.2.2 Concourse Z:** Wall Locations. Locations have been designated along the north wall of the public corridors in Concourse Z; no locations have been designated on the apron level of the South Finger. In general, diorama locations are positioned on corridor walls opposite departure lounges, not opposite service core areas containing public toilets and concessions.

**9.2.2.1 Wall Construction:** The north wall of the public corridor is finished with ceramic steel panels mounted on steel studs. At designated diorama locations, a 6' - 8" wide by 4' - 9" high by 2' – 0" deep recess is provided for the installation of an internally-illuminated diorama unit. A removable "blank" panel, provided in the recess, shall be removed and delivered to the Authority prior to the

installation of a diorama in each recess. The recess should provide a 6" reveal border around the diorama after the diorama installation is complete. Tenants shall provide and install the dioramas complete with mounting hardware, frames, filler pieces, and provisions for any necessary ventilation. See **Exhibits III-9-1, III-9-2, III-9-3, III-9-4, and III-9-5** for dioramas location, elevation, and details.

**9.2.2.2 Art and Typography:** Art and typography shall be computer or photo process generated. Hand written displays will not be acceptable.

**9.2.2.3 Transparencies:** Transparencies for tenant logo artwork will be produced on a suitable transparent film from a computer-generated original. Scanned 4-color images are encouraged.

**9.2.2.4 Tenant Transparencies:** Tenant transparencies shall fill the image area entirely. Visible seams and light leaks will be unacceptable.

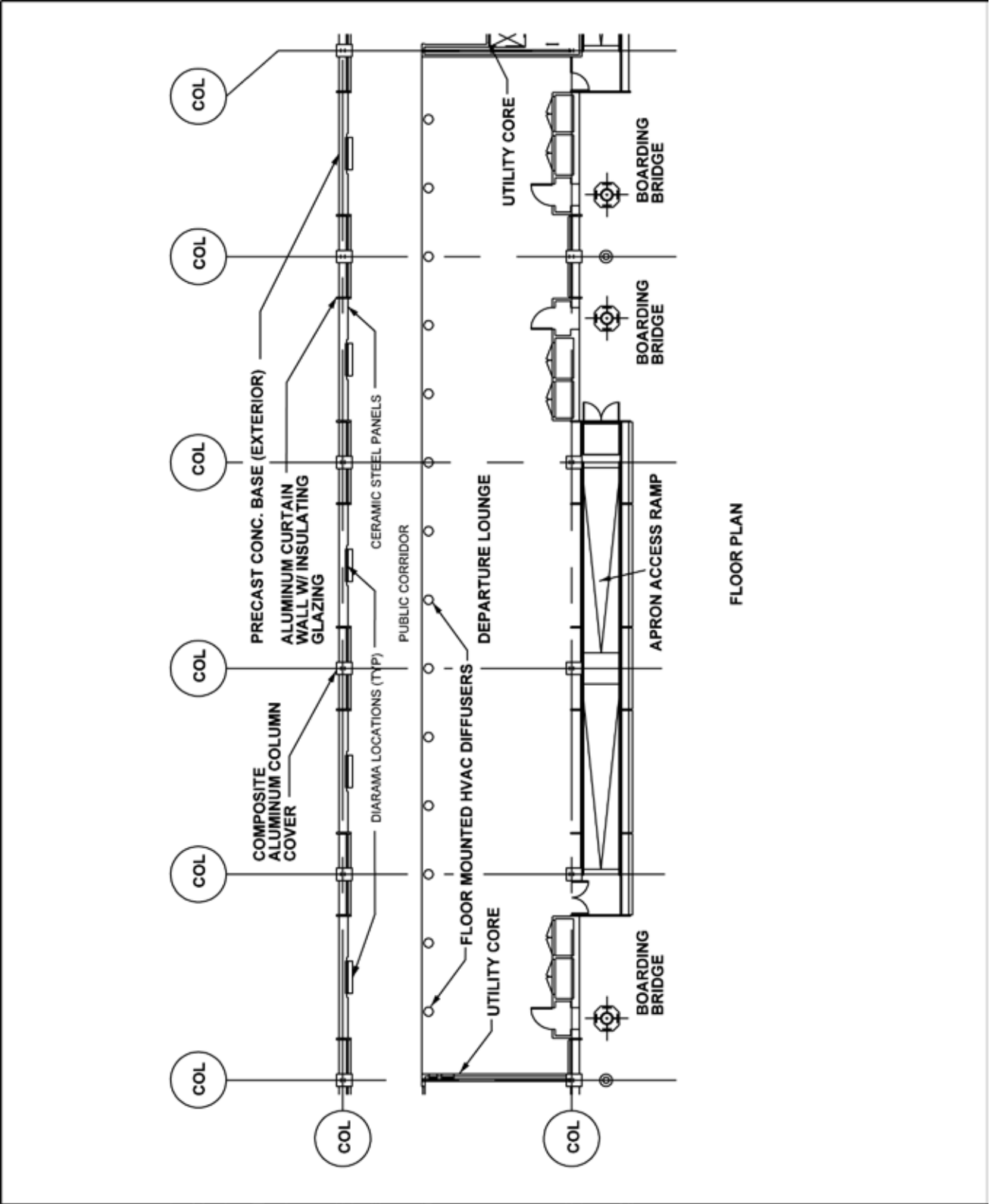
**9.2.2.5 Artwork:** Artwork shall have single transparency thickness and shall lie perfectly flat within display frame.

**9.2.2.6 Full Frame Area:** Full frame area shall be utilized such that excessive dark areas are avoided.

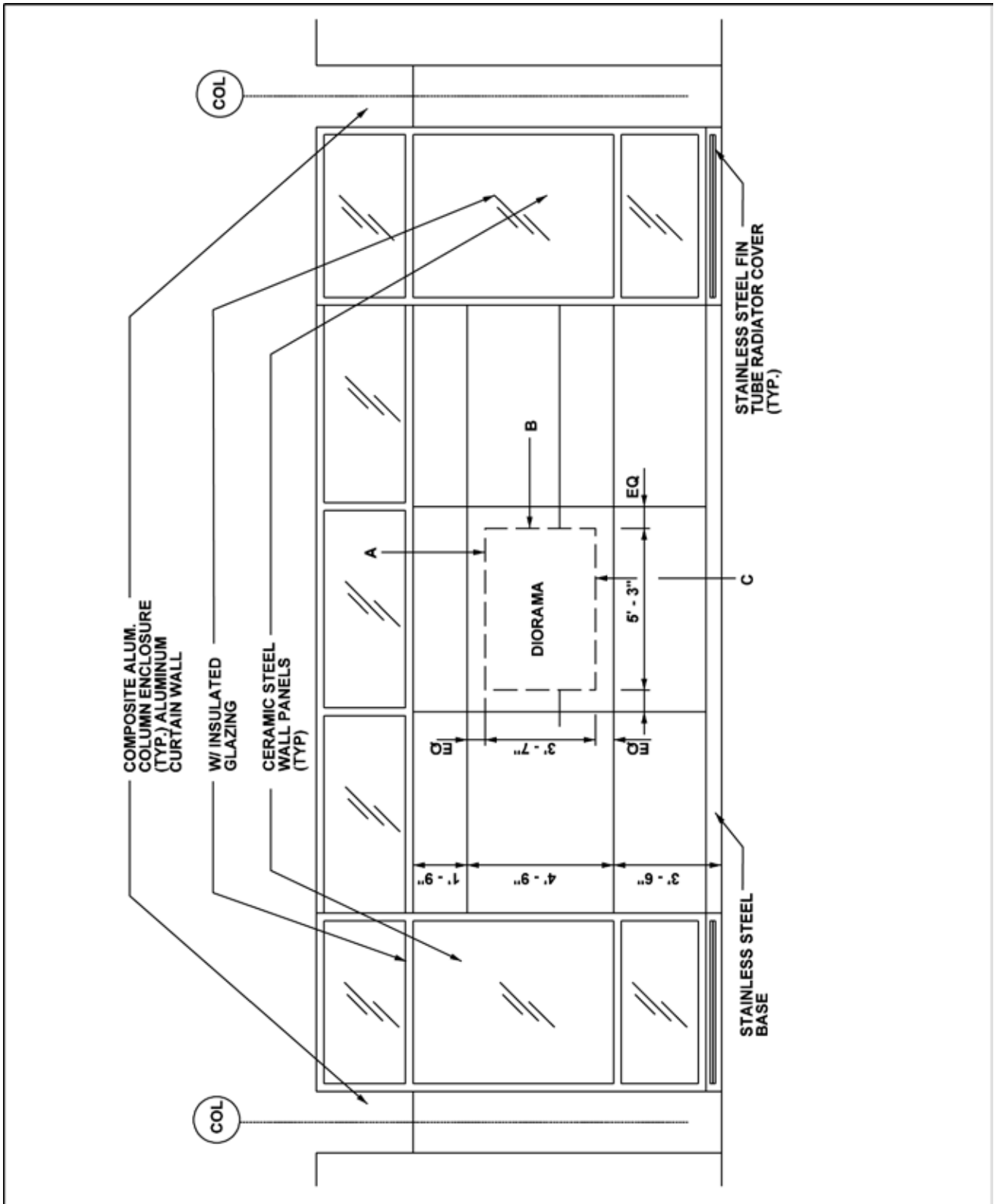
**9.2.2.7 Additional Graphics:** No additional graphics, artwork or decals are permitted on walls adjacent to diorama displays.

**9.2.2.8 Printed Material:** All printed material/graphics shall be level and parallel to sign casework where providing informational messages.

**9.2.2.9 Reproductions:** Inferior reproduction of any kind will be rejected. Washed-out images or overly dark, contrasting images will generally be unacceptable. Tenants are required to engage a professionally trained graphic designer with a minimum of five years of professional experience to provide graphic display materials.

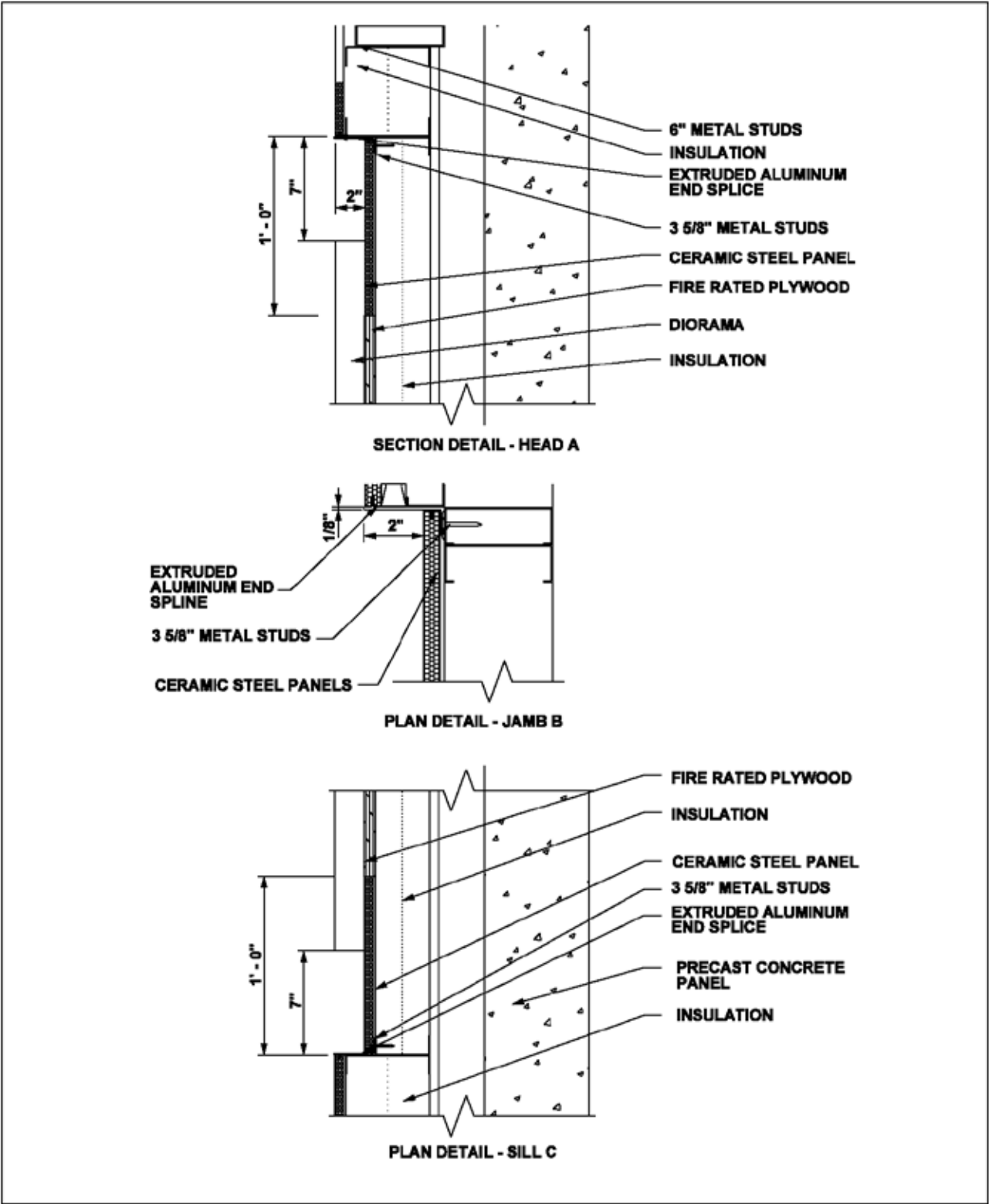


Concourse Z Advertising Location Plan      Exhibit III-9-1



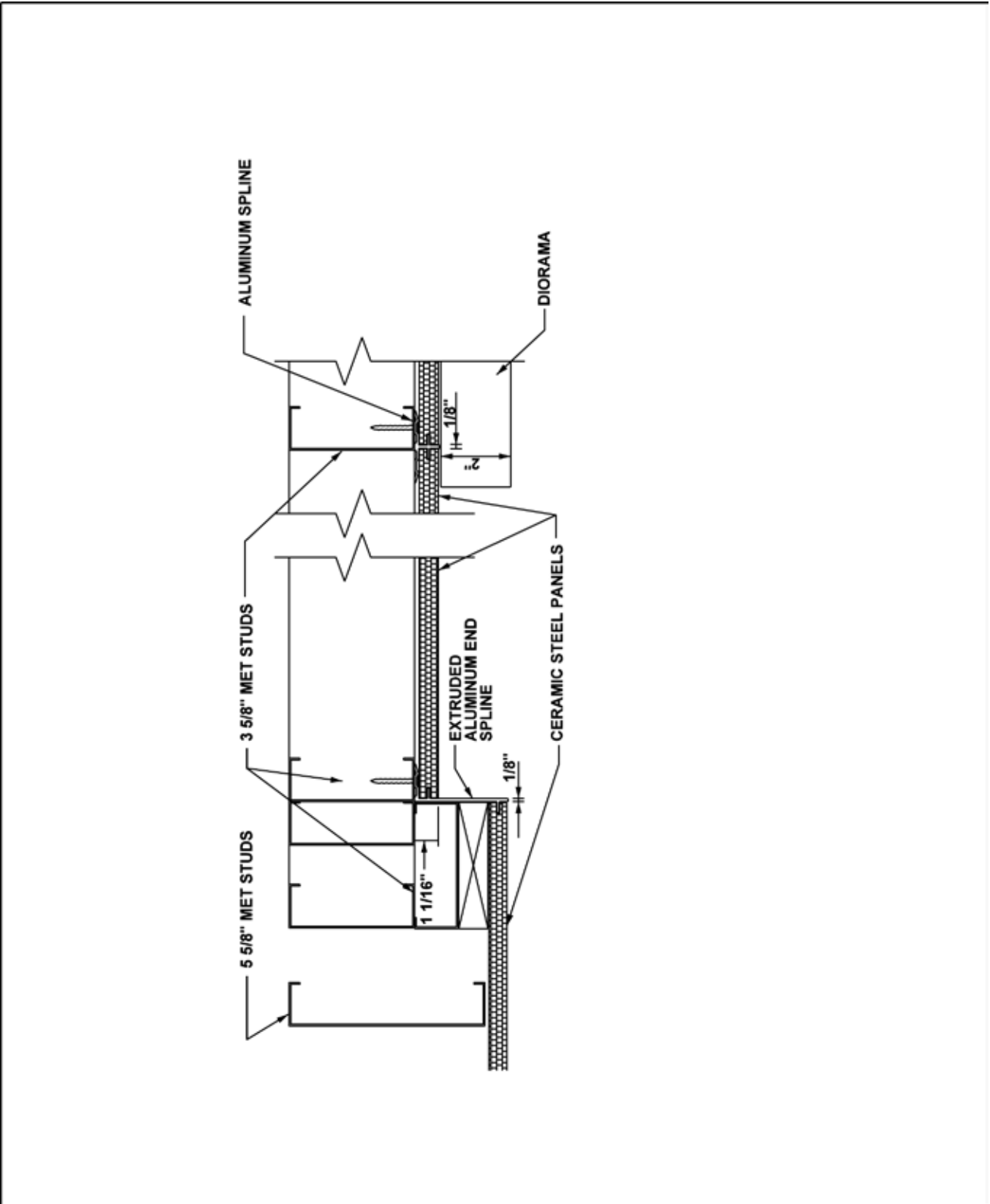
Concourse Z Advertising Diorama Elevation

Exhibit III-9-2

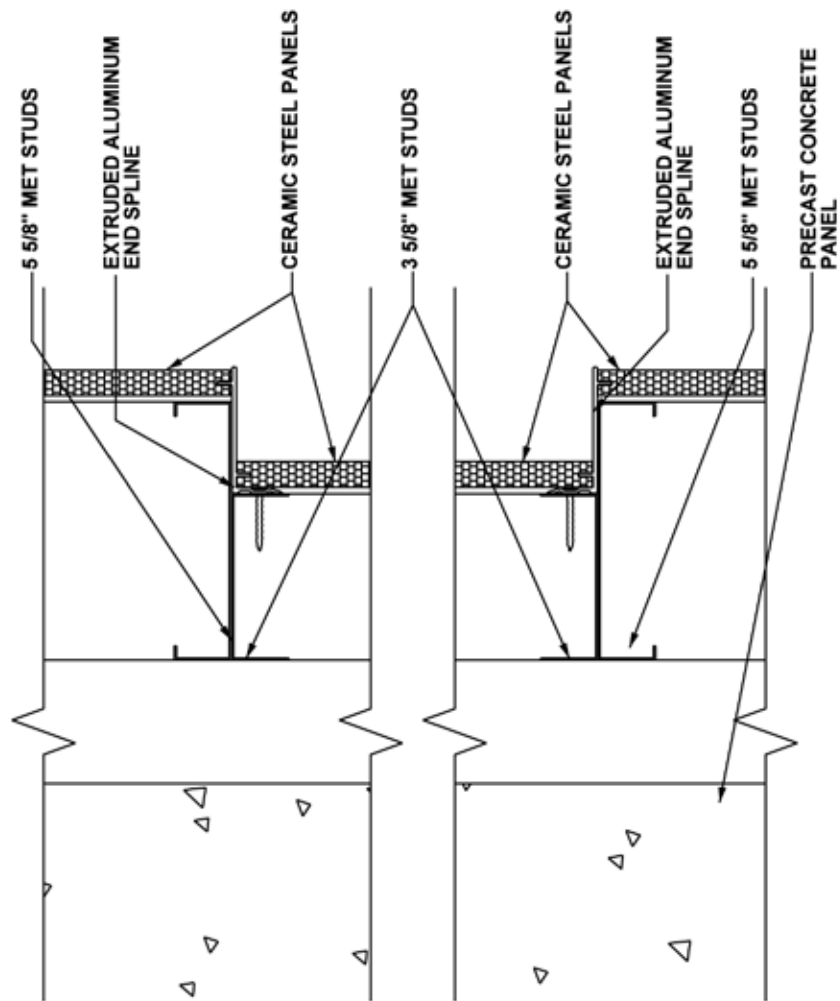


Concourse Z Advertising Diorama Detail

Exhibit III-9-3



Concourse Z Advertising Diorama Jamb Detail      Exhibit III-9-4



Concourse Z Advertising Diorama Typical Detail

Exhibit III-9-5

**9.2.2.10 Advertising Graphics:** Advertising graphics shall contain imagery and wording that is direct and effective at communicating content. The Authority will review and approve all proposals for diorama installations for message content and visual quality.

**9.2.3 Stanchion/Freestanding Advertising Signage:** Freestanding advertising signage is generally prohibited.

**9.2.3.1 Stanchion Type Signage: Brochure**

**Dispensing:** No freestanding racks or cardholders for general advertising will be permitted in concourse areas.

**A.** Installation of wall mounted dioramas has been anticipated by the Authority at the locations indicated. Power to each location will be provided by a junction box installed above the ceiling. Tenants shall provide frames, filler pieces and all necessary ventilation as required.

**9.2.4 Ad Monitors:** Tenants shall coordinate installation of monitors and location and installation of head end equipment with the Authority.

**9.2.5 Advertising Stanchions:** Non-illuminated, double-sided advertising stanchions are not provided by the Authority for the use by Food-and-beverage tenants.

### 9.3 Metering

**9.3.1 General:** Advertising locations are not independently metered.

### 9.4 General Criteria/Prohibitions

**9.4.1 Size/Mounting:** The following dimensions are provided for guidance. Tenants shall field verify dimensions prior to actual fabrication of inserts.

**9.4.1.1 Monitors:** Tenant shall use a 27" diagonal screen high resolution color monitor. Monitor enclosures will accommodate a monitor of dimensions not-to-exceed the following

2' - 1/16" wide x 1' - 7-3/16" deep x 1' - 7 1/2" high.

DVC boxes, if required, shall be floor mounted beneath the claim device enclosure. Tenants shall verify built dimensions of enclosure prior to procuring monitors.

**9.4.1.2 Advertising Stanchions:** Advertising stanchion insert size shall be a maximum of 2' - 8 3/4" high x 1' - 6 3/4" wide. Advertising stanchion image area (insert size - dimension of case frame) is limited to 2' - 8 1/4" high x 1' - 6 1/4" wide. Advertising materials shall be mounted so that when installed in the Authority provided units they do not bend, wrinkle or warp.

**9.4.1.3 Sign Stanchions:** Sign stanchion insert size shall be a maximum of 2' - 1/4" high x 2' - 6 1/4" wide. Sign stanchion image area (insert size - dimension of case frame) is limited to 1' - 11 3/4" high x 2' - 5 3/4" wide. Sign stanchion display case image area shall be 1' - 2' high x 5 3/4" wide. Illuminated display cases are suitable for the insertion of print graphics that change periodically, such as menus, reviews, specials or seasonal information.

**9.4.2 Media:** Printed materials shall have art and typography that are computer or photo process generated and/or printed. Professionally executed calligraphy shall be the only acceptable form of hand prepared graphics.

**9.4.2.1 Transparencies:** The tenant logo/artwork should be reproduced on transparent film or rigid translucent vinyl by photo process from computer generated originals. Scanned 4-color images are encouraged. Hand-cut overlays if executed in a professional manner may be acceptable. Hand-cut overlays shall have straight edges that are square and true. Curves and rounds of letter shall be crisp and smooth.

**9.4.2.2 Video:** Videos shall be executed in broadcast quality format.

**9.4.3 Message Content/Media Quality:** The tenant will be required to use a professionally trained graphic designer to develop message and visual materials intended for use

at advertising locations. Advertising shall have graphics, wording and/or imagery that are clean, clear and crisp in execution. Typography shall be computer generated or of equal quality. Letters shall have smooth and sharp edges. Cut edges shall be straight and true. Words shall be level and parallel to sign casework if providing informational messages. All proposed art for printed material and transparencies for development of advertising media proposed for display in the Terminal will be subject to Authority review and approval of message content and visual quality.

**9.4.3.1 Videos:** The tenant will be required to use a professionally trained multi-media consultant to develop promotional video materials. Such consultants shall have a minimum of five years of producing credits. Videos shall be professionally produced, recorded and edited on broadcast quality tape format. The Authority will review and approve all proposed video materials, including scripts and/or story boards prepared to communicate content, style and pace of the video program prior to execution of custom video materials. Story boards shall include proposed visual concepts and/or key images, animation, special effects, backgrounds and graphic messages.

#### **9.4.4 Prohibitions**

**9.4.4.1 Printed Materials:** Inferior reproduction will be rejected. Low contrast complex images or lettering smaller than 5/8" may be considered inappropriate. Unprofessional execution of artwork is unacceptable. Handwritten copy is unacceptable.

**9.4.4.2 Transparencies:** Visible seams and light leaks are unacceptable in transparency installations.

**9.4.4.3 Videos:** Loop tapes shall be no longer than one hour so as to eliminate long segments of signal noise. Audio programs are not permitted.

## CHAPTER 10 Miscellaneous Commercial Standards

### 10.1 Applicability

**10.1.1 General:** The standards contained in this Chapter apply to a variety of commercial or passenger related services that may be located in the Terminal. Such spaces or elements may be provided or occupied by the Authority, by other tenants, by Vendors or by Authority or Tenant-procured service operations. Update of commercial standards is currently being addressed by the Authority.

**10.1.2 Ground Transportation Center:** A Ground Transportation Center, or GTC, is provided on a separate level next to the baggage claim area. The GTC desk will allow for staffing by 2-3 attendants, sale of tickets for various modes of ground transportation, and has provisions for storage and display of a variety of information of interest to passengers and visitors. Immediately behind the desk in a display case for the display of maps or other GTC related visual information. Adjacent to the desk are areas with phone provisions for contacting rental car companies that are located outside the Terminal Building, as well as local hotel and motel accommodations.

**10.1.3 Washington Flyer Podium:** Freestanding podiums for the sale of tickets for Washington Flyer and/or door-to-door ground transportation operations will be provided by the Authority. Exhibits are currently under development.

**10.1.4 Commercial Directories:** Illuminated commercial directories will be provided by the Authority to assist the traveling public in wayfinding to the many retail and food-and-beverage establishments. Commercial directory inserts shall be provided by the retail and food-and-beverage Developers. Film negatives listing the name of the establishment and room number in project standard format shall be provided. Room numbers shall key to adjacent floor plan artwork. Additional commercial directories, if desired by the Authority, will be located so as not to disrupt passenger movements. Commercial directory casework shall be procured to match the vocabulary established in the Casework Construction Package. Proposed additional

locations will be reviewed and approved by the Authority. Modifications to the casework standard that may be required to allow incorporation into an existing space will also be reviewed and approved by the Authority.

**10.1.5 Customer Service Centers:** Customer service centers are provided at select locations at the terminal ground level.

**10.1.5.1** The Tenant may operate this area as a staffed or self-service center. The following recommended services to be located at these Customer Service Centers are under review by the Authority:

- A. Coin/credit card operated fax.
- B. Coin/credit card operated copier.
- C. Change machine.
- D. FedEx, UPS collection box.
- E. Telephone Services/pp2000.
- F. Automated Postal Services.
- G. Insurance Vending.
- H. Express Mail Drop.
- I. PC Battery Charging.
- J. Cellular Phone/Pager Rental.
- K. Brokerage/Stock Quote Services.
- L. Bank marketing/Banking Services.
- M. Automated Teller Machines.
- N. Automated Foreign Currency Exchange Machines.
- O. Mail Back Service.

**10.1.5.2** Tenants are encouraged to maintain an open appearance to the area and use lighting to enhance visibility and opportunity for public recognition. No permanent casework or millwork shall be affixed to the storefront or in the Design Control Zone.

**10.1.6 Cable Television:** CATV distribution to tenant areas is under development. The Authority will review and approve all public locations proposed by tenants or vendors for the purposes of providing cable television broadcasts. Cable television will occur in designated terminal areas only. The Authority will provide television monitor enclosure boxes and the associated ceiling mounted rack. Tenants shall install television monitor enclosures, associated miscellaneous steel supports above the ceiling, and television monitors. Power and signal to each enclosure box shall be provided by the tenant. Duplex receptacles shall be mounted above the finished ceiling. Power and signal shall be fed into the box for connection to the monitor. Tenants shall provide a 27" diagonal screen high resolution color monitor. Monitor enclosures will accommodate a monitor of dimensions not-to-exceed the following: 2' - 1/16" wide x 1' - 7 3/16" deep x 1' - 7 1/2" high. Tenants shall verify built dimensions of enclosure prior to procuring monitors. Television monitors in freestanding casework are prohibited.

**10.1.7 Shoeshine Stands:** Shoeshine stand locations have been established within the terminal at the main concourse. Shoeshine stands, storage closets and associated display cases will be provided and installed by the Authority for use by approved tenants.

**10.1.8 Newspaper Dispenser Racks:** Newspaper vending areas will be established and dispenser racks procured and installed by the Authority.

**10.1.9 Baggage Carts/Dispensers:** Baggage carts/dispenser locations have been established by the Authority. Additional locations, if required, will be reviewed and approved by the Authority prior to procurement and installation of additional units. Layout shall ensure that there is adequate space at either end of the dispenser for

removal and insertion of the carts themselves without damage to adjacent surfaces or other freestanding elements.

#### **10.1.9.1 Instructional Signage/Supplemental**

**Advertising:** Instructional signage shall be integral to the cart system and shall be permanently affixed. Instructional signage and graphics shall comply with the criteria set forth in **Chapter 5**. Supplemental advertising, if desired by the vendor, shall be reviewed and approved by the Authority prior to display or installation.

**10.1.9.2 Installation:** All wiring shall be concealed. Any floor plates shall be set flush with adjacent floor surfaces. Floor plate edges shall be ground smooth with no protruding fasteners.

**10.1.9.3 Personal** luggage carts/dispenser shall be of a single variety.

### **10.2 General Criteria/Prohibitions**

**10.2.1 General Criteria:** The Authority, other Tenants, Vendors or other Authority or tenant procured service operations or providers of miscellaneous commercials areas or elements shall comply with the general design standards contained in **Chapter 5** of this document. In addition, the following specific criteria shall apply.

**10.2.2 Modifications/Alterations:** Tenants, including the Authority as tenant, may not alter controlled materials or base building elements without prior approval of the Authority. This includes columns within any area, structural elements above storefronts, floors, walls or ceiling surfaces. All proposed modifications to existing areas regardless of the Tenant or occupant will be reviewed by the Authority. Such modifications include changes to finish materials or color, modifications to casework or millwork, the addition or removal of signage, the addition of free standing casework, including, but not limited to, interactive video units, insurance vending, automatic teller or ticket machines, facsimile or copy machines or postal vending units, replacement of or changes to lighting, furnishings or

fixtures. Approved new construction or installations of new or additional elements shall return existing floor, walls and ceiling surfaces to their original condition.

**10.2.3 Storage:** Storage of supplies, merchandise, equipment or furnishings associated with administrative or business functions shall occur in areas provided: either in store rooms or casework. Tenants and other occupants shall maintain an uncluttered appearance in areas visible from public circulation areas of the terminal. Display of personal mementos in areas visible to the public is prohibited.

**10.2.4 Signing/Graphics Inside Designated Areas:** Standard vendor signing may be acceptable if reviewed and approved by the Authority. Sign application and method of attachment shall be permanent and vandal proof. Freestanding or attached advertising units that are part of the manufacturer's standard system may be acceptable if reviewed and approved by the Authority. Such systems shall not intrude into the public way beyond designated locations or interfere with wayfinding by being visually intrusive into the environs. Such criteria shall be applicable to standard commercial elements, including but not limited to personal luggage carts/dispensers, lockers and newspaper dispensers. Desk bar signing used to identify attendants or to present hours of operation shall comply with the criteria provided.

**10.2.5 Music/Television:** In keeping with a professional and service oriented Terminal environment, personal portable televisions, radios, tape or compact disk players are discouraged at miscellaneous commercial locations, including but not limited to the Ground Transportation Information Center, the Washington Flyer Podiums, the shoeshine stands, or other sales or service counters.

**10.2.6 Furnishings/Fixtures/Equipment:** The Authority will review and approve Tenant provided furnishings/fixtures/equipment on a periodic basis. Tenants

may be required to replace or repair worn, damaged, frayed, shabby or broken items.

**10.2.7 Brochure Displays:** Tenants or occupants who wish to offer or display brochures or other literature/materials at any location, for which provisions have not otherwise been included in the design of Authority provided casework, shall procure clear acrylic easels or holders. Maximum overall dimension shall be 8½" x 11". Such fixtures may not be affixed to any casework or building surface either on a permanent or semi-permanent basis. Tenants and occupants shall review catalog cuts or sample displays with the Authority prior to procurement for use in their areas.

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