

*Project 96079*

**INTERMODAL HUB**  
**PRELIMINARY ENGINEERING STUDY**  
**NCTC**

North Coast Transportation Center  
Including West Third Street Station

Prepared For:

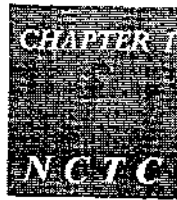
Greater Cleveland  
Regional Transit Authority

September 1998



PARSONS  
BRINCKERHOFF OHIO, INC.

# INTRODUCTION AND PRELIMINARY DESIGN CRITERIA



The Intermodal Hub Preliminary Engineering Study was initiated by the Greater Cleveland Regional Transit Authority (RTA) for the development of a multi-modal passenger facility in the City of Cleveland. For considerable time there has been interest in creating an intermodal passenger facility to provide convenient connections for passengers among available modes of local, regional, and national rail services. As envisioned, the intermodal hub would accommodate RTA's local rapid transit service, Amtrak inter-city service, proposed commuter rail, and future high speed rail lines. The facility, hereafter identified as the **North Coast Transportation Center (NCTC)**, would also connect rail passengers to surface transportation including RTA buses, taxis, and automobiles.

In 1992, the RTA studied several locations for an intermodal terminal, including Tower City, East 12<sup>th</sup> Street on the Lakefront, West 150<sup>th</sup> Street, and the vicinity of Cleveland Hopkins International Airport. Alternative locations were compared against transportation, development, and financial considerations, with Tower City initially selected as the preferred location.

Since that time, significant urban development projects in downtown Cleveland created new major activity centers and other changes occurred that prompted the evaluation and selection of a new preferred location. These changes include:

- Construction of RTA's Waterfront Line, linking RTA rail services at Tower City to the Flats and North Coast Harbor;
- Construction of the North Coast Harbor attractions such as the Rock and Roll Hall of Fame and Great Lakes Science Center;
- Construction of the new Cleveland Browns Stadium, scheduled for completion in 1999;
- Proposed expansion or relocation of the Cleveland Convention Center, with associated hotel, retail, and tourist attractions; and
- The acquisition of Conrail by Norfolk Southern and CSX, which affects rail freight traffic in Cleveland.

As a result of these changes, it became apparent that the Lakefront should be reconsidered as the NCTC site. The study area, illustrated in Figure 1 (Figures are located at the end of the chapter in which they are first referenced), extends along the northerly edge of the Cleveland Central

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## **INTERMODAL HUB PRELIMINARY ENGINEERING STUDY**

Business District (CBD), bounded by West Ninth Street , North Coast Harbor, East Ninth, and Lakeside Avenue.

Cleveland's commitment to revitalizing downtown as a "world-class destination," emphasized in the recently released *Civic Vision 2000 and Beyond* , focuses on stimulating Lakefront development and relocating infrastructure and facilities to diversify this activity center. The North Coast Transportation Center can support this objective, either as an independent structure or a facility developed within other structures, located in proximity to these Lakefront development initiatives. The selection of the new preferred location near North Coast Harbor, as presented in Chapter IV, enhances connections to these destinations and contributes to the physical and economic revitalization of the City.

### **BACKGROUND**

In 1990, the Regional Transit Authority began a strategic planning process to address long-range public transportation needs in the Cleveland metropolitan area. The product of that process, *Transit 2010*, defines operational and management objectives and a plan to meet them. RTA commissioned the first *Intermodal Hub Study*, completed in 1992, to encourage commerce, tourism and employment in downtown Cleveland, increase transit ridership, and contribute to the quality of life for residents of the region. Three recommended improvements were identified by that study:

- Access-ways connecting passengers between Tower City Center and adjacent commercial properties,
- Transit service connecting Tower City Center with the entertainment district in the Flats and North Coast,
- Creation of an intermodal hub to connect RTA service with other forms of passenger rail service.

Each recommendation was incorporated into the *Transit 2010* program and RTA's Long Range Plan. RTA has successfully completed two of these recommended projects. An enclosed walkway from Tower City to Gund Arena was completed in April 1994, offering weather-protected access to Gateway events. Walkway access is not limited to RTA patrons and therefore benefits the general public.

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Another significant step in implementing recommendations from the 1992 Intermodal Hub Study was the construction of the Waterfront Line, a 2.2-mile extension of the RTA Blue and Green Lines. Completed in July 1996, the Waterfront Line became an added attraction of the City's Bicentennial celebration, serving more than one million passengers in its first year. The remaining element is the development of the intermodal hub, including the advance construction of the West Third Street Station on the Waterfront Line.

## **DEVELOPMENT OF GOALS AND OBJECTIVES**

The development of goals and objectives for the NCTC was carefully considered during winter 1996-1997 and was presented to the following organizations:

- RTA Board of Trustees
- RTA Executive Management Team
- City of Cleveland Design Review Committee
- City of Cleveland Planning Commission

The resulting recommended Goals and Objectives are presented in Table I-1. Many of these issues were also considered by the 1992 study, but some differences exist, as described in Chapter II.

It was noted by the group that numerous alternative approaches and trade-offs for NCTC development could be made. Furthermore, it was recognized that all objectives need not necessarily be met. In particular, the desirability of NCTC to provide access among other activity centers makes it very dependent on the location, nature, and interrelationships of those activity centers.

The catalytic success of North Coast Harbor since 1992 has shifted public and private sector focus towards continued redevelopment of the Lakefront. It was agreed that an important consideration, therefore, is creating an effective linkage among these recreational and employment centers to the CBD, as well as to the entire region.

## **A PRIMER FOR INTERMODAL FACILITIES**

As part of this study process, a "Primer" was developed to educate involved individuals with the purpose, siting, and design criteria of intermodal stations in the United States. This Primer included the identification of five key principles, underlined below, which are common to most successful intermodal facilities. The primary function of an intermodal facility is, of course, a transportation function, with the station serving as a *major transfer and destination point* for passengers. Intermodal stations are located in areas of high employment concentrations or near other major destinations so that many passengers can then walk to their final destination rather than transferring to another vehicle or mode. The facilities are served by a variety of modes, as well as numerous routes for each mode, to maximize the ability of passengers to transfer from this location.

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**TABLE I - 1**  
**GOALS AND OBJECTIVES**

### **GOALS**

- Create economic development
- Enhance RTA ridership
- Create a "front door" for Cleveland
- Provide access to North Coast Harbor venue daily activities
- Provide access to special events at North Coast Harbor, Convention Center and Mall C
- Promote connections between transportation services
- Maximize value of public investment

### **OBJECTIVES**

- Provide transit service to the new Cleveland Browns Stadium, Convention Center, North Coast Harbor, Warehouse District
- Provide transit service to future Lakefront and downtown activity centers
- Provide pedestrian linkages between Lakefront and downtown activity centers
- Create an architectural icon unique to Cleveland and compatible with neighboring development. This objective was later identified as being optional.
- Pursue public/private partnerships

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Increasingly, stations are functioning much like the great train stations of the late 19th and early 20th centuries, as *major civic structures* where people meet. This can take the form of either indoor spaces such as public buildings or halls, and outdoor public squares. Recent intermodal stations have *high-end passenger amenities*, including service retail, a wide variety of food vendors, coffee stands, banks, flower stands and candy shops. These amenities make commuting by transit more pleasant and convenient, thereby encouraging transit use. In many cases, these amenities attract patrons from surrounding buildings, helping to generate activity and a lively, secure atmosphere.

Many intermodal facilities are developed in conjunction with other entities as *joint development projects*, initiated by public/private or public/public partnerships. Public/public partnerships are those which involve another public agency in addition to the transit authority. For example, the Wheeling, West Virginia Intermodal Center includes a National Park Service Visitor Center, with the NPS contributing \$1 million in construction funding. Commercial joint development and public/private partnerships can integrate a variety of uses, including office, hotel, parking, retail and entertainment.

#### Framework for Development Decisions

Intermodal stations function best in areas of high employment density or high concentrations of other types of downtown activity. The most desirable locations for intermodal stations, therefore, tend to be on or adjacent to prime development parcels. Discussions about a proposed station can help focus the debate about development of adjacent parcels. Developers will evaluate the impacts of the station on their development options. In some cases, the facility provides an opportunity for shared costs such as site acquisition and site preparation.

#### Economic Initiatives

Intermodal stations are often developed in conjunction with other major economic initiatives. Recent examples are found in San Antonio, where an Intermodal Center is connected to the Alamo Dome, a major new sports arena. In Boston, an Intermodal Center is connected to Fleet Center, a major new sports arena, and an intermodal station is planned to serve the proposed new Convention Center there.

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## INTERMODAL HUB PRELIMINARY ENGINEERING STUDY

### Location

The selection of a preferred location is based on a number of criteria, some of which are very site-specific and some are more generic. The following italicized criteria are important to any location selected, but the criteria are usually prioritized and weighted to maximize the opportunities presented by local conditions.

The *size and configuration* of the proposed site must be able to accommodate the transit program, as well as any desired ancillary development, while providing for efficient on-site transit operations. The site must be *efficiently located* with respect to the transit routes, thereby minimizing required route changes and/or passenger transfers, and allowing the center to serve the maximum number of patrons. A central location can also help to minimize dead-heading, which is the need to move empty transit vehicles from the station to storage facilities. Because of the large number of pedestrians using the facility, the opportunity to create or continue a *well-designed pedestrian environment* is very important.

A prominent location helps to increase *visibility* for the local transit authority and *improve the overall image of transit* in an effort to increase ridership. As discussed above, intermodal stations frequently function as *major civic buildings*. The preferred site should provide the opportunity for designing such a facility. Locating a station on a site which has compatible surrounding land uses will help to *minimize environmental concerns*. For example, increased bus activity and any concomitant traffic, noise or air quality impacts are more acceptable in a commercial setting than in a residential neighborhood. Other potential environmental issues include the presence of hazardous materials on site and the location of the site in or adjacent to an historic district. These issues must be dealt with through the environmental review process; minimizing environmental impacts will help to expedite that process.

Intermodal stations can act as a *catalyst to development activity*. An ability to foster economic development can encourage public support. Support from elected officials, the business community, local residents and other interested parties is very important to the success of the project. Selecting a site which is compatible with other local initiatives and planning objectives, and which does not preclude other popular projects, will greatly improve the potential for achieving a high level of *public support* and thus the likelihood of success.

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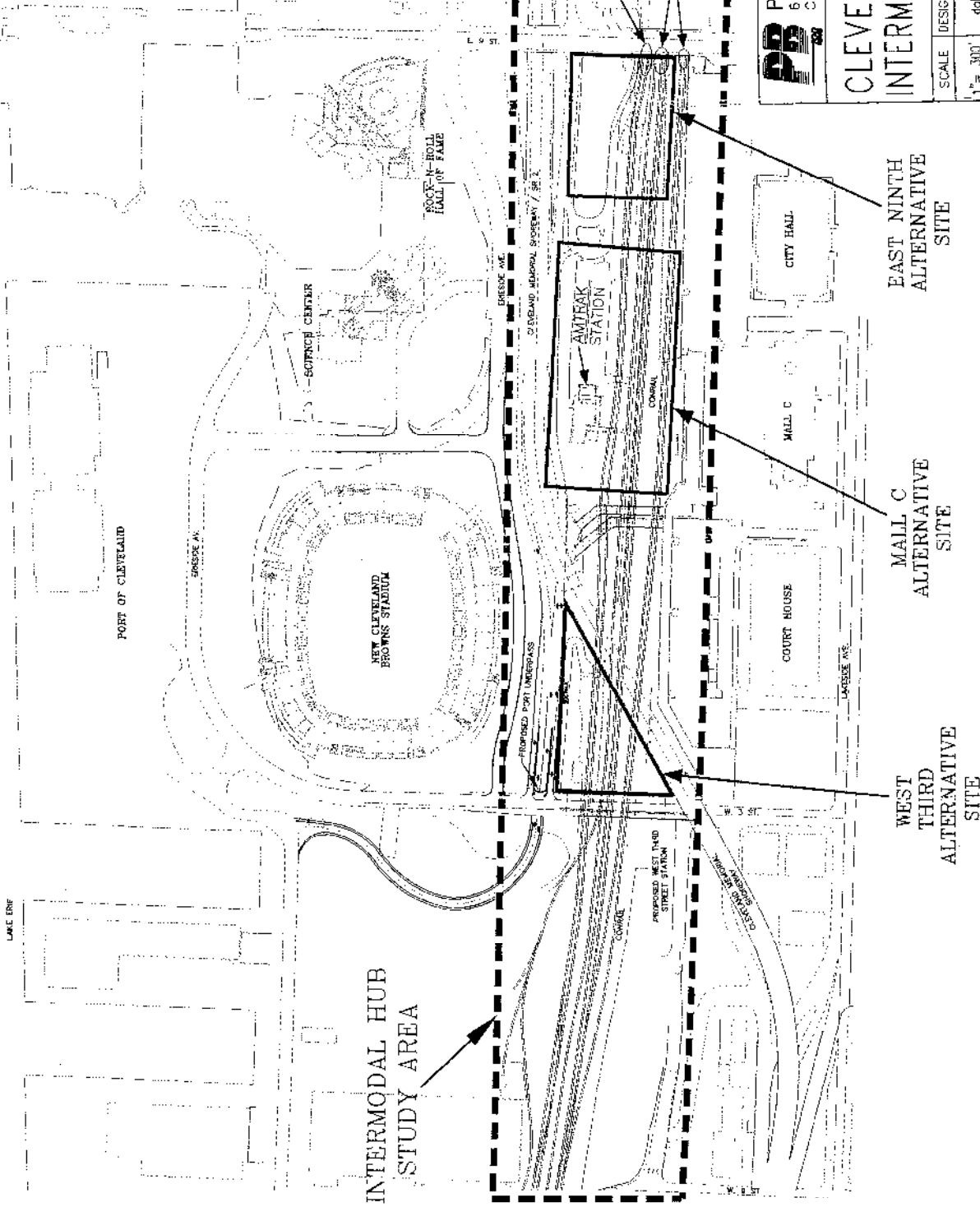
## Design Principles

Although intermodal facilities can take a variety of forms, most successful adhere to several underlying design principles. As important civic spaces, intermodal stations should reflect *high quality architectural and landscape design*. High quality design and materials, for both interior and exterior spaces, will help to improve the image of transit and encourage increased use of the transit system. Stations should be attractive and comfortable, in addition to being safe and easy to use.

An intermodal station functions as a gateway to the city it serves, providing a visitor's first glimpse into the *city's character and style*. As such, the facility should conform with and enhance its surroundings, taking design cues from local architectural styles and other architecturally significant buildings in the area. Because many passengers either arrive or depart a station as pedestrians, the pedestrian environment should be well designed with handsome *streetscape amenities*. The station can set a standard for streetscape design which later will be incorporated into the design of developments on surrounding parcels. Outdoor waiting areas and entries can function as public plazas, so that both the intermodal facility and the surrounding street is enlivened.

Designing the intermodal station as an *open structure with a high degree of natural light* helps to create a pleasantly light and airy atmosphere, and provides patrons with views of transit platforms and the surrounding streets. The ability to see into and out of the station helps orient passengers and improves safety and security. Viewing the platforms allows passengers to know when and where their bus or train is arriving, and to see and be seen by passersby on the street.





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**CLEVELAND LAKEFRONT  
 INTERMODAL HUB VICINITY**

SCALE	DESIGNED	CHECKED	DATE
1" = 300'	dkk		07/10/98

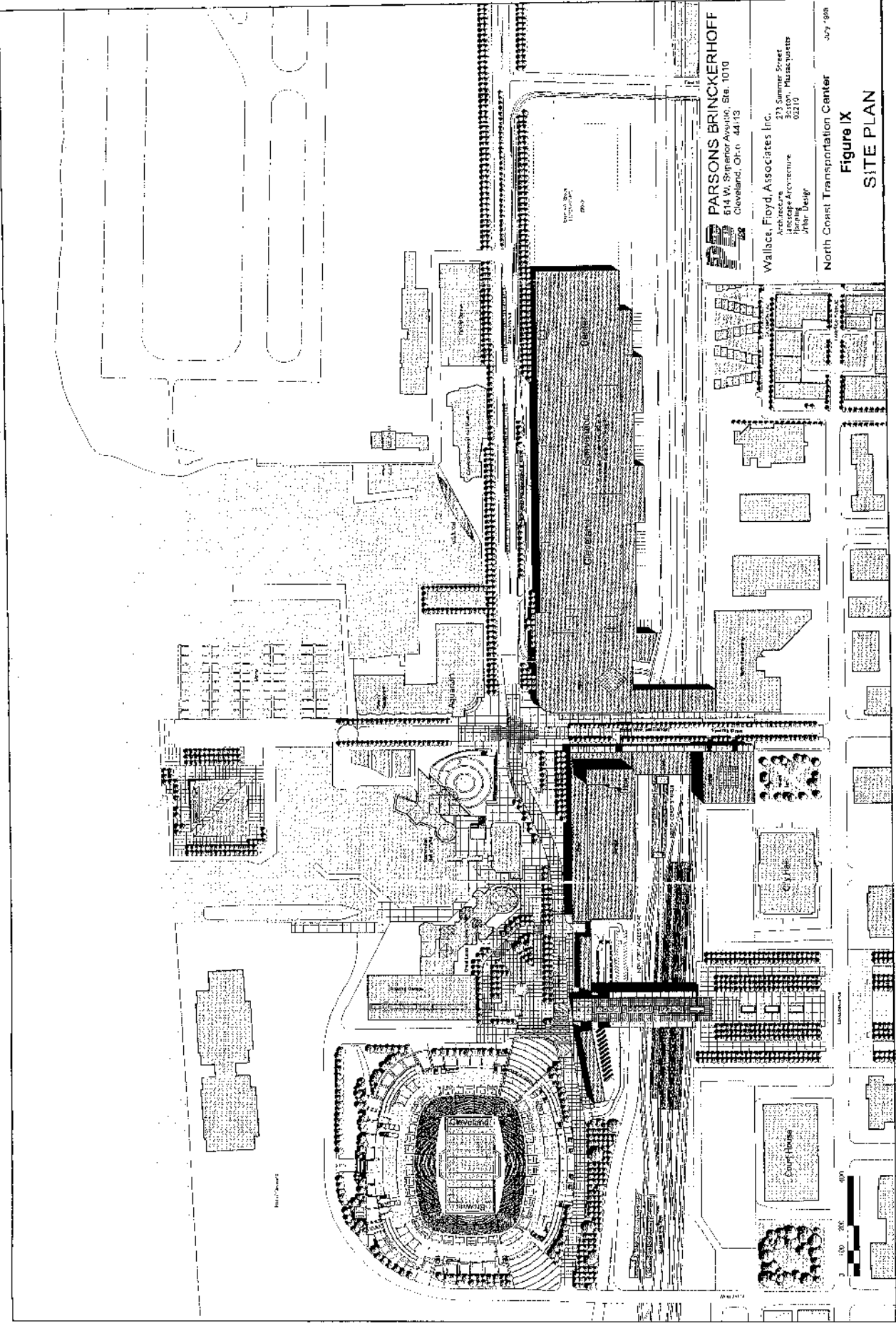
**Figure VI**

WEST THIRD ALTERNATIVE SITE

MALL C ALTERNATIVE SITE

EAST NINTH ALTERNATIVE SITE

INTERMODAL HUB STUDY AREA



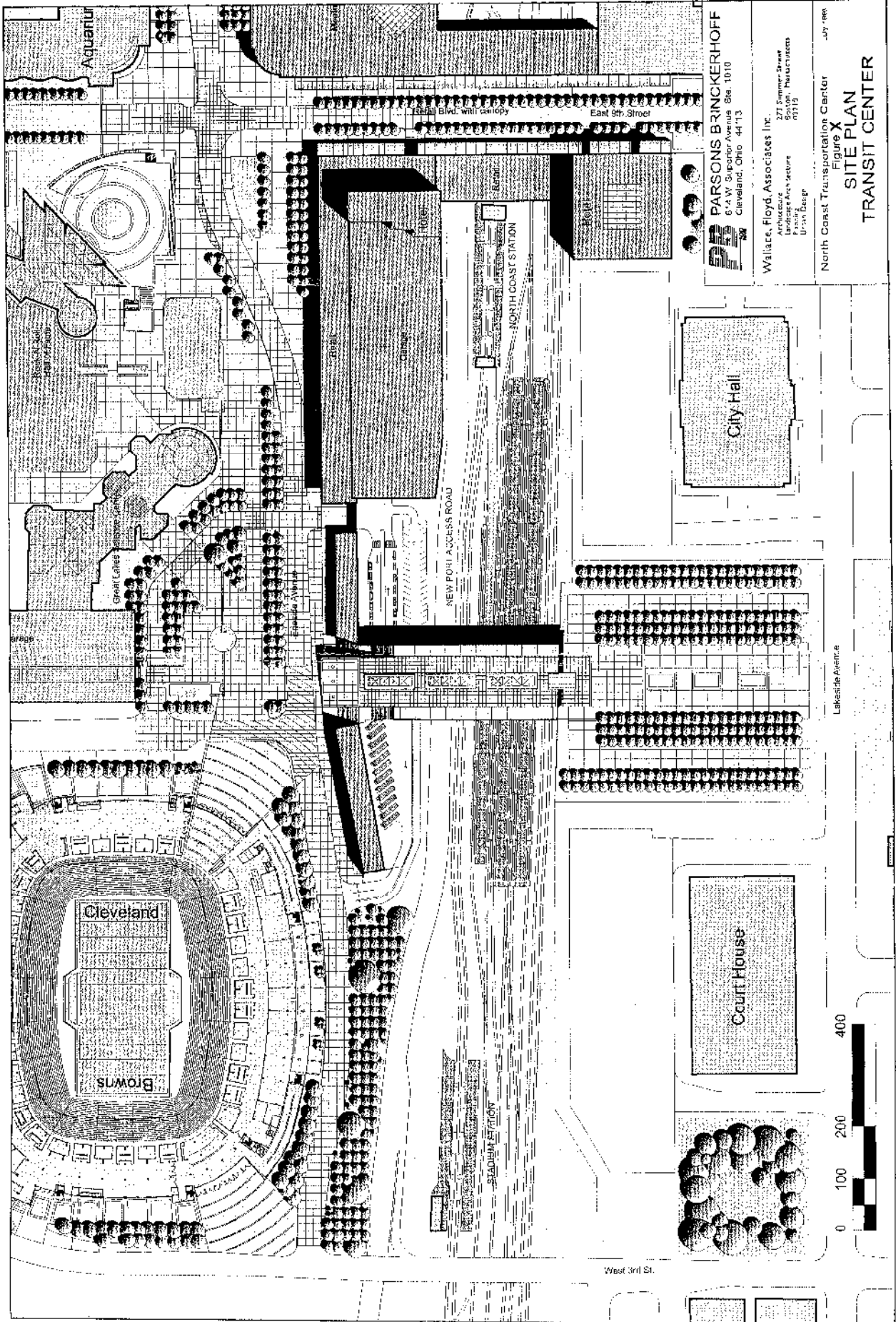
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Wallace, Floyd, Associates Inc.  
 Architects  
 Planning Architecture  
 Urban Design

3 Summer Street  
 Boston, Massachusetts  
 02110

North Coast Transportation Center  
 July, 1988

**Figure IX**  
**SITE PLAN**



**PARSONS BRINCKERHOFF**  
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**Wallace, Floyd, Associates Inc.**  
 271 Summer Street  
 Architecture  
 Landscape Arch. & Interiors  
 6000 E. 12th St.  
 Cleveland, Ohio 44115

North Coast Transportation Center  
 Figure X  
**SITE PLAN**  
**TRANSIT CENTER**  
 -JULY-1988

City Hall

Court House

Cleveland Browns

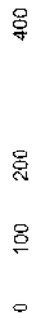
NORTH COAST STATION

NEW PORT ACCESS ROAD

Aquarium

Lakeside Avenue

West 3rd St.



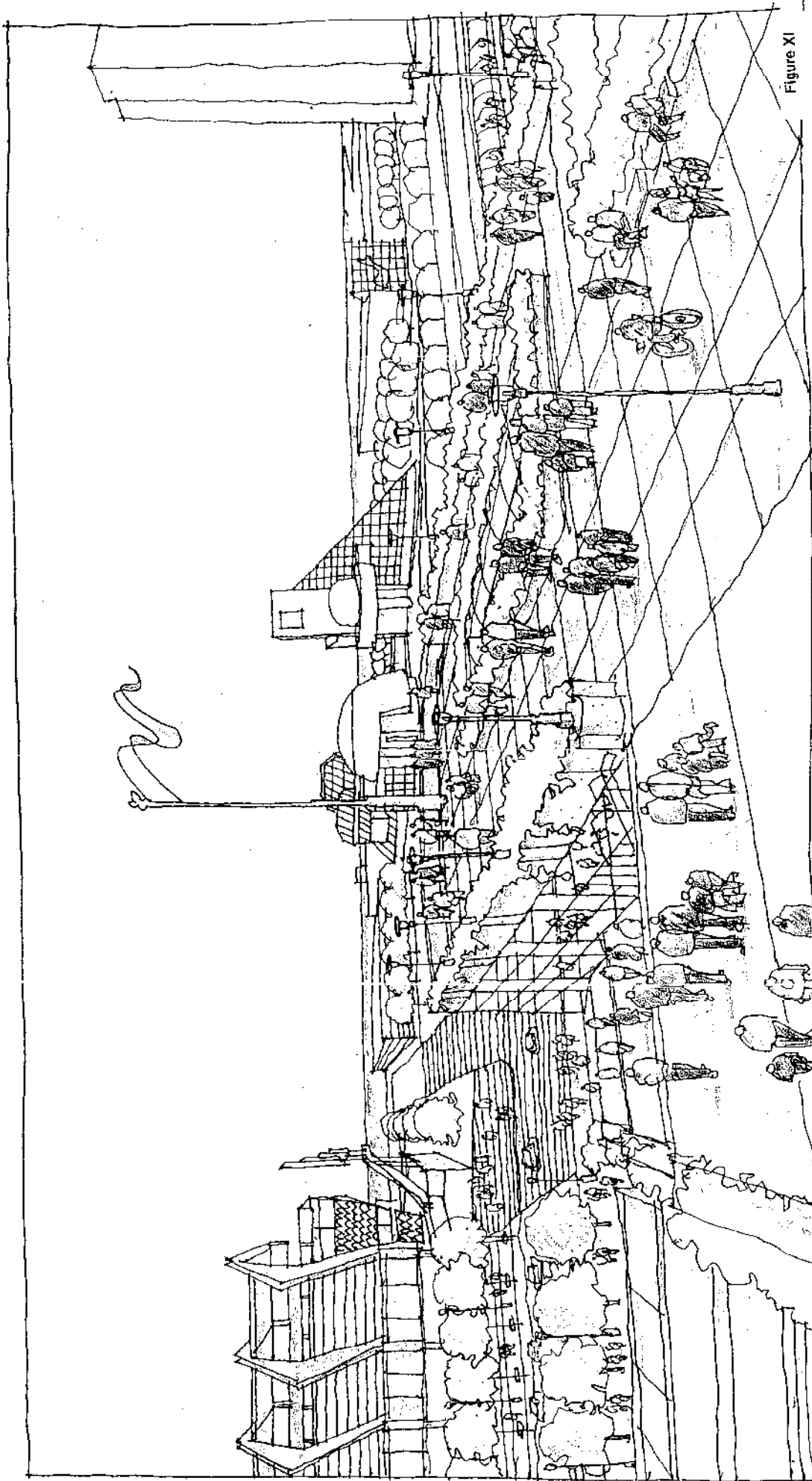


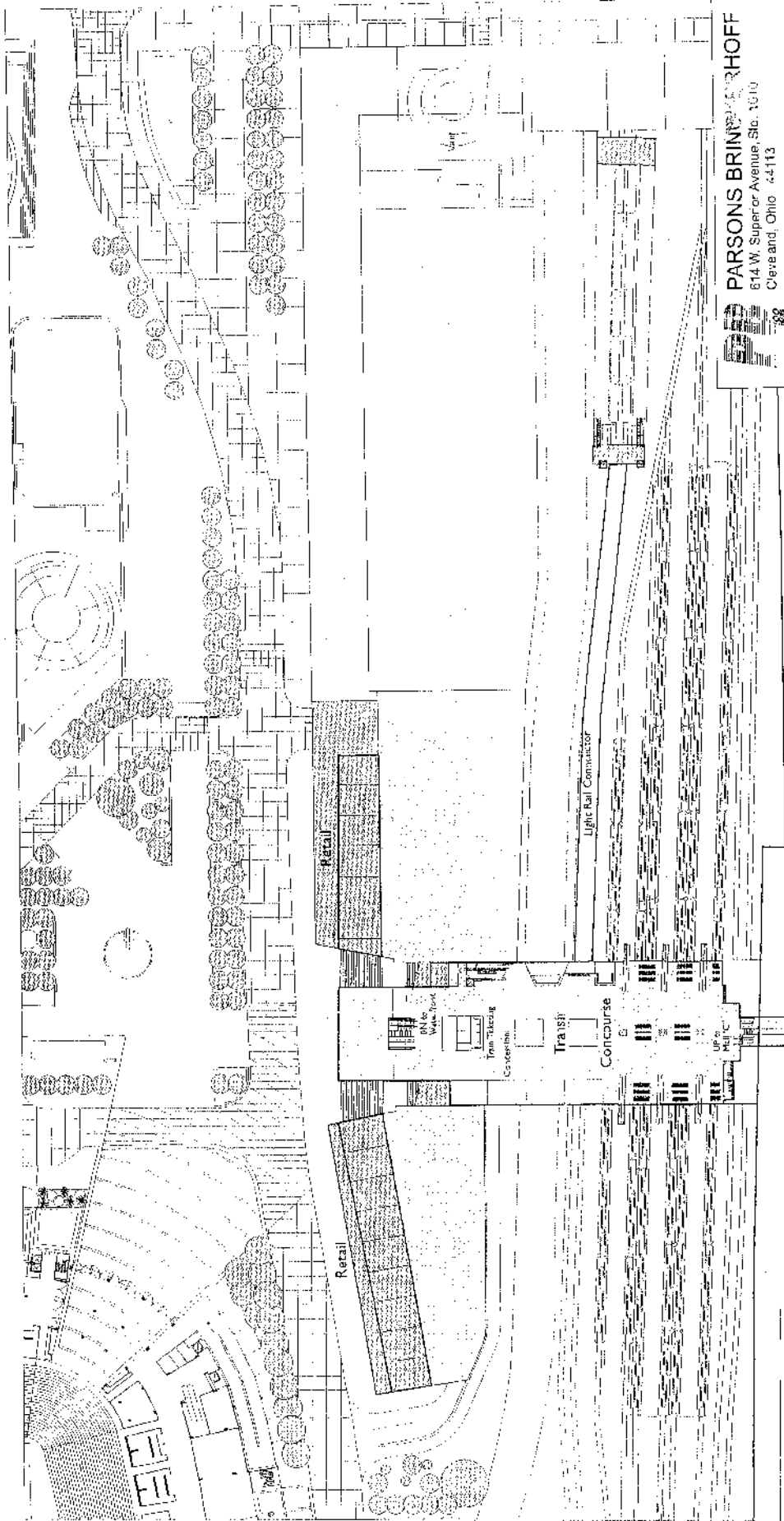
Figure XI

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North Coast Transportation Center  
JULY 1988

VIEW NORTH FROM  
MAIL C BELVEDERE



**PARSONS BRINCKERHOFF**  
 614 W. Superior Avenue, Ste. 1910  
 Cleveland, Ohio 44113

Wallace, Floyd, Associates Inc.

Architecture  
 Landscape Architecture  
 Planning  
 Urban Design

273 Summer Street  
 Boston, Massachusetts  
 02110

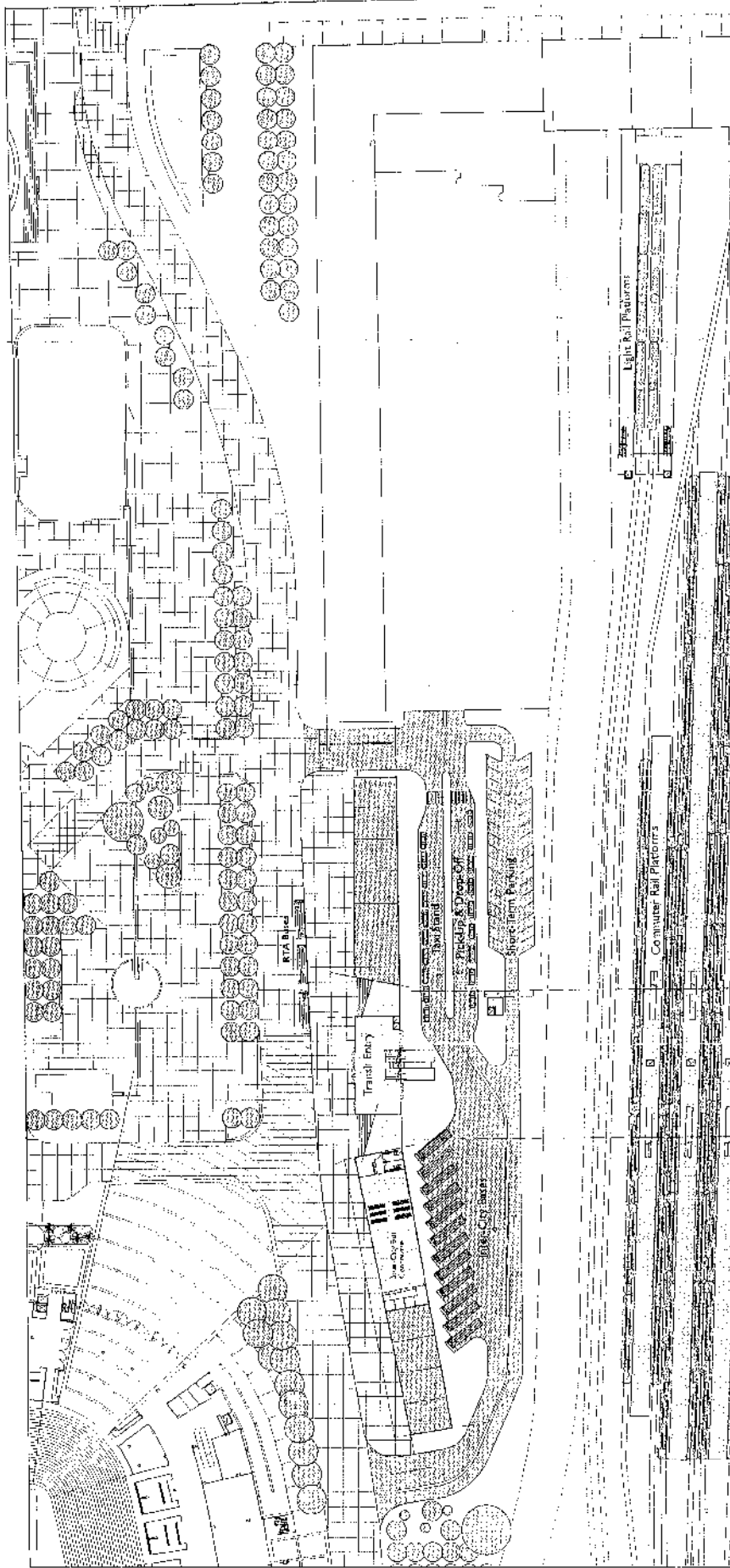
North Coast Transportation Center July 1988

**Figure XII**  
**PLAN**  
**MEZZANINE LEVEL**

EL +618

Mall "C" Above





**PARSONS BRINCKERHOFF**  
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 Planning  
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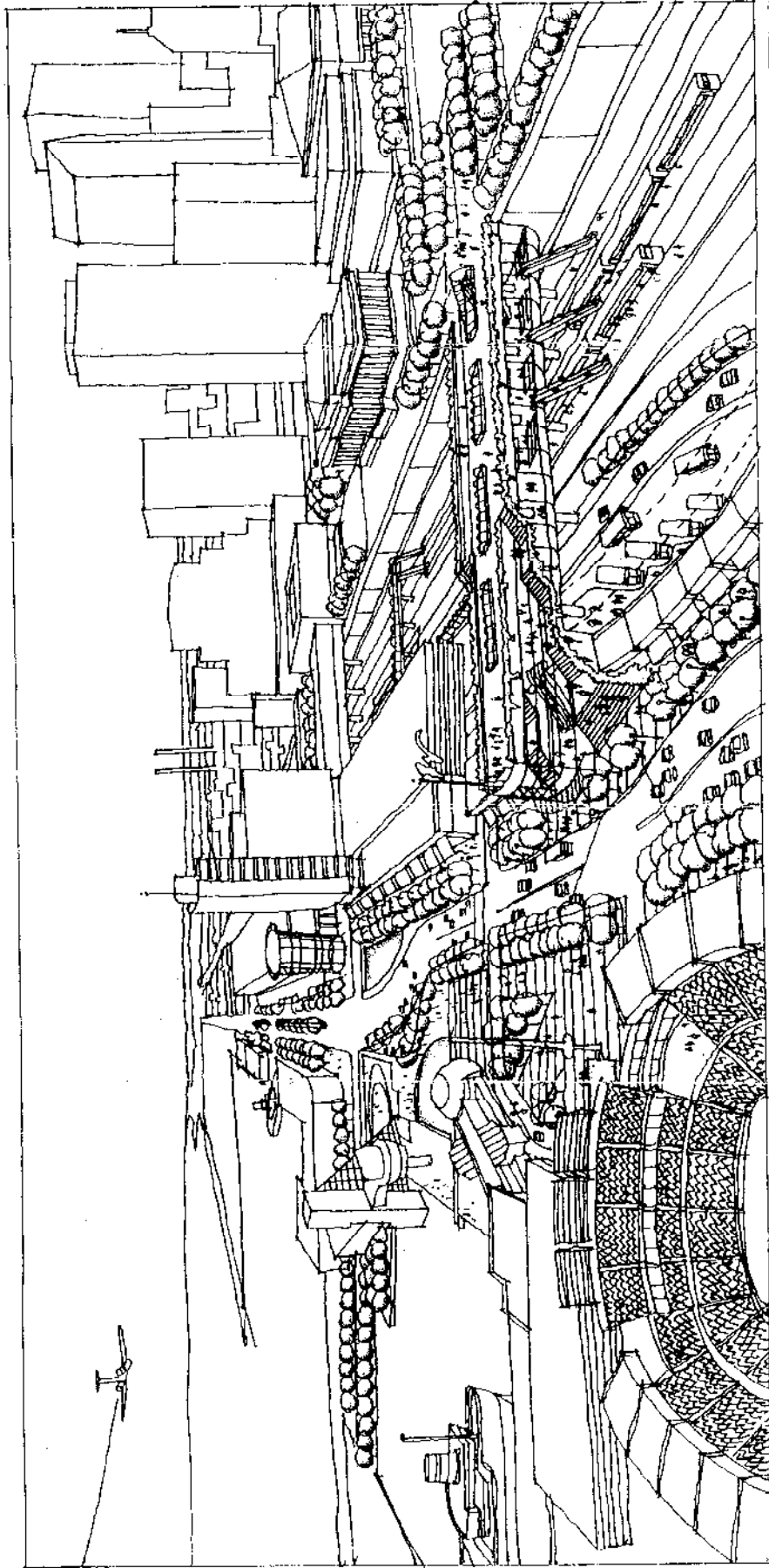
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**Figure XIII**  
**PLAN**  
**LOWER LEVEL**

EL. +530

Mall "C" Above





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North Coast Transportation Center  
- 04/98  
**Figure XX**  
**AERIAL-LOOKING S.E.**  
prepared by: Wallace, Ford, Associates, Inc.