High/Naghten Urban Design Study

Columbus, Ohio

Prepared for

Battelle Commons Company
Department of Development, City of Columbus
Nationwide Insurance

Prepared by

Sasaki Associates, Inc.

January, 1977

SA

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February 25, 1977

Messrs. N. Jack Huddle, City of Columbus, Department of Development
Warren J. Cremean, Battelle Commons Company
Stephen E. Lance, P.E., Nationwide Insurance

Re: High/Naghten Urban Design Study
SA No. 5237

Dear Sirs:

Sasaki Associates, Inc. is pleased to submit the final report on the High/Naghten Urban Design Study. Your joint sponsorship of this study reflects the commitment of the public and private sectors to the revitalization of the High/Naghten area of Downtown Columbus. Sasaki Associates wishes to acknowledge the cooperation and assistance of representatives of the Battelle Commons Company, the City of Columbus Department of Development, Nationwide Insurance, other City agencies, and private consultants in the development of the recommendations outlined in this report.

A primary objective of the High/Naghten redevelopment effort is to provide a unified urban environment in the High/Naghten area and to link this area to other districts within Downtown Columbus through the revitalization of the High Street corridor. This report emphasizes the need for clustering new development to create well-defined exterior spaces, particularly along High Street, and to reinforce the pedestrian orientation of these spaces through the strategic location of retail, commercial, and entertainment facilities. Furthermore, a system of second-level walkways is described, with emphasis on the necessity for coordinating the design of the walkways with the design and location of retail facilities and pedestrian open spaces.

The Urban Design Study deals with planning and design issues which affect both private and public interests in the High/Naghten area. Your continued cooperation and leadership are needed to achieve the design objectives outlined in this report.

Yours truly,

Don H. Olson
Principal

mgm/5237

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View of High/Naghten Area looking south along High Street towards Capitol Square (photographed February 1977)

I. INTRODUCTION

The High/Naghten Area of Columbus, Ohio, is located to the north of the State Capitol and bounded on the south by Spring Street, on the north by the innerbelt, on the west by Marconi Boulevard, and on the east by Fourth Street. The area is currently changing in character and is evolving into a major multi-use urban complex within the City's core area. Redevelopment of the High/Naghten area by the public and private sectors offers the potential for creating an attractive environment to be enjoyed both by residents of Columbus and by visitors.

This report documents an urban design study jointly commissioned in February 1976 by three of the principals in the redevelopment of the High/Naghten area: the City of Columbus represented by the Department of Development, Nationwide Insurance, and the Battelle Commons Company. The primary purpose of this study is to provide planning and design guidelines which will promote the coordinated and complementary development of projects being separately implemented by the principals: Nationwide Plaza being developed by Nationwide Insurance, the Ohio Center being developed by the Battelle Commons Company, and various public area improvements being implemented by the City of Columbus. This study focuses on urban design issues and site planning considerations which are of general and mutual concern to the three principals and which affect the overall quality of development in the area.

A. Study Process

Sasaki Associates, Inc., provided urban design and site planning services to the three principals over an eight-month period. A phased work program prepared at the outset of the study provided for step-by-step development of study recommendations in collaboration with client representatives. Recommendations were also reviewed during the course of the study with the members of the High/Naghten Coordinating Committee which represented the various governmental agencies, private developers, and private consultants involved in the planning for the area.

The phased work program involved five work sessions in Columbus. The sessions and their subject matter included:

Session #1. Design reconnaissance and collection of background information; a work session in Columbus (10, 11, and 12 February 1976) involving meetings with City agency representatives and Nationwide and Battelle representatives to familiarize SA with existing conditions and proposals in the High/Naghten area.

Session #2. Definition of objectives and statement of assumptions; a work session (1 and 2 March 1976) which dealt with the definition of planning and design objectives and included a review of preliminary studies of open space and pedestrian circulation. (See memorandum dated 4 March 1976.)

Session #3. Review of alternative urban design schemes; a work session (16 and 17 March 1976) in which alternative schemes were presented dealing with overall building massing, pedestrian circulation, and location of activity-generating elements. This session also dealt with an overall concept for exterior lighting. (See memorandums dated 31 March on lighting and 27 March on alternative urban design schemes.)

Session #4. Presentation of design guidelines for public right-of-ways; a work session (17 and 18 May 1976) to review proposals for High Street, Naghten Boulevard, and Marconi/Front Connector in terms of cross section design, surface materials, planting, traffic signals, etc. (See memorandums dated 20 May 1976 and 25 May 1976.)

Session #5. Review of Portal Park design alternatives and restatement of general urban design recommendations; a work session (19 August 1976) for the review of Portal Park studies and submission of summary recommendations for review prior to the preparation of a final report. (See draft document dated 17 August 1976.)

B. Summary of Recommendations

Sections III- VI of this report describe the conclusions and recommendations of the urban design study. Several key recommendations, however, are summarized below due to their importance to the overall development effort:

1. The development of the High/Naghten area should emphasize the strategic location of activity-generating facilities. Shops, restaurants, and other public-oriented facilities should relate to and reinforce High Street as a pedestrian environment where people are attracted both day and night. Creating a new sense of life and activity along the streets of the Downtown should be a key objective of redevelopment, and the configuration of new buildings, open space, and circulation systems can be critical in achieving this objective.
2. New development should provide strong architectural definition to the streets and open spaces in the High/Naghten area. In particular, vacant parcels of land along High Street should receive high priority in terms of new development in order to recreate the urban quality which has been lost through demolition of buildings.
3. The second-level walkway system in the High/Naghten area should be designed to provide an attractive and weather-protected environment for pedestrian movement. The system should provide direct linkages between major activity centers and should incorporate frequent connections to ground level to increase its accessibility and usefulness. Long segments of second-level walkways without adjacent points of interest and activity should be avoided.
4. The public street right-of-ways in the High/Naghten area should include design elements which will add to the quality of the new development in the area. Street lighting, trees, sidewalk paving, traffic signals, graphics, benches, and other street furniture elements should be attractively designed and carefully located to create a distinctive image for the public streets. Effective coordination is required between the various city departments with responsibilities for the public right-of-ways in order to successfully implement the design proposals outlined later in this report.

5. Portal Park should provide an exciting focus for pedestrians in the High/Naghten area as well as a landmark for people driving through the area. The Park design should reinforce the second-level pedestrian system by providing an enclosed, multi-level attraction at the midway point in the Ohio Center-Nationwide Plaza pedestrian linkage. The enclosed portions of the Park should provide architectural definition to the High/Naghten intersection, and the arrangement of levels within the Park should provide direct linkages between ground level and the second-level walkway.

6. Public and private improvements which strengthen the ties between the High/Naghten area and the other districts of the Downtown should be actively pursued. In particular, improvements to properties along High Street south of the High/Naghten area and the development of the High Street Transitway should be carried forth as part of an overall program of revitalization and unification in the Downtown.

C. Implementation

This report contains planning and design recommendations applicable to public and private improvements which will be constructed over an extended period of time. The responsibility for implementation of these recommendations is divided between several parties: Nationwide Insurance, Battelle Commons Company, and the various City agencies including the Department of Development, the Department of Parks and Recreation, and the Divisions of Traffic Engineering, Engineering and Construction, and Electricity. Other private and public bodies, such as the Mid-Ohio Regional Planning Commission, the Central Ohio Transit Authority, and the Ohio Department of Transportation, also have implementation roles in the High/Naghten area. Because of the time span and the number of parties involved in this implementation process, it is important that the principals in this study continue to exercise leadership jointly in determining the future direction of the High/Naghten area. The recommendations of this report will require continuing review and interpretation to meet changing conditions and the client structure evolved for this urban design study is an effective body for providing the continuity which is needed.

II. SUMMARY OF CURRENT HIGH/NAGHTEN AREA DEVELOPMENT PLANS

This urban design study has been conducted within the context of a number of ongoing development efforts in the High/Naghten area. Furthermore, several of the proposals in this study incorporate concepts outlined in earlier studies and most notably the work completed by Vincent Ponte in 1973. The following summary of proposals and current development plans provides a context for the detailed recommendations in subsequent sections.

A. Proposals by Vincent Ponte (in conjunction with Travers Associates and Nitschke Godwin Bohm)

Vincent Ponte outlined a series of action programs for downtown Columbus in 1973. Several of these proposals are directly oriented to the High/Naghten area and include:

1. Naghten Boulevard: In Progress Report 1[1] Ponte identified the opportunity to implement, in the form of a landscaped boulevard, the Naghten downtown artery called for in the 1968 Regional Center Plan. The boulevard form was suggested as an appropriate setting for the major new developments planned along its right-of-way.
2. Marconi/Front Connector: this improvement to vehicular circulation was proposed in Progress Report 1[2] as a solution to awkward traffic movements between the Marconi and Front one-way pairs in the vicinity of Chestnut Street.

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(1): Action Program for Downtown, Progress Report 1, Access and Circulation, prepared by Vincent Ponte, 1973.

(2): Ibid.

3. Portal Park: In Progress Report 2,[3] Vincent Ponte outlined the concept of "Green Gateways to the City."[4] Four parks were proposed as "portals" to the Downtown located along the main approach routes of Broad Street and High Street. North Portal Park was proposed adjacent to the intersection of Naghten Boulevard and High Street and, as the other portal parks, was to announce that the "threshold of the core has been reached." The site acquired for North Portal Park is illustrated on Figure 1.

4. High Street Transitway: Progress Report 4[5] outlines a phased program for improvements to High Street which would strengthen its role and character as a mass transit route. The emerging Ohio Center and County Courthouse Complexes at either end of High Street within the core were cited as generators of increased bus activity. While the transitway proposed in Progress Report 4 spanned only to Spring Street on the north, related improvements to High Street would extend from the north innerbelt to the south innerbelt and would require a new design vocabulary appropriate to the street's new role in the revitalized core.

5. Pedestrian Walkway System: a network of sheltered and grade-separated walkways for the core area was outlined in Progress Report 4.[6] Even though the plans presented in that report did not specifically propose a system for the High/Naghten area, the subsequent planning for the area extended the core system northward to interconnect the major new developments such as Nationwide Plaza and Ohio Center with a series of second-level walkways. While the system proposed for the core by Ponte was oriented toward the service alleys, the system as currently envisioned in the

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(3): Action Program for Downtown Columbus, Progress Report 2, Broad Street, prepared by Vincent Ponte, 1973.
(4): Progress Report 2, page 23.
(5): Action Program for Downtown Columbus, Progress Report 3, High Street, prepared by Vincent Ponte, 1973.
(6): Action Program for Downtown Columbus, Progress Report 4, Pedestrians and Parking, prepared by Vincent Ponte, 1973.

High/Naghten area is much more oriented toward the major public streets and pedestrian open spaces.

Another public project not included in the Ponte proposals but currently under design is the replacement of the High Street viaduct. This project will provide a completely reconstructed High Street from Naghten Boulevard north to Vine Street.

B. Nationwide Plaza

Nationwide Insurance is a major contributor to the redevelopment of the High/Naghten area. The Company's new headquarters building with its associated pedestrian plaza accounts for the redevelopment of a one-city-block area, with the potential for related development expansion into adjacent city blocks. The redevelopment project, referred to as Nationwide Plaza, incorporates not only office space but also retail space on the first two levels of the complex. A pedestrian walkway system being constructed at the second level is designed for extension to adjacent developments, and a multi-level parking structure is planned to serve the development, with pedestrian access via the second-level walkway system.

C. Ohio Center

The Battelle Commons Company is developing a multi-use facility incorporating convention/exhibition facilities, meeting rooms, retail space, parking, and a hotel. The development is referred to as Ohio Center and is located in the Union Station railroad yard area north of Naghten Boulevard. A major transportation center is proposed as a part of the Ohio Center complex and is planned to include an Amtrak station, a terminal for express buses connecting to the airport, and a terminus for a rapid rail system which might serve Columbus in the future.

D. Federal Office Building

The General Services Administration is constructing a new Federal Office Building within the High/Naghten redevelopment area. This building, located at High and Spring Streets, provides the initial link of the second-level pedestrian walkway system which will eventually interconnect Nationwide Plaza, the Ohio Center, and other major developments in the area.

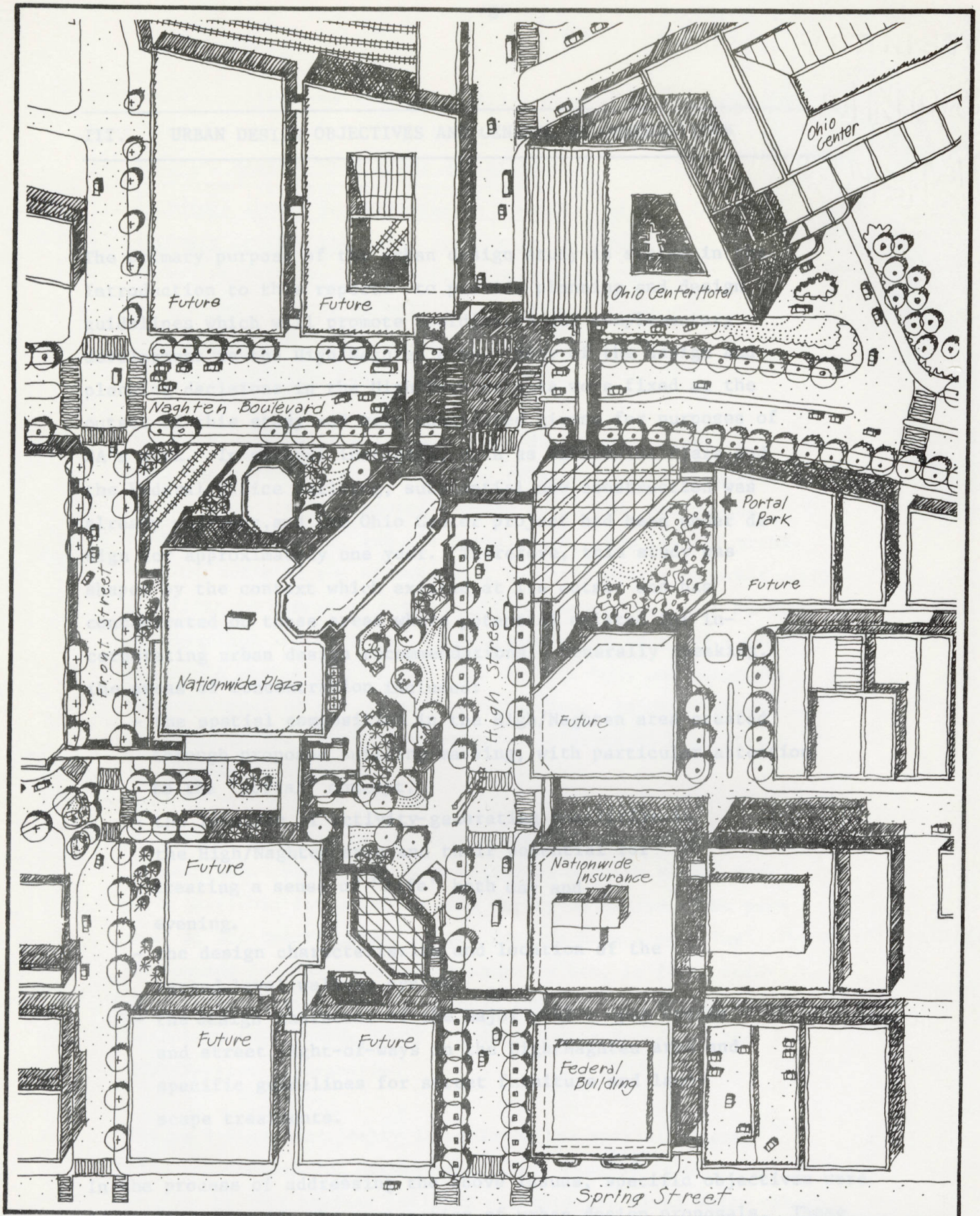

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Figure 1
The High/Naghten Area

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III. URBAN DESIGN OBJECTIVES AND GENERAL RECOMMENDATIONS

The primary purpose of the urban design study is stated in the Introduction to this report: to provide planning and design guidelines which will promote coordinated and complementary development in the High/Naghten area. Many of the design and planning decisions in the High/Naghten area were fixed at the outset of this study and were considered givens for purposes of SA's work. In several instances, such as Nationwide Plaza and the Federal Office Building, substantial new construction was already underway,and the Ohio Center project had been under design for approximately one year. Therefore, this study was shaped by the context which existed at its outset and has concentrated on those areas where potential existed for incorporating urban design recommendations. Generally speaking, the areas of concentration included:

- the spatial composition in the High/Naghten area created through proposed building massing, with particular attention to the "portal" concept.
- the location of activity-generating facilities in the High/Naghten area and their potential for creating a sense of "life" both day and evening.
- the design characteristics and location of the second-level walkway system.
- the design character of the major public open spaces and street right-of-ways in the High/Naghten area and specific guidelines for street furniture and landscape treatments.

In the process of addressing the above issues, specific objectives were identified to guide the preparation of urban design proposals. These objectives apply both to the High/Naghten redevelopment projects currently planned and to possible future developments.

Four sets of objectives with paralleling general recommendations have been defined for the High/Naghten area:

A. Building Massing/Open Space Definition:

Buildings should be developed in a manner which strongly defines the major streets in the area. Excessive setbacks and undefined open spaces should be avoided in favor of well defined street right-of-ways which then emphasize significant open spaces such as Nationwide Plaza and Portal Park.

The High/Naghten area is quite open due to the extensive railroad yards and the demolition related to reconstruction of the High Street viaduct, Naghten Boulevard, Nationwide Plaza, Ohio Center, and the Portal Park. The loss of architecture defining the streets will be particularly apparent until a deficit of office or other building space stimulates further construction in the area. This hiatus could last for a considerable period of time and thus detract from the immediate visual impact of the current construction. Priority should be given to the development of sites adjacent to High Street to minimize this impact.

A related objective is the development of the portal entrance to downtown. Vincent Ponte's notion of a North Portal Park as a threshold for downtown is a worthy objective to be pursued in the redevelopment of the High/Naghten area. The Nationwide and the Ohio Center projects are, in fact, reinforcing the portal concept through the addition of two large buildings (Nationwide Tower and Ohio Center Hotel) at the High/Naghten intersection.

Figure 2 diagrammatically illustrates the spatial composition recommended for High Street. This diagram is a composite product in that certain building elements are fixed while others are to be constructed in the future. The location of these

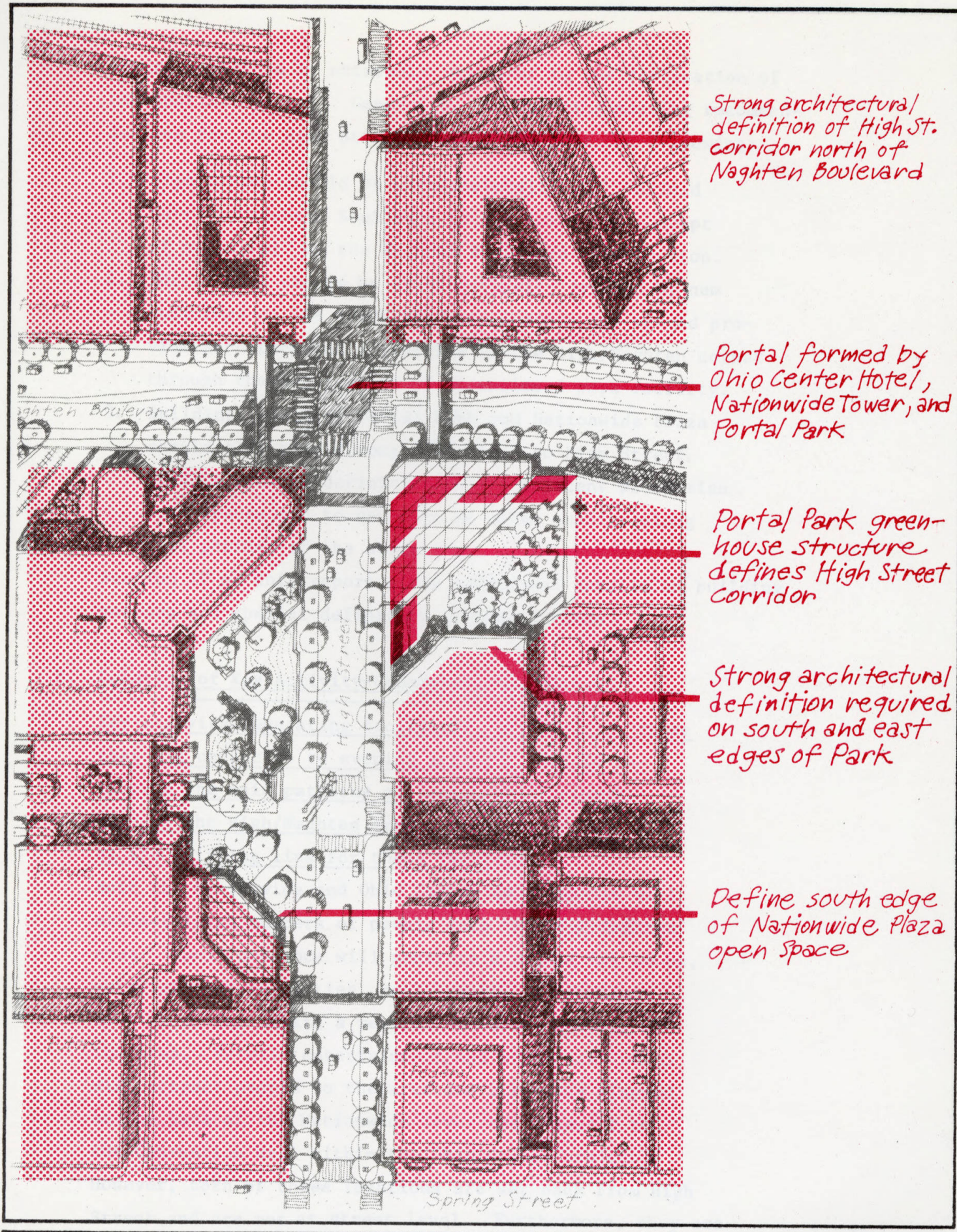

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Figure 2
Spatial Composition

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future buildings is extremely important to the realization of the spatial concept. Generally, the building massing recommendations for the High Street Corridor include the following:

1. High Street should be architecturally well defined north of Naghten Boulevard to reinforce the concept of a "portal" at the Naghten Boulevard intersection.
2. Portal Park should be architecturally defined by new buildings on its south and east borders and should provide architectural definition to the High/Naghten corner through the development of an enclosed park facility.
3. Buildings south of Portal Park and Nationwide Plaza should also give strong definition to High Street, both to provide definition to the adjacent pedestrian open spaces and to maintain an urban quality along this portion of the street.

Section IV of this report gives additional details on building massing and spatial definition recommendations.

B. Location of Key Activity-Generating Facilities:

Key activity-generating facilities, particularly those that are conducive to evening activity, should reinforce the main patterns of pedestrian movement through the High/Naghten Area. High Street should be the unifying link for these facilities.

Both the Nationwide and Ohio Center developments will attract large numbers of people into the High/Naghten area. Their presence will generate a demand for shops, entertainment facilities, restaurants, and similar uses which can impart a revitalized urban quality to the area. Retail, entertainment, and other uses which will attract people to the area are currently planned at the base of the Nationwide Tower and adjacent to the Convention Hall within the Ohio Center project. However, both of these locations are set back from High Street and are not at street level. Furthermore, they are

somewhat distant from each other, being separated by Naghten Boulevard, High Street, and the Portal Park site. The resultant pattern of pedestrian activity within these centers will be somewhat removed from the street environment.

It is important, therefore, that a maximum amount of activity be planned for the remaining building sites along High Street and that Portal Park be developed as an active element between the Ohio Center and Nationwide centers. The hotel for the Ohio Center will be very helpful in this regard if retail facilities are planned for the sidewalk frontage. Similarly, the hotel planned to the south of the Nationwide Tower can add activity to the street by providing sidewalk-oriented retail facilities.

Figure 3 illustrates the location of currently planned retail/entertainment facilities and the areas where future activity-generating facilities should be located at street level. A key site in this scheme is Portal Park, which should be an enclosed, all-season facility with a variety of programs which will attract people to the area. Future buildings on the park's south and east edges should be encouraged to provide ground floor shops and restaurants which will directly complement the park as an active pedestrian space.

C. Second-Level Walkway System Design:

The second-level walkway system should provide an attractive and convenient network of pedestrian connections within the High/Naghten area, and should directly reinforce and link with the at-grade facilities for pedestrians.

The creation of a second-level pedestrian system in the High/Naghten area adds a new dimension to the redevelopment which is potentially of great benefit. However, extreme care must be taken to make this system a complementary rather than a competitive component in the overall pedestrian circulation system, and to make it safe, attractive, and convenient for its users. The following recommendations focus on the

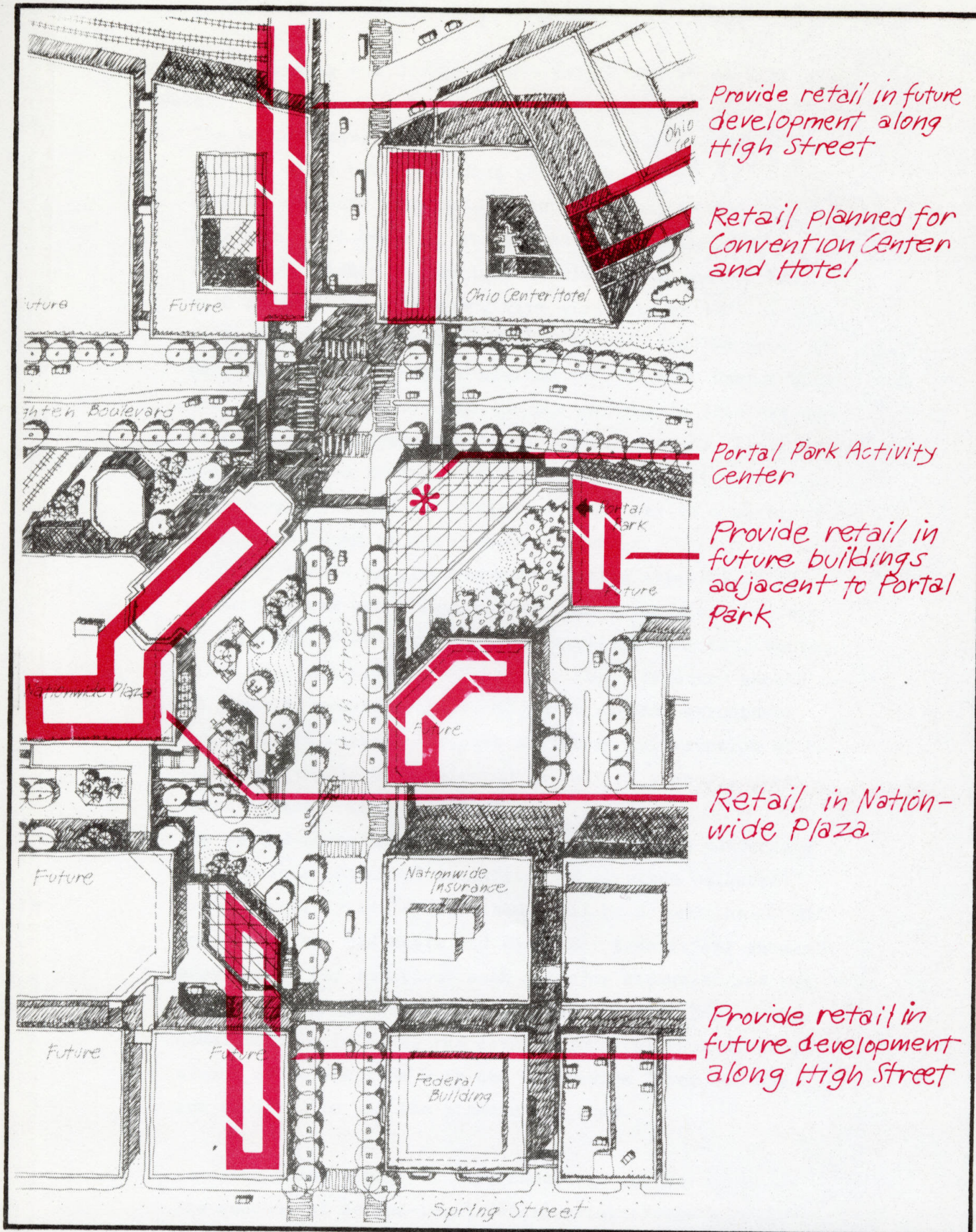

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Figure 3
Location of Retail Activities

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critical planning and design issues related to the second level system. (See Figure 4 for the system organization.)

1. The second-level system should provide direct connections between major uses, avoiding circuitous routes and lengthy segments without adjacent points of activity and interest. For example, the second level connection between Ohio Center and Nationwide Plaza is a lengthy walk with potentially little activity along its route. Therefore, the total length of walkway between the two developments should be held to a minimum and the Ohio Center Hotel and Portal Park should provide the maximum in interest and activity to encourage people to use the system. Every effort should be given to route the system in a manner which will take people through activities on their way to a particular destination such as the Convention Center.
2. Priority should be given to constructing segments of the walkway system which interconnect the primary new centers of activity in the High/Naghten area: Ohio Center, Nationwide Plaza, and the Federal Office Building. Priority should also be given to constructing linkages to parking structures. Second-level walkway linkages to future construction or existing buildings should be considered as part of a second phase of construction. (See Figure #4.)
3. The second-level walkway system should provide convenient and numerous points of transition to at-grade walkways. The second-level system's usefulness will be a function of its accessibility, and stair and escalator transitions should be provided at key locations such as major sidewalks and building entrances. A particularly important location for an escalator connection would be at the corner of Portal Park where a large number of people from both the Nationwide Tower and Ohio Center are expected to use the planned bus stop.

Numerous connections are important from another point of view. The success of second-level retail establishments located along the walkway will depend to a large extent upon their visibility

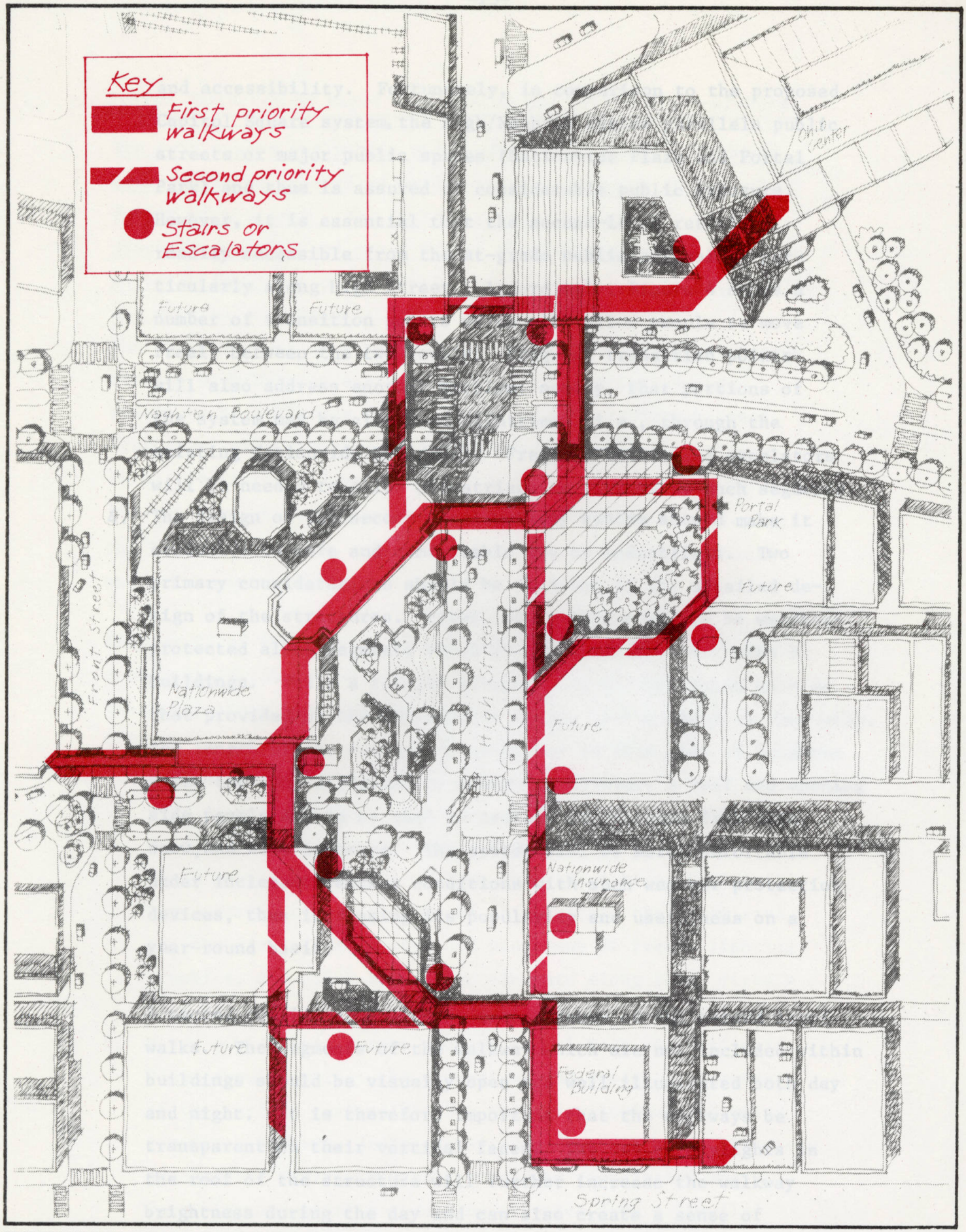

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Figure 4
Second-Level Pedestrian Walkway System

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and accessibility. Fortunately, in comparison to the proposed Capitol Square system, the High/Naghten system parallels public streets or major public spaces (Nationwide Plaza and Portal Park) and thus is assured of considerable public exposure. However, it is essential that the second-level retail be readily accessible from the at-grade public sidewalks, particularly along High Street. Accordingly, Figure 4 shows a number of transition points which will allow people to move freely between the two levels. Frequent transition points will also address another problem: namely, that portions of the system may be closed at nighttime (i.e., through the existing Nationwide Building). Frequent stairs and escalators will be needed to allow pedestrians to circumvent such segments.

4. The design of the second-level walkway system should make it conducive to safe and comfortable use by pedestrians. Two primary considerations should be observed in the detailed design of the structures. First, the walkways should be weather-protected along segments which are not otherwise enclosed by buildings. While a totally enclosed and heated system such as that provided by the Minneapolis Skyway system would be desirable, the length of the exterior connections in this area of Columbus makes the idea difficult to achieve. However, a roof and opening side panels should be used to protect pedestrians from rain, snow, and wind exposure. The system will be more comfortable under inclement weather conditions with such weather protection devices, thus increasing its popularity and usefulness on a year-round basis.

A second consideration is the transparency of the second level walks. The segments of the walkway which are not included within buildings should be visually open and well illuminated both day and night. It is therefore important that the walkways be transparent on their vertical faces. The use of skylights in the roof of the structure will further increase the walkway brightness during the day and can also create a sense of structural openness which will reduce the apparent weight of the walkway bridge segments when viewed from the street. Both Minneapolis and Cincinnati have comparable design examples.

D. Design Character of Major Open Spaces and Public Right-of-Ways:

The open spaces and public right-of-ways in the High/Naghten area should be treated as major unifying features in the urban fabric of the area. The design of planting, paving, lighting, graphics, seating, and other street furnishings should adhere to an established set of standards which are applied to both public and private developments.

The establishment of a set of site development design standards for the High/Naghten area does not imply identical design solutions in all areas of development. Construction budgets, functional requirements, design objectives, related architectural treatment, and maintenance capabilities vary considerably between the public and private entities involved in developing the High/Naghten area. Specific site design solutions should and will vary accordingly.

Chapter VI of this report discusses recommendations for site design standards in the High/Naghten area. In general these recommendations focus on the following concerns:

1. Site elements within the major public street right-of-ways (i.e., lighting, planting, street furniture) should be highly consistent in terms of design and placement. The linear street right-of-ways have the inherent potential for creating a strong sense of unity within the urban area, and the disciplined design and placement of trees, lighting, graphics, and other repetitive elements along these streets is a very effective tool for realizing this potential.
2. Major public open spaces such as Portal Park and Nationwide Plaza should reflect the objectives and design preferences of the parties responsible for their development and maintenance. However, design details, such as lighting fixtures, benches, and paving materials, should be coordinated where feasible, and ideally should be selected from a 'family' of compatible forms and materials.

The design and placement of site elements within the High/Naghten public right-of-ways has broader implications for downtown Columbus. High Street is envisioned as an integrated design solution from the south innerbelt to the north innerbelt, with the Spring Street to Main Street segment developed as a pedestrian/transit-way mall. Given the phasing of downtown improvements, the design details developed in this study will set standards for the improvements along the entire length of High Street. For example, lighting, planting, and traffic signal recommendations outlined later in this report will, to a large degree, set standards for the design of improvements in the portions of High Street outside the immediate High/ Naghten area.

The consistent treatment of design details along the entire High Street corridor will also help to link the High/Naghten area with the remainder of the Downtown. In particular, the three-block area between Spring and Broad Streets should be improved to create an attractive pedestrian environment which will encourage people to walk between Capitol Square and the High/Naghten area.

IV. URBAN DESIGN GUIDELINES

This section describes the urban design guidelines for the private development areas within the High/Naghten area. Guidelines for the public areas (street right-of-ways and Portal Park) are described in subsequent sections. The guidelines are presented in detail in this section on an area-by-area basis, organized as follows:

- Convention Center Block: the Ohio Center development area bounded by High Street, Naghten Boulevard, and Third Street and extending north toward Goodale Street.
- Northwest Corner Block: the area bounded by High Street, Naghten Boulevard, and Front Street and extending north to Vine Street. This block has a strong relationship to the Ohio Center and Nationwide Plaza developments to the east and south, respectively.
- Nationwide Plaza Block: the area bounded by Naghten Boulevard, High Street, Spring Street, and Front Street and including the site of the new home office for Nationwide Insurance Company.
- Federal Building Block: the area bounded by High Street, Spring Street, and Chestnut Street and extending toward Third Street. This area includes the new Federal Building and the existing Nationwide home office building.
- Portal Park Block: the area bounded by High Street, Naghten Boulevard, and Chestnut Street and extending toward Third Street. This area includes the quarter-block Portal Park site as well as adjacent areas for potential development.

The guidelines described below are noted on a series of accompanying illustrative plan graphics for each area.

A. CONVENTION CENTER BLOCK (See Figure 5)

1. Building massing should be as close to the High Street and Naghten Boulevard right-of-ways as possible to help define the Portal Park space and to minimize the length of pedestrian links at street level and above. However, building massing at the High/Naghten corner itself should be set back or notched to improve visibility and architectural interest at the intersection. Shops and other retail facilities should be located at street levels to generate pedestrian activity in the area.

   The current plans for the Convention Center/Hotel (as of September 1976) are generally consistent with the building massing recommendations. Shops are also proposed along High Street within the hotel. The deep setback of the Convention Center/Hotel building mass along Naghten Boulevard is acceptable provided there is sufficient landscape space to soften the paved area requirements of the hotel's traffic approach loop. Although the approach loop is horizontally recessed under the building's south facade, the opening is probably high enough so that the provision of irrigation would make planting possible in this area.

2. The High Street railroad bridge structure prevents the planting of street trees north of Naghten Boulevard. To keep the street from appearing excessively wide, the High Street facade of the Convention Center/Hotel should be located at the property line. However, due to the narrow sidewalk width in this area, additional at-grade pedestrian space should be provided by means of a colonnade under the edge of the hotel building. The narrowing of the High Street space in this area will help to dramatize the "portal" experience at Naghten where High Street opens to the Portal Park and Nationwide Plaza landscaped spaces.

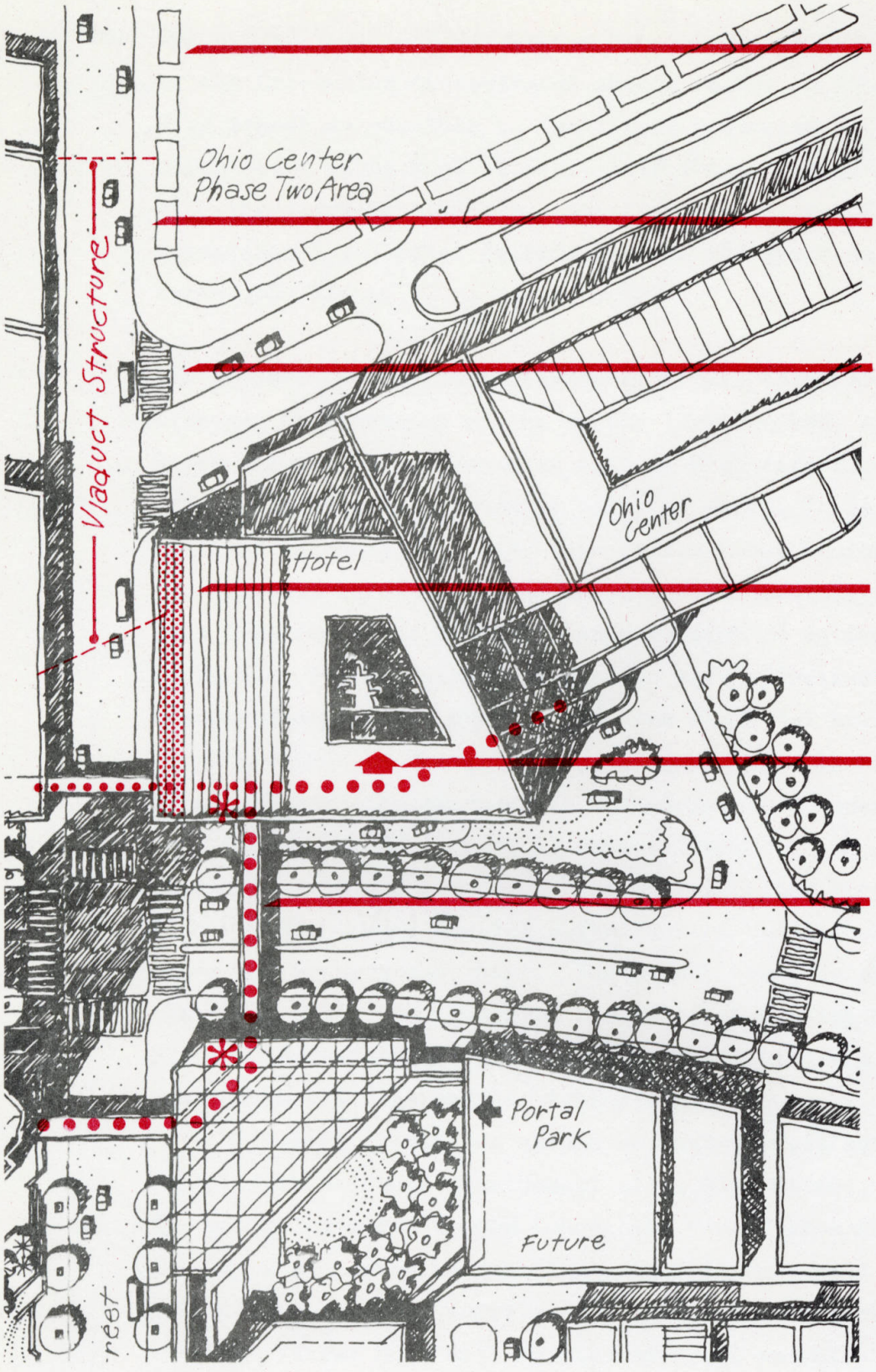

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Figure 5
Convention Center Block

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3. The second-level walkway system connecting from Portal Park to the Convention Center/Hotel should relate as closely to High Street as possible to facilitate protected pedestrian circulation along High Street. This location would also provide the shortest possible connection between the Convention Center/Hotel and other destinations to the south such as Nationwide Plaza.

   The present Convention Center/Hotel scheme (September 1976) proposes the terminus of the second-level walkway at the hotel elevator tower somewhat east of High Street. While this would provide a dramatic point of entry, it is recommended that the second-level connection to the hotel be located near the southern terminus of the colonnade adjacent to High Street. This location would provide a shorter link to Nationwide Plaza, would serve High Street pedestrian traffic more effectively, and would allow pedestrians to pass by and view the hotel atrium activities. A major exchange of levels is provided at this location in the hotel and could be expanded to accommodate the second-level walkway and its connection to street level.

4. Future development within the Convention Center Block should provide for the strong spatial definition of the High Street corridor north of the proposed hotel. The arcade theme being developed in the hotel should be continued northward along High Street to provide increased sidewalk width while allowing the building massing to abut the street right-of-way. Shops or other pedestrian-oriented facilities should be incorporated into the ground level of this future development along High Street.

5. The vehicular entry to the Convention Center from High Street should be as narrow as functional requirements will permit. By maintaining a narrow entry width, the visual interruption along the High Street edge will be minimized and potential risks to pedestrians crossing the entry will be reduced.

B. NORTHWEST BLOCK (See Figure 6)

The Northwest Block will play a key urban design role in the High/Naghten area due to its close proximity to Ohio Center and Nationwide Plaza. While the presence of the railroad yards makes redevelopment less likely in the immediate future, it is nonetheless important that the guidelines outlined in this study be followed in the planning for facilities which may be placed there.

Figure 6 provides a diagrammatic indication of the building massing recommendations described below for the Northwest Block. This drawing does not represent a known building program for the area, but instead provides an interpretation of how buildings in this area should relate to High Street and Naghten Boulevard.

1. The building massing recommendations for the Convention Center Block apply to this Northwest Block. In particular, the building setbacks along High Street and at the High/Naghten corner should generally follow that of the hotel on the opposite side; i.e., the currently proposed colonnade should be repeated on the west side of High Street and be terminated at its southern end in a manner which complements the hotel. An elaboration of the colonnade at this southern terminus would make a fitting entrance to the building which is to occupy this site.
2. Second-level walkway connections should be provided to the Northwest Block from Ohio Center and Nationwide Plaza in order to reinforce the overall walkway system. These connections should be located in close proximity to the High/Naghten intersection, both to maximize their accessibility and to reinforce the sense of unified development on all sides of the intersection.

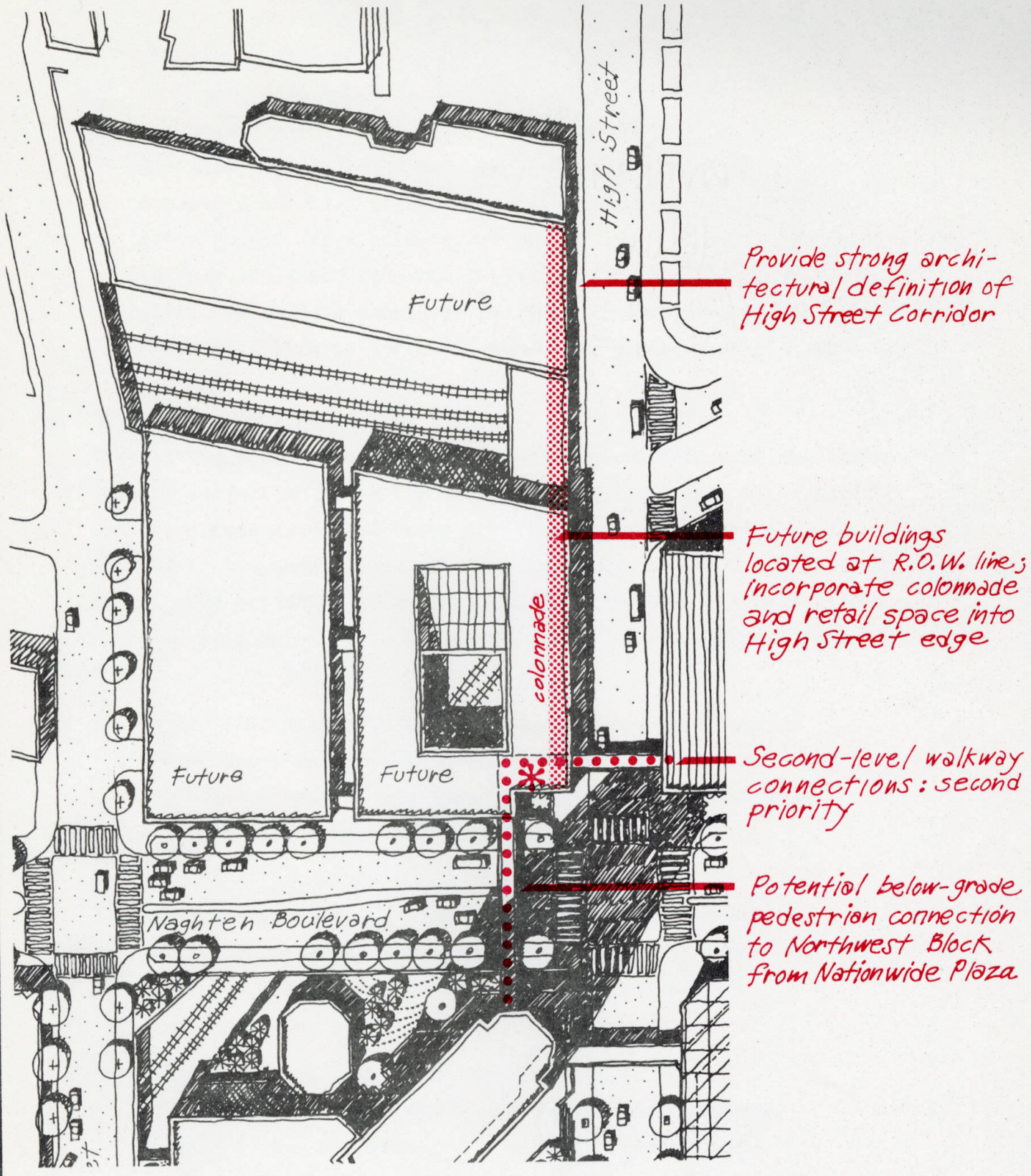

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Figure 6
Northwest Block

0 200 North

The reconstruction of Naghten Boulevard and High Street also provides a timely opportunity to build below-grade weather-protected pedestrian connections to the Hotel/Convention Center and to Nationwide Plaza from the Northwest Block. These links are easily constructed because of the rising grades on Naghten Boulevard and High Street and could be for either public or private use. If a below-grade pedestrian tunnel for public use is to be provided from the Nationwide Tower north under Naghten, an open courtyard should be provided at its terminus in the Northwest Block to further enhance the corner entry to this area.

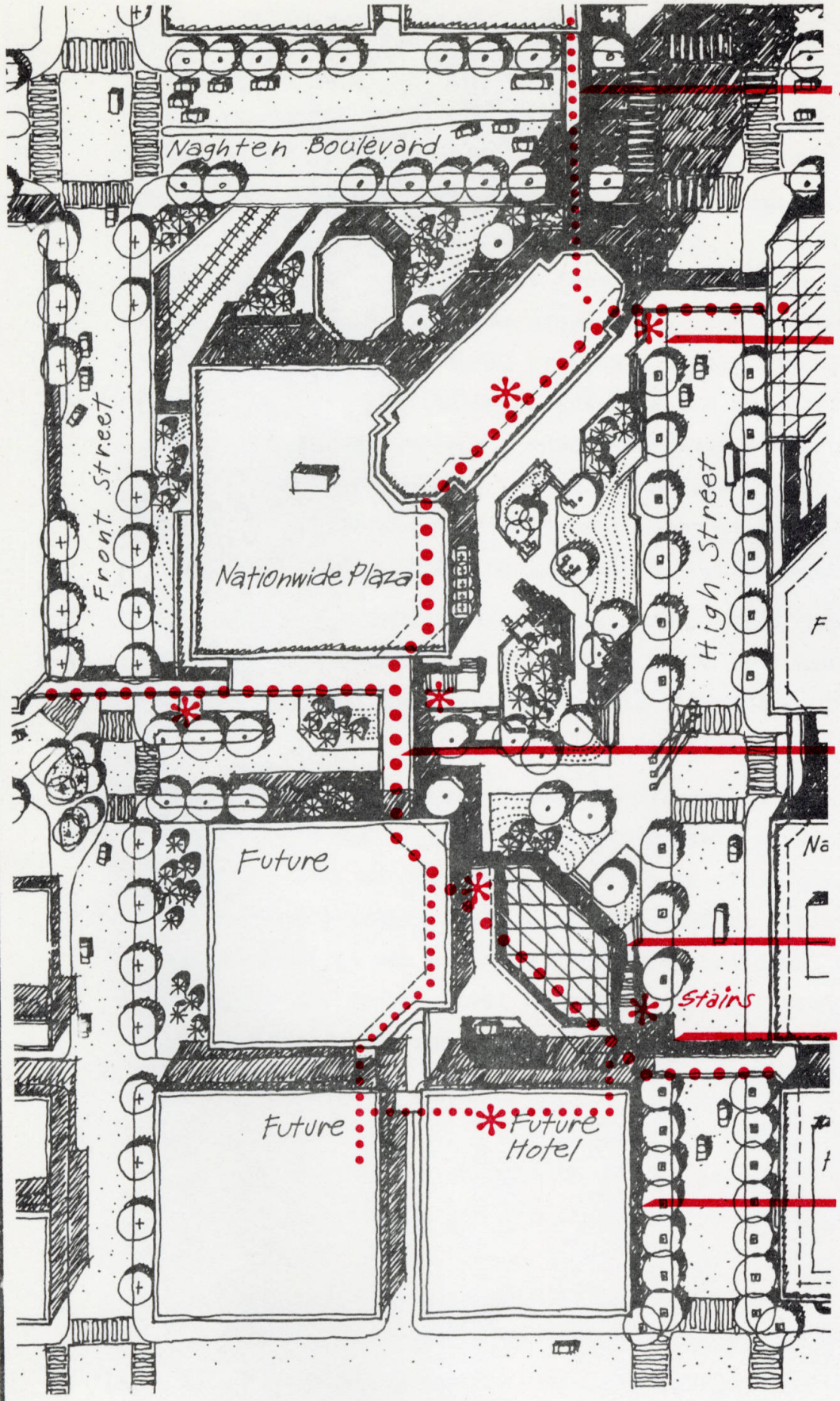
C. NATIONWIDE PLAZA BLOCK (See Figure 7)

Many of the elements of the Nationwide Plaza development are either under construction or in the final stages of design. Accordingly, the guidelines described below primarily address design issues related to the undeveloped area located south of the new Nationwide Plaza (area extending to Spring Street). Specific recommendations are also made relative to the grade-separated pedestrian circulation system.

1. An exterior stair connection should be provided between the second-level walkway and the street grade at the northeast corner of the Nationwide Tower (consistent with the second-level system recommendations in Section III).

2. The reconstruction of Naghten Boulevard provides a timely opportunity to build a below-grade weather-protected pedestrian connection to the northwest corner site for either private or public use.

3. Future building massing in the undeveloped parcel south of Nationwide Plaza should define High Street between Spring and Hickory. A modest building setback or colonnade should be considered at the sidewalk level to improve the sidewalk width (similar to the treatment of the new Federal Building).



Second-level walkway connections: second priority

Provide stairs to second-level walkway at northeast corner of tower

Second-level walkway system: first priority

Pavilion building defining south edge of Plaza open space

Prime vehicular access to future hotel via Hickory (under second level deck)

Building massing should define High street; provide retail at street level

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Figure 7
Nationwide Plaza Block

0 200 North

4. If the Spring/Hickory site is to be a hotel, special consideration must be given to front door access for taxis, limousines, private cars, and attendant parking drop-off. This access should not disrupt the High Street frontage, but could be provided from Spring Street, from Wall Street, or perhaps most attractively from Hickory Street via an entrance located under the proposed second-level walkway. This latter location could provide a direct visual relationship between the hotel entrance and the Nationwide Plaza garden and include a mezzanine-level connection to the second-level walkway system. The High Street frontage of the hotel should provide retail shops at grade to enhance the pedestrian activity desired along High Street.

5. Since the Nationwide Plaza open space is quite large, the provision of upper-level decks or a small pavilion building to the north of the hotel site could help reduce the scale of the space.

6. The second-level walkway system should bridge High Street at the south end of the Plaza approximately at Hickory Street. Since no stairway connection to grade exists in the Federal Building at Hickory and exterior stairs cannot be easily added in the existing Nationwide Building, a major access to the second-level walkway from the street should be provided at the west end of the High Street bridge.

D. FEDERAL BUILDING BLOCK (See Figure 8)

This block includes two existing buildings which represent fixed conditions (Nationwide Office Building and the Federal Office Building). The Federal Building provides the first point of entry to the second-level walkway system from downtown and represents a good example of how to handle transitions between grade level and the second-level walkway. It has been indicated that continuation of the second-level walkway system through the existing Nationwide Building is possible by modifications to the building's interior area along High Street. This portion of the system should be considered a second priority, with first priority given to a connection to Ohio Center via Nationwide Plaza. The second level walkway should be laid out if possible to provide a slight jog in alignment at the northwest corner of the existing Nationwide Building. This will allow the existing building corner to stand free from visual disruption and will provide greater visual interest in the walkway system as it connects to the block to the north. Other recommendations for this block are related to streetscape proposals covered under Section VI.

E. PORTAL PARK BLOCK (See Figure 8)

Section V of this report discusses the design proposals for the quarter-block Portal Park site. The following guidelines relate to the parcels of land adjacent to Portal Park on the south and on the east. Both parcels have a direct impact on the Park and should be planned to complement the Park activities as well as to provide an architectural enclosure for the space. The two existing alleys (Locust and Pearl) which currently separate the Portal Park site from the adjacent properties should be vacated. Vacating these alleys will maximize the area available to the Park as well as provide a direct frontage connection between the Park and the future buildings located to the south and east.

1. Guidelines for Parcel South of Portal Park

   a. Continuity of the second-level walkway system should be provided northward along High Street with access from the street at Chestnut. An eastward jog in the position of the Chestnut bridge will provide space for stairs close to High Street and give variety to the

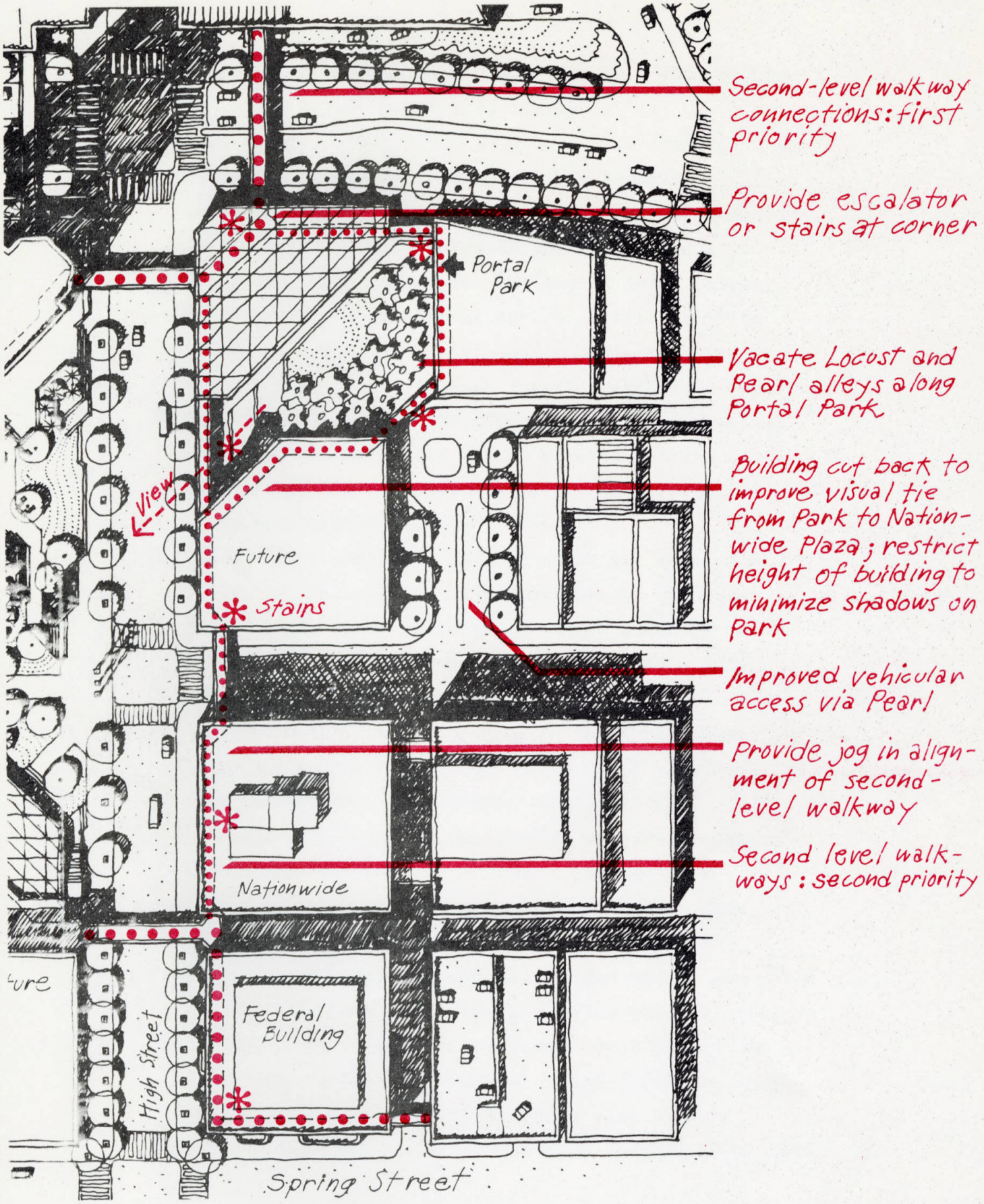

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Figure 8
Federal Building Block
Portal Park Block

0 200 North

vista while walking along this passage. This segment should be a second-priority linkage.

b. Because Nationwide Plaza provides ample open space on the west side of the street in this location, the building massing should abut the High Street property line with additional at-grade pedestrian space provided by a colonnade under the second level walkway.

c. If possible, the northwest corner of this building should be cut back on a 45 degree angle (similar to the angle of the Nationwide Tower) providing a stronger relationship between the Portal Park and Nationwide Plaza. A special vista can be created between the Portal Park and the lower waterfall in Nationwide Plaza across High Street.

d. The building should be limited in height to 4 to 6 floors to minimize the length of shadows cast over Portal Park. Alternatively, a taller building on this site could be stepped back on its north side to alleviate shadow problems.

e. The ground-floor space related to the Portal Park edge should incorporate uses which would reinforce park activities, i.e., shops, restaurants.

f. A second-level walkway should also be provided along the Portal Park site to provide a linkage to a future building to the east of Portal Park. This segment should be a second-priority linkage.

g. A motor court access could be provided on the east side of this site (via Pearl Alley) serving this building, the Portal Park (via its southeast corner), and the future use of the site east of Portal Park. Development of this vehicular access might also help to reorient functional access away from Naghten Boulevard.

2. Guidelines for Parcel East of Portal Park

a. This site has desirable frontage for a variety of uses due to its proximity to Ohio Center and the Portal Park. In particular, the at-grade frontage along Portal Park and Naghten Boulevard should be used for active facilities such as shops and restaurants.

b. Although vehicular access to this site is potentially available via the proposed Convention Center/Naghten intersection, the use of an improved Pearl Alley access way from Chestnut would generally benefit not only this specific parcel but the entire super block bounded by High, Chestnut, Naghten, and Third. Given that curb cuts and vehicular lay-over areas will not generally be permitted along the Naghten Boulevard frontage to this block, the development of an accessway from Chestnut Street via Pearl Alley would provide important supplementary vehicular access to this area. Service and drop-off functions could be accommodated by the vehicular turnaround (illustrated in Figure 8) and direct access to Locust Alley would be maintained.

V. PORTAL PARK RECOMMENDATIONS

The key purpose of Portal Park as conceived by Vincent Ponte is to enhance the entry into downtown from the north and provide a public open space at the core of new facilities in the High/Naghten area. While it is not within the scope of this study to prepare a detailed design for Portal Park, it is important that the parameters for the Park's design be clearly articulated and a design direction be established for subsequent development. Accordingly, the following material includes a description of design objectives and a preliminary design concept for the Park.

A. Design Objectives

The following design objectives are responsive to the Park's site conditions, its role in reinforcing the pedestrian-oriented environment of the High/Naghten area, and its potential for providing a special design statement in a highly visible location.

1. The strategic location of the Park site midway between the Ohio Center and Nationwide Plaza developments provides the opportunity for year-round use of the facility. The Park should provide both interior and exterior spaces to accommodate year-round use, which will in turn encourage the flow of pedestrians through the area.

2. Given the portal function of the Park, it is important that the design have a recognizable design quality when viewed from High Street and Naghten Boulevard.

3. The development of Portal Park presents a special opportunity to integrate the second-level walkway system into the Park design. In particular, the elevated walkway should help define the Park space from the street, provide special views into the Park, and generally provide a three-dimensional park experience. Stair and/or escalator connections to street level should take place at High and Naghten, at High and Locust, and at the southern edge of the Naghten pedestrian bridge.

4. Because the Park site contains a 12-foot change of grade from the High/Naghten corner to the Pearl/Locust corner, the Park design should take advantage of this change in level to further enhance the quality of a three-dimensional park and to create a pedestrian space buffered from the surrounding streets.
5. The Park should be constructed in a single phase which includes the construction of the second-level connectors to the Ohio Center and Nationwide Plaza. The walkways and the Park are mutually supportive in terms of stimulating use by pedestrians; that is, more people will gain access to the Park because of the existence of the second-level system, and conversely people will be more likely to use the second-level system as a connector between Ohio Center and Nationwide Plaza because of the presence of the Park along the route.

B. Preliminary Design Concept

The design concept for Portal Park illustrated in Figure 9 provides for a multi-use facility which is useable during all seasons of the year. The design includes both enclosed and open spaces, integrates the second-level walkway system into the Park, and provides a recognizable portal element at the High/Naghten intersection. The main elements of the Park design are (see Figures 9 and 10):

1. The Greenhouse Structure: Situated at the High Street and Naghten Boulevard corner of the Park, the Greenhouse structure provides a glass-enclosed and weather-protected area useable year-round. The structure slopes from its tallest elevation at the northwest corner of the Park to a low elevation at the middle of the Park, providing a southeast orientation to the enclosed area.

   The location of the Greenhouse structure provides a three-dimensional definition of the High Street corridor and reinforces the portal entry created by the Nationwide Tower and the Ohio Center Hotel. The Greenhouse configuration illustrated in Figure 9 also creates a well-defined exterior park space by virtue of its relationship to the future building masses on the south and east edges of the Park.

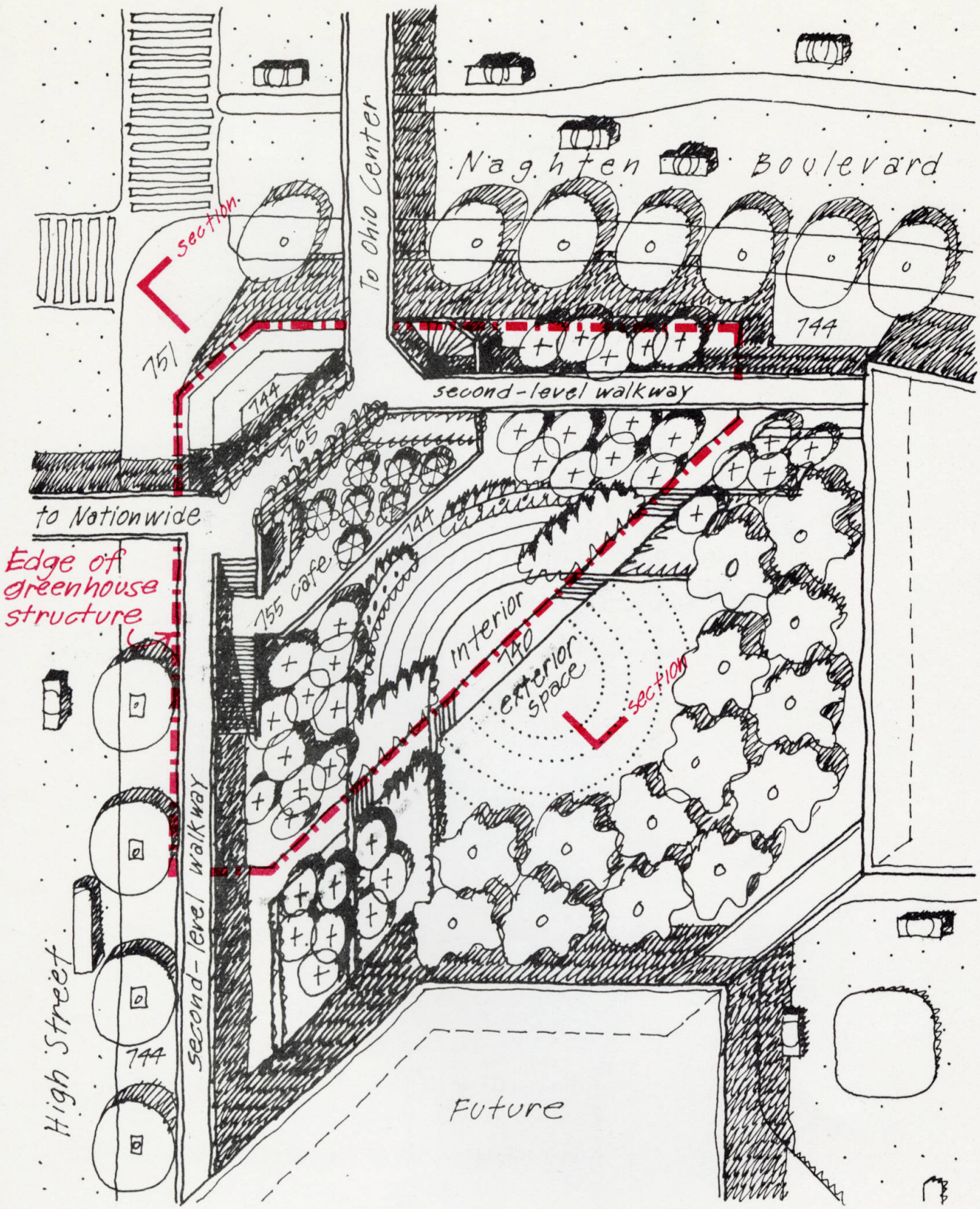

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Figure 9
Portal Park Design Concept: Plan

0 50 North

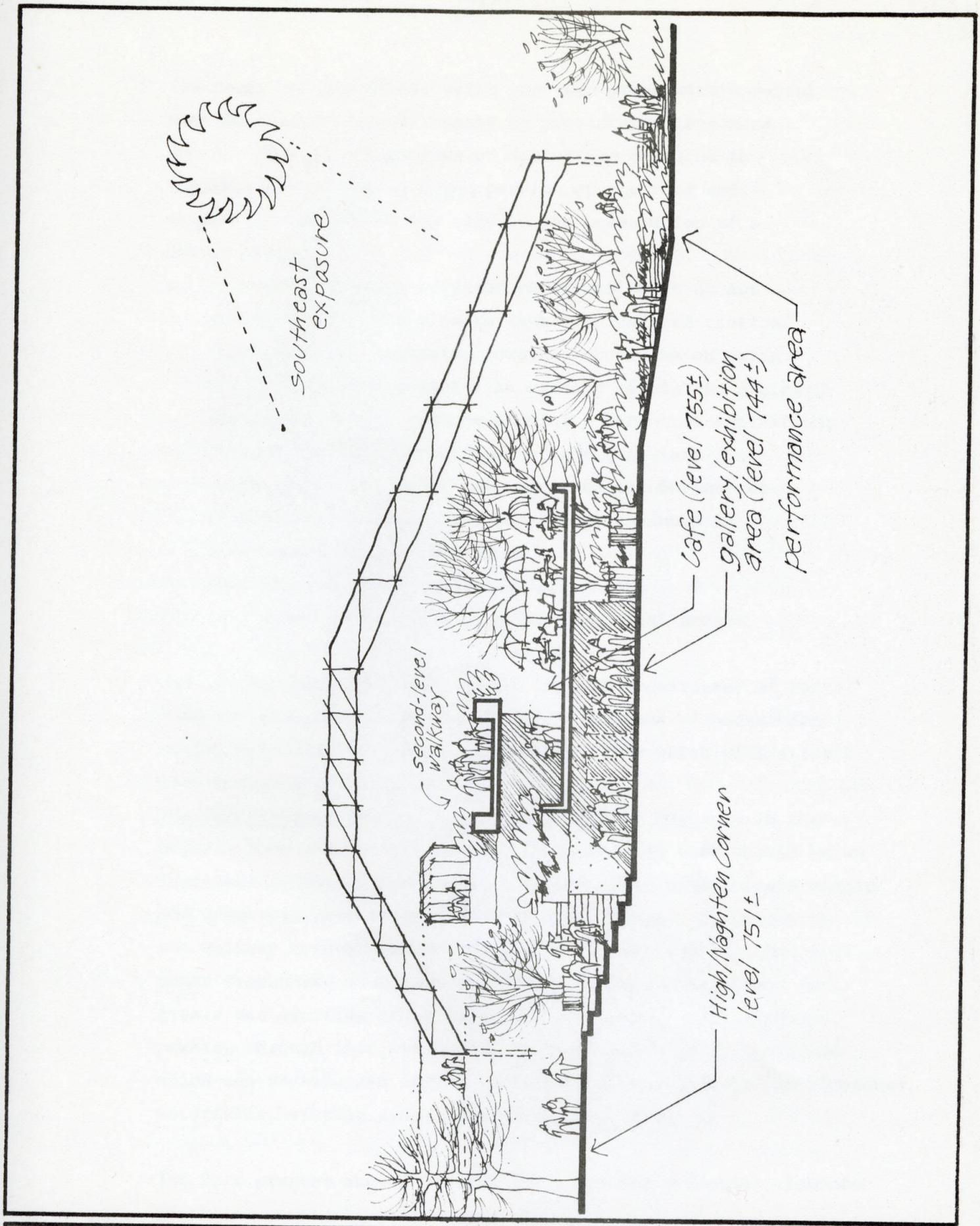

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Figure 10
Portal Park Design Concept: Section

0 50

The range of activities which can take place within Portal Park is expanded significantly by providing an enclosed space. The following types of activities could be incorporated into the enclosed portion of the Park and should be reviewed by the City in the preparation of a design program:

a. permanent displays of plant materials which do not thrive in the Ohio climate (sub-tropical and tropical species). The emphasis, however, should be on using plants to create a park-like setting within the enclosed structure, rather than developing a botanical exhibition;
b. periodic exhibitions of crafts, antiques, art (in conjunction with local galleries and the Gallery of Fine Arts); possible incorporation of animals in conjunction with the Columbus Zoo;
c. food service and refreshment facilities;
d. live performances by musical or theatrical groups.

All of the above programs reflect the urban character of Portal Park and its close relationship to the centers of pedestrian activity in Ohio Center and Nationwide Plaza which will attract people during both the day and the evening.

2. The Second-Level Walkways: The Park plays a key role in the High/Naghten second-level walkway system. The Park should be an important center of pedestrian activity which will attract people and encourage them to use the elevated walkways, particularly the walkway between Nationwide Plaza and Ohio Center. The proposed Greenhouse structure provides a fitting environment for a lively and exciting urban park, and the second-level walkways, passing through this structure, create a multi-level situation which can be expanded into a variety of plateau levels for plantings, waterfalls, sitting areas, and exhibition areas.

The Park program should provide the following essential elements of the second-level walkway system:

a. The Park program should include the walkway segments needed to connect Nationwide Plaza and Ohio Center.

b. The second-level walkways through the Park should be connected to grade level near the High and Naghten corner by way of steps and an escalator. The steps should be a sculptural feature of the Park and could be integrated with a water feature or plateau areas for planting, sitting, or refreshment service.

c. Provision should be made in the Park design to accommodate second-level walkway links to the future development areas to the east and south.

3. The Exterior Space: An exterior park space is provided in an area directly related to the Greenhouse structure and defined on the south and east by future development. The exterior space would complement the Greenhouse program by providing an area of trees, grass, and paving which could be used in mild weather for sitting, lunchtime activities, and floral displays, as well as performances and exhibitions which would normally take place within the Greenhouse during winter. During mild weather, the exterior space could be joined with the interior space by providing opening panels along the southeast perimeter of the structure.

The exterior space should also provide a natural entry into the Park from the adjacent sidewalks. The High Street edge of Portal Park should be designed to permit vistas both into the Park and from the Park to the Nationwide Plaza open space across High Street. This edge should provide a prominent entrance into the Park because of the potentially high volume of pedestrian activity along High Street. Because Naghten Boulevard is primarily a vehicular street, this edge should permit only glimpse views into the Park and provide a smaller-scaled pedestrian entrance from the sidewalk.

The exterior space has an important function during the period in which the south and east edges of the Park are not defined by new development. A buffer zone should be developed along these edges to resolve the Park's sloping grade in relation to future construction, as well as to provide a place for the planting of shade trees which will enclose this edge of the Park. The design of the buffer should create a permanent condition along these edges which will minimize the need for changes when the adjacent buildings are constructed.

VI. PUBLIC RIGHT-OF-WAY DESIGN RECOMMENDATIONS

The public right-of-ways of a city create a major open space system which is highly visible and in constant use by pedestrians and motorists. The streets, sidewalks, and alleys of a city not only form a functional system designed to accommodate the movement of goods and people but also form a public environment which has the potential of being attractive and a source of pride for the city's residents.

The scheduled improvements to the High Street, Marconi/Front Connector, and Naghten Boulevard right-of-ways offer the potential for creating a high-quality public environment which will reinforce the high-quality private developments such as Nationwide Plaza and Ohio Center which are already underway. However, to realize this potential, the components of the public right-of-ways - the streets, sidewalks, planting, lights, traffic signals, bus shelters, etc. - must be well-designed individually and as parts of a coordinated whole. Each element within the public right-of-ways has the potential for being attractive, i.e., a well-designed bus shelter or street light. However, numerous poorly located street furniture elements can create a confusing and disorderly public environment which effectively neutralizes the impact of well-designed individual elements. The Department of Development's Street Furnishings Design Program-Program Description[1] documents and graphically portrays the problems created by poorly designed street furnishings which are allowed to proliferate.

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1 Street Furnishings Design Program- Program Description, Department of Development, October 24, 1975.

This chapter describes basic guidelines for creating a more orderly and attractive public street environment. Special attention has been placed upon defining ways of coordinating and organizing the components of the street environment. The design of individual elements is treated in a more general way. In fact, many street furnishings, such as trash containers, graphics, and bus shelters, are the focus of current and ongoing design efforts by local groups such as the Department of Development and the Central Ohio Transit Authority. In these instances, the most important considerations are coordination of design qualities (materials, color) and orderly placement in the street environment.

The following public right-of-way design recommendations are described by design situations such as Naghten Boulevard/High Street and in terms of functional elements such as traffic signals and street lighting.

A. High Street

The High Street right-of-way is scheduled for complete reconstruction from Naghten Boulevard to the north edge of the existing viaduct over the railroad yards. In addition, portions of the street and sidewalks south of Naghten are scheduled for partial reconstruction near Nationwide Plaza. The design guidelines described in this section pertain to High Street from Spring Street north to the innerbelt, with particular attention focused on the portions of the street where first-phase improvements are recommended.

1. General Design Concept: High Street within the High/Naghten study area includes a variety of physical conditions (i.e., varying right-of-way widths, viaduct structure versus at-grade street conditions). Furthermore, the design of the street right-of-way contributes to the implementation of the portal concept. Taking both factors into consideration, the design concept for High Street should be one of a narrower, architecturally defined street north of Naghten which changes to a broader, tree-lined street south of Naghten.

2. Design Guidelines: The following guidelines are organized by functional element.

   a. Planting (see Figures 11 and 12)

   High Street between Spring and Naghten should have street trees spaced approximately on 50' centers and located 6'± from the curb. The 50' spacing is close enough to define the street, yet sufficiently open to permit views into Nationwide Plaza and Portal Park. Two exceptions should be noted, however. First, the 30' spacing of sycamore trees specified for installation in front of the Federal Office Building should be duplicated on the west side of High Street. Second, the existence of underground vaults in front of the existing Nationwide Building precludes planting of street trees in this half block. Low flowering plantings in pots should be used in front of the Nationwide Building to add color and interest along this frontage. Trees placed in surface pots generally do not thrive and appear awkward in the context of large buildings. Pots should therefore be reserved for more decorative low-level plantings. Figure 11 illustrates a typical High Street edge condition with trees on 50' centers. Figure 12 illustrates specific tree locations between Spring and Naghten.

   The area north of Naghten Boulevard to the innerbelt is an area in transition. Trees should be located only where space conditions permit until such time as redevelopment makes a more comprehensive planting program possible. Because of structural conflicts, no tree plantings should be placed on the viaduct. Tree plantings are recommended along the Ohio Center property north of the viaduct and should be accommodated in the replanning of this frontage.

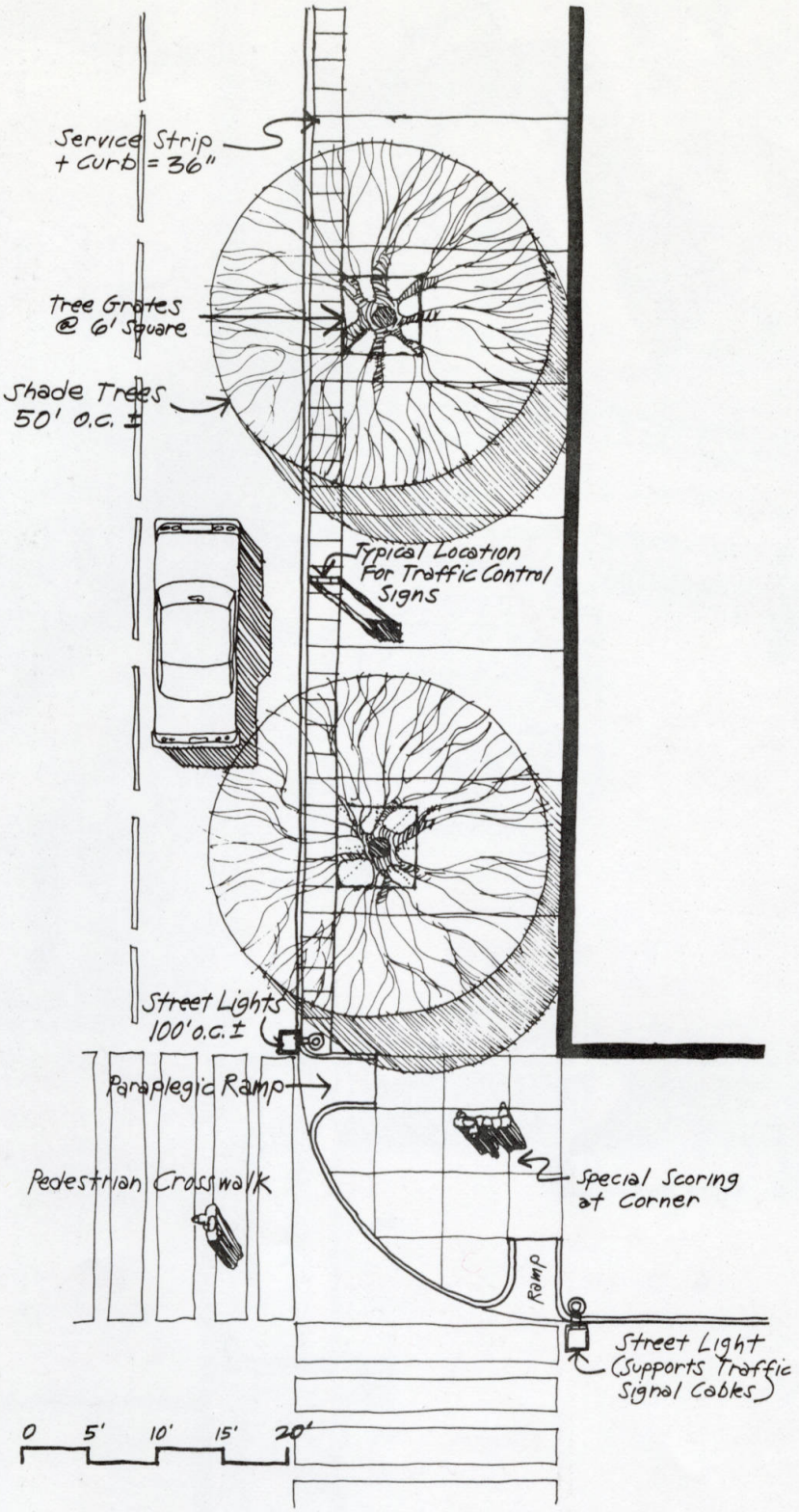

Figure 11
High Street Edge Design

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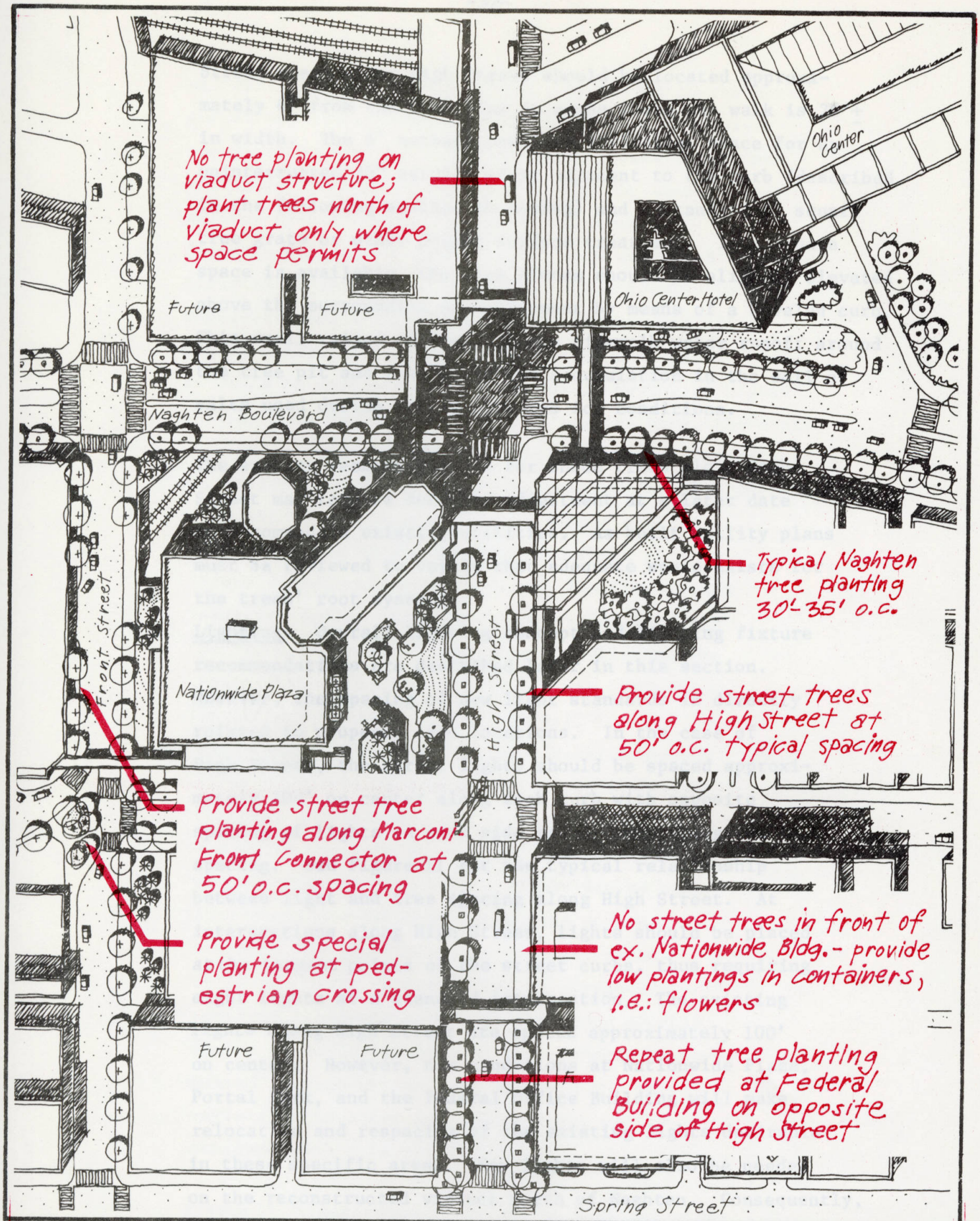

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Figure 12
Street Tree Planting Plan

0 200 North

Street trees along High Street should be located approximately 6' from the curb line in areas where the walk is 20'± in width. The 6' setback provides sufficient space for an uninterrupted 30" service strip adjacent to the curb (described in the following section on paving) and a standard 6' square tree grate or other porous surface treatment. If adequate space is available, the tree grates should be slightly elevated above the surrounding walk pavement by means of a beveled curb. This small raised curb will force sidewalk water runoff around the tree pit and thus avoid the accumulation in the soil of salts used during winter snow and ice conditions.

The spacing recommendations for shade trees along High Street may require detailed adjustment at a later date to accommodate existing utilities. As-built utility plans must be reviewed to verify that adequate space exists for the trees' root systems.

b. Lighting: Overall lighting concept and lighting fixture recommendations are described later in this section. However, the spacing of new light standards is directly related to proposed tree locations. In the case of High Street, the street lights should be spaced approximately 100' on center along each curb with opposite spacing of lights on each side rather than staggered spacing. See Figure 11 for the typical relationship between light and tree spacing along High Street. At intersections along High Street, lights should be placed at the tangent points of the street curbs, thus requiring eight lights at a standard intersection. The existing lights along High Street are spaced approximately 100' on center. However, new conditions at Nationwide Plaza, Portal Park, and the Federal Office Building will make relocation and respacing of the existing lights desirable in these specific areas. New lights will also be needed on the reconstructed viaduct north of Naghten. Consequently, the potential exists for replacing a majority of the fixtures from Spring to the north end of the reconstructed viaduct. It is recommended that as a first-phase lighting improvement

all fixtures be replaced from Spring Street to the north end of the viaduct structure and that they be closely coordinated with the location of new street trees, new entrances to adjacent facilities, and the second-level walkway system where it crosses the street.

c. Sidewalk Paving: At present, the city sidewalks are constructed of concrete. In certain situations, however, the developers of adjacent properties have installed higher-quality paving materials to the curb line. While it would be desirable to have sidewalk paving of higher quality than concrete in the High/Naghten area, the costs involved would most likely not be justified. Accordingly, the following guidelines are recommended for High Street.

- The use of paving materials of higher quality than concrete should be permitted where provided by adjacent developments. The City should exercise design review over the sidewalk paving provided by private developers. Special paving materials could include brick, slate, granite, or various types of precast pavers.
- The standard material for the sidewalks should be poured-in-place concrete of a uniform color, texture, and scoring. It is recommended that raw-white concrete be avoided. In general, a darker color coupled with a finely scored surface pattern creates an attractive pavement suitable for heavily used pedestrian areas. While the final determination of a standard concrete treatment is beyond the scope of this study, it is important that the standard be repeated throughout the area to avoid the many variations in color and design which can be achieved with this material.

Figure 11 illustrates a typical High Street sidewalk situation which includes a scored 30" service strip along the curb. This specially scored strip

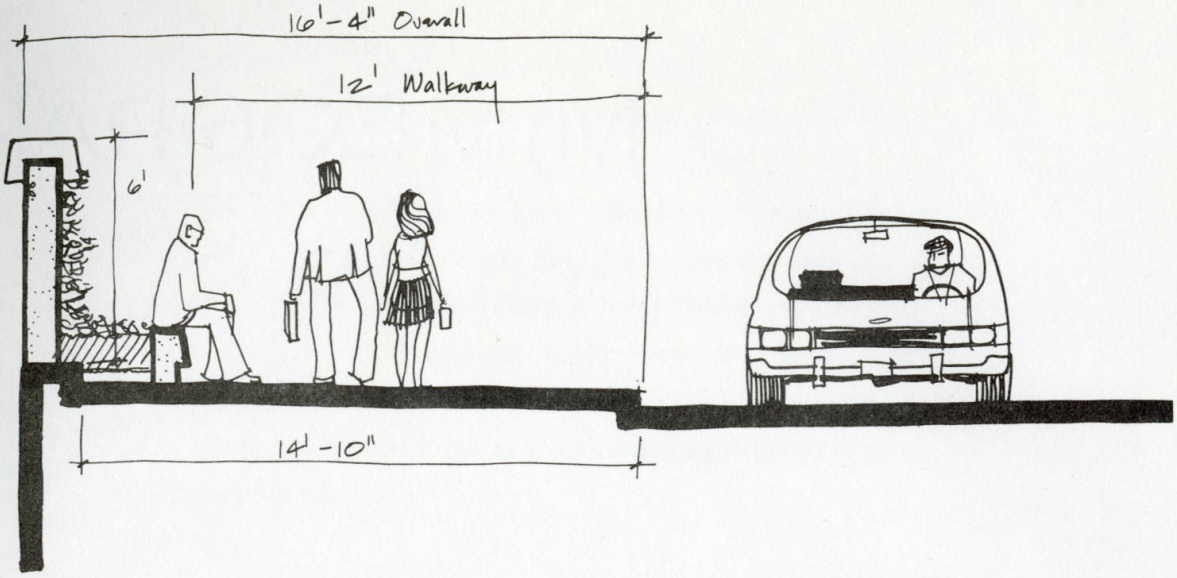
would provide a standard location for signs, street lights, fire hydrants, and other street-related elements. The small scale of the 30" service strip panels would facilitate changes in specific locations of elements along the curb line such as light bases and traffic sign supports. Small portions of the service strip could be removed and replaced without disturbing the major portion of the sidewalk.

Figure 11 also illustrates the location and desgin of paraplegic ramps at the pedestrian crosswalks. The ramps should be placed at the ends of the corner radii and should be integrated into a special pavement scoring pattern.

d. High Street Viaduct: The design deatails for the High Street Viaduct insofar as paving and lighting are concerned should be as recommended above. However, due to the demolition of buildings on the west side of the existing viaduct structure, additional steps should be taken to provide a visual barrier to block views into the railroad yards below. The Ohio Center development on the east side of the viaduct will prevent such views. However, the likelihood of air rights development to the west of the viaduct is not certain and interim provisions should be made to construct a wall/railing on the west side of the pedestrian sidewalk. Figure 13a illustrates how such a wall should be integrated into the bridge structure. This wall should incorporate small planting areas for vines and a canopy could be attached to create a bus shelter (see Figure 13b). This construction should be designed for future removal.

3. Phasing

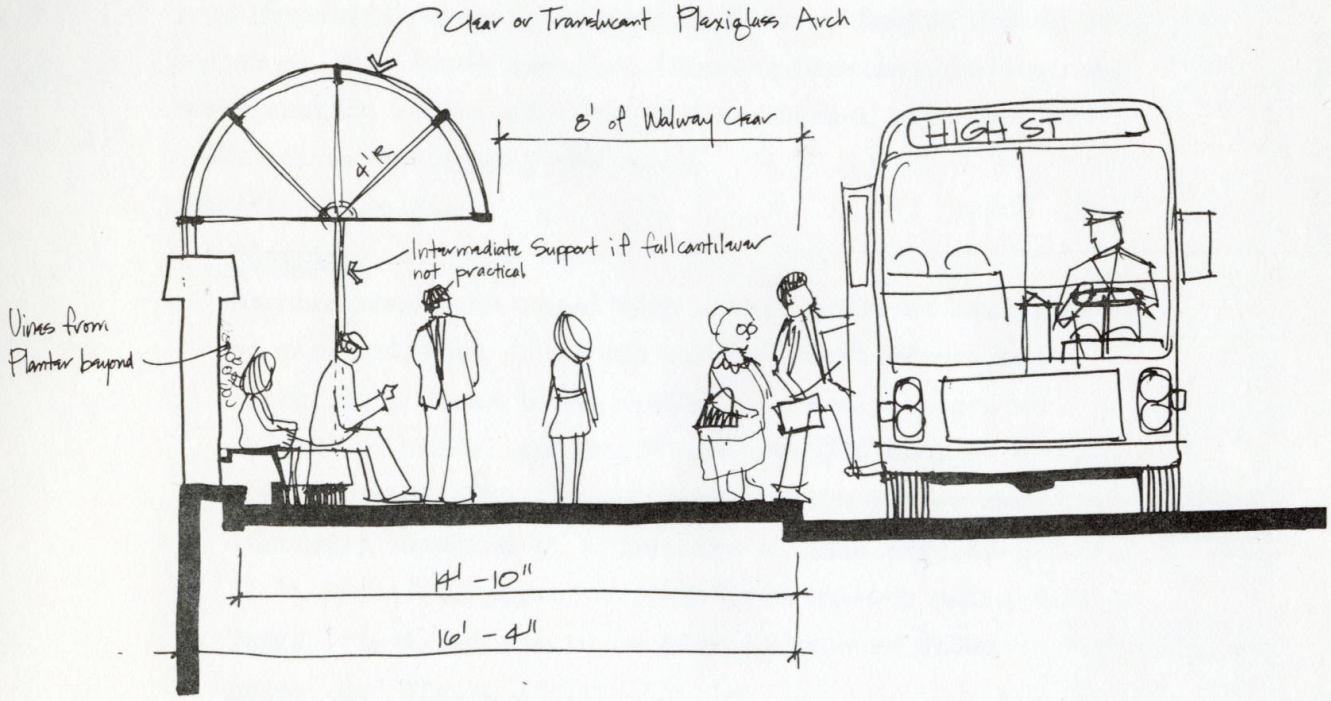
The improvements along High Street should be completed as a single phase from Spring Street north past the viaduct structure. This part of High Street is adjacent to a majority of the new developments in the High/Naghten area and will have a direct impact on the visual quality of those new developments. Basic lighting and planting north of the viaduct structure should be completed as a second priority.



WEST WALK SECTION @ HIGH ST. BRIDGE

0 2' 4' 8'

Figure 13a



BUS STOP SECTION @ HIGH ST. BRIDGE

0 2' 4' 8'

Figure 13b

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Figures 13a and 13b

The actual reconstruction of walkways along High Street between Spring and Naghten may be phased to coincide with construction of adjacent projects (i.e., Federal Office Building, Nationwide Plaza, etc.). However, where construction on an adjacent parcel does not appear likely for some time, the paving should then be replaced in advance in order to complete the street improvements. Adjustments or changes to sidewalk paving in these areas might be necessary later but would be the responsibility of the individual projects.

B. Naghten Boulevard

Naghten Boulevard is scheduled for construction as a new divided roadway from Fourth Street to Front Street. From Front to Marconi, the street will be an undivided roadway.

1. General Design Concept: Section II of this report refers to the original Ponte concept of Naghten as a landscaped boulevard. This boulevard concept has been further evaluated during the course of this study and the following planting, paving, and cross section recommendations are consistent with the conclusions reached during the study.

2. Specific Guidelines:

   a. Planting

      Naghten should be lined with street tress on each side of the boulevard along the entire length of new construction. These trees should be closely spaced at 30'-35' on center to hasten the establishment of a strong visual edge along a street which is not consistently bordered by architecture. (See Figures 12 and 14.) Where the street divides into one-way pairs east of Third, the trees should be planted on both sides of each pair. (See Figure 15.)

      A second component of the proposed planting design is the median and edge treatment of the boulevard. No planting is recommended for the median of the street between Front and Third Streets due to the fumes, wind, and winter

salt conditions which would inhibit the growth and development of plant materials. An 11' grass strip is recommended for the edges of the boulevard as illustrated in Figures 14 and 16. This grass strip would occur along each side of Naghten Boulevard between Marconi and Third. East of the Third Street bridge the grass strip would be eliminated in a transitional area where the sidewalks are again located adjacent to the street curb. Figure 15 illustrates the recommended transition design.

The use of grass and trees within the right-of-way of Naghten Boulevard will require a regular program of maintenance to assure the health and survival of the plants. Periodic feeding, watering, grass cutting, and area cleanup will be needed to create and perpetuate the image of an attractive boulevard. Special maintenance programs may have to be established by the City in order to meet the needs of the area. If the City is not able to support the required maintenance program, it may be necessary to establish an assessment district for the area which would generate the funds which are needed. Such an assessment district approach has been used in other instances of downtown improvements and could be considered for the High/Naghten area.

A lack of commitment on the part of the City or adjacent property owners to this important maintenance function could produce a street environment which would detract from, rather than enhance, the High/Naghten area. Should the City decide that an adequate maintenance program is not possible, then the Naghten Street cross-section should be modified to eliminate the grass area on each side of the street. The street trees would then be placed in sidewalk cutouts with tree grates as recommended along High Street. The disadvantage of this alternative is the extensive paved area

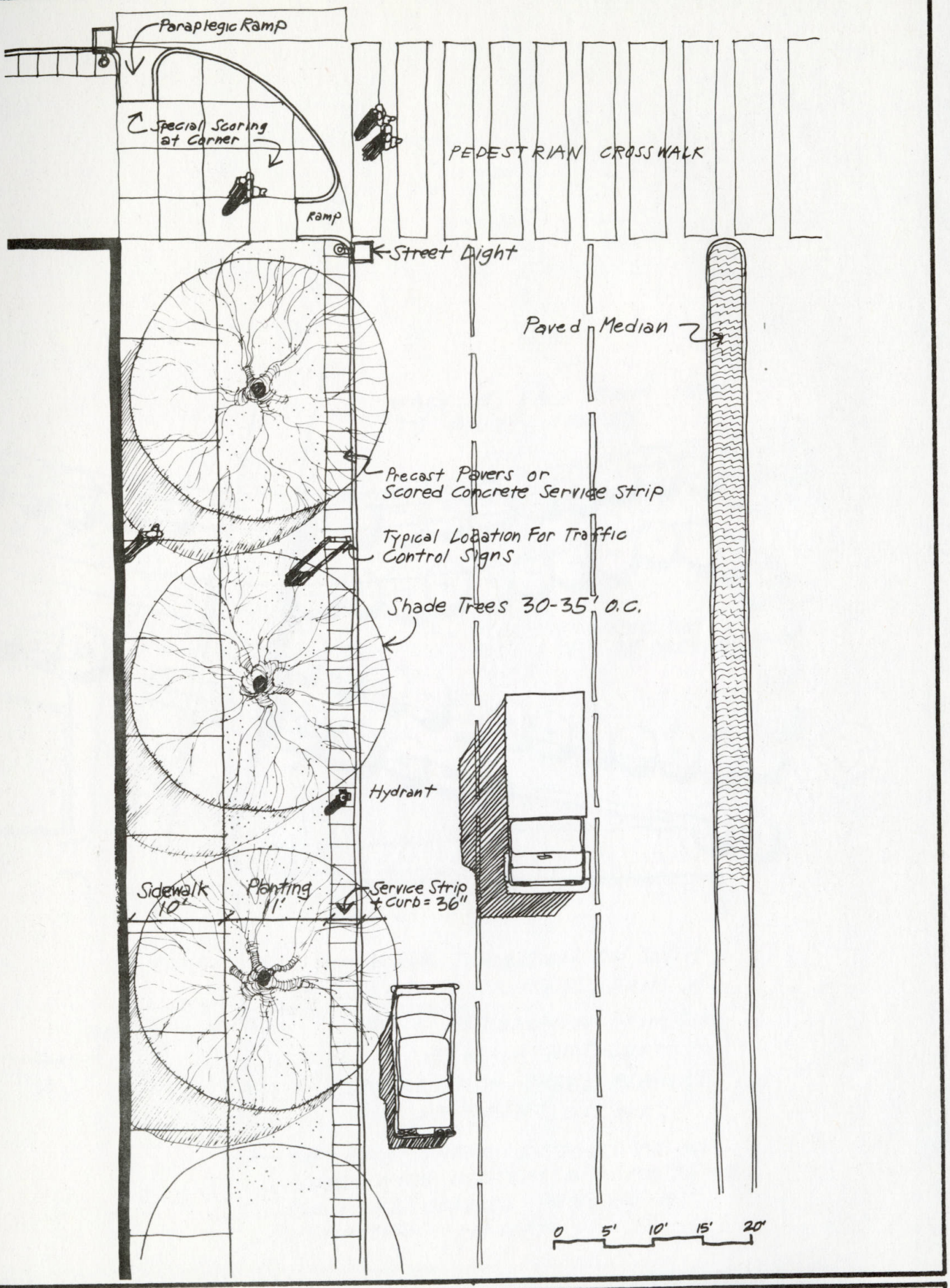

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Figure 14
Naghten Boulevard Edge Design

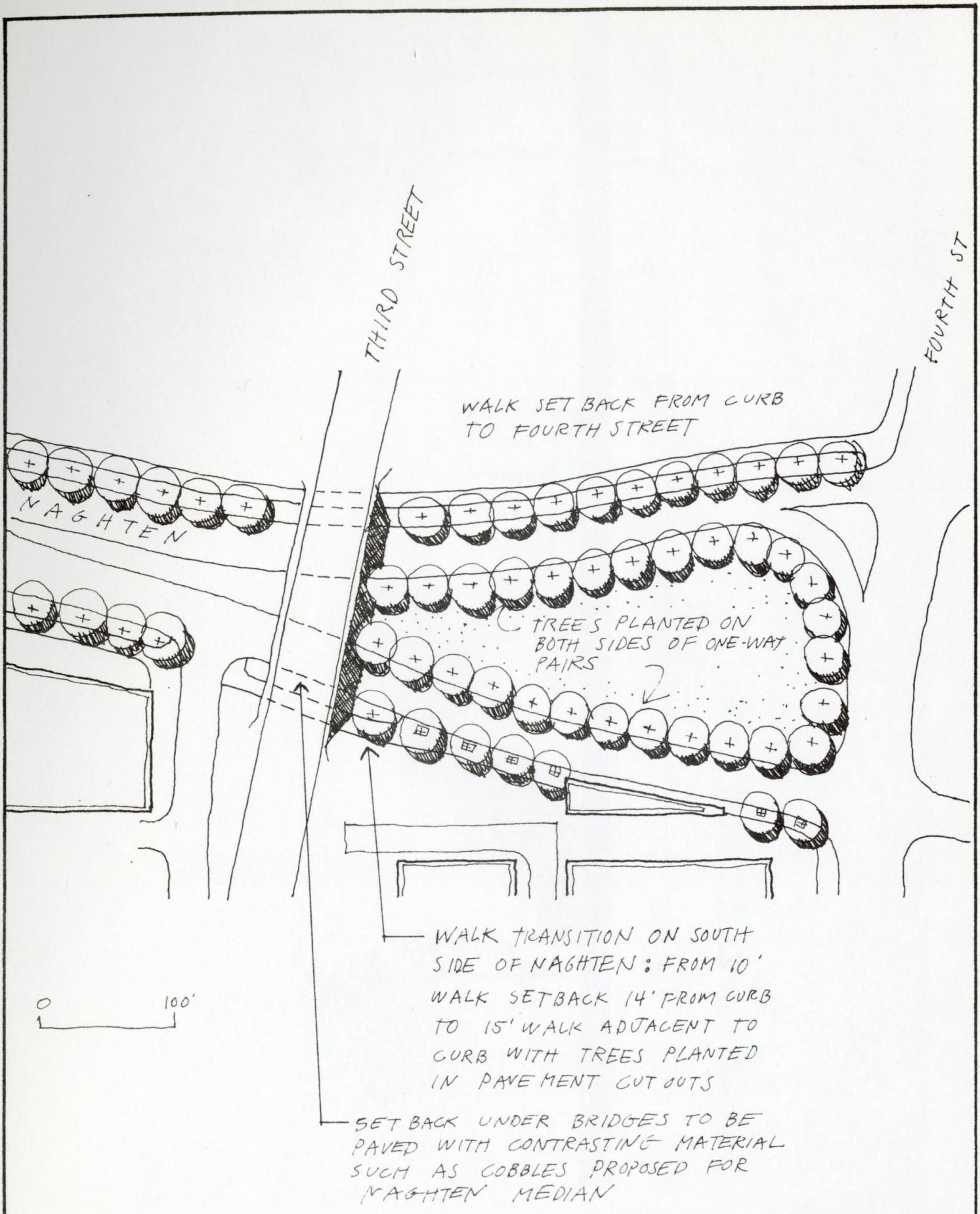

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Figure 15
Naghten Boulevard Transition

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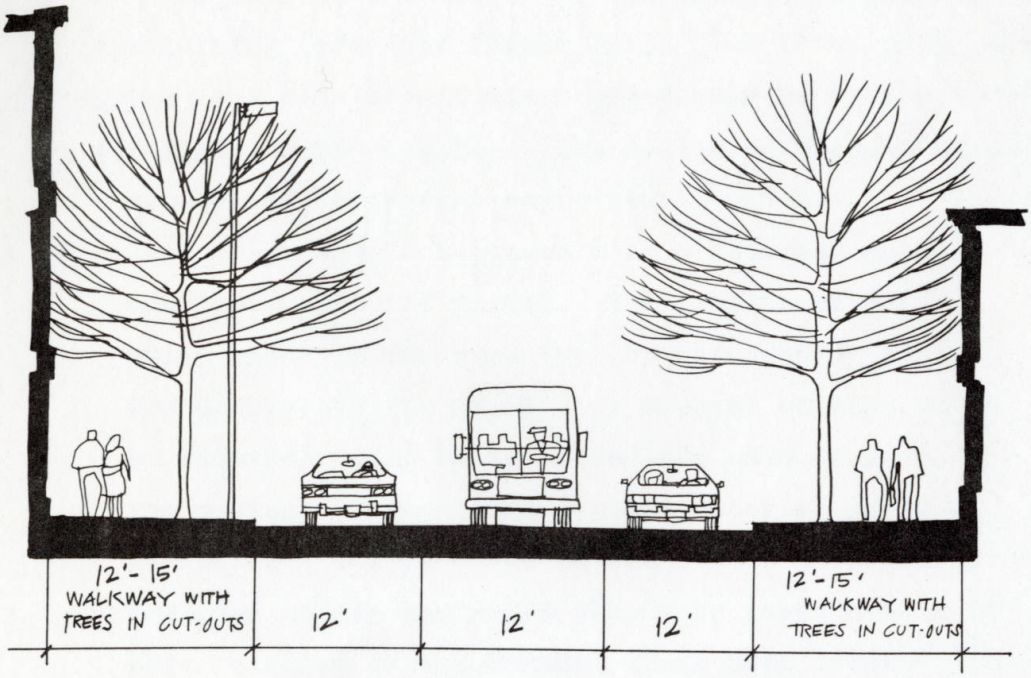
Figure 16
Naghten Boulevard Standard
Cross Section



NAGHTEN BLVD. EAST OF FOURTH ST.

0 10' 20'

Figure 17

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which would result for the Naghten cross-section - an unbroken paved area of 115'-120' width.

b. Lighting

As in the case of High Street, lighting along Naghten must be closely coordinated with the location of street trees. (See Subsection D for a description of the lighting concept.) Based on discussions with the Division of Electricity, a spacing of 100' to 120' between lighting fixtures is appropriate. Figure 14 illustrates the typical location of street light supports relative to the location of shade trees. Lights should be located in opposite positions on each side of the boulevard section.

c. Paving

Naghten Boulevard consists of six moving traffic lanes and one turning lane (see Figure 16). The total paved area for autos is a significant width and should be broken by contrasting materials where possible. The following recommendations are made for the median and sidewalk paving:

- The median should be paved with a material which contrasts with the street. The granite pavers which exist in the area (on the Ohio Center site and underneath the asphalt of several streets to be removed) could be reclaimed and used to pave the median. A recycling of this material would add texture and interest to the street cross-section.
- The edge of the boulevard should be paved with a 30" service strip as recommended along High Street. This paved strip would eliminate the need for maintenance of grass around street light supports, traffic signs, fire hydrants, and other elements which must be located adjacent to the curb. It would also help to protect the grass area from the effects of snow plowing and winter salting. This service strip should match the design of the strip as proposed for High Street.

- The sidewalk should be concrete of the color and texture to be established as a standard by the City for the High/ Naghten area. A 10' walk is recommended. Should the grass strip be eliminated due to maintenance considerations, the walk and service strip should total 15' in width with the tree centers set back 6'± from the curb. A 15' walk width should also be maintained along Naghten east of Third where the walk must be adjacent to the street due to existing conditions (see Figure 17).

d. Naghten Boulevard Bridge

The Naghten Boulevard bridge spanning the railroad tracks north of Nationwide Plaza should be designed to minimize direct views to the tracks below. A solid parapet wall of approximately 4' height should be incorporated into the bridge structure in lieu of the standard metal tubular railings which are currently used in the area. A parapet wall of masonry construction would be appropriate.

The width of the Naghten Boulevard bridge should be the same as the street right-of-way (136'). The full-width bridge will provide continuity in the sidewalk alignments, and will allow the bridge parapet on the south side to be integrated into the retaining walls along the north edge of Nationwide Plaza.

3. Phasing

Naghten is programmed for reconstruction as a single phase from Fourth Street to Marconi Street. All planting, lighting, paving, and street furniture improvements should be included as an integral part of this single-phase capital improvement program.

C. Marconi/Front Connector

The Marconi/Front Connector is scheduled for new construction from Naghten Boulevard to Marconi Boulevard. The following design recommendations should be incorporated into the improvement program for the street.

1. Street trees should be installed where surface and subsurface conditions permit in the Naghten to Chestnut segment of Front. Trees should be 50' o.c.
2. Sidewalks along Front Street should be constructed of concrete of the same color and texture which is adopted as a standard in the area except where adjacent new development may make higher-quality materials possible.
3. The pedestrian island at the intersection of Chestnut and Front Streets should be designed to facilitate pedestrian flows as well as enhance the surrounding area. Figure 18 illustrates a sketch design for the intersection which provides for the cross flow of pedestrians at grade from the Nationwide garage. The walks within the island are broken by areas for planting of shade trees. These areas could either be planted with low shrubs and groundcovers or be surfaced with open joint pavers such as the cobbles which have been suggested for the Naghten Boulevard median.

D. High/Naghten Area Exterior Lighting

The lighting of the public and private exterior spaces in the High/Naghten area is an important urban design consideration, particularly since the area will contain significant nighttime activities such as the Convention Center. Attractive nighttime lighting can provide for the safety and security of users while at the same time enhancing the design of buildings, pedestrian plazas, and landscaped spaces. The daytime appearance of fixtures can be equally pleasing and can add to the overall design quality of the City's street furnishings.

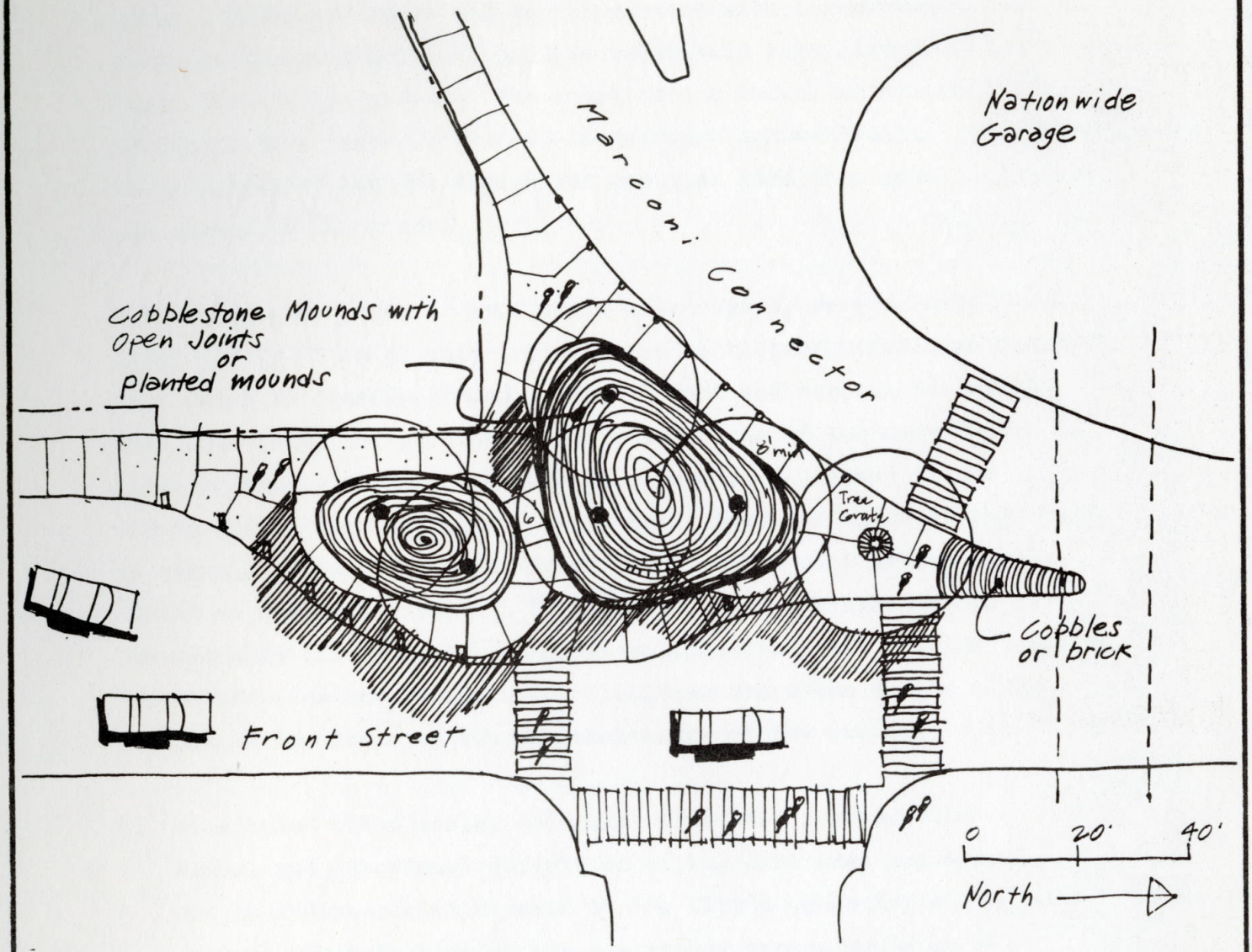

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Figure 18
Pedestrian Island at Marconi/Front Connector

A primary consideration in good lighting design is establishing a hierarchy for lighting which is consistent with the use and importance of public and private spaces. Pedestrian areas should be illuminated with fixtures which are suitably scaled to people, give a natural rendition of flesh tones, and provide light without causing excessive glare. Vehicular zones may be illuminated with larger-scale and brighter fixtures and must provide relatively even distribution of light for traffic safety. The complicating factor within the urban fabric is that these two zones - pedestrian and vehicular - are in close proximity and the design for one must take into consideration its impact on the other.

The High/Naghten area is typical in this regard, particularly since a major effort is being made to create an attractive pedestrian environment which is closely linked to High Street and Naghten Boulevard. In this situation, the problem is potentially one of too many lights in close proximity with no apparent structure or hierarchy either during the day or at night. The following guidelines are aimed at providing an overall concept for lighting which specifies what urban features should be emphasized through lighting and what features should be functionally illuminated but not visually emphasized. Typical equipment recommendations are included in situations where the design of the fixture is important to the implementation of the concept.

1. At a broad urban scale, Columbus' innerbelt provides the visual and functional definition of the core area and stands out as a distinctive element in the City's vehicular circulation system. This portion of the expressway system would be an appropriate place for special lighting, and the use of a distinctive light source such as high pressure sodium vapor would establish a "golden necklace" of light which would reinforce the identity of the core area through a color distinction. The impact of the "necklace" would, of course, be diluted if the sodium vapor lights were extended to the full expressway system within the City. The standard "cobra head" design with its highly visible light source would be suitable equipment in the context of the expressway system.

2. Broad and High Streets are distinctive within the City's core area due to their function as shopping/pedestrian districts, their historical importance, and their relationship to landmarks and civic facilities. Furthermore, in the case of Broad Street, its width gives it a distinctive appearance. Recognizing the limited funds which are available for the lighting of public streets, it is recommended that Broad and High Streets be considered for special treatment, but that other streets within the core continue to be illuminated with existing equipment. Existing equipment consists primarily of the standard "cobra head" luminaire with a mercury vapor light source.
3. The lighting of High Street and Broad Street should feature the use of pedestrian-scaled fixtures designed to enhance special locations such as the Capitol grounds, Ohio Center, Nationwide Plaza, Portal Park, the proposed High Street transitway, and other special civic, institutional, and private facilities. Conceptually, the pedestrian-scaled fixtures should be distinctive during the day as well as the night and should emphasize light quality and appearance rather than amount of light output.

Integral to this concept is the need to reduce the visibility of the higher-wattage street lights which are necessary to maintain adequate illumination along the public rights-of-way. The existing "cobra head" fixtures which use dropped lens refractors are highly visible at nighttime and tend to neutralize the impact of pedestrian-scaled lighting fixtures with their lower-wattage light sources. Accordingly, the following fixture descriptions are provided as a guide for choosing exterior lighting equipment which will be appropriate to the concept:

a. The street lights along High Street should utilize a "cutoff" fixture design with its internal reflector system for light distribution. The cutoff fixtures reduce the visibility of the light source when viewed from a distance and thus increase the potential nighttime impact of the more decorative pedestrian fixtures (see Figure 19 for an illustration of the recommended fixture type). The fixtures should be mounted on round poles with flush bases. The luminaires and the poles should be painted or anodized in a dark brown color.

b. The pedestrian-scaled fixtures (15' height) need not be strictly standardized in the High/Naghten area, but should instead be allowed to reflect the uniqueness of the various sections of the street; i.e., the High/Naghten area, Capitol Square, or the County Complex. The fixtures should, however, be compatible in terms of materials, particularly with regard to the luminaire. Clear acrylic and glass should be used in the luminaires, which might still take various forms such as spheres, cubes, or crystalline shapes. Mounting characteristics should also be allowed to vary. Luminaries can be mounted as singles or clusters on poles, from wall brackets, or from pendants within arcades.

Much of the nighttime illumination in pedestrian areas will be provided by the adjacent street lights. Thus, the use of low-wattage light sources is possible and will serve to minimize glare in pedestrian areas as well as to emphasize the decorative characteristics of the fixtures. The metal areas of the pedestrian lights should be finished in a dark color similar to that selected for the street lights. (See Figure 20 for typical pedestrian area fixtures.)

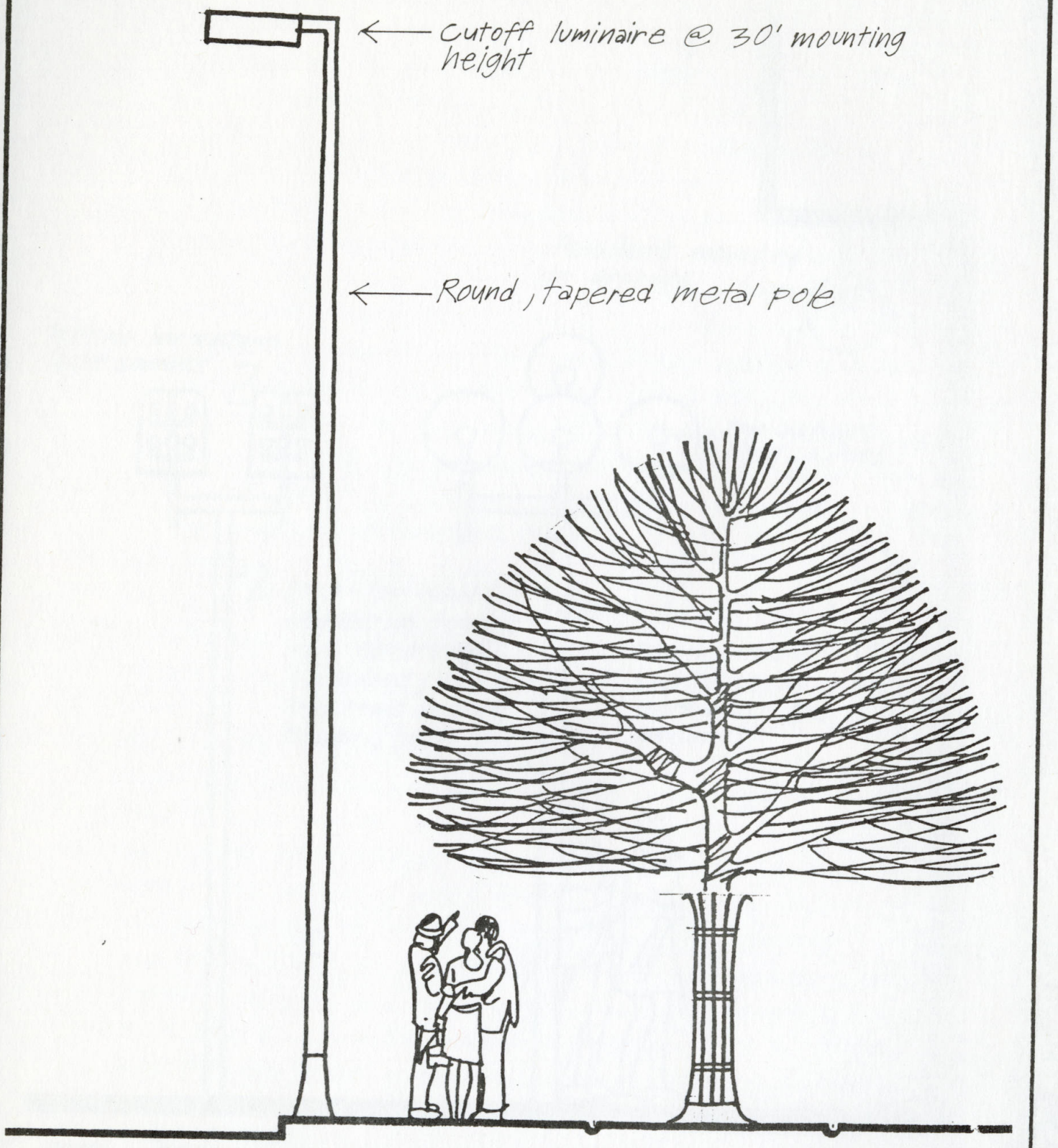

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Figure 19
Street Light: Cutoff Design

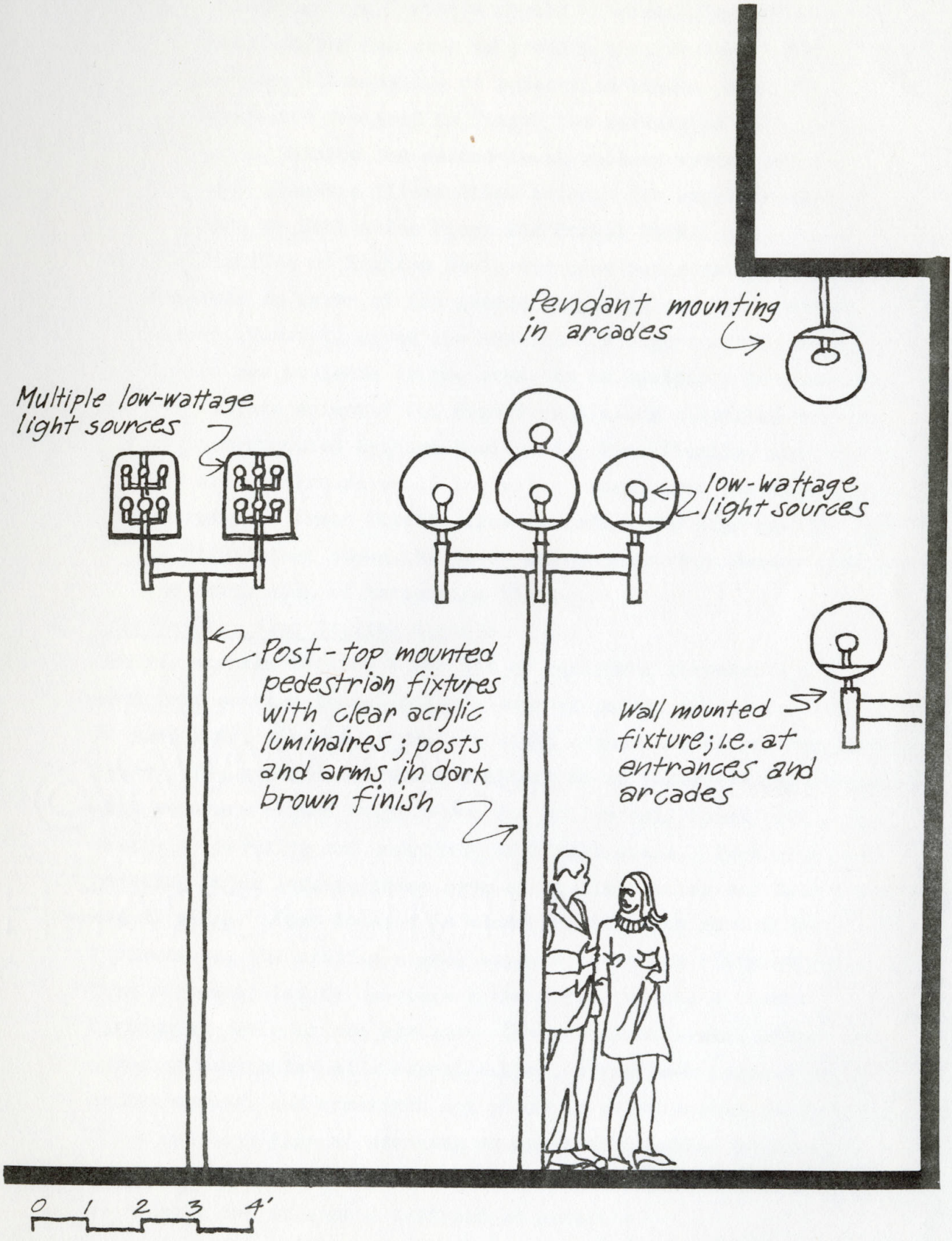

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Figure 20
Pedestrian Lights

c. Floodlighting fixtures should be used selectively in the High/Naghten area to provide indirect and supplementary illumination of pedestrian areas. Fixtures which are designed to "wash" the surface of buildings or illuminate the second-level walkway system can provide dramatic illumination effects for exterior spaces such as Nationwide Plaza and Portal Park.

4. The lighting of Naghten Boulevard does not require special emphasis in terms of the general lighting concept proposed above. However, given the emphasis on high-quality design in the new projects in the area, it is desirable to extend the fixture selected for High Street along a limited portion of reconstructed Naghten Boulevard. Specifically, the cut-off street fixture would logically extend from the Third Street overpass to Front Street, thus extending the high-quality lighting of High Street along the south entrance to Ohio Center and along the north side of Nationwide Plaza.

E. High/Naghten Area Traffic Signals

Traffic signals require a variety of equipment components for each intersection installation - support poles, horizontal cables or mast arms, signals, traffic control signs, and electronic control boxes. The presence of these elements at an intersection, coupled with separate street light supports, police call boxes, etc., can create a confusing and unattractive street scene. Typically, the existing major intersections have eight light poles and four traffic signal poles, often located in close proximity to each other. Furthermore, the traffic signal support poles are often tilted from perpendicular to counteract the forces of the attached horizontal cable or arm systems. The resultant visual effect is chaotic: many poles at a street corner, oftentimes located in a random manner, and sometimes not plumb in relationship to each other. Given the objective of creating an attractive public street environment, it is essential that the traffic signal system be as orderly and as simply designed as possible.

The following recommendations are aimed at providing a workable solution for the High/Naghten area which utilizes available traffic signal equipment.

1. Support posts: It is recommended that one set of posts be used at a typical intersection for both traffic signals and street lighting. Lighting requirements indicate the need for eight posts (two at each corner) as illustrated in Figure 21. These same posts should also be used to support the traffic signal cable system. The posts should be designed to hold the cable system without being tilted out of perpendicular - that is, they should appear plumb when in place.
2. Signal support system: The cable system now used by the City to support traffic signals should continue to be used in lieu of a mast arm system. The horizontal mast arms are highly visible and when successive intersections are viewed from one position (as is the case when looking along High Street) the hardware becomes very apparent. In contrast, the cables disappear when viewed from a distance.
3. It is recommended that the number of traffic control signs suspended from the cable system be minimized. Figure 22 illustrates the natural sag of the cable system. If numerous signs are attached to the cables, the sag is emphasized and the visual clutter in the intersection increased. The signals themselves are not an issue in this regard in that their verticality creates an acceptable visual order.
4. The signal control boxes are usually independently mounted on a separate pole near the intersection. It is recommended that these boxes be located on a lower mounting to reduce their visibility and perhaps be attached to the metal frame system discussed in the subsequent section on site furniture.
5. The pedestrian crosswalk signals are now mounted on the signal support poles and should continue to be under the proposed system. Attention should be given to improving the mounting system for the pedestrian signals. The existing pipe mountings should be

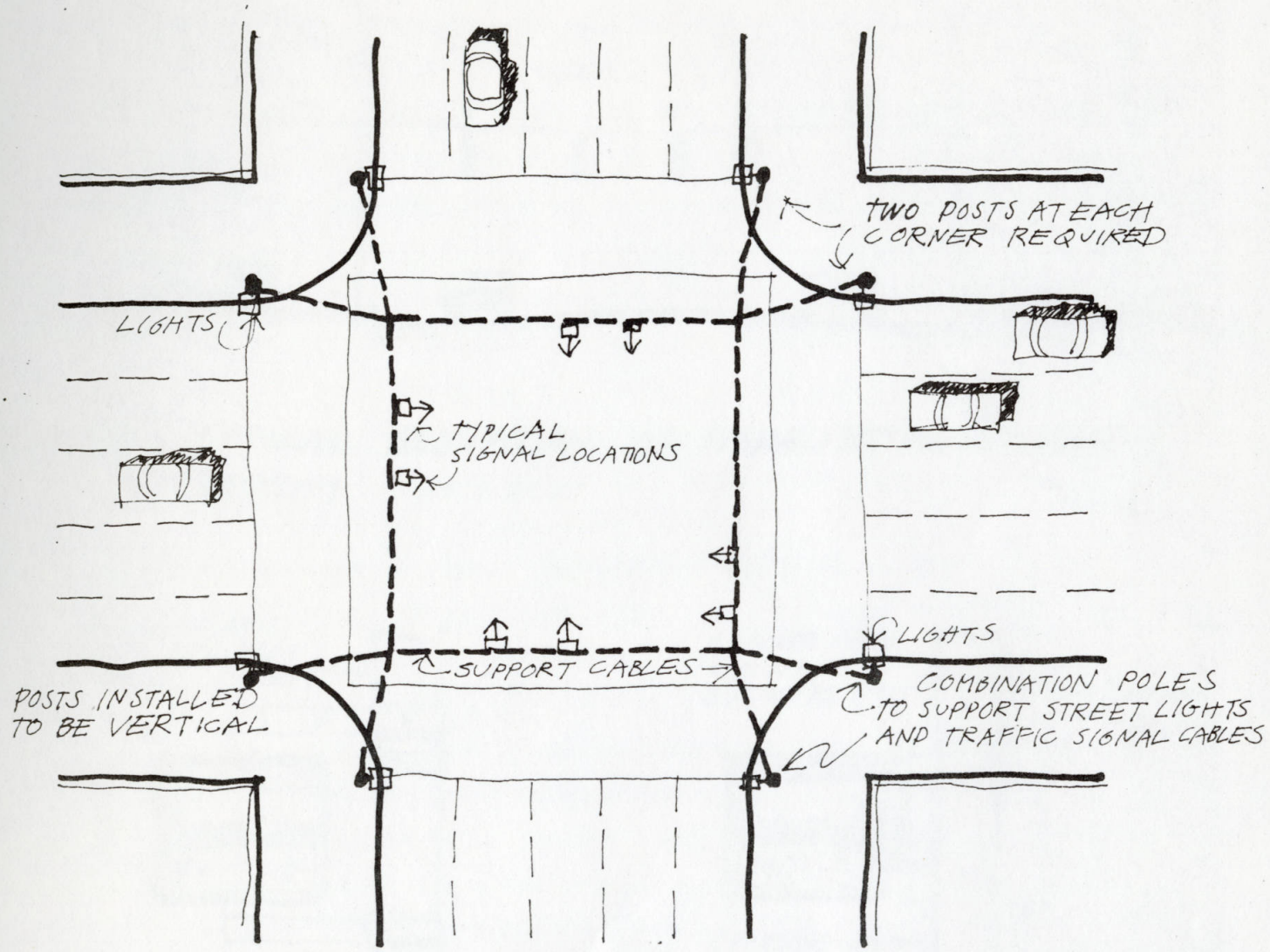

FIGURE 21 - INTERSECTION SIGNALIZATON PLAN
NO SCALE

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Figure 21

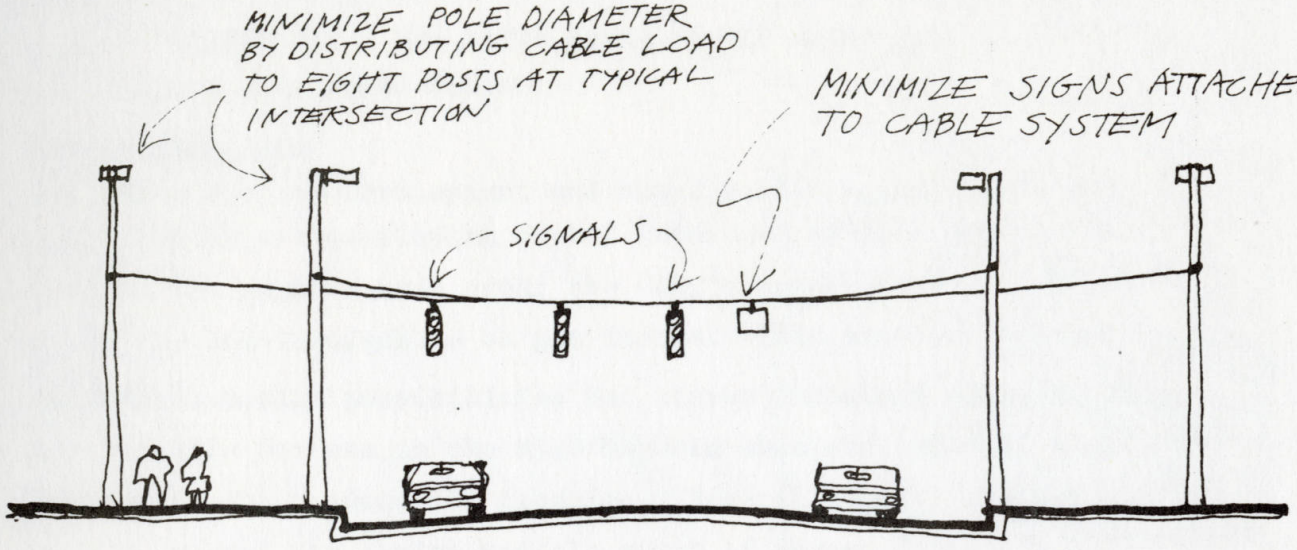
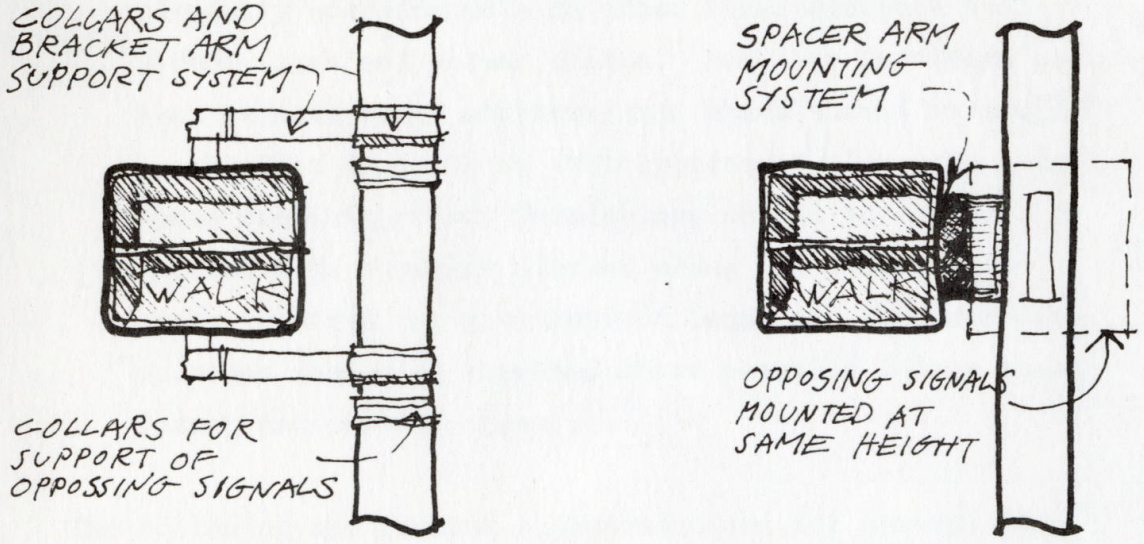


FIG. 22 - TYPICAL ELEVATION OF SIGNALIZATION/LIGHTING SYSTEM NO SCALE



EXISTING MODIFIED

FIG. 23 - MOUNTING SYSTEM FOR CROSSWALK SIGNALS
NO SCALE

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Figures 22 and 23

replaced by a less cumbersome mounting which is in keeping with the simplicity of the recommended cutoff light fixture see Figure 23). The metal color should match that of the pole; i.e., a dark brown finish.

F. Street Furniture

The Department of Development and other public agencies now have developed or are developing street furniture designs which will be used in the High/Naghten area; the City's trash container design is the first of these designs to be put in use. This section illustrates several additional design possibilities for street furniture elements which are suitable for use in the High/Naghten area and could be developed further by the responsible agencies. Several general objectives should control the design and placement of street furniture elements:

- Metal colors should be coordinated ; the dark brown color recommended for the street light poles and luminaires should also be used for the metals in traffic sign supports, bus shelters, kiosks, benches, etc.
- The location of street furniture elements should be carefully coordinated with other fixed elements such as street trees and street lights. Non-city furniture elements such as mail boxes and newspaper boxes should be monitored by the City in terms of their placement along the street. Where possible, street furnishings should be combined or clustered to minimize clutter along the street, i.e., signs required for a variety of legal and informational purposes should be combined where possible into a common format and onto one support.

The following are general recommendations for several street furniture items:

1. Bus shelters: COTA and the City of Columbus are preparing a bus shelter design. The design should use the same dark metal color as other street furniture; should be transparent to maximize interior light; and should be enclosed at the base to protect users from winds at ground level. The location of the shelters should be coordinated with the service strip and tree spacing (see Figure 24). Figure 25 illustrates a design eleva-

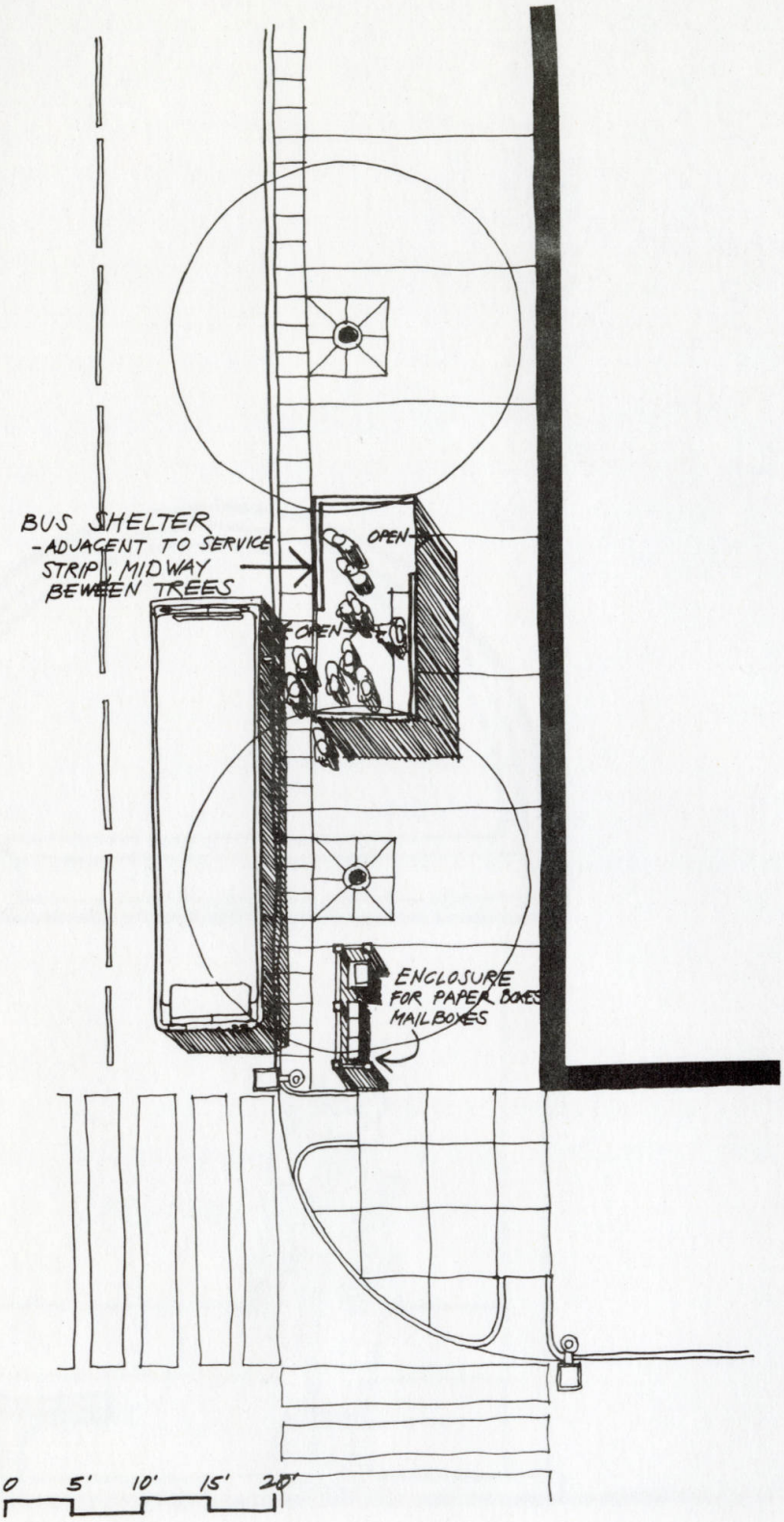

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Figure 24
Bus Shelter Location

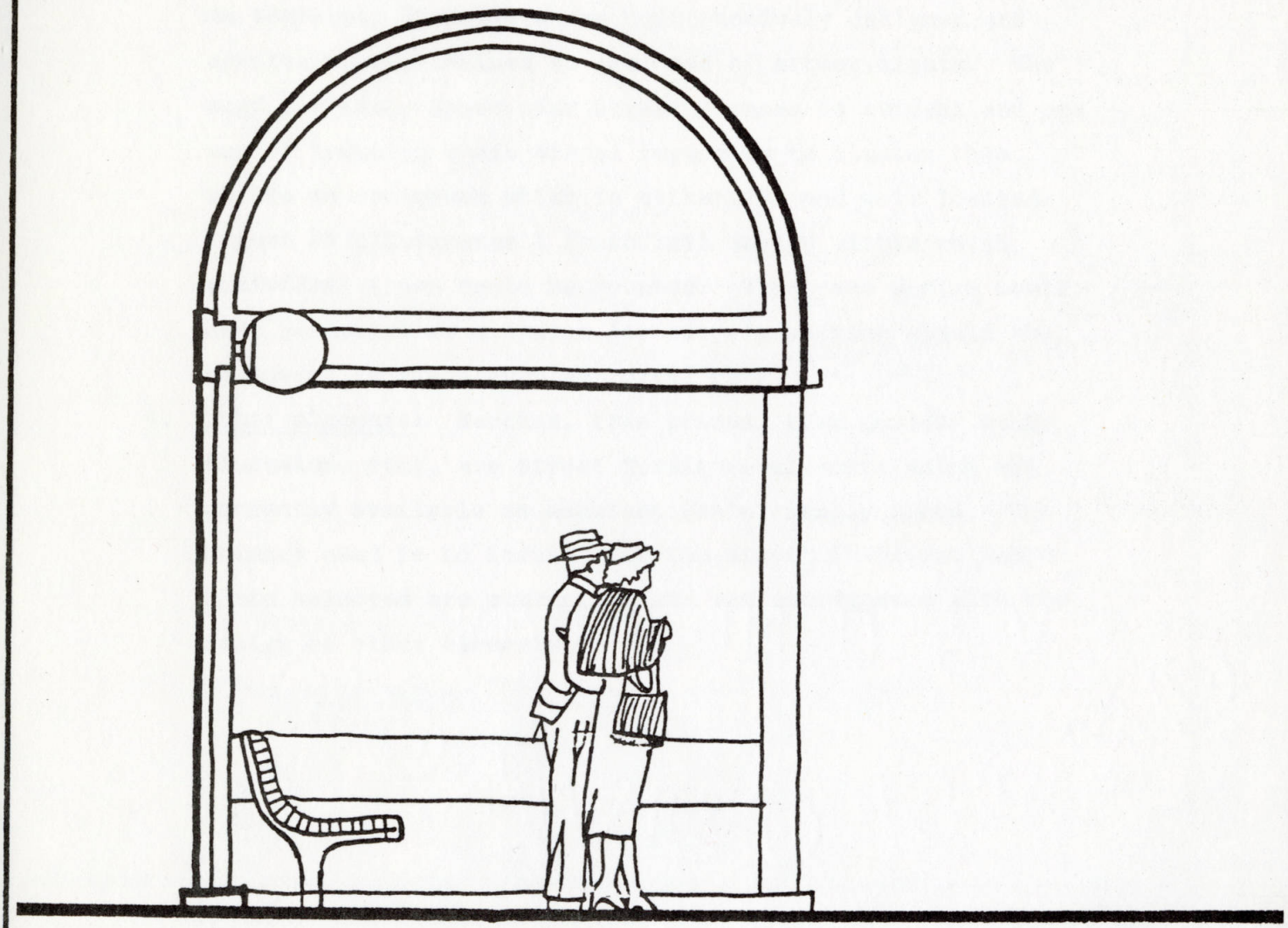

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Figure 25
Bus Shelter Elevation

tion which features a semi-circular roof treatment which might be incorporated into the COTA design.

2. Graphics: Graphics designs prepared by the City are attractive and functional and should be used for public information and traffic control purposes in the High/Naghten area. Signs should be combined where possible and their location along the street coordinated with the location of trees and lights.

3. Mail boxes/newspaper dispensers: Presently these two items add to the visual confusion at street corners. In addition, the newspaper dispensers are unattractively designed and unattractively chained to the base of street lights. The need for these boxes near street corners is evident and one way of reducing their visual impact is to cluster them within an enclosure which is attractive and well located. Figure 26 illustrates a fence/rail design within which individual items could be mounted. This same design would also be useful as a system for bicycle parking should that be needed in areas such as Portal Park.

4. Other elements: Benches, tree grates, tree guards, water fountains, etc., are street furniture elements which are currently available as manufacturer's catalog items. The primary need is to insure that the street furniture components selected are attractive and are coordinated with the design of other elements.

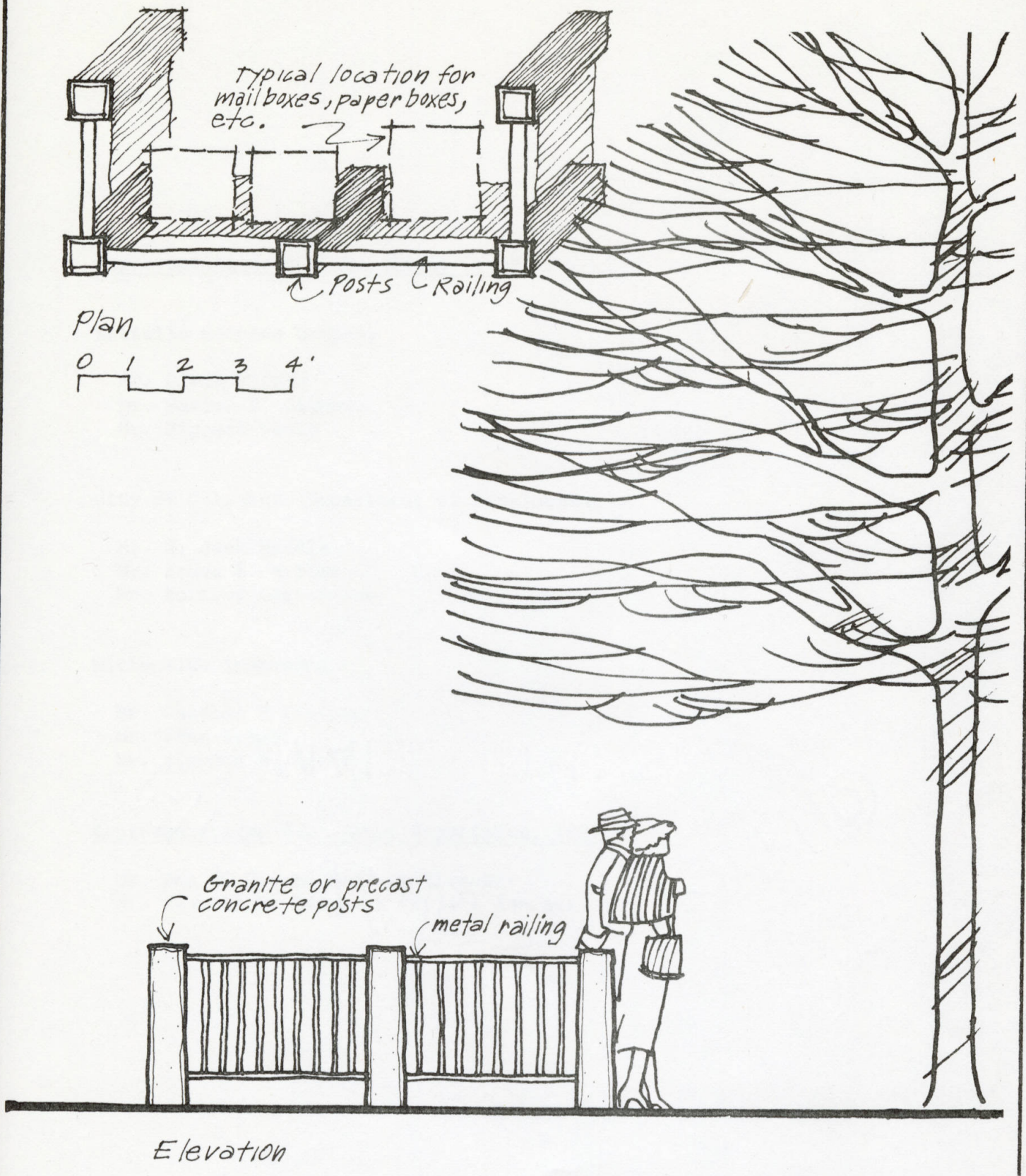

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Figure 26
Enclosure Design

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