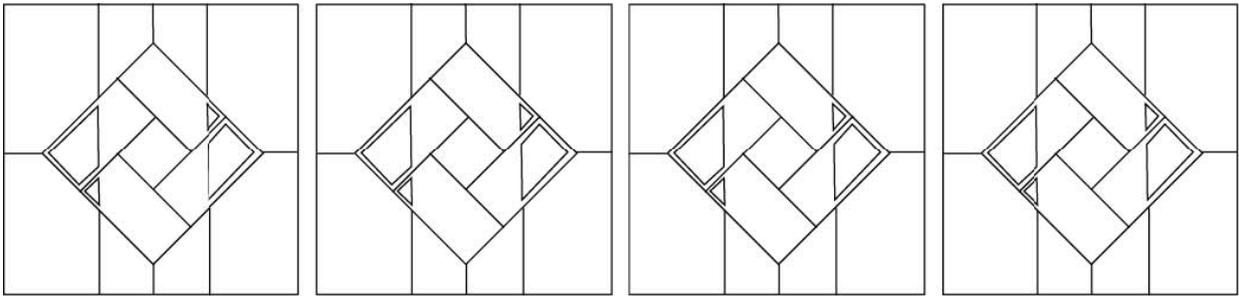


Approved February 27, 1991
Revised July 23, 1991
Revised – June 3, 2010
Revised – September 1, 2011

FRANK LLOYD WRIGHT BOULEVARD



DESIGN GUIDELINES

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Section 1.0 OVERVIEW

1.1 ORGANIZATION OF GUIDELINES

The content of this document is arranged into six sections including this Overview; Section 2.0 Landscape Guidelines; Section 3.0 Hardscape Guidelines; Section 4.0 Auto Dealership Vehicle Display Pads; Section 5.0 Figures; and Section 6.0 Bibliography. The purpose of this Overview is orientation. It defines the historical, physical, and planning context for the streetscape and guidelines; establishes a purpose and objectives for the project; articulates a general design concept and theme for the roadway; and documents the rules and procedures related to the use and implementation of the guidelines and their concepts.

Sections 2.0 and 3.0 address landscape and hardscape design respectively. Each defines a purpose and a concept in support of the overall general concept. The landscape section addresses both planting and irrigation design, while the hardscape discussion focuses on implementing Wright's architectural concepts through features and elements of the streetscape. Both Sections 2.0 and 3.0 apply to the entire length of the corridor by articulating standards for implementation of the general concept to the overall streetscape.

Section 4.0 relates to the auto dealerships in the Airpark/Northsight vicinity (refer to Figure 1a), and the special requirements, needs, and challenges, related to visibility and vehicle displays. The guidelines in Section 4.0 are in addition to, and should be used in conjunction with, the guidelines in their entirety. Section 4.0 describes a streetscape concept that responds to the business requirements of the auto dealerships, while retaining the overall theme and general concept of the Boulevard.

1.2 HISTORY AND CONTEXT

Frank Lloyd Wright Boulevard is located south of the C.A.P. canal, and runs in a northwest/southeast direction between Scottsdale Road and Shea Boulevard (refer to Figure 1a). The nearly eight-mile-long roadway is a multi-functional, major arterial that connects distinct planning areas, neighborhoods, commercial districts, and is the main road that intersects the access to Taliesin West. While providing connectivity within the community, Frank Lloyd Wright Blvd. also acts as a high capacity thoroughfare linking central Scottsdale to the southern region via SR101.

The theme and design of the roadway pay tribute to Frank Lloyd Wright, the renowned architect who wintered in the Valley beginning in 1937 until his death in 1959. Wright designed and built Taliesin West where he lived and taught his devoted students his innovative concepts in organic architecture and design. Frank Lloyd Wright left a distinctive architectural heritage, for Arizona and the rest of America, that would continue to be enjoyed beyond his lifetime. Wright's Foundation guards this heritage and continues to be an important influence in architecture, operating Taliesin West according the traditions Wright first established, and forwarding the concepts embodied within Wright's style. Taliesin West has become a valued community landmark and travel destination, attracting visitors from around the world.

Frank Lloyd Wright Boulevard, and these design guidelines, celebrate Wright's contributions to architecture and his presence in the Valley, enhancing the design, character, and identity of the community. The streetscape design and design guidelines align with the community's vision, and conform to its General Plan. The roadway's landscape palette of indigenous and drought

tolerant plants, and its informal planting design, are in keeping with the “Transitional Arid” character streetscape designation, and further demonstrate the high value placed by the city on the natural environment of the Sonoran desert. The streetscape’s reference to Wright’s work reflects the city’s commitment to arts and culture, and its priority of preserving local history. Lastly, Wright’s philosophies and approach to architecture stand as an enduring model for sustainable design in the desert, an objective shared by the city and promoted through the Sensitive Design Principles.

1.3 FLW: RE-DEFINING ARCHITECTURAL FORM

Frank Lloyd Wright was born in Wisconsin in 1869, and attended the University of Wisconsin. Before graduating, Wright moved to Chicago to begin his career in architecture. There he joined the efforts of famed architect Louis Sullivan. Following his seven-year employment with Sullivan's firm, Wright continued to promote Sullivan's philosophies to create a departure from the classical ideal of architecture that dominated design around the turn of the century. Wright assumed no allegiance to the norm of his contemporaries, and with that motivation, he began shaping the face of organic architecture with his works in Oak Park, Illinois.

Wright envisioned architecture as an inevitable expression of a site's topography, plant mass, and overall habitat. With each project, Wright developed a greater refinement of this architectural concept. As his popularity grew, Frank Lloyd Wright received commissions for both residential and commercial buildings throughout the United States and Japan.

1.4 GENERAL CONCEPT AND INTENT

The general concept for the streetscape, and intent of these design guidelines, is to translate Wright’s style and concepts of organic architecture and extend them to the roadway by means of physical improvements and landscape. There are numerous opportunities in the design of the streetspace to implement Wright’s unique style, concepts, and approach to design. Some of these include: the selection and use of materials and colors, pavement design, the design of site walls and decorative metalwork, concrete impressions and formwork, and the design of signage.

To ensure design unity throughout the boulevard, some decisions have been made to establish the streetscape theme. Predetermined features and concepts include a palette of colors derived from Taliesin West and Wright’s other work in the southwest region (refer to Figure 15), a conceptual crosswalk design and other pedestrian improvements (refer to Figures 6 through 9), and an identifying graphic symbol for the boulevard that can be applied and utilized for any number purposes (refer to Figure 14). A palette of native and regionally adapted plant material, and rules for planting are also defined (refer to Section 2.0 and 4.3).

Project designers must implement these concepts and features, and integrate them with their own project designs, such that the right-of-way improvements and adjoining areas of private property appear unified and consistent in their basic design. Adjoining developments are encouraged to integrate the established concepts, and to contribute new ideas and themes that complement the boulevard. In doing this, designers are encouraged to explore Wright’s style, in particular his work in Arizona and the desert southwest, and apply his philosophies, including his approach to design that is based on observation and coordination with the natural elements of the site, and the surrounding context. Section 6.0 Bibliography, includes several highly considered sources on Frank Lloyd Wright.

1.5 OBJECTIVES

The following objectives and design considerations further articulate the general concept for these guidelines.

- The streetscape design should closely reflect and maintain the integrity of Frank Lloyd Wright's concepts of organic architecture.
- The design of the street should serve to unify and connect the community, enhance its mobility, and be a positive expression of community identity.
- Design of the streetscape should respond to the immediate context and the requirements of adjoining land uses, as they may vary and change along the corridor, contributing to the character and enhancing the function of adjoining neighborhoods, commercial districts, and land uses.
- The streetscape design should respond to vehicular and pedestrian needs, as well as use patterns that are inherent to the area.
- The streetscape design should meet the larger community's expectations for an attractive and meaningful streetscape that is in balance with the reasonable needs and requirements of adjoining businesses, neighborhoods, and other users. Landscape improvements, including plant selection, planting design, and maintenance practices, should optimize growing conditions for plants.
- The streetscape design should be sustainable and should consider ongoing maintenance, durability and longer-term replacement of hardscape and landscape components. Maintenance practices should be coordinated with, and meet or exceed, city standards for publicly maintained areas. The city's maintenance standards are based on recognized ASNI standards that have been adapted to regional conditions and local preferences.
- The streetscape design should be an important component of the effort to ensure the economic viability of the FLW corridor. This includes the Airpark/Northsight auto dealerships, as well as other current and future users.
- The streetspace design solutions should utilize current best practices and standards as defined by the city's Design Standards and Policy Manual (DS&PM), modified as necessary to meet the general design concept, design purpose, and intent of the Design Guidelines.

1.6 PLANNING RESOURCES

In addition to these design guidelines, projects may be subject to other city policies, regulatory standards, and agreements involving the city. Some of these include:

Approved Plans and Studies: All properties in Scottsdale, including properties with frontage on the Frank Lloyd Wright Boulevard, are subject to the policies and provisions of the city's General Plan, as well as any specific sub-area plans, or studies.

Zoning and Development Standards: Properties are also subject to the use limitations, and property development standards established by underlying zoning, and zoning overlays, in accordance with the provisions of the Zoning Ordinance of the City of Scottsdale. This includes stipulations, conditions of approval, and legal agreements involving the city and the property owner, that were approved as part of any zoning map amendment decision by the City Council, or approvals by the Development Review Board. This includes any supplemental material requested from the applicant by the city (i.e. Master Plans, MEDCPs, project specific design guidelines).

Improvement Standards and Specifications: Development in the City of Scottsdale is also subject to the standards and regulations set forth in the Design Standards and Policy Manual (DS&PM). The design and construction of all facilities and improvements shall be in accordance with standards set forth in the DS&PM; adapted and modified as necessary to meet the general concept intent of these design guidelines.

Other Property Controls: Properties may also be affected by agreements, easements, CC&Rs, and similar controls involving other public and private entities. Such controls are the interests of others and will not be enforced by the city.

Conflicts, Interpretations and other Rules: If there are any conflicts between these guidelines and any Federal, State, or County regulations, then the regulations of the superior agency shall control. Any conflict between guidance provided herein and that set forth in any city formal policies or zoning provision, including stipulations and conditions for entitlements, the controlling mechanism shall be determined by city's Zoning Administrator. Within the document, should any guideline in Section 4.0 conflict with any other guideline, then the guidelines of Section 4.0 shall control, unless otherwise determined by the city's Zoning Administrator. All illustrations herein are conceptual and not intended for construction.

The Development Review Board and the City Council reserve the right to amend or modify, by their decisions, any provision herein.

Development Review Approval: With the exception of single-family homes, all development in the city is subject to the review and approval of the Development Review Board at public hearing. This includes all current proposals for physical improvements. Development applications which are determined to meet the intent of these guidelines, and follow their recommendations, may be eligible for consideration as a minor development application, per Section 1.906 of the Zoning Ordinance.

Section 2.0 LANDSCAPE GUIDELINES

Purpose: Establish a streetscape theme that reflects Frank Lloyd Wright’s design theory of creating the built environment through the inspiration of nature and organic forms. It is the intent of these guidelines to reflect a planting theme that outlines this approach to a landscape element for Frank Lloyd Wright Boulevard.

Utilize these guidelines for the design of landscape improvements that implement the general concept of the streetscape and the “Transitional Arid” character designation for the street.

Goals: The specific goals of this section include:

- Create a low water use plant palette.
- Outline requirements to create a uniform streetscape theme.

Content:

- General Streetscape Concept
- Plant Material Requirements
- Project Theme Trees
- Approved Plant List
- Non-organic Mulch and Boulder Features
- Landscape Construction Guidelines
- Irrigation and Maintenance
- Landscape Accent Lighting

2.1 GENERAL STREETScape CONCEPT

Frank Lloyd Wright Boulevard is situated in an area of the city in which the “Transitional Arid” character design theme for street medians has been approved. It is the intent of these guidelines to further this concept within the public rights-of-way and adjoining areas up to, and including, the site walls of parcels that are fronting on Frank Lloyd Wright Boulevard. A plant palette consisting of desert and arid region plants is typical of a landscape having this type of character. Within the general theme, the following guidelines have been established:

- 2.1.1 The use of low-water-use plant materials will be implemented to reflect the desert compatible design themes of Frank Lloyd Wright. Plant materials that may be inconsistent with this theme are discouraged for use in the public rights-of-way and setback areas, but may be considered for use in conjunction with areas such as a small courtyard within a group of buildings.
- 2.1.2 The landscape theme within the setbacks along the boulevard should tie into the theme established within the public rights-of-way.
- 2.1.3 In areas of special emphasis, the planting design should change in terms of intensity, pattern, texture, scale, or form, to denote intersecting streets, views, or other special features.

- 2.1.4 Near the entrance to Taliesin West, the design theme should intensify to indicate a sense of arrival at the campus.

2.2 PLANT MATERIAL REQUIREMENTS

The following minimum standards are established to illustrate the typical plant sizes and density for the landscape theme within the public rights-of-way.

- 2.2.1 The landscape area shall consist of the center median and areas between the curb and right-of-way line on both sides of the street.
- 2.2.2 One-half of the total trees planted are to be a minimum of 24-inch-box size, with the balance to be 15-gallon size. Trees will be planted at a minimum rate of one per 400 square feet of landscape area.
- 2.2.3 Shrubs are to be a minimum 1-gallon container size, and planted at a minimum rate of one per 50 square feet of landscape area.
- 2.2.4 Vegetative ground cover should cover a minimum of 25 percent of the landscape area. The cover should be arranged into clusters and patterns which avoid large bare areas, and which create visual variety.
- 2.2.5 Areas of decomposed granite without plant materials/groundcovers shall not exceed dimensions of more than 7 feet in any one direction, measured between plant canopies or coverage. This dimension shall be that provided by mature plantings.
- 2.2.6 All plantings must conform to sight distances that are outlined in the City of Scottsdale Design Standards and Policies Manual (DS&PM), Section 5 - 3 Geometrics. Show all sight lines on the final landscape construction plans submittal (refer to DS&PM Figure – 5.3-26).

2.3 PROJECT THEME TREES

To establish a consistent theme throughout the boulevard, the following guidelines shall be followed:

- 2.3.1 Saguaro (*Carnegia gigantea*) shall be provided at the rate of 1 per 100 linear feet of Frank Lloyd Wright Boulevard frontage. Saguaros may be planted in clusters. In areas with less than 100 feet of frontage, 1 saguaro shall be provided.
- 2.3.2 The following trees shall be incorporated into the plant palette for all intersections (refer to Figure 2).
- mesquite species (thorn-less)
 - palo brea
 - saguaro, minimum 15 feet height
-

2.4 APPROVED PLANT LIST

In reference to the plant list below, a character was established for Frank Lloyd Wright Boulevard based on the following desired criteria. Plants without a letter in the middle column may be used at the designer's discretion.

Approved Plant List

BOTANICAL NAMES	Use	COMMON Name
TREES		
acacia species	(B)	acacia
cercidium species	(A)	palo verde, palo brea
chilopsis linearis	(B)	desert willow
olneya tesota	(B)	ironwood
pithecellobium flexicaule	(B)	Texas ebony
prosopis species	(A)	mesquite
thevetia peruviana	(B)	yellow oleander
vitex angus-castus	(B)	monk's pepper

SHRUBS		
acacia redolens	(E)	trailing acacia, desert carpet
caesalpinia species	(D)	bird of paradise
calliandra species	(E)	fairy duster
dalea species	(C)	indigo
encelia species	(C)	brittlebrush
justicia species	(C)	Mexican honeysuckle and chuparosa
penstemon species	(D)	penstemon
simmondsia chinensis	(C)	jojoba
larrea tridentate	(C)	creosote bush
leucophyllum species	(C)	Texas sage
lysiloma thornberi	(D)	feather bush
ruellia peninsularis	(C)	ruellia
salvia greggii	(C)	autumn sage
salvia leucantha	(C)	Chihuahuan sage
tecoma stans	(C)	trumpet bush
vaquelinia californica	(C)	Arizona rosewood

BOTANICAL NAMES	COMMON Name
GROUND COVERS & VINES	
ambrosia species	bursage
atriplex	salt bush
baileya multiradiata	desert marigold
eschscholzia californica	California poppy
convolvulus	bush morning glory
dalea species	trailing dalea
dyssodia pentachaeta	golden dyssodia
lupinus species	lupines
lantana species	lantana
melampodium leucanthum	blackfoot daisy
myoporum parvifolium	creeping boobiala burgundy carpet
oenthera berlandieri	Mexican primrose evening primrose
rosmarinus officinalis (e)	rosemary
verbena goodingii and rigida	verbena

FOCUS PLANTS	
agave species	desert agave
aloe species	aloe
carnegia gigantea	saguaro cactus
ferocactus species	barrel cactus
dasilyrion wheeleri	desert spoon
fouquieria splendens	ocotillo
opuntia violacea santa rita	purple prickly pear
pennisetum setaceum rubrum	red fountain grass
yucca aloifolia	Spanish bayonet
yucca baccata	banana yucca
hesperaloe parviflora	red yucca

The following notes refer to the "Use" column of the table above.

- (A) At least 50 percent of trees shall be from the species marked
- (B) Species for tree variety
- (C) At least 60 percent of shrubs shall be from the species marked
- (D) Species for shrub variety
- (E) Not allowed in medians

2.5 NON-ORGANIC MULCH AND BOULDER FEATURES

- 2.5.1 Decomposed granite: Color shall be consistent with the landscape theme of the immediate surroundings, and shall be placed at a depth of 2 inches. Size shall be 3/8-inch or less.
- 2.5.2 Boulders in the public rights-of-way: 1/3 of the boulder to be placed in the ground. No more than 18 inches in exposed vertical height measured at grade. (This practice is further restricted by the DS&PM)

2.6 LANDSCAPE CONSTRUCTION GUIDELINES

The following guidelines establish details that must be followed within the public rights-of-way.

- 2.6.1 Berms must not exceed a 1:4 slope.
- 2.6.2 All irrigation runoff shall be directed away from the sidewalk and curb (refer to Figure 3).
- 2.6.3 Trees shall be a minimum of 5 feet from the back of curb. This distance will be measured from the back of the curb to the trunk of the tree. Any tree that has a large mature canopy may require a greater setback.
- 2.6.4 Shrubs shall be setback from the curb a distance of 3 feet as measured to the drip-line of the shrub at its mature size.
- 2.6.5 Placement of Focus Plants, including saguaro, shall follow these guidelines:
- In a median, saguaro shall be placed in the center of the median.
 - Near a sidewalk, saguaro and other cacti will be oriented to allow the maximum level of safety for pedestrians.
 - Where possible, saguaro shall be setback from the sidewalk a minimum of 15 feet, or a distance that is equal to the transplanted height of the saguaro, whichever is greater.

2.7 LANDSCAPE ACCENT LIGHTING

- 2.7.1 Low voltage accent lighting shall be incorporated into the landscape plan at all intersections. When determining light fixture locations, consideration shall be given to maintaining a consistent style of lighting throughout the boulevard.
- 2.7.2 Lighting techniques may include up-lighting, silhouette, or down-lighting of the landscape elements.
- 2.7.3 All lighting shall conform to applicable City of Scottsdale codes, ordinances, and policies.

2.8 IRRIGATION AND MAINTENANCE

- 2.8.1 All irrigation and maintenance will be carried out in a manner consistent with city procedure and policy, and as outlined in Section 8-1 in the DS&PM.

Section 3.0 HARDSCAPE GUIDELINES

Purpose: To set a design theme, for the non-landscape elements of Frank Lloyd Wright Boulevard, that ties into the overall concept of Wright's organic architectural style.

Goals: The specific goals of this section include:

- Incorporate Frank Lloyd Wright's style of design into site improvements such as sidewalks, walls, railings, bridges, etc.
- Create a unifying theme through the use of Frank Lloyd Wright inspired design along Frank Lloyd Wright Boulevard.

Content:

- General Hardscape Concept
- Paving Patterns
- Wall Design
- Street Furniture
- Sign Graphics and Boulevard Theme Colors
- Civil Structures

3.1. GENERAL HARDSCAPE CONCEPT

Frank Lloyd Wright Boulevard has been designated as a Major Arterial in the city's General Plan "Circulation Element". Figure 1b shows the cross sectional features of this level of street classification. Throughout the boulevard, the Frank Lloyd Wright design theme will be implemented through the hardscape design features. The hardscape includes paving design, site furniture and fixtures, walls, and other design features. Throughout the boulevard, the hardscape will reflect design features that are derived from the Frank Lloyd Wright style of nature-inspired designs that are translated into the built environment.

3.2 PAVING PATTERNS

- 3.2.1 The paving pattern concept and boulevard symbol motif should be retained and extended where appropriate. Materials and processes can be modified, or equivalent treatments substituted where necessary, in order to comply with the recommended best practices and standards of the city's Design Standards and Policy Manual. This includes changes required to comply with evolving ADA standards for accessing public facilities.
- 3.2.2 Throughout the boulevard, both sides of the street shall have a sidewalk. The southwest side shall have an 8-foot wide sidewalk, and the northeast side shall have both 8-foot and 6-foot wide sidewalks (refer to Figure 10).
- 3.2.3 Sidewalks shall be designed to meander along the right-of-way line, with periodic returns to the curb at intersections and driveways. At 50-foot intervals, the concrete stamp pattern shall be applied to the sidewalk (refer to Figure 11). If the 50-foot

stamp interval occurs where the sidewalk changes direction, then the stamp shall be applied beyond the 50-foot interval at the nearest straight section.

- 3.2.4 Decorative pavement should be used to distinguish pedestrian areas at all signalized intersections and crosswalks (refer to Figure 5). Pavement material within the street shall be colored, stamped asphalt, or similar treatment (Streetprint™, Streetbond™, or similar textured overlay application). Textured concrete, integrally colored concrete, concrete pavers, or combination of these materials, should be used in other areas, except at crosswalk landings and median bull noses. Concrete pavers are preferred in non-vehicular pavement because of the three dimensional and tactile qualities, and the design flexibility that is inherent to the material. Other materials and processes may be considered if they achieve a similar result and comply with the DS&PM, or if they are specifically approved through the Development Review process. Materials indicated above are brand names; equivalent and similar products may be substituted.
- 3.2.5 Figure 6 illustrates the paving concept for a crosswalk at a typical controlled intersection. Appearance, maintenance, and ease of replacement should be considered in selecting the pavement treatment. These guidelines are not intended to exclude any new processes and technologies from consideration.
- 3.2.6 Before constructing the sidewalk, all on-site heavy construction shall be completed in order to avoid sidewalk repairs that may result from construction traffic. Sidewalks shall be repaired, or replaced, where walks have sustained damage from reconstruction, or other previous activity, in the rights-of-way.
- 3.2.7 In areas where the boulevard is built, and the existing corners are to be retrofitted according to these guidelines, the details in Figures 7 or 8 should be followed.
- 3.2.8 In areas where the existing right-of-way does not allow enough space for these standards, the detail in Figure 9 shall be used.

Detailed imprint patterns and specifications for paving features are available from the city.

3.3 WALL DESIGN

These guidelines and associated illustrations are examples that are intended as a general guide to aid the designer in understanding the basic intent of Wright's style. In areas where walls are required along the boulevard frontage, the following guidelines shall apply (refer to Figure 2).

- 3.3.1 The alignment of walls shall avoid long distances without a variation in horizontal and vertical alignment.
- 3.3.2 Wall faces shall contain accent features that reflect Frank Lloyd Wright's design style. Details such as decorative block and metal work may be used to enhance the image of such features.

- 3.3.3 Colors that imitate the vegetation, soil, and natural rock colors of the desert environment shall be preferred, rather than colors that do not relate to the natural setting of the area.
- 3.3.4 Building materials shall be consistent with those used in typical Wright designs. Precast concrete blocks with imprinted designs were common in a majority of Wright's work.

3.4 STREET FURNITURE

Within the hardscape palette, street furniture can depict a design theme more significantly than other design elements. The primary street furniture on the boulevard will be the bus shelters. Figure 13 shows a typical shelter, with the accompanying graphics panel to be installed. Other street furniture may be utilized to enhance the overall design concept of the boulevard. Projects shall coordinate bus shelter improvements with the city's Transportation staff, and the recommended best practices and standards of the DS&PM.

3.5 SIGN GRAPHICS AND BOULEVARD THEME COLORS

- 3.5.1 A boulevard identifying symbol has been developed for use on the street name signs. The boulevard symbol shall be applied to the right-hand side of street name signs at signalized intersections (refer to Figure 14).
- 3.5.2 The boulevard identifying symbol may also apply to sidewalk impressions, railing and wall designs, concrete forms and impressions, stamped asphalt surfaces, asphalt coatings, and other paving systems that may be approved through the Development Review process.
- 3.5.3 Signs should utilize the palette of boulevard theme colors (refer to Figure 15). The potential use of each paint color is indicated along with brand identification, substitutions and formulas for mixing, if these are not proprietary.

3.6 CIVIL STRUCTURES

The following guidelines address civil structures such as bridged street crossings, culvert head walls and end walls, railings attached onto sidewalks and bridges, streetlight poles, and traffic signal poles.

- 3.6.1 All streetlight and traffic signal poles shall conform to the DS&PM and to all applicable ADOT and MAG standards and specifications.
- 3.6.2 In the event that a signalized intersection is implemented at the Taliesin West entrance, a traffic signal with enhanced features such as a backlit sign panel and trombone arm will be considered. The use of this signal will be limited to the Taliesin entrance in order to place special emphasis at Taliesin West.

Section 4.0 AUTO DEALERSHIP VEHICLE DISPLAY PADS

Purpose: Provide guidance for the design and construction of permanent vehicle display pads and related improvements for auto dealerships in the Airpark/Northsight vicinity. Maintain the general design concept and overall theme of the streetscape.

Goals: The specific goals of this section include:

- Implement a design that balances the needs of the adjoining land use and the community's interest in an attractive and functional streetscape.
- Maintain the design integrity of the streetscape and allow better management and enforcement practices related to auto dealership activities within the right-of-way.

Content:

- Design Concept
- Display Pad Design, Access and Layout
- Landscape and Hardscape Design
- Maintenance

4.1 DESIGN CONCEPT

The guidelines in this section apply specifically to portions of the Frank Lloyd Wright Boulevard adjoined by auto dealerships. This use is concentrated at the west end of the Frank Lloyd Wright Blvd. in the Airpark/Northsight vicinity west of Hayden Road.¹

Vehicle sales and leasing is a unique use that is distinguished separately from other retail sales venues and operations. By their nature, they utilize large land areas, and one dealership may represent several brands in addition to handling used cars, maintenance, and service operations. Among the auto dealer's specific needs is the effective display of the product. This appropriately occurs along roadway frontages where passersby are introduced and enticed to the dealership's products. Related to the traditional streetscape, this activity presents certain manageable challenges of maintaining display visibility and a landscape that is meaningful.

The concept for this area is in addition to the general concept for the boulevard, established in Sections 1.0 – 3.0, with the added criteria of vehicle display visibility. The guidelines in this section outline a solution that satisfies business needs of the dealerships, while retaining the overall theme and general concept of the boulevard and meeting the expectations for an attractive streetscape.

¹ Acknowledging the dual frontage of certain dealerships Section 4.0 extends the force of these guidelines to limited portions of Hayden Road and the Greenway/Hayden Loop. The area includes dealerships that are part of the Northsight Auto Mall, parcels to which additional design guidelines may apply in accordance with the zoning action that created the subdivision.

4.2 DISPLAY PAD DESIGN, ACCESS AND LAYOUT

The function of a display is to feature a product, ideally in a controlled environment. With this in mind, designers should consider the best way to display a vehicle for observation by passing motorists. An effective display is largely about visibility. The guidelines below are intended to achieve two objectives. First, to improve the visibility of vehicle display at auto dealerships that are adjacent to Frank Lloyd Wright Boulevard. Second, to establish landscape improvements which are compatible with the need to display a vehicle.

The following guidelines address the design, access, and layout of vehicle display pads, as well as their relationship to the larger streetspace and design theme of the boulevard. Design of the display pads and the grouped pads of a display area are concerned with both appearance and function. Also important is the location and orientation of pads and how they relate to the larger street space (refer to Figure 16).

Vehicle display pads may be constructed with an open design as illustrated in Figure 17, or may utilize the enclosed pad design as illustrated in Figure 19.

- 4.2.1 The design of display pads should contain and secure vehicles, as well as provide an on-site access route for loading and unloading featured vehicles.
- 4.2.2 The quantity of display pads per auto dealership shall be based on one pad for every 120 linear feet of major street frontage.
- 4.2.3 Display pads shall occur fully behind the right-of-way line. Maintain a minimum distance of 6 feet between a display pad and any adjacent sidewalk. Vehicle displays should not encroach on any sidewalk, maintaining a clear unobstructed pathway for pedestrians.
- 4.2.4 Display pads may be co-located, or grouped together, as long as no pad in the group is separated from the others by more than 30 feet. Such groupings shall be referred to as a display area. Each display area may contain no more than 1 enclosed display pad. In the interest of maintaining a landscape presence along the roadways, display pads and/or display areas shall be spaced at a minimum distance of 100 feet apart, thus providing opportunities for landscape improvements that are consistent with Section 2.0.
- 4.2.5 A display pad should be wide enough to accommodate movement around the vehicle, but should not exceed a width of 16 to 20 feet per vehicle displayed. An enclosed display pad shall contain no more than 1 vehicle per structure.
- 4.2.6 Consider how the foreground and background become factors of an effective display, utilizing features in the foreground to frame and accent. A simple backdrop may focus attention on the display.
- 4.2.7 Optimize the orientation of the display pad to capture views from the roadway and feature the most appealing aspects of the vehicle. Review foreground planting recommendations, as part of the effort to avoid plant massing that obstructs visibility. Focus plants are encouraged in foreground planting areas in order to accent and frame displays areas.
- 4.2.8 Racks, turnstiles, etc., that are utilized to raise vehicles for display, should have a solid base that is covered by perforated metal sheeting, wire mesh with 50 percent or greater density, solid panel sheeting, or other durable commercial grade architectural material.

- 4.2.9 When a display pad and rack are utilized in combination, the maximum height of the display pad, at 2 feet, and a rack/turnstile, at 3 feet, shall not exceed a total of 5 feet, as measured from the nearest adjacent sidewalk.
- 4.2.10 A vertical barrier, 18 inches tall, or an equivalent arrangement of other elements, shall be applied to secure the vehicle on at least three sides, or three-quarters of the perimeter, of a display pad. The barrier may be continuous, or intermittent, as necessary to restrict movement of the vehicle. Possible barriers include pipe railings or other sturdy decorative metal railings, vertical masonry elements; boulders and other integrated landscape features; low bollards or pylons of compatible design; a vertical change in finish grade at the edge of an elevated pad; or any combination of the above.
- 4.2.11 For the purpose of illuminating a vehicle that is on an open display pad, low-voltage up-lighting is allowed. New pole mounted lighting is not anticipated, nor is modification to any existing lighting systems. Such proposals may disqualify projects from the minor development application process.
- 4.2.12 Enclosed display pads may be internally and/or externally illuminated with full cut-off fixtures. The maintained average horizontal illuminance for the area within 5 feet of the display pad shall not exceed 8 footcandles.
- 4.2.13 Lighting of the public right-of-way is the sole responsibility of the city and should not be modified as part of any design that is proposed by others.
- 4.2.14 Architectural character and materials for enclosed vehicle display pads shall be consistent with that illustrated in Figure 19.
- 4.2.15 The maximum height for an enclosed vehicle display pad structure shall be 16 feet, plus 3 feet for the base.
- 4.2.16 Any mechanical equipment that may be associated with the enclosed vehicle display pads shall be fully contained within the structure of the enclosure so that it is not visible from any angle.
- 4.2.17 Vehicle display pads shall be for the display of cars only, and shall not include signage or advertising on, inside, or outside of the structure, except as approved by the Development Review Board.
- 4.2.18 Colored glass or colored lights that create the illusion of colored glass shall not be permitted on an enclosed display pad structure.

4.3 LANDSCAPE AND HARDSCAPE DESIGN

The landscape and hardscape design concepts for the boulevard are established in Sections 2.0 and 3.0 respectively and are modified by the guidelines of this section as described below (refer to Figures 16 through 18). Specific landscape challenges for dealership frontage relates to the plant density, species selection, and a planting design that supports vehicle display. The hardscape design should convey the streetscape theme in much the same way as in other areas except that display pad structures present additional opportunities to express Wright's unique style and design concepts. While project designers conceptualize solutions for vehicle displays that convey the aesthetic of the boulevard, care should be taken not to forget other important objectives (refer to Section 1.4). Project design should consider all factors as appropriate for its context and circumstances.

The streetscape design for this area reduces the required density of larger trees, and designates specific zones where they will frame views, and growing conditions can be optimized. These planting areas alternate with display areas. Designated areas for foreground planting, to be composed of low shrubs, groundcovers, and an increased density of focus plants, are located to maintain views, as well as to frame and accent the display areas. Appropriate maintenance and pruning strategies are important to achieving the desired affect and are discussed in Section 4.4.

The following guidelines are intended to implement these concepts.

- 4.3.1 The design and construction of all facilities, improvements, and landscape installations shall be in accordance with standards set forth in the DS&PM. These standards may be adapted and modified, as necessary, to preserve the intent of these design guidelines, and the integrity of the general design concept.
- 4.3.2 Plant material shall be selected from the “Approved Plant List” from Section 2.4, in quantities and varieties that reflect the revised planting requirements and maintain the image of the overall streetscape.
- 4.3.3 Consider the compatibility of selected plants with the function and appearance of display pads, and dealership display/storage lots.
- 4.3.4 Canopy trees should be provided at a rate of 1 tree per 50 linear feet of dealership frontage. This reduced quantity is intended to ensure visibility of the vehicle display pads, and afford views into the business and display/storage lots.
- 4.3.5 Incorporate additional focus plants with compact, open branching, or sculptural forms that conserve and frame views, and accent foreground areas.
- 4.3.6 The recommended minimum distance between the trunk of a canopy trees and any adjacent projecting display pad should be 40 feet (refer to Figure 16).
- 4.3.7 The placement of plant material should maintain the visibility of display pads to passing motorists (refer to Figure 18).
- 4.3.8 Project designs should account for the repair or replacement of sidewalks, curbs, irrigation systems, and other facilities that have been damaged by prior activities, regardless of the cause. Improvements shall match the design and specifications of the original construction. Depending on the extent of reconstruction necessary, projects may need to meet current standards as defined in the DS&PM.
- 4.3.9 Landscape design should protect, restore, conserve, and replace where necessary, existing landscape improvements that correlate with these streetscape guidelines. Native plants should be conserved and relocated, per the city’s Native Plant Ordinance.
- 4.3.10 New site walls and pedestals, associated with a display pad, should be designed to complement existing walls and conform to the requirements of Section 3.0 of these guidelines (refer to Figures 12 and 17).

4.4 MAINTENANCE

Appropriate maintenance and replacement of landscape improvements, including but not limited to, plant material, irrigation systems, water collection systems, and landscape lighting/electrical systems, will assure that the Frank Lloyd Wright Boulevard streetscape will fulfill the general concept and intent of these guidelines.

- 4.4.1 Appropriate maintenance and irrigations systems are required and essential for the desired streetscape design. It is recommended that maintenance of landscape improvements follow ASNI standards as modified by the city requirements. Additional information and a sample landscape maintenance contract are available through the city.
- 4.4.2 Devise long-term maintenance and replacement strategies to retain the character of the streetscape design and maximize the community's investment. Plant layout should optimize growing conditions for selected plant varieties, so that mature plants have an effect that compliments adjoining uses.
- 4.4.3 Coordinate on-site landscape maintenance with the city's maintenance of medians and the right-of-way on the north side the roadway. Apply similar maintenance practices based on city standards derived from ASNI standard landscape practices for this region, as modified for local conditions and preferences.

Section 5.0 FIGURES

The figures that are on the following pages are conceptual designs. As such, they may be modified as necessary for current best practices, the DS&PM, and the Zoning Ordinance. If modified, then the design intent and character shall be consistent with the original conceptual design.

FRANK LLOYD WRIGHT BOULEVARD LOCATION



Figure 1a

TYPICAL SECTION FRANK LLOYD WRIGHT BLVD STREETSPACE

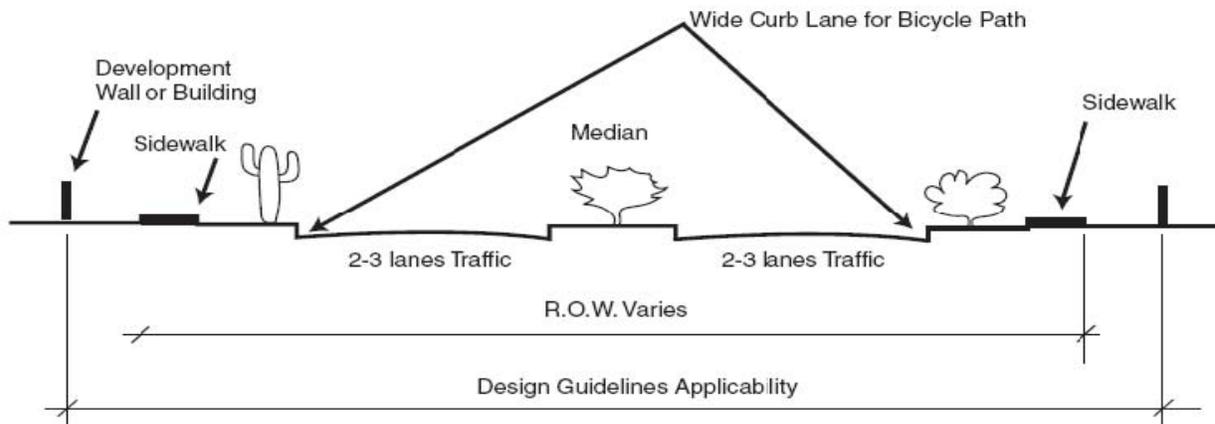


Figure 1b

THEME TREE LOCATION DETAIL

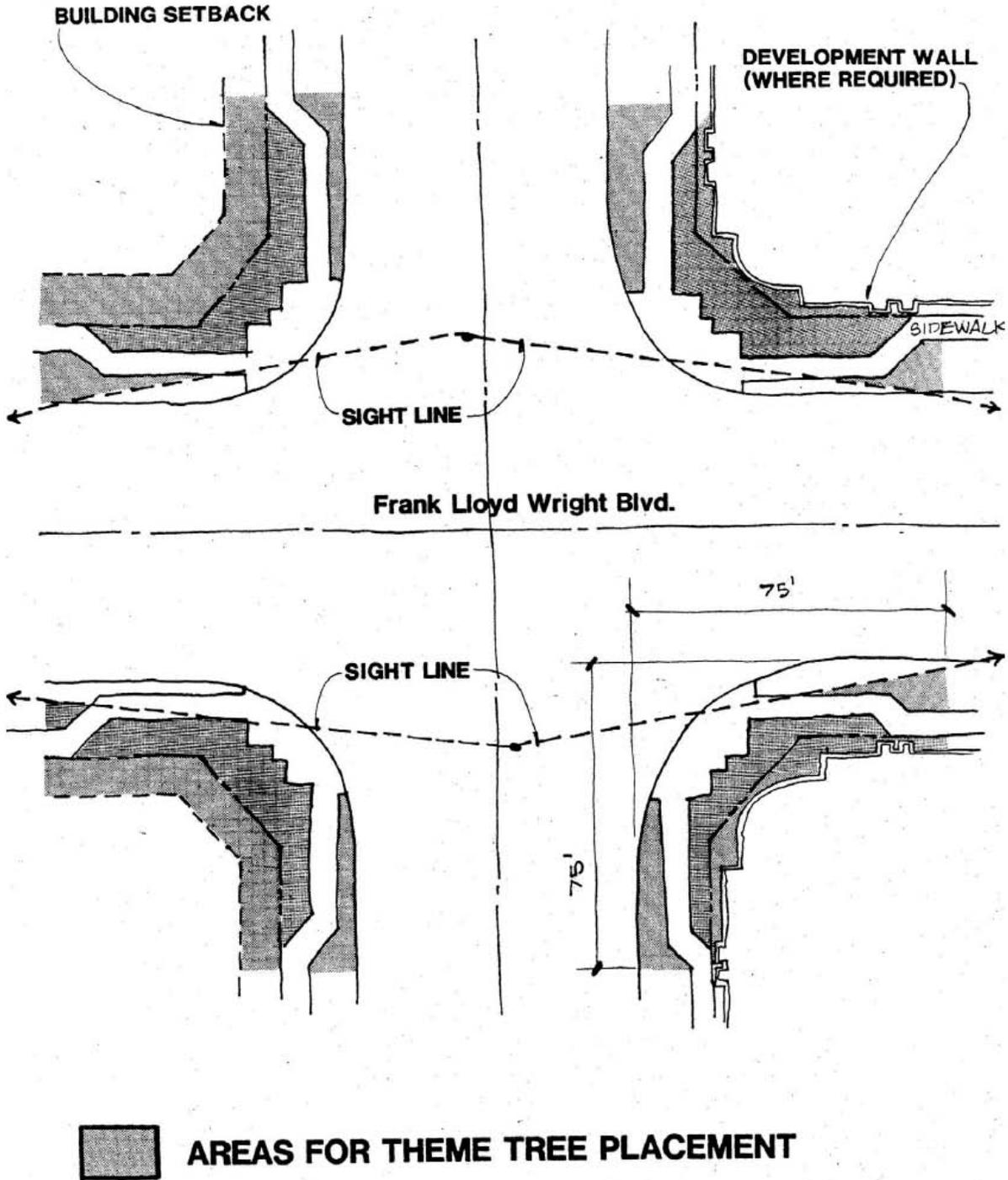


Figure 2

LANDSCAPE SWALE DETAIL

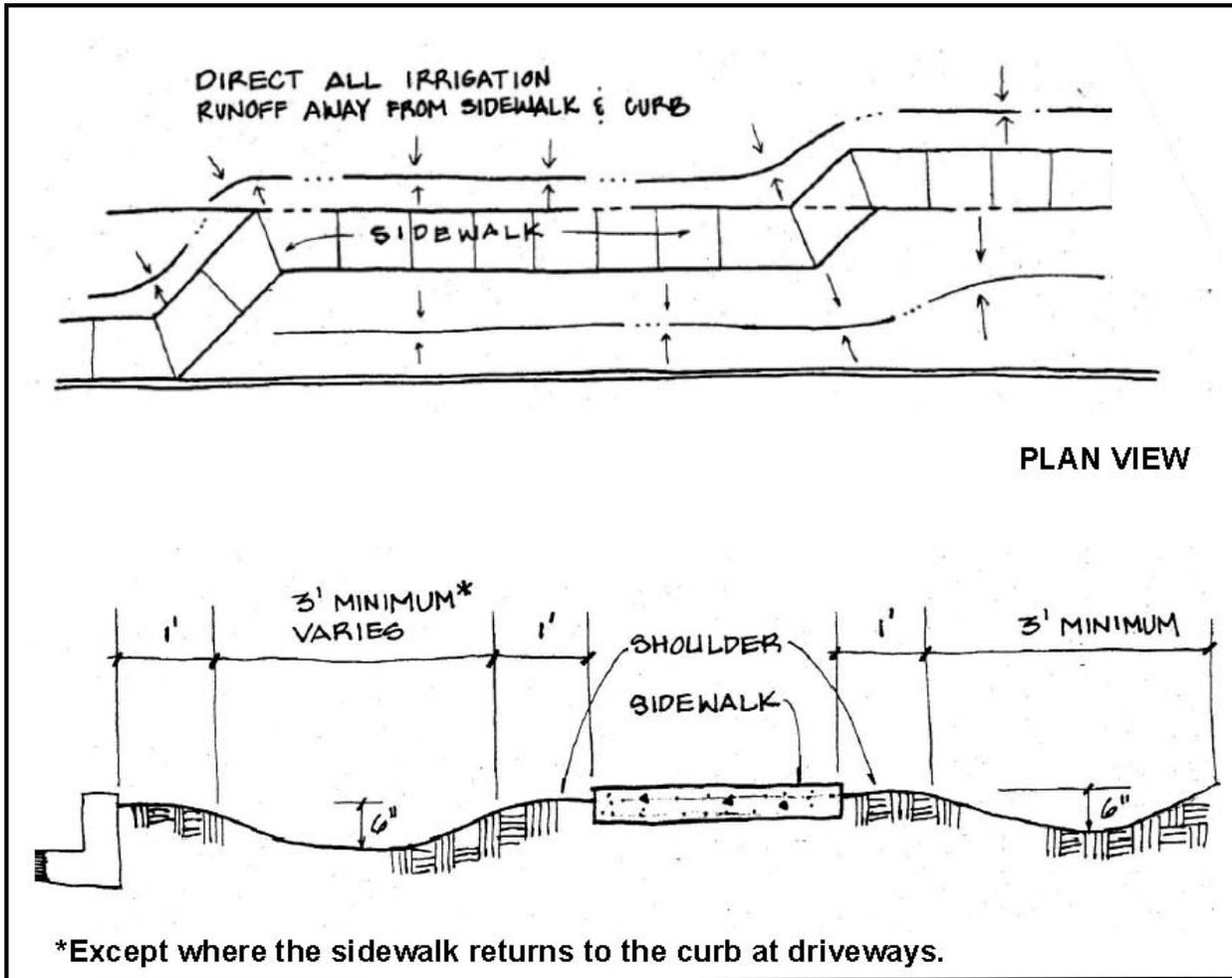
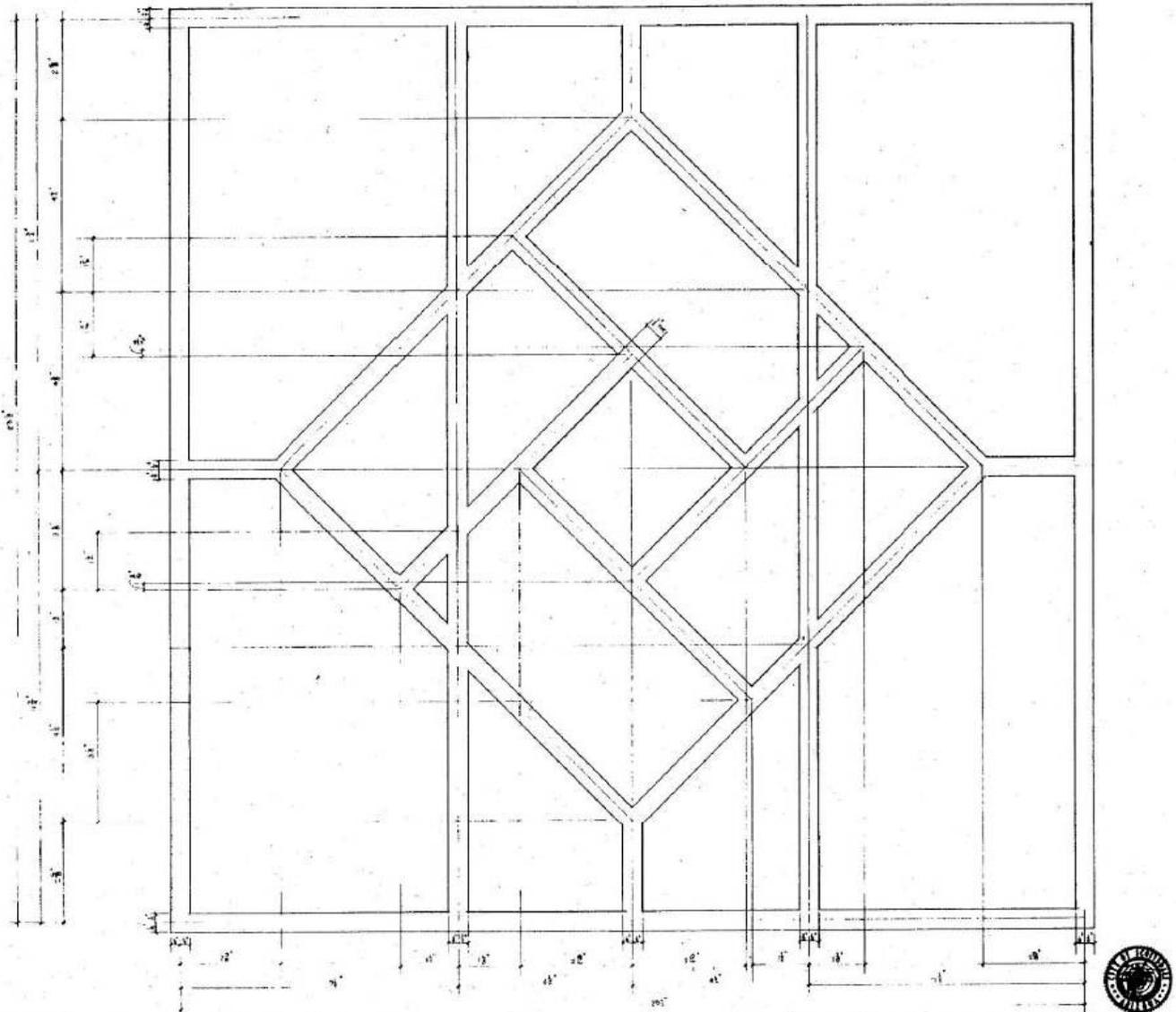


Figure 3

BOULEVARD SYMBOL GRAPHIC



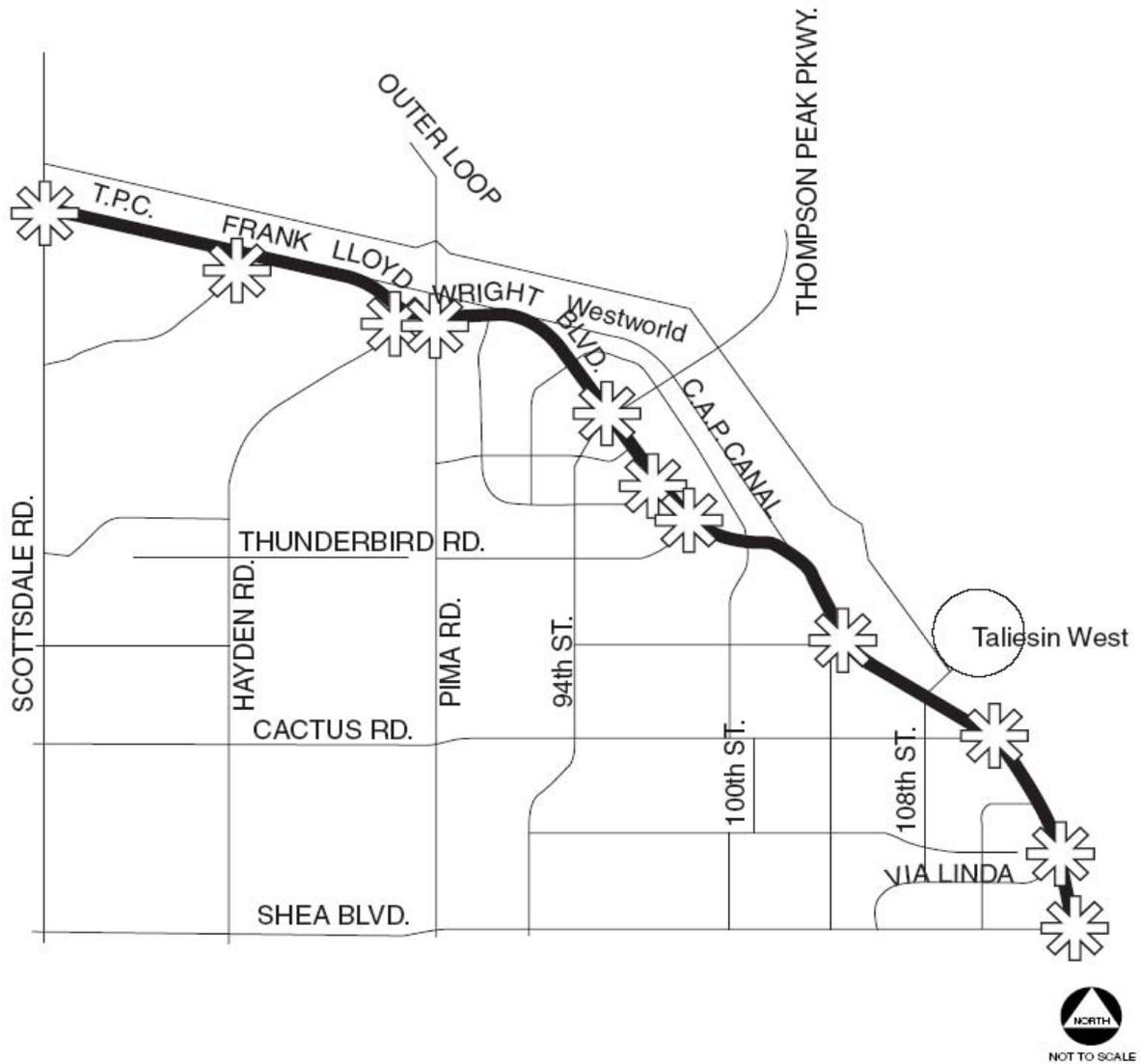
Refer to Figures 6 – 9 and 10 - 14 for further detail related to applying the boulevard graphic symbol to paving design and other streetscape features.

When utilized as a pavement unit, the graphic symbol above should have an overall dimension of 1' x 1'

Drawing above is proportional but NTS.

Figure 4

AREAS TO RECEIVE DECORATIVE PAVING TREATMENT



 AREAS TO RECEIVE SPECIAL PAVING TREATMENT

Figure 5

STREET CORNER DESIGN CONCEPT

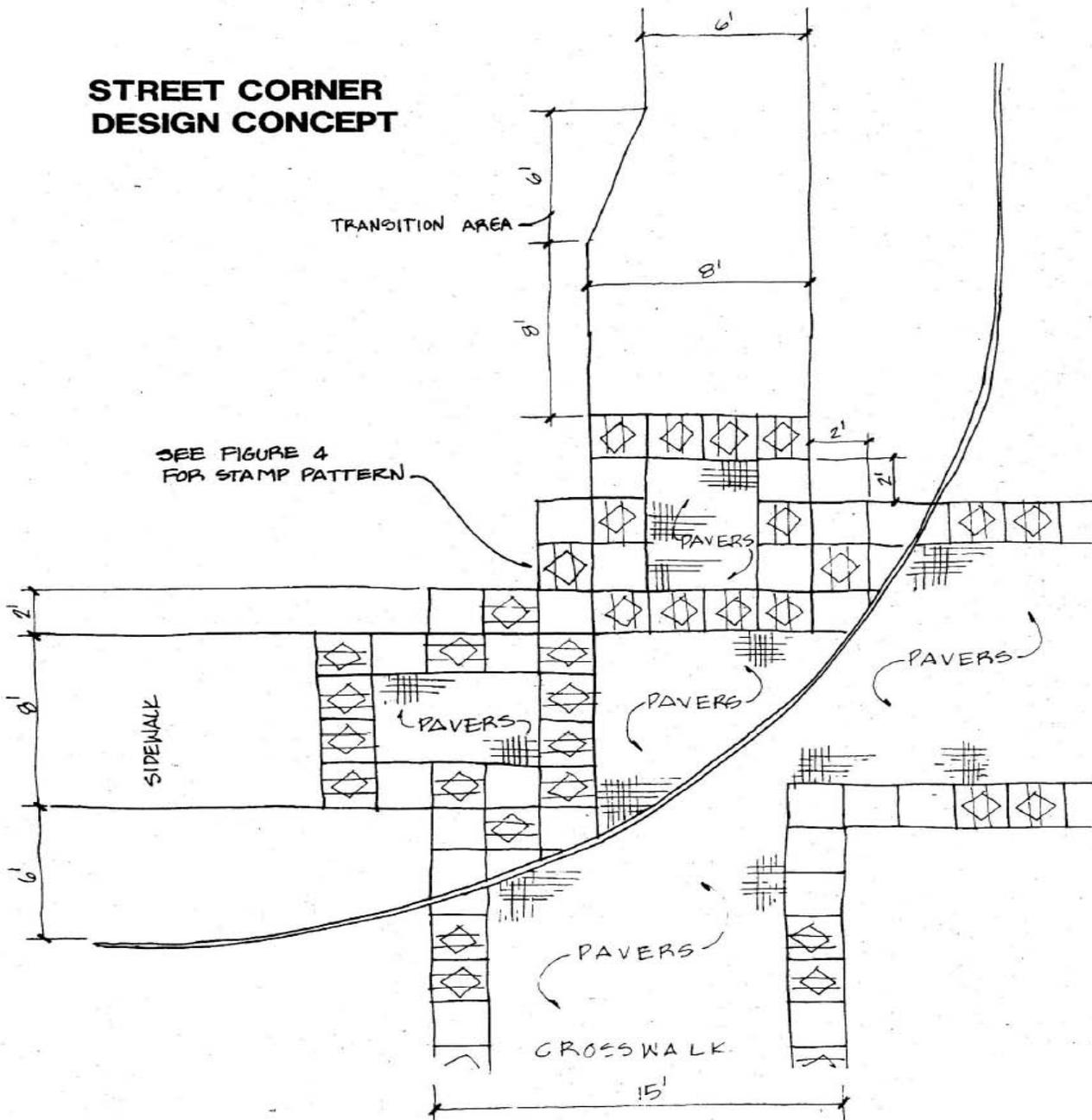


Figure 7

RETROFIT CORNER DESIGN CONCEPT

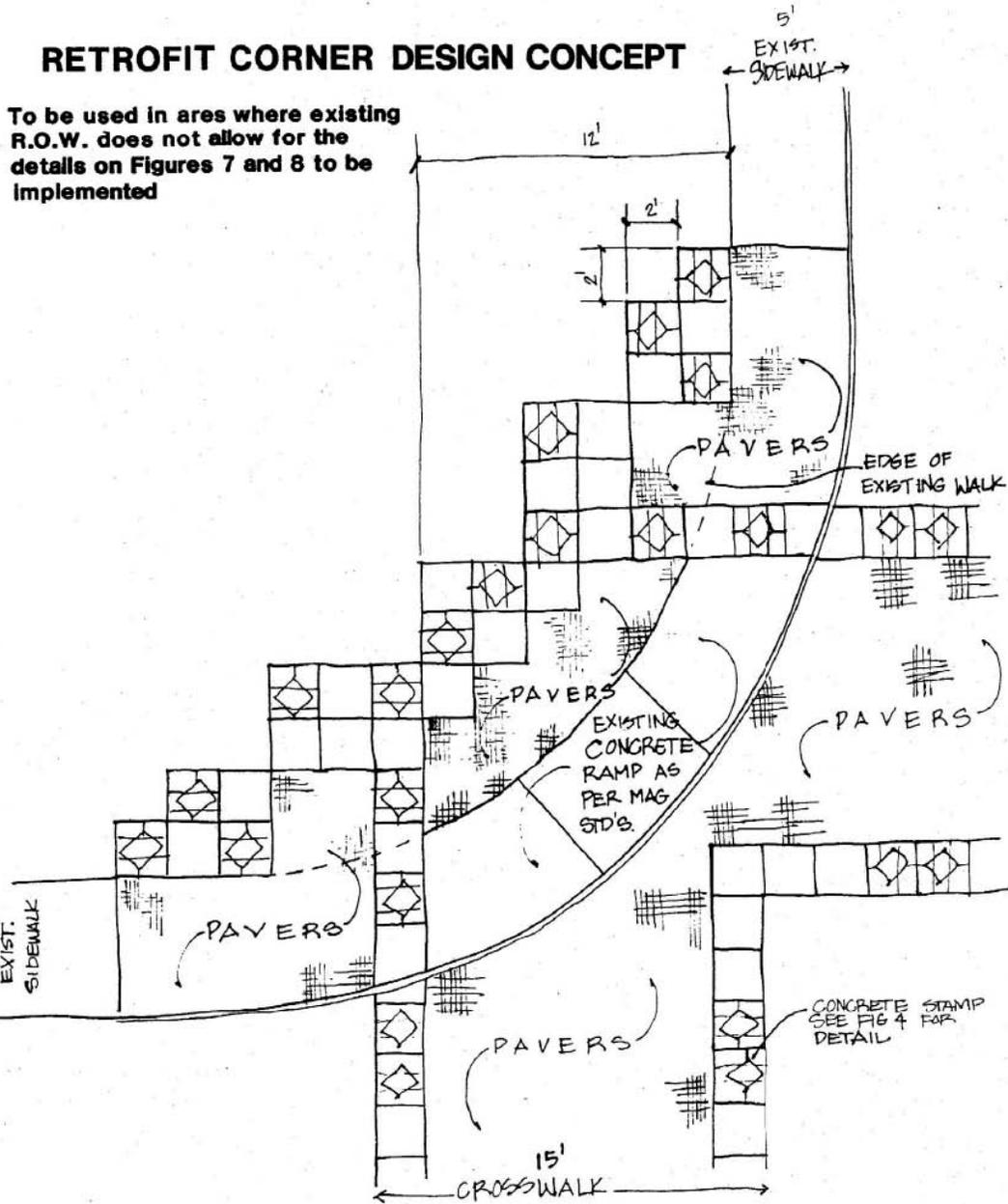


Figure 9

BOULEVARD SIDEWALK PLAN

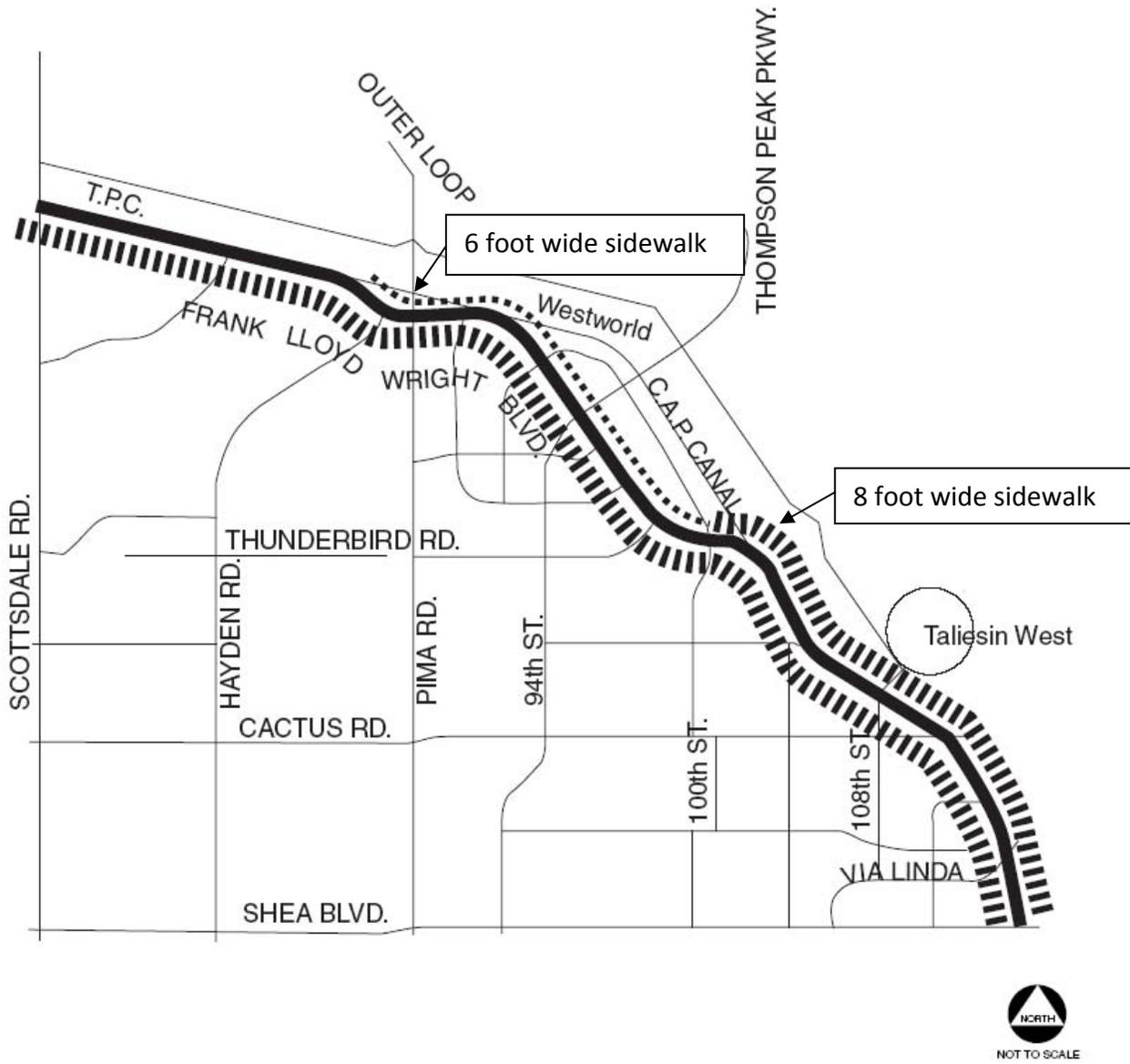
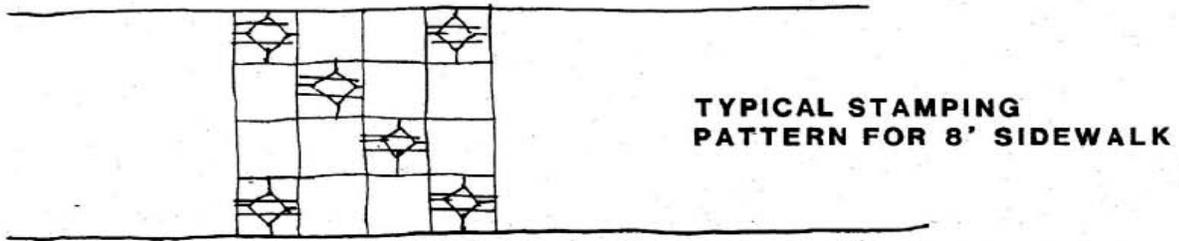
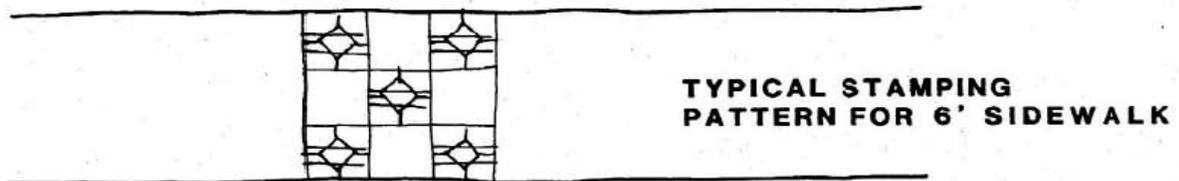


Figure 10

SIDEWALK DESIGN DETAILS

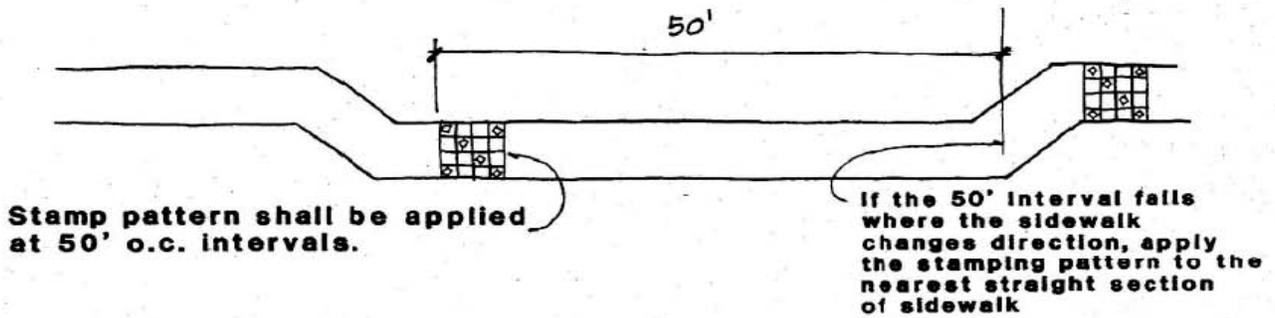


TYPICAL STAMPING PATTERN FOR 8' SIDEWALK



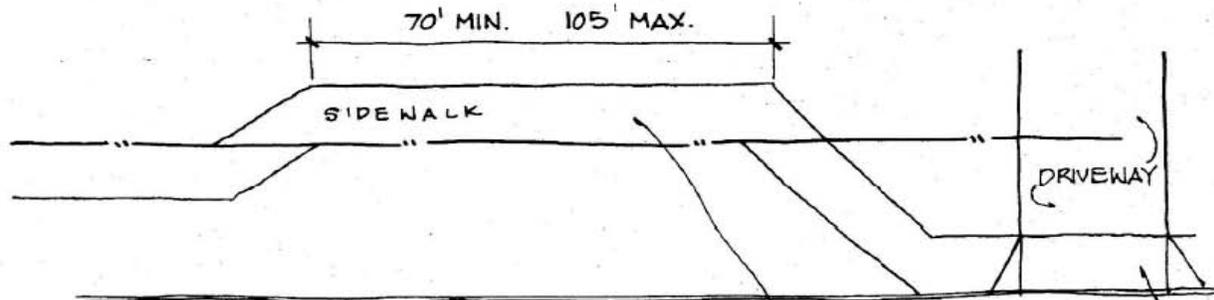
TYPICAL STAMPING PATTERN FOR 6' SIDEWALK

SEE FIGURE 7 FOR A DETAIL OF THE INDIVIDUAL STAMP DESIGN



Stamp pattern shall be applied at 50' o.c. intervals.

If the 50' interval falls where the sidewalk changes direction, apply the stamping pattern to the nearest straight section of sidewalk

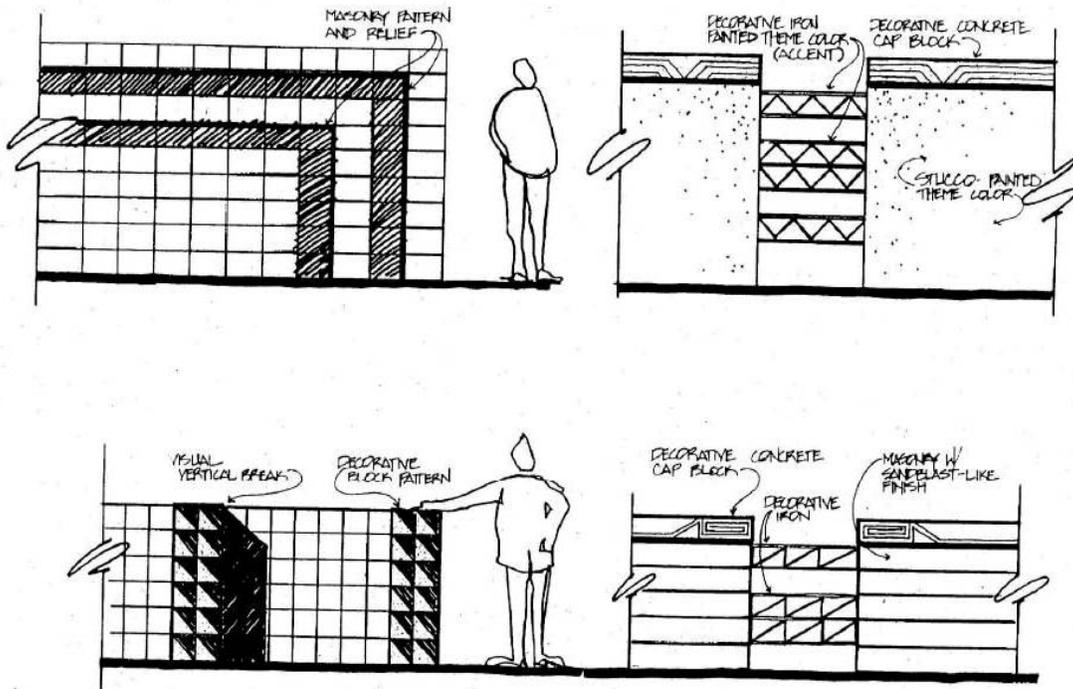


Sidewalk to meander along the R.O.W. line with one side of the walk on the R.O.W. line.

Return sidewalk to the curb at all driveways and intersections. See detail on Figure 5 for street intersection/corner design.

Figure 11

WALL DESIGN CONCEPT



WALL ELEVATION CONCEPTS

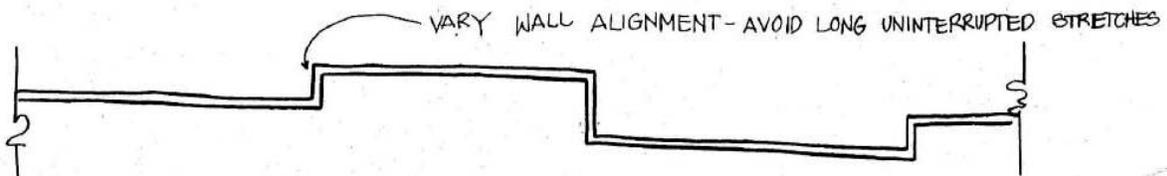
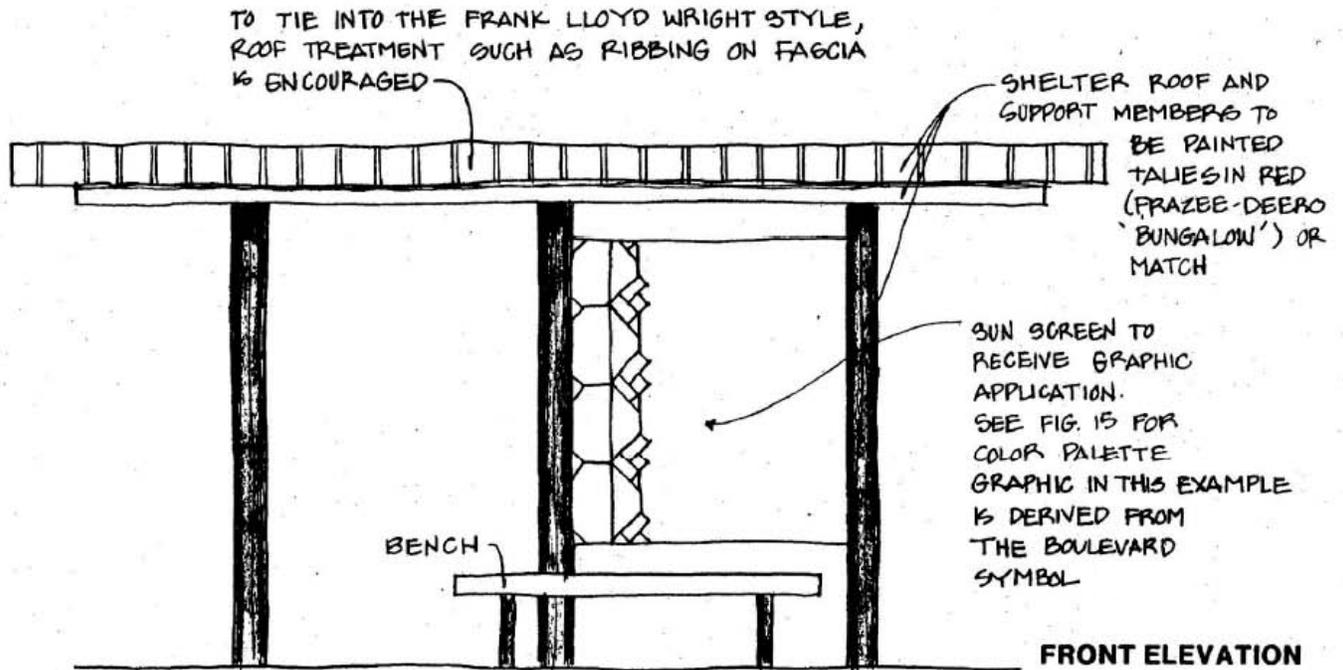


Figure 12

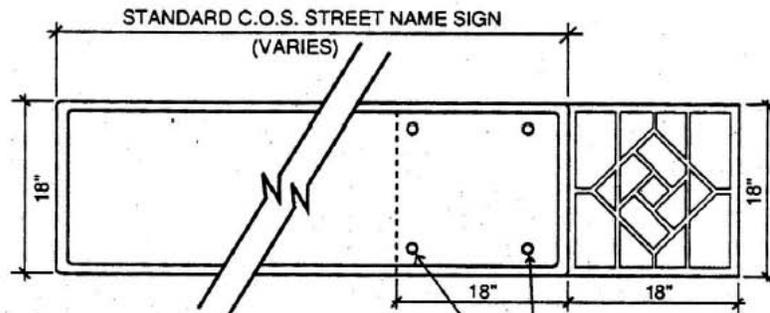
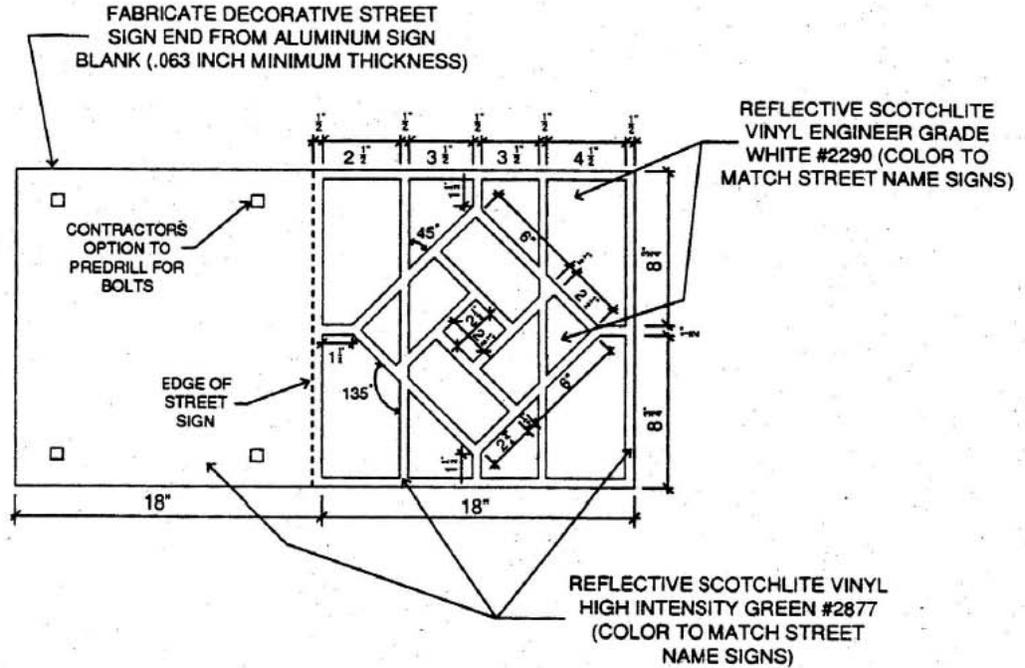
BUS SHELTER CONCEPT



ALL MATERIALS AND CONSTRUCTION TO BE AS PER CITY STANDARDS
DETAILED WORKING DRAWINGS AVAILABLE FROM THE CITY OF SCOTTSDALE TRANSIT DEPARTMENT

Figure 13

DECORATIVE SIGN PANEL



NOTES:

1. VERIFY ALL DIMENSIONS FOR SYMBOL DESIGN. ARTWORK PROVIDED BY CITY OF SCOTTSDALE.
2. ALL MATERIALS & APPLICATIONS SHALL MEET OR EXCEED ALL CITY OF SCOTTSDALE SIGNAGE STANDARDS OR EQUAL MANUFACTURES ARE ACCEPTED ON A FORMAL PRIOR APPROVAL PROCESS ONLY.
3. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.
4. NOTIFY CONTRACT ADMINISTRATOR IF STREET NAME SIGN HEIGHT DOES NOT EQUAL 18".

BOLT DECORATIVE SIGN PANEL TO REAR OF STANDARD STREET SIGN WITH 4 - 5/16" BOLT, LOCK NUT & WASHER STAINLESS STEEL. PAINT TO MATCH SIGN.

NOT TO SCALE

Figure 14

BOULEVARD THEME COLORS ⁽¹⁾

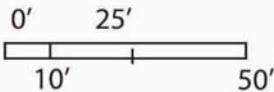
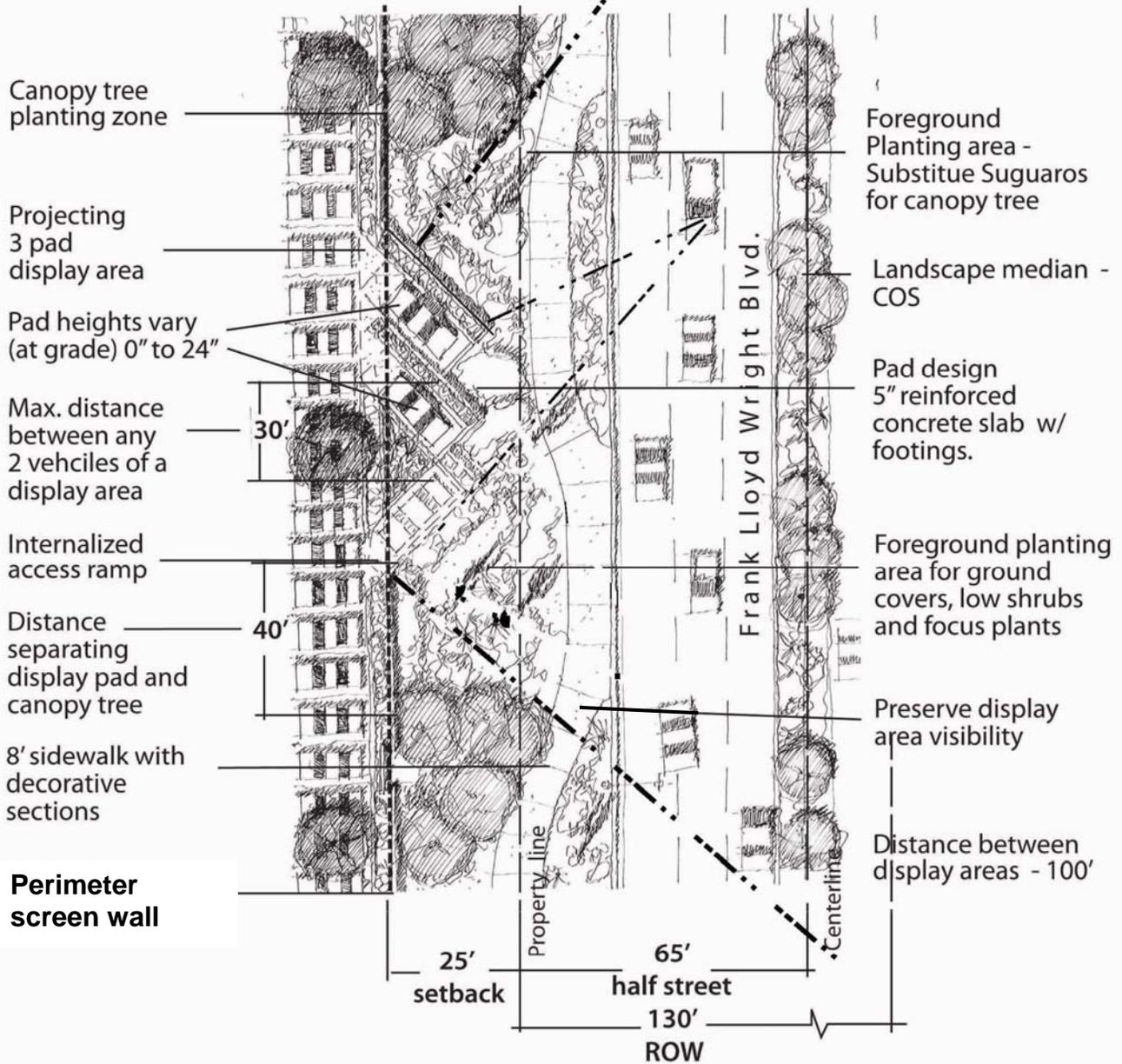
COLOR	FAN DECK #	LIGHT POLES	RAILINGS	WALLS	BUS STOPS	GRAPHICS	STREET FURNITURE
Taliesin Red (Bungalow)	4214D		X		X	X	X
Maricopa Red	N/A*	X	X	X	X	X	X
East Wind	4954D		X		X	X	X
Lighthouse	5015A		X		X	X	X
Electric Blue	5054D				X	X	X
Warn White	5930W				X	X	X
Terra Cotta	4334D		X		X	X	X
Villa Tan	4351W		X		X	X	X
Red Earth	4273M		X		X	X	X
Plymouth Red	4275A		X		X	X	X

*customer color

(1) Paint colors are Frazee brand "Creative Colors™" fan deck (log 891) except Dunn Edwards® Customer Color "Maricopa Red". Equivalents may be used for all trademark and brand products. A list of current paint colors and formulas for traffic signal poles and streetlights are listed on the City's web page at http://www.scottsdaleaz.gov/design/trafficsignalspecs/paint_colors.asp.

Figure 15

VEHICLE DISPLAY PAD DESIGN CONCEPT



Graphic Scale
March 2010

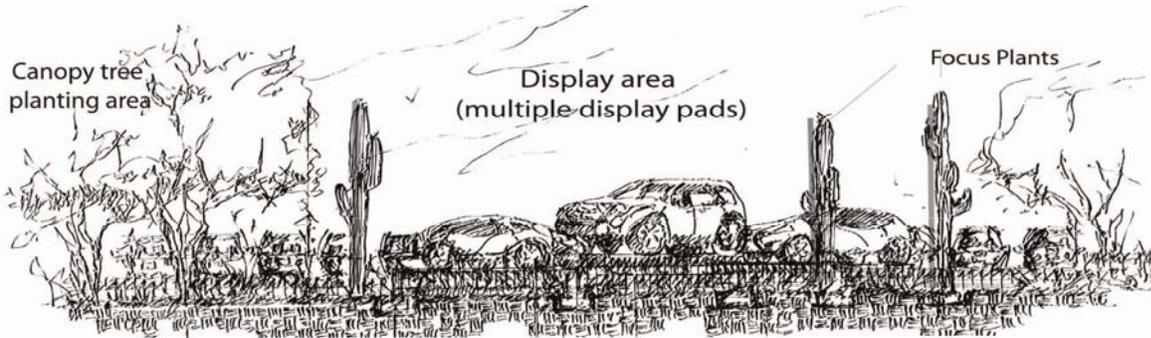
City of Scottsdale, Current Planning

Conceptual - Not for Construction

PLAN VIEW

Figure 16

OPEN VEHICLE DISPLAY PAD DESIGN CONCEPT

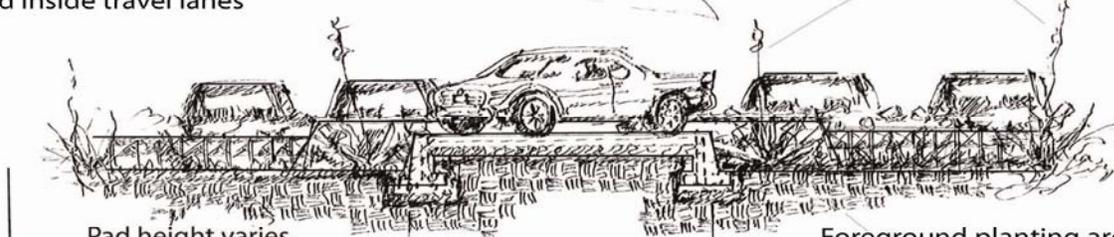


Pad height varies
0" (at grade) to 24"

Display pad visibility triangle -
200' measured to outside
and inside travel lanes

16' to 20'
maximum
per vehicle

Focus Plants



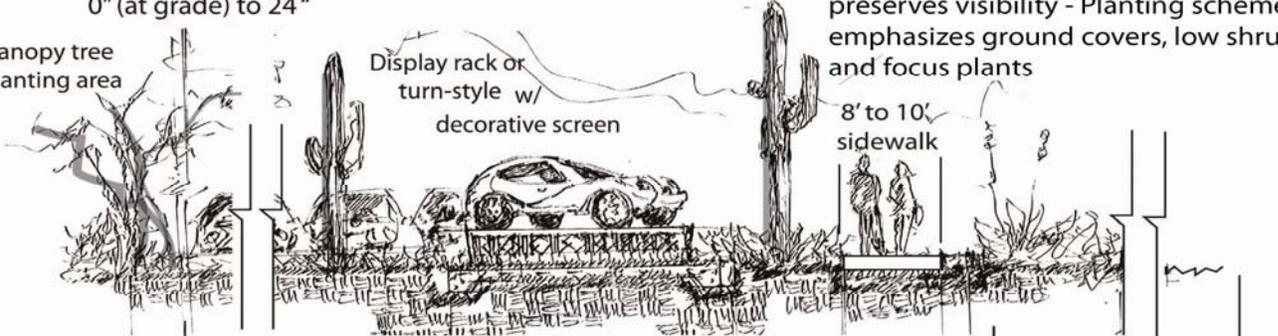
Pad height varies
0" (at grade) to 24"

Foreground planting area
preserves visibility - Planting scheme
emphasizes ground covers, low shrubs
and focus plants

Canopy tree
planting area

Display rack or
turn-style w/
decorative screen

8' to 10'
sidewalk



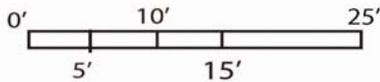
40'
Distance between display
pad and canopy tree

16' to 20'
maximum width
per vehicle

25'
setback

ROW

65'
Half street
130'
ROW



Graphic Scale is approximate
April 2010

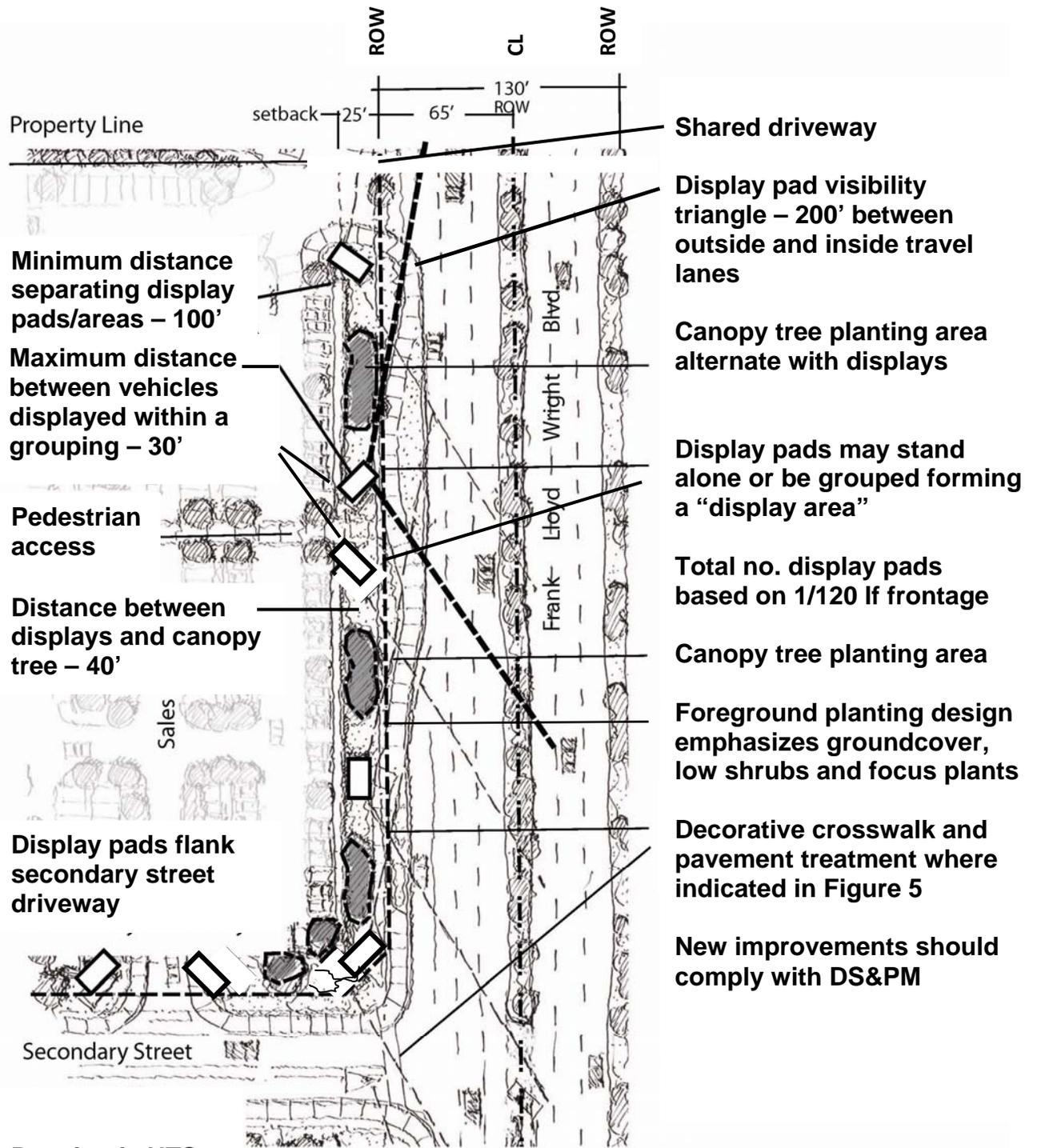
City of Scottsdale, Current Planning

Conceptual - Not for Construction

SECTION/ELEVATION

Figure 17

VEHICLE DISPLAY PAD LAYOUT



Minimum distance separating display pads/areas – 100'

Maximum distance between vehicles displayed within a grouping – 30'

Pedestrian access

Distance between displays and canopy tree – 40'

Sales

Display pads flank secondary street driveway

Secondary Street

Drawing is NTS

Shared driveway

Display pad visibility triangle – 200' between outside and inside travel lanes

Canopy tree planting area alternate with displays

Display pads may stand alone or be grouped forming a "display area"

Total no. display pads based on 1/120 lf frontage

Canopy tree planting area

Foreground planting design emphasizes groundcover, low shrubs and focus plants

Decorative crosswalk and pavement treatment where indicated in Figure 5

New improvements should comply with DS&PM

City of Scottsdale, Current Planning

Figure 18

ENCLOSED VEHICLE DISPLAY PAD CONCEPT

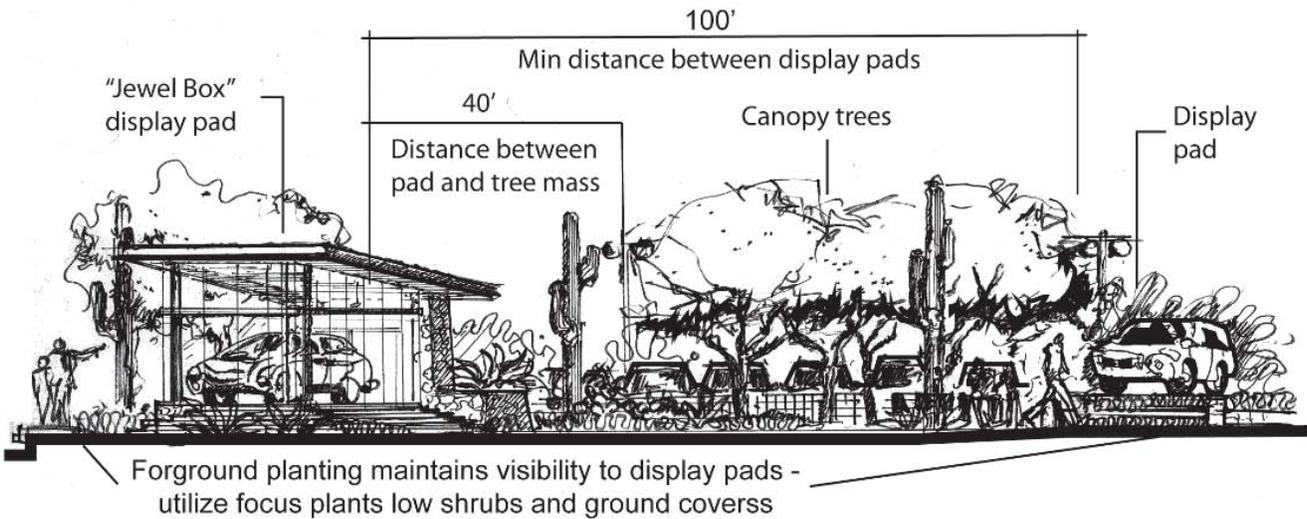


Figure 19

Drawing is conceptual not for construction and nts

ENCLOSED VEHICLE DISPLAY PAD SITING

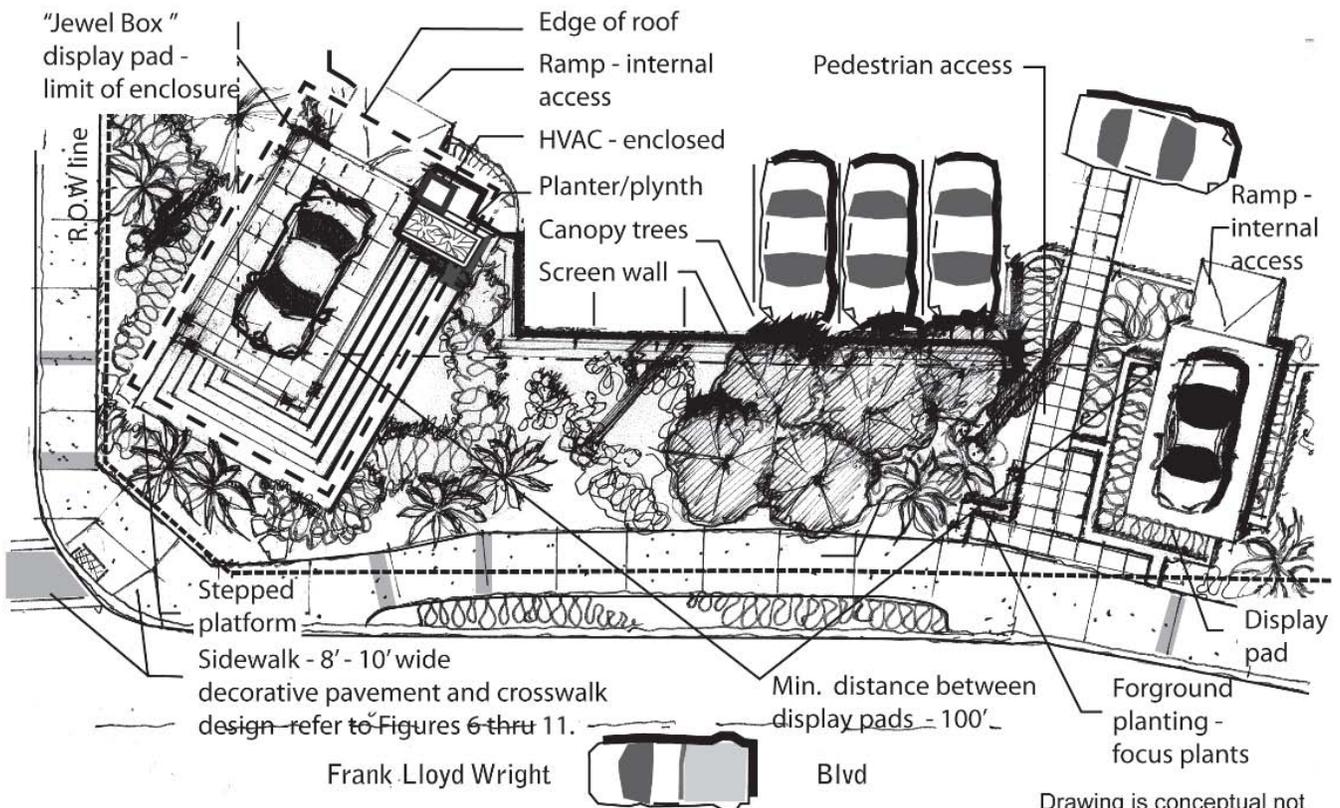


Figure 20

Drawing is conceptual not for construction and nts

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