

B. LANDSCAPE

B.1 LANDSCAPE CONCEPT – See Exhibit 1

The following Landscape Design Guidelines supplement the Laguna Ridge, City of Elk Grove, Specific Plan document, dated June 16, 2004. These guidelines are also intended to supplement the minimum requirements of the regulations per the City of Elk Grove Municipal Code, Zoning Code, development standards and other City policies.

Conditions of approval for Del Webb at Laguna Ridge tentative subdivision map (EG-03-479) dated 05/19/05 and the conditions of approval for the Grove at Laguna Ridge tentative subdivision map (EG-04-764) dated 05/19/05 are a part of the following Design Guidelines document.

The Design Guidelines reiterate design objectives of the above mentioned specific plan, establish development standards that ensure implementation of the design concept, and serve as zoning regulators for the development of the property within the Specific Plan boundary.

The planning concept for Laguna Ridge is implemented in two ways: (1) create a walkable pedestrian – oriented environment, (2) create community spaces in the form of Recreation Centers, parks and open space corridors, which allow residents of Laguna Ridge to come together to use and enjoy their shared community. The Refined Conceptual Landscape Plan as prepared for Phases I and II, as depicted in Exhibit 1. This same approach will be applied to Phases III and IV, and will be incorporated into this document at a later date.

B.2 PEDESTRIAN ENVIRONMENT

Pedestrian friendly environments within Laguna Ridge are created by providing usable pedestrian connections through community trails, paseos and safe, pleasant streetscenes. Residents of Laguna Ridge may walk from their home to community parks, a Recreation Center, a high school,

an elementary school, commercial areas, transit stops, and from one neighborhood to another via a meandering paseo or sidewalk, in many cases without crossing a major collector road. On arterial collector streets, there are striped bike lanes adjacent to the curb, and on local residential streets, bike lanes share the travel lane with vehicles. On Whitelock Parkway, there is a dedicated 14' wide Class I off-street bicycle/pedestrian combination trail which provides a major east-west connection. In addition to the bike lanes, several 8' wide meandering walkways within a 40' wide minimum width paseo / greenbelt provide north-south pedestrian and bicycle connections between Whitelock Parkway and Big Horn Boulevard. These paseos connect to residential neighborhoods and ultimately connect to the proposed Civic Center and community park. Seating and picnic areas are located along the Class I off-street bicycle/pedestrian trail as well as along the north-south paseos. In addition, large scale shade trees are planted along all paseos and walkways to help cool the sidewalk and paseos, and create a pleasant physical environment. There are two (2) pedestrian bridges over the grand parkway drainage corridor adjacent to Whitelock Parkway, which facilitates paseo connections from the meandering Class I trail to the north-south paseo systems. See the Grand Parkway Exhibits for pedestrian bridge locations. In addition there are five (5) pedestrian bridges crossing the wetlands riparian habitat mitigation area, facilitating additional pedestrian connections across this drainage corridor.

B.3 BIKEWAYS

There is an extensive Class I and Class II bike trail system proposed for Laguna Ridge. The Class I bike trail provides a major east-west connection between Bruceville and ultimately to Highway 99. The Class I bike trail features the following:

- 10'-0" wide meandering concrete bicycle trail with a 4'-0" wide adjacent decomposed granite pedestrian trail. (2' level area is

required on all sides of the bicycle trail.)

- Off-street – no closer than 10'-0" to streetscene curb
- 14'-0" vertical clearance is required above the bicycle trail
- Also, refer to Streetscene Section for Whitelock Parkway

Class II bike lanes are located along every arterial and provide a dedicated stripped 7'-0" or 8'-0" wide zone on both sides of the street. The Class II bike lanes feature the following:

- 5'-0" stripped bike lane plus gutter (8'-0" total) on Bruceville Road
- 4'-0" stripped bike lane plus gutter (7'-0" total) on (both sides of the street) on
 - Big Horn Boulevard
 - Laguna Springs Drive
 - Civic Center Drive
 - Lotz Parkway
 - Neighborhood collectors and local neighborhood streets do not include a dedicated stripped bike lane.
- Elk Grove Boulevard- 14' wide Class I off street bikeway.
- Refer to streetscene sections for all streets above.

B.4 LANDSCAPE DESIGN ELEMENTS

Landscape design elements, which include the major planting and thematic hardscape features that occur at the community and neighborhood level, establish and reinforce the design theme and community feeling for Laguna Ridge. Major thematic elements such as stone monument walls at entries, planter walls, theme structures, special paving, thematic lighting and heritage trees set the theme for Laguna Ridge. Streetscene design and the relationship of the grand parkway and the greenbelt paseo system to the community also serve to enforce the unique identity of Laguna Ridge, setting it apart from other communities.



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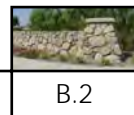
August 3, 2005

Exhibit 1 Conceptual Landscape Plan



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Scale 1" = 500'



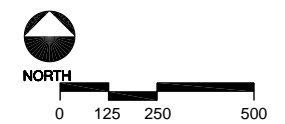
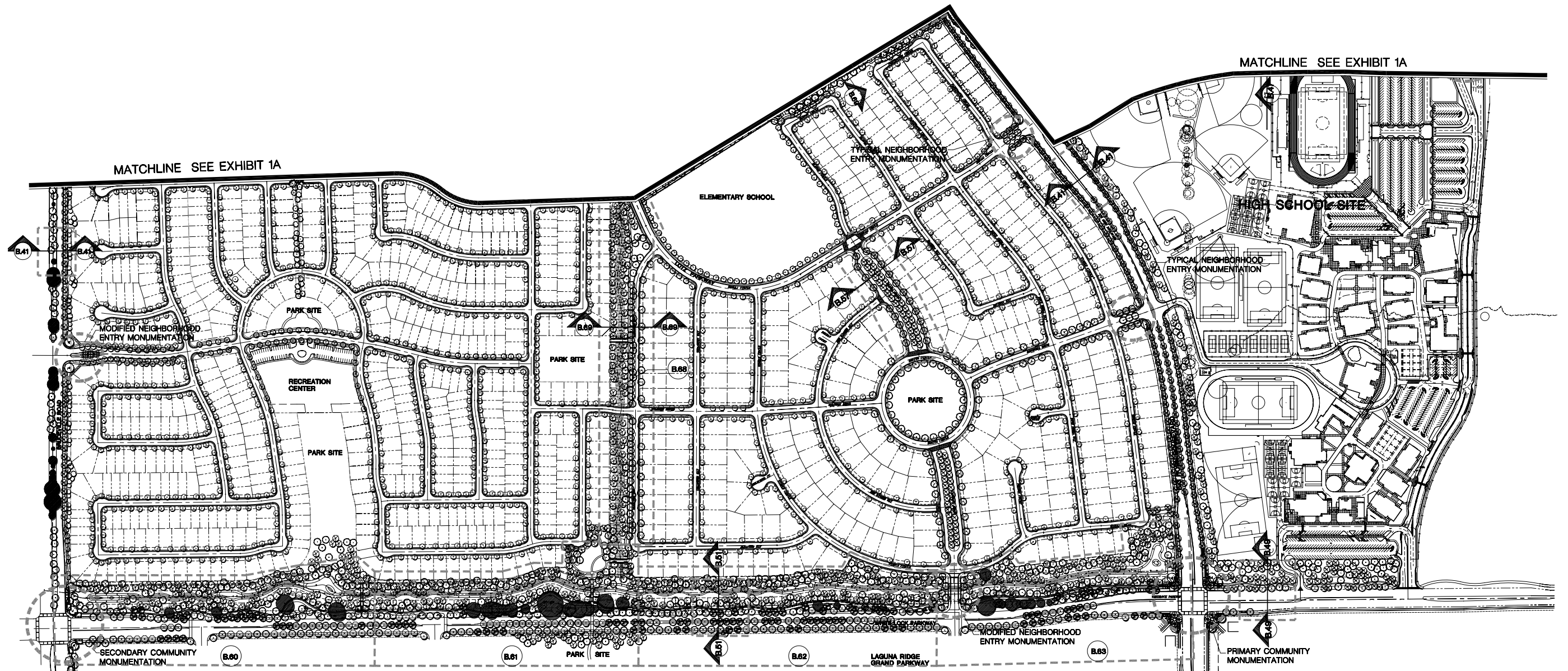
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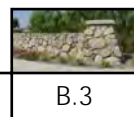
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Exhibit 1 Conceptual Landscape Plan



Scale 1" = 500'



B.3

B.5 COMMUNITY MONUMENTATION – See Exhibits 2, 3, 4, 5, 6, 7, 8, 9, and 10

Community monumentation elements are located at community entry points and at key intersections to provide a sense of arrival and establish the identity of Laguna Ridge Phase I and II. The monumentation elements are developed at a hierarchy of scales consistent with their location and relationship to community and neighborhood features. Thematic materials, with local historical significance, textures and colors are repeated in all monuments hierarchies to reinforce the identity of Laguna Ridge as a distinct community. To further define the community, thematic rail fencing with stone pilasters will run along Whitelock Parkway and along the greenbelt and paseo corridors.

With the exception of direction and residential street signs for traffic control, all permanent monumentation signage are constructed of natural and natural appearing materials such as natural stone man-made stone and wood and set within a thematic landscape setting.

Community Entry Monumentation within Laguna Ridge is located at the following intersections and are classified as follows (Phases III and IV Entry Monumentation will be in addition to the following):

- District Monumentation – Three (3) locations
 - At Bruceville Road and Civic Center Drive
 - At Civic Center Drive and Big Horn Boulevard
 - At Civic Center Drive and Laguna Springs Drive
- Primary Community Monumentation – One (1) location
 - At Whitelock Parkway and Big Horn Boulevard
- Secondary Community Monumentation – Three (3) locations
 - At Lotz Parkway and Laguna Springs Drive
 - At Lotz Parkway and Big Horn Boulevard
 - At Bruceville Road and Whitelock Parkway

- Neighborhood Entry Monumentation – Nine (9) locations
 - Three (3) locations on Civic Center Drive
 - Two (2) locations on Bruceville Road
 - Three (3) locations on Big Horn Boulevard
 - One (1) location on Lotz Parkway
- Up-graded Neighborhood Entry Monumentation – Two (2) Locations
 - One (1) location on Bruceville Road
 - One (1) location on Whitelock Parkway

B.5.1 District Monumentation – See Exhibits 2 and 3

These monumentation occur in three (3) locations along Civic Center Drive, at the intersections of Bruceville Road, Big Horn Boulevard and Laguna Springs Drive. The district monumentation feature a 55’0” wide setback at all corners, and include the following elements:

- 18” high stone seat walls with concrete cap.
- Stone pilasters with concrete cap, with streetscene thematic rail fencing.
- Thematic heavy timber craftsman style entry structures with stone columns (all corners).
- Specimen trees, - one (1) at each corner (60” box)
- Pedestrian enriched paving (interlocking pavers).
- Vehicular enriched paving in crosswalks (interlocking pavers).
 - Community accent paving - interlocking pavers with white concrete band (add no Lamp black).
 - All interlocking pavers to be installed per city of Elk Grove standard detail.
- Vertical evergreen backdrop trees – 36” box minimum.
- Secondary walkway connections to adjacent land uses.
- Enriched landscaping at entry threshold areas. 25% 15 gallon shrubs, 75% 5 gallon shrubs.

- Solid community wall at back of the corner setback.
- Theme lighting.

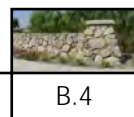
B.5.2 Primary Community Monumentation – See Exhibits 4 and 5

This monumentation occurs at one (1) location at the intersection of Whitelock Parkway and Big Horn Boulevard. The primary community monumentation features a 75’-0” wide setback at all corners and include the following elements:

- 18” high seat walls with concrete cap.
- Thematic heavy timber (craftsman style) entry structures with stone columns.
- Specimen trees – two (2) at each corner (60” box)
- Transit stops with benches and shade structures.
- Plaza accent trees (48” box).
- Commercial monument feature (at commercial land uses) including stone seat wall with concrete cap and sculpture opportunity.
- Pedestrian enriched paving (interlocking pavers).
- Vehicular enriched paving in crosswalks (interlocking pavers).
- Pedestrian Plaza at commercial land uses.
- Enriched landscaping at entry threshold areas – 25% 15 gallon shrubs, 75% 5 gallon shrubs.
- Theme lighting.

B.5.3 Secondary Community Monumentation - See Exhibits 6 and 7

The secondary community monuments occur at three (3) locations, at Laguna Ridge Road and Laguna Springs Drive, at Laguna Ridge Road and Big Horn Boulevard and at Bruceville Road and Whitelock Parkway. The secondary community monumentation feature a 55’-0” wide setback at all corners and include the following elements:



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- 18" high stone seat/planter wall with concrete cap.
- Stone pilasters with concrete cap, with streetscene thematic rail fence.
- Thematic heavy timber (craftsman style) entry structures with stone columns – two (2) at each corner spanning the sidewalk.
- Specimen trees – one (1) at each corner (60" box)
- Pedestrian enriched paving (interlocking pavers).
- Vehicular enriched paving in cross walks (interlocking pavers).
 - Community accent paving - interlocking pavers with white concrete band (add no Lamp black).
 - All interlocking pavers to be installed per city of Elk Grove standard detail.
- Vertical evergreen backdrop trees – all corners except at The Grand Parkway.
- Community walls where planning areas dictate.
- Enriched landscaping at entry threshold areas – 25% 15 gallon shrubs and 75% 5 gallon shrubs.
- Theme lighting.

B.5.4 Neighborhood Entry Monumentation – See Exhibits 8a, 8b, 8c, 9, 10 and 11

The neighborhood entry monuments occur at nine (9) locations, where neighborhood entries occur along all perimeter collector streets. These neighborhood entries feature an expanded setback at all corners, and include the following elements:

- 2'-8" high stone wall with concrete cap.
- Thematic heavy timber (craftsman style) entry structure with stone columns (one (1) each corner).
- Specimen trees – one (1) at each corner at collector road intersection (48" box minimum).
- Pedestrian enriched paving (interlocking pavers).

- Vehicular enriched paving in cross walks and entry road (interlocking pavers).
 - Community accent paving - interlocking pavers with white concrete band (add no Lamp black).
 - All interlocking pavers to be installed per city of Elk Grove standard detail.
- 2'-6" high hedge rows – 5 gallon minimum.
- Stone-faced community walls along entry road.
- Neighborhood entry accent trees – (36" box minimum).
- Enriched landscaping at entry area – 25% 15 gallon and 75% 5 gallon.
- Vines on community wall along entry road, 5 gallon – 10'-0" on center spacing.
- Expanded landscape development zone each side of entry road.
- Median island with shrubs.
- 18" wide color exposed aggregate concrete maintenance strip around median island.

B.5.5 Up-Graded Neighborhood Entry Monumentation - See Exhibit 8d

The up-graded neighborhood entry roads occur at one (1) location on Bruceville Road and at one (1) location on Whitelock Parkway. All the above elements per the neighborhood entry apply with the following exceptions:

- Developers are encouraged to create up-graded neighborhood entries to provide variety.
- All up-graded neighborhood entries should be designed utilizing the community landscape design features as shown on pages B.20 - B.26 and per the design amenities.
- Entry on Whitelock Parkway has no median island and features a stone wall with thematic bridge railing and craftsman style theme structures along the streetscene edge.

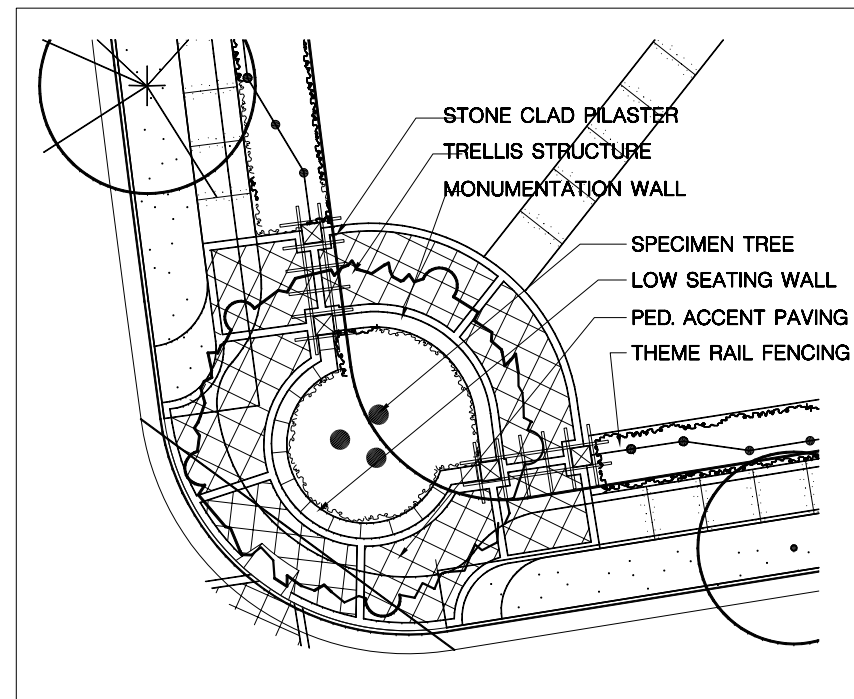


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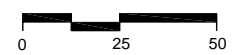
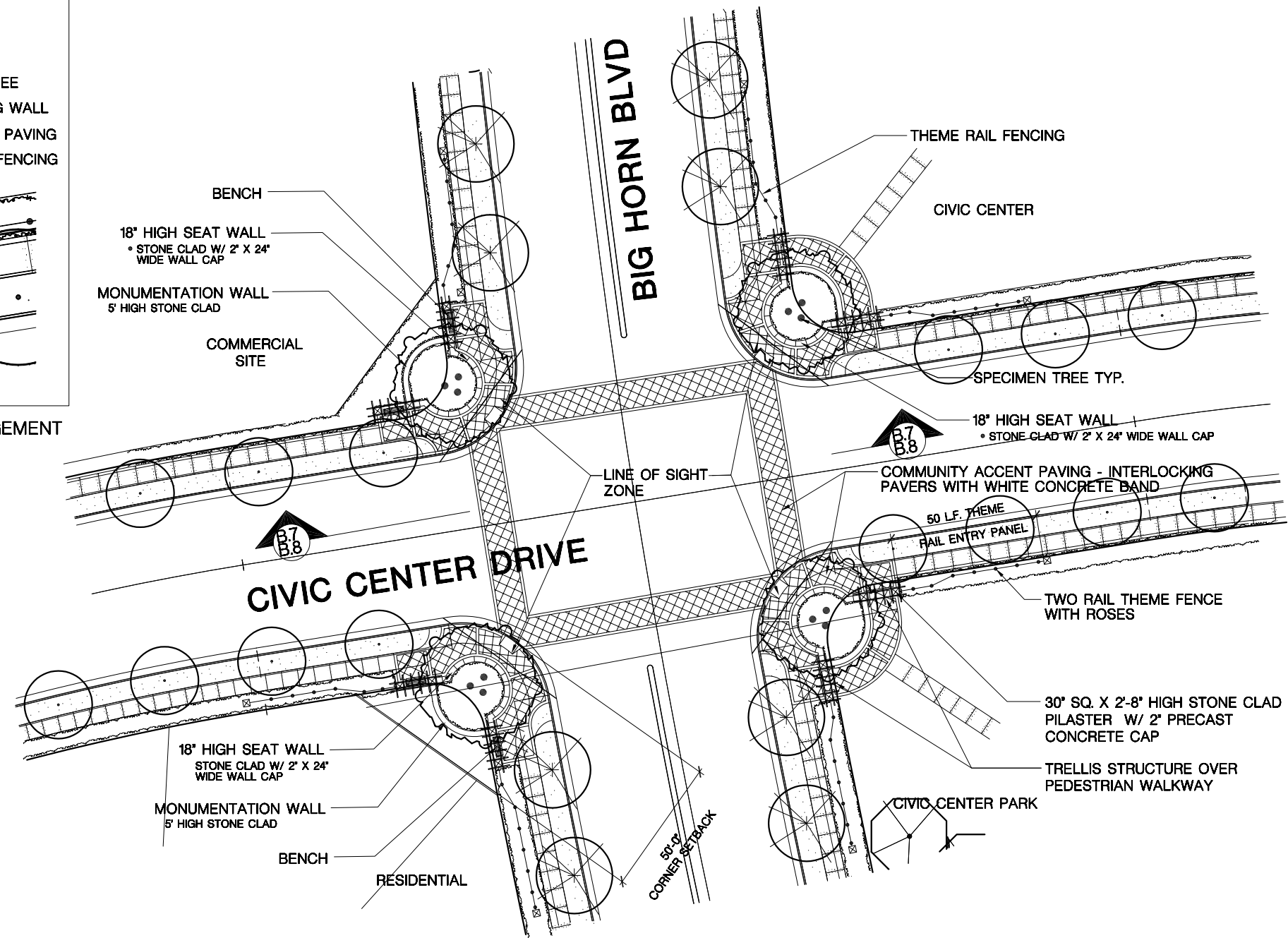
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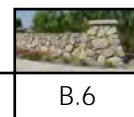
Exhibit 2 District Monumentation Plan



CORNER ENLARGEMENT



Scale 1" = 50'



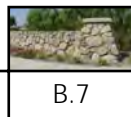
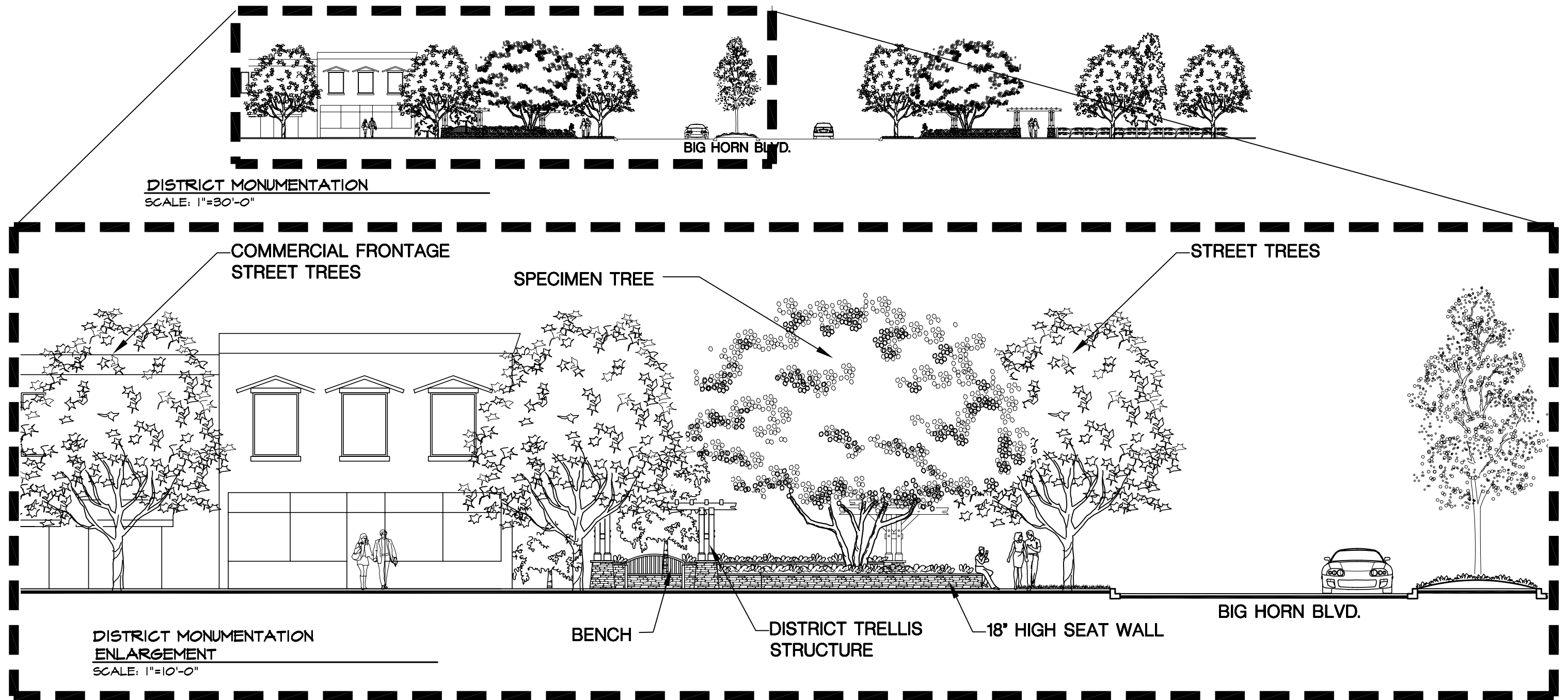
B.6

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Exhibit 3 District Monumentation Elevation

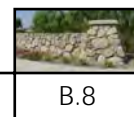
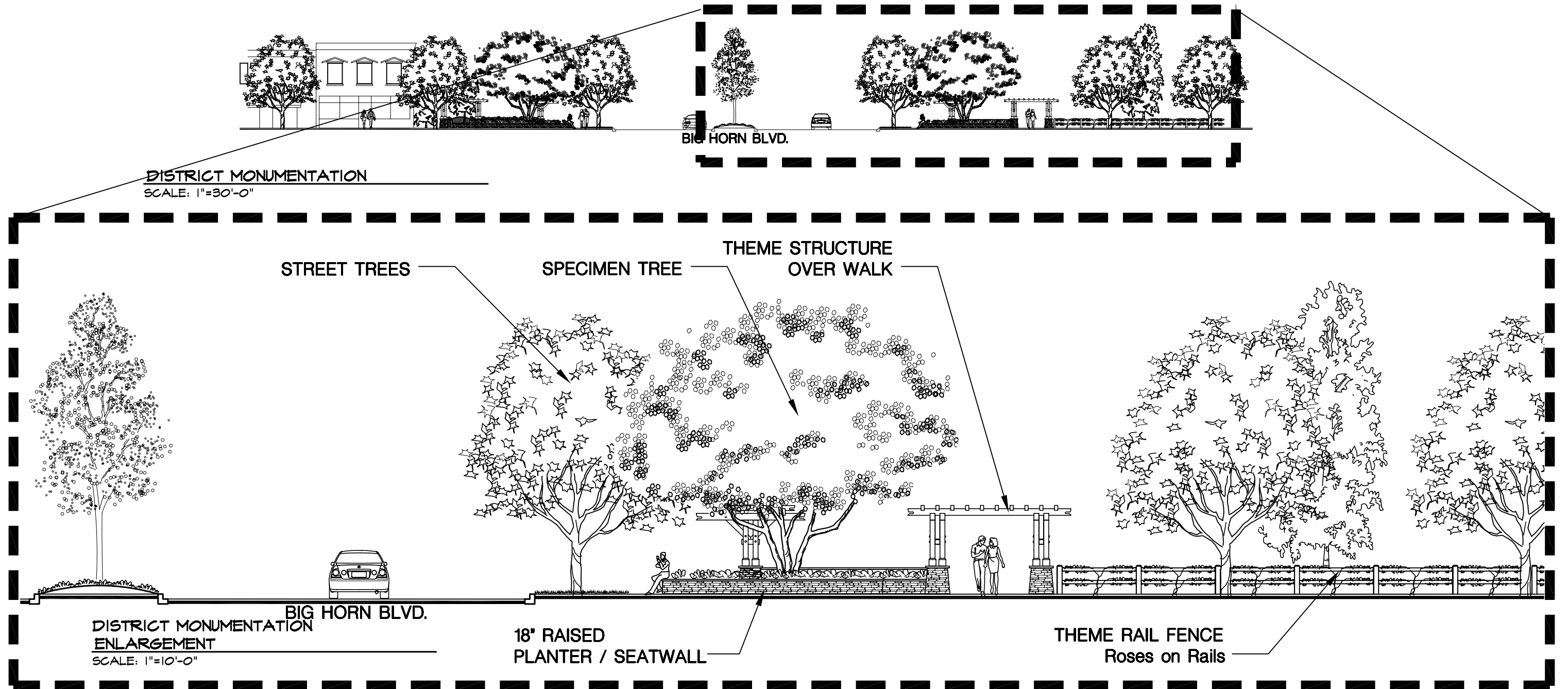


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Exhibit 3 District Monumentation Elevation

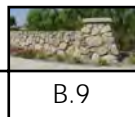
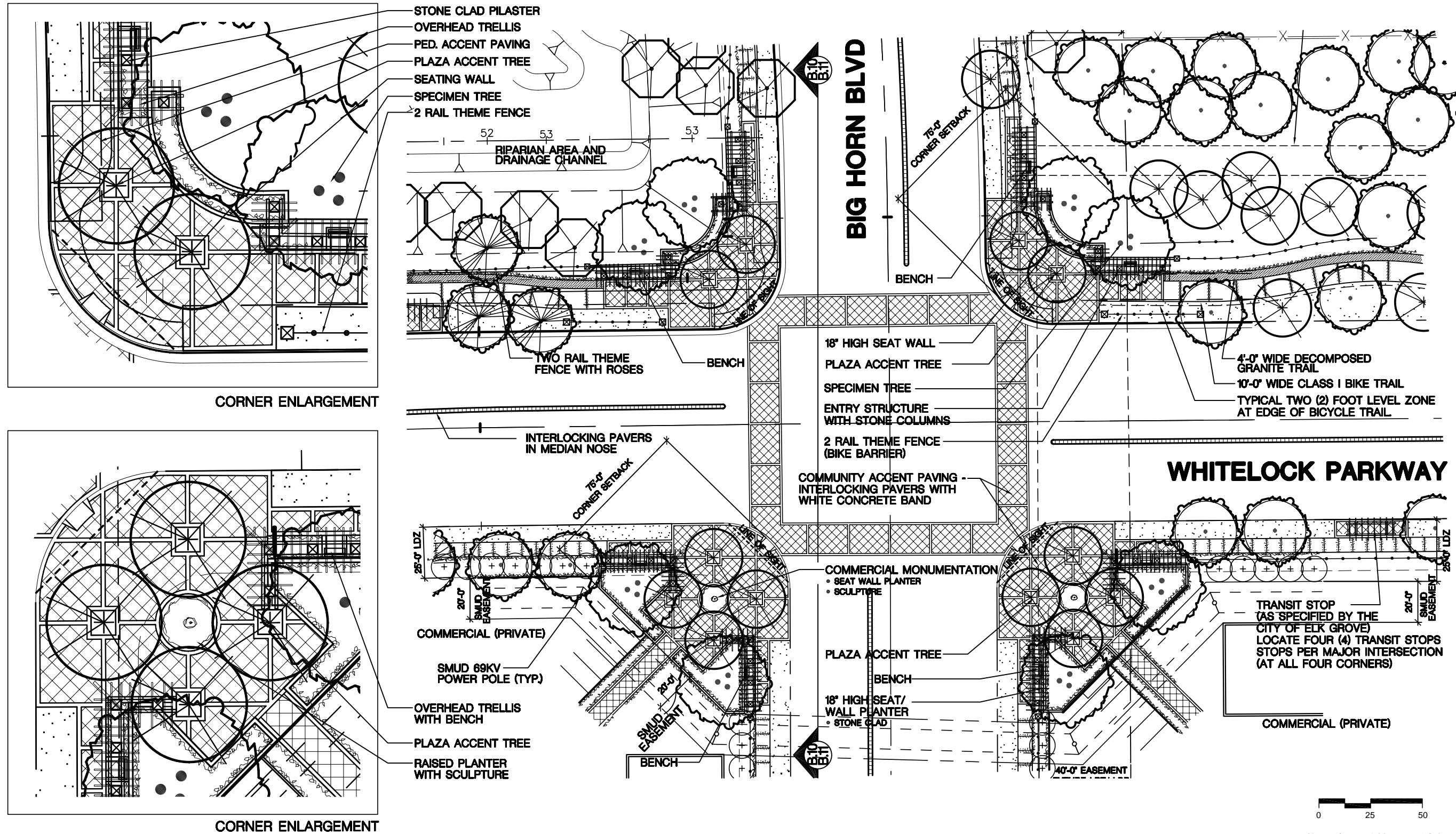


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Exhibit 4 Primary Monumentation Plan

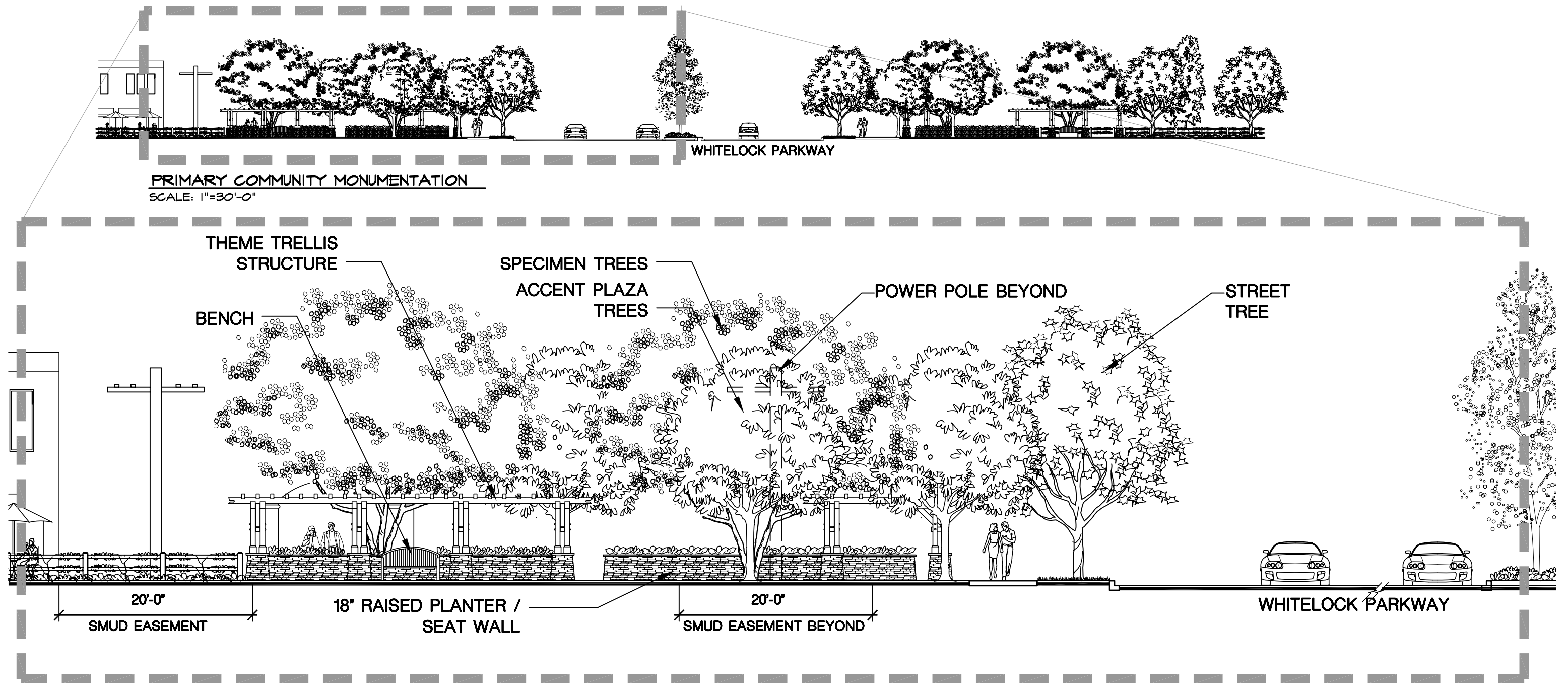


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Exhibit 5 Primary Monumentation Elevation



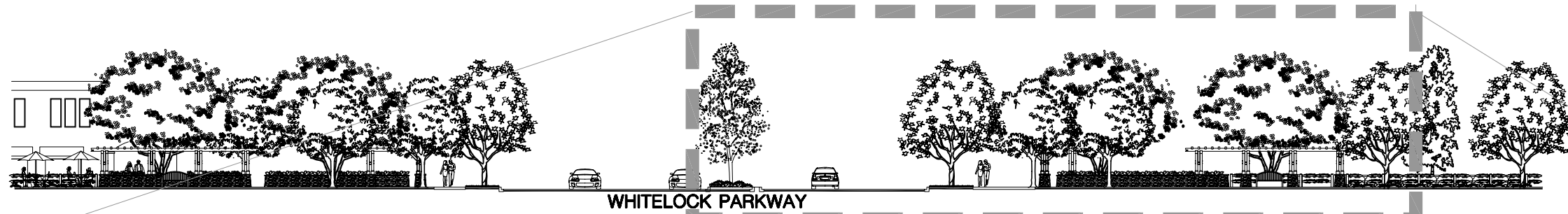
**PRIMARY COMMUNITY MONUMENTATION
ENLARGEMENT**
SCALE: 1"=10'-0"

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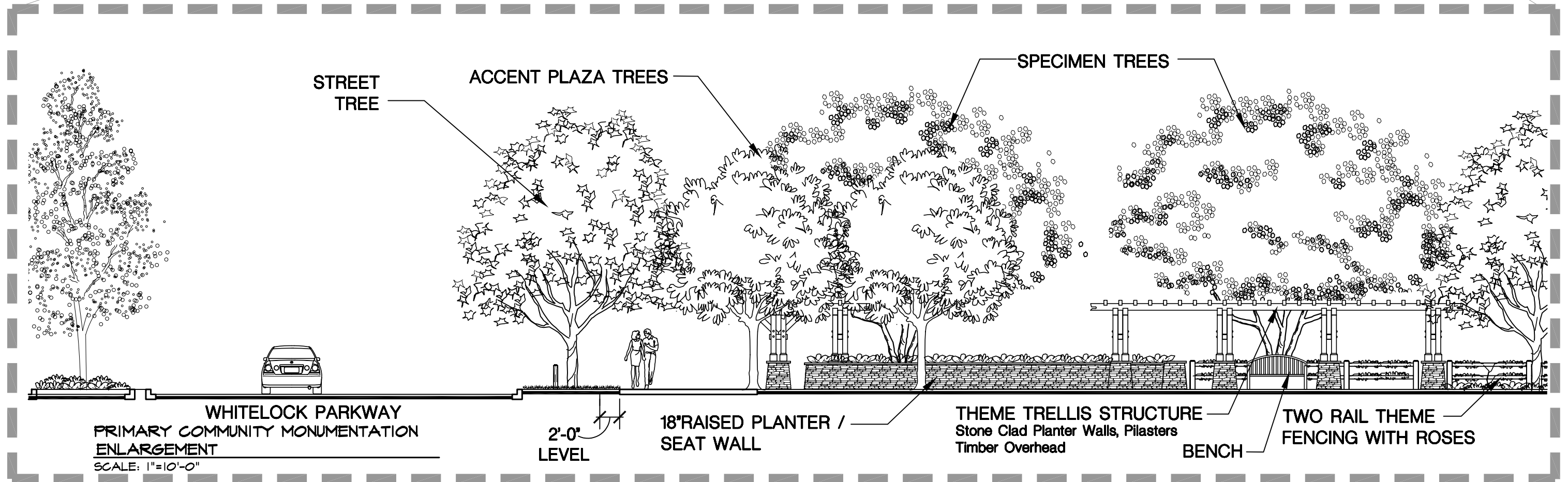
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Exhibit 5 Primary Monumentation Elevation



PRIMARY COMMUNITY MONUMENTATION
SCALE: 1"=30'-0"



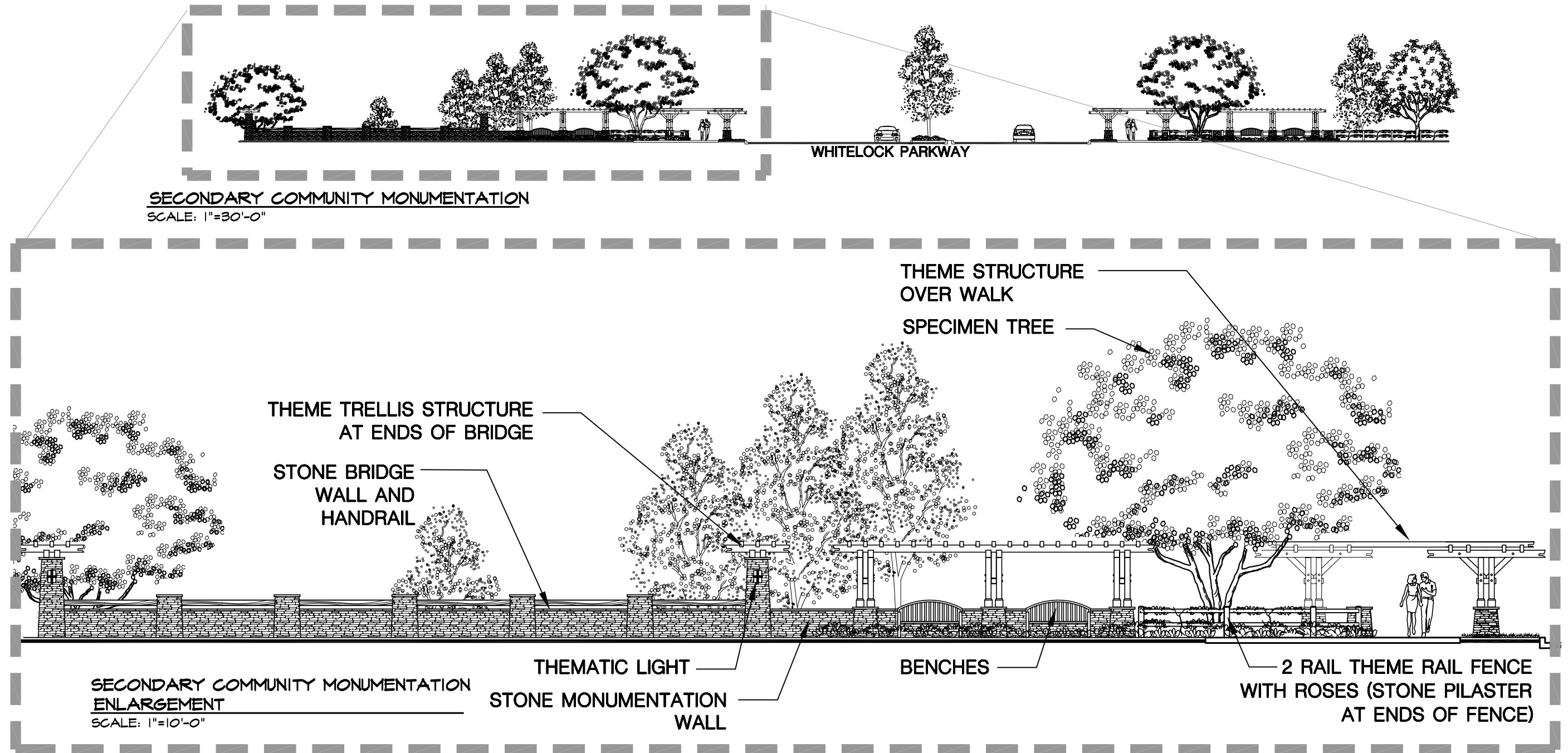
**WHITELOCK PARKWAY
PRIMARY COMMUNITY MONUMENTATION
ENLARGEMENT**
SCALE: 1"=10'-0"

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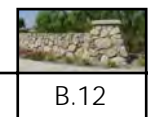
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Exhibit 6 Secondary Monumentation Plan



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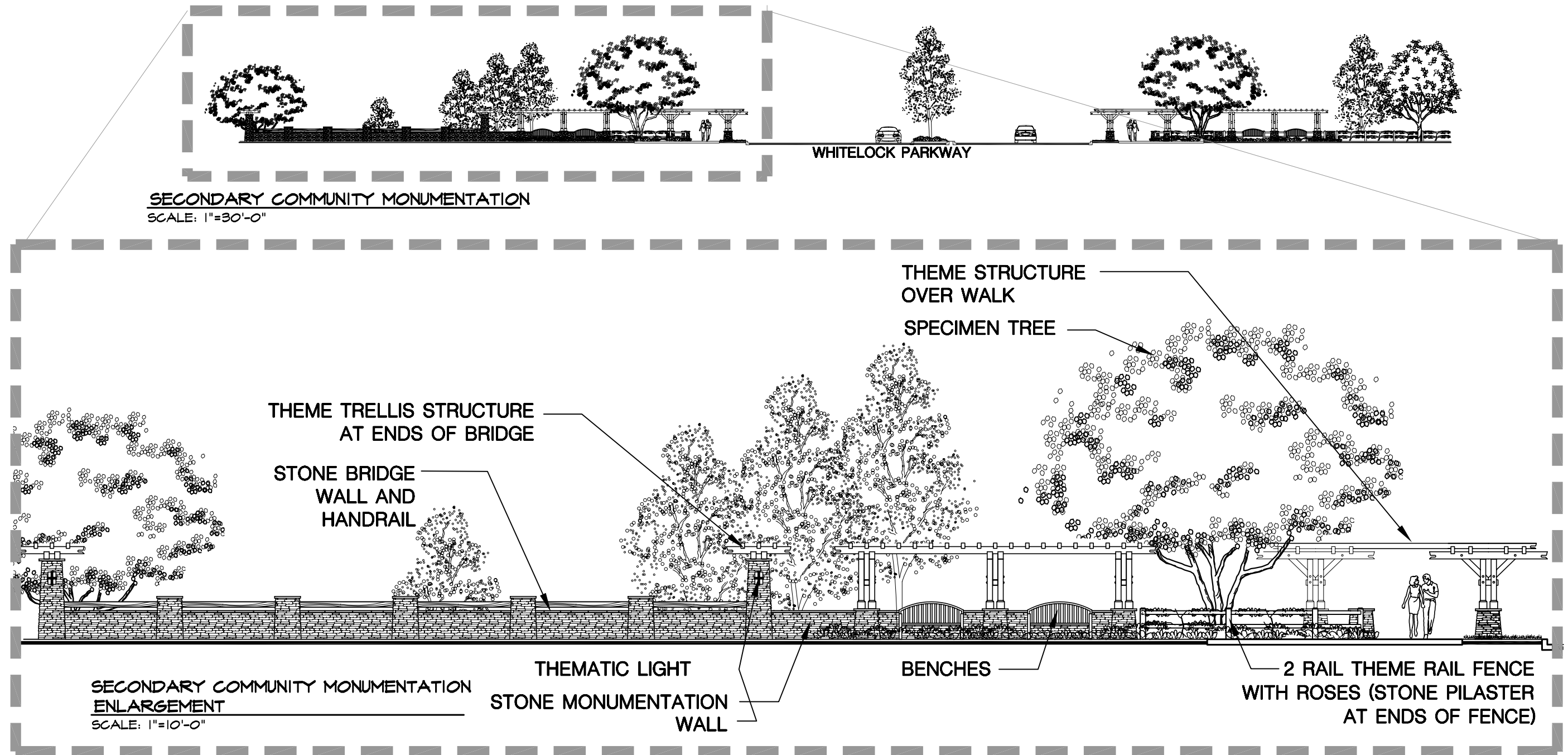
B.12

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Exhibit 7 Secondary Monumentation Elevation

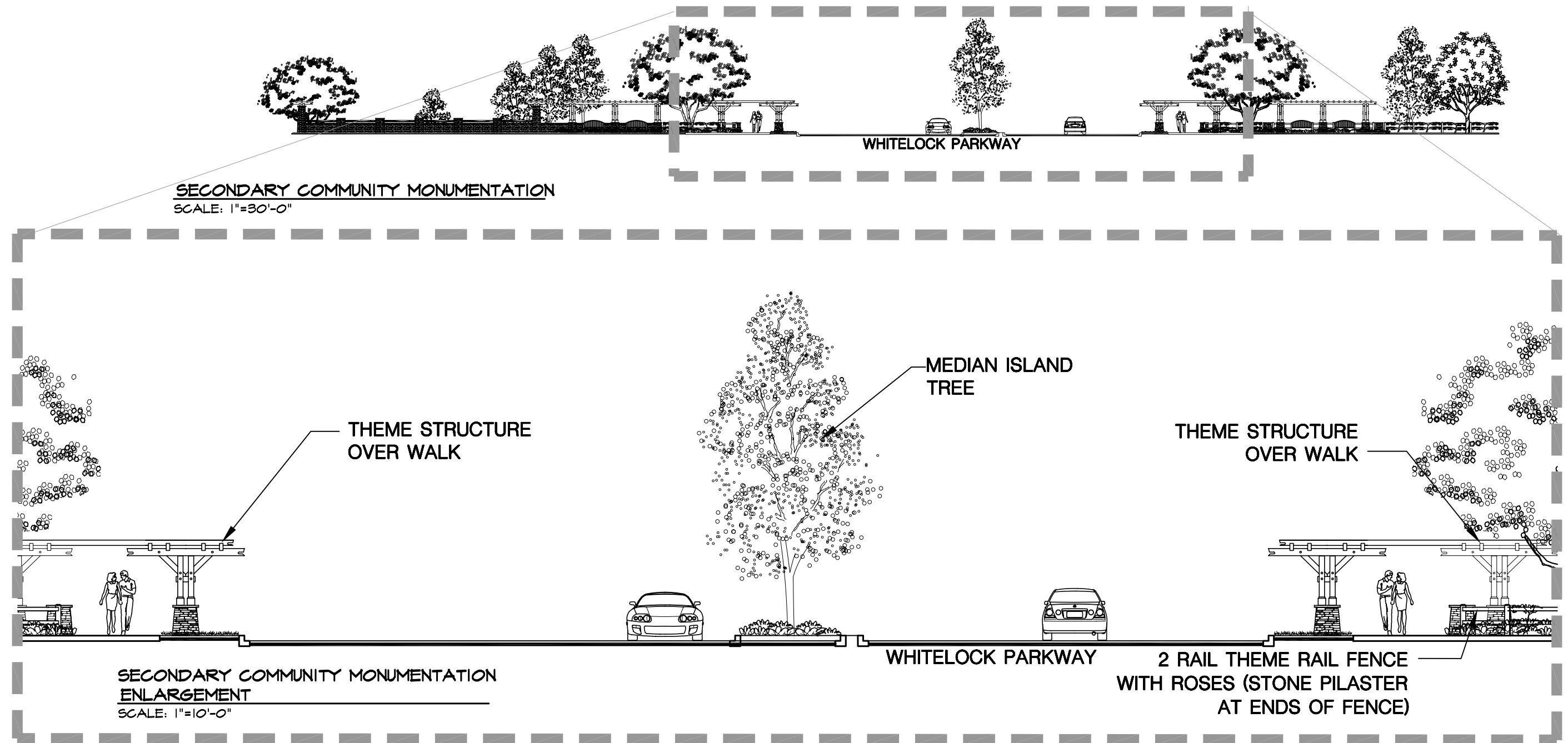


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Exhibit 7 Secondary Monumentation Elevation

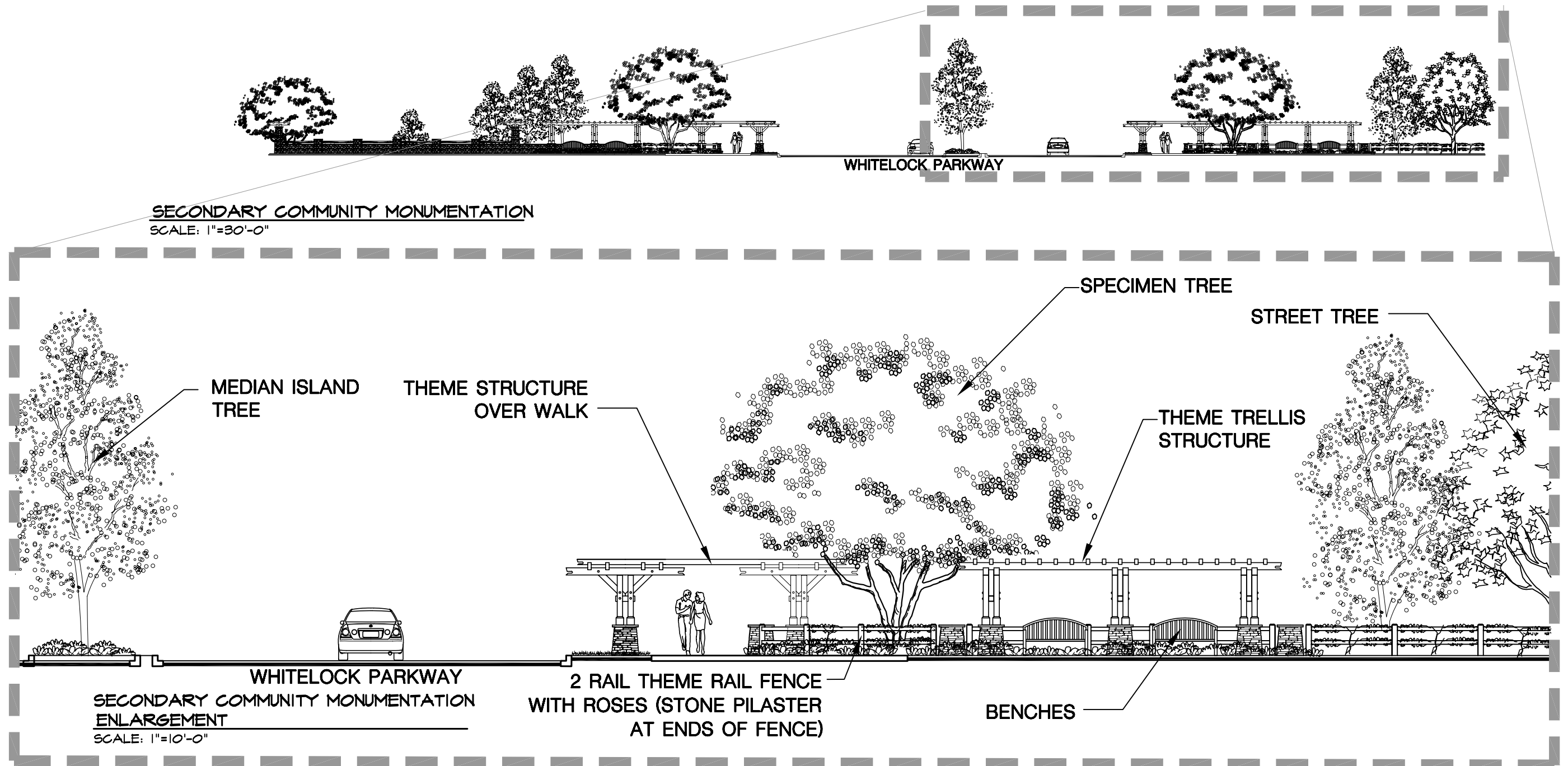


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Exhibit 7 Secondary Monumentation Elevation

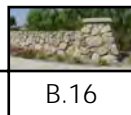
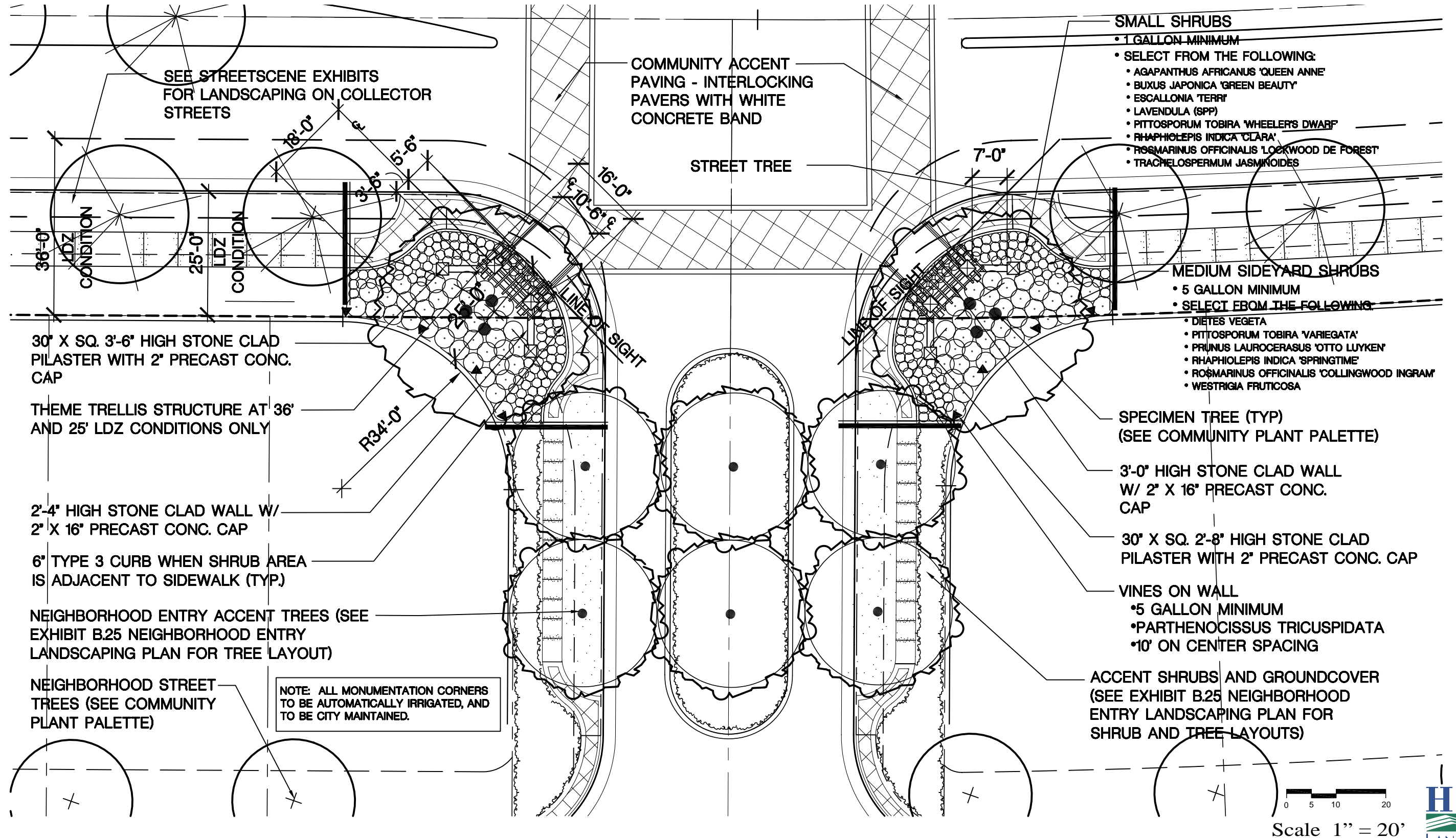


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Exhibit 8a Neighborhood Monumentation Plan 'A'



B.16

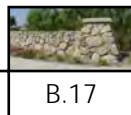
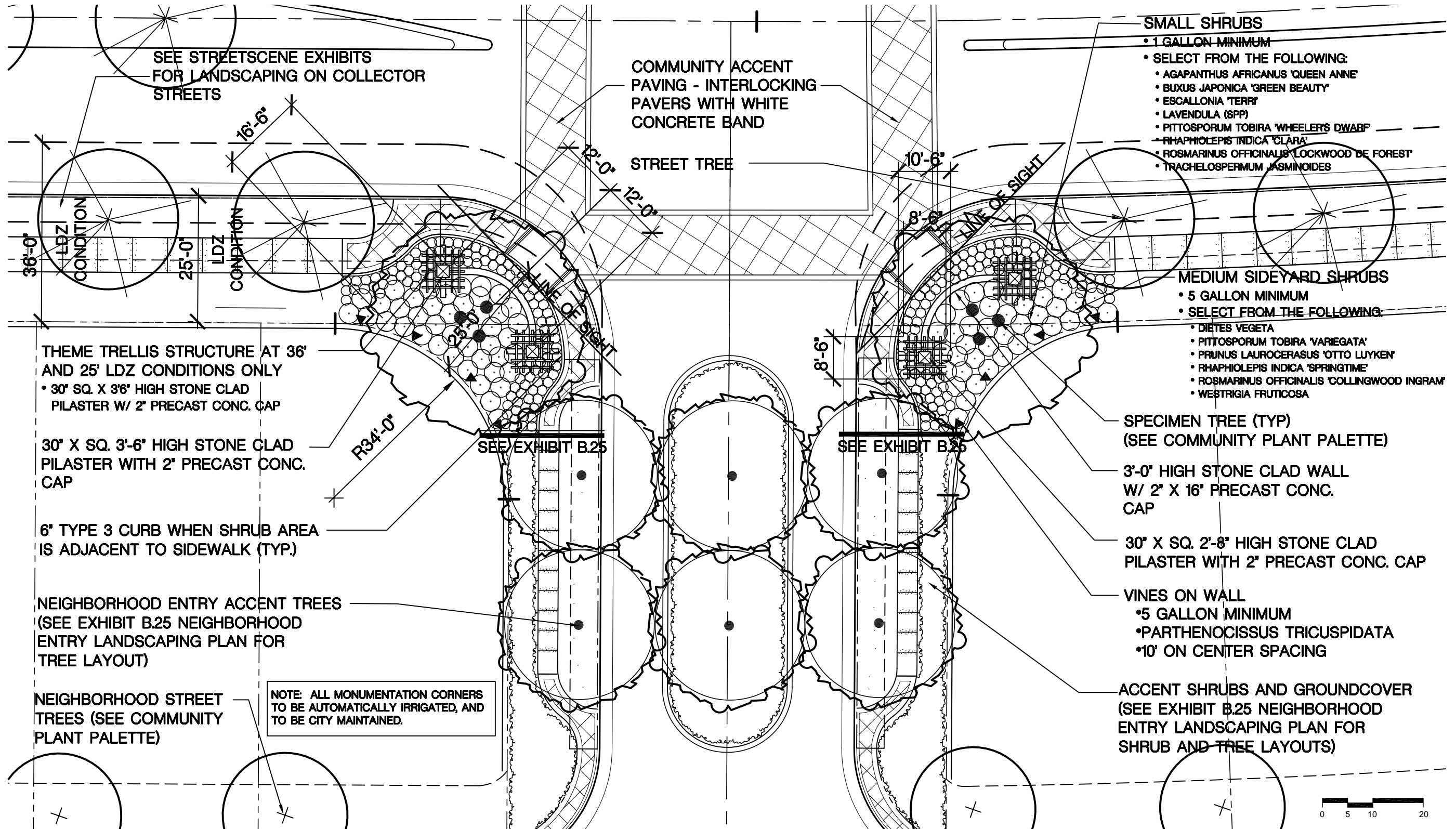


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Exhibit 8b Neighborhood Entry Plan 'B'



B.17

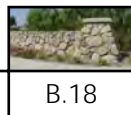
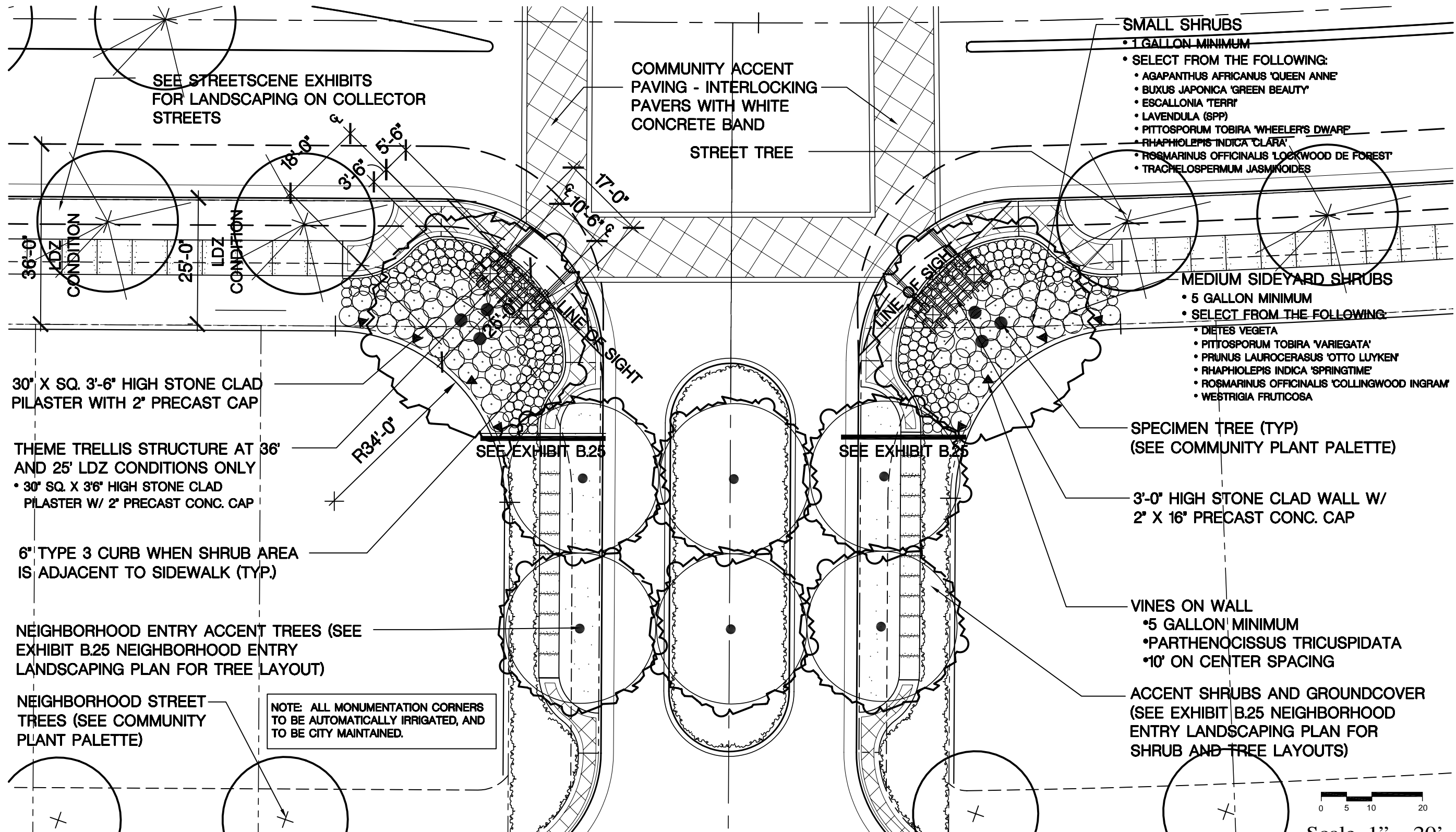


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Exhibit 8c Neighborhood Entry Plan 'C'



B.18

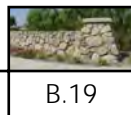
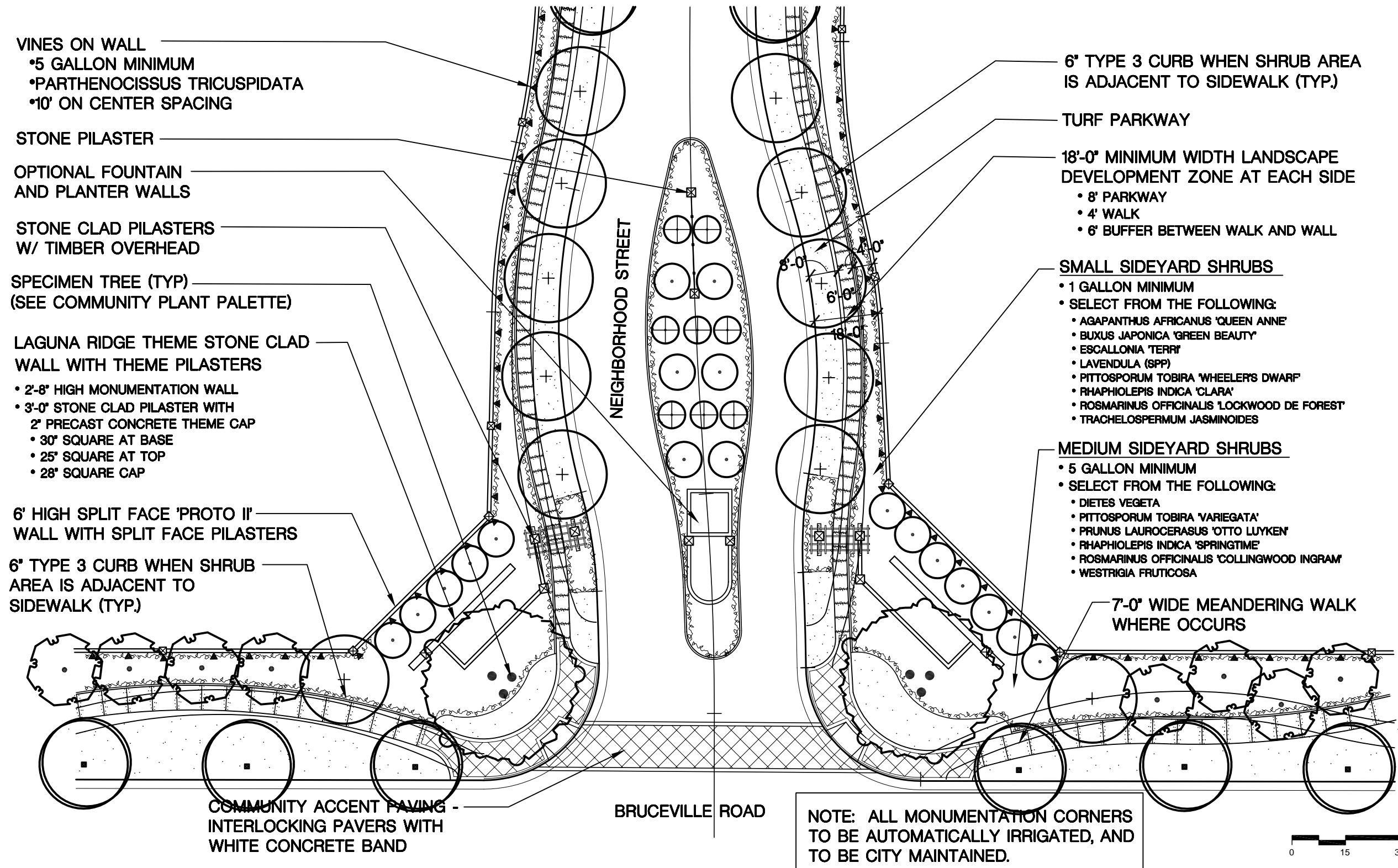


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Exhibit 8d Neighborhood Entry Plan 'D'

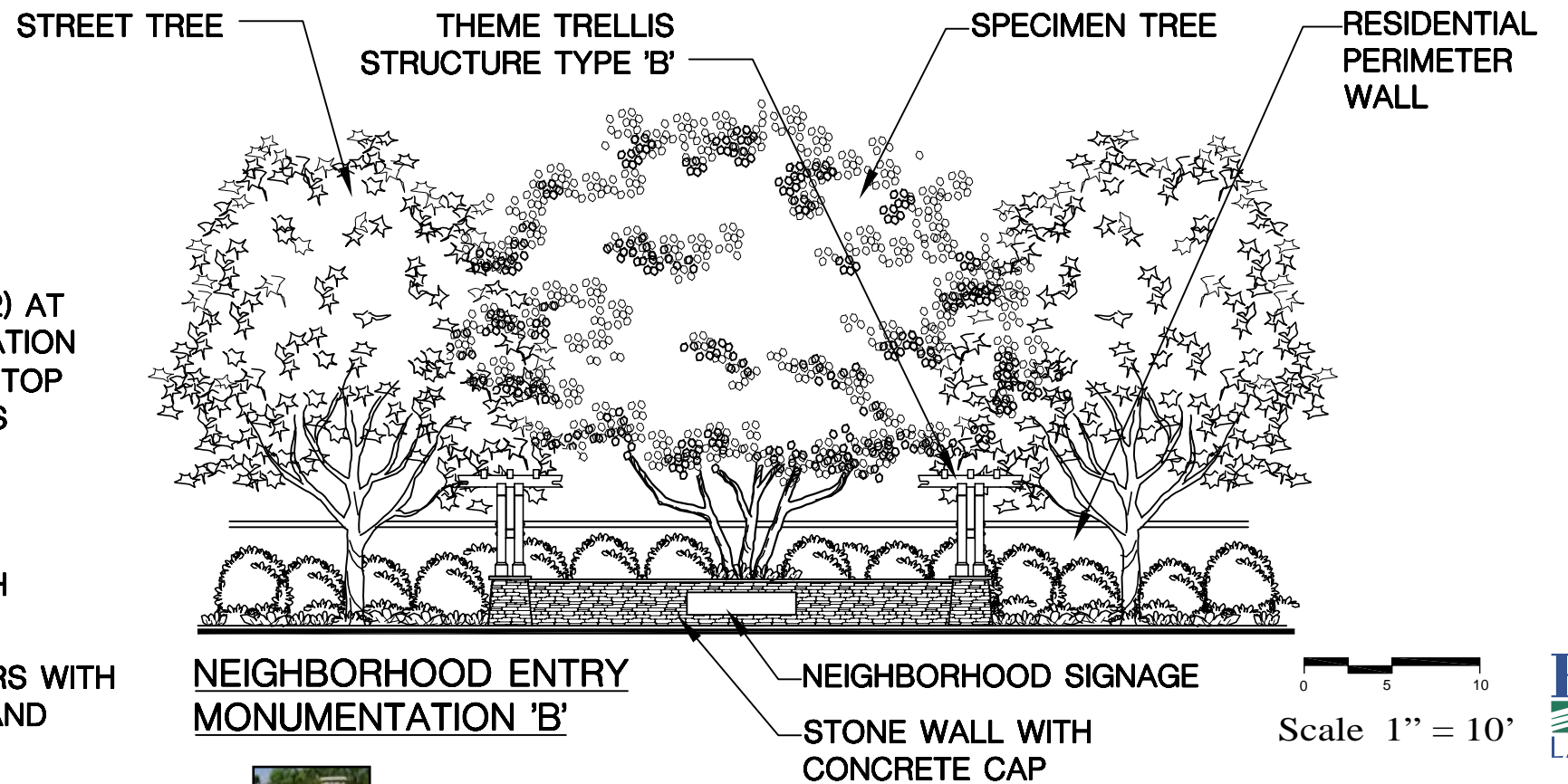
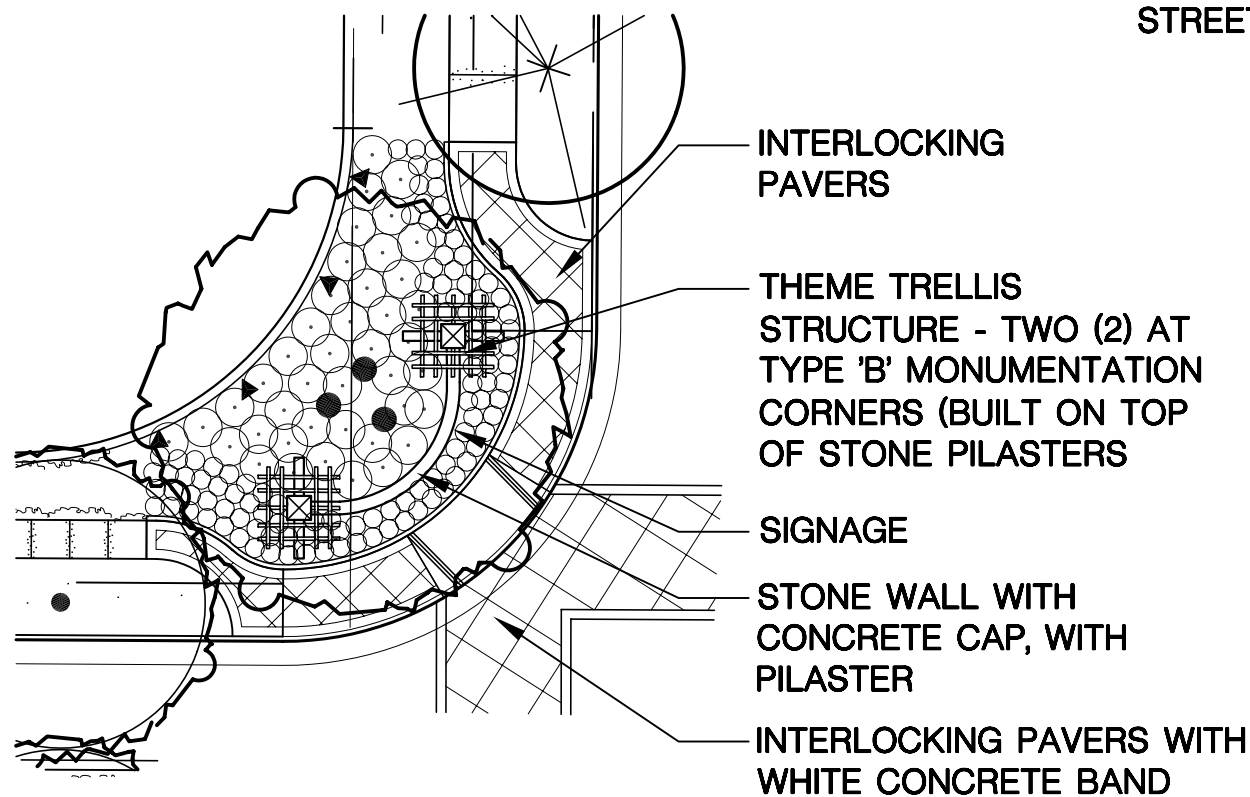
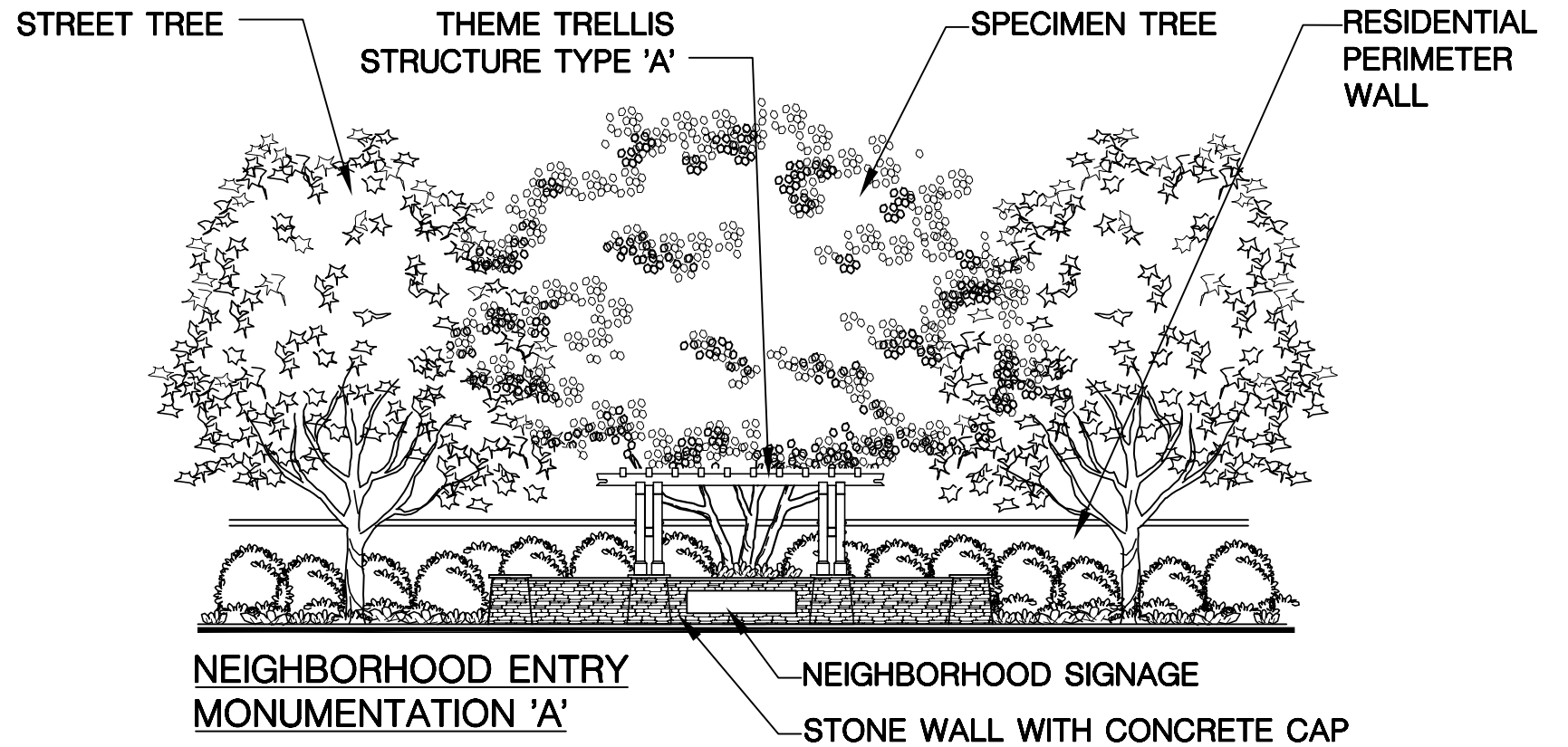
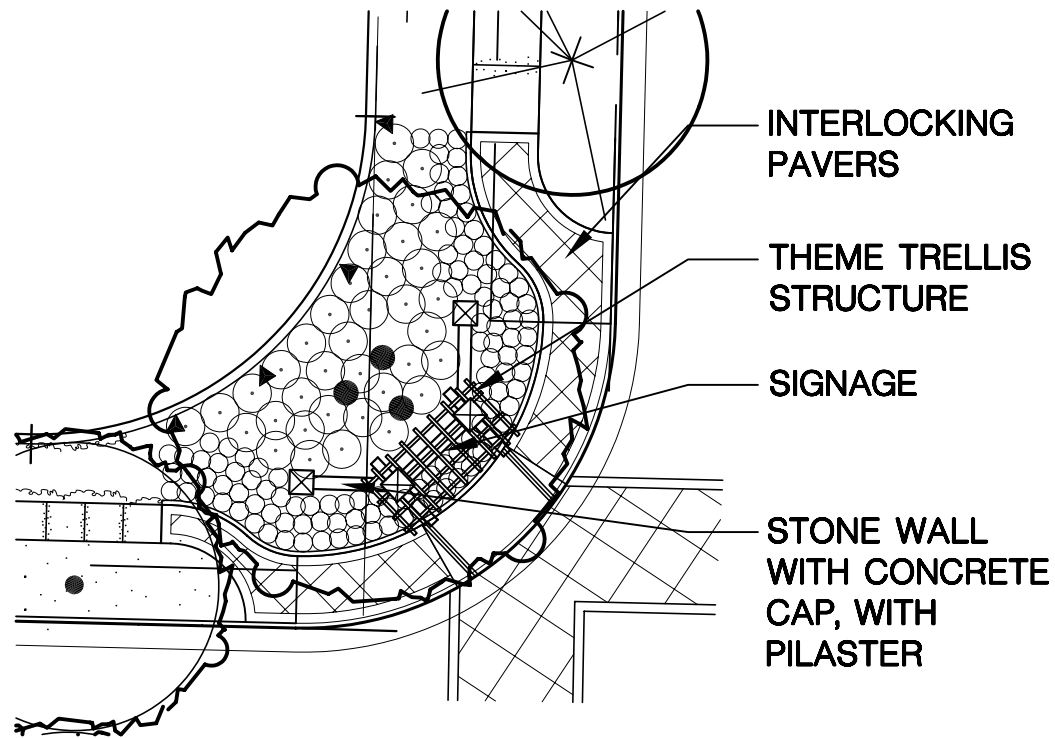


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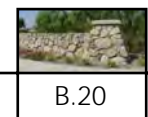
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Exhibit 9 Neighborhood Entry Plans and Elevations



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Scale 1" = 10'

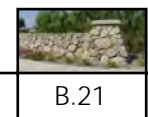
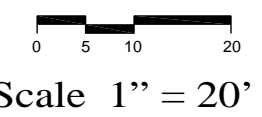
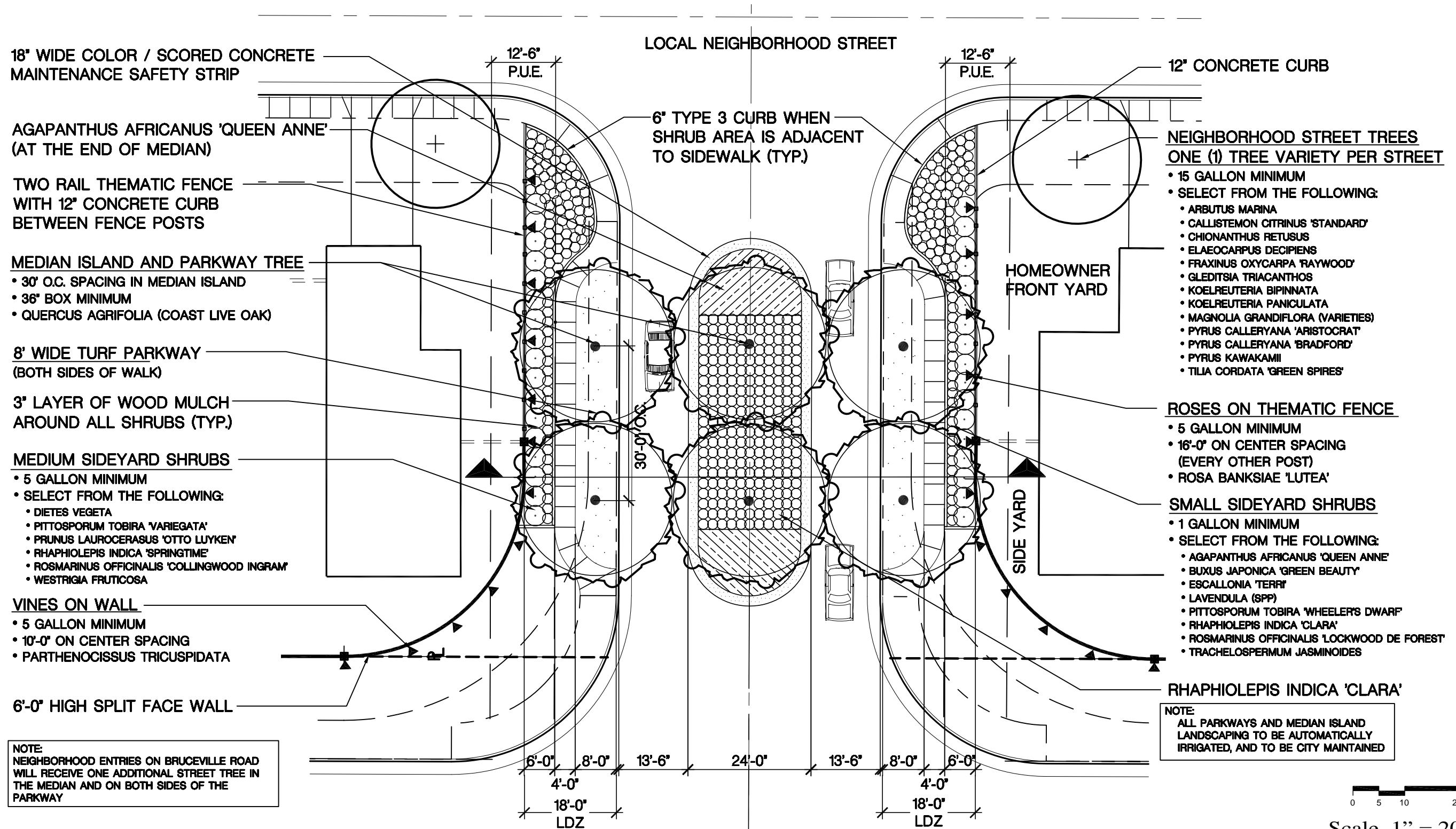


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Exhibit 10 Neighborhood Collector Landscape Plan

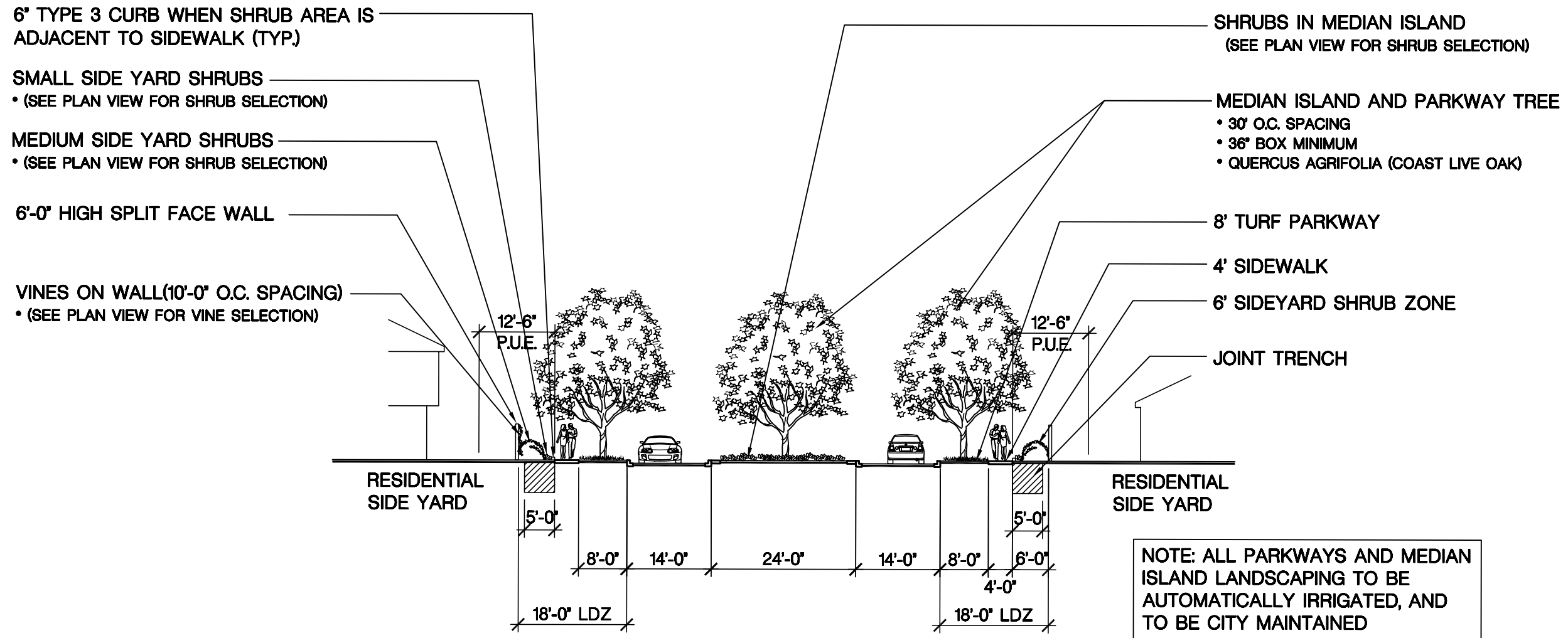


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Exhibit 11 Neighborhood Collector Landscape Section



0 5 10 20
Scale 1" = 20'



B.6 COMMUNITY WALLS AND FENCES – See Exhibits 12 and 13

Walls and fences are used in Laguna Ridge to provide safety and privacy along arterial and collector roads, and also delineate homeowner property boundaries. Where perimeter walls are used along arterials, and collector roads, a solid 6'-0" high split face block "Proto II" wall system shall be used. Where homeowner property line walls are used along the Grand Parkway, paseos and the mitigation channel edge, an ornamental iron fence shall be used, in lieu of solid walls. Other Residential property lines shall be fenced with either a standard wood fence or an enhanced wood fence. See Exhibit 12 Community Walls and Fences Plan for wall and fence locations and Exhibit 13 for Community Walls and Fencing Elevations.

General guidelines for use of fences and walls are provided below:

- Solid split face community walls are located at the back of the streetscene Landscape Development Zone (LDZ) on Bruceville Road, Big Horn Boulevard, Civic Center Drive, Laguna Ridge Road, Neighborhood collector streets (adjacent to side and rear yards).
- Community walls are not used where multi-family, schools, public buildings, parks and open space are adjacent to streets. At these locations, a 6" wide concrete maintenance curb is used in lieu of a community wall.
- Split face block walls shall be constructed using a "Proto II" wall system.
- Split face block walls shall be constructed using 8" x 16" block, mission color #201, as available from Orco Block Company or equal.
- Solid split face community walls shall be no higher than 6'-0" above grade.

- Ornamental iron fence is used at all residential property lines, when the residential rear yards are adjacent to the Grand Parkway on Whitelock Parkway and along paseos and the Habitat Mitigation Channel.
- Builders may install an optional combination wall/ fence featuring a 2'-0" high low wall with a 4'-0" high iron fence atop in lieu of the 6'-0" ornamental iron fence along paseos, Whitelock Parkway or the Habitat Mitigation Channel.
- 6'-6" high split face pilasters are located at 100' - 120'± on center spacing and at, change of direction.
- A 6'-0" high wood property line fencing is used at homeowner side and rear yards. An enhanced wood fence shall be used when side or rear yards are adjacent to a neighborhood street.
- Community walls along collector streetscene shall be maintained by whoever is maintaining the streetscene landscaping.

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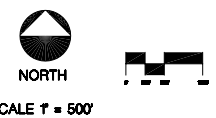
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Exhibit 12 Fencing And Wall Plan



LEGEND

- TWO-RAIL THEME RAIL FENCE
- THREE-RAIL THEME RAIL FENCE
- 6'-0" HIGH WOOD FENCE
- 6'-0" HIGH ENHANCED WOOD FENCE
- 6'-0" HIGH SPLIT FACE 'PROTO FF WALL
- 6'-0" ORNAMENTAL IRON FENCE OR BUILDER OPTIONAL COMBINATION WALL-
2'-0" WALL WITH 4'-0" ORNAMENTAL IRON FENCE ON TOP OF WALL
- 8'-0" HIGH SPLIT FACE 'PROTO FF WALL



Scale 1" = 500'

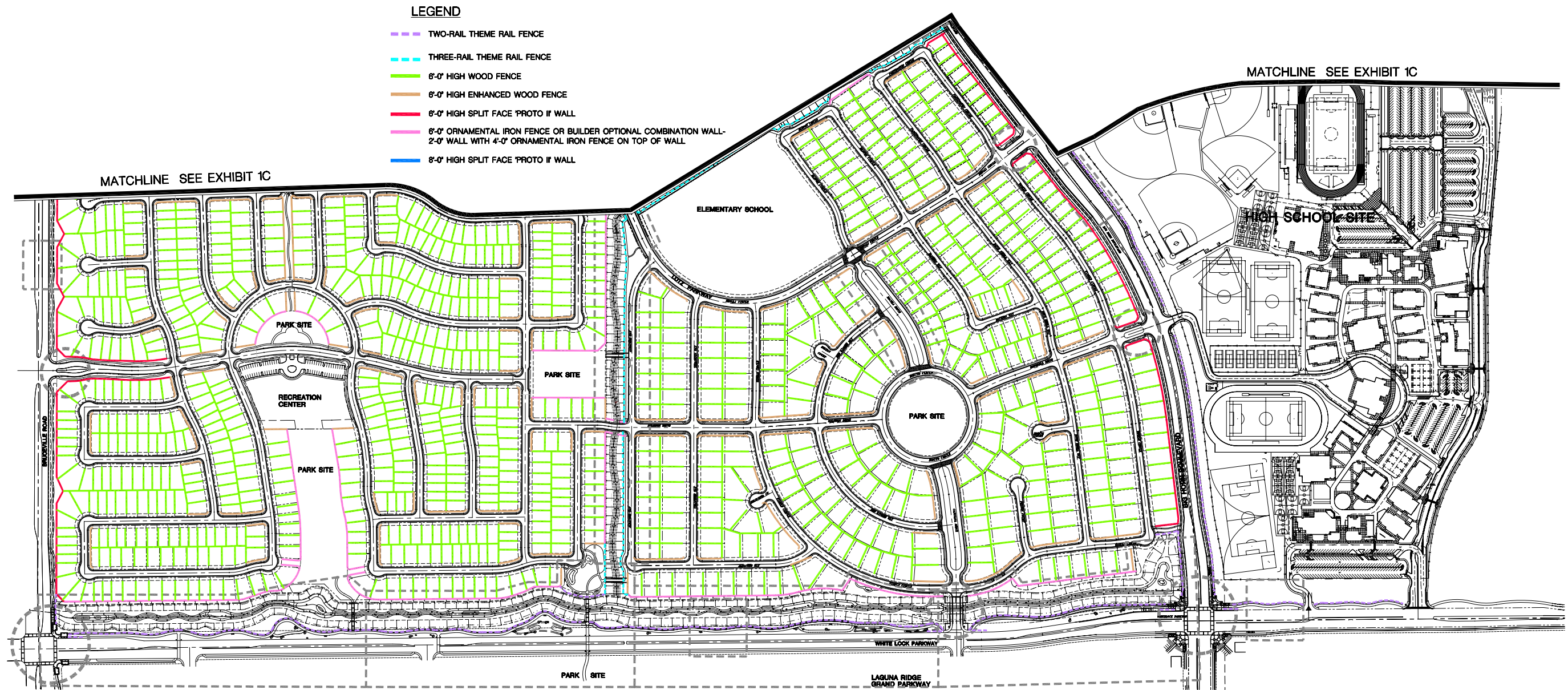


LAGUNA RIDGE

Design Guidelines

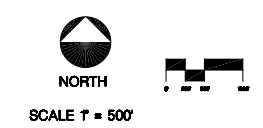
August 3, 2005

Exhibit 12 Fencing And Wall Plan



LEGEND

- TWO-RAIL THEME RAIL FENCE
- THREE-RAIL THEME RAIL FENCE
- 6'-0" HIGH WOOD FENCE
- 6'-0" HIGH ENHANCED WOOD FENCE
- 6'-0" HIGH SPLIT FACE PROTO IF WALL
- 6'-0" ORNAMENTAL IRON FENCE OR BUILDER OPTIONAL COMBINATION WALL- 2'-0" WALL WITH 4'-0" ORNAMENTAL IRON FENCE ON TOP OF WALL
- 8'-0" HIGH SPLIT FACE PROTO IF WALL



Scale 1" = 500'

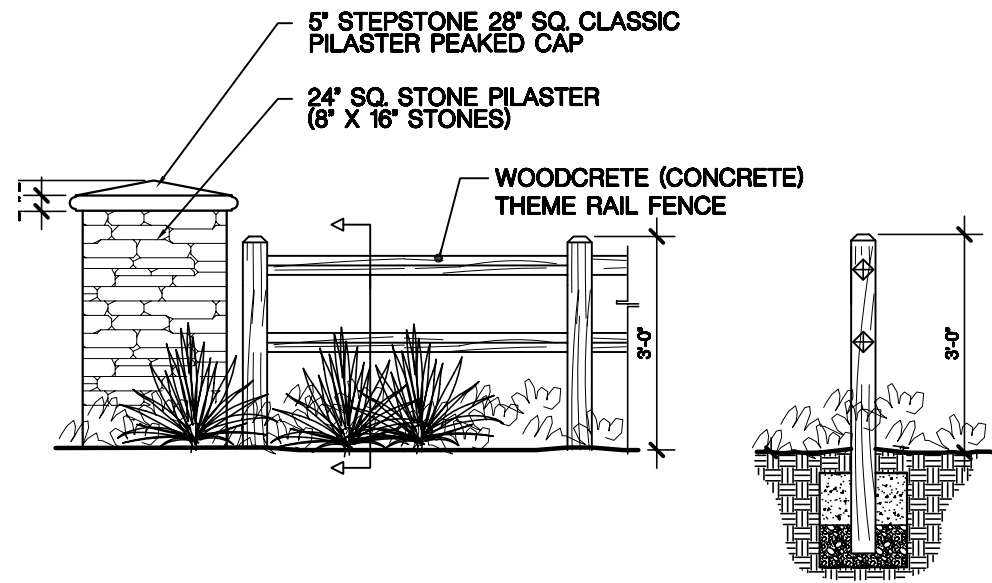


LAGUNA RIDGE

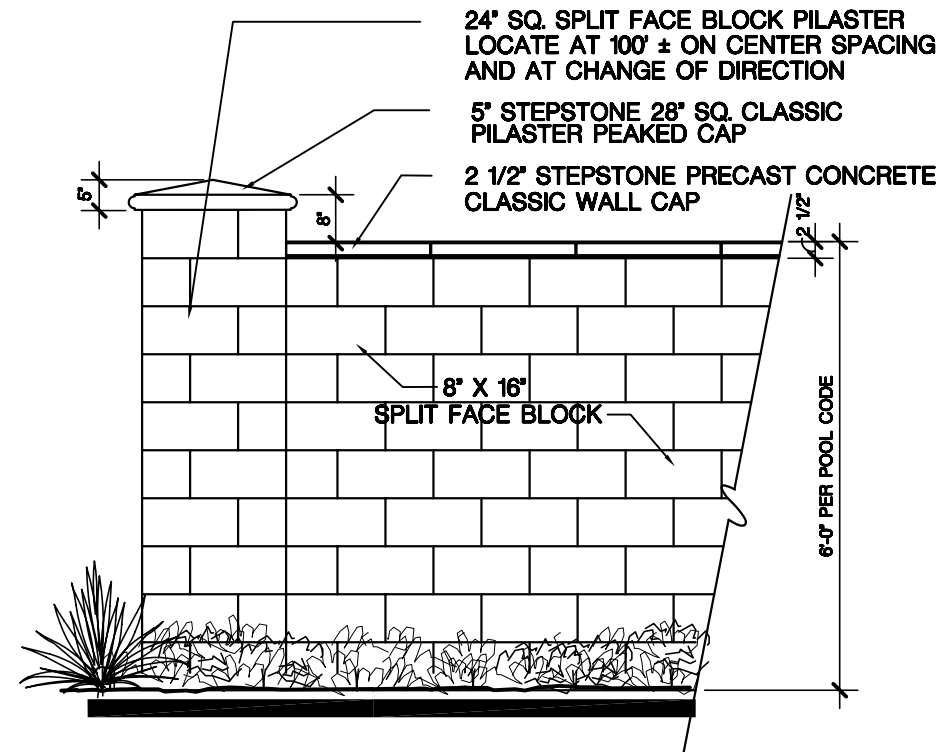
Design Guidelines

August 3, 2005

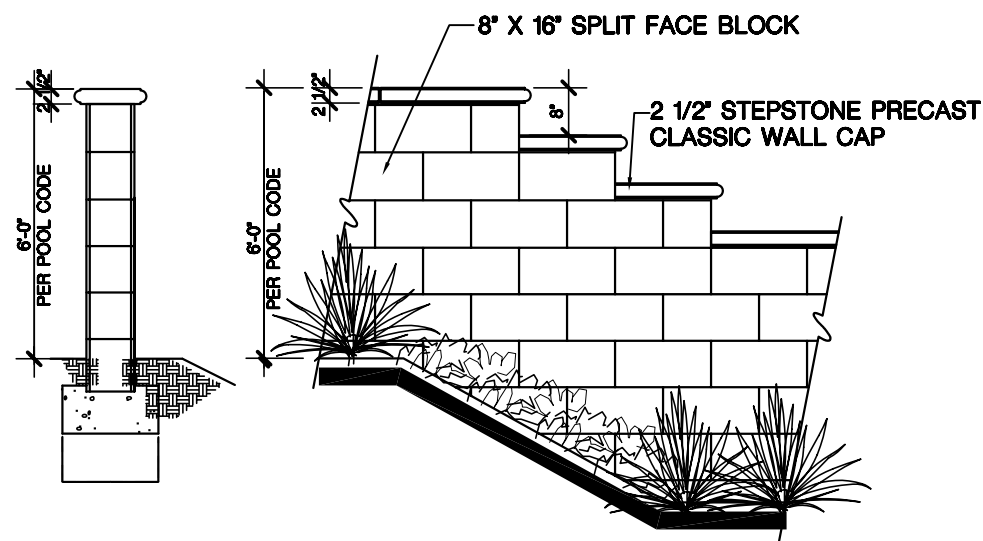
Exhibit 13 Typical Community Walls And Fences



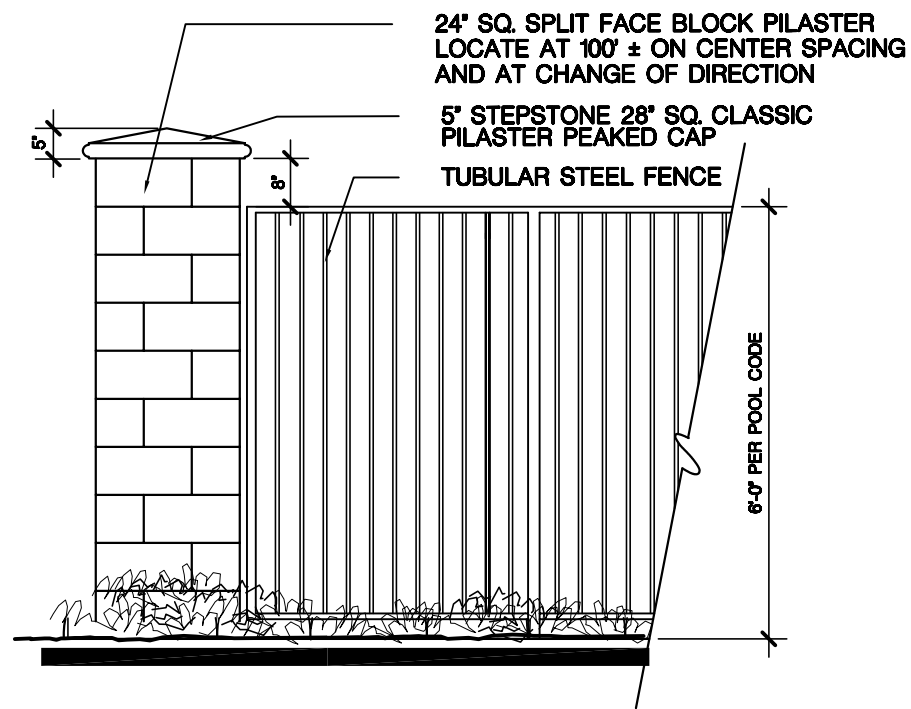
TWO-RAIL THEMATIC RAIL FENCE



SPLIT FACE SOLID COMMUNITY WALL - "PROTO II" SYSTEM
NOT TO SCALE



SPLIT FACE SOLID COMMUNITY WALL AT STEP CONDITIONS - "PROTO II" SYSTEM
NOT TO SCALE



TUBULAR STEEL FENCE
NOT TO SCALE

FINISH NOTE:

- ① SPLIT FACE WALL COLOR: TAN BY ORCO BLOCK COMPANY- OR EQUAL
- ② STEPSTONE CONCRETE CAPS ON WALLS CLASSIC WALL CAP COLOR: CAFE BROWN BY STEPSTONE INC. - OR EQUAL
- ③ STEPSTONE PILASTER CAP - CLASSIC PILASTER PEAKED CAP 28" SQ. COLOR: CAFE BROWN BY STEPSTONE INC. - OR EQUAL
- ④ WOODCRETE THEME RAIL FENCE COLOR: DAVIS SANDSTONE COLOR (WOODCRETE STANDARD COLOR)
- ⑤ TUBULAR STEEL FENCE COLOR: BENJAMIN MOORE - BLACK
- ⑥ ENHANCED WOOD FENCE STAINED WITH OLYMPIC SOLID BODY STAIN. COLOR: NAVAJO BY OLYMPIC STAIN
- ⑦ COMMUNITY WOOD FENCE COLOR: UNSTAINED
- ⑧ ORCO BLOCK AVAILABLE THROUGH:
ORCO BLOCK COMPANY INC.
11100 BEACH BLVD.
STANTON, CA 90680
- ⑨ STEPSTONE PILASTER AND WALL CAPS AVAILABLE THROUGH:
STEPSTONE INC.
17025 S. MAIN ST.
GARDENA, CA 90248
(800) 572-9029
- ⑩ WOODCRETE CONCRETE RAIL FENCE AVAILABLE THROUGH:
DESIGNER CONCRETE FENCES
4925 SEPULVEDA BLVD.
SHERMAN OAKS, CA 91403

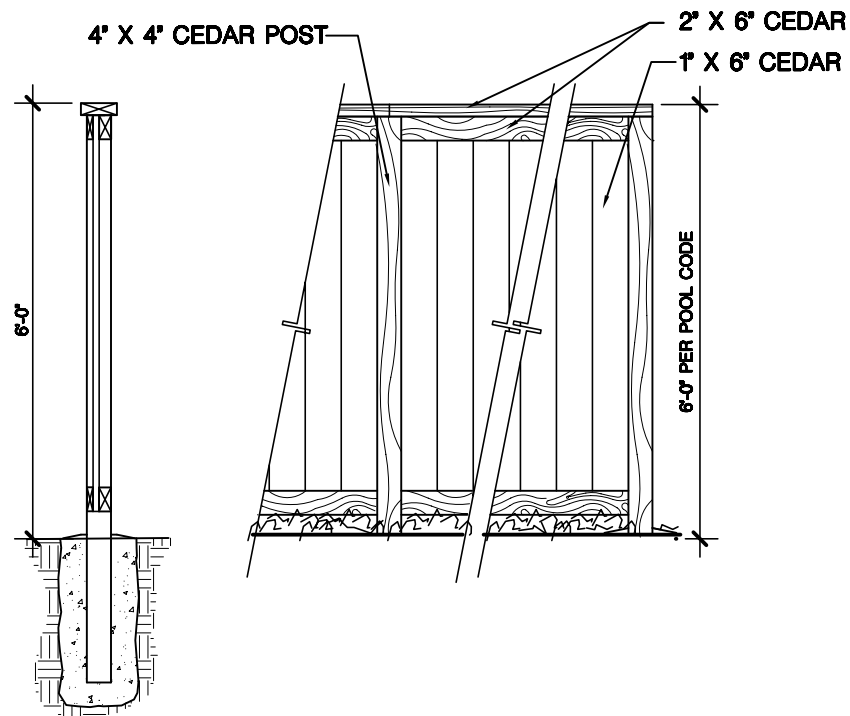
LAGUNA RIDGE

Design Guidelines

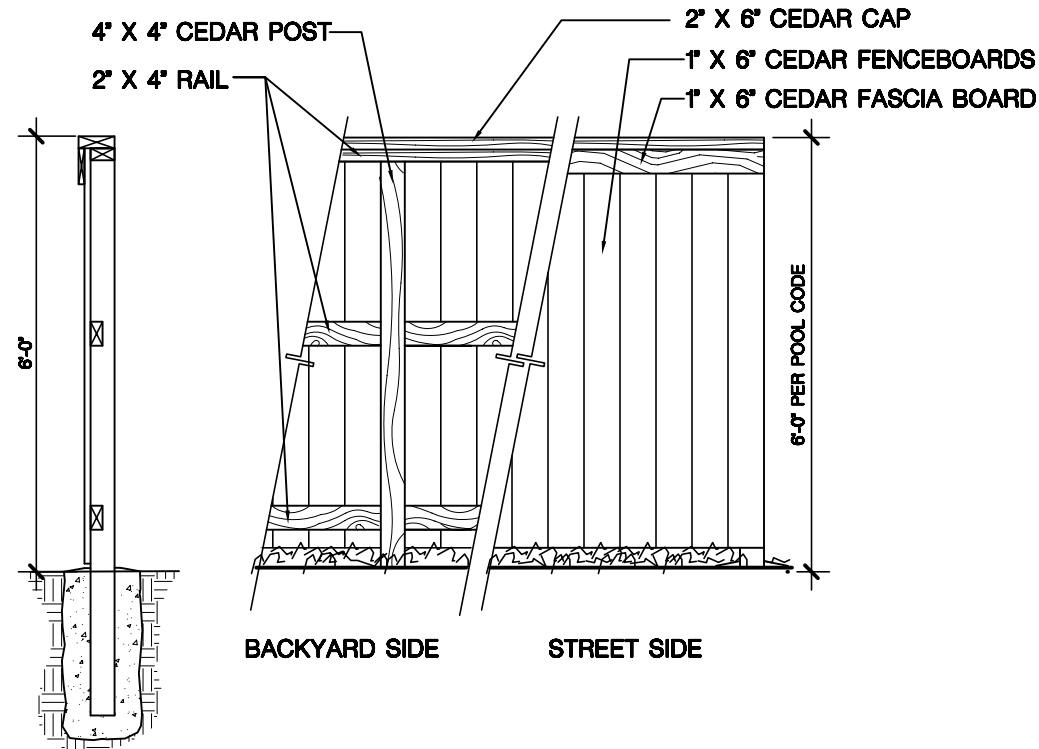
August 3, 2005

B.7 PEDESTRIAN CIRCULATION AND TRAILS – See Exhibits 14 and 15

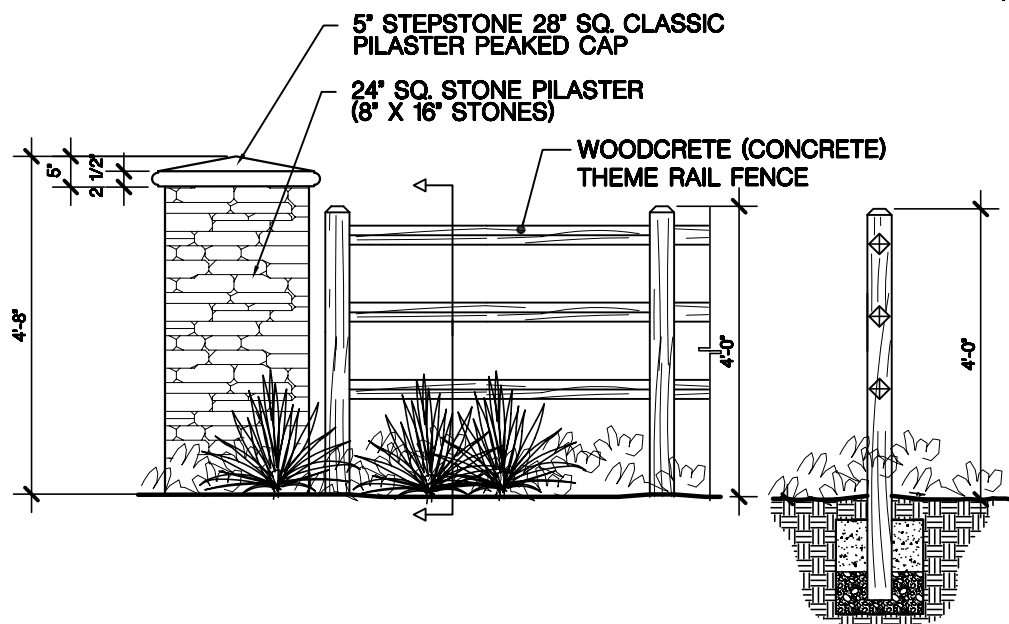
The Site Plan for Laguna Ridge is based on the principle that all neighborhoods would provide for pedestrian connectivity. This goal is achieved in numerous ways. First, Bruceville Road, Big Horn Boulevard, Laguna Springs Drive, Laguna Ridge Road (east of Big Horn Boulevard) and the south side of Whitlock Parkway all contain a 7'-0" wide sidewalk separated from the street by either a variable width or a standard width turf parkway. Civic Center Drive provides a 6'-0" wide sidewalk. Second, there is a 10'-0" wide meandering Class I bicycle trail which parallels Whitlock Parkway with an adjacent 4'-0" wide decomposed granite trail, within 'The Grand Parkway' providing a major east-west project connection. Third, there are 8'-0" wide meandering trails located within paseos / greenbelts and along the Habitat Mitigation Channel, providing pedestrian connections through Laguna Ridge connecting Whitlock Parkway paseo system to Big Horn Boulevard and to future off-site paseo and trail systems. The streetscene parkways along the perimeter collector streets have been established to accommodate a walkway/road separation and street trees, which provide a shady sidewalk, for a more comfortable pedestrian movement. This pedestrian system, with its greenbelts and trails, is intended to create a continuous pedestrian network utilizing paseos and expanded parkways along perimeter collector roads to link residential neighborhoods to off site trail systems, and to neighborhood parks and the community recreation center. The greenbelt trail will also serve to establish a strong community fabric and provide connections between neighborhoods and provide a direct and safe pedestrian circulation system, in many cases without crossing a major collector road. See Exhibit 14 for overall pedestrian circulation plan and Exhibit 15 for typical paseo plans and sections. All trails within paseos shall have pedestrian lighting, when these trails are located away from a streetscene corridor. Type of light fixtures and spacing shall be per the City of Elk Grove codes and regulations. Light fixtures shall be approved by the City.



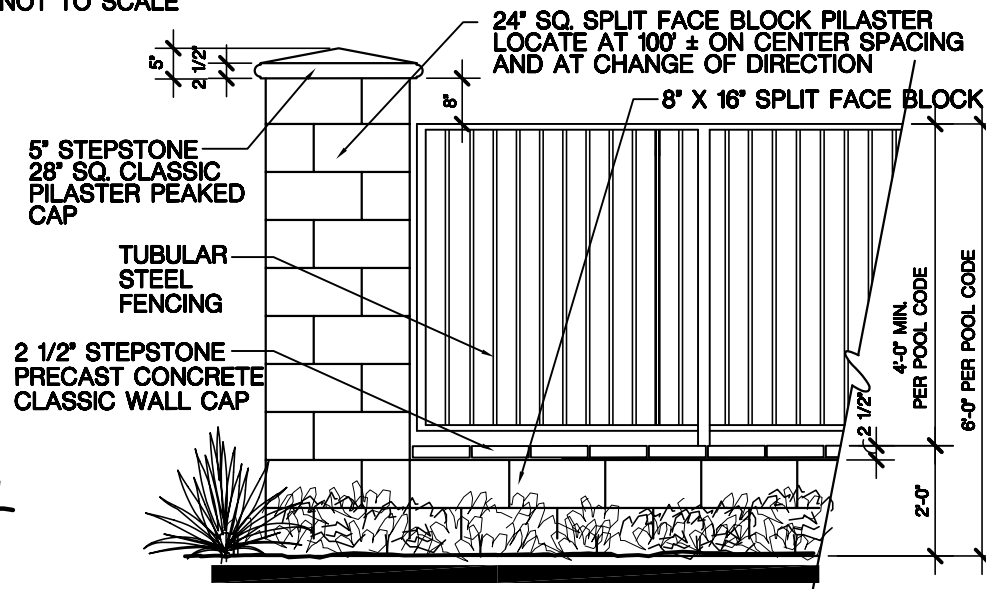
COMMUNITY WOOD FENCE
NOT TO SCALE



ENHANCED WOOD FENCE (TO BE STAINED)
SEE NOTE #5 ON PAGE B.30
NOT TO SCALE



THREE-RAIL THEMATIC RAIL FENCE
NOT TO SCALE



COMBINATION WALL- TUBULAR STEEL VIEW FENCE ATOP OF SPLIT FACE LOW WALL- 'PROTO II' SYSTEM
NOT TO SCALE (BUILDER OPTIONAL WALL)

LAGUNA RIDGE

Design Guidelines

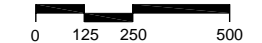
August 3, 2005

Exhibit 14 Pedestrian Circulation And Bike Trail Plan



LEGEND

- NEIGHBORHOOD COLLECTOR CURB SEPARATED 4' SIDE WALK
- NEIGHBORHOOD EXPANDED MEDIAN ISLAND CURB SEPARATED 5' SIDEWALK
- PERIMETER COLLECTOR STREETS CURB SEPARATED 7' SIDEWALK
- - - GREENBELT WETLAND / HABITAT MITIGATION AREA & DECOMPOSED GRANITE TRAIL SYSTEM
- - - 10' WIDE TRAIL
- LOCAL NEIGHBORHOOD STREET CURB ADJACENT SIDEWALK
- CLASS ONE BIKE TRAIL (10' WIDE)
- - - CLASS TWO STRIPED BIKE LANE
- CLASS ONE BIKE TRAIL (14' WIDE)



Scale 1" = 500'



LAGUNA RIDGE

Design Guidelines

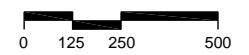
August 3, 2005

Exhibit 14 Pedestrian Circulation And Bike Trail Plan



LEGEND

- NEIGHBORHOOD COLLECTOR CURB SEPARATED 4' SIDE WALK.
- NEIGHBORHOOD EXPANDED MEDIAN ISLAND CURB SEPARATED 5' SIDEWALK.
- PERIMETER COLLECTOR STREETS CURB SEPARATED 7' SIDEWALK.
- - - GREENBELT WETLAND / HABITAT MITIGATION AREA 8' DECOMPOSED GRANITE TRAIL SYSTEM.
- - - 10' WIDE TRAIL
- LOCAL NEIGHBORHOOD STREETS CURB ADJACENT SIDEWALK
- CLASS ONE BIKE TRAIL (10' WIDE)
- - - CLASS TWO STRIPED BIKE LANE.
- CLASS ONE BIKE TRAIL (14' WIDE)



Scale 1" = 500'

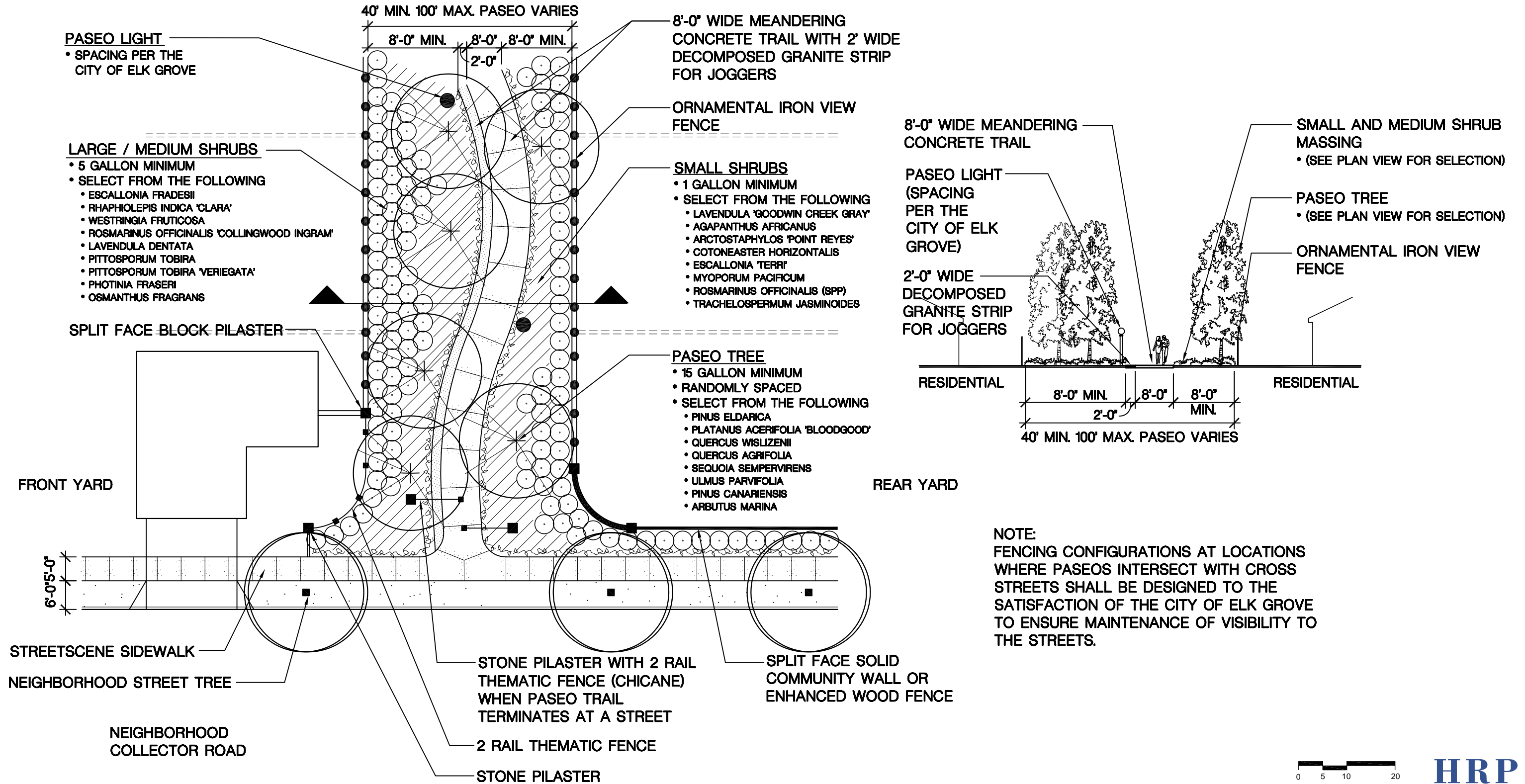


LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 15 Typical Pedestrian Paseo Plan And Section



Scale 1" = 20'



B.8 STREETSCENE LANDSCAPING – See Exhibits 16 through 35

The landscape treatment for streetscenes in Laguna Ridge are designed to create an open, welcoming feel for people entering the Community. Street trees are the primary delineators within the landscape which aesthetically soften the environment along street corridors. Street trees provide pedestrian scale and create a pedestrian friendly image. Ideally, street trees will create a continuous tree canopy along the street which aids in contributing to creating a pedestrian friendly streetscene. Randomly spaced background trees on some streets are intended to supplement the streetscene character and aid in softening pedestrian views of adjacent architecture.

The following are streetscene general landscaping requirements:

- Minimum street tree and background tree size is 15 gallon.
- One-third (1/3) of all street trees shall be 24” box or larger.
- All street trees shall be selected from the street tree plant palette.
- One dominant street tree shall be specified on each street.
- Specimen trees are utilized at monumentation corners and neighborhood entries.
- Street trees on Bruceville Road are randomly spaces. Gaps between tree groupings shall not exceed 100 feet.
- Street trees which are not randomly spaced shall not exceed 50’-0” on center spacing.
- Street trees located within a standard width parkway shall be centered in the parkway.
- All street trees shall be staked per the City of Elk Grove requirements.
- Street trees and background trees shall be a combination of deciduous and evergreen trees for purposes of screening and creating seasonal change.
- Two (2) trees shall be planted on each residential lot, with one of the trees designated as a street tree. The second tree shall be planted in the residential front yard. The street tree and front yard tree may be

different varieties, to create streetscene interest.

- Trees planted in residential front yards shall be 15 gallon minimum.
- All trees planted closer than five (5) feet to a hardscape element shall have a linear root barrier installed adjacent to all hardscape elements at time of planting tree.

B.8.1 Bruceville Road (Exhibits 16 and 17)

This major arterial road which runs between Civic Center Drive and White Lock Parkway and features a 36’-0” wide Landscape Development Zone (LDZ) as measured from the streetscene curb to the property line wall. The existing median island improvements will also be addressed. The other side of the street is existing.

This street features a 7’-0” meandering sidewalk, which meanders no closer than 8’-0” to either the streetscene curb or the property line wall at the back of the landscape development zone.

Quercus wislizenii (interior live Oak) and Quercus agrifolia (Coast Live Oak) trees are planted in the median island as infill trees around the existing Oak trees. All existing Oak trees shall be protected in place receive a 3” layer of wood mulch, and shall receive no irrigation. Spreading shrubs watered using a drip or bubbler irrigation system shall also be planted in the median island, however, the shrubs must not be planted under existing Oak tree drip lines.

The existing Bruceville median island is thirty-six (36’) wide. Landscaping along the outer twelve feet (12’) on each side of the existing median island will be removed at a future date to accomodate future street widening. No mitigation trees shall be planted within the median island. Irrigation systems within the future removed area shall be designed to allow for easy removal with minimum disturbance to the permanent median island area.

The following landscape standards apply:

• Median Island

- Quercus wislizenii (Interior Live Oak) as infill tree randomly spaced.
- Quercus agrifolia (Coast Live Oak) as infill tree randomly spaced
- 15 gallon minimum.
- One-third 24” box or larger.
- 18” wide color exposed aggregate concrete maintenance safety strip around median.
- Wood mulch – 3” layer of wood mulch around existing trees and around all new plantings.
- Install linear root barrier when trees are closer than 5’ to a hardscape element
- Spray Irrigation
- Low spreading shrubs in all new planting areas.
 - Baccharis pilularis “Twin Peaks”
 - Rosmarinus officinalis “Irene”
 - 1 gallon minimum
 - 2’-6” on center triangular spacing.
- All existing trees to remain – protect in place.
- No irrigation or planting allowed under the drip line of existing trees.
- No open trench cutting allowed under existing trees which are to remain in place.
- SMUD 69KV power lines are currently located over the median island. SMUD may trim or remove trees under their lines, as necessary if they become to large. Therefore no mitigation trees shall be allowed.

• Parkway

- 36’-0” wide Landscape Development Zone (LDZ).
- Street Tree
 - Platanus acerifolia ‘Bloodgood’ or ‘Columbia’.

- 15 gallon minimum.
- One third 24” box or larger.
- 7’ wide meandering sidewalk.
- 4:1 maximum landscape berming (where space allows).
- 6’ high split face “Proto II” block wall at back of LDZ.
- Background Trees
 - Quercus wislizenii (Interior Live Oak)
 - Quercus agrifolia (Coast Live Oak)
 - 15 gallon minimum.
 - One third (1/3) 24” box or larger.
- Vines on wall at 10’-0” on center spacing.
 - 5 gallon minimum.
 - Select from Bruceville Road plant palette.
- Large background shrubs
 - 5 gallon minimum
 - Select from Bruceville Road plant palette.
- Medium shrubs
 - 5 gallon minimum
 - Select from Bruceville Road plant palette.
- Small shrubs/groundcover
 - 1 gallon minimum.
 - Select from Bruceville Road plant palette.
- Turf between walk and curb.
- Shrubs between walk and community theme wall.
- Install linear root barrier at all trees planted closer than 5’ to a hardscape element.

B.8.2 Big Horn Boulevard – Exhibits 18 and 19

This minor arterial runs between Civic Center Drive and Whitelock Parkway and features a 25’-0” wide Landscape Development Zone (LDZ) as measured from the streetscene curb to the property line wall at residential areas and to the back of LDZ at the High School site. There is also a 12’-0” wide median island. This street features a 7’-0” wide sidewalk and a 8’-0” wide turf parkway. A 10’-0” zone behind the sidewalk is planted with shrubs and additional streetscene trees. Trees in this zone will be planted only where there is no conflict with the PUE.

The following landscape standards apply:

- **Median Island**
 - Pyrus calleryana ‘Aristocrat’ – Median Accent tree at ends of median.
 - 25’-0” on center spacing.
 - 15 gallon minimum
 - One third 24” box or larger
 - Quercus agrifolia
 - 35’-0” on center spacing
 - 15 gallon minimum
 - One third 24” box or larger
 - Shrubs – 30” high maximum
 - 1 gallon minimum
 - 50% 5 gallon
 - Select from Big Horn Boulevard plant palette.
 - 18” wide color exposed aggregate concrete maintenance strip around median.
 - 3” layer of wood mulch around all shrubs.
 - Spray Irrigation

- Install linear root barrier at all trees planted closer than 5’ to a hardscape element.
- Install a city approved moisture barrier around all median islands, between landscaping and curb.
- **Parkway**
 - 25’-0” wide Landscape Development Zone (LDZ)
 - Street Tree
 - Platanus acerifolia ‘Bloodgood’ or ‘Columbia’
 - 15 gallon minimum
 - One third (1/3) 24” box or larger
 - Background Trees (used only when not in conflict with PUE)
 - Celtis sinensis (Chinese Hackberry)
 - Magnolia grandiflora ‘Russet’
 - Pinus canariensis
 - Pyrus calleryana ‘Red Spine’ (Flowering Pear)
 - 15 gallon minimum.
 - One third (1/3) 24” box or larger.
 - Install linear root barrier at all trees planted closer than 5’ to a hardscape element.
 - 7’ wide sidewalk
 - 8’ wide turf parkway
 - 6’ high split face block “Proto II” wall at back of LDZ (Residential) – 6’ high ornamental iron fence at school.
 - Vines on wall at 10’-0” on center spacing.
 - 5 gallon minimum
 - Select from Big Horn Boulevard plant palette.
 - Medium Shrubs
 - 5 gallon minimum
 - Select from Big Horn Boulevard plant palette.



- Small Shrubs/Groundcover
 - 1 gallon minimum
 - Select from Big Horn Boulevard plant palette.
- Turf between walk and curb.
- Shrubs between walk and community theme wall.
- 3" layer of wood mulch around all shrubs

B.8.3 Laguna Springs Drive – Exhibits 20 and 21

This community collector with commercial/retail land uses runs between Civic Center Drive and Laguna Ridge Road and features 25'-0" wide Landscape Development Zone. In addition, there is a 12'-0" wide median island. There is a 8'-0" wide turf parkway and a 7'-0" wide sidewalk on both sides of the street. The back side of the sidewalk contains a 10'-0" wide planting zone, which is planted with small shrubs and a clipped hedge row or a turf zone.

The following landscape standards apply:

- **Median Island**
 - Magnolia grandiflora 'Russet' – Median Accent tree at ends of median.
 - 25'-0" on center spacing.
 - 15 gallon minimum
 - One third 24" box or larger
 - Quercus agrifolia
 - 35'-0" on center spacing
 - 15 gallon minimum
 - One third 24" box or larger
 - Shrubs – 30" high maximum

- 1 gallon minimum
- 50% 5 gallon
- Select from Laguna Springs Drive plant palette.
- 18" wide color exposed aggregate concrete maintenance strip around median.
- 3" layer of wood mulch around all shrubs.
- Spray Irrigation
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.

- **Parkway**

- 25'-0" wide Landscape Development Zone (LDZ)
- Street Tree
 - Platanus acerfolia 'Bloodgood' or 'Columbia'
 - 15 gallon minimum
 - One third 24" box or larger
- 7' wide sidewalk
- 8' wide turf parkway
- Hedge Row Shrubs
 - 5 gallon minimum
- Ligustrum Japonica 'texanum'
 - Hedge to 2'-6" high
- 3' layer of wood mulch around all shrubs
- Turf between walk and curb.
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.

B.8.4 Civic Center Drive – See Exhibits 22 and 23

This Community Collector runs between Bruceville Road and Laguna

Springs Drive and is a primary through street in Phase I and II. This street includes a 20'-0" Landscape Development Zone (LDZ) on the north side of the street (retail and commercial) and 20'-0" wide LDZ on the south side of the street (residential). Both sides of the street contain a 7'-0" wide turf parkway and a 6'-0" wide sidewalk. The residential side of the street (south side) features a 7'-0" wide planting zone between the sidewalk and property line wall, which will accommodate shrubs and vines. The north side of the street features a hedge row at the back of the Landscape Development Zone or a turf zone.

The following landscape standards apply:

- **Parkway**

- 20'-0" wide LDZ
- 10'-0" wide painted median
- Street Tree
 - Quercus agrifolia street tree
 - 15 gallon minimum
 - One third (1/3) 24" box or larger (at key locations)
- 6' wide sidewalk
- Hedge Row or turf on north side of street
- 5 gallon minimum
- Ligustrum Japonica 'texanum'
 - Hedge to 2'-6" high
- Turf between walk and curb
- Medium Shrubs (south side of street)
 - 5 gallon minimum
 - Select from Civic Center Drive plant palette.



- Small Shrubs/Groundcover (south side of street)
 - 1 gallon minimum
 - Select from Civic Center Drive plant palette.
- 3” layer of wood mulch around all shrubs
- 7’-0” wide turf parkway (both sides of street)
- Painted Median island
- Install linear root barrier at all trees planted closer than 5’ to a hardscape element.

B.8.5 Lotz Parkway – See Exhibits 24 and 25

This portion of Lotz Parkway runs between Big Horn Boulevard and Laguna Springs Drive. (East of Big Horn Boulevard). Lotz Parkway west of Big Horn Boulevard is a residential collector. Refer to neighborhood collector streetscene for Lotz Parkway west of Big Horn Boulevard. Lotz Parkway east of Big Horn Boulevard features a 25’-0” wide Landscape Development zone (LDZ) on both sides of the street. A 12’-0” wide median island is also planned for this road. As with other collector roads, there is a 8’-0” wide turf parkway and a 7’-0” wide sidewalk on both sides of the street. Behind the sidewalk on both sides of the street is a 10’-0” side shrub planting zone. The streetscene panel on the north side of the street contains three (3) different land uses. The lands uses are a Civil Center Park (future), single family residential and commercial/retail. A 6’-0” high split fence “Proto II” block wall will be constructed at the back of the streetscene LDZ at the residential land uses. This streetscene block wall will be replaced with a 6” wide concrete maintenance separation curb at the future civic center park site and at the commercial/retail sites. The high school (Phase I development area) is adjacent to the streetscene LDZ on the south side of the street. An ornamental iron fence will be built at the back of the streetscene LDZ as a school/streetscene separation.

The following landscape standards apply:

- **Median Island**

- Magnolia grandiflora ‘Russet’ – Median Accent tree at ends of median.
 - 25’-0” on center spacing.
 - 15 gallon minimum
 - One third 24” box or larger
- Platanus acerifolia ‘Bloodgood’ or ‘Columbia’
 - 35’-0” on center spacing
 - 15 gallon minimum
 - One third 24” box or larger
- Shrubs – 30” high maximum
 - 1 gallon minimum
 - 50% 5 gallon
 - Select from Lotz Parkway plant palette.
- 18” wide color exposed aggregate concrete maintenance strip around median.
- Wood mulch around all shrubs.
- Spray Irrigation
- Install linear root barrier at all trees planted closer than 5’ to a hardscape element.

- **Parkway**

- 25’-0” wide Landscape Development Zone (LDZ)
- Street Tree
 - Quercus wislizenii
 - 15 gallon minimum
 - One third 24” box or larger
- 7’ wide sidewalk
- 8’-0” wide turf parkway
- 6’ high split face block “Proto II” wall at back of LDZ (Residential area)

- 6’ high ornamental iron fence at back of LDZ (School)
- 6” wide concrete maintenance separation curb at back of LDZ (park and commercial/retail areas)
- Vines on wall at 10’-0” on center spacing.
 - 5 gallon minimum
 - Select from Lotz Parkway plant palette
- Large Background Shrubs
 - 5 gallon minimum
 - Select from Lotz Parkway plant palette
 - Medium Shrubs
 - 5 gallon minimum
 - Select from Lotz Parkway plant palette
 - Wood mulch around all shrubs.
 - Shrubs between walk and community theme wall, maintenance curb and ornamental iron fence.
 - Install linear root barrier at all trees planted closer than 5’ to a hardscape element.
 - Install a city approved moisture barrier around all median islands, between landscaping and curb.

B.8.6 Whitelock Parkway – West of Big Horn Boulevard See Exhibits 26 and 27

This streetscene for descriptive purposes is separated into two (2) areas. First, the Whitelock Parkway streetscene, which includes the streetscene parkway on the south side of the street and the streetscene parkway on the north side of the street (from the street curb to the meandering Class I Trail). The remaining area, which is called “The Grand Parkway”, is the zone between the Class I pedestrian/bicycle trail and the residential edge, and will



be discussed in a different section.

Whitelock Parkway is classified as a minor arterial and runs between Bruceville Road on the west and Big Horn Boulevard on the east. The streetscene on the south side of the street features a 25'-0" wide Landscape Development Zone (LDZ) from curb fence to the property line split fence block wall or maintenance separation curb at the back of the landscape development zone. The future land uses on the south side of the street contain commercial land uses, single family detached and a 19 acre park. The 6'-0" high split face "Proto II" block wall along the streetscene will be utilized only at the residential land uses. The solid streetscene wall will be replaced with a 6" wide concrete maintenance curb at the commercial and park uses areas. The streetscene on the south side contains an 8'-0" wide turf parkway with randomly spaced street trees and a 7'-0" wide sidewalk. Behind the sidewalk a 10'-0" wide shrub planting area is planned.

The streetscene on the north side of the street features a meandering parkway planted with a combination of turf and native fescue grasses. There are also randomly spaced Oak and sycamore street trees. Periodically a shrub zone from the back side of the Class I pedestrian/bicycle trail will extended into the streetscene parkway area, and in some cases, will extend to the streetscene curb. The back of the streetscene parkway contains a meandering 14'-0" wide Class I pedestrian/bicycle combination trail, which meanders to within 10'-0" of the streetscene curb. A continuous meandering streetscene thematic rail fence with roses planted at 16'-0" on center ends the streetscene panel on the north side of the street.

The following landscape standards apply:

- **Median Island**

- Platanus acerifolia 'Bloodgood' or 'Columbia' with Quercus wislizenii, and Quercus agrifolia, all randomly spaced.
 - 15 gallon minimum
 - One third 24" box or larger

- Shrubs – 30" high maximum
 - 1 gallon minimum
 - 50% 5 gallon
 - Select from Whitelock Parkway plant palette.
- 18" wide color exposed aggregate concrete maintenance strip around median.
- Wood mulch around all shrubs.
- Spray Irrigation
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.
- Install a city approved moisture barrier around all median islands, between landscaping and curb.

- **Parkway (south side)**

- 25'-0" wide Landscape Development Zone (LDZ)
- Platanus acerifolia 'Bloodgood' or 'Columbia' with, Quercus wislizenii and Quercus agrifolia. All street trees randomly spaced
- 15 gallon minimum
- One third 24" box or larger
- 7' wide sidewalk.
- 8'-0" wide turf parkway
- 6' high split face 'Proto II' block wall at back of LDZ. (at residential area)
- Vines on wall at 10'-0" on center spacing.
 - 5 gallon minimum.
 - Select from Whitelock Parkway plant palette.
- Large background shrubs
 - 5 gallon minimum
 - Select from Whitelock Parkway plant palette.
- Medium shrubs
 - 5 gallon minimum
 - Select from Whitelock Parkway plant palette.

- Wood mulch around all shrubs.
- Shrubs between walk and community theme wall.
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.
- **Parkway (North side)**
 - Variable width streetscene landscape development zone
 - Platanus acerifolia 'Bloodgood' or 'Columbia', with Quercus wislizenii, Quercus agrifolia, and Quercus lobata. All street trees randomly spaced
 - 15 gallon minimum
 - One third 24" box or larger
 - 10'-0" wide concrete meandering Class I bike trail (with 2' level zone at the edge of the trail).
 - 4'-0" wide adjacent decomposed granite trail
 - Thematic streetscene fence with stone pilasters.
 - Roses on thematic streetscene fence
 - 5 gallon minimum
 - 16'-0" on center spacing (every other fence post)
 - The majority of the streetscene parkway shall consist of mowable Dwarf Fescue (Festuca arundinacea) at limited areas un-mowed fescue grasses may be used in lieu of the mowed fescue, where more natural landscaping is desired.
 - Shrub zone in certain areas
 - 1 gallon minimum
 - Select from the Whitelock Parkway plant list
 - Mulch around all shrubs
 - Install linear root barrier at all trees planted closer than 5' to a hardscape element.

B.8.7 Whitelock Parkway – East of Big Horn Boulevard

See Exhibits 28 and 29

The south parkway and median island are consistent with the streetscene panel as described in Whitelock Parkway –west of Big Horn Boulevard. However the north side of the street varies from the streetscene west of Big Horn Parkway. The variable width streetscene Landscape Development zone varies between 60' to 140' from streetscene curb to the school property line with fence. As with the parkway west of Big Horn Parkway, there is a 14'-0" wide meandering Class I pedestrian/bike trail. The area between the trail and the school fence will be planted with Oak mitigation trees.

The following landscape standards apply:

- Variable width (60' to 140') Landscape Development Zone
- Quercus wislizenii, Quercus agrifolia and Quercus lobata street trees and migration trees. (all randomly spaced)
- 15 gallon minimum
- One third 24" box or larger
- Variable width turf parkway (8'-0" minimum)
- Expanded turf zone behind meandering trail
- 5:1 maximum landscape berming (where space allow)
- Thematic streetscene rail fence(back of expanded turf zone)
- 12'-0" wide meandering decomposed granite trail / service road over underground storm drain (within storm drain easement)
- 10'-0" wide concrete meandering Class I bike Trail
- 4'-0" wide adjacent decomposed granite trail
- Project mitigation trees planted between the thematic rail fence and the high school fence – Quercus lobata, Quercus agrifolia and Quercus wislizenii.
- Large screen shrubs
 - 5 gallon minimum
 - Select from Whitelock Parkway plant palette.

- Spreading shrubs
 - 1 gallon minimum
 - Select from Whitelock Parkway plant palette.
- 3" layer of wood mulch around all shrubs

B.8.8 Neighborhood Collector Street – See Exhibits 30 and 31

Neighborhood Collector Street occur throughout Phase I residential areas, and provide major north-south and east-west vehicular collection points from smaller surrounding neighborhoods. For the most part, the Neighborhood Collectors are un-loaded. The Neighborhood Collector Roads differ from the Local Neighborhood street in that they have a 6' wide turf parkway, where as the local residential streets have a curb adjacent sidewalk. Neighborhood collectors have two (2) conditions. One condition is where there is a residential rear yard or side yard adjacent to the streetscene. This streetscene panel features a 16'-0" wide landscape development zone. The other condition is where a residential front yard is adjacent to the streetscene panel. In this condition, there is a 6'-0" wide turf parkway and a 4' wide sidewalk.

The following landscape standards apply:

- 16'-0" wide Landscape Development Zone where side yard or rear yards are adjacent to the streetscene
- 6' high enhanced wood fence at the back of the 16'-0" wide streetscene LDZ
- 6'-0" wide turf parkway, both sides of the street.
- 6'-0" wide shrub zone – side or rear yard condition

- **Parkway**

- **Street Trees**
 - One (1) variety per street
 - One (1) per lot – front yard
 - Two (2) per lot – side yards

- Centered in parkway
- 15 gallon minimum
- Select from the Neighborhood Street tree plant palette.
- Additional front yard tree
 - One (1) per lot
 - 15 gallon minimum
- 6' wide turf parkway
- Medium side yard shrubs (between walk and property line wall).
 - 5 gallon minimum.
 - Select from the Community Plant Palette
- Vines on enhanced wood fence at 10'-0" on center spacing.
 - 5 gallon minimum.
 - Select from the Community Plant Palette.
- 3" layer of wood mulch around all shrubs
- Parkway and shrub zone homeowner maintained.
- Street trees City maintained.
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.

B.8.9 Local Neighborhood Street – See Exhibits 32 and 33

The local neighborhood streets are similar to the neighborhood collector street with one exception, they have curb adjacent sidewalks. Where rear or side yards are adjacent to the streetscene, a 6'-0" high Enhanced wood fence is built on the residential property line, a distance of 12'-0" from the streetscene curb.

The following landscape standards apply:

- **Parkway**



- 12'-0" wide Landscape Development Zone where side yards or rear yards are adjacent to the streetscene.
- 6' high split face 'Proto II' block wall at the back of the 12'-0" wide streetscene LDZ.
- 4'-0" wide curb adjacent sidewalk.
- **Street Trees**
 - One (1) variety per street.
 - One (1) per lot – front yard.
 - Two (2) per lot – side yard.
 - Centered in parkway.
 - 15 gallon minimum.
 - Select from the neighborhood street tree plant palette.
- Additional front yard tree
 - One (1) per lot
 - 5 gallon minimum
- **Medium side yard shrubs –** (between walk and property line wall)
 - 5 gallon minimum.
 - Select from the Community Plant Palette.
- **Vines** on wall at 10'-0" on center spacing.
 - 5 gallon minimum.
 - Select from the Community Plant Palette.
- 3" layer of wood mulch around all shrubs.
- Streetscene shrub zone homeowner maintained.
- Street trees City maintained.
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.

This streetscene condition occurs at three (3) locations within the Phase I residential neighborhoods. In all cases, this expanded streetscene panel terminates at a community or neighborhood park. These streets feature a 50'-0" wide median island with an 18'-0" wide expanded Landscape Development Zone (See exhibit 35, B.57). As with the neighborhood collectors, there are two (2) streetscene conditions.

One condition is where there is a residential rear yard or side yard adjacent to the streetscene. This streetscene panel features an 18'-0" wide Landscape Development Zone. The other condition is where a residential front yard is adjacent to the streetscene panel. In this condition, there is an 8'-0" wide turf parkway and a 4' wide sidewalk (See exhibit 35, B.57).

The following landscape standards apply:

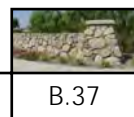
- **Median Island**

The following is a list of suggested design criteria; however, widened median design shall comply with the City standard detail.

- 50'-0" wide median island.
- Platanus acerifolia 'Bloodgood' or 'Columbia' median island tree.
 - Two rows at 30'-0" on center spacing (50'-0") wide median.
 - One row at 30'-0" on center spacing (12' wide median).
 - 24" box minimum.
- Hedge row at sides of 50'-0" wide medians.
 - 5 gallon minimum.
 - 2'-6" on center spacing.
 - Ligustrum japonica 'Texanum' (Hedge to 2'-6" high)
- 6" wide concrete mow curb between hedge row and turf.
- Turf in center of median island and at median island ends.
- 18" wide color exposed aggregate concrete maintenance safety strip.

- Small shrubs in 12'-0" wide median.
 - 1 gallon minimum.
 - 50% 5 gallon
 - Select from Community Plant Palette
- Install linear root barrier at all trees planted closer than 5' to a hardscape element.
- Install a city approved moisture barrier around all median islands, between landscaping and curb.
- **Parkway**
 - 18'-0" wide Landscape Development Zone where side yards or rear yards are adjacent to the streetscene.
 - 6' high enhanced wood fence at the back of the 18'-0" wide streetscene LDZ.
 - 8'-0" wide turf parkway, both sides of the street.
 - Quercus agrifolia parkway trees.
 - 24" box minimum.
 - Centered in 8'-0" wide parkway.
 - Interlocking pavers in crosswalks.
 - Medium shrubs adjacent to property line wall.
 - 5 gallon minimum
 - Select from the Community Plant Palette
 - Vines on enhanced fence at 10'-0" on center spacing.
 - 5 gallon minimum.
 - Select from Community Plant Palette
 - 3" layer of wood mulch around all shrubs

B.8.10 Neighborhood Linear Park and Streetscene - See Exhibits 34, 35

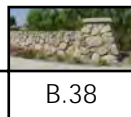
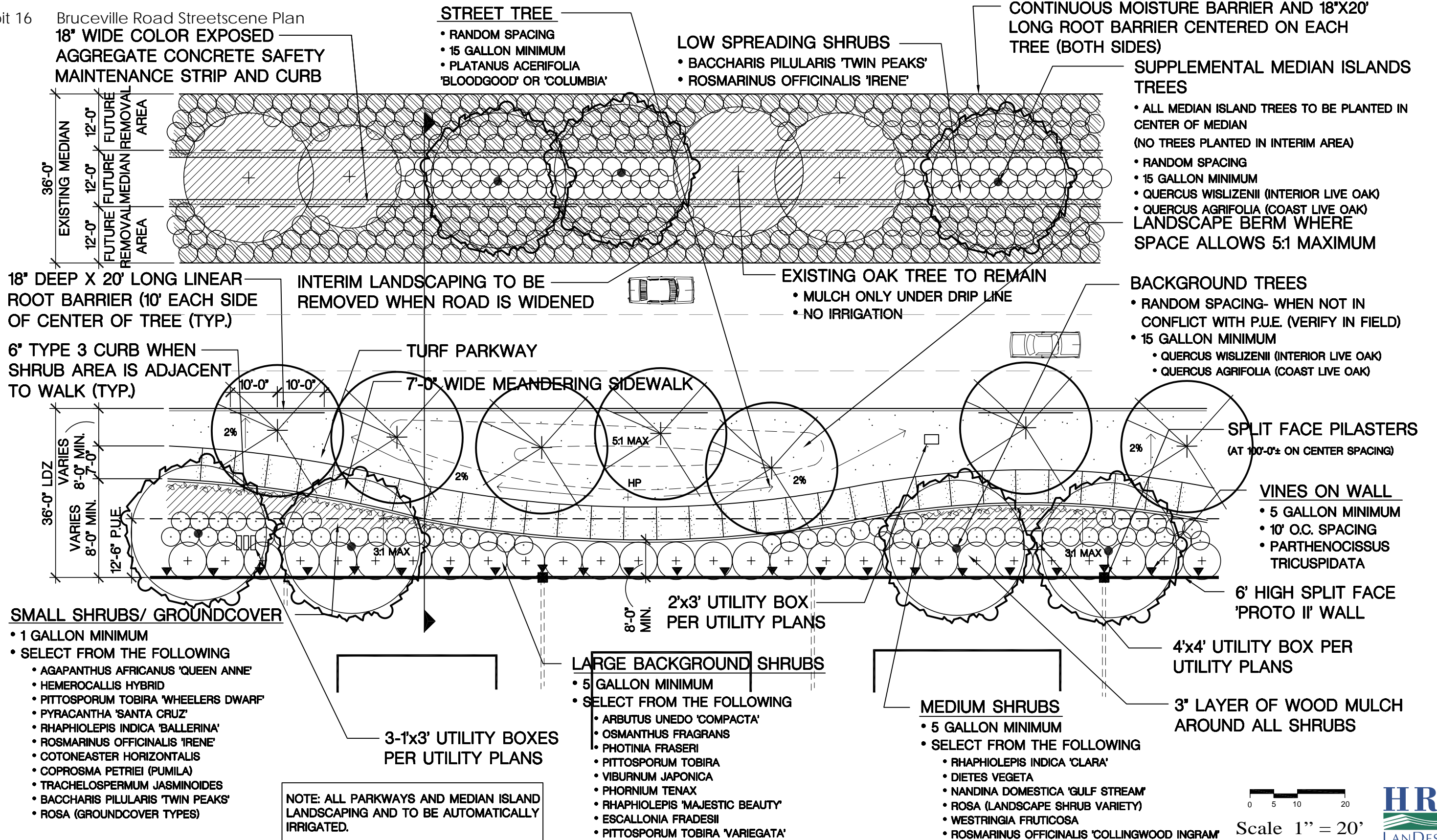


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Design Guidelines

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Exhibit 16 Bruceville Road Streetscene Plan

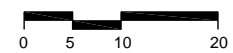
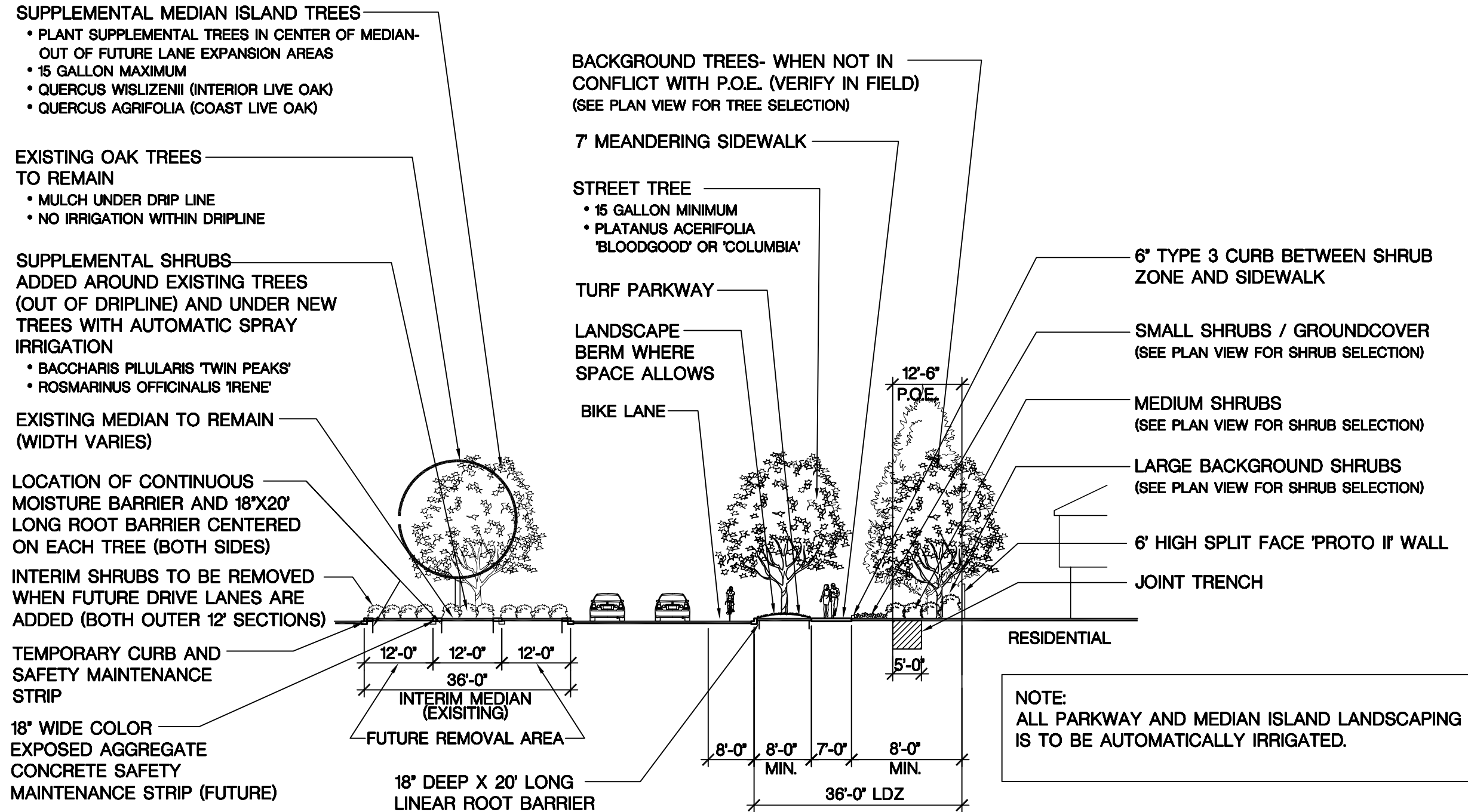


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Design Guidelines

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Exhibit 17 Bruceville Road Streetscene Section



Scale 1" = 20'



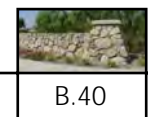
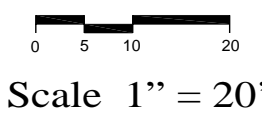
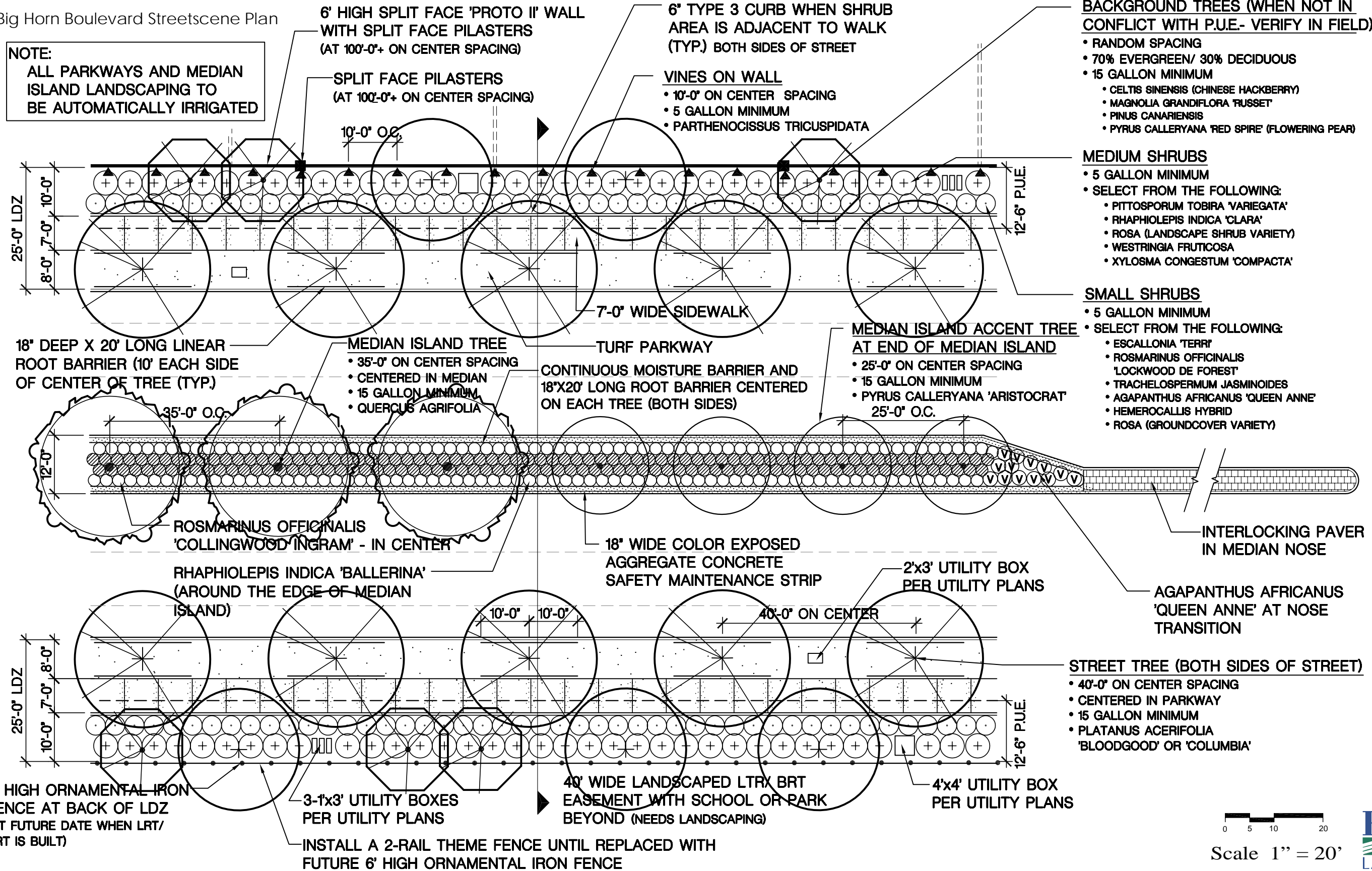
LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 18 Big Horn Boulevard Streetscene Plan

NOTE:
ALL PARKWAYS AND MEDIAN ISLAND LANDSCAPING TO BE AUTOMATICALLY IRRIGATED

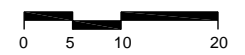
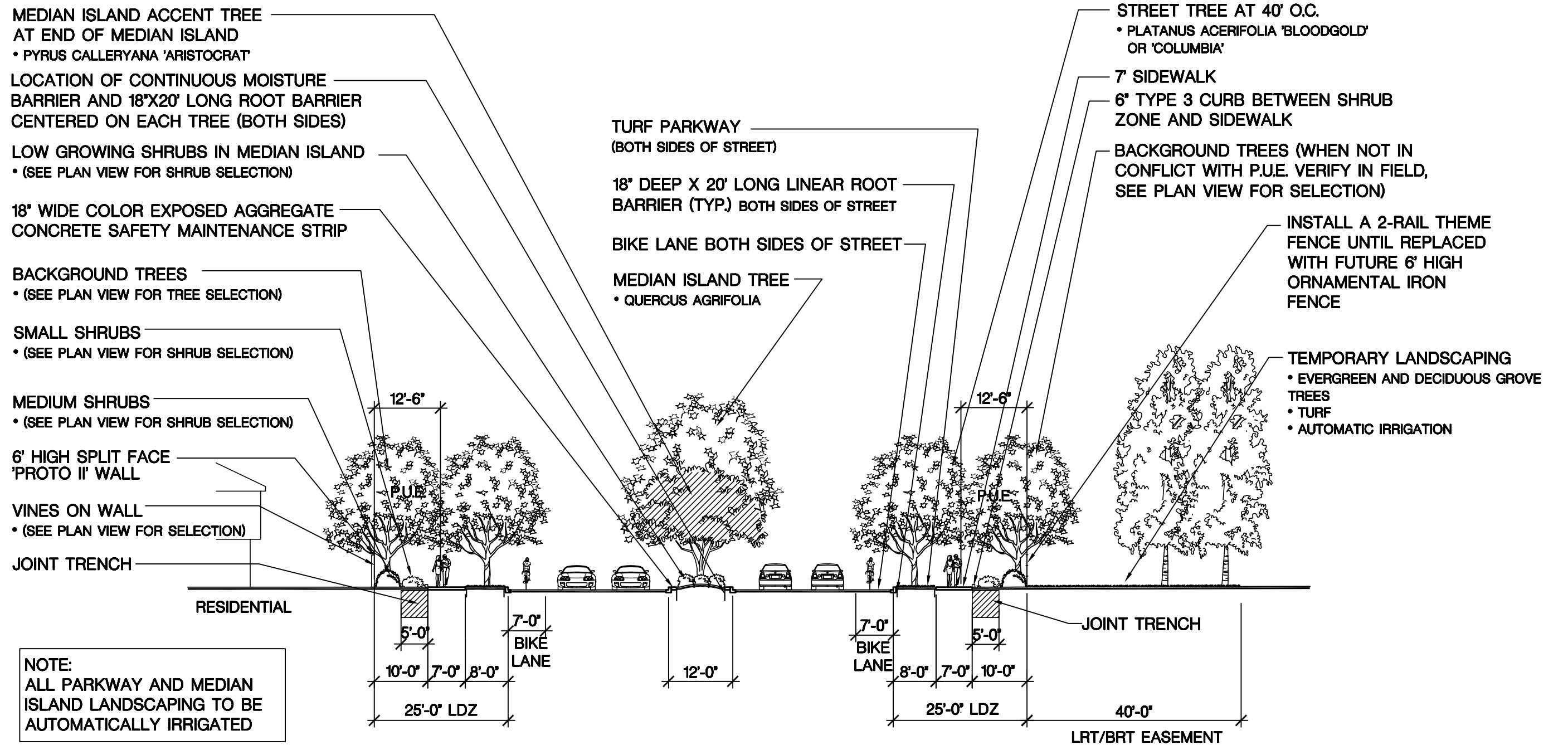


LAGUNA RIDGE

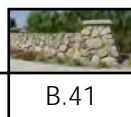
Design Guidelines

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Exhibit 19 Big Horn Boulevard Streetscene Section



Scale 1" = 20'



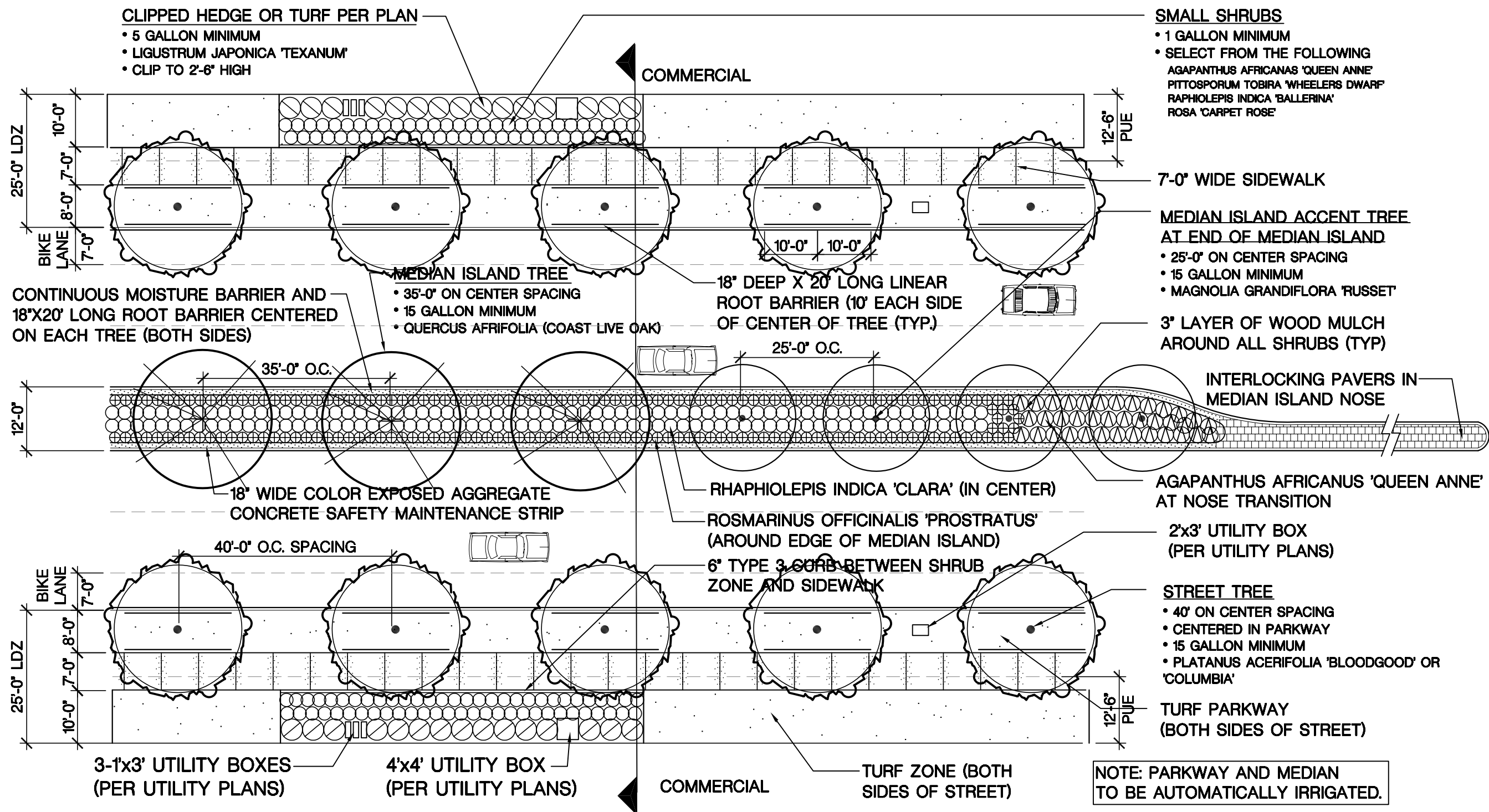
B.41

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Design Guidelines

August 3, 2005

Exhibit 20 Laguna Springs Drive Streetscene Plan



Scale 1" = 20'

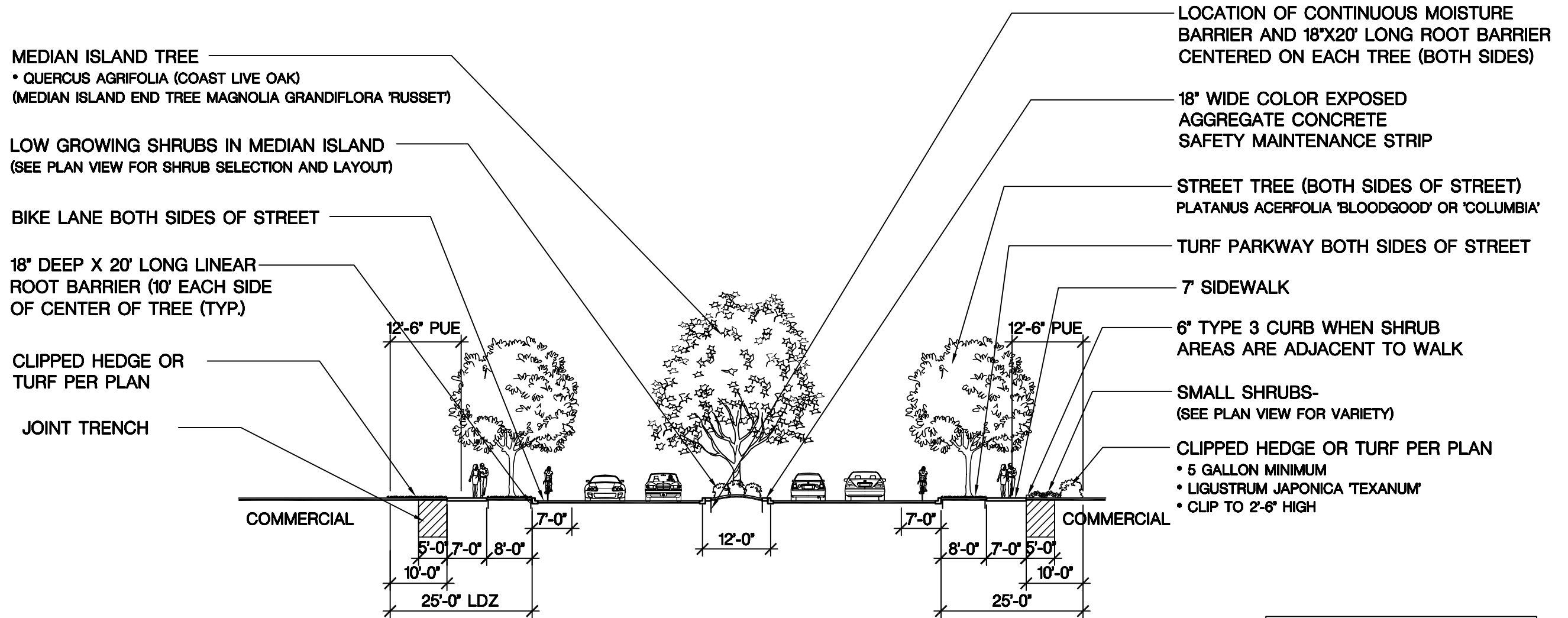


LAGUNA RIDGE

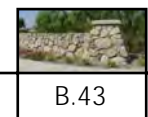
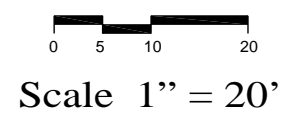
Design Guidelines

August 3, 2005

Exhibit 21 Laguna Springs Drive Streetscene Section



NOTE: PARKWAY AND MEDIAN TO BE AUTOMATICALLY IRRIGATED.



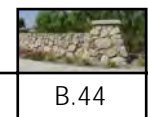
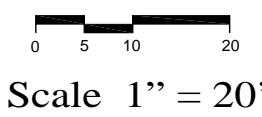
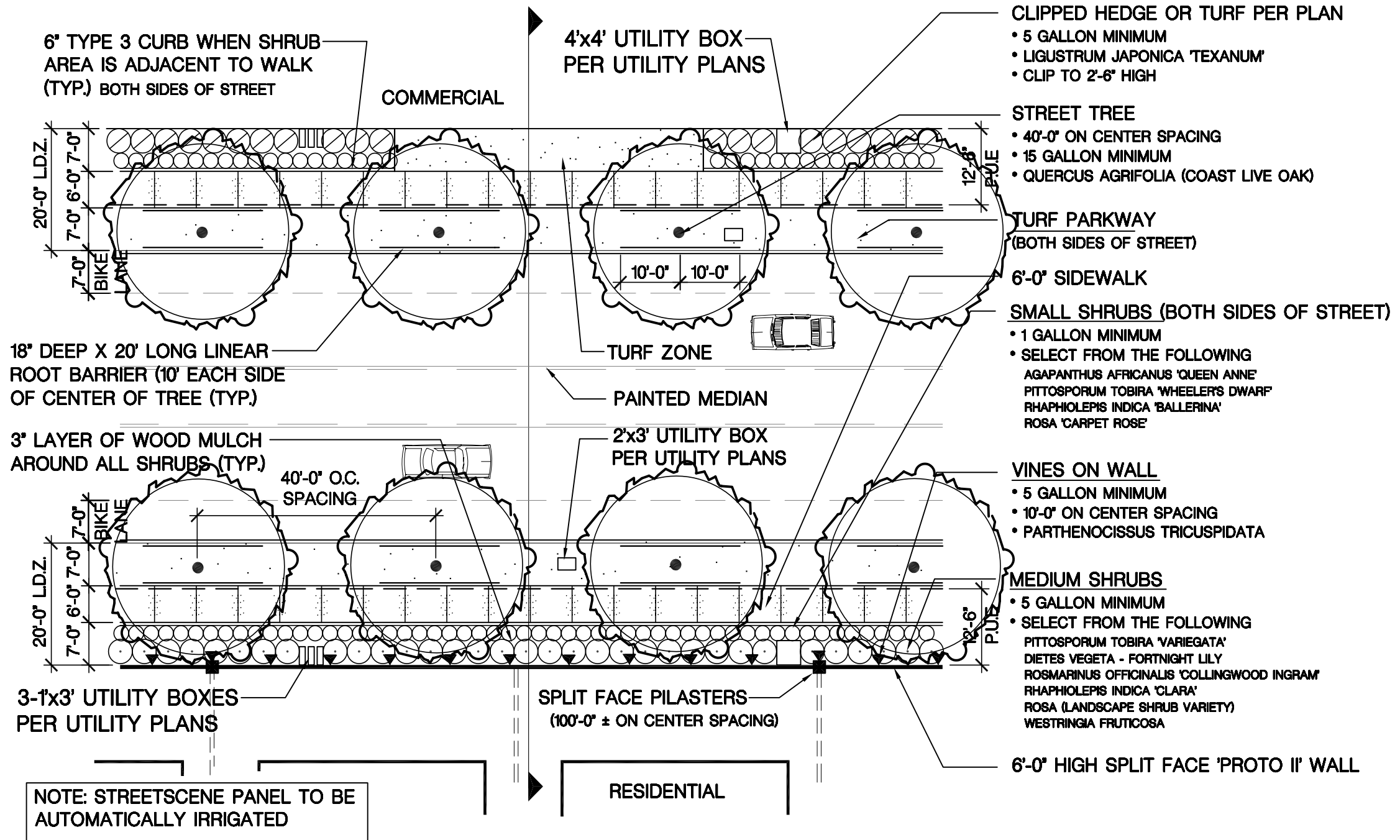
B.43

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Design Guidelines

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22 Civic Center Drive Streetscene Plan (At Residential)



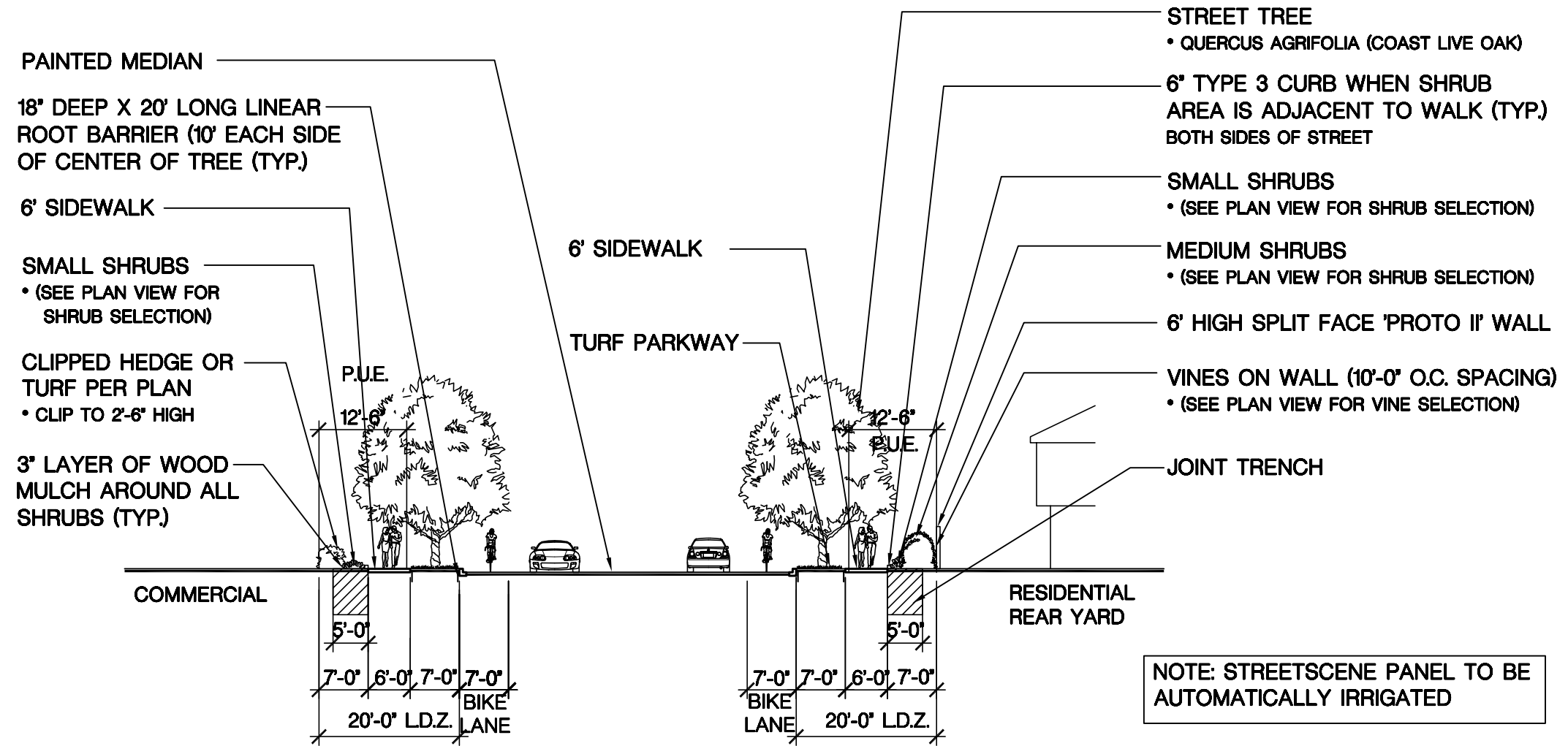
B.44

LAGUNA RIDGE

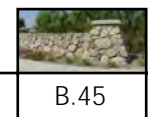
Design Guidelines

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Exhibit 23 Civic Center Drive Streetscene Section (At Residential)



Scale 1" = 20'

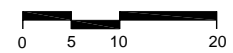
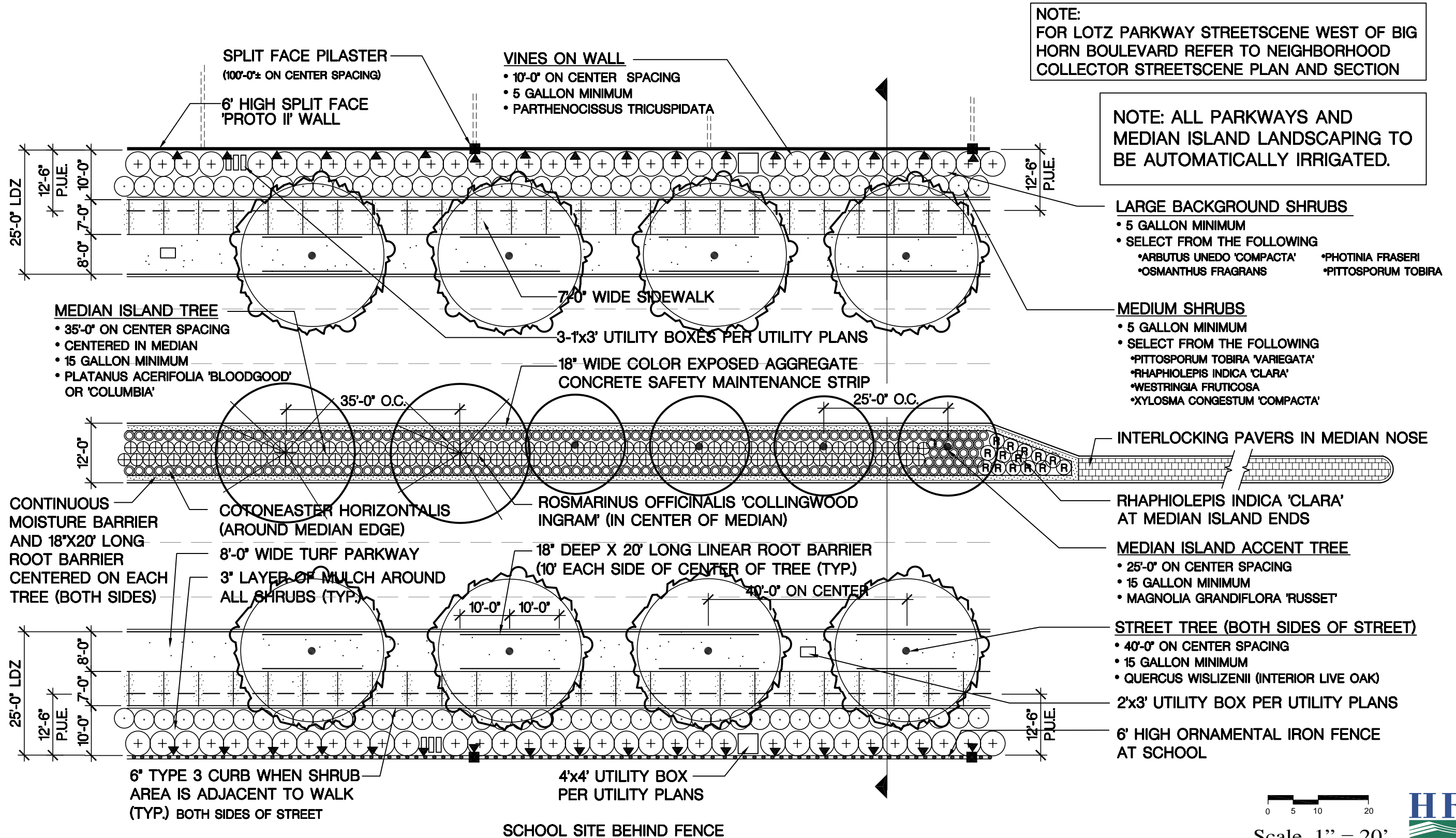


LAGUNA RIDGE

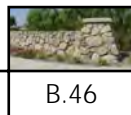
Design Guidelines

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Exhibit 24 Lotz Parkway Streetscene Plan (East Of Big Horn Boulevard)



Scale 1" = 20'



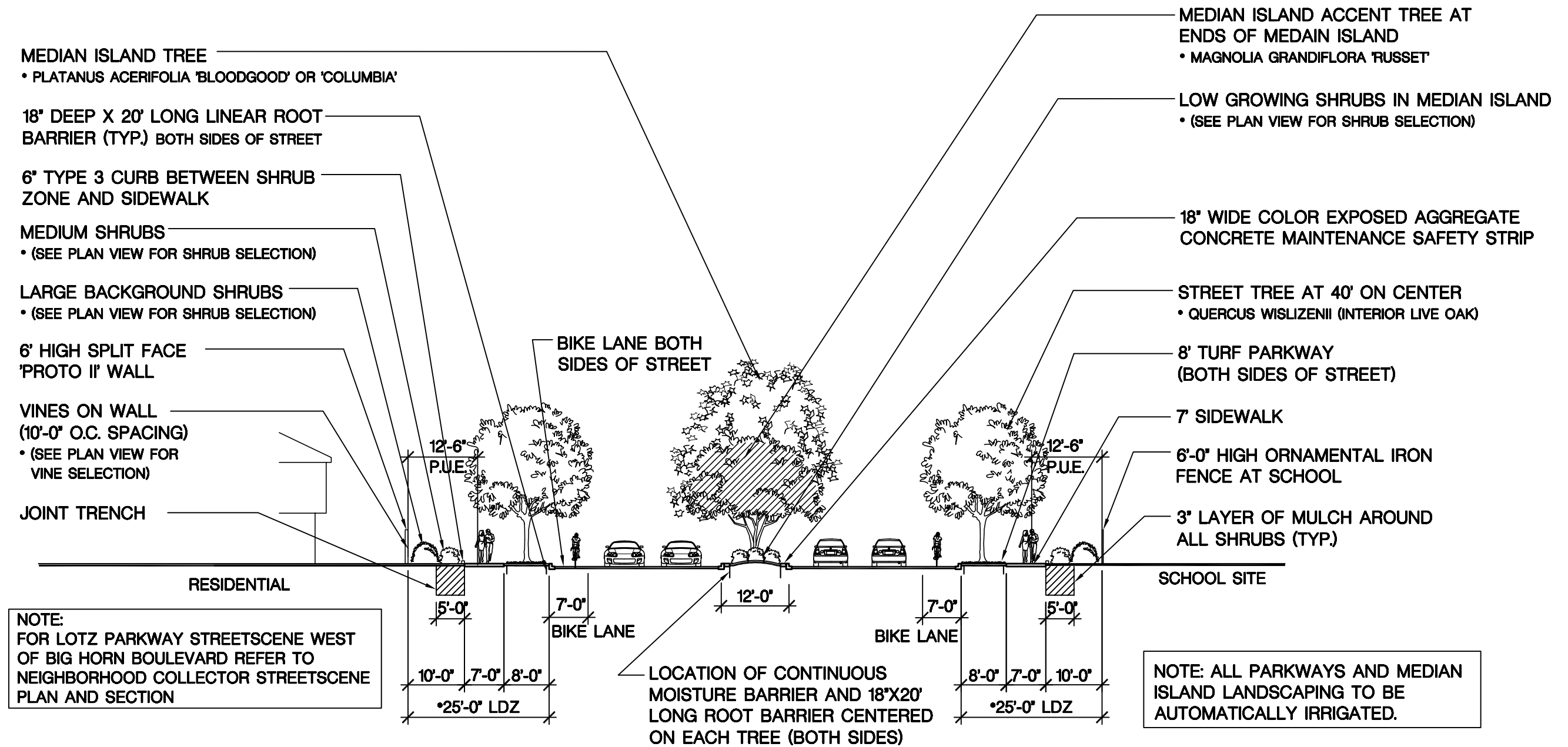
B.46

LAGUNA RIDGE

Design Guidelines

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Exhibit 25 Lotz Parkway Streetscene Section (East Of Big Horn Boulevard)

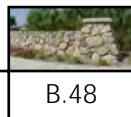
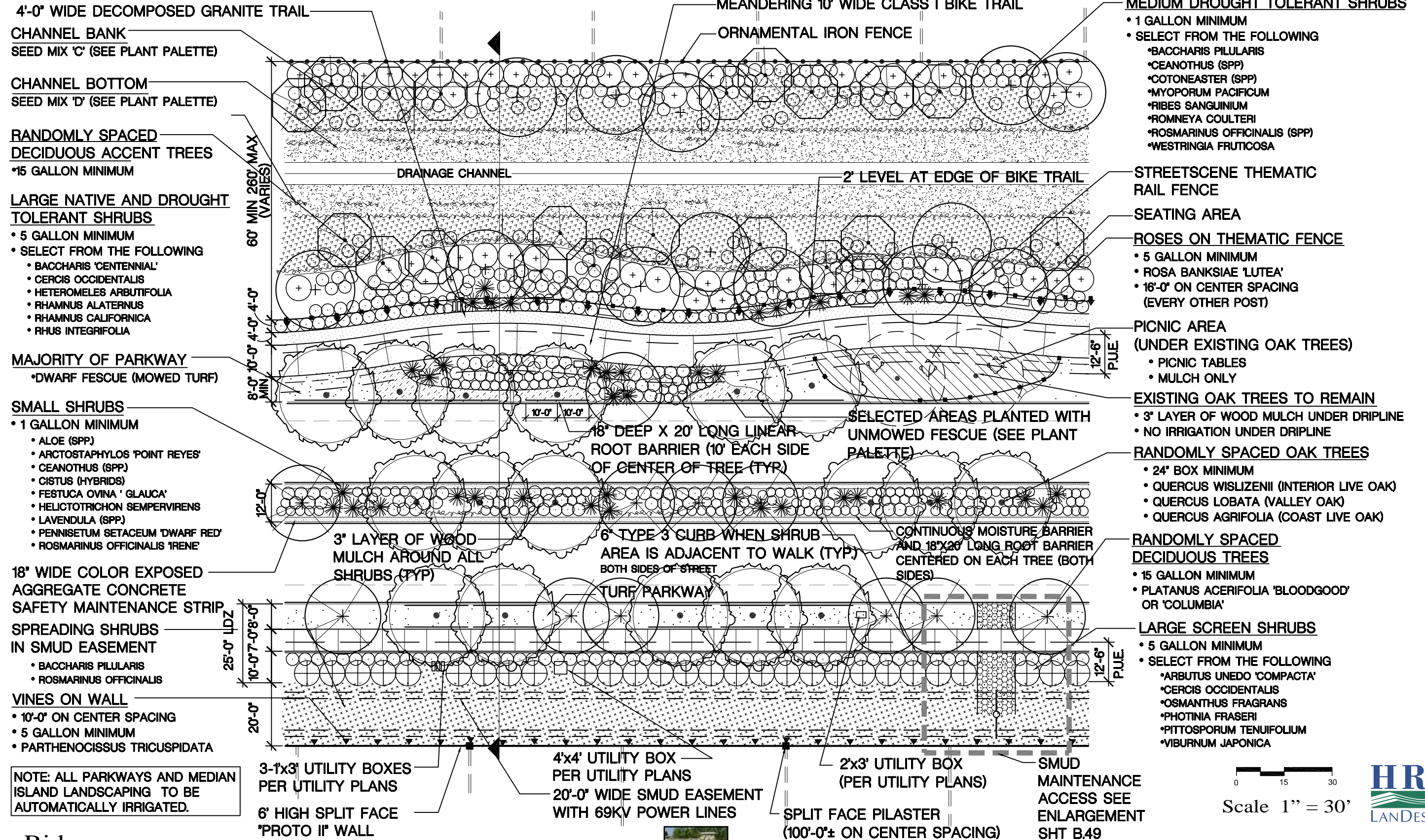


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Design Guidelines

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Exhibit 26 Whitelock Parkway Streetscene Plan (West Of Big Horn Boulevard)

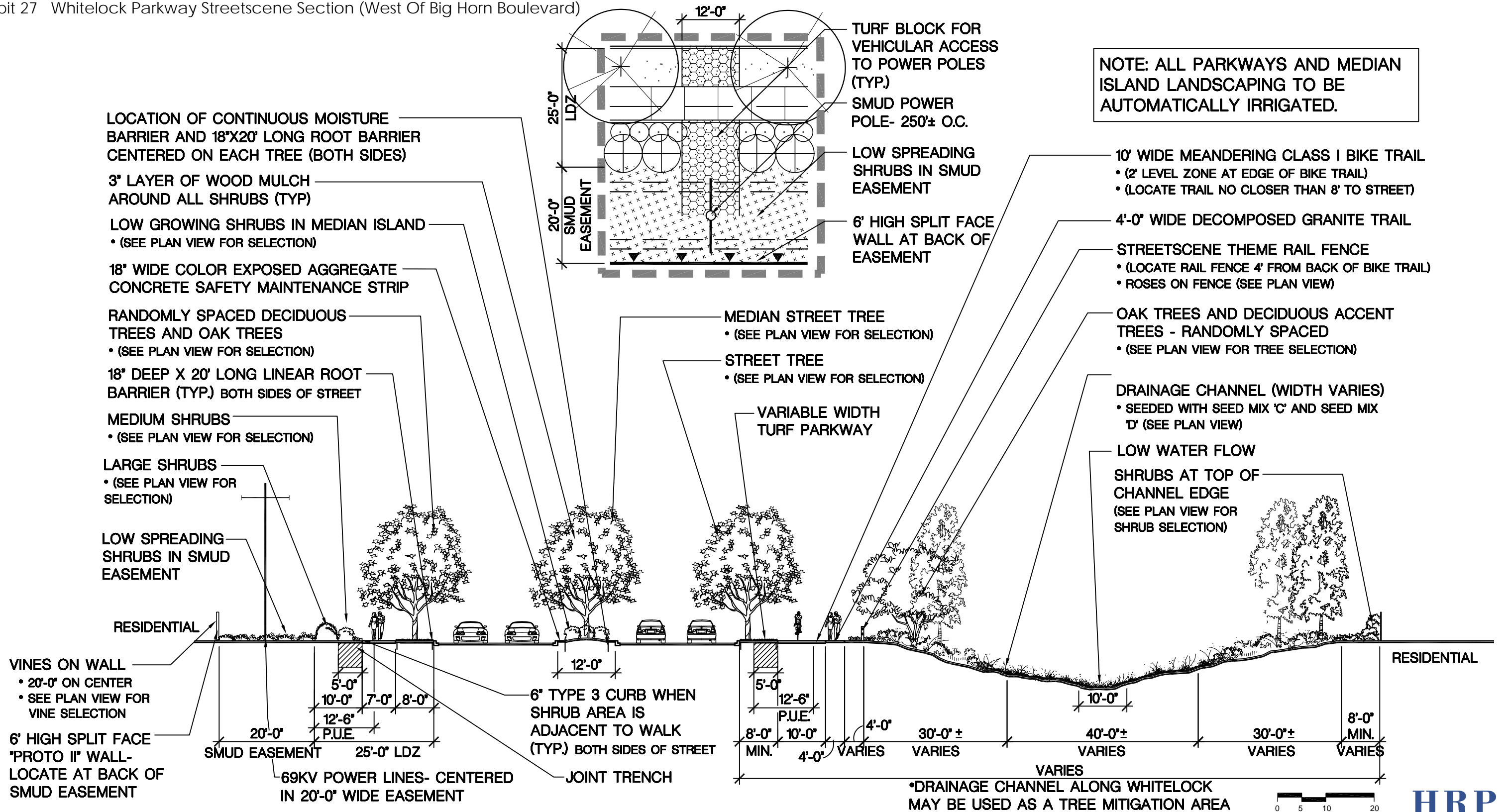


LAGUNA RIDGE

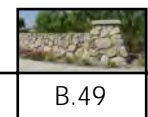
Design Guidelines

August 3, 2005

Exhibit 27 Whitelock Parkway Streetscene Section (West Of Big Horn Boulevard)



Scale 1" = 20'

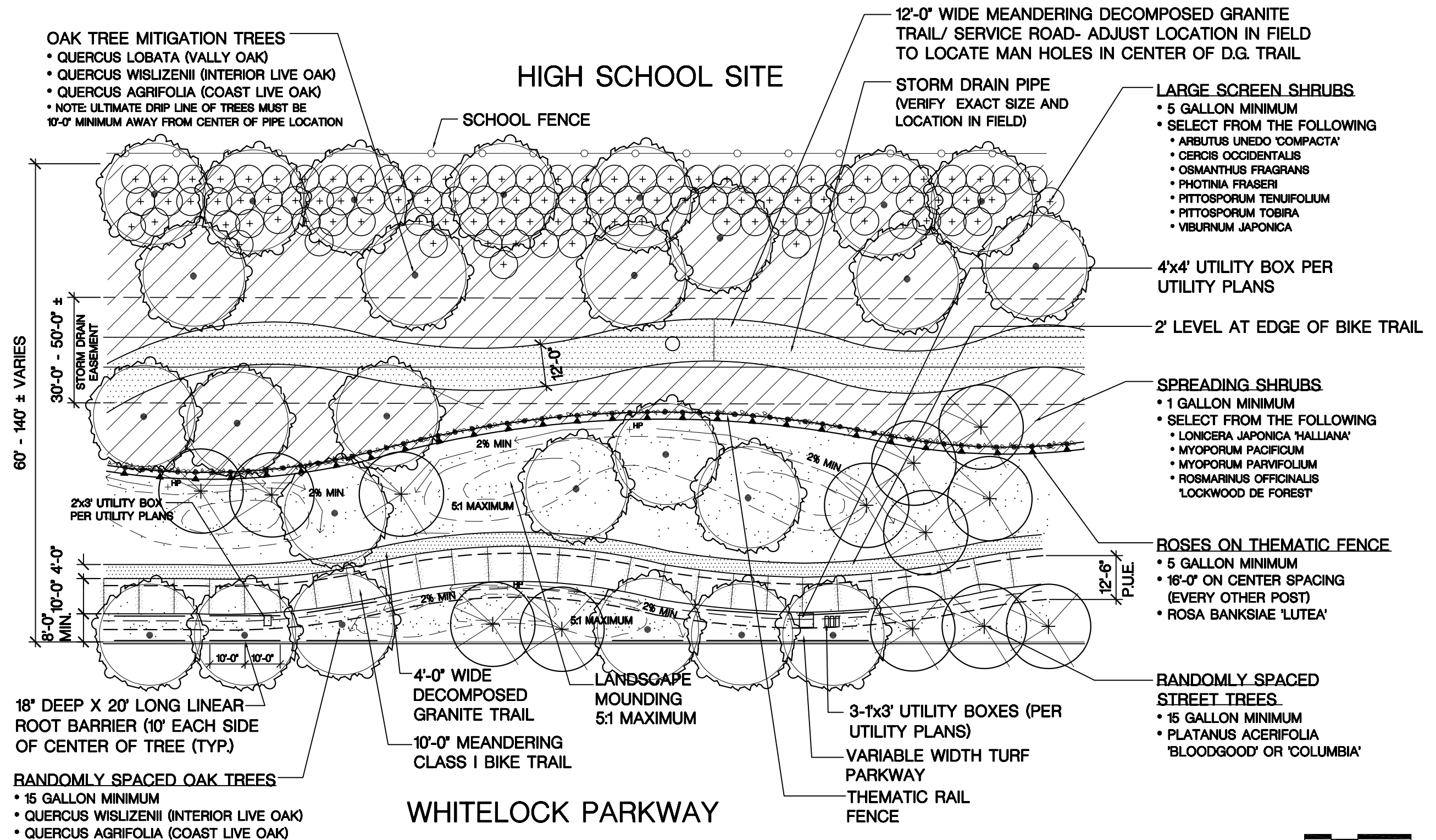


LAGUNA RIDGE

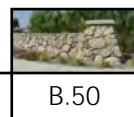
Design Guidelines

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Exhibit 28 Whitelock Parkway Streetscene Plan (East Of Big Horn Boulevard)



0 15 30
Scale 1" = 30'

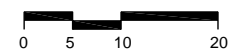
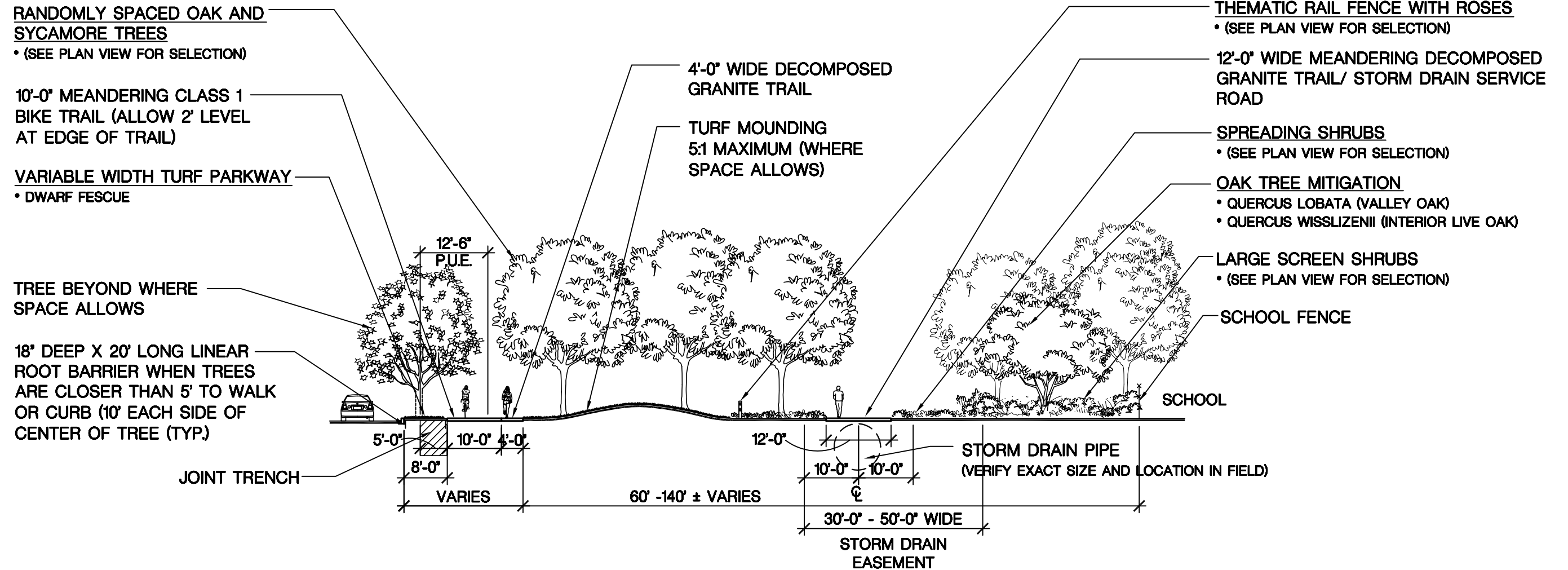


LAGUNA RIDGE

Design Guidelines

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Exhibit 29 Whitelock Parkway Streetscene Section (East Of Big Horn Boulevard)



Scale 1" = 20'

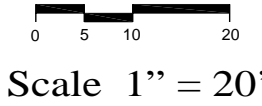
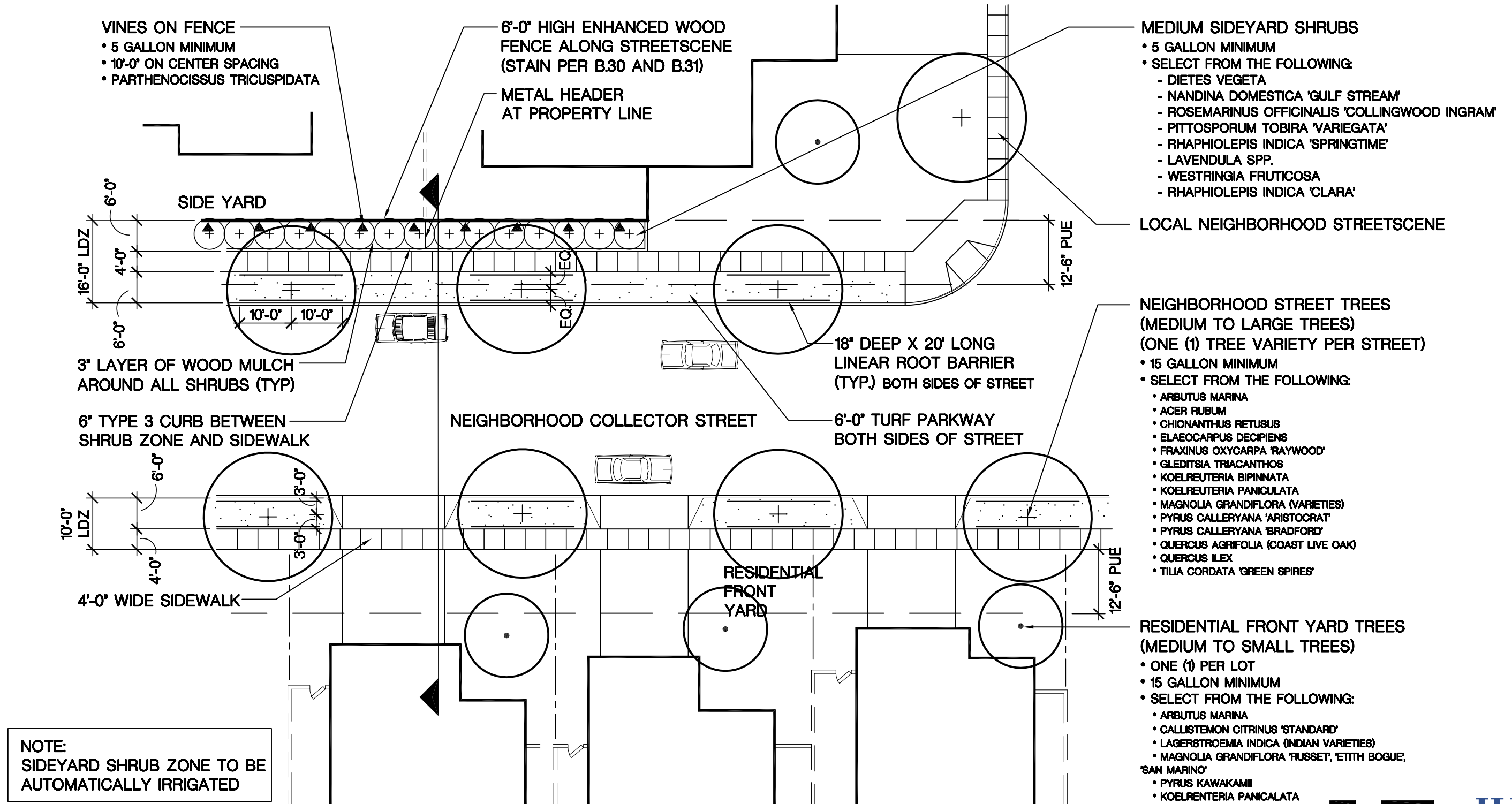


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Exhibit 30 Neighborhood Collector Streetscene Plan

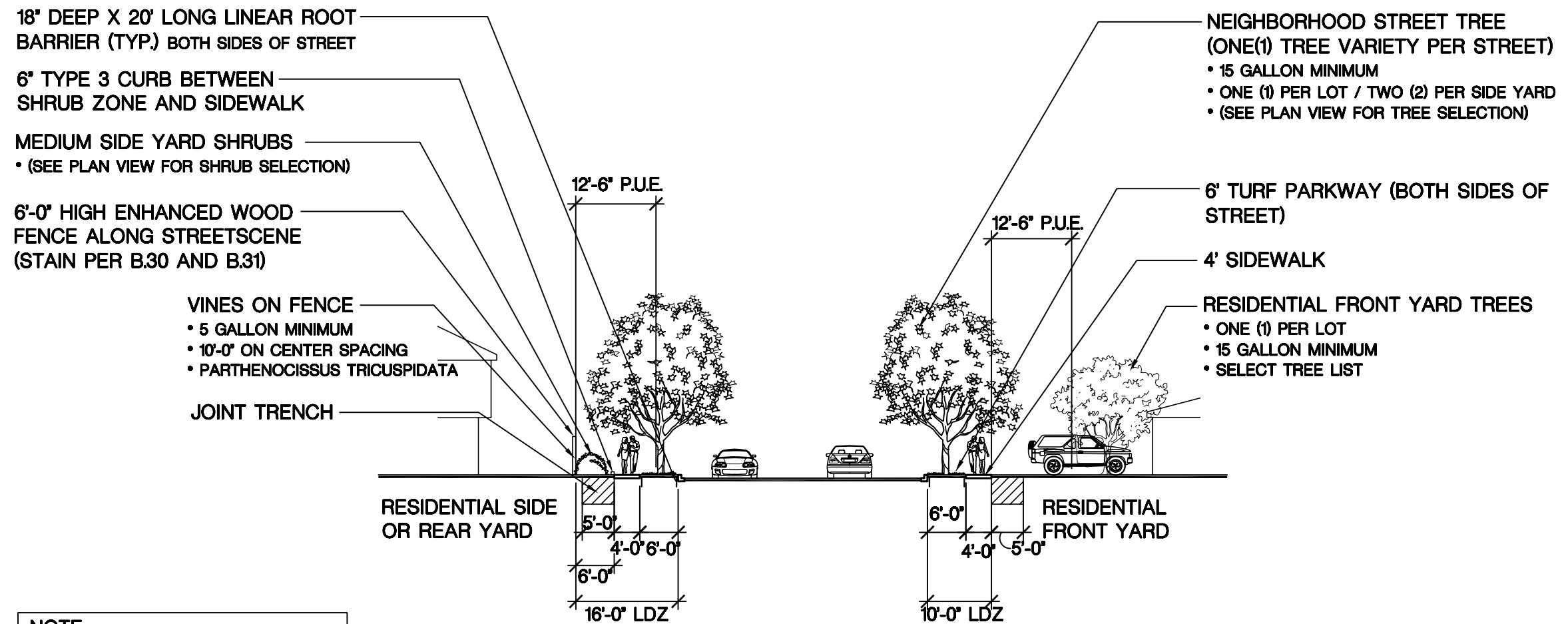


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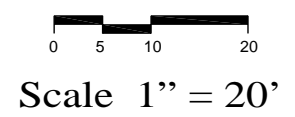
Design Guidelines

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Exhibit 31 Neighborhood Collector Streetscene Section



NOTE:
SIDEYARD SHRUB ZONE TO BE AUTOMATICALLY IRRIGATED.

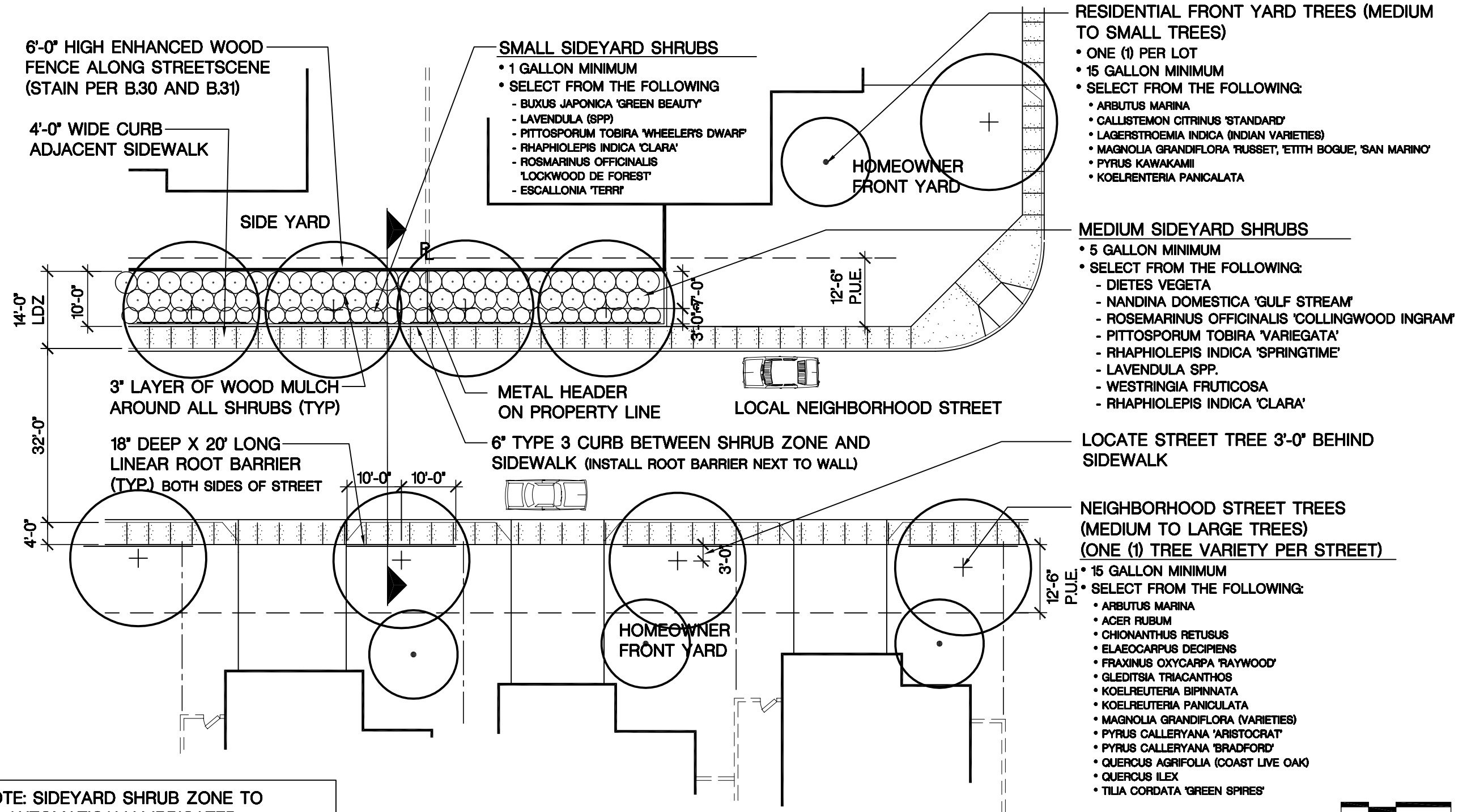


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Exhibit 32 Local Neighborhood Streetscene Plan



NOTE: SIDYARD SHRUB ZONE TO BE AUTOMATICALLY IRRIGATED.

Scale 1" = 20'

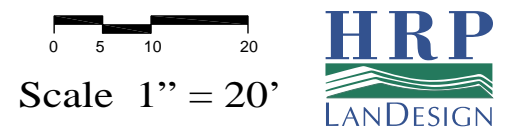
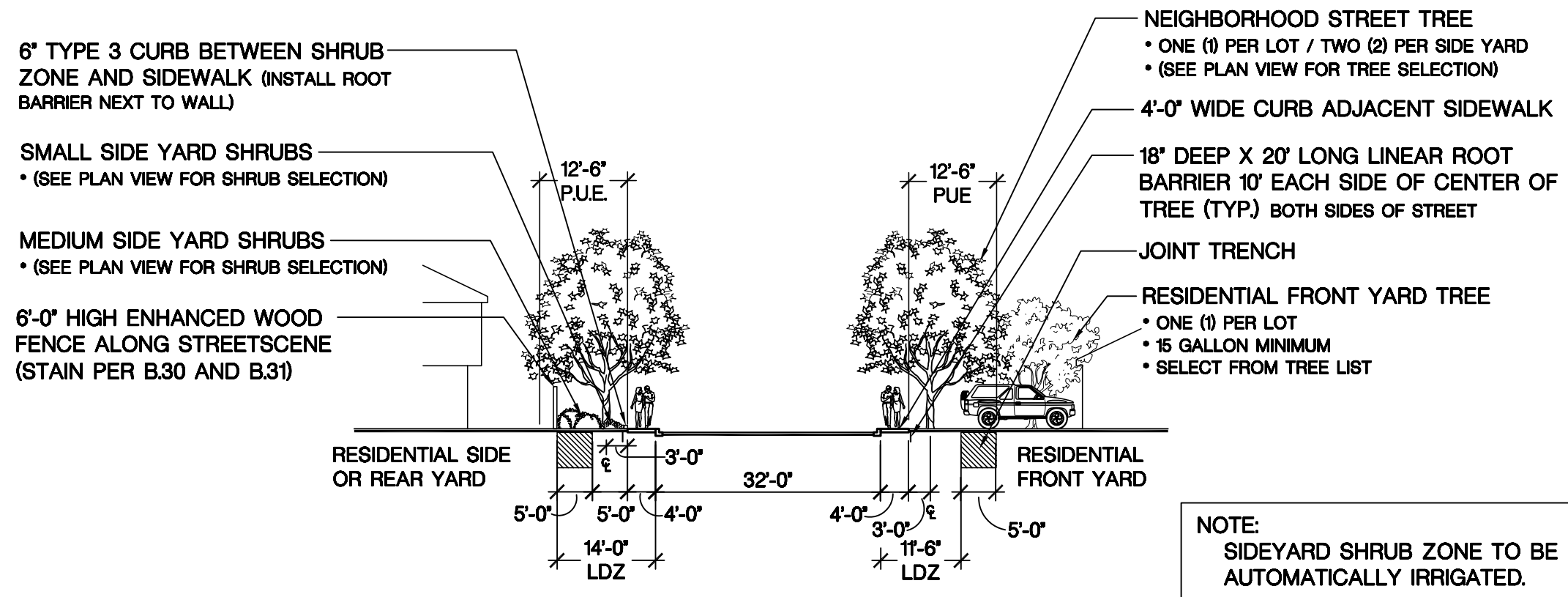


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Exhibit 33 Local Neighborhood Streetscene Section

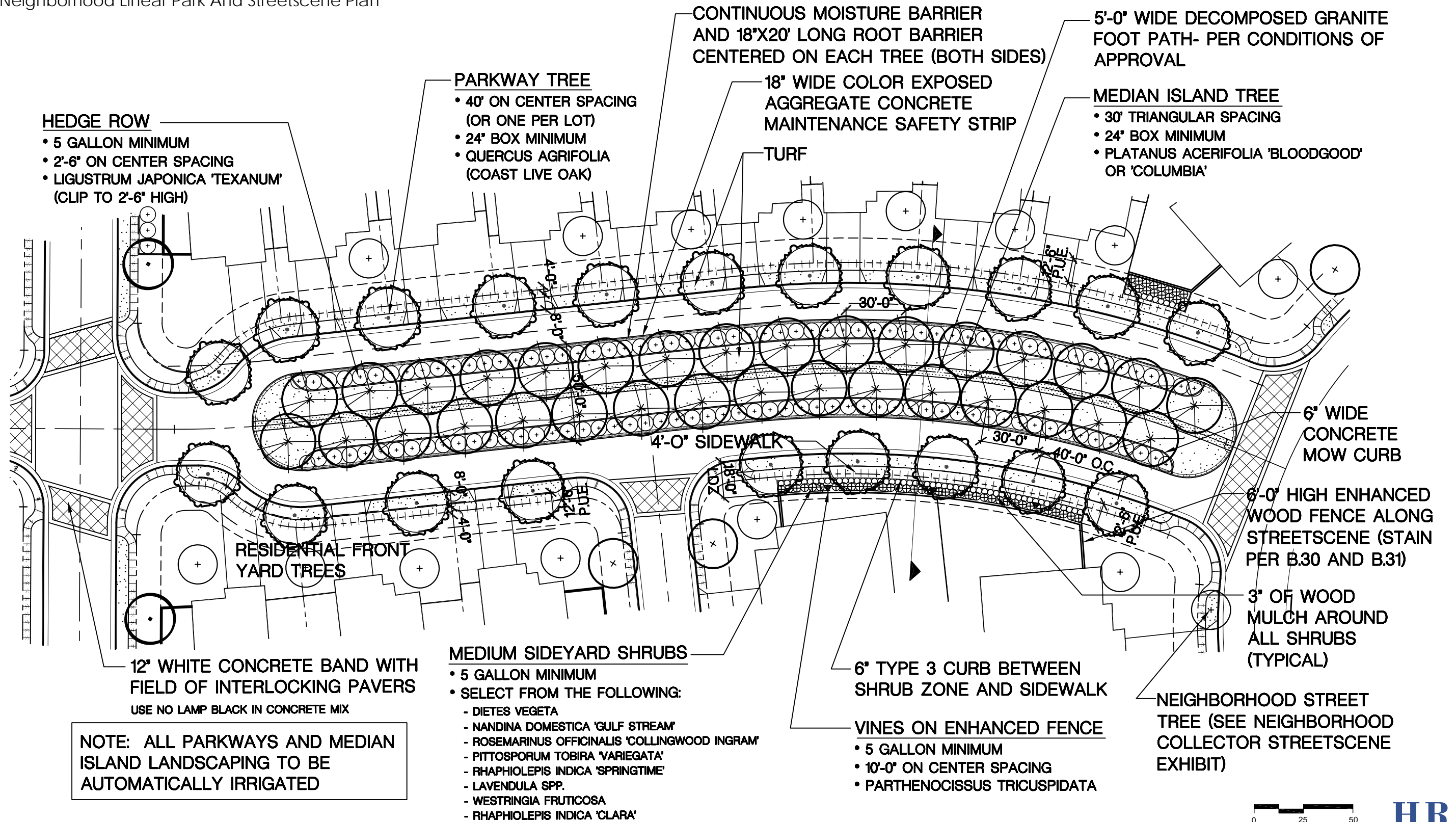


LAGUNA RIDGE

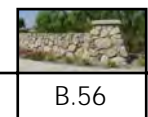
Design Guidelines

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Exhibit 34 Neighborhood Linear Park And Streetscene Plan



0 25 50
Scale 1" = 50'



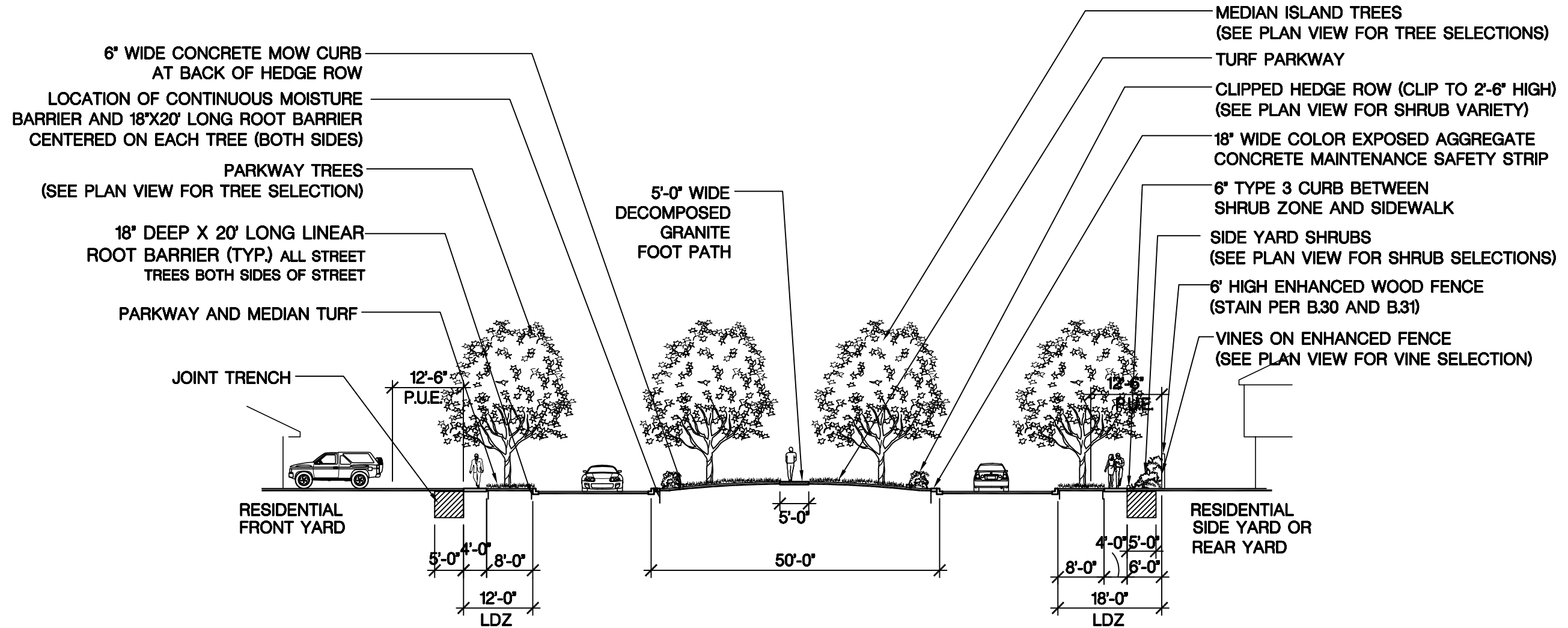
B.56

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Design Guidelines

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Exhibit 35 Neighborhood Linear Park And Streetscene Section



NOTE:
ALL PARKWAYS AND MEDIAN ISLAND LANDSCAPING TO BE AUTOMATICALLY IRRIGATED

SEE CITY STANDARD DETAIL FOR THE WIDENED MEDIAN.

Scale 1" = 20'



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B.9 The Grand Parkway – See Exhibits 36a, 36b, 36c, and 36d

The Grand parkway is the communities centralized major pedestrian and bicycle connection between land uses. The landscaping along this corridor is the most natural looking in the Community. The use of California Sycamore trees and Oak trees, along with California natives, grasses and compatible drought tolerant plant material also help to convey the “Natural” feel of this special corridor. The Grand Parkway serves a number of purposes including such things as storm water conveyance, water quality area, an area for Oak tree mitigation, and an enhanced natural appearing landscape corridor along Whitelock Parkway. Pedestrian access from the meandering Class I pedestrian/bike combination trail to secondary paseo systems is achieved by providing pedestrian bridges at two (2) key locations. There are existing Oak tree groupings along this corridor, and where possible these existing trees will be saved.

The following landscape standards apply:

- Grand Parkway overall Development Zone – varies from 60’ to 260’ wide.
- Mitigation Trees- All trees within the 100 year flood zone shall have all lower branches pruned to 8’-0” above finish grade.
 - Quercus lobata – Valley Oak
 - Quercus wislizenii – Valley Live Oak
 - Quercus agrifolia – Coast Live Oak
 - Quercus rubra- Red Oak
 - 15 gallon minimum
- Deciduous Accent Tree
 - Platanus racemosa- California Sycamore
 - Alnus rhombifolia- White Alder
 - 15 gallon minimum

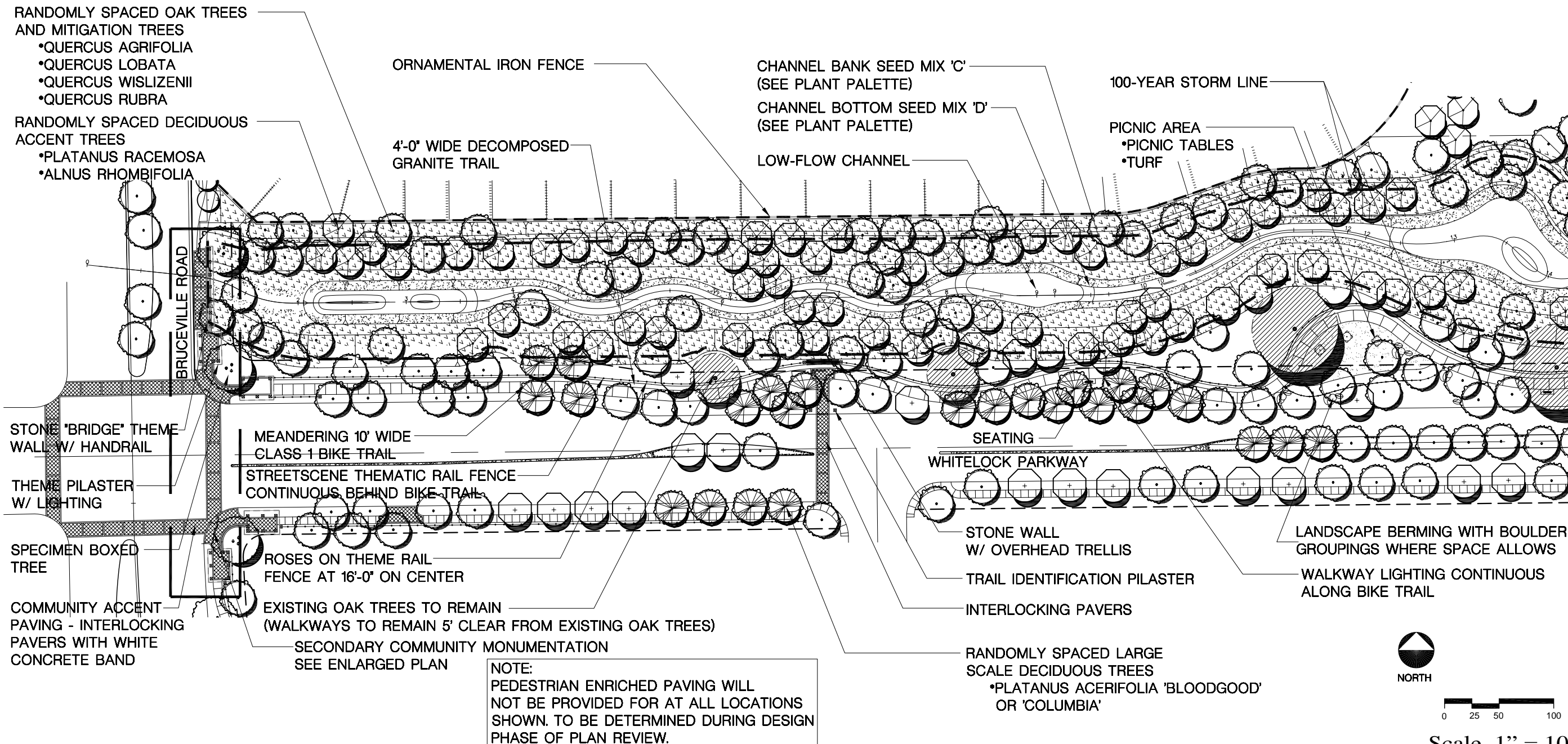
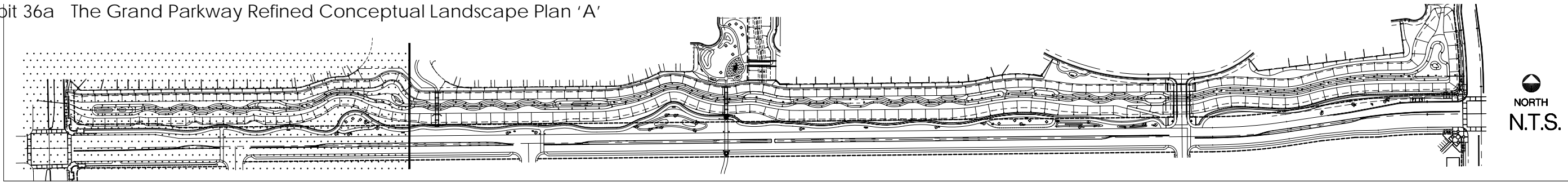
- Large native and drought tolerant shrubs.
 - 5 gallon minimum
 - Select from the Grand Parkway plant palette.
- Medium drought tolerant shrubs
 - 1 gallon minimum
 - One third 5 gallon
 - Select from the Grand Parkway plant palette.
- Small drought tolerant shrubs
 - 1 gallon minimum
 - One third 5 gallon
 - Select from the Grand Parkway plant palette.
- 3” Layer of wood mulch around existing Oak trees
 - No irrigation.
 - No irrigation trenching under existing oak trees.
- Channel Bottom Seed Mix
 - Mix ‘D’
 - See Community Palette for mix
- Channel Bank Seed Mix
 - Mix ‘C’
 - See Community Plant Palette for mix
- Thematic rail streetscene rail fence located at the back of the Class I pedestrian/bike combination trail.
- Roses on the thematic rail fence.
 - 5 gallon minimum.
 - 16’-0” on center spacing (every other fence post).
 - Select from Grand Parkway plant palette.
- Ornamental iron view fence or Builder optional combination wall featuring a 2’ high low wall with 4’ high ornamental iron fence atop at Residential rear yard property lines.

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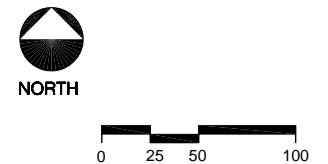
Design Guidelines

August 3, 2005

Exhibit 36a The Grand Parkway Refined Conceptual Landscape Plan 'A'



NOTE:
PEDESTRIAN ENRICHED PAVING WILL NOT BE PROVIDED FOR AT ALL LOCATIONS SHOWN. TO BE DETERMINED DURING DESIGN PHASE OF PLAN REVIEW.

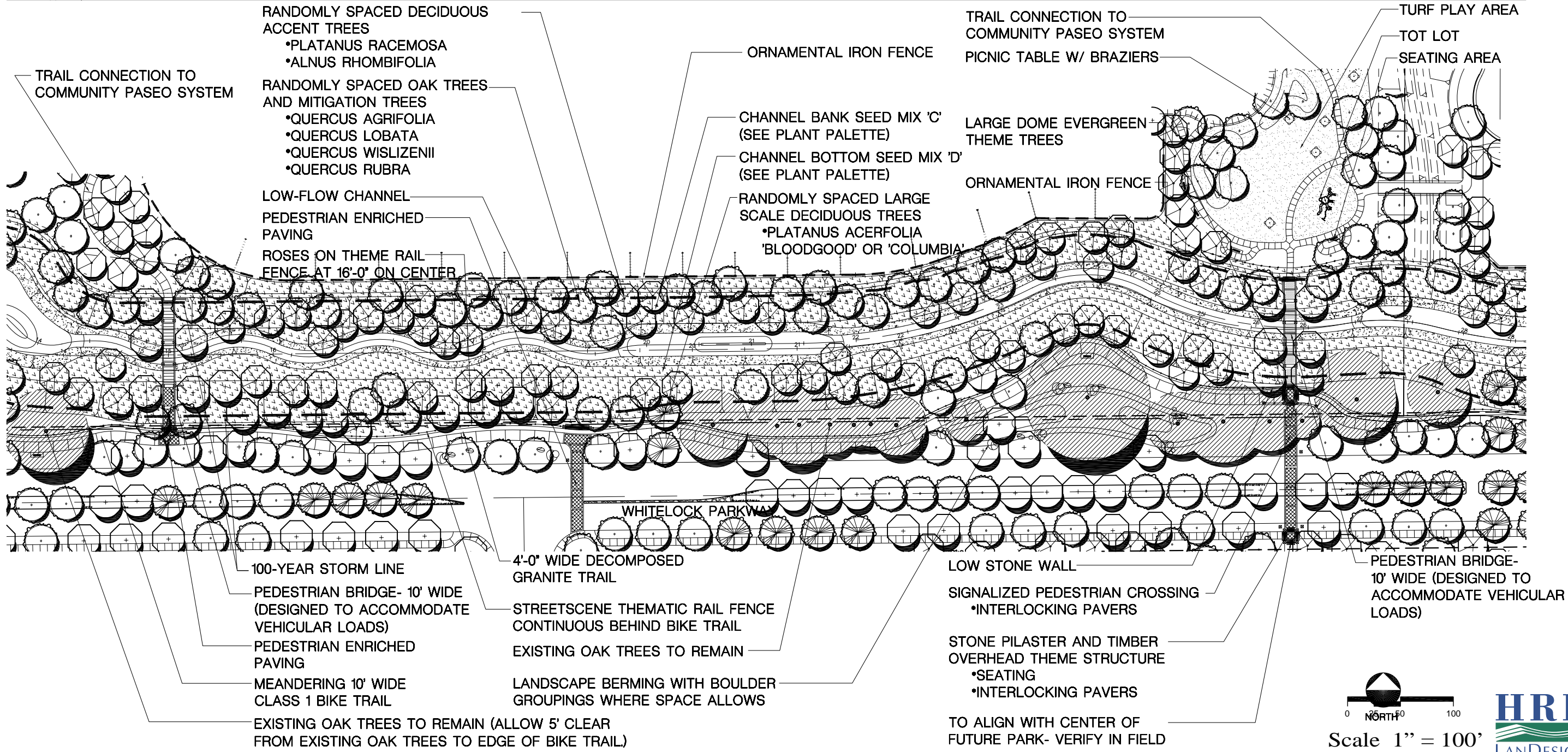
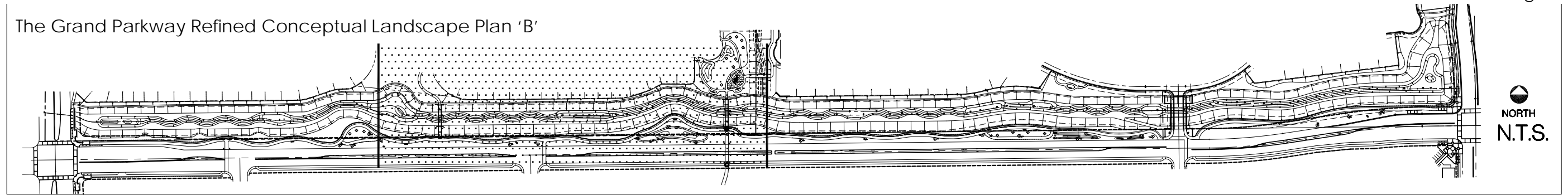


LAGUNA RIDGE

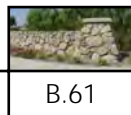
Design Guidelines

August 3, 2005

Exhibit 36b The Grand Parkway Refined Conceptual Landscape Plan 'B'



Scale 1" = 100'



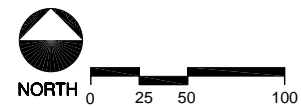
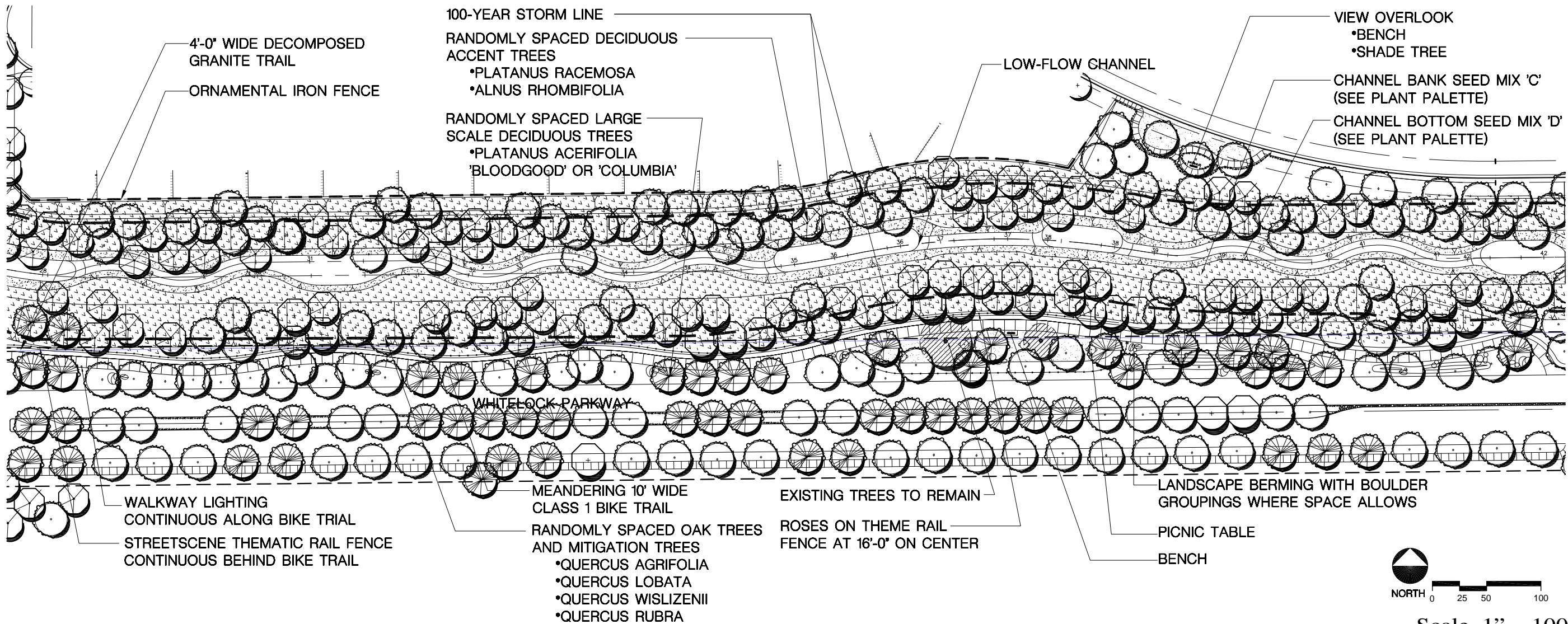
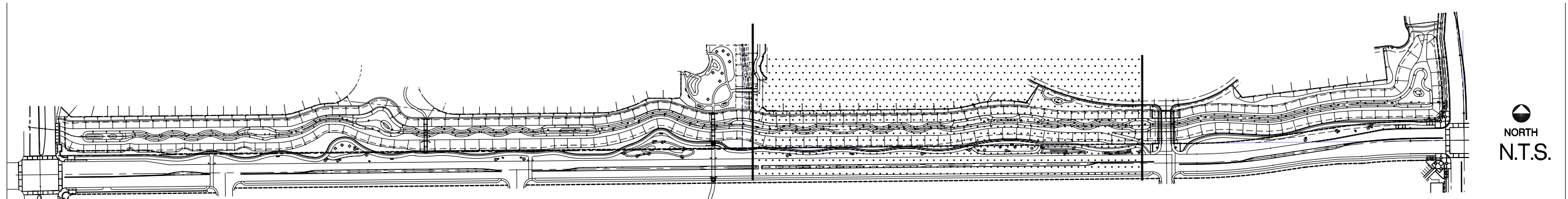
B.61

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Design Guidelines

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Exhibit 36c The Grand Parkway Refined Conceptual Landscape Plan 'C'



Scale 1" = 100'

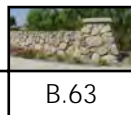
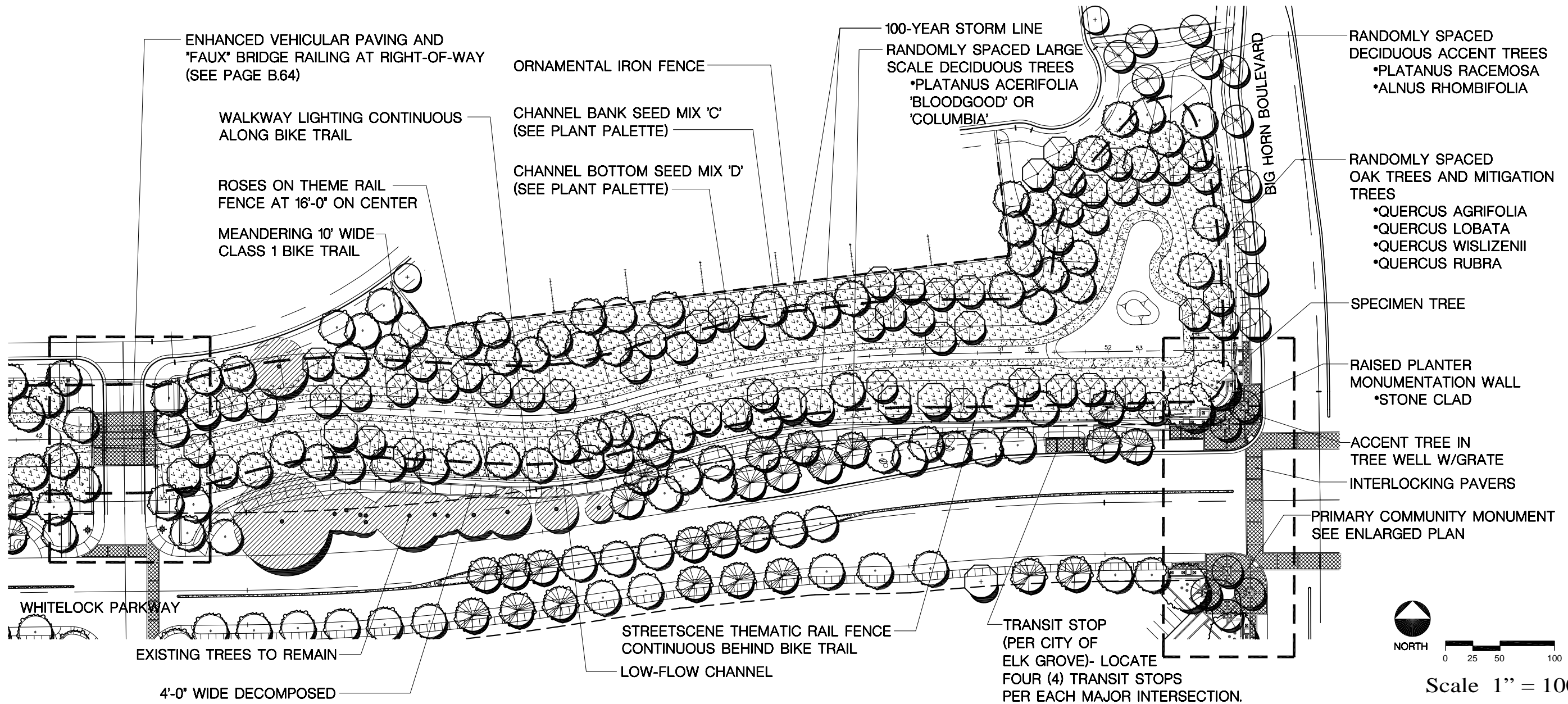
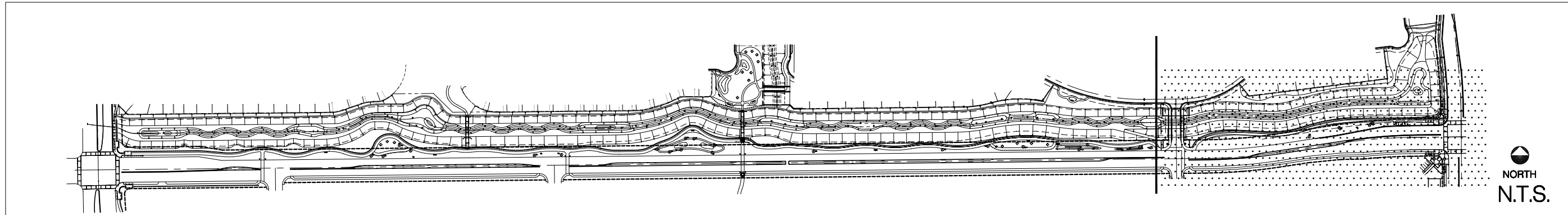


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Exhibit 36d The Grand Parkway Refined Conceptual Landscape Plan 'D'



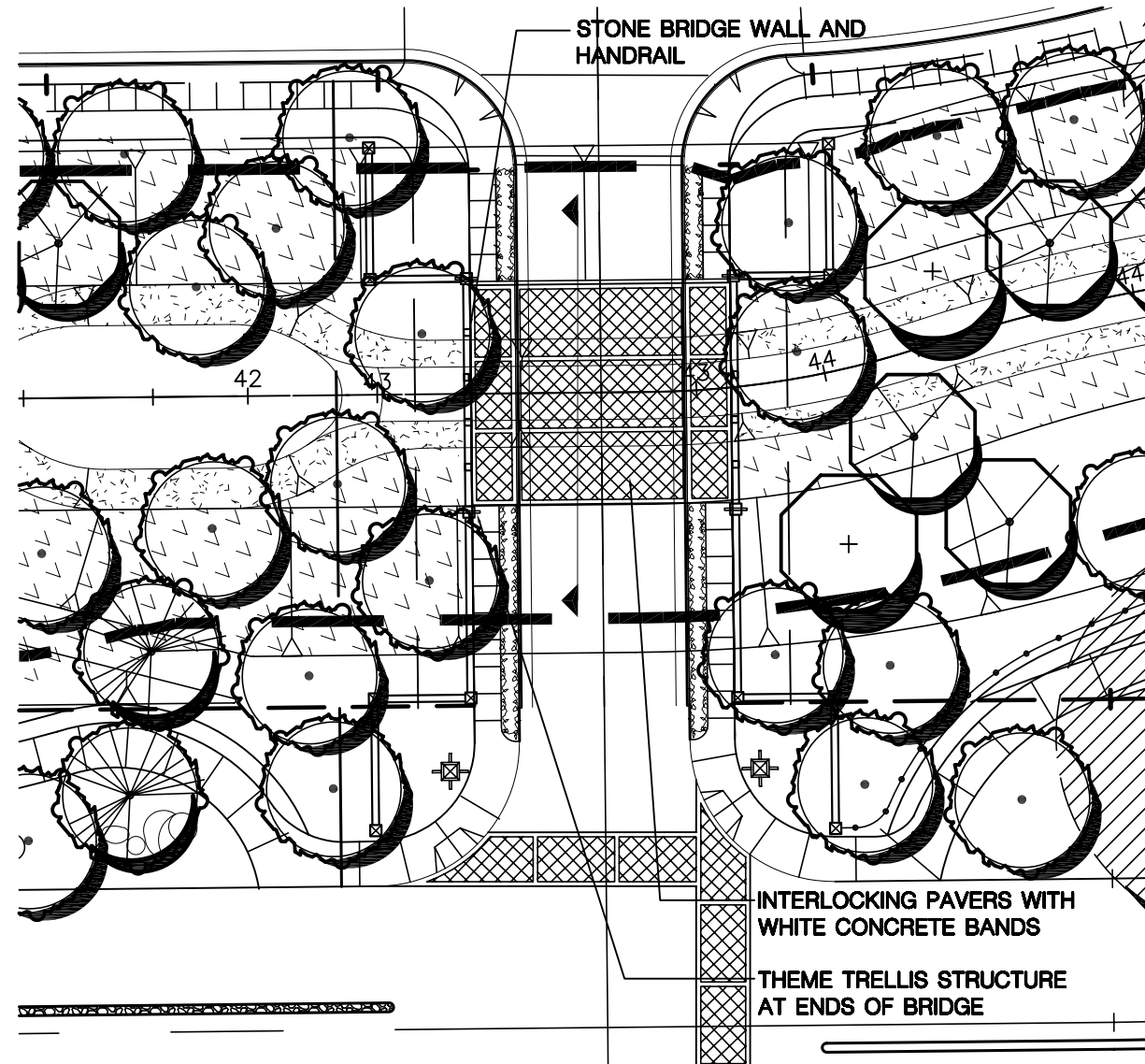
B.63

LAGUNA RIDGE

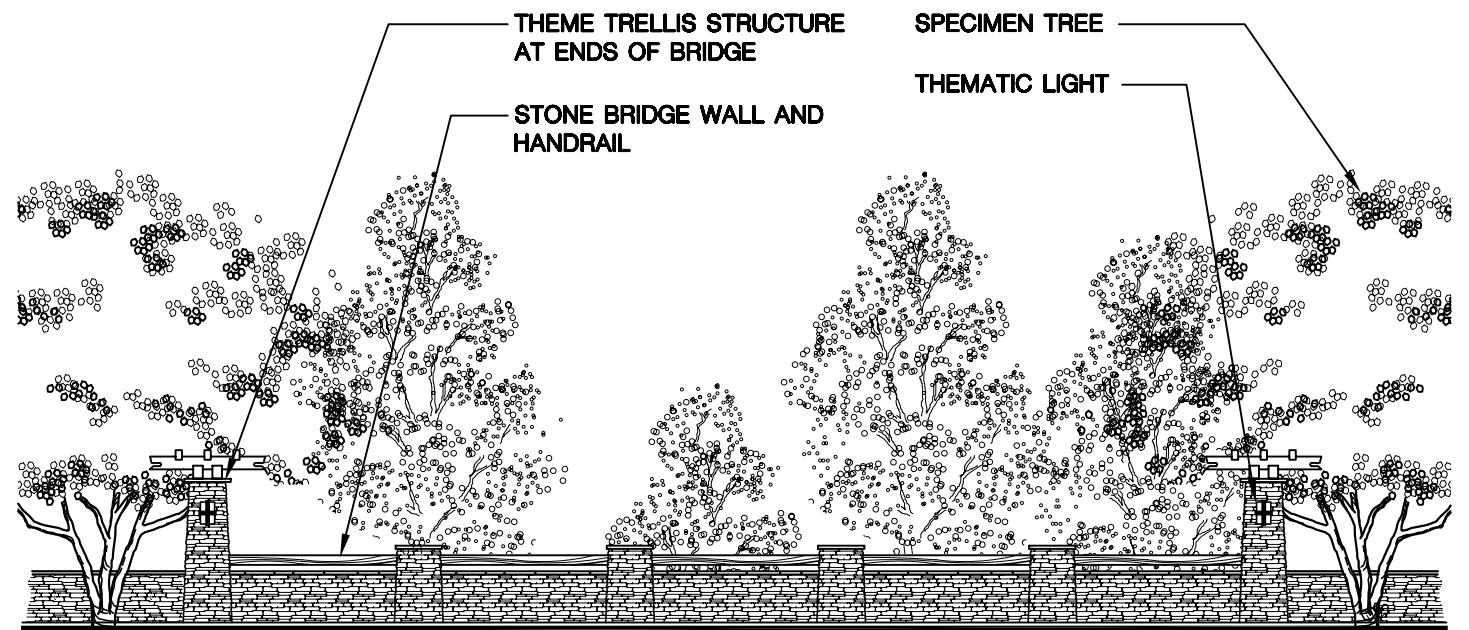
Design Guidelines

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Exhibit 36e Faux Bridge



FAUX BRIDGE PLAN VIEW
SCALE: 1"=40'



FAUX BRIDGE ELEVATION
SCALE: 1"=10'

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B.10 Paseo/Greenbelt and Wetland Riparian Habitat Mitigation Area – See Exhibits 37a, 37b, 37c, and 37d

The Paseo/Greenbelt and Wetland Riparian Habitat Mitigation Plans and sections is consistent with the Wetland/Riparian Habitat Mitigation and Monitoring Plan prepared for the U.S. Army Corp of Engineers, as prepared by Gibson and Skordal, LLC, dated December 2004 (revised). For additional information on specifics of this mitigation area, refer to the above mentioned document.

This corridor features Oak mitigation trees (*Quercus lobata*) and riparian trees. There are several pedestrian bridge crossings over the low flow channel to provide residential connections from one neighborhood to another. A 10'-0" wide decomposed granite trail along the edge of the channel provides connections to neighborhoods and to the Grand Parkway Corridor. This decomposed granite trail must meet ADA standards. There are two (2) vehicular crossings over this mitigation corridor. One is at a residential street and the other is at Laguna Ridge Road. Both of these crossings feature a faux bridge with thematic railings, enriched paving (interlocking pavers) and thematic lighting. The portion of the channel between the Grand Parkway and Laguna Ridge Road features residential rear yards on the west side of the channel and residential street with front yards on the east side. This neighborhood streetscene is planted with *Quercus lobata* mitigation trees on both sides of the street. There is also a 10'-0" wide decomposed granite trail with street taper areas to allow for on street parking on the west side of the street as well as an un-striped bicycle trail in the street. A 3-rail thematic rail fence parallels the paseo on the edge of the mitigation/habitat channel, and serves as a pedestrian habitat/mitigation separation.

The portion of the channel between Laguna Ridge Road and Big Horn Boulevard contains three (3) pedestrian bridge crossings, which provides a pedestrian connection between the community park and the elementary school site. As with the portion of the channel south of Laguna Ridge Road, a 10'-0" wide decomposed granite trail provides neighborhood connections to the paseo system, as well as providing a pedestrian connection to Big

Horn Boulevard. There is also a small neighborhood pocket park where the channel meets Laguna Ridge Road.

The following landscape standards apply:

- The Mitigation/Habitat Channel is approximately 100' wide
- Mitigation Trees
 - *Quercus lobata* – Valley Oak
 - 24" box minimum
- Riparian Trees
 - *Platanus racemosa* - California Sycamore
 - *Salix laevigata* – Red Willow
 - 15 gallon minimum
- The total riparian and Oak trees needed for mitigation in this area is as follows: (Per U.S. Army Corps of Engineers)
 - 95 *Quercus lobata*
 - 120 *Platanus racemosa*
 - 35 *Salix laevigata*
- 10'-0" wide decomposed granite trail on the south and east side of the channel. (Must meet ADA standards.)
- 3-rail thematic rail fence continuous along the paseo, located between the trail and the top of channel. (Provides separation between pedestrians and the habitat/mitigation corridor)
- Ornamental iron fence or Builder optional combination wall featuring a 2' high low wall with 4'-0" high ornamental iron fence atop at rear yard conditions (when adjacent to channel edge).
- Neighborhood Pocket Park
 - Turf
 - Mitigation Oak trees
 - Benches
 - Picnic

- Walk
- Channel Bottom Seed Mix
 - Mix 'B' (Per U.S. Army Corps of Engineers)
 - See Community Plant Palette for mix.
- Channel Bank Seed Mix
 - Mix 'A' (Per U.S. Army Corps of Engineers)
 - See Community Plant Palette for mix.
- Street tapers at parking area.

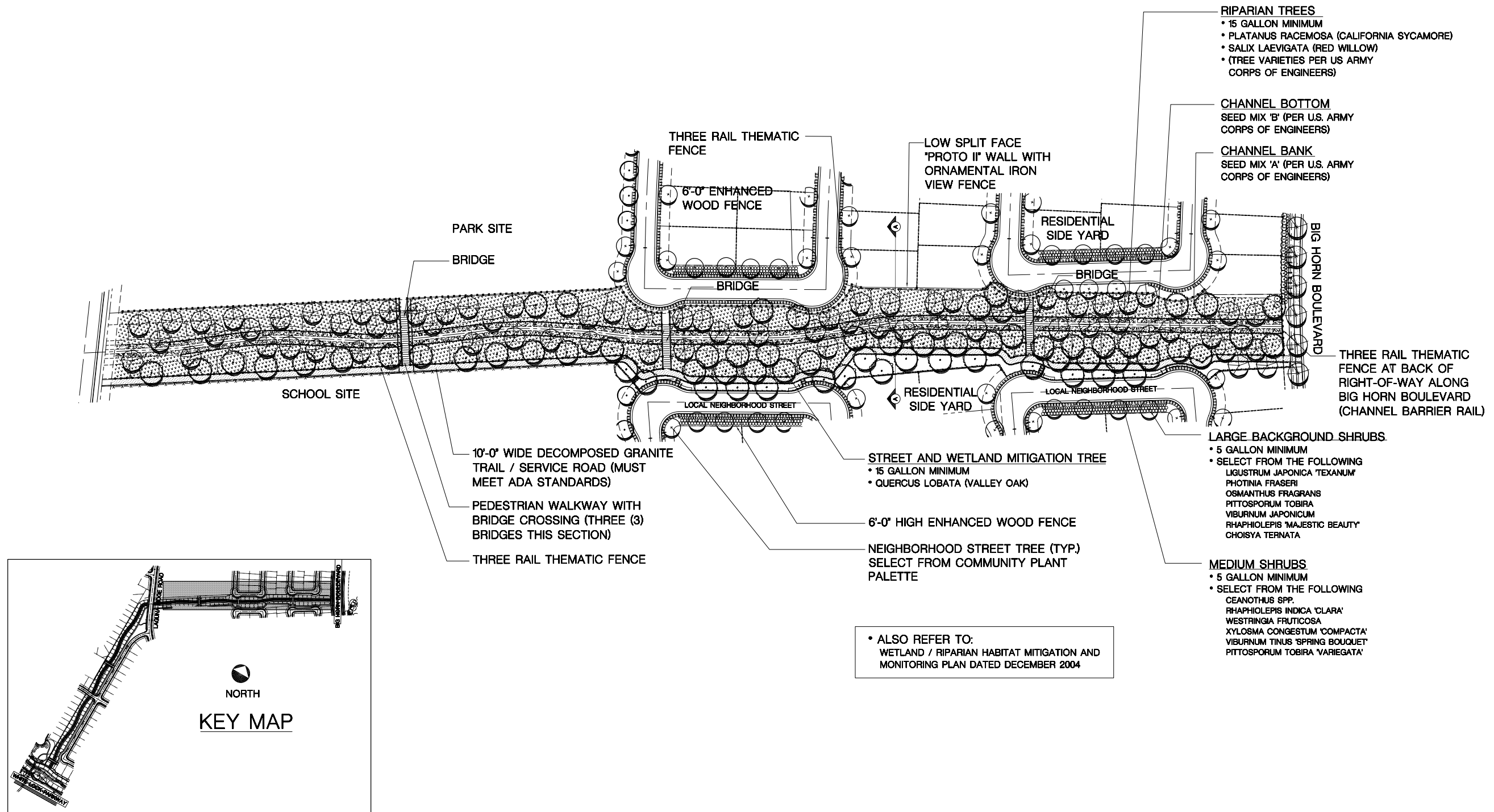


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Exhibit 37a Paseo Greenbelt And Wetlands Riparian Habitat Mitigation Area Plan (East Of Park Site)



Scale 1" = 150'

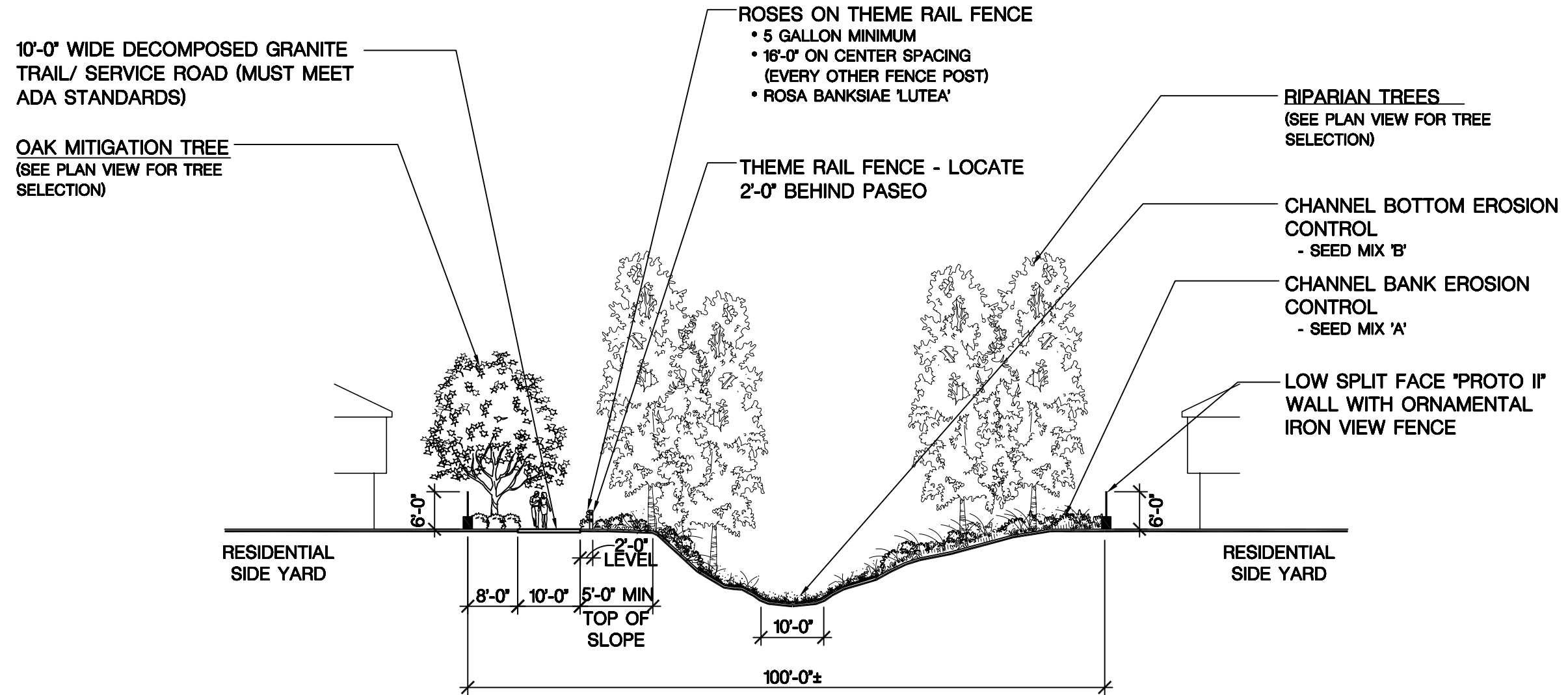


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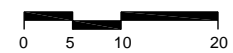
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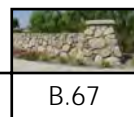
Exhibit 37b Paseo Greenbelt And Wetlands Riparian Habitat Mitigation Area Section (East Of Park Site)



SECTION A-A (PAGE B.66)



Scale 1" = 20'

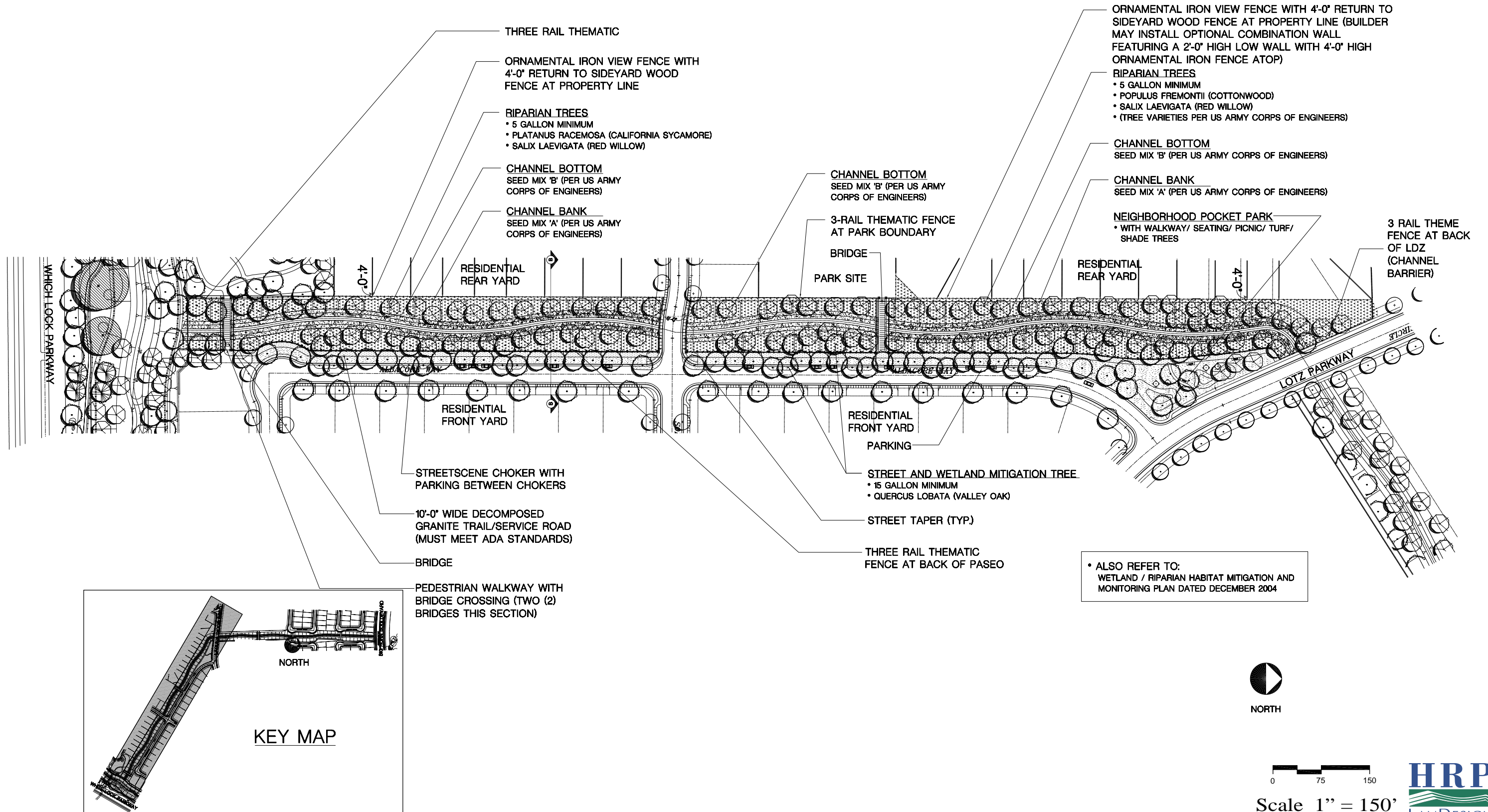


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Exhibit 37c Paseo Greenbelt And Wetlands Riparian Habitat Mitigation Area Plan (South Of Park Site)

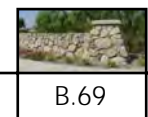
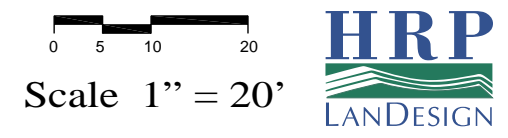
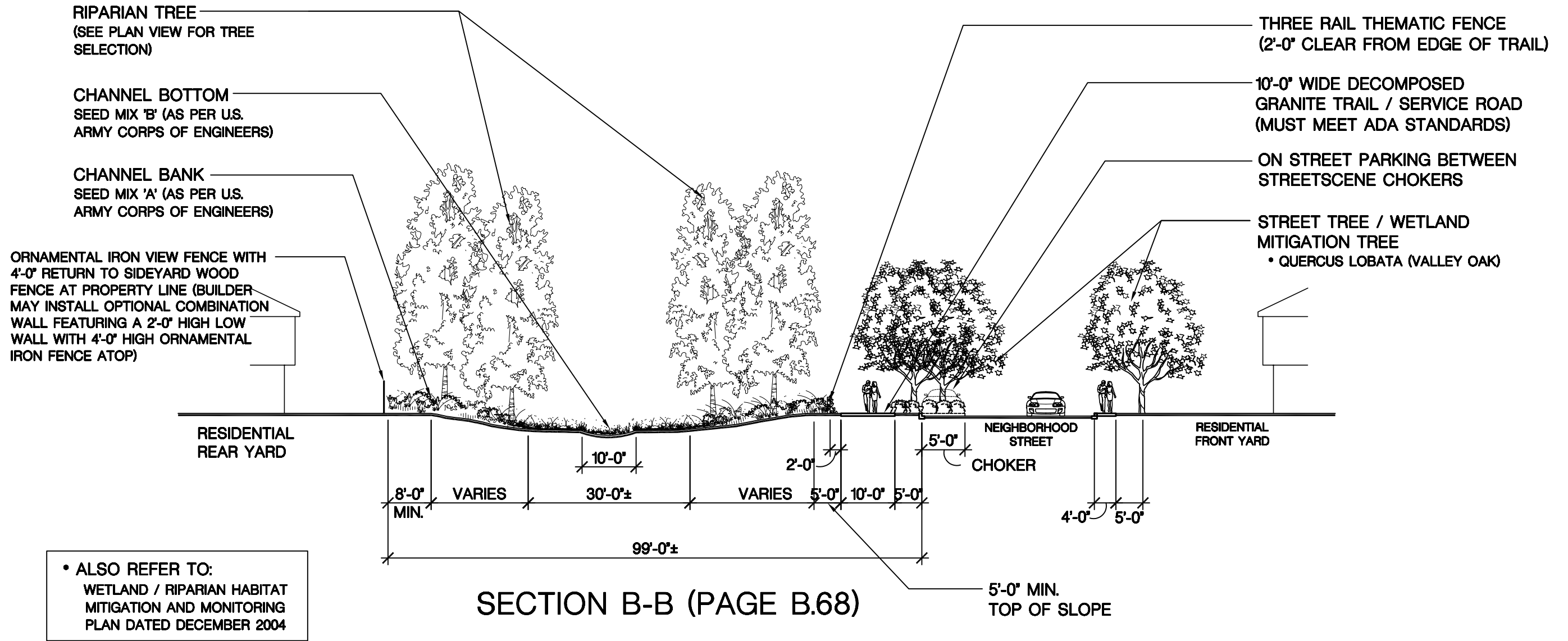


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Exhibit 37d Paseo Greenbelt And Wetlands Riparian Habitat Mitigation Area Section (South Of Park Site)



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B.11 COMMUNITY PLANT PALETTE

Flexibility, diversity in plant material and a limited plant palette give greater unity and thematic identity to the community. The following plant material lists have been selected for their appropriateness to the project theme, climate conditions, and concern for maintenance. A limited selection of plant materials used in simple composition is encouraged. Whenever possible, overall plant material selection for a given area shall have compatible drought resistant characteristics, and irrigation programming should be designed to minimize water applications.

Specimen Trees - at community monumentation corners and at points of interest.

- Quercus agrifolia *Coast live oak*
 - 60" Box minimum

Plaza Accent Trees - at primary community monumentation corners

- Arbutus Marina *NCN*
 - 36" Box minimum
- Lagerstroemia indica 'hybrid' *Crape Myrtle*
 - 36" Box minimum
- Cornus kousa *Kousa Dogwood*
 - 36" Box minimum
- Koelreuteria paniculata *Goldenrain Tree*
 - 36" Box minimum
- Magnolia grandiflora 'Edith Bogue' *Magnolia*
 - 36" Box minimum
- Magnolia grandiflora 'San Marino' *Magnolia*
 - 36" Box minimum
- Pyrus kawakamii *Evergreen Pear*
 - 36" Box minimum

Backdrop Vertical Accent

- Prunus caroliniana 'Compacta' *Carolina Laurel Cherry*
 - 15 gallon minimum
- Podocarpus henkelii *Long-Leafed Yellowwood*
 - 24" Box minimum

Neighborhood Entry Tree

- Quercus agrifolia *Interior LiveOak*
 - 24" Box minimum

Bruceville Road Street Trees

- Platanus acerifolia 'Bloodgood' or 'Columbia' *London Plane Tree*
 - 15 gallon minimum
 - One third 24" Box

Bruceville Road Meidan Island

In fill Trees

- Quercus wislizenii *Interior Live Oak*
- Quercus agrifolia *Coast Live Oak*
 - 15 gallon minimum
 - One third 24" Box

Bruceville Road Background Trees – Select from the following:

- Quercus wislizenii *Interior Live Oak*
- Quercus agrifolia *Coast Live Oak*
 - 15 gallon minimum

Bruceville Road Large Background Shrubs – Select from the following:

- Arbutus unedo 'Compacta' *Dwarf Strawberry Tree*
- Osmanthus fragrans *Sweet Olive*
- Photinia fraseri *Photinia*
- Pittosporum tobira *Tobira*
- Viburnum japonica *Viburnum*
- Phornium tenax *Flax*
- Escallonia fradesii *NCN*

- Pittosporum tobira 'Variegata' *Variegated Tobira*
- Rhamphiolepis 'Majestic Beauty' *Indian Hawthorn*
 - 5 gallon minimum

Bruceville Road Medium Shrubs – Select from the following:

- Rhamphiolepis indica 'Clara' *India Hawthorn*
- Rhamphiolepis indica 'Springtime' *India Hawthorn*
- Dietes vegeta *Fortnight Lily*
- Nandina domestica 'Gulf Stream' *Heavenly Bamboo*
- Rosmarinus officinalis 'Collingwood Ingram' *Rosemary*
- Westringia fruticosa *Coast Rosemary*
 - 5 gallon minimum

Bruceville Road Small Shrubs/Groundcovers – Select from the following:

- Agapanthus africanus 'Queen Anne' *Lily of the Nile*
- Pittosporum tobira 'Wheelers Dwarf' *Dwarf Tobira*
- Pyracantha 'Santa Cruz' *Spreading Firethorn*
- Hemerocallis hybrid *Daylily*
- Rhamphiolepis indica 'Ballerina' *India Hawthorn*
- Rosmarinus officinalis 'Irene' *Rosemary*
- Cotoneaster horizontalis *Rock Cotoneaster*
- Coprosma petriei *NCN*
- Trachelospermum jasminoides *Star Jasmine*
- Baccharis pilularis 'Twin Peaks' *Dwarf Coyote Bush*
- Rosa (groundcover types) *Landscape Rose*
 - 1 gallon minimum

Bruceville Road Vines

- Parthenocissus tricuspidata *Boston Ivy*
 - 5 gallon minimum

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Bruceville Road Median Island Shrubs

- Baccharis pilularis ‘Twin Peaks’ *Dwarf Coyote Bush*
- Rosmarinus officinalis ‘Irene’ *Rosemary*
 - 1 gallon minimum

Big Horn Boulevard Street Tree

- Platanus acerifolia ‘Bloodgood’ or ‘Columbia’ *London Plane Tree*
 - 15 gallon minimum
 - One third 24” Box

Big Horn Boulevard Median Island Tree

- Quercus agrifolia *Coast Live Oak*
 - 15 gallon minimum
 - One third 24” Box

Big Horn Boulevard Median Island Accent Tree

- Pyrus calleryana ‘Aristocrat’ *Ornamental Pear*
 - 15 gallon minimum
 - One third 24” Box

Big Horn Boulevard Back Ground Trees – Select from the following:

- Celtis sinensis *Chinese Hackberry*
- Magnolia grandiflora ‘Russet’ *Magnolia*
- Pinus canariensis *Canary Island Pine*
- Pyrus calleryana ‘Red Spire’ *Flowering Pear*
 - 15 gallon minimum
 - One third 24” Box

Big Horn Boulevard Medium Shrubs – Select from the following:

- Pittosporum tobira ‘Varigata’ *Variegated Tobira*
- Rhamphiolepis indica ‘Clara’ *India Hawthorn*
- Rosa (Landscape Shrub Variety) *Rose*
- Westringia fruticosa *Coast Rosemary*
- Xylosma congestum ‘Compacta’ *NCN*

Big Horn Boulevard Small Shrubs – Select from the following:

- Agapanthus africanus ‘Queen Anne’ *Lily of the Nile*
- Escallonia ‘Terri’ *NCN*
- Hemerocallis ‘Hybrid’ *Day Lily*
- Rosa (groundcover type) *Landscape Rose*
- Rosmarinus officinalis ‘Lockwood de Forest’ *Rosemary*
- Trachelospermum jasminoides *Star Jasmine*
 - 1 gallon minimum

Big Horn Boulevard Median Island Shrubs

- Rosmarinus officinalis ‘Collingwood Ingram’ *Rosemary*
- Rhamphiolepis indica ‘Ballerina’ *India Hawthorn*
- Agapanthus africanus ‘Queen Anne’ *Lily of the Nile*
 - 1 gallon minimum

Big Horn Boulevard Vines

- Parthenocissus tricuspidata *Boston Ivy*
 - 5 gallon minimum

Whitlock Parkway Street Trees and Median Island Trees

- Platanus racemosa *California Sycamore*
- Quercus wislizenii *Interior Live Oak*
- Quercus lobata *Valley Oak*
 - 15 gallon minimum
 - One third 24” Box

Whitlock Parkway Deciduous Accent Trees

- Platanus racemosa *California Sycamore*
- Alnus rhombifolia *White Alder*

Whitlock Parkway Large Screen Shrubs – Select from the following:

- Arbutus unedo ‘Compacta’ *Dwarf Strawberry Tree*
- Cercis occidentalis *Western Redbud*

- Osmanthus fragrans *Sweet Olive*
- Photinia frameri *Photinia*
- Pittosporum tenuifolium *NCN*
- Viburnum japonica *Viburnum*
 - 5 gallon minimum

Whitlock Parkway Large Native and Drought Tolerant Shrubs – Select from the following:

- Baccharis ‘Centennial’ *NCN*
- Cercis occidentalis *Western Redbud*
- Heteromeles arbutifolia *Toyon*
- Rhamnus alaternus *Italian Buckthorn*
- Rhamnus californica *Coffeeberry*
- Rhus integrifolia *Lemonade Berry*
 - 5 gallon minimum

Whitlock Parkway Medium Drought Tolerant Shrubs – Select from the following:

- Baccharis pilularis *Dwarf Coyote Bush*
- Ceanothus spp. *Wild Lilac*
- Cotoneaster spp. *Cotoneaster*
- Myoporum pacificum *NCN*
- Ribes sanguinum *Currant*
- Romneya coulteri *Matilija Poppy*
- Rosmarinus officinalis spp. *Rosemary*
- Salvia leucantha *Medican Sage*
- Westringia fruticosa *Coast Rosemary*
 - 5 gallon minimum

Whitlock Parkway Small Shrubs – Select from the following:

- Aloe spp. *Aloe*

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- Arctostaphylos ‘Point Reyes’
- Ceanothus spp.
- Cistus hybrids
- Festuca ovina ‘Glauca’
- Helictotrichon sempervirens
- Lavendula spp.
- Pennisetum setaceum ‘Dwarf Red’
- Rosmarinus officinalis ‘Irene’
 - 1 gallon minimum

Prostrate Manzanita
Wild Lilac (Prostrat Va.)
Rockrose
Blue Fescue
Blue Oat Grass
Lavender
Red Fountain Grass
Rosemary

- Lupinus Bicolor
- Leymus condensatus
- Minulus aurantiacus
- Nassella lepida
- Nassella pulchra
- Sisyrinchium bellum

Minature Lupine
Giant Wild-rye
Bush Monkey Flower
Purple Needlegrass
Purple Needlegrass
Blue Eyed Grass

- Ligustrum japonica ‘Texanum’
 - 5 gallon minimum

Texas Privet

Whitelock Parkway Vines

- Parthenocissus tricuspidata
 - 5 gallon minimum
- Rosa banksiae ‘Lutea’
 (on streetscene rail fence)
 - 5 gallon minimum

Boston Ivy

Climbing Rose

Whitelock Parkway Channel Bottom Seed Mix – City of Elk Grove Seed Mix ‘D’

- Bromus carinatus
- Dichelostemma capitatum
- Eschscholzia californica
- Lupinus Bicolor
- Nassella lepida
- Nassella pulchra
- Plantago ovata
- Sisyrinchium bellum

California Brome Grass
Blue Dicks
California Poppy
Minature Lupine
Purple Needlegrass
Purple Needlegrass
California Plantain
Blue Eyed Grass

Civic Center Drive Vines

- Parthenocissus tricuspidata
 - 5 gallon minimum

Boston Ivy

Laguna Springs Drive Street Trees

- Platanus acerifolia ‘Bloodgood’ or ‘Columbia’
 - 15 gallon minimum
 - One third 24” Box

London Plane Tree

Laguna Springs Drive Median Island Tree

- Quercus agrifolia
 - 15 gallon minimum
 - One third 24” Box

Coast Live Oak

Whitelock Parkway Turf

- Festuca arundinacea (‘Dwarf’ varieties)
- Festuca marei (Limited use)
- Festuca californica (Limited use)
 - Seed/Hydroseed

Dwarf Fescue
Marei Fescue
California Fescue

Civic Center Drive Street Tree

- Quercus agrifolia
 - 15 gallon minimum
 - One third 24” Box

Coast Live Oak

Laguna Springs Drive Median Island Accent Tree

- Magnolia grandiflora ‘Russet’
 - 15 gallon minimum
 - One third 24” Box

Magnolia

Whitelock Parkway Channel Bank Seed Mix -

City of Elk Grove Seed Mix ‘C’

- Artemisia californica
- Baccharis pilularis
- Bromus carinatus
- Dichelostemma capitatum
- Encelia californica
- Eschscholzia californica
- Gnaphalium californicum

California Sagebrush
Chaparral Broom
California Brome Grass
Blue Dicks
California Encelia
California Poppy
California Everlasting

Civic Center Drive Medium Shrubs – Select from the following:

- Pittosporum tobira ‘variegata’
- Rhamphiolepis Indica ‘Clara’
- Rosa (Landscape Shrub Variety)
- Rosmarinus officinalis ‘Collingwood Ingram’
- Dietes variegata
- Westringia fruticosa
 - 5 gallon minimum

Varigated Tobira
India Hawthorn
Rose
Rosemary
Fortnight Lily
Coast Rosemary

Laguna Springs Drive Median Island Shrubs

- Rhamphiolepis indica ‘Clara’
- Rosmarinus officinalis ‘Prostratus’
- Agapanthus africanus ‘Queen Anne’
 - 1 gallon minimum

Indian Hawthorn

Rosemary

Lily of the Nile

Laguna Springs Drive Hedge Row and Small Shrubs

- Ligustrum japonica ‘Texanum’
 - 5 gallon minimum
- Agapanthus africanus

Texas Privet

Lily of the Nile

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- Pittosporum tobira ‘Wheelers Dwarf’
- Rhamphiolepis indica ‘Ballerina’
- Rosa ‘Carpet Rose’
 - 1 gallon minimum

Dwarf tobira
Indian Hawthorn
Landscape rose

Lotz Parkway Medium Shrubs – Select from the following:

- Pittosporum tobira ‘variegata’ *Variegated tobira*
- Rhamphiolepis indica ‘Clara’ *Indian Hawthorn*
- Westringia fruticosa *Coast Rosemary*
- Xylosma congestum ‘Compacta’ *NCN*

- Lagerstroemia indica ‘Hybrid’ (Indian) *Crape Myrtle*
- Magnolia grandiflora ‘Etith Bogue’ *Magnolia*
- Magnolia grandiflora ‘Russet’ *Magnolia*
- Magnolia grandiflora ‘San Marino’ *Magnolia*
- Pyrus kawakamii *Ornamental Evergreen Pear*
 - 15 gallon minimum (street trees)
 - 15 gallon minimum (front yard trees)

Laguna Ridge Road Street Tree

- Quercus wislizenii
 - 15 gallon minimum
 - One third 24” Box

Interior Live Oak

Lotz Parkway Vines

- Parthenocissus tricuspidata *Boston Ivy*
 - 5 gallon minimum

Lotz Parkway Median Island Tree

- Platanus acerifolia ‘Bloodgood’ or ‘Columbia’
 - 15 gallon minimum
 - One third 24” Box

London Plane Tree

Neighborhood Street Trees (Medium to Large trees) – Select from the following:

- Arbutus marina *NCN*
- Acer rubum *Red maple*
- Chionanthus retusus *Chinese Fringe Tree*
- Elaeocarpus decipiens *Japanese Blueberry Tree*
- Fraxinus oxycarpa ‘Raywood’ *Ash*
- Gleditsia triacanthos *Honey Locust*
- Koelreuteria bipinnata *Chinese Flame Tree*
- Koelreuteria paniculata *Goldenrain Tree*
- Magnolia grandiflora ‘Majestic Beauty’ *Magnolia*
- Pyrus calleryana ‘Aristocrat’ *Ornamental Pear*
- Pyrus calleryana ‘Bradford’ *Ornamental Pear*
- Quercus agrifolia *Coast Live Oak*
- Quercus ilex *Holly Oak*
- Tilia cordata ‘Green Spire’ *Linden*
 - 15 gallon minimum (street trees)
 - 15 gallon minimum (front yard trees)

Wetland Riparian Habitat Mitigation Plant List

Mitigation Trees

- Quercus lobata *Valley Oak*
 - 15 gallon minimum
 - One third 24” Box

Lotz Parkway Median Island Accent Tree

- Magnolia grandiflora ‘Russet’
 - 15 gallon minimum
 - One third 24” Box

Magnolia

Riparian Trees

- Platnus racemosa *California Sycamore*
 - Salix laevigata *Red Willow*
 - 15 gallon minimum
- (Per US Army Corps of Engineers)

Lotz Parkway Median Island Shrubs

- Rosmarinus officinalis ‘Callingwood Ingram’ *Rosemary*
- Cotoneaster horizontalis *Prostrate Cotoneaster*
- Rhamphiolepis indica ‘Clara’ *Indian Hawthorn*
 - 1 gallon minimum

Rosemary

Prostrate

Indian Hawthorn

Lotz Parkway Large Shrubs – Select from the following:

- Arbutus unedo ‘compacta’ *Dwarf Strawberry tree*
- Photinia fraseri *Photinia*
- Osmanthus fragrans *Sweet Olive*
- Pittosporum tobira *Tobira*
 - 5 gallon minimum

Dwarf Strawberry tree

Photinia

Sweet Olive

Tobira

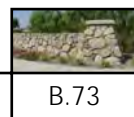
Residential Front Yard Trees (Medium to Small trees) – Select from the following:

- Arbutus marina *NCN*
- Callistemon citrinus *Lemon Bottlebrush*
- Koelreuteria paniculata *Goldenrain Tree*

Channel Bank Seed Mix (Mix A)

(As approved by the U.S. Army Corps of Engineers)

- Artemisia douglasiana *Mugwort*
- Vulpia microstachys *Small Fescue*
- Hordeum brachyantherum *Meadow Barley*
- Leymus triticoides Yolo *Yolo Creeping Wildrye*
- Nassella cernua *Nodding Stipa*
- Poa secunda *Pine Bluegrass*



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- Festuca idahoensis
- Lotus scoparius
- Lupinus microcarpus

Idaho Fescue
Deerweed
Golden Lupine

- Ligustrum japonica ‘Texanum’
- Lonicera japonica ‘Halliana’
- Myoporum parvifolium
- Nandina domestica ‘Gulf Stream’

Texas Privet
Halls Honeysuckle
NCN
Heavenly Bamboo

- Festuca marei
- Helictotrichon sempervirens
- Pennisetum setacudum ‘Dwarf Red’

Marei Fescue
Blue Oat Grass
Dwarf Fountain Grass

Channel Bottom Seed Mix (Mix B)

(As approved by the U.S. Army Corps of Engineers)

- Deschampsia cespitosa
- Hordeum brachyantherum
- Vulpia microstachys
- Leymus triticoides Yolo
- Scirpus californicus
- Scirpus acutus
- Juncus bufonius
- Typha latifolia
- Eleocharis macrostachya
- Cyperus eragrostism
- Achillea millefolium

Tufted Hairgrass
Meadow Barley
Small Fescue
Yolo Creeping Wildrye
California Bulrush
Hard-stem Bulrush
Toad Rush
Broad-leaved Cattail
Common Spikerush
Nutsedge
White Yarrow

- Osmanthus fragrans
- Photinia fraseri
- Phornium tenax
- Pittosporum tenuifolium
- Pittosporum tobira
- Pittosporum tobira ‘Variegata’
- Pittosporum tobira ‘Wheelers Dwarf’
- Rhamnus alaternus
- Rhamnus californica
- Rhamnus californica
- Rhaphiolepis ‘Majestic Beauty’
- Rhaphiolepis indica ‘Springtime’
- Rhaphiolepis indica ‘Ballerina’
- Rhaphiolepis indica ‘Clara’
- Rhus integrifolia
- Ribes sanguinium
- Ribes viburnifolium
- Romneya coulteri
- Rosa Varieties
- Rosmarinus officinalis ‘Collingwood Ingram’
- Rosmarinus officinalis ‘Irene’
- Rosmarinus officinalis ‘Prostrata’
- Rosmarinus officinalis ‘Lockwood de Forest’
- Trachelospermum jasminoides
- Viburnum japonicum
- Westringia fruticosa
- Xylosma congestum ‘compacta’

Vines

Sweet Olive
Photinia
Flax
NCN
Tobira
Variegated Tobira
Dwarf Tobira
Italian Buckthorn
Coffeeberry
NCN
Indian Hawthorn
Indian Hawthorn
Indian Hawthorn
Lemonade Berry
Current
Evergreen Current
Matilija Poppy
Rose
Rosemary
Rosemary
Rosemary
Rosemary
Star Jasmine
Viburnum
Coast Rosemary
NCN

- Parthenocissus tricuspidata
(on streetscene walls and fences only)
 - Rosa Banksiae ‘Lutea’ (on thematic fence only)
- Boston Ivy*
Climbing Rose

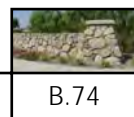
Community Shrubs

- Agapanthus africanus
- Aloe spp.
- Arbutus unedo ‘Compacta’
- Arctostaphylos ‘Point Reyes’
- Baccharis ‘Centennial’
- Baccharis pilularis
- Buxus japonica ‘Green Beauty’
- Ceanothus spp.
- Cistus spp.
- Cotoneaster spp.
- Dietes vegeta
- Escallonia ‘Terri’
- Escallonia fradesii
- Euonymus japonica
- Heteromeles arbutifolia
- Lavendula spp.

Lily of the Nile
Aloe
Dwarf Strawberry Tree
Prostrate Manzanita
NCN
Dwarf Coyote Bush
Boxwood
Wild Lilac
Rock Rose
Cotoneaster
Fortnight Lily
NCN
NCN
Toyon
Lavender

Grasses

- Festua arundinacea (Dwarf variety)(parkway turf)
 - Festuca ovina ‘Glauca’
 - Festuca californica
- Dwarf Fescue*
Blue Fescue
California Festuca



LAGUNA RIDGE

Design Guidelines

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Table 1 - Height / Caliper relationship to box size

Box Size	Caliper	Average Height Range	Typical Maximum Height
15 Gal. Evergreen	1/2 in.	4 to 5 ft.	6 ft.
15 Gal. Deciduous	3/4 in.	6 to 8 ft.	10 ft.
24" Box Evergreen	1 in. / 1 1/4 in	8 to 10 ft.	11 ft. / 12ft.
24" Box Deciduous	1 1/2 in. / 1 3/4 in	10 to 12 ft.	14 ft.
36" Box Evergreen	2 in. / 2 1/2 in	12 to 14 ft.	16 ft.
36" Box Deciduous	3 in.	14 to 16 ft.	18 ft.
48" Box Evergreen	3 1/2 in.	14 to 16 ft.	18 ft.
48" Box Deciduous	4 in.	16 to 18 ft.	22 ft.
60" Box Evergreen	4 1/2 in.	16 to 18 ft.	22 ft.
60" Box Deciduous	5 in.	18 ft. and up	26 ft.

* Above information aobtained from American Satandard for nursery stock, dated May 12, 2004

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B.12 Irrigation Standards

Irrigation systems within Laguna Ridge will when all possible utilize reclaimed water for irrigating streetscene corridors, parks, open space and school sites, as available from Sacramento Regional Water Treatment Plant.

With the use of a reclaimed water irrigation concept, and a water management program, the water availability concerns within Laguna Ridge will be reduced. Perimeter streetscenes, parkways and median islands shall be irrigated using conventional spray type irrigation heads. All grand parkway and paseo/greenbelt areas shall be irrigated using conventional spray type irrigation heads in areas less than 20' wide and rotor type spray heads in areas over 20' wide. Care shall be taken to lay out the irrigation system in concert with the planting design, preventing irrigation heads to be blocked by the shrub plantings.

The irrigation systems shall be separated into systems based on the planting design/plant palette/planting hydrozones. The irrigation design shall provide for 100% double coverage of all rotor and spray head systems. The irrigation system design shall also conform to State of California Assembly Bill #325/ City of Elk Grove Water Conservation ordinance for a water conserving landscape utilizing no more than 80% of the historical evapotranspiration rate for the City of Elk Grove.

All internal parkway landscape areas shall be irrigated with an automatic irrigation system connected to the homeowner's front yard irrigation system.

Specific irrigation equipment refers to the Irrigation Legend for the following equipment:

- Water Meter – per City of Elk Grove requirements.
- Electrical Meters – per SMUD requirements.
- Basket Strainer – for Reclaimed Irrigation Systems
- Backflow Device – for Domestic Irrigation System

- Irrigation Pumps – if required shall be per the Legend.(No Plastic)
- Remote Control Master Irrigation Valves – shall be per the Legend.
- Pressure Regulators – if required, based on pressure – shall be per the Legend.
- Quick Coupler Valves – 100' o.c. per the Irrigation Legend.
- Remote Irrigation Control Valves – shall be per the Irrigation Legend.
- Pressure Regulating Irrigation Control Valves – shall be per the Irrigation Legend.
- Flow Sensors – shall be per the Irrigation Legend.
- Gate Valves – shall be per the Irrigation Legend.
- Irrigation Controllers – shall be Central Control Irrigation Controllers, per the Irrigation Legend.
- Telephone service – provide telephone service to the Rain Bird (Cluster Control Unit)
- Communication Conduit/Cable – provide conduit and pull boxes and cable/per the Irrigation Legend.
- Irrigation PVC Mainline – provide purple pipe reclaimed mainline for all reclaimed irrigation systems – per the irrigation system.
- Irrigation Lateral Lines – provide lateral lines per the Irrigation Legend.
- On Grade Pipe – Provide galvanized pipe for all required on grade installations per the Irrigation Legend.
- Irrigation Sleeves – Provide irrigation wire and pipe sleeves under all streets and hardscape 6' or longer, per the Irrigation Legend.
- Irrigation common and control wires per the Irrigation Legend.
- Irrigation Turf Heads – provide 6" pop up heads for all turf areas, per the Irrigation Legend.
- Shrub Heads – provide 12" pop up heads for all shrub areas, per the Irrigation Legend.
- Pressure compensating screens – provide pressure compensating screens to adjust all spray heads – use screens per the Irrigation Legend.

LAGUNA RIDGE

Design Guidelines

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B.2.1 Irrigation Equipment Legend

MANUFACTURER AND MODEL -ALL EQUIPMENT LISTED SHALL BE OR AS EQUAL, AS SPECIFIED OR PER THE CITY OF ELK GROVE
WATER METER, SIZE PER PLAN - INSTALL PER CIVIL ENGINEERS PLANS
ELECTRIC SERVICE FOR IRRIGATION CONTROLLER INSTALL PER ELECTRICAL PLANS
WATTS BASKET STRAINER MODEL #316SS WITH FLANGED STAINLESS STEEL BODY WITH 20 MESH MONEL SCREEN AND GATE VALVE PER DETAIL. - FOR RECLAIMED WATER
WATTS 009PCQTS REDUCED PRESSURE TYPE BACKFLOW DEVICE W/ (20 MESH) 'Y' STRAINER, TEST COCK CLEAN OUT VALVE, COVER BACKFLOW ASSEMBLY WRAPPED WITH THERMAL 'POLAR BARRIER R-19' INSULATION, (909) 587-2230. INSTALL PER DETAIL. - FOR DOMESTIC WATER
RAIN BIRD PUMP SYSTEM SHALL BE - CRE SERIES.
RAIN BIRD EFB-CP REMOTE MASTER CONTROL VALVE. SIZE PER PLAN.
WILKINS #500HLR PRESSURE REGULATOR (SPRING RANGE 10-125 PSI)
RAIN BIRD 33-DNP QUICK COUPLING VALVE WITH PURPLE COVER. INSTALL ON MAINLINE AT 100' ON CENTER PER PLAN. (INSTALL ON RECLAIMED MAINLINE ONLY)
RAIN BIRD 33-DLRC QUICK COUPLING VALVE WITH LOCKING RUBBER COVER. INSTALL ON MAINLINE AT 200' ON CENTER PER PLAN. (INSTALL ON DOMESTIC MAINLINE ONLY)
RAINBIRD EFB-CP REMOTE CONTROL VALVE SIZE PER PLAN. (INSTALL ON RECLAIMED MAINLINE ONLY)
RAIN BIRD EFB-CP-PRS-D REMOTE CONTROL VALVE W/ PRESSURE REGULATING MODULE. SIZE PER PLAN. (INSTALL ON RECLAIMED MAINLINE ONLY)
RAIN BIRD FLOW METER. SIZE PER PLAN. FLOW SENSOR CABLE ARIZONA ELECTRIC FABRICATING INC.# 9516-25P, PER MANUFACTURER'S SPECIFICATIONS
NIBCO CLASS 125 T-III THREADED GATE VALVE FOR 2 INCHES OR SMALLER. NIBCO-F-619 GATE VALVE FOR 2 1/2 INCHES AND LARGER. SIZE PER MAINLINE.
RAINBIRD MAXI COM MODEL ESP-SAT IRRIGATION CONTROLLER TOP MOUNT IN A HORIZON WATER MANAGEMENT STAINLESS STEEL CONTROLLER ENCLOSURE MODEL #SA6-RBI-XX+C2B/LPP/MSP/FS-XXX/RRA HORIZON WATER MANAGEMENT PER IRRIGATION PLAN. CCU AVAILABLE IN 6 AND 28 STATIONS. CONTROLLER AVAILABLE IN 12, 16, 24, 28, 32, 36, 40 STATIONS.
RAIN BIRD RSD-BEX RAIN SENSOR
TELEPHONE SERVICE - CONTRACTOR TO PAY FOR COORDINATION AND INSTALLATION OF SERVICE
COMMUNICATION CABLE IN CONDUIT W/ JUNCTION BOXES EVERY 200' ON CENTER OR WHERE CROSSES STREET AND CHANGES DIRECTION PER MANUFACTURER'S SPECIFICATIONS
RECLAIMED WATER IRRIGATION SYSTEM-MAIN LINE (BURY 24" BELOW FINISH GRADE), SCH. 40 PVC-1 1/2" AND SMALLER, CLASS 315 PVC-2" AND LARGER. LABEL WITH PURPLE STICKER TAPE "RECLAIMED WATER" OR PURPLE PIPE LETTERED "RECLAIMED WATER".
DOMESTIC WATER IRRIGATION SYSTEM-MAIN LINE (BURY 24" BELOW FINISH GRADE), SCH. 40 PVC-1 1/2" AND SMALLER, CLASS 315 PVC-2" AND LARGER.
SCH. 40 PVC LATERAL LINE (BURY 12" BELOW FINISH GRADE) (PURPLE)
"UVR" SCH.40 PIPE (OR EQUAL) LATERAL LINE . INSTALL ON GRADE. LABEL WITH PURPLE STICKER TAPE "RECLAIMED WATER" OR PURPLE PIPE LETTERED "RECLAIMED WATER". (PURPLE)
CLASS 315 PVC (FOR 2" THROUGH 4"), CLASS 200 PVC (FOR 6" AND ABOVE) MAINLINE, LATERAL LINE AND WIRE SLEEVES-BURY 24" BELOW FINISH GRADE.
CONTROL AND COMMON WIRE #14 AWG-UF (DIRECT BURIAL) SOLID COPPER WIRE (BURY WITH MAIN LINE) UL APPROVED.

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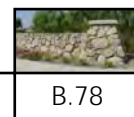
Design Guidelines

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Irrigation Head Legend

IRRIGATION HEAD LEGEND -ALL EQUIPMENT LISTED SHALL BE OR AS EQUAL, AS SPECIFIED OR PER THE CITY OF ELK GROVE

MANUFACTURER AND MODEL	P.S.I.	RADIUS MAX. FEET	PRECIP. INCH/HR.	PATTERN & GPM				REMARKS
				F	H	Q	V	
RAIN BIRD 1806-SAM-PRS-15 TURF POP-UP	30	15	1.83	3.70	1.85	.93	1.23	MPR PLASTIC NOZZLE U-15
RAIN BIRD 1812-SAM-PRS-15 SHRUB POP-UP	30	15	1.83	3.70	1.85	.93	1.23	MPR PLASTIC NOZZLE U-15
RAIN BIRD 1806-SAM-PRS-12 TURF POP-UP	30	12	2.01	2.60	1.3	.6	.87	MPR PLASTIC NOZZLE U-12
RAIN BIRD 1812-SAM-PRS-12 SHRUB POP-UP	30	12	2.01	2.60	1.3	.6	.87	MPR PLASTIC NOZZLE U-12
RAIN BIRD 1806-SAM-PRS-10-LA TURF POP-UP	30	10	1.75	1.57	.79	.39	.52	MPR PLASTIC NOZZLE
RAIN BIRD 1812-SAM-PRS-10-LA SHRUB POP-UP	30	10	1.75	1.57	.79	.39	.52	MPR PLASTIC NOZZLE
RAIN BIRD 1806-SAM-PRS-8-LA TURF POP-UP	30	8	2.74	1.57	.79	.39	.52	MPR PLASTIC NOZZLE
RAIN BIRD 1812-SAM-PRS-8-LA SHRUB POP-UP	30	8	1.75	1.57	.79	.39	.52	MPR PLASTIC NOZZLE
RAIN BIRD 1812-SAM-PRS-16-SLA SHRUB POP-UP	30	16	1.40	3.22	1.61	.81	-	MPR PLASTIC NOZZLE
RAIN BIRD PA-8S-PRS-16-SLA SHRUB STANDARD	30	16	1.40	3.22	1.61	.81	-	MPR PLASTIC NOZZLE
RAIN BIRD 1812-SAM-PRS-22-SLA SHRUB POP-UP	30	22	.90	3.22	1.61	.81	-	MPR PLASTIC NOZZLE
RAIN BIRD PA-8S-PRS-22-SLA SHRUB STANDARD	30	22	.90	3.22	1.61	.81	-	MPR PLASTIC NOZZLE
RAIN BIRD 1812-SAM-PRS-R13 SHRUB POP-UP	30	18	.60	1.31	.65	.33	-	R13 ROTARY NOZZLE
RAIN BIRD PA-8S-PRS-22-R13 SHRUB STANDARD	30	18	.60	1.31	.65	.33	-	R13 ROTARY NOZZLE
RAIN BIRD 1812-SAM-PRS-R17 SHRUB POP-UP	30	24	.60	2.45	1.22	.61	-	R17 ROTARY NOZZLE
RAIN BIRD PA-8S-PRS-R17 SHRUB STANDARD	30	24	.60	2.45	1.22	.61	-	R17 ROTARY NOZZLE
RAIN BIRD 1804-SAM-PRS-PA-80-1401 SHRUB POP-UP	30	3	.25	-	.25	-	-	MPR PLASTIC NOZZLE
RAIN BIRD 1806-SAM-PRS-15SST TURF POP-UP	30	4x30	2.74	-	1.21	-	-	MPR PLASTIC NOZZLE
RAIN BIRD 7005-SS-08 TURF POP-UP	60	49	.78	-	-	8.4	-	#08 NOZZLE (QUARTER)
RAIN BIRD 7005-SS-16 TURF POP-UP	60	65	.84	-	15.9	-	-	#16 NOZZLE (HALF)
RAIN BIRD 7005-SS-18 TURF POP-UP	60	65	.94	15.9	-	-	-	#18 NOZZLE (FULL)
RAIN BIRD 5006-PC-SAM TURF POP-UP	35	30	.61	-	-	1.23	-	5000-MPR-30-Q NOZZLE
RAIN BIRD 5006-PC-SAM TURF POP-UP	35	30	.64	-	2.59	-	-	5000-MPR-30-H NOZZLE
RAIN BIRD 5006-FC-SAM TURF POP-UP	35	30	.63	5.08	-	-	-	5000-MPR-30-F NOZZLE
RAIN BIRD 5012-PC-SAM SHRUB POP-UP	35	30	.61	-	-	1.23	-	5000-MPR-30-Q NOZZLE
RAIN BIRD 5012-PC-SAM SHRUB POP-UP	35	30	.64	-	2.59	-	-	5000-MPR-30-H NOZZLE
RAIN BIRD 5012-FC-SAM SHRUB POP-UP	35	30	.63	5.08	-	-	-	5000-MPR-30-F NOZZLE
RAIN BIRD 5006-MPR-25-Q-SAM TURF POP-UP	35	24	.68	-	-	.88	-	5000-MPR-25-Q NOZZLE



Shrub / Turf Irrigated Areas Less Than 8' Only

SHRUB / TURF IRRIGATED AREAS LESS THAN 8' ONLY.

-ALL EQUIPMENT LISTED SHALL BE OR AS EQUAL, AS SPECIFIED OR PER THE CITY OF ELK GROVE

MANUFACTURER AND MODEL	P.S.I.	RADIUS MAX. FEET	PRECIP. INCH/HR.	PATTERN & GPM	H	REMARKS
RAIN BIRD 1806-SAM-PRS-8-LA TURF POP-UP	30	7'	.91	.4	.4	8 FLT MPR PLASTIC NOZZLE (ORANGE PCS SCREEN)
RAIN BIRD 1806-SAM-PRS-8-LA TURF POP-UP	30	6'	.93	.3	.3	8 FLT MPR PLASTIC NOZZLE (SILVER PCS SCREEN)
RAIN BIRD 1806-SAM-PRS-8-LA TURF POP-UP	30	5'	.89	.2	.2	8 FLT MPR PLASTIC NOZZLE (BROWN PCS SCREEN)
RAIN BIRD 1812-SAM-PRS-8-LA SHRUB POP-UP	30	7'	.91	.4	.4	8 FLT MPR PLASTIC NOZZLE (ORANGE PCS SCREEN)
RAIN BIRD 1812-SAM-PRS-8-LA SHRUB POP-UP	30	6'	.93	.3	.3	8 FLT MPR PLASTIC NOZZLE (SILVER PCS SCREEN)
RAIN BIRD 1812-SAM-PRS-8-LA SHRUB POP-UP	30	5'	.89	.2	.2	8 FLT MPR PLASTIC NOZZLE (BROWN PCS SCREEN)

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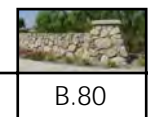
Design Guidelines

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Performance Legend

1800 PCS SCREEN PERFORMANCE - MPR NOZZLES - ALL EQUIPMENT LISTED SHALL BE OR AS EQUAL, AS SPECIFIED OR PER THE CITY OF ELK GROVE																					
		PCS-010		PCS-020		PCS-030		PCS-040		PCS-060		PCS-090		PCS-125		PCS-175		PCS-260		PCS-370	
GPM:		.1		.2		.3		.4		.6		.9		1.25		1.75		2.6		3.7	
M ³ /H (L/S)		0.02 (0.01)		0.05 (0.01)		0.07 (0.02)		0.09 (0.03)		0.14 (0.04)		0.20 (0.06)		0.28 (0.08)		0.40 (0.11)		0.59 (0.16)		0.84 (0.23)	
COLOR:		PURPLE		BROWN		SILVER		ORANGE		BLACK		WHITE		GREEN		YELLOW		BLUE		RED	
DISTANCE		FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS	FEET	METERS
MPR	5Q	5'	(1.5)	6'	(1.8)																
	5T	5'	(1.5)	6'	(1.8)																
	5H	4'	(1.2)	5'	(1.5)																
	5F					5'	(1.5)	8'	(2.4)												
	8Q	4'	(1.2)	8'	(2.4)	9'	(2.7)	10'	(3.1)												
	8T			6'	(1.8)	7'	(2.1)	8'	(2.4)	9'	(2.7)										
	8H			5'	(1.5)	7'	(2.1)	8'	(2.4)	10'	(3.1)	11'	(3.4)								
	8F					4'	(1.2)	3'	(0.9)	8'	(2.4)	10'	(3.1)	11'	(3.4)						
	10Q	2'	(0.6)	6'	(1.8)	8'	(2.4)	10'	(3.1)												
	10T			4'	(1.2)	9'	(2.7)	10'	(3.1)	11'	(3.4)										
	10H			3'	(0.9)	6'	(1.8)	8'	(2.4)	10'	(3.1)	12'	(3.7)								
	10F							1'	(0.3)	4'	(1.2)	8'	(2.4)	10'	(3.1)	12'	(3.7)				
	12Q			3'	(0.9)	8'	(2.4)	11'	(3.4)	12'	(3.7)										
	12T			2'	(0.6)	6'	(1.8)	10'	(3.1)	11'	(3.4)	12'	(3.7)								
	12H					4'	(1.2)	6'	(1.8)	10'	(3.1)	12'	(3.7)	14'	(4.3)						
	12TT					2'	(0.6)	4'	(1.2)	6'	(1.8)	9'	(2.7)	12'	(3.7)	15'	(4.6)				
	12TQ					2'	(0.6)	3'	(0.9)	6'	(1.8)	8'	(2.4)	10'	(3.1)	12'	(3.7)				
	12F							2'	(0.6)	5'	(1.5)	7'	(2.1)	8'	(2.4)	12'	(3.7)	13'	(4.0)		
	15Q			3'	(0.9)	5'	(1.5)	9'	(2.7)	12'	(3.7)	15'	(4.6)								
	15T					5'	(1.5)	7'	(2.1)	12'	(3.7)	14'	(4.3)	15'	(4.6)						
15H					3'	(0.9)	4'	(1.2)	7'	(2.1)	11'	(3.4)	15'	(4.6)	17'	(5.2)					
15TT					1'	(0.3)	2'	(0.6)	4'	(1.2)	8'	(2.4)	10'	(3.1)	13'	(4.0)	15'	(4.6)			
15TQ											6'	(1.8)	8'	(2.4)	14'	(4.3)	15'	(4.6)			
15F											4'	(1.2)	6'	(1.8)	10'	(3.1)	12'	(3.7)	15'	(4.6)	
16Q-SLA	1'	(0.3)	2'	(0.6)	8'	(2.4)	11'	(3.4)	16'	(4.9)	18'	(5.5)									
16H-SLA			0.5'	(0.2)	1'	(0.3)	4'	(1.2)	9'	(2.7)	12'	(3.7)	16'	(4.9)	20'	(6.1)					
16F-SLA							0.5'	(0.2)	2'	(0.6)	3'	(0.9)	6'	(1.8)	12'	(3.7)	16'	(4.9)	19'	(5.8)	
22Q-SS			2'	(0.6)	7'	(2.1)	12'	(3.7)	20'	(6.1)	22'	(6.7)									
22H-SS					2'	(0.6)	4'	(1.2)	8'	(2.4)	14'	(4.3)	22'	(6.7)	25'	(7.7)					
22F-SS									2'	(0.6)	5'	(1.5)	7'	(2.1)	18'	(5.5)	22'	(6.7)	24'	(7.3)	
BUBBLER	5Q-B			2'	(0.6)	4'	(1.2)	5'	(1.5)												
	5H-B					1'	(0.3)	2'	(0.6)	5'	(1.5)										
	5F-B							1'	(0.3)	2'	(0.6)	3'	(0.9)	5'	(1.5)						
	5CST-B			1'	(0.3)	3'	(0.9)	5'	(1.5)												
STRIP	15SQ											4'x4'	(1,2x1,2)	7'x7'	(2'1x2,1)	11'x11'	(3,4x3,4)	15'x15'	(4,6x4,6)	16'x16'	(4,9x4,9)
	9SST											9'x9'	(2,7x2,7)	9'x11'	(2,7x2,7)	9'x13'	(2,7x4,3)	9'x14'	(2,7x4,3)		
	15CST							4'x6'	(1,2x1,8)	4'x12'	(1,2x3,7)	4'x15'	(1,2x4,6)	4'x17'	(1,2x5,2)	4'x18'	(1,2x5,5)				
	15SST							4'x5'	(1,2x3,1)	4'x10'	(1,2x3,1)	4'x15'	(1,2x4,6)	4'x16'	(1,2x4,9)						
	15EST					4'x12'	(1,2x4,6)	4'x15'	(1,2x4,6)	4'x21'	(1,2x6,4)										

BOLD TYPE INDICATES RECOMMENDED NOZZLE/SCREEN COMBINATION TO ACHIEVE CATALOG PERFORMANCE AT 30 PSI. NOTE: SCREENS WERE TESTED AT 50 PSI FOR 10 MINUTES PRIOR TO TAKING DISTANCE MEASUREMENTS. DISTANCES MAY VARY SLIGHTLY WITH HIGHER PRESSURES AND LONGER RUN TIMES.



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Performance Legend

1800 PCS SCREEN PERFORMANCE - U-SERIES AND VAN NOZZLES - ALL EQUIPMENT LISTED SHALL BE OR AS EQUAL, AS SPECIFIED OR PER THE CITY OF ELK GROVE																						
		PCS-010		PCS-020		PCS-030		PCS-040		PCS-060		PCS-090		PCS-125		PCS-175		PCS-260		PCS-370		
GPM:		.1		.2		.3		.4		.6		.9		1.25		1.75		2.6		3.7		
M ³ /H (L/S)		0,02 (0,01)		0,05 (0,01)		0,07 (0,02)		0,09 (0,03)		0,14 (0,04)		0,20 (0,06)		0,28 (0,08)		0,40 (0,11)		0,59 (0,16)		0,84 (0,23)		
COLOR:		PURPLE		BROWN		SILVER		ORANGE		BLACK		WHITE		GREEN		YELLOW		BLUE		RED		
DISTANCE		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		FEET METERS		
U-SERIES	U-12Q		2'	(0,6)	7'	(2,1)	12'	(3,7)	14'	(4,3)												
	U-12H				3'	(0,9)	4'	(1,2)	7'	(2,1)	11'	(3,4)	12'	(3,7)								
	U-12F						3'	(0,9)	6'	(1,8)	8'	(2,4)	9'	(2,7)	11'	(3,4)	12'	(3,7)	14'	(4,3)		
	U-15Q		2'	(0,6)	6'	(1,8)	11'	(3,4)	15'	(4,6)	16'	(4,9)										
	U-15H				2'	(0,6)	3'	(0,9)	5'	(1,5)	9'	(2,7)	12'	(3,7)	15'	(4,6)						
U-15F									4'	(1,2)	6'	(1,8)	7'	(2,1)	10'	(3,1)	13'	(4,0)	15'	(4,6)		
VAN	4(90°)		1'	(0,3)	3'	(0,9)	4'	(1,2)	6'	(1,8)	9'	(2,7)	10'	(3,1)	11'	(3,4)	11'	(3,4)	11'	(3,4)	12'	(3,7)
	4(180°)		1'	(0,3)	2'	(0,6)	3'	(0,9)	4'	(1,2)	6'	(1,8)	7'	(2,1)	8'	(2,4)	9'	(2,7)	10'	(3,1)		
	4(270°)				1'	(0,3)	2'	(0,6)	4'	(1,2)	6'	(1,8)	7'	(2,1)	8'	(2,4)	9'	(2,7)	9'	(2,7)	9'	(2,7)
	4(330°)				1'	(0,3)	2'	(0,6)	4'	(1,2)	5'	(1,5)	6'	(1,8)	7'	(2,1)	8'	(2,4)	8'	(2,4)	8'	(2,4)
	6(90°)		1'	(0,3)	3'	(0,9)	6'	(1,8)	8'	(2,4)	9'	(2,7)	10'	(3,1)	10'	(3,1)	11'	(3,4)	11'	(3,4)	11'	(3,4)
	6(180°)				2'	(0,6)	4'	(1,2)	6'	(1,8)	9'	(2,7)	10'	(3,1)	10'	(3,1)	11'	(3,4)	11'	(3,4)	11'	(3,4)
	6(270°)				0.5'	(0,2)	1'	(0,3)	3'	(0,9)	6'	(1,8)	7'	(2,1)	8'	(2,4)	9'	(2,7)	9'	(2,7)	9'	(2,7)
	6(330°)				0.5'	(0,2)	1'	(0,3)	3'	(0,9)	6'	(1,8)	7'	(2,1)	8'	(2,4)	9'	(2,7)	9'	(2,7)	9'	(2,7)
	8(90°)				1'	(0,3)	3'	(0,9)	8'	(2,4)	12'	(3,7)	14'	(4,3)	14'	(4,3)	15'	(4,6)	15'	(4,6)	15'	(4,6)
	8(180°)				0.5'	(0,2)	2'	(0,6)	4'	(1,2)	8'	(2,4)	10'	(3,1)	11'	(3,4)	12'	(3,7)	13'	(4,0)	13'	(4,0)
	8(270°)						0.5'	(0,2)	3'	(0,9)	5'	(1,5)	8'	(2,4)	10'	(3,1)	11'	(3,4)	11'	(3,4)	11'	(3,4)
	8(330°)						0.5'	(0,2)	3'	(0,9)	5'	(1,5)	8'	(2,4)	9'	(2,7)	10'	(3,1)	11'	(3,4)	11'	(3,4)
	10(90°)				3'	(0,9)	5'	(1,5)	10'	(3,1)	11'	(3,4)	12'	(3,7)	13'	(4,0)	14'	(4,3)	14'	(4,3)	14'	(4,3)
	10(180°)						1'	(0,3)	5'	(1,5)	7'	(2,1)	10'	(3,1)	12'	(3,7)	13'	(4,0)	14'	(4,3)	14'	(4,3)
	10(270°)						1'	(0,3)	4'	(1,2)	6'	(1,8)	9'	(2,7)	10'	(3,1)	12'	(3,7)	13'	(4,0)	13'	(4,0)
	10(330°)				0.5'	(0,2)	1'	(0,3)	4'	(1,2)	6'	(1,8)	8'	(2,4)	10'	(3,1)	12'	(3,7)	13'	(4,0)	13'	(4,0)
	12(90°)		3'	(0,9)	8'	(2,4)	10'	(3,1)	12'	(3,7)												
	12(180°)				1'	(0,3)	2'	(0,6)	5'	(1,5)	8'	(2,4)	12'	(3,7)								
	12(270°)				0.5'	(0,2)	1'	(0,3)	3'	(0,9)	6'	(1,8)	8'	(2,4)	12'	(3,7)						
	12(330°)						1'	(0,3)	3'	(0,9)	5'	(1,5)	7'	(2,1)	12'	(3,7)	14'	(4,3)				
	15(90°)				2'	(0,6)	5'	(1,5)	11'	(3,4)	15'	(4,6)										
15(180°)				1'	(0,3)	3'	(0,9)	6'	(1,8)	9'	(2,7)	12'	(3,7)	15'	(4,6)							
15(270°)										6'	(1,8)	8'	(2,4)	15'	(4,6)	16'	(4,9)					
15(330°)												8'	(2,4)	12'	(3,7)	14'	(4,3)	15'	(4,6)			
18(90°)				0.5'	(0,2)	2'	(0,6)	6'	(1,8)	12'	(3,7)	17'	(5,2)	18'	(5,5)	20'	(6,1)	21'	(6,4)	21'	(6,4)	
18(180°)						1'	(0,3)	3'	(0,9)	5'	(1,5)	9'	(2,7)	16'	(4,9)	18'	(5,5)	19'	(5,8)	19'	(5,8)	
18(270°)						0.5'	(0,2)	1'	(0,3)	3'	(0,9)	5'	(1,5)	11'	(3,4)	15'	(4,6)	18'	(5,5)	18'	(5,5)	
18(330°)						0.5'	(0,2)	1'	(0,3)	3'	(0,9)	4'	(1,2)	9'	(2,7)	12'	(3,7)	15'	(4,6)	15'	(4,6)	

BOLD TYPE INDICATES RECOMMENDED NOZZLE/SCREEN COMBINATION TO ACHIEVE CATALOG PERFORMANCE AT 30 PSI. NOTE: SCREENS WERE TESTED AT 50 PSI FOR 10 MINUTES PRIOR TO TAKING DISTANCE MEASUREMENTS. DISTANCES MAY VARY SLIGHTLY WITH HIGHER PRESSURES AND LONGER RUN TIMES.

Sample Project Pump System Specification for Pumps that may be Required

The packaged water booster pump system shall be a standard product of a single pump manufacturer. The manufacturer of the packaged pump system shall also be the manufacturer of the pumps. Non standard, "one of a kind" packaged pump systems shall not be considered equal. The packaged water booster pump system shall be Model # GR1CR32-1-1 E as provided by Horizon Water Management (XXX)XXX-XXXX

The complete packaged water booster pump system shall be certified and listed by UL for conformance to U.S. and Canadian Standards. Systems that have only the sub-assemblies certified and listed by UL for conformance to U.S. and Canadian Standards and/or UR and/or cUR recognized components shall not be considered equal.

The packaged booster pump system shall use advanced variable frequency drive and electronic controller technology to maintain a constant pressure of 100 psi to a maximum flow of 100 gpm. Minimum supply pressure shall be 75 psi. Pump systems that use pump control valves or pressure reducing valves to maintain a constant water pressure shall not be considered equal.

The packaged pump system shall have 1 pump. An optional spare main pump shall be included in the system if required. The maximum duty point of each pump shall be 100 gpm @ 231' TDH. The system power shall be 460 volts, 3 phase.

The pump suction/discharge chamber, motor stool, and pump shaft couplings shall be constructed of cast iron. The impellers, pump shaft, diffuser chambers, outer discharge sleeve, impeller seal rings, and seal ring retainers shall be constructed of stainless steel. Optional materials for the suction/discharge chamber and motor stool liner shall be stainless steel.

The pump impellers shall be secured directly to the pump shaft by means of a splined shaft arrangement for pumps rated to a maximum of 115 gpm or less. The pump impellers shall be secured to the shaft by a split cone and nut for 115 gpm and above. The shaft journal and chamber bearings shall be Tungsten Carbide and Ceramic for model CR(NG)16 and below. The shaft journal and chamber bearings shall be Tungsten Carbide and Bronze for model CR32 and above (Tungsten Carbide and Grafion ? for CRN32 and above or as an option for CR32 and above). CR(NG)16 and smaller pumps shall be equipped with a high temperature mechanical seal assembly with Tungsten Carbide/Carbon or Tungsten Carbide seal faces mounted in stainless steel components. For CR32 and larger pumps, the shaft seal shall be of the cartridge design. CR32 and larger pumps may be ordered with Tungsten Carbide/Carbon, Tungsten Carbide, or the Rain Bird "Hybrid" seal face design. The CR32 and larger pumps shall be designed so that the cartridge seal may be replaced without removing motors 15 HP and larger.

Motor

The motor shall be of the pulse width modulated, integrated motor/variable frequency drive design; the motor and drive designed and built by a single manufacturer. The variable frequency drive enclosure shall include a PI controller, dry-contact fault output relay contacts, analog, and digital inputs. The motor shall detect/protect itself against under voltage, over voltage, excessive phase shift (3 phase models), overload, sensor signal fault, and set-point signal fault. The motor/drive enclosure shall be rated IP55. The motor windings shall be class F rated.

The 3-phase motor set-point shall be set by either plus and minus buttons located on the variable frequency drive enclosure or through an optional hand-held controller which communicates with the PI controller via infrared signal. The hand-held controller shall be produced by the same manufacturer as the motor/drive. The hand-held controller shall provide a text LCD readout of alarms (faults), pump discharge pressure (psi), motor speed (rpm), instantaneous motor power input (kW), lifetime cumulative motor power consumption (kWh), and cumulative motor operating hours.

Installation settings for the hand held controller must include the ability to select/adjust/read the set-point, optional external set-point, with a read-out of the resulting actual set-point adjusted for the external set-point setting, control mode (internal PI controlled or uncontrolled), PI controller integral action time or system time (TI) and PI reaction gain (Kp), activate/deactivate external set-point, activate/deactivate plus and minus set-point buttons on the variable frequency drive enclosure, the reaction mode of the digital input signal, and activate/deactivate low/zero-flow stop function, including delta H related to the stop function.

The hand-held controller must be able to enter a "Number" code into the single pump systems for pump system number identification (examples, pump system number "1", "2", etc.) and upload, store, and download motor/drive settings from and to other single pump systems of the same manufacturer. The hand-held controller must be able to transmit the motor/drive settings via infrared communication to a printer equipped to accept the infrared transmission. The 3-phase motor/drive must be job-site programmable through a manufacturer supplied PC program for settings other than that possible through the hand-held controller.

The 1-phase motor set-point shall be set by a potentiometer mounted on the integrated variable frequency drive controller enclosure or a remotely located potentiometer, connected to the integrated variable frequency drive controller enclosure through a shielded control cable, the connection requiring a maximum of three signal/switch wires, plus a ground. Motor/drive operation settings must be through DIPswitches mounted in the integrated variable frequency drive enclosure. The motor/drive shall be job-site programmable through a PC program supplied by the system manufacturer for settings additional to the DIPswitch settings.

Base and Electrical

The pump shall be mounted on a fabricated stainless steel sheet base. The power connection terminal box shall be mounted on a bracket that is attached to the pump end. The power connection terminal box shall include a disconnect switch. Optional electrical accessories are available and mount in an optional larger power connection terminal box mounted on a larger pump base frame and control panel bracket.

The pump suction flange shall include a pressure switch to sense the presence of fluid (dry run protection), shall be electrically connected to the integrated variable frequency drive enclosure, and shall shut down the system when the fluid pressure drops below the switch limit. An optional, adjustable pressure switch must be available from the manufacturer.

A 4-20ma-pressure sensor, sized for proper application requirements, shall be installed on the discharge pipe and shall be electrically connected to the integrated variable frequency drive enclosure. An optional high-pressure shutdown switch must be available from the manufacturer.

Plumbing

The pump system shall include a stainless steel suction pipe with stainless steel isolation ball valve. The discharge pipe shall be stainless steel and include a port to install a pressure sensor and optional high-pressure shutdown switch and a port to install a pressure tank connection. A stainless steel isolation ball valve and stainless steel body/plastic check valve shall be installed on the pump discharge pipe.

The suction and discharge manifolds shall be fabricated of 316 stainless steel. Both manifolds shall be designed to attach to the system piping at either end of the manifold. Each manifold shall include a liquid filled pressure gauge. The suction manifold shall have as standard a pressure switch or pressure sensor to sense low suction pressure (other suction fault inputs optional). The discharge manifold shall include a stainless steel pressure transducer with a 4-20ma output. The pressure transducer shall be factory installed and wired.

Isolation valves shall be installed on the suction and discharge of each pump. A check valve shall be installed on the discharge of each pump (optional on the suction side for suction lift applications).

All systems shall be factory tested for performance and hydrostatic tested to 300 psi. The system shall include an ASME rated diaphragm type pressure tank sized by the manufacturer. Verified Factory Performance Tests and Witness Factory Performance Tests shall be options provided by the system manufacturer. Verified Factory Performance Tests and Witness Factory Performance Tests shall be options provided by the system manufacturer.

A system start-up shall be provided by Horizon Water Management at completion of installation. The contractor shall be responsible for contacting Horizon Water Management to begin start-up. A certification of compliance shall be provided to owner at completion of a successful start-up.



B.13 Landscape Maintenance

In general the landscape maintenance shall be performed on a daily basis by a Licensed Landscape Contractor. All work shall be performed based on an annual maintenance calendar of monthly and weekly maintenance tasks.

Landscape maintenance shall include the following.

- Irrigation System Maintenance
 - Water Management
 - Submittal of monthly water usage records
 - Repair irrigation systems on a daily basis
 - Monitor the irrigation for clogged heads or malfunctions equipment daily
- Annual horticultural soil test to confirm seasonal fertilizer recommendations.
- Work Near Utilities
Notify the appropriate utility company/ "Underground Service Alert" before performing maintenance work around utilities.
- Weeding/Mulching
Weeding shall be performed on a weekly basis. Utilize mulch, proper watering and pre-emergents as necessary to control weeds.
- Mowing
All lawns shall be mowed weekly during the growing season and as needed throughout the non-growing season. Dispose of all clippings in a approved recycling site.
- Trimming Trees and Shrubs
Trim all trees annually to shape trees, and prevent heavy limbs from damage in the wind. Perform safety pruning of low hanging limbs immediately when noticed.
- Rodent/Insect Control
Treat the site and plant material for rodents and insects whenever noticed.
- Hardscape
Keep all walks clear of debris at all times.

- Trash Collection
Collect and remove trash from the site on an as needed basis.
- Drainage Facilities
Maintain all landscape drainage facilities on a on going basis.
- Safety Procedures
Review all safety procedures with the maintenance staff on a weekly basis. Steps shall be taken at all times to protect the public from all equipment used on the site. Set up protected work areas as necessary when performing landscape maintenance.
- Monthly Maintenance Review
Perform a monthly maintenance review of all areas and generate a list of items to be completed during the next month.

Grading and Drainage

The following grading and drainage guidelines shall apply to all Landscape areas.

- All Landscape areas shall have a positive surface flow from high points at 2% minimum.
- Maximum grade for turf- 5:1
- Maximum grade for planted shrubs areas- 4:1
- No 2:1 slopes

B.14 Sign Standards

Signs for bike paths shall meet Cal Trans standards as to size of sign, color, graphics and material. Include the following additional elements for bike path signage:

- Bike path metal signs shall be enclosed in a 2"x 3". Re-sawn Redwood frame with 45% mitered corners.
- Sign posts shall be 4"x4" pressure treated redwood (Height per Cal Trans standards.)
- All signs to be approved by the City of Elk Grove

All other miscellaneous site signage shall be approved by the City of Elk Grove and shall be sandblasted redwood signs with painted signage and

graphics. All posts shall be 4"x4" pressure treated redwood.

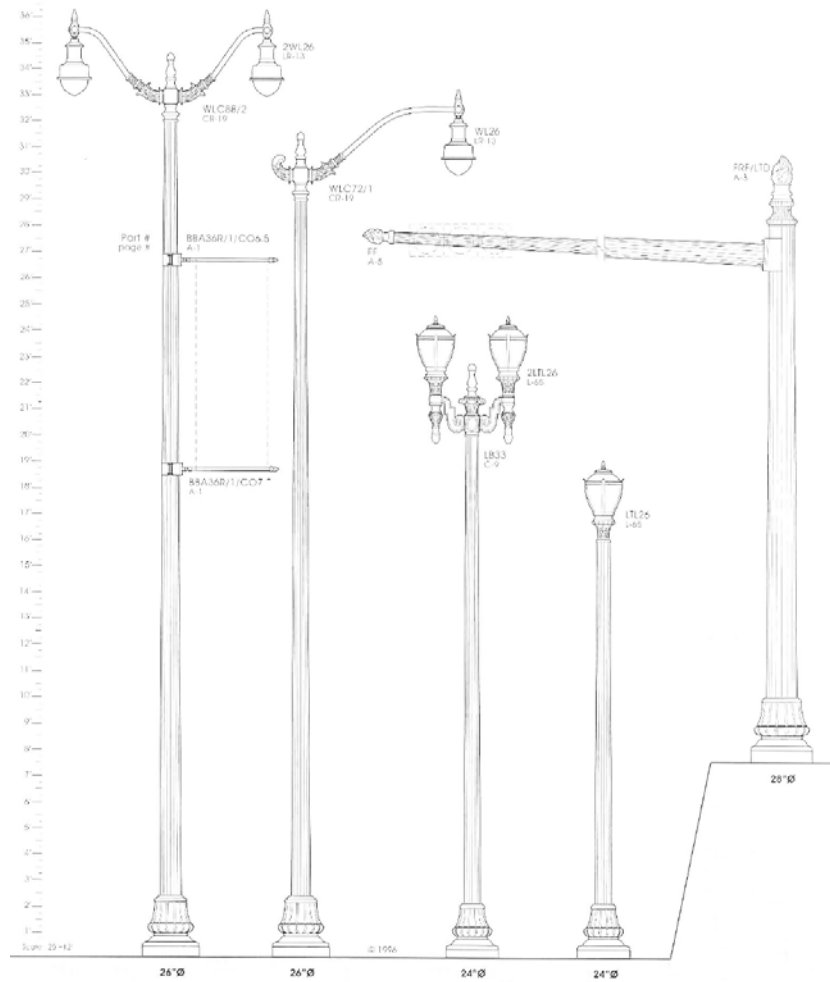
The exact signage program to be implemented in Laguna Ridge has not been established by the City of Elk Grove and is pending at this time. Refer to site amenities and specifications sections for street signage specifications.

LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38a Site Amenities And Specifications



- ROADWAY & TRAFFIC SIGNAL POSTS
CAPITOL SERIES
(CLAM-SHELL STYLE BASE)
COLOR: BLACK

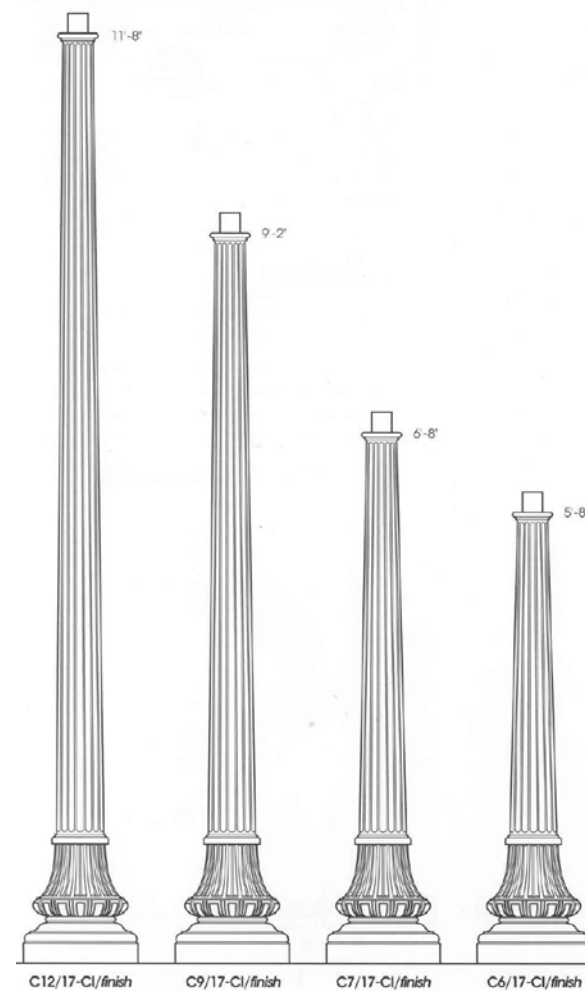
ANTIQUE STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330

AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630

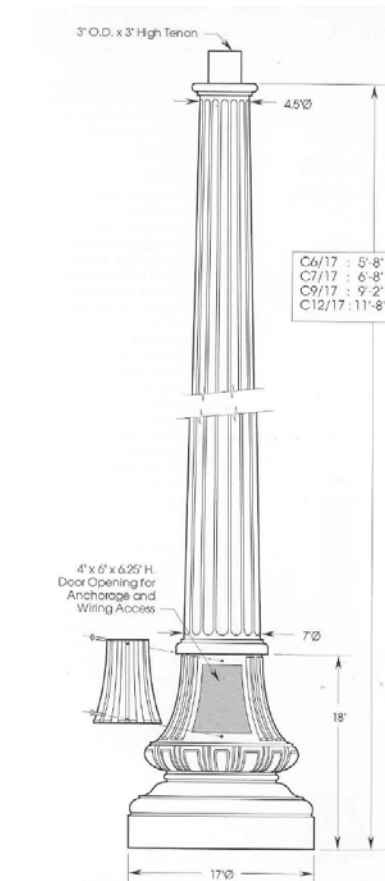
949-597-1633
FAX: 949-597-1753

CONTACTS:
PETE STEVENS
CELL: 714-390-2642
LINDA HARPER
CELL: 949-294-2002



- CAST IRON POSTS -17" DIA. BASE
CAPITOL SERIES
(CLAM-SHELL STYLE BASE)
COLOR: BLACK

ANTIQUE STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330



AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630
949-597-1633
FAX: 949-597-1753

CONTACTS:
PETE STEVENS
CELL: 714-390-2642
LINDA HARPER
CELL: 949-294-2002

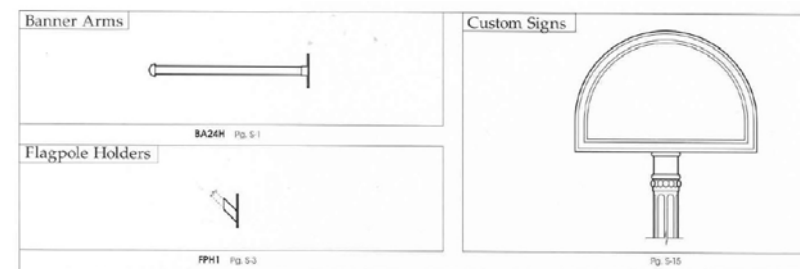
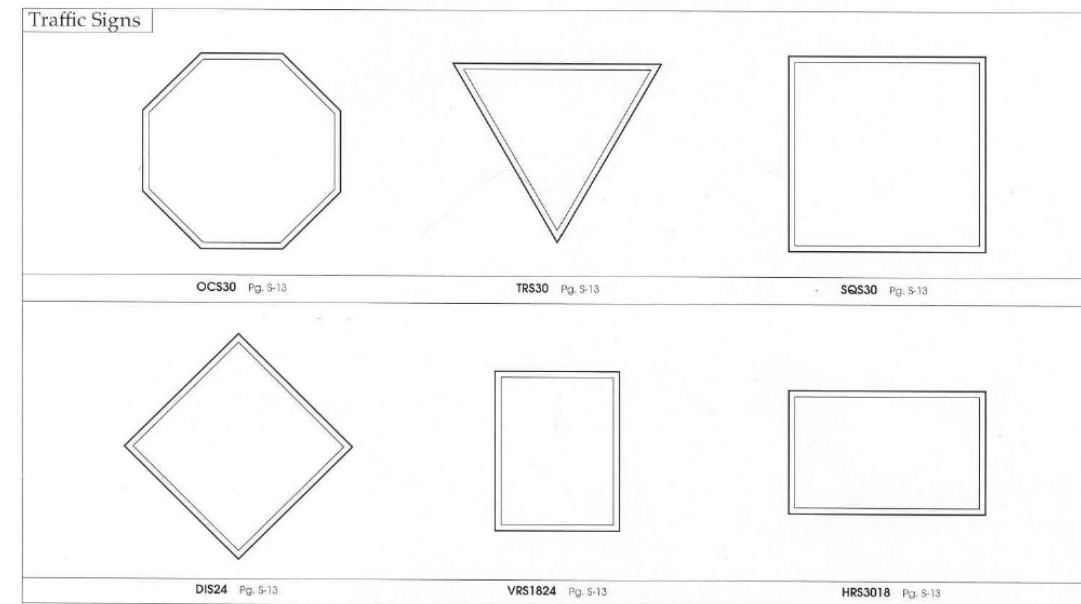
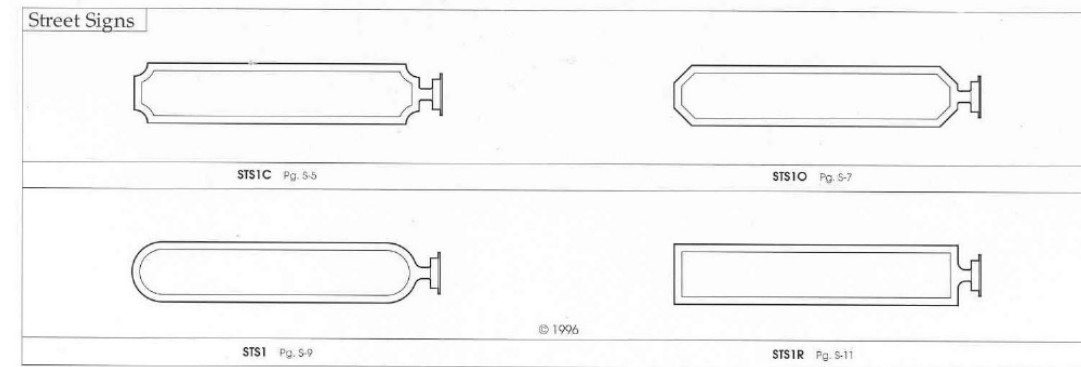
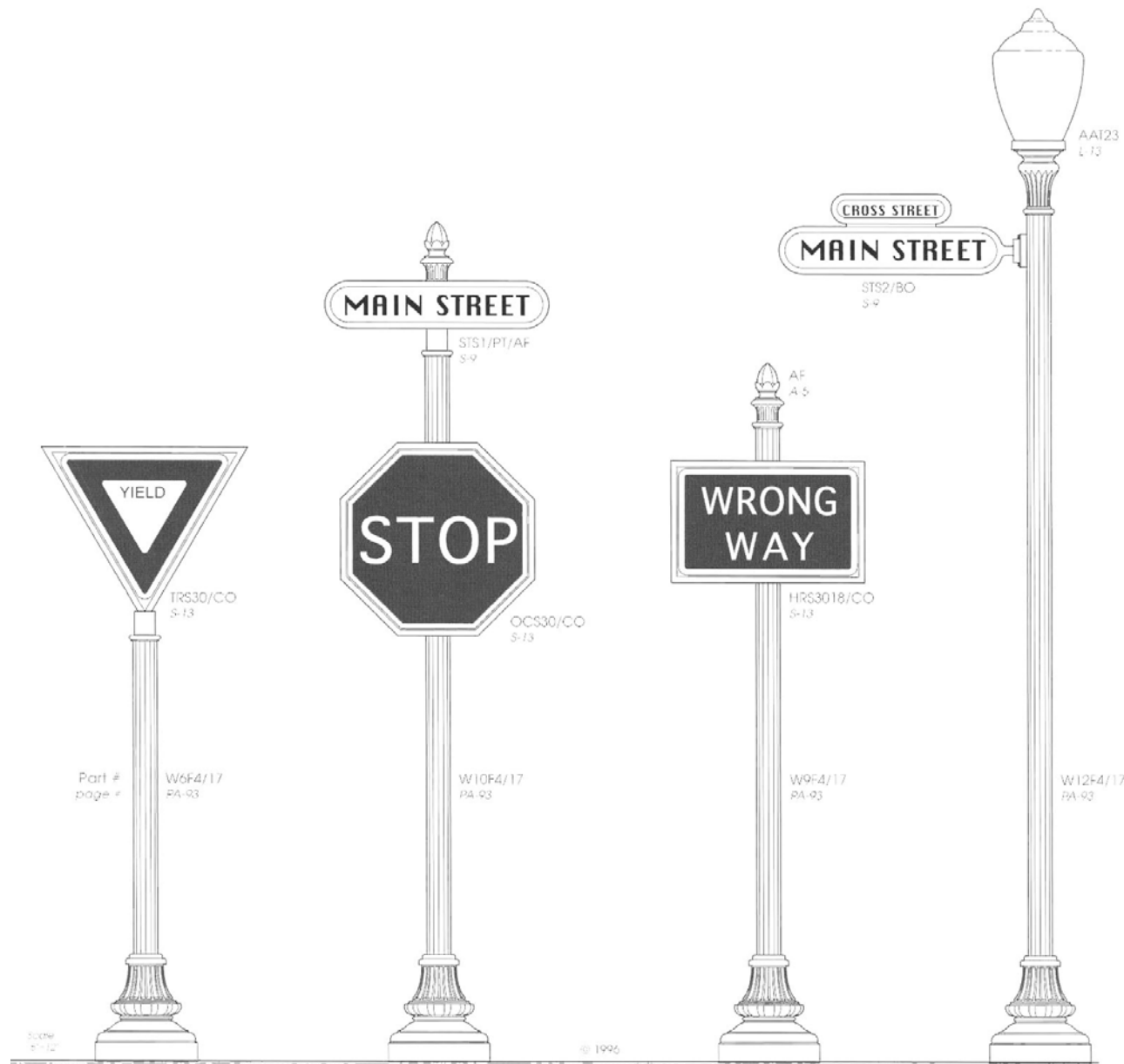


LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38b Site Amenities And Specifications



- ROADWAY & TRAFFIC SIGNAL POSTS
CAPITOL SERIES
(CLAM-SHELL STYLE BASE)
COLOR: BLACK

ANTIQUE STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330

AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630
949-597-1633
FAX: 949-597-1753

CONTACTS:
PETE STEVENS CELL: 714-390-2642
LINDA HARPER CELL: 949-294-2002

NOTE:

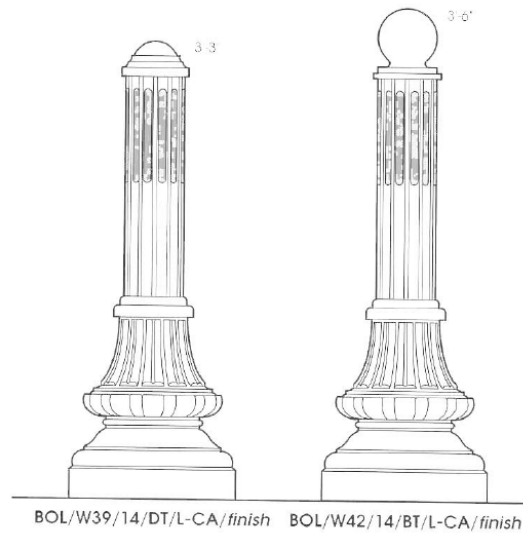
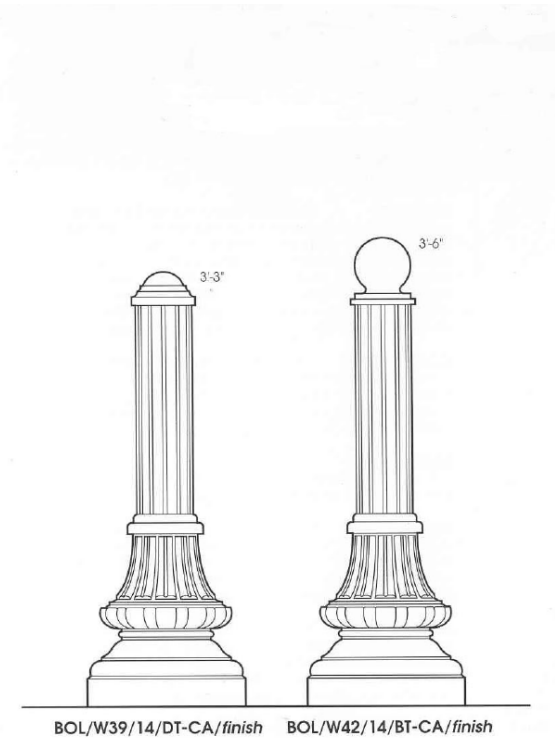
Street signs shall be installed to City standard. Special housings shall be used only on paseos and bike trails, not within the normal street system.

LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38c Site Amenities And Specifications



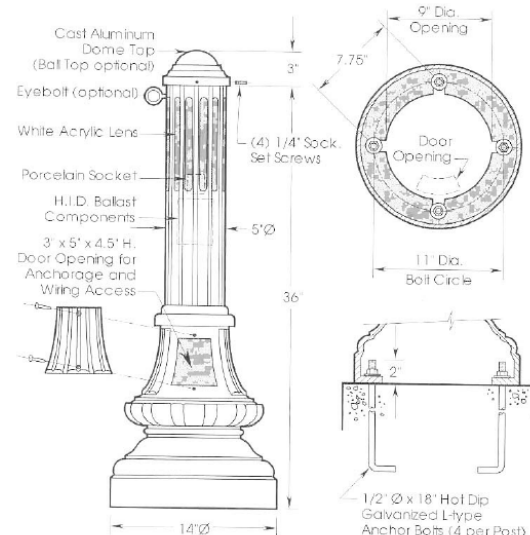
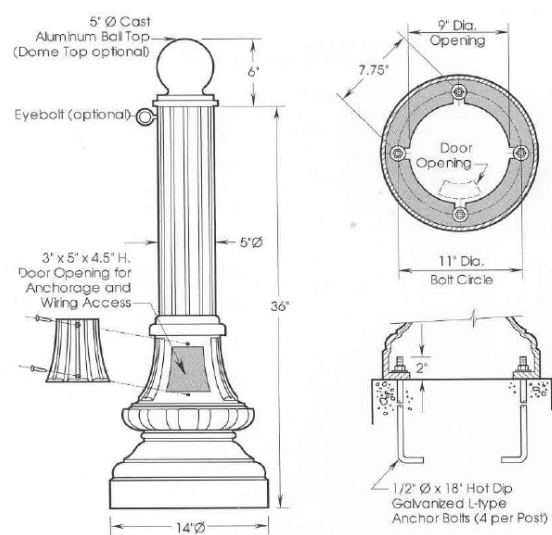
- BOLLARDS
WASHINGTON SERIES

ANTIQUÉ STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330

AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630
949-597-1633
FAX: 949-597-1753

CONTACTS:
PETE STEVENS CELL: 714-390-2642
LINDA HARPER CELL: 949-294-2002



LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38d Site Amenities And Specifications



- IRONSITES TRASH, ASH AND RECYCLING RECEPTACLES
COLOR: BLACK

VICTOR STANLEY, INC.
PO DRAWER 330
DUNKIRK, MD 20754
301-855-8300
800-368-2573
FAX: 410-257-7579

AVAILABLE THROUGH:

DAVE BANG ASSOCIATES, INC.
PO BOX 1088
TUSTIN, CA 92781
800-669-2585
FAX: 800-729-2483
www.davebang.com



#3511 FR

#3511

- DRINKING FOUNTAIN
PEDESTAL FOUNTAIN #3511
COLOR: BLACK

AVAILABLE THROUGH:

HAWS CORPORATION
MANUFACTURES REPRESENTATIVE:
R.V. AND ASSOCIATES
JACKIE
707-745-3655
3200 BAYSHORE ROAD
BENICIA, CA 94510
FAX: 707-745-2059



Bench 162

- BENCH
BENCH 162-60 6' BENCH
COLOR: BLACK

AVAILABLE THROUGH:

DUMOR, INC.
PO BOX 142
MIFFINTOWN, PA 17055
717-430-2106
FAX: 717-430-9839

WAKEFIELD CO.
ATTN: RYAN MIJA
949-552-1130
949-552-1626



- INTERLOCKING PAVERS
STYLE: APPIAN WAY
PEDESTRIAN: 6cm THICK
VEHICULAR: 7cm THICK

AVAILABLE THROUGH:

ACKER STONE
13296 TEMESCAL CANYON ROAD
CORONA, CA 91719
909-322-1719
CONTACT: BARRY RAWLINS

PAVER FIELD
COLOR: CHARCOAL, BROWN, TAN
BLEND
SIZE: 9-1/2" x 6-1/4" RECTANGLE
PAVERS
6-1/4" X 6-1/4" SQUARE PAVERS
PATTERN: RANDOM

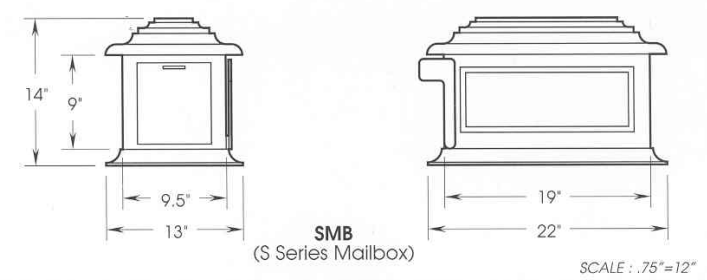
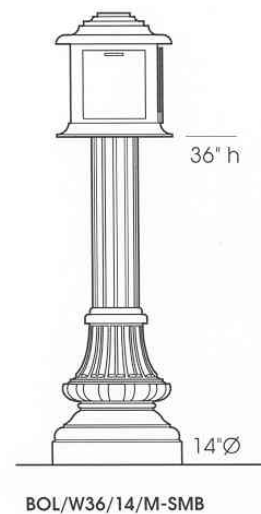
PAVER BAND
COLOR: BROWN
SIZE: 9-1/2" X 6-1/4" RECTANGLE
PATTERN: SOLDIER COURSE BAND

LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38e Site Amenities And Specifications



- MAILBOX
S SERIES
COLOR: BLACK

ANTIQUE STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330

AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630
949-597-1633
FAX: 949-597-1753

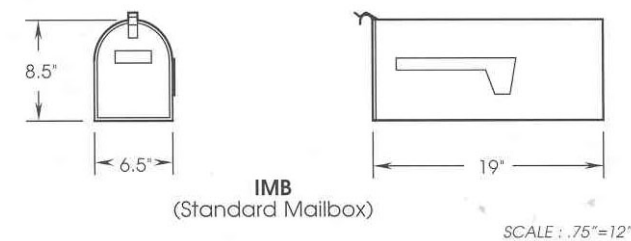
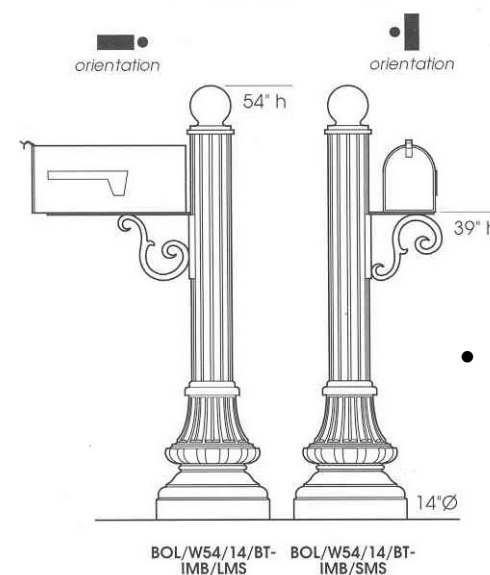
CONTACTS:

PETE STEVENS CELL:
714-390-2642
LINDA HARPER CELL:
949-294-2002

- MAILBOX
STYLE 3 MAILBOX (BOX ONLY)
COLOR: BLACK
POST TO BE PROVIDED BY CONTRACTOR.

AVAILABLE THROUGH:

CUSTOM HOME ACCESSORIES
800-265-0041



- MAILBOX
S SERIES
COLOR: BLACK

ANTIQUE STREET LAMPS, INC.
PO BOX 150279
AUSTIN, TX, 78715-0279
512-295-3585
FAX: 512-295-3330

AVAILABLE THROUGH:

PACIFIC LIGHTING SALES, INC.
23666 BUTCHER DRIVE, SUITE 100
LAKE FOREST, CA 92630
949-597-1633
FAX: 949-597-1753

CONTACTS:

PETE STEVENS CELL:
714-390-2642
LINDA HARPER CELL:
949-294-2002

LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38f Site Amenities And Specifications



- TREE GRATES
DEL SOL SERIES (SQUARE)
COLOR: BLACK

AVAILABLE THROUGH:

IRONSMITH
P.O. BOX 10868, PALM DESERT, CA 92255
800-338-4766



- TREE GUARDS
M5 SERIES
COLOR: BLACK

AVAILABLE THROUGH:

IRONSMITH
P.O. BOX 10868, PALM DESERT, CA 92255
800-338-4766



- BIKE RACK
125-130 SERIES
COLOR: BLACK

AVAILABLE THROUGH:

DUMOR, INC.
PO BOX 142
MIFFINTOWN, PA 17055
717-430-2106
FAX: 717-430-9839

LAGUNA RIDGE

Design Guidelines

August 3, 2005

Exhibit 38g Site Amenities And Specifications



- HAZELTON SHELTER

AVAILABLE THROUGH:

COLUMBIA EQUIPMENT COMPANY
 180-10 93rd AVENUE
 JAMAICA, NY 11433
 718-658-5900
 800-742-1297
 FAX: 718-526-4110

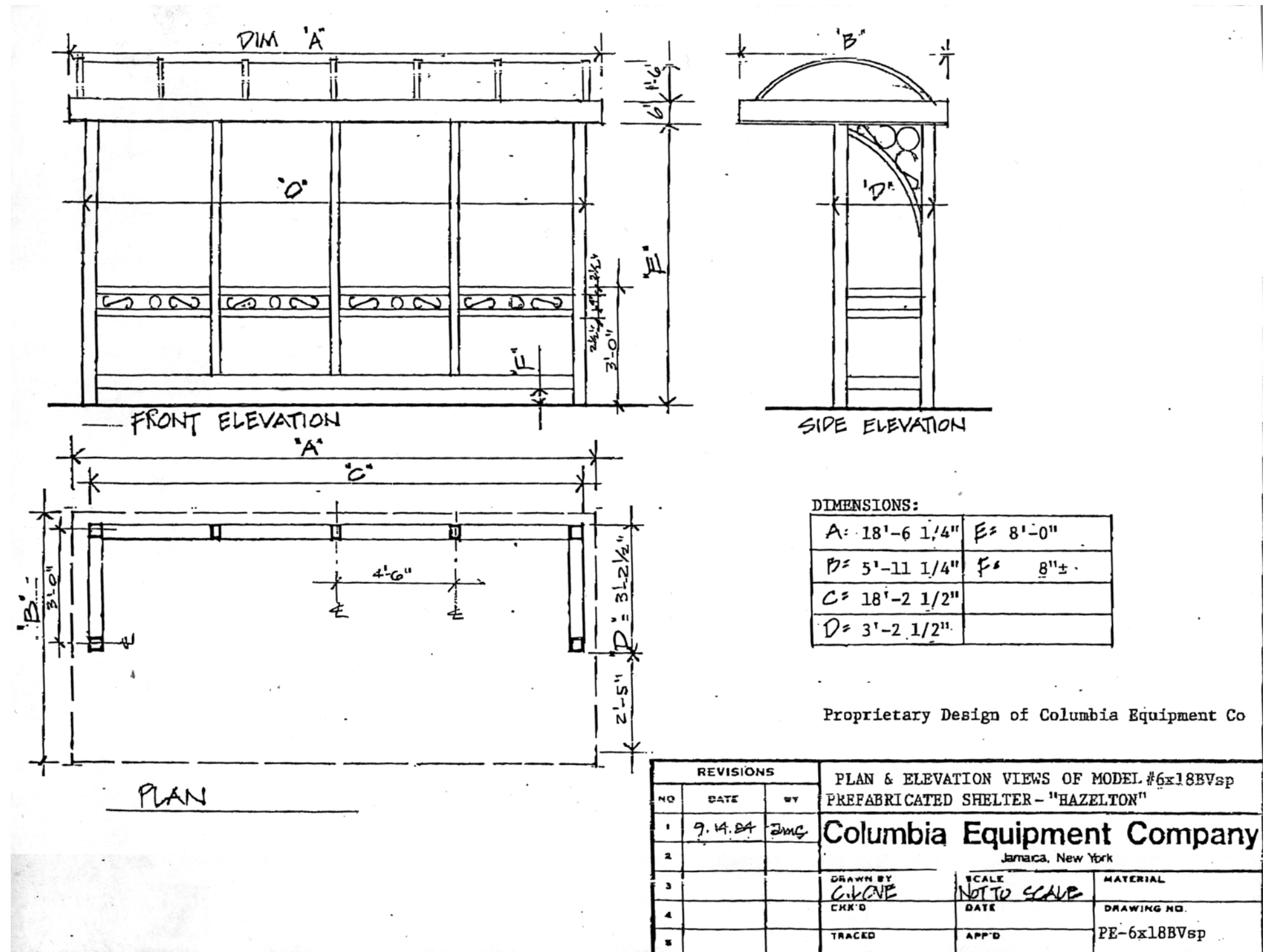


Exhibit 38h Site Amenities And Specifications



- PILASTERS, ENTRY MONUMENT WALL, OVERHEAD STRUCTURE PILASTERS, AND SEAT WALL.

ELDORADO STONE
(WESTRIDGE FIELDSTONE MIX)

AVAILABLE THROUGH:

VALLEY BUILDING MATERIALS
23271 CHERRY AVE.
LAKE FOREST, CA. 92630
(949) 855-9994



- PEDESTRIAN BRIDGE
10' WIDE X 90' LONG

MOOSMAN BRIDGE
PO BOX 803
VALENTINE, NE 65201
402-376-2544
FAX: 402-376-1737
dan@moosmanbridge.com