

Roadway cross sections to be considered as the basis for roadway design options within this planning or study area



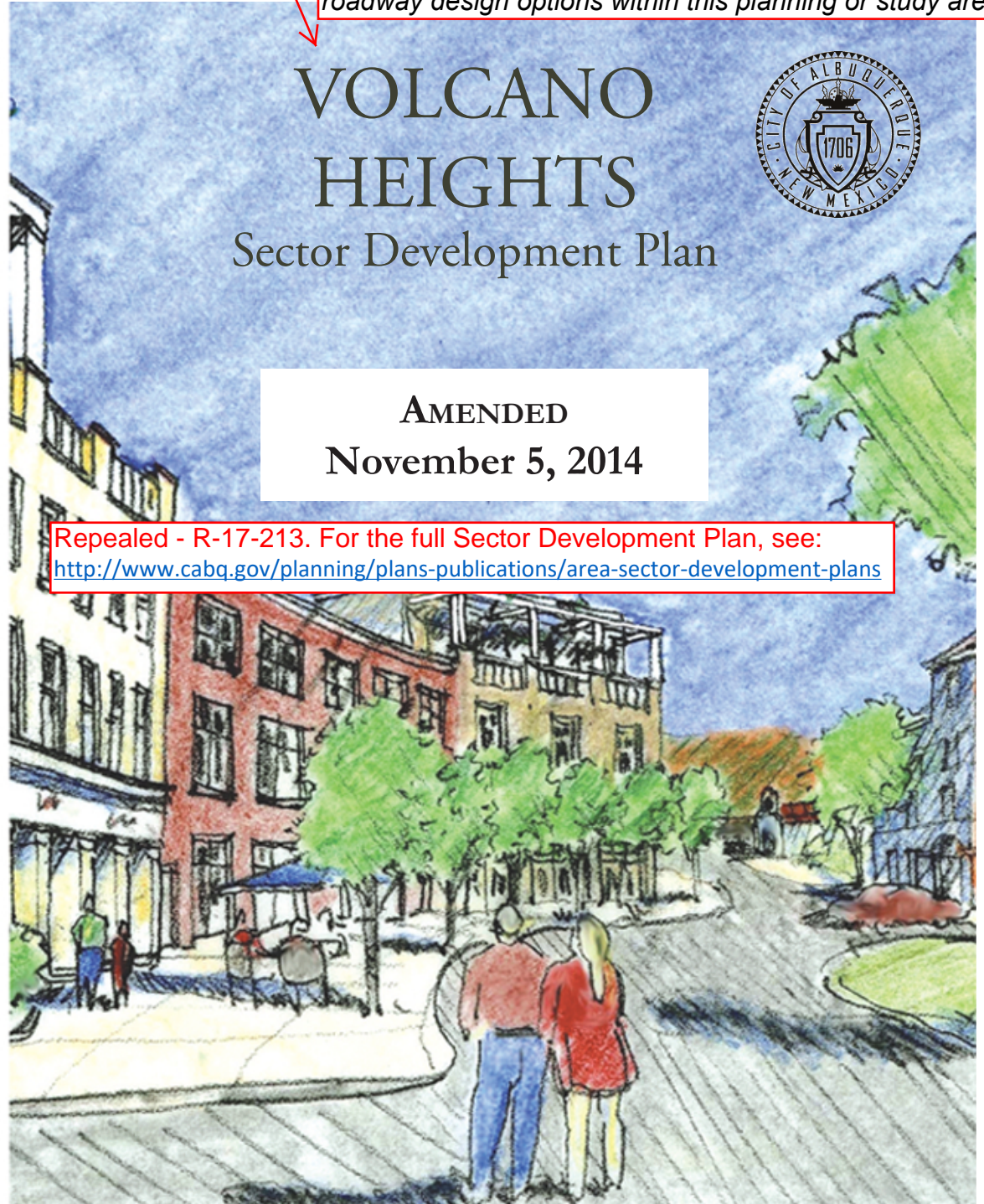
VOLCANO HEIGHTS

Sector Development Plan



AMENDED
November 5, 2014

Repealed - R-17-213. For the full Sector Development Plan, see:
<http://www.cabq.gov/planning/plans-publications/area-sector-development-plans>



CHAPTER I: INTRODUCTION

I.0 EXECUTIVE SUMMARY

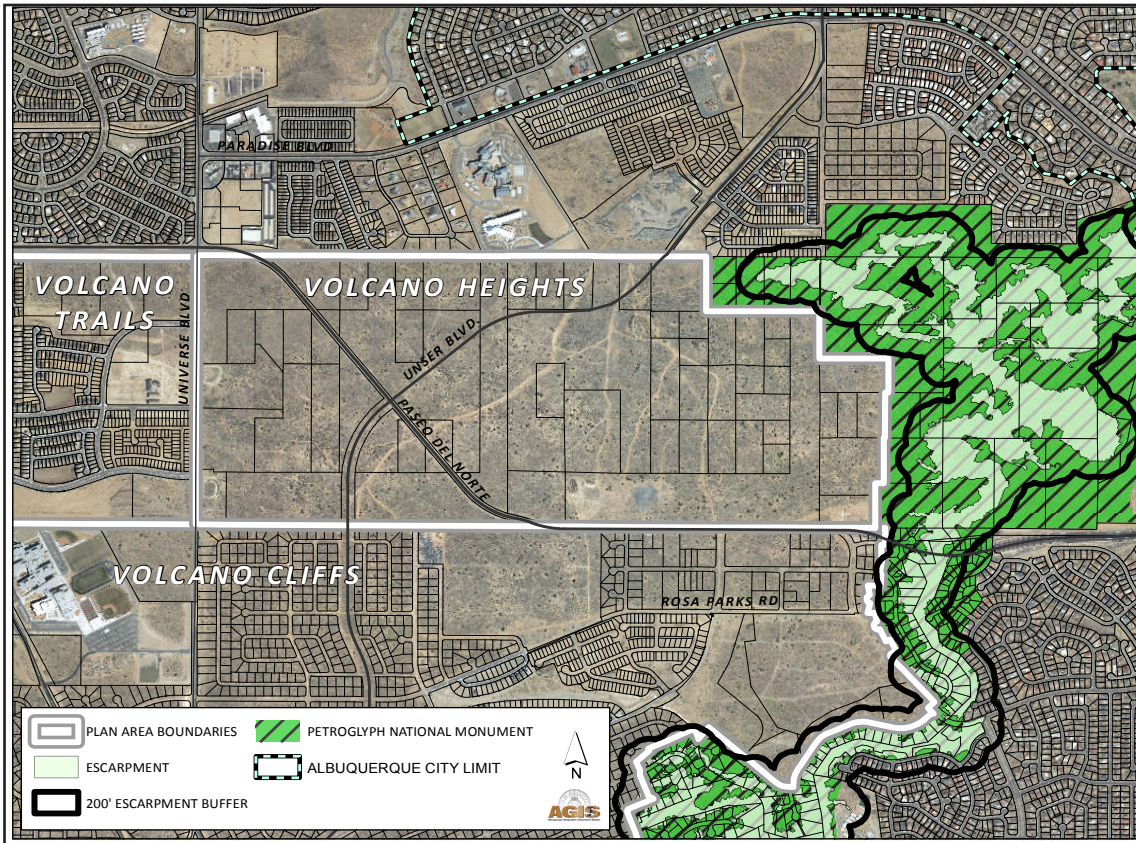


EXHIBIT I.2 – VOLCANO HEIGHTS PLAN AREA

ILLUSTRATION – Example of potential development layout assuming Anticipated Build-out levels by 2035



The Plan includes two types of transition zones as buffers between development densities and intensities: (1) Neighborhood Transitions to ensure that new development is compatible with single-family residential areas to the north and south of the Plan area and (2) an Escarpment Transition in the eastern part of the Plan area to ensure development compatible with sensitive lands within the Petroglyph National Monument.

As Volcano Heights is a unique landscape that shares a border with the Petroglyph National Monument, the Plan takes an innovative approach toward building height limits to concentrate opportunities for height and density toward the center of the Plan area and step heights down toward the edges with Transition zones. The Plan offers an optional bonus height system as an incentive to preserve and provide public access to rock outcroppings and other sensitive lands. [See **Section 6.4 Optional Height Bonus for Buildings** starting on page 111.]

1.5. Strategy for Development Standards

The Plan implements the vision for Volcano Heights as established by the zoning map. [See **Exhibit 4.1** on page 64.] The zoning requires minimum standards to guide property owners, developers, and the City on the form, character, and intensity of desired future development within key locations and along key corridors in the Plan area. Six distinct character zones enumerate specific site, building design, and other development standards as basic building blocks to create sense of place. Clear graphic standards are provided for location, height, and building design elements.

Such standards promote predictability of adjacent developments, flexibility in land use, walkable and transit-supportive mixed-use development, transitions to existing neighborhoods, and protection of natural and cultural resources.

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10.0 STREET STANDARDS

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

10.1. Purpose/ Intent: Streets in Volcano Heights need to support the overall intent and character of each corridor. They should balance all forms of mobility while maximizing convenience for residents and visitors. Streets are also used to convey drainage and support **water harvesting**. **Auto-oriented** streets serve more regional trips as well as providing access for service, trucking, and maintenance for non-residential uses.

10.2. Applicability: Street and streetscape standards apply to all streets and development within Volcano Heights.

10.2.1. Streets within Volcano Heights are to be designed and constructed per the standards in this Plan.

[Amended
November 5, 2014]
10.2.2. Bicycle facilities, including on-street bicycle lanes and multi-use trails, should be designed and developed to meet safety considerations as provided in the Institute for Transportation Engineers (ITE) or American Association of State Highway Transportation Officials (AASHTO) standards.

10.2.3. Streetscape standards address all elements between the building face and edge of the curb. Typical streetscape elements addressed are street trees, lighting, street furniture and pedestrian amenities, and materials.

10.2.4. Street cross sections have been carefully designed to work with frontage requirements in the Site Development Standards for each **character zone** in order to provide a consistent, predictable built environment along corridors, across property lines, and over time.

10.2.5. These standards may be adjusted by the **DRB** per the thresholds and criteria specified in **Table 10.1** on page 168.

- (i) Any adjustments needed that exceed these thresholds, including the following, will require **EPC** approval to ensure the Plan's intent and purpose are still met with the proposed changes:
 - a. Eliminating a street cross section element and/or
 - b. Adjusting a dimension beyond the 20% that **DRB** can grant.
- (ii) Changes to a Primary Street cross section may only be due to utility use, drainage requirement, engineering for safety, or to respond to site context.
- (iii) The applicant is to provide engineering drawings demonstrating the need for an adjustment to the street cross section and proposing an improved cross section that works for the project site and adjacent sites, while still meeting the intent of this Plan.

10.2.6. Maintenance of all streetscape is to be per City Code of Ordinances Chapter 6, Article 5. [See **Section 13.3.13** starting on page 236 for policies relating to roles and responsibilities for maintenance.]

10.3. How to Use These Standards

10.3.1. Cross Sections: The cross sections in Volcano Heights are designed to accommodate all modes of transportation safely, with a special emphasis on creating a high-quality pedestrian environment that can contribute to the success of the Major Activity Center. For this reason, travel lane widths are minimized to help calm traffic and reduce crossing distances for pedestrians. Travel lanes where transit is anticipated are planned for 12 feet wide.

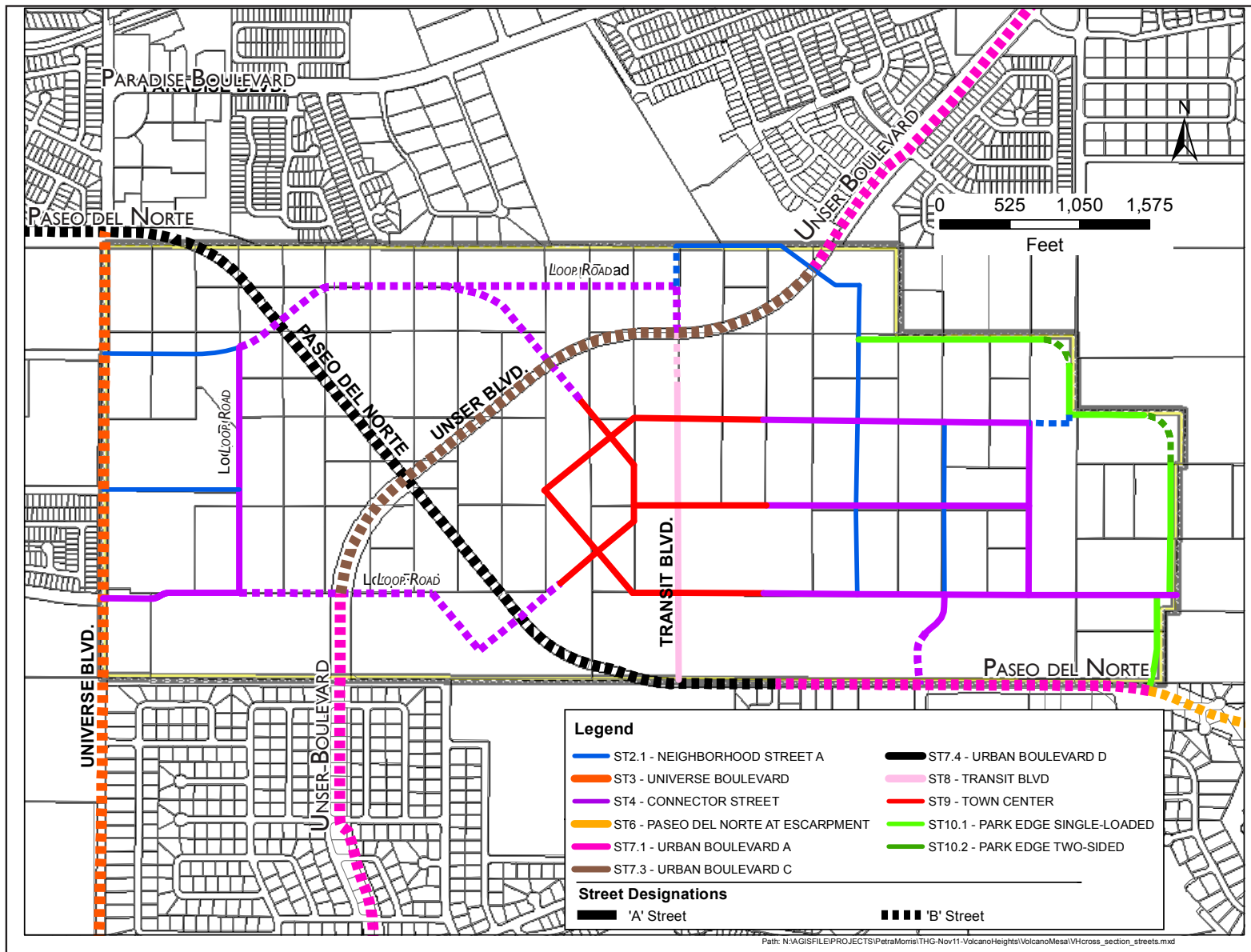


EXHIBIT 10.1 – PRIMARY STREETS AND DESIGNATIONS MAP

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

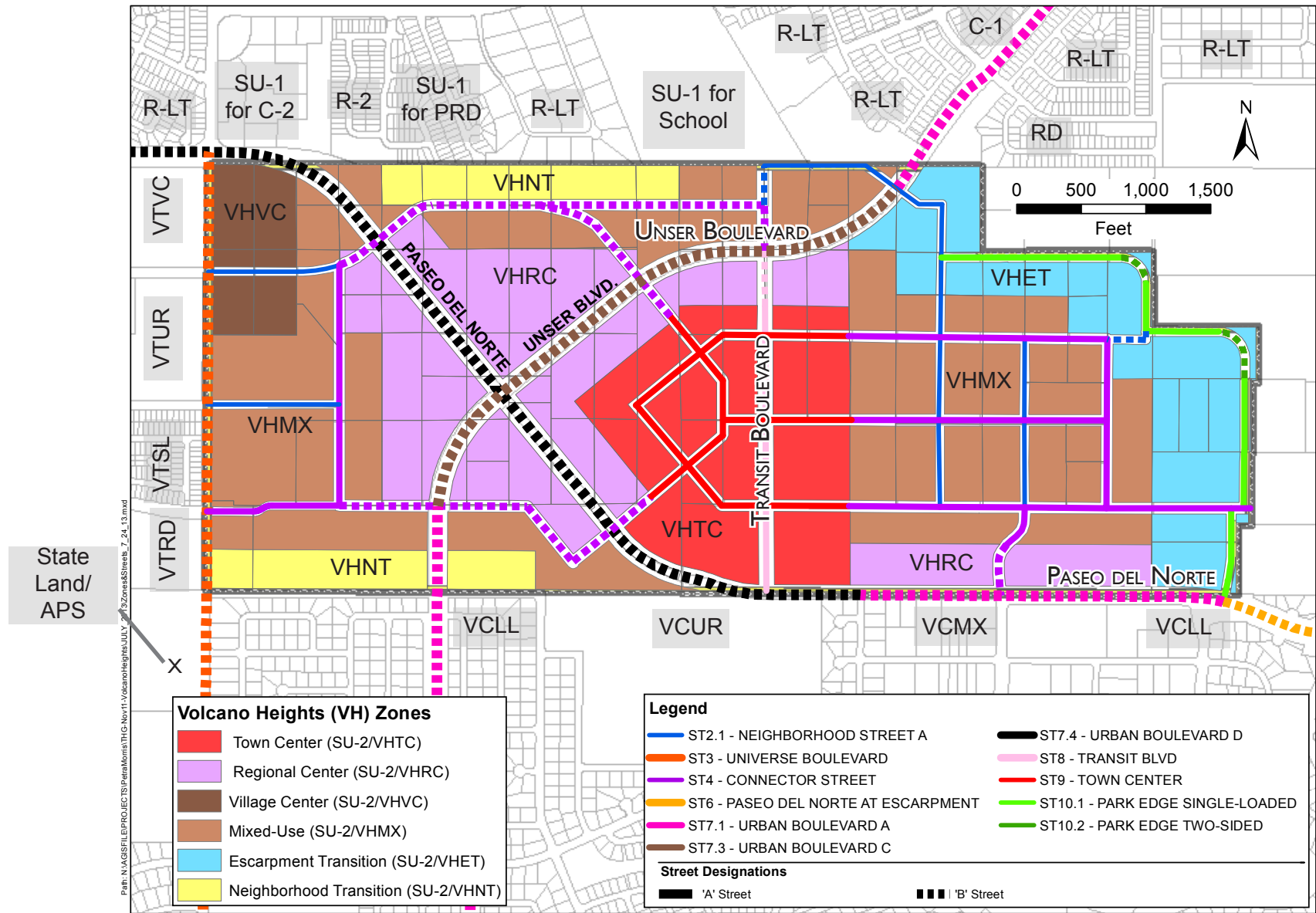


EXHIBIT 10.2 – CHARACTER ZONES AND STREET TYPES

10.0 STREET STANDARDS

10.3.2. **Primary Streets:** The character of streets in Volcano Heights will vary based on location. The Primary Streets and Designations Map [see **Exhibit 10.1**] illustrates the street network within the Plan area. Street alignments as shown coincide with the existing 20-foot access easement on the edge of each parcel wherever possible. **Section 10.6** starting on page 173 includes cross sections for the typical configuration of each **Primary Street** type. The specifications address vehicular lane width, parkway widths, **ROW** widths, number of travel lanes, on-street parking, and pedestrian accommodation.

- (i) Cross sections for each type of **Primary Street** depict specific elements and associated dimensions. The arrangement of these elements may change to suit local conditions, particularly when a **Primary Street** is intended for **Bus Rapid Transit (BRT)**. The final location of these lanes — whether the **BRT** will run in the median, the outside, or the inside lanes, or a combination of the above based on **adjacent** land uses, **ROW**, etc. — will be determined during the road design process. Similarly, the final location of the multi-use trail required along Paseo del Norte and Unser Boulevard will be determined in coordination with City Parks and Recreation. Trails should be situated to provide the best pedestrian access to the Town Center area. Intersections should be carefully planned and designed to facilitate connections to surrounding areas.

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- (ii) See **Table 10.1** for allowable adjustments to the **Primary Street** standards. Adjustments should be considered carefully to ensure that the intended character of each street type is maintained or enhanced.
- (iii) See **Section 10.5.4** starting on page 172 for more on intersection design.

10.3.3. **Secondary Streets:** This Plan specifies standards for all new local streets in Volcano Heights in **Section 10.7** starting on page 199. The platting and construction of new streets will be addressed on a project-by-project basis and reviewed by the City Department of Municipal Development (DMD) the City Engineer and/or other agencies or sections, as relevant.

[Amended
November 5, 2014]

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

TABLE 10.1 – ADJUSTMENT CRITERIA

STANDARD	MINOR ADJUSTMENT ALLOWED	CRITERIA
Location/geometry of Primary Street Alignments	Adjustment of the centerline of the street up to 300 feet. In the case of avoiding natural and/or culturally significant features, a greater allowance is permitted on a case by case basis and may require a signed agreement with adjacent owners.	<ul style="list-style-type: none"> Does not introduce a curve beyond what an automobile can navigate safely as defined in the City's Development Process Manual (DPM) Chapter 23, Sections 2 and 3. Any deviation to the location of a Primary Street has been reviewed and approved by the Planning Director or his/her designee. Any deviations proposed to avoid rock outcroppings or other natural and/or culturally significant features has been coordinated with City Open Space Division.
Primary Street Cross Sections	Any dimensional standard change (increase or decrease) up to 20%.	<ul style="list-style-type: none"> Does not eliminate any element from a cross section. Does not decrease travel lanes below 10 feet or increase travel lanes to more than 12 feet. Has been justified by the applicant to the satisfaction of the DRB. May include criteria for variances per City Zoning Code §14-16-4-2(C).
	Adding medians to an 'A' Street .	<ul style="list-style-type: none"> Provides enough width to allow vegetation to be planted and sustain itself within the entire median, including turn bays.
	Adding or removing angled parking to/from an 'A' Street .	<ul style="list-style-type: none"> On-Street parking may be parallel or angle parking. Where angle parking is used, sufficient additional ROW is needed to add that element while still maintaining appropriate dimensions for all other elements. A median is recommended with reverse-angle parking.
	Adding or removing roundabouts and/or other traffic control device.	<ul style="list-style-type: none"> Roundabouts and/or other traffic control devices are to be constructed in compliance with all City standards with the minimal allowed profile and all feasible best practices to ensure compatibility with a high-quality pedestrian environment. Roundabouts and/or other traffic control devices on transit corridors are to be designed in coordinate with ABQ Ride. Prior to the removal of roundabouts and/or other traffic control devices on 'A Streets,' projects are to demonstrate alternative methods to ensure multimodal accommodations to preserve a high-quality streetscape for all transportation modes.
	Changes to the arrangement of street cross sections.	<ul style="list-style-type: none"> Has been reviewed and approved by the Planning Director or his/her designee to ensure compatibility with the intent of this Plan. Reference to ITE's "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach" or Context Sensitive Design is encouraged.
Secondary Street Cross Section	Changes to the arrangement of street cross sections.	<ul style="list-style-type: none"> Has been reviewed by the Planning Director or his/her designee to ensure compatibility with the intent of this Plan. Reference to ITE's "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach" or Context Sensitive Design is encouraged.

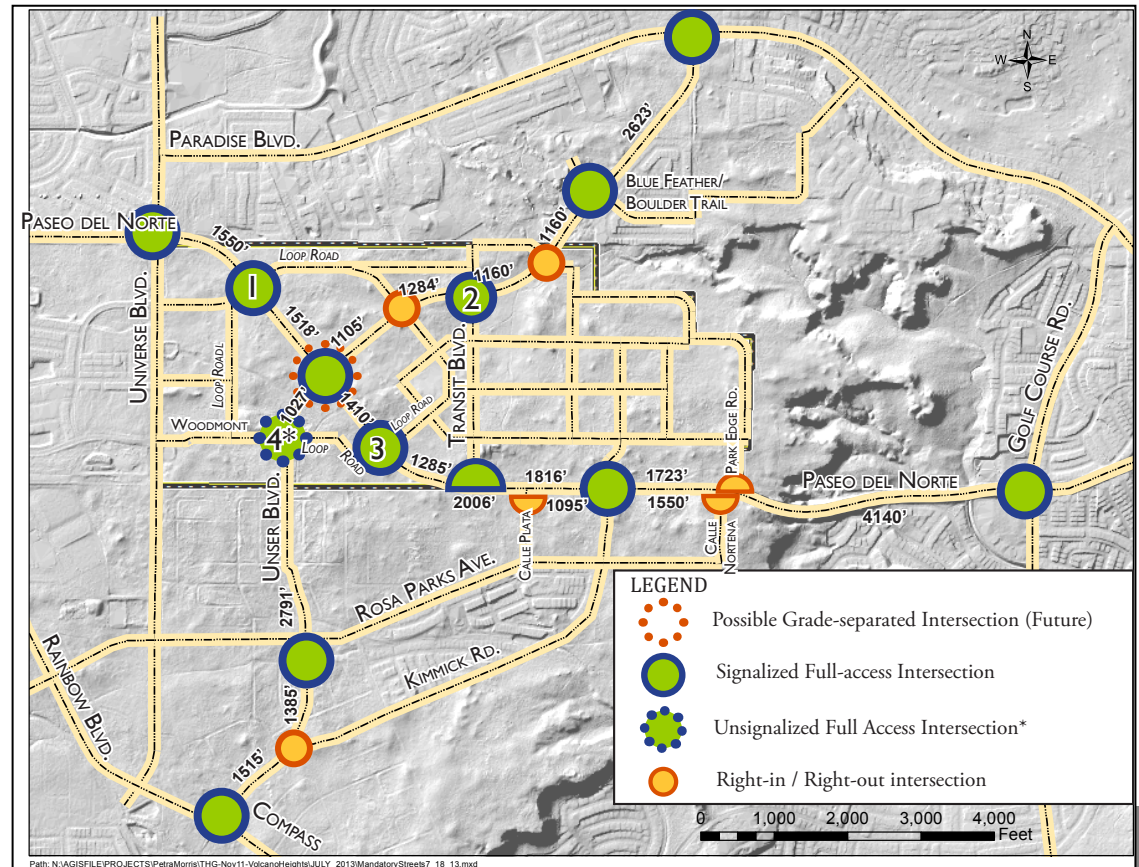
10.0 STREET STANDARDS

10.4. Access

10.4.1. Primary Streets and Designations Map: General access to properties is to be provided via the backbone grid of streets with general alignments and connections as shown in **Exhibit 10.1** on page 165.

10.4.2. Intersections on Limited-Access Roads

- (i) Unser Boulevard and Paseo del Norte are designated as limited-access facilities by the Metropolitan Planning Organization (MPO), and access is controlled via the Roadway Access Modification Policies.
- (ii) The approved intersections shown in **Exhibit 10.3** provide access to serve development in Volcano Heights and connect to surrounding areas. Intersections 1-4 are intended to create a loop road around the Paseo/Unser intersection in order to provide additional safe opportunities for all modes of travel to cross these large regional roadways expected to carry significant numbers of vehicles.
- (iii) Per the Transportation Coordinating Committee (TCC) Resolution R-13-03 [See **Appendix C**], the Paseo/Unser intersection should be reviewed for the construction of a grade-separated interchange at such time as traffic congestion and development conditions warrant.



[1/4 MILE = 1320 FEET]

EXHIBIT 10.3 – APPROVED LIMITED-ACCESS INTERSECTIONS

[Amended
November 5, 2014]

* NOTE: See **Section 10.4.2(iii)**.

10.0 STREET STANDARDS

Until this time, the intersection should be constructed as a traditional at-grade, signalized intersection. At such time as a grade-separated interchange is recommended by the TCC, it should be designed to complement this urban, multimodal area and minimize negative impacts to the surrounding land uses, trails, and sensitive lands. [See also **Section 13.3.1** starting on page 229.]

- (iv) Intersection #4 is to be unsignalized until such time as Paseo del Norte/Unser Boulevard intersection becomes grade-separated, at which time #4 may be signalized.
- (v) The intersection at the southern terminus of the Transit Boulevard is approved for a “high T-intersection,” which, to the extent practical, preserves the eastbound through free-flow movement on Paseo del Norte with a dedicated eastbound to northbound left-turn lane and a southbound to eastbound left-turn lane combined with an eastbound merge lane, in order to minimize traffic signal phasing and cycle length and to minimize red-signal time for Paseo del Norte. Until such time as Paseo del Norte is constructed to a four or six lane facility and the “High-T” intersection is constructed, the intersection may be constructed as a traditional at-grade, signalized intersection.

10.4.3. Access to Properties

- (i) As envisioned in this Plan, the Primary Street grid respects the purpose of limited-access roadways as regional thoroughfares and eliminates the need for individual curb cuts for developments along these corridors. Each access point on Unser Boulevard or Paseo del Norte connects to a Primary Street to provide general access to local development. For individual developments, further access is to be provided via Secondary Streets as necessary. The planned grid provides coordinated access to properties in the Plan area and connections to Volcano Trails to the west and Volcano Cliffs to the south. Together with intersections on the limited-access roadways, planned streets in Volcano Heights create a walkable, urban district with a high degree of connectivity for all modes of transportation.
- (ii) The provision of Primary and Secondary Streets using the appropriate cross sections as shown in this Plan (See **Exhibit 10.1** on page 165) will occur via the City development review process. Streets will only be required to be constructed to serve projects at the time of their development.

- (iii) Roads are to follow the recommended Primary Street alignments where possible, as shown in **Exhibit 10.3** on page 169. Where Primary Street alignments are infeasible or unhelpful to serve new development, new street alignments should be planned to provide the most direct path between the subject property and either an existing street or approved access point along Paseo del Norte and Unser Boulevard following existing 20-foot access easements around property edges wherever possible.
- (iv) In order to allow for more rapid advancement to full development conditions, property owners are encouraged to coordinate to plan alignments and share the cost of infrastructure in whatever manner they deem fair.
- (v) Although outside the purview of this Plan, property owners should consider infrastructure financing tools (e.g. PID, TIDD, etc.) as mechanisms to pool costs and coordinate development, particularly utilities and other infrastructure to be constructed along roadway alignments.
- (vi) Sufficient documentation of coordination and agreement among all affected property owners adjacent to new streets is required prior to the issuance of permits. Sufficient documentation includes but is not limited to:
 - a. Council-approved TIDD, SAD, or PID that includes such streets and/or

- b. **DRB**-approved Site Plan for Subdivision that includes such streets as well as letter(s) of cross access easement and construction approval among affected property owners.

[See Transportation Policies in **Section 13.3** starting on page 226.]

10.5. Street Designations: The following **street designations** are established for all streets within the Plan area.

- 10.5.1. **'A' Streets:** 'A' Streets are intended to provide the most pedestrian-friendly development context. Buildings along **'A' Streets** should be held to the highest standard of **pedestrian-oriented** design. These streets are the main connectors for local development and **adjacent** neighborhoods.
 - (i) Curb cuts are not allowed on **'A' Streets**, except for porte cochere entries for hotels or other substantial uses, per the discretion of the Planning Director or his/her designee.
 - (ii) Development on **'A' Streets** may incorporate a **parking court**, surrounded on three sides by the development, served via one-way access, and with dimensions not to exceed 110 feet wide and 150 feet deep.
 - (iii) In order to provide pedestrian connectivity where blocks are more than 300 feet long, pedestrian walkways are to be provided every 300-500 feet. These walkways count toward **usable open space** requirements per **Section 9.5** starting on page 144 of this Plan.

10.0 STREET STANDARDS

- (iv) In order to support their purpose as pedestrian and cyclist-friendly corridors as well as supportive of retail and neighborhood services, **'A' Streets** are to be engineered for speeds within 5 miles per hour of posted speeds.
- (i) Additional **'A' Street** standards are included in **Section 10.6** for **Primary Streets**, as well as **Section 10.7.3** for **Secondary Streets**.

10.5.2. **'B' Streets:** 'B' Streets are intended to accommodate more **auto-oriented** uses, surface parking, and service functions. Individual standards are included in **Section 10.6.4** for Unser Boulevard, **Section 10.6.5** for Paseo del Norte, and **Section 10.7.5** for **Secondary 'B' Streets**.

10.5.3. **Alleys:** **Alleys** are an optional way to provide access for service and maintenance vehicles and access to parking areas for private vehicles while separating these vehicle uses from the public realm. Alleys can be either residential or commercial.

- (i) Typically narrower than **'B' Streets**, **alleys** can be a functional element within a commercial block and can provide a pleasant walking option in residential areas. [See more standards in **Sections 10.7** and **11.0 Streetscape Standards** in this Plan.]
- (ii) See **Section 13.3.13** starting on page 236 in this Plan for policies relating to roles and responsibilities for alley maintenance.

10.5.4. Intersection Design

- (i) **Multimodal Accommodation:** Intersections are to be designed and constructed to accommodate safe crossing for all modes of transportation.
- (ii) **Signal Warrants:** The determination of where and when traffic signals and/or roundabouts are to be installed is based upon the evaluation of traffic conditions at an intersection in accordance with the warrants contained within the Manual for Uniform Traffic Control Devices (MUTCD).
- (iii) **Development Review:** Intersection design and cross section configuration surrounding intersections shall be subject to judgment of the City Engineer and/or the Department of Municipal Development to ensure safety and appropriate connectivity.

[Amended
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(iv) **Roundabouts:**

- a. Excepting intersections on principal arterials, roundabouts are to be considered for every location that meets or is anticipated to meet MUTCD criteria for a traffic signal.
- b. The criteria to be used for selecting a roundabout over other forms of intersection control such as signals or stop signs include, but are not limited to: safety, operational improvements, efficiency, traffic calming, construction and operating costs, right-of-way requirements, protection of sensitive lands, and community enhancement. [See also **Section 13.3.11** starting on page 235.]
- c. Roundabouts are the preferred design solution when rock outcroppings lie within a Primary Street corridor as shown in **Exhibit 9.1** on page 147.
- d. Roundabouts are to be the preferred option for intersection control on all single-lane minor arterials and collectors. They should also be considered as alternatives to signals on two-lane minor arterials.
- e. All Traffic Impact Studies should include a comparison of the theoretical intersection delay for a roundabout versus a signal at all warranted signal locations.

(v) **Pedestrian and/or Cyclist Activated**

Signals: Safe multimodal access is key to the success of the Volcano Heights Major Activity Center. Pedestrian- and cyclist-activated signals should be considered where traffic conditions warrant in order to provide safe crossing to land uses in the area.

10.5.5. **Site Distance:** Site distance requirements shall follow current **AASHTO** standards.

10.5.6. **Americans with Disability (ADA) Compliance:** **ADA** guidelines shall govern minimum sidewalk widths to provide unobstructed passage from impedances, including but not limited to landscaping, street furniture, pedestrian amenities, utilities, signage, and grade changes.

10.6. Primary Street Cross Sections: Primary Streets are those whose alignments are shown in **Exhibit 10.1** on page 165, which also designates '**A**' vs. '**B**' streets. The following cross sections for each **Primary Street**, together with frontage standards for each zone per **Section 5.0** starting on page 77, are intended to create a predictable built environment along corridors, across property lines, and over time.

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Amended
November 5, 2014]

TABLE 10.2 – STREET TYPES AND CROSS SECTIONS

CROSS SECTION	PROGRAMMED ROW	#VEHICULAR LANES	VEHICULAR TRAVEL LANE WIDTHS / TRANSIT LANE WIDTHS	BIKE LANE / BUFFER*	ON-STREET PARKING*	PEDESTRIAN SIDEWALK WIDTH	LANDSCAPE / TREE WELL	APPLICABLE SECTOR PLAN AREA
ST 1.1: Typical Retail Collector <i>Applicable Streets:</i> • Rosa Parks • Universe Blvd. south of Rosa Parks	58 feet	2	10 feet	None	7 feet	12 feet	(Within sidewalk width)	VCSDP
ST 1.2: Typical Residential Collector <i>Applicable Streets:</i> • Kimmick Dr.	58 feet	2	10 feet	None	7 feet	6 feet**	6 feet	VCSDP
ST 2.1: Neighborhood Street A	70 feet	2	11 feet	4 feet / 3 feet	7 feet	10 feet	(Within sidewalk width where required)	VHSDP
ST 2.2: Neighborhood Street B <i>Applicable Streets:</i> • Kimmick from Paseo to Rosa Parks • Calle Nortena from Paseo to Valiente	72 feet	2 (+ 14' median/turn bay)	10 feet	None	7 feet	6 feet	6 feet	VCSDP
ST 2.3: Neighborhood Street C <i>Applicable Street: Urraca Rd.</i>	64 feet	2	10 feet	None	7 feet	5 feet	5 feet	VCSDP

* Includes curb and gutter dimension where element is at the edge of the paved section of the roadway.

** Except where platted at 5 feet at the time of the original adoption of this Plan (May 2011), in which case the total programmed ROW is reduced by 2 feet overall.

10.0 STREET STANDARDS

[Amended
November 5, 2014]

TABLE 10.2 – STREET TYPES AND CROSS SECTIONS (Cont'd)

CROSS SECTION	PROGRAMMED ROW	#VEHICULAR LANES	VEHICULAR TRAVEL LANE WIDTHS / TRANSIT LANE WIDTHS	BIKE LANE / BUFFER*	ON-STREET PARKING*	PEDESTRIAN SIDEWALK WIDTH	LANDSCAPE / TREE WELL	APPLICABLE SECTOR PLAN AREA
ST 3: Universe Blvd. <i>Applicable Street: Universe Blvd.</i>	77 feet	2 (+ 16' median/center turn bay)	11 feet	5 feet	None	7 feet	5 feet	VCSDP VHSDP
ST 4: Connector Street	84 feet	2 (+ 12' median/turn bay)	10 feet	4 feet / 3 feet	7 feet	12 feet	(optional within sidewalk width)	VHSDP
ST 5: Suburban Boulevard <i>Applicable Streets:</i> • <i>Unser Boulevard at Escarpment</i> • <i>Rainbow Boulevard</i>	128 feet	4	11 feet	7 feet	None	10 feet	10 feet	VCSDP
ST 6: Paseo del Norte at Escarpment	135 feet	4 (+2 transit lanes)	11 / 12 feet	9 feet	None	(See cross section)	None	VCSDP VHSDP

* Includes curb and gutter dimension where element is at the edge of the paved section of the roadway.

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Amended
November 5, 2014]

TABLE 10.2 – STREET TYPES AND CROSS SECTIONS (Cont'd)

CROSS SECTION	PROGRAMMED ROW	# VEHICULAR LANES	VEHICULAR TRAVEL LANE WIDTHS / TRANSIT LANE WIDTHS	BIKE LANE / BUFFER*	ON-STREET PARKING*	PEDESTRIAN SIDEWALK WIDTH	LANDSCAPE / TREE WELL	APPLICABLE SECTOR PLAN AREA
ST 7.1: Urban Boulevard A <i>Applicable Streets:</i> <ul style="list-style-type: none"> Paseo del Norte from Calle Nortena to Kimmick Unser Boulevard from southern boundary of Volcano Cliffs to Escarpment Unser Boulevard from Kimmick to Woodmont 	156 feet	4 (+ 50' median)	11 feet	6 feet	None	10 feet	10 feet	VCSDP
ST 7.2: Urban Boulevard B <i>Applicable Streets:</i> <ul style="list-style-type: none"> Unser Boulevard from Escarpment to Kimmick 	156 feet	4 (+36' median)	12 feet	8 feet	None	None	None	VCSDP
ST 7.3: Urban Boulevard C <i>Applicable Streets:</i> <ul style="list-style-type: none"> Unser Boulevard from Woodmont to northernmost right-in/right-out in Volcano Heights 	156 feet	4 (+2 slip lanes)	11 / 12 feet	4 feet / 2 feet	None	(See cross section)	(See cross section)	VHSDP
ST 7.4: Urban Boulevard D <i>Applicable Street: Paseo del Norte from Kimmick to western boundary of Volcano Trails</i>	156 feet	6 (+2 transit lanes)	11 / 12 feet	6 feet / 2 feet	None	10 feet	(Within sidewalk width)	VHSDP VTSDP

* Includes curb and gutter dimension where element is at the edge of the paved section of the roadway.

10.0 STREET STANDARDS

[Amended
November 5, 2014]

TABLE 10.2 – STREET TYPES AND CROSS SECTIONS (Cont'd)

CROSS SECTION	PROGRAMMED ROW	# VEHICULAR LANES	VEHICULAR TRAVEL LANE WIDTHS / TRANSIT LANE WIDTHS	BIKE LANE / BUFFER*	ON-STREET PARKING*	PEDESTRIAN SIDEWALK WIDTH	LANDSCAPE / TREE WELL	APPLICABLE SECTOR PLAN AREA
ST 8: Transit Boulevard	120 feet	2 (+2 transit lanes)	10 / 12 feet	4 feet / 3 feet	7 feet	12 feet	6 feet	VHSDP
ST 9: Town Center	96 feet	2	11 feet	4 feet / 3 feet	18 feet (reverse-angle)	12 feet	(Within sidewalk width)	VHSDP
ST 10.1: Park Edge – Single-loaded	76 feet	2 (+12' median/turn bay)	11 feet	6.5 feet / 2.5 feet	7 feet (one side only)	10 feet	(Within sidewalk width)	VHSDP
ST 10.2: Park Edge – Double-loaded	70 feet	2	11 feet	4 feet / 3 feet	7 feet	10 feet	(Within sidewalk width)	VHSDP
ST 11: Local Street	52 feet	2	9 feet	None	6 feet	6 feet**	5 feet	VCSDP

* Includes curb and gutter dimension where element is at the edge of the paved section of the roadway.

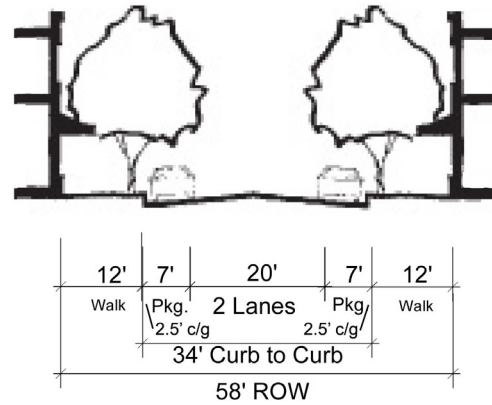
CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Note: Street Types 1.1 and 1.2 are not used within the Volcano Heights SDP]

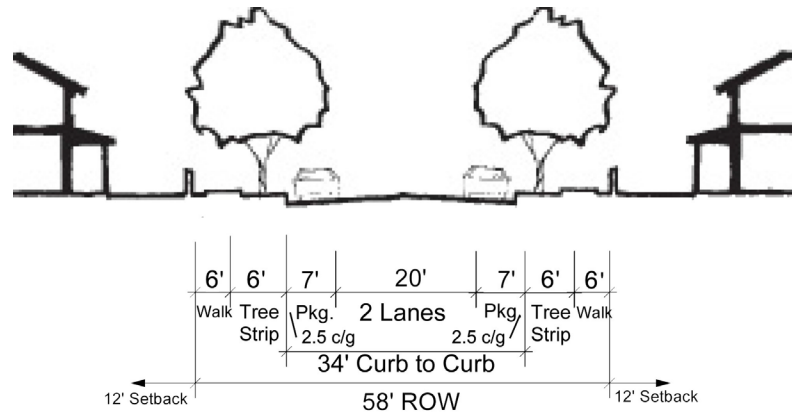
[Amended November 5, 2014]

ST 1.1: RETAIL COLLECTOR



STREET TYPE 1.1 – TYPICAL RETAIL COLLECTOR (2 LANES)

* Note: c/g stands for “curb and gutter”

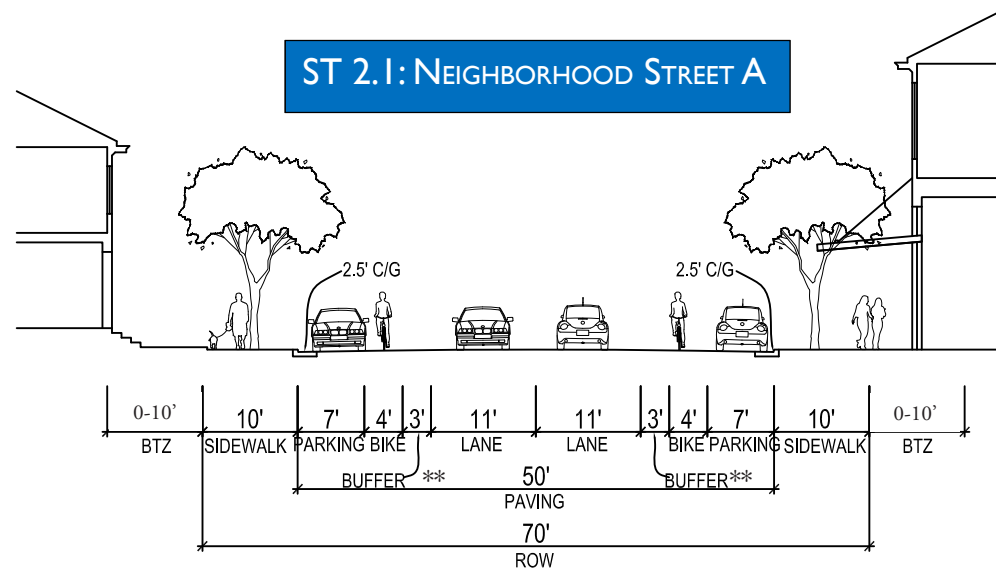


STREET TYPE 1.2 – TYPICAL RESIDENTIAL COLLECTOR (2 LANES)

ST 1.2: RESIDENTIAL COLLECTOR

10.6.1. Street Type 2.1: Neighborhood Street A

- (i) **Intent/Purpose:** These streets are intended to access local uses, predominantly businesses and residences within the Plan area.
- (ii) **Cross Section:** See **Exhibit 10.4.**
- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.
- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.



[Amended November 5, 2014]

EXHIBIT 10.4 – STREET TYPE 2.1: NEIGHBORHOOD STREET A

* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

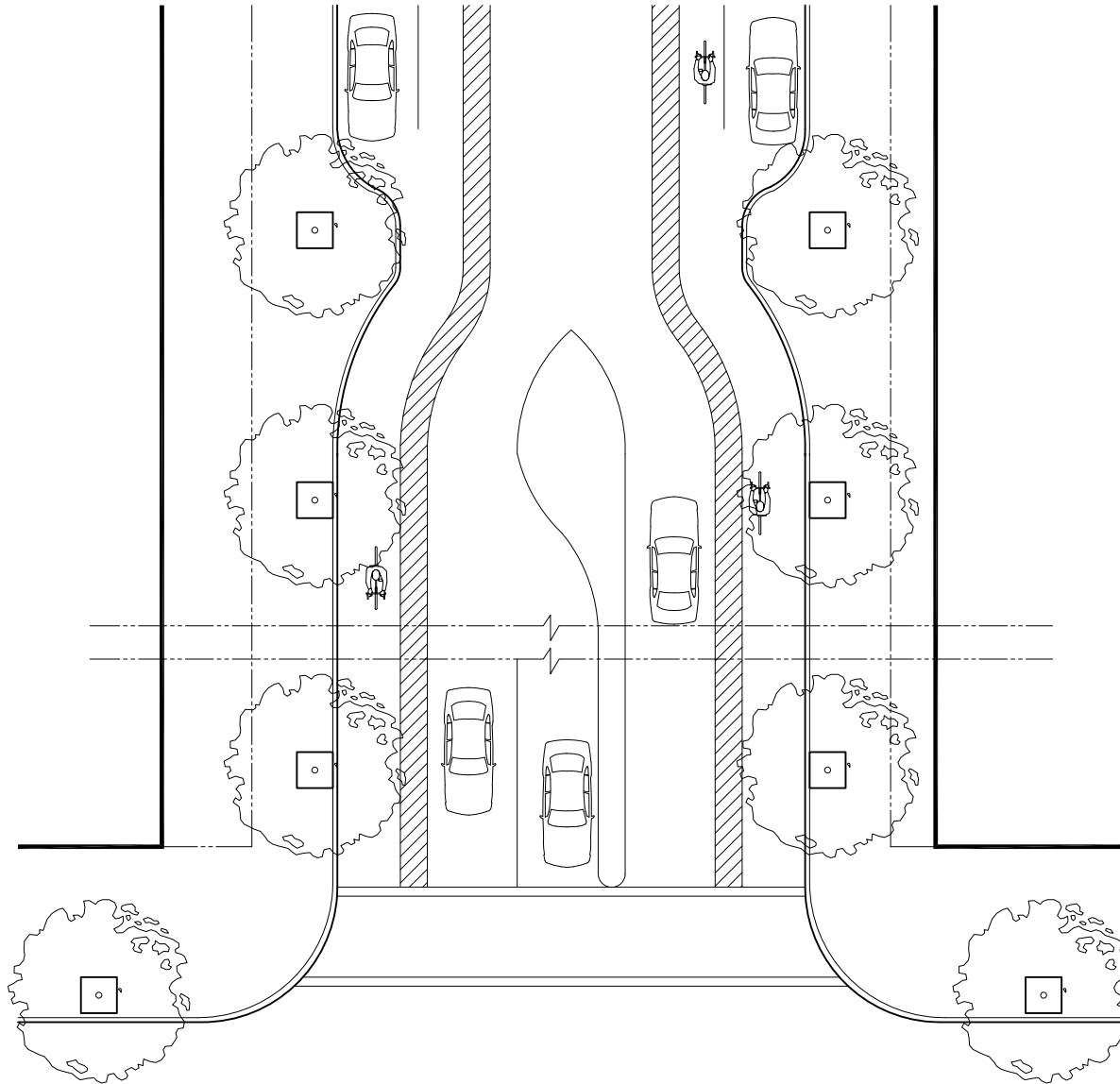


EXHIBIT 10.5 – STREET TYPE 2.1: NEIGHBORHOOD STREET A – TYPICAL INTERSECTION (PLAN VIEW)

10.0 STREET STANDARDS

[Note: Street Types 2.2 and 2.3 are not used within the Volcano Heights SDP]

ST 2.2: NEIGHBORHOOD STREET B

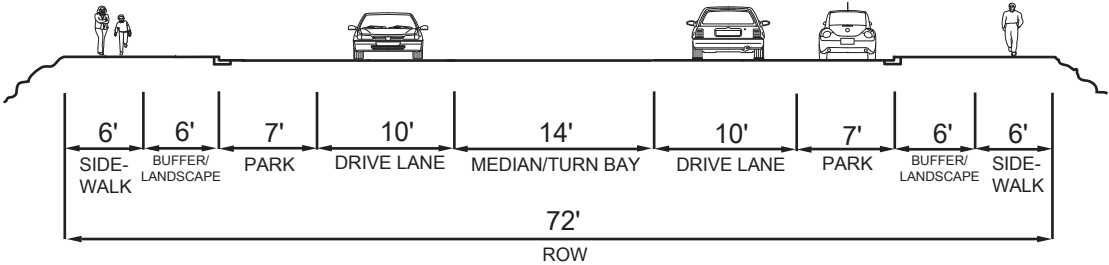


EXHIBIT 10.6 – STREET TYPE 2.2: NEIGHBORHOOD STREET B

ST 2.3: NEIGHBORHOOD STREET C

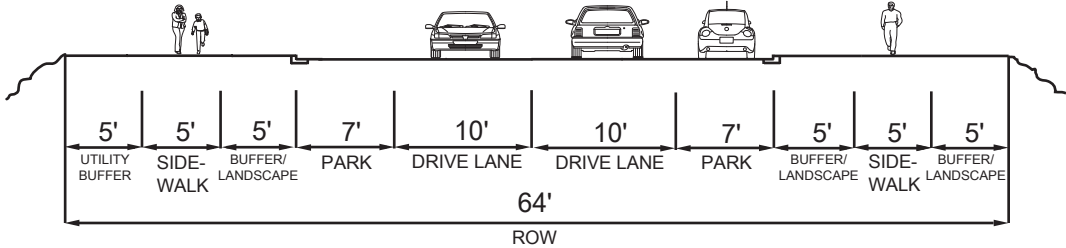


EXHIBIT 10.7 – STREET TYPE 2.3: NEIGHBORHOOD STREET C

[Amended November 5, 2014]

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Amended November 5, 2014]

10.6.2. Street Type 3: Universe Blvd.

- (i) **Intent/Purpose:** Universe Boulevard is a minor arterial carrying significant traffic volumes to facilitate regional movement. At the same time, it connects many predominantly residential areas and therefore must be safe and comfortable for pedestrian and cyclists.
- (ii) **Cross Section:** See **Exhibit 10.18.**
- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.
- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.

ST 3: UNIVERSE BLVD.

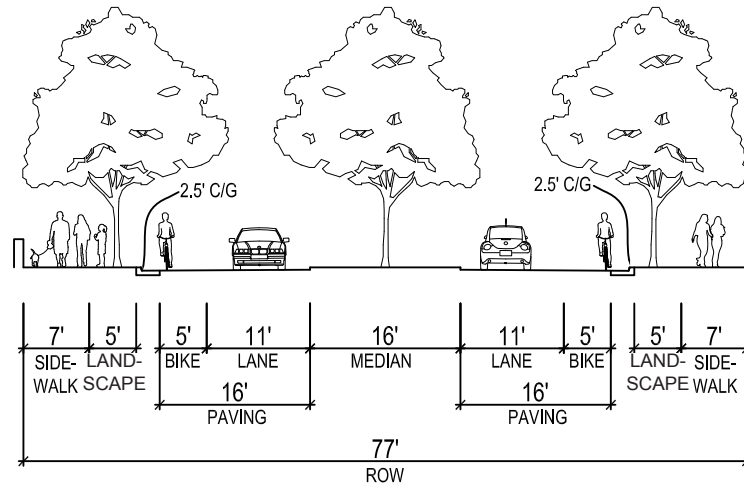
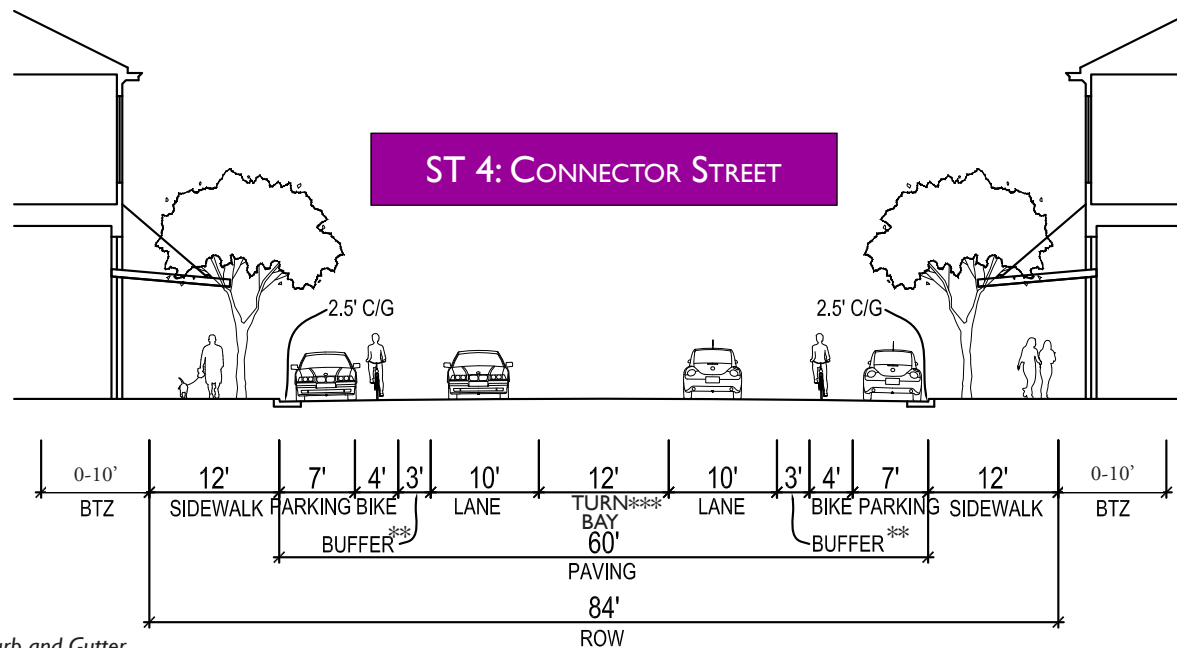


EXHIBIT 10.8 – STREET TYPE 3: UNIVERSE BLVD.

10.6.3. Street Type 4: Connector Street

- (i) **Intent/Purpose:** These streets are intended to access **neighborhood streets** and promote multi-modal transportation to reach businesses and residences within the Plan area.
- (ii) **Cross Section:** See **Exhibit 10.6.**
- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.
- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.

[Amended November 5, 2014]



* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

*** Note: The center lane is a two-way left-turning lane and/or median as appropriate.

EXHIBIT 10.9 – STREET TYPE 4: CONNECTOR STREET

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

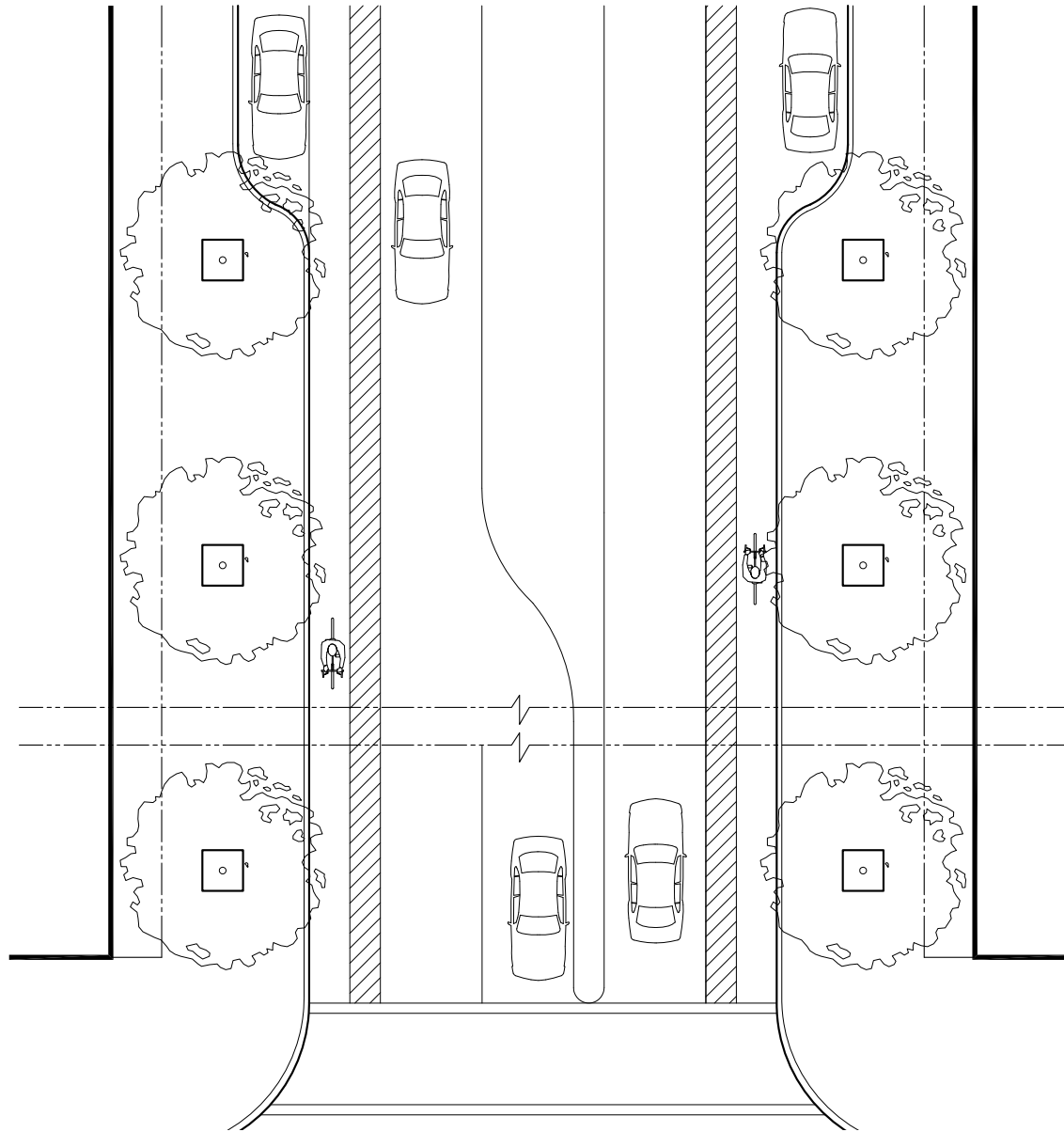


EXHIBIT 10.10 – STREET TYPE 4: CONNECTOR STREET – TYPICAL INTERSECTION (PLAN VIEW)

10.0 STREET STANDARDS

[Note: Street Type 5 is not used within the Volcano Heights SDP]

ST 5: SUBURBAN BOULEVARD

[Amended November 5, 2014]

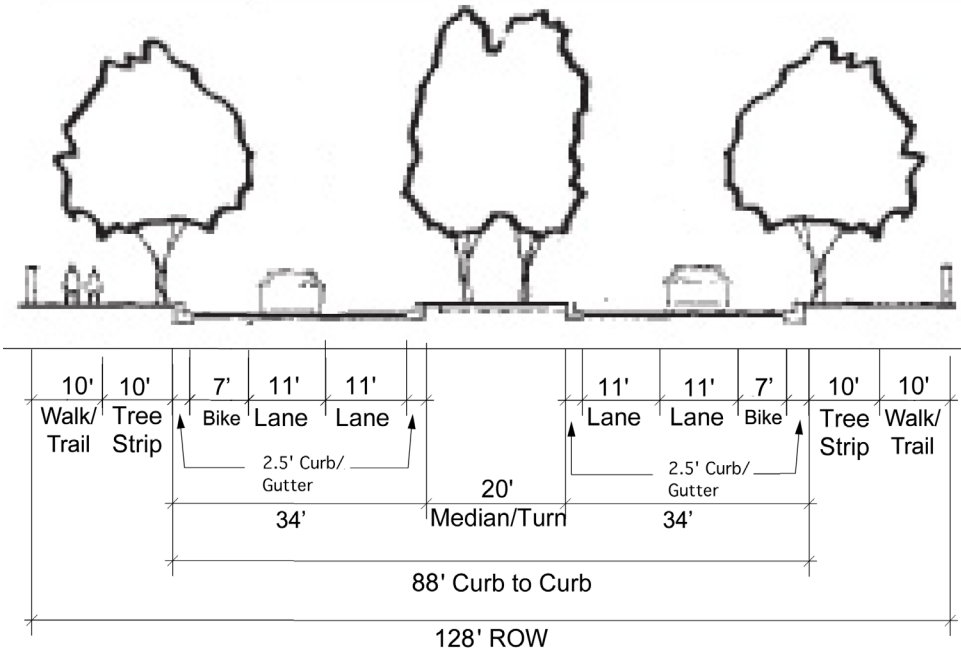


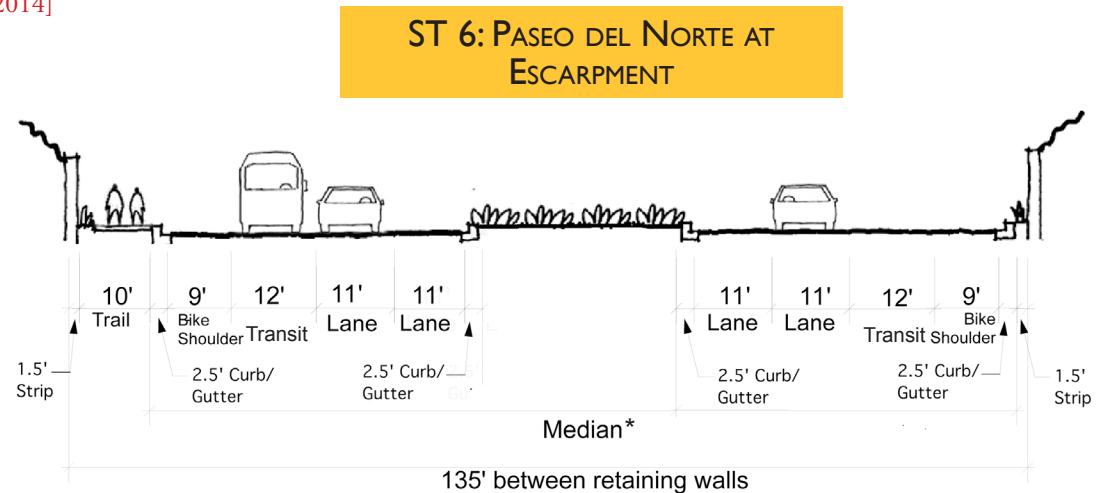
EXHIBIT 10.11 – STREET TYPE 5: SUBURBAN BOULEVARD

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Note: Street Type 6 is not used within the Volcano Heights SDP]

[Amended November 5, 2014]



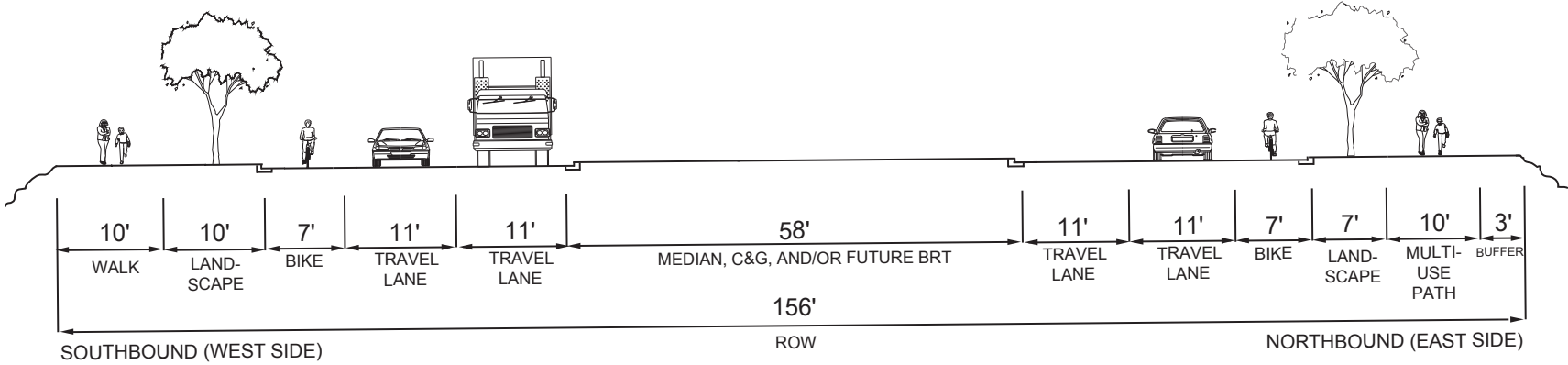
* Note: Median width varies according to right-of way through the Petroglyph National Monument

EXHIBIT 10.12 – STREET TYPE 6: PASEO DEL NORTE AT ESCARPMENT (6 LANES WITH TRANSIT)

10.0 STREET STANDARDS

[Amended November 5, 2014]

ST 7.1: URBAN BOULEVARD A



* Note: C/G = Curb and Gutter
** Note: Buffer = Separation between the multi-use path and private ROW.

EXHIBIT 10.13 – STREET TYPE 7.1: URBAN BOULEVARD A

10.0 STREET STANDARDS

[Note: Street Type 7.2 is not used within the Volcano Heights SDP]

[Amended November 5, 2014]

ST 7.2: URBAN BOULEVARD B

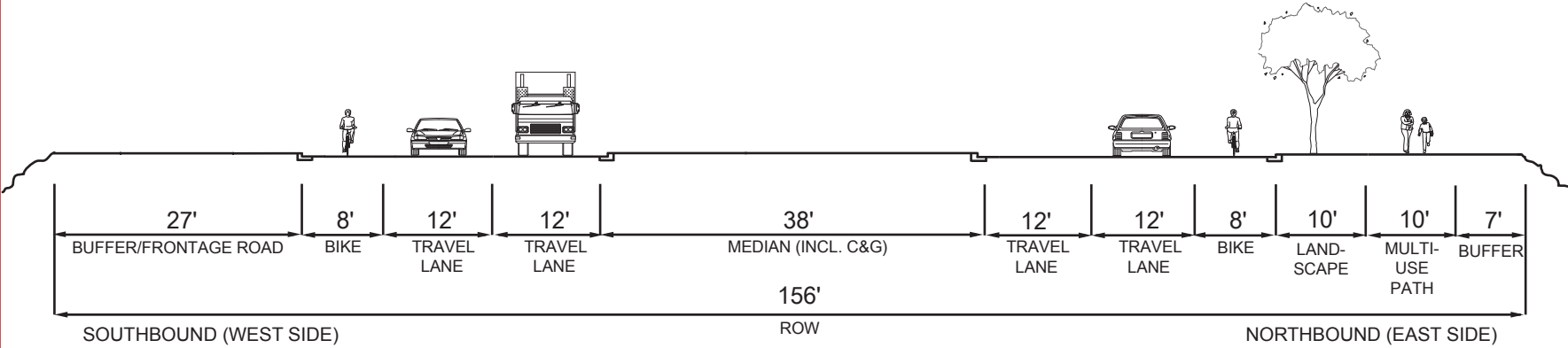


EXHIBIT 10.14 – STREET TYPE 7.2 – URBAN BOULEVARD B

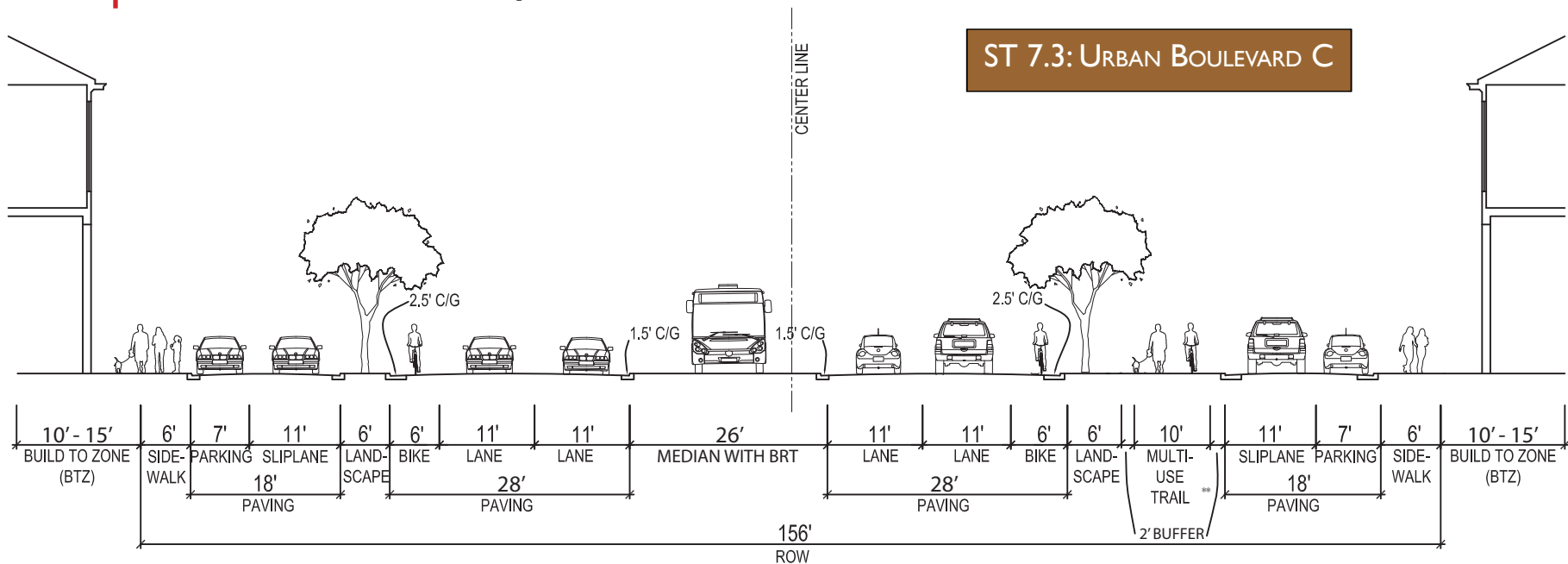
10.0 STREET STANDARDS

10.6.4. Street Type 7.3: Urban Boulevard C

- (i) **Intent/Purpose:** Unser Boulevard is primarily a regional road, serving residents and businesses within Volcano Heights as well as the surrounding region.
- (ii) **Cross Section**
 - a. See **Exhibit 10.16**.
 - b. Slip lanes are for one-way movement only. Directional signage is needed.
 - c. Beginning 500 feet from an intersection with Paseo del Norte, the Transit Boulevard, or any potential station locations, an extra 24 feet in the ROW may be needed for **BRT** lanes and/or station platforms.

[Amended
November 5, 2014]

- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.
- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.



10

* Note: C/G = Curb and Gutter

** Note: Multi-use trail to be southeast of Unser Blvd. between Woodmont and Transit Blvd. and northwest of Unser Blvd. between Transit Blvd. and the northern edge of the Plan area.

EXHIBIT 10.15 – STREET TYPE 7.3: URBAN BOULEVARD C

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

10.6.5. Street Type 7.4: Urban Boulevard D

- (i) **Intent/Purpose:** Paseo del Norte is primarily a regional road, serving residents and businesses within Volcano Heights as well as the surrounding region.

(ii) Cross Section

- a. See **Exhibit 10.17**.
b. Beginning 500 feet from an intersection with Unser Boulevard, the Transit Boulevard, or any potential station locations, 24 feet in the **ROW** may be needed for **BRT** lanes and/or station platforms.

[Amended
November 5, 2014]

- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.

- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.

ST 7.4: URBAN BOULEVARD D

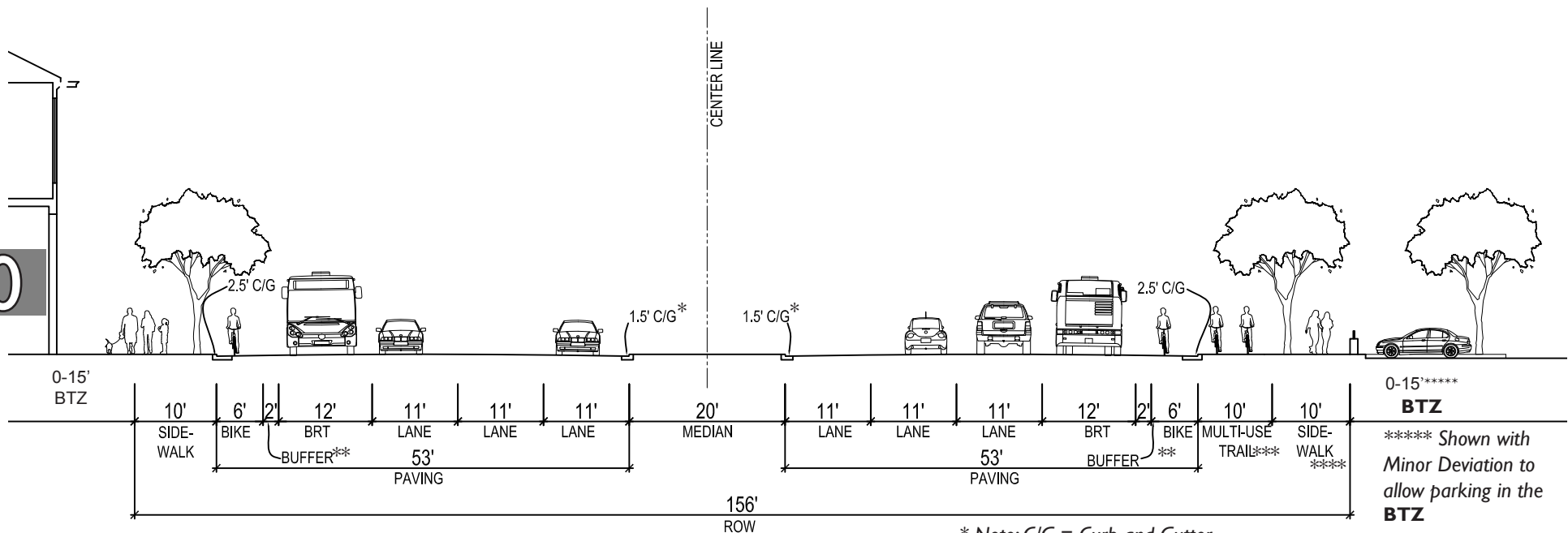


EXHIBIT 10.16 – STREET TYPE 7.4: URBAN BOULEVARD D

* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

*** Note: Multi-use trail to be on the east side of Paseo del Norte.

**** Note: Sidewalk dimension may be adjusted to accommodate trail and/or trail buffer.

10.6.6. Street Type 8: Transit Boulevard

- (i) **Intent/Purpose:** The Transit Boulevard serves multiple modes of transportation, including the proposed **BRT**. The walkable, dense, urban Town Center is organized around this Transit Boulevard, which acts as a “Main Street” for Volcano Heights.

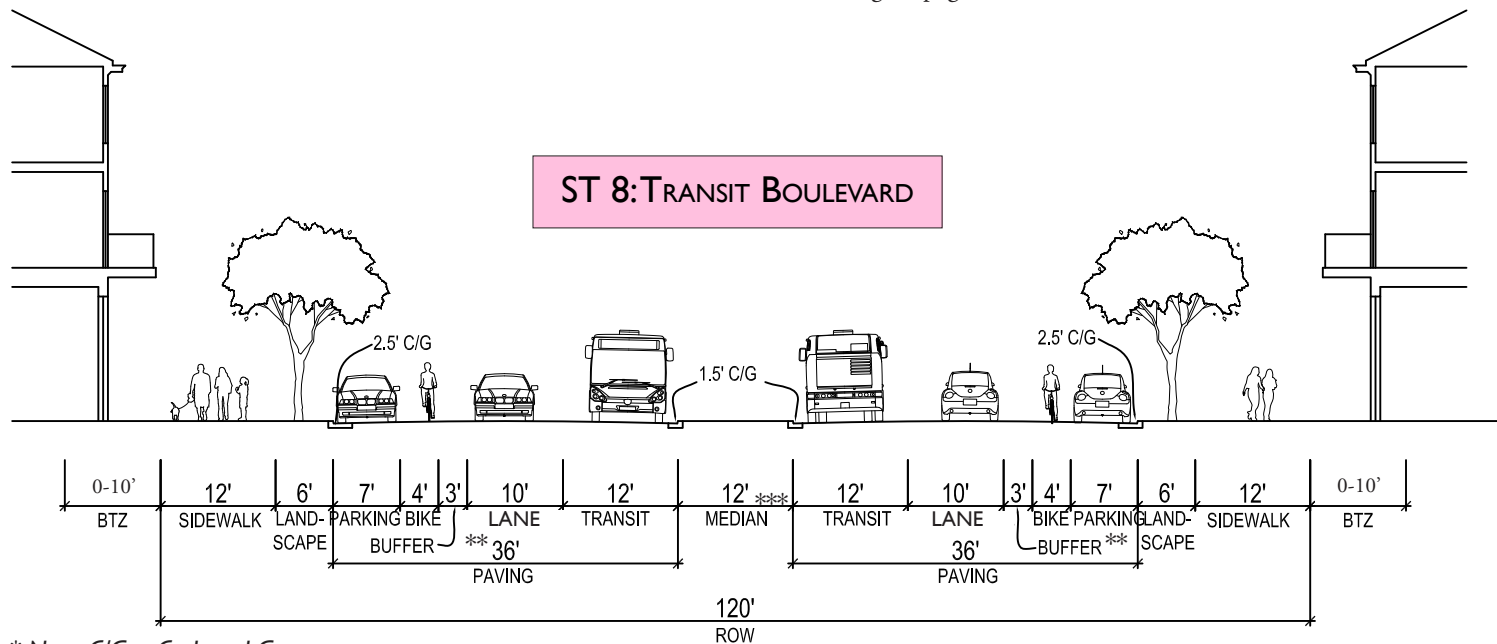
(ii) Cross Section

- a. See **Exhibit 10.14**.
b. Beginning 500 feet from intersections on Paseo del Norte, Unser Boulevard, and any other potential station locations, an extra 36 feet of ROW may be needed for **BRT** lanes and/or station platforms.

- (iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.

- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.

[Amended
November 5, 2014]



* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

*** Note: Median becomes Turn Bay or equivalent in 'B' Street segments.

EXHIBIT 10.17 – STREET TYPE 8: TRANSIT BOULEVARD

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10.0 STREET STANDARDS

ST 8: TRANSIT BOULEVARD

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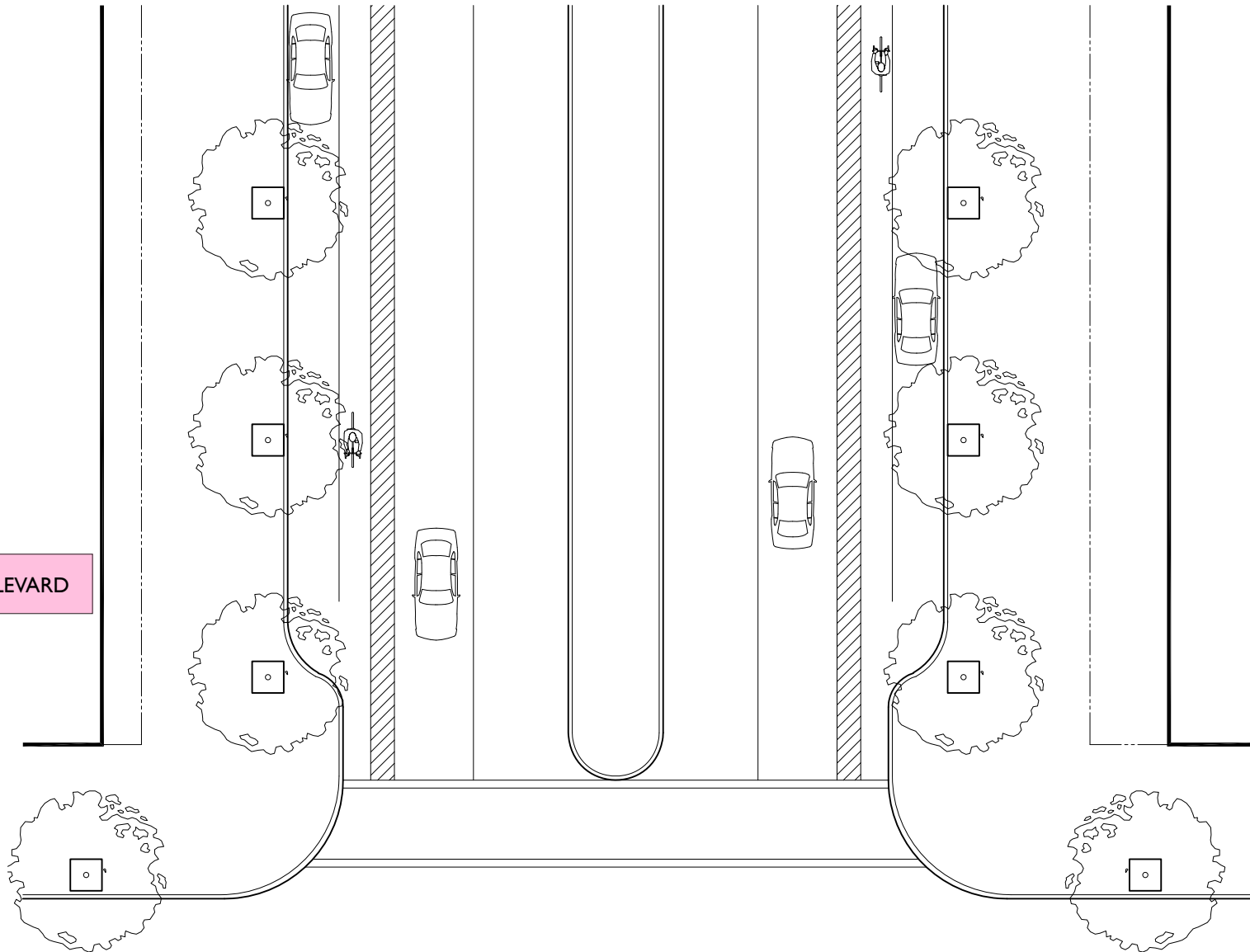
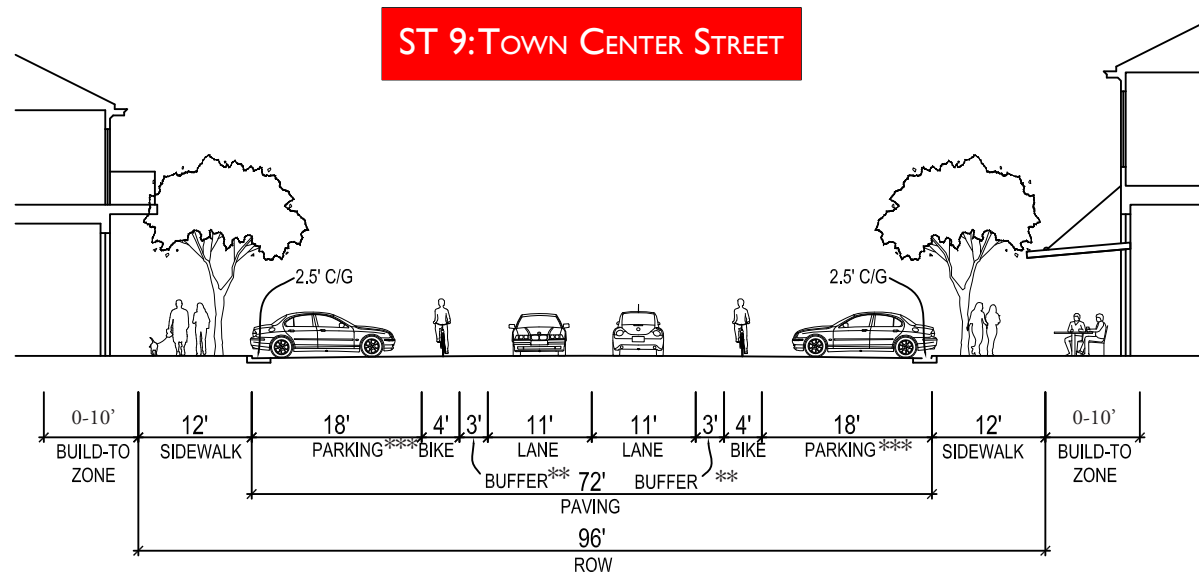


EXHIBIT 10.18 – STREET TYPE 8: TYPICAL INTERSECTION (PLAN VIEW)

10.6.7. Street Type 9: Town Center Street

- (i) **Intent/Purpose:** These streets are intended to be the most pedestrian-friendly while supporting multiple modes of transportation circulating throughout the Plan area and surrounding region.
- (ii) **Cross Section:** See **Exhibit 10.4.**
- (iii) **Frontage Standards:** See Site Development Standards in **Section 5.1** starting on page 78.
- (iv) **Streetscape Standards:** See **Section 11** starting on page 205.

[Amended
November 5, 2014]



* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

*** Note: Parking shown is reverse-angle parking. See **Section 13.3.10(ix)**.

EXHIBIT 10.19 – STREET TYPE 9: TOWN CENTER STREET

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10.0 STREET STANDARDS

ST 9: TOWN CENTER STREET

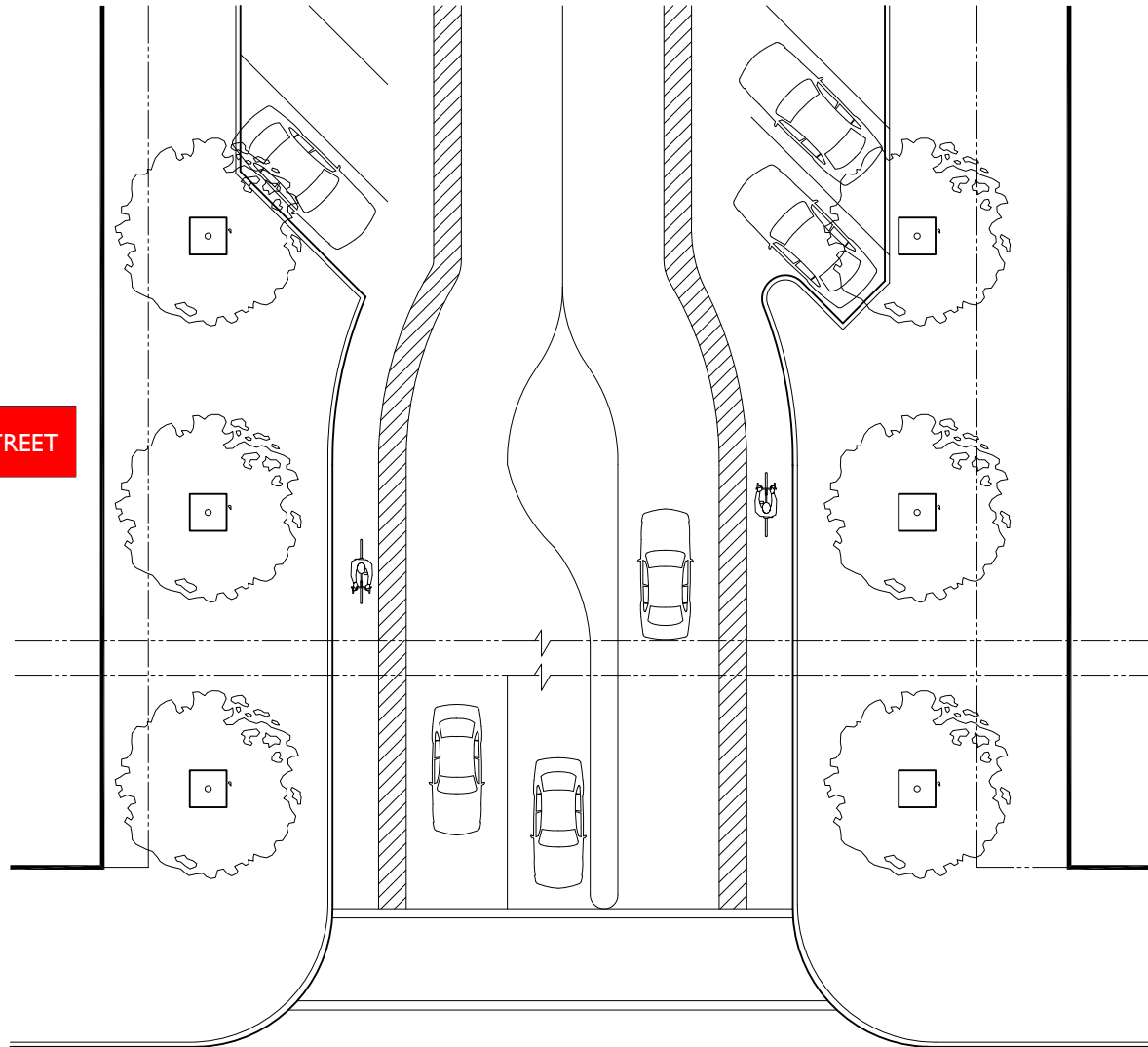
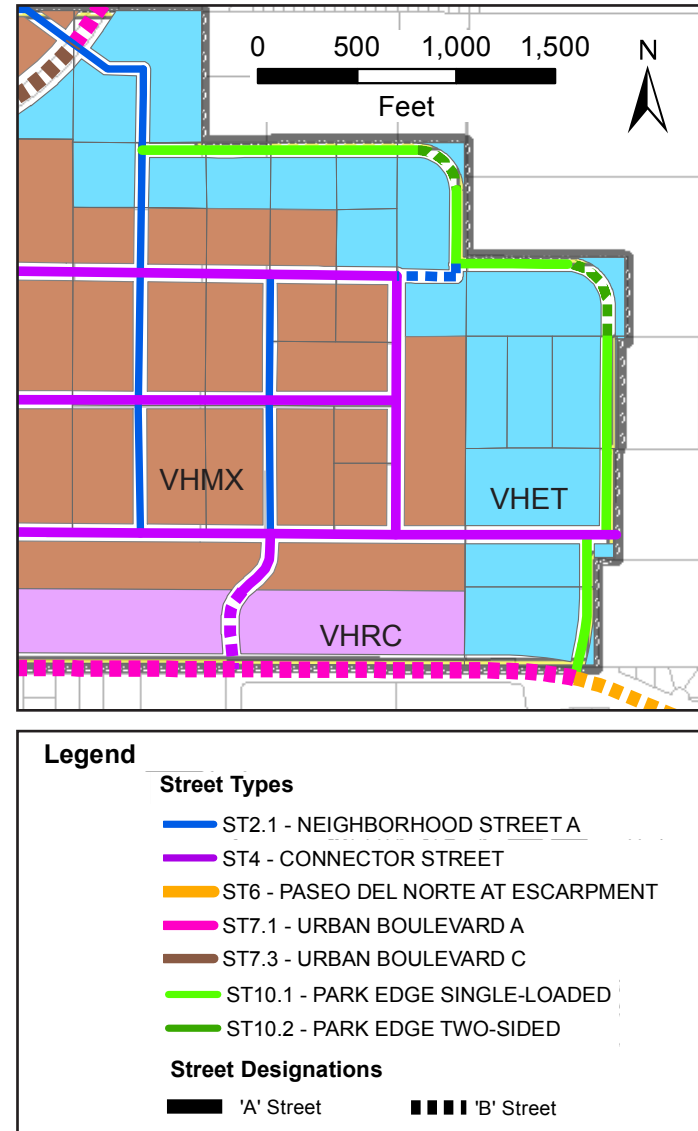


EXHIBIT 10.20 – STREET TYPE 9: TYPICAL INTERSECTION (PLAN VIEW)

10.6.8. Street Type 10: Park Edge

- (i) **Intent/Purpose:** The Park Edge road is intended to access local development, predominantly residences and businesses within the Plan area, by multiple modes of transportation, including on-street bicycle lanes as well as connections to an off-street trail along the Petroglyph National Monument. **Major Public Open Space** is best enhanced and protected as a public amenity when buffered from development by a **single-loaded road** along Major Public Open Space edges (i.e. development only occurs on the side of the road farthest from the Major Public Open Space). The City Open Space Division and the National Park Service prefer the single-loaded road as the best transition between development and sensitive lands within the Petroglyph National Monument. Single-loaded roads increase safety for open space users and nearby property owners by providing visibility for surveillance and monitoring, as well as improving accessibility for park users. Single-loaded roads are also the most effective means of protecting important views into and out of the Monument, as well as to the Sandia Mountains to the east. The Park Edge road cross sections are designed to incorporate landscaping and medians that act as transitions from the built environment to **sensitive lands** within the Monument.



DETAIL OF EXHIBIT 10.2 – CHARACTER ZONES AND STREET TYPES: PARK EDGE ROAD

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

[Amended
November 5, 2014]

ST 10.1: PARK EDGE SINGLE-LOADED

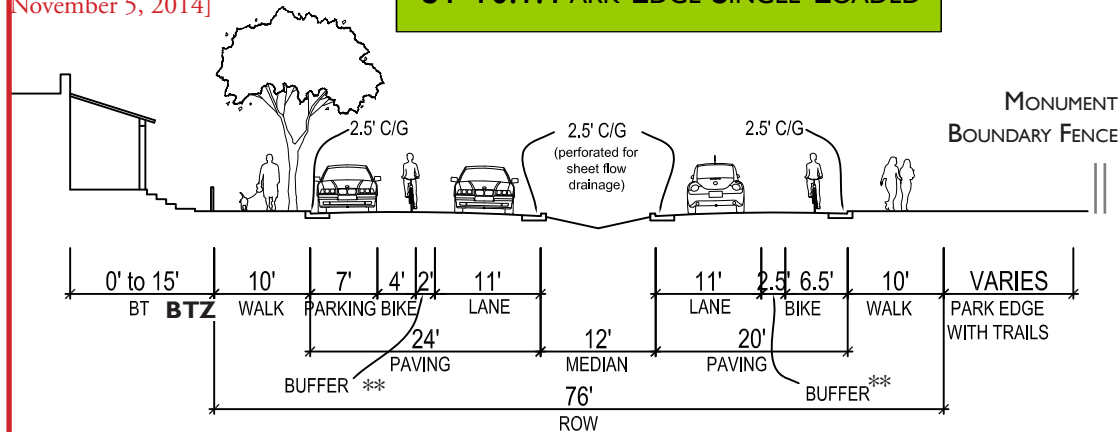


EXHIBIT 10.21 – STREET TYPE 10.1: PARK EDGE SINGLE-LOADED

* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

ST 10.2: PARK EDGE TWO-SIDED

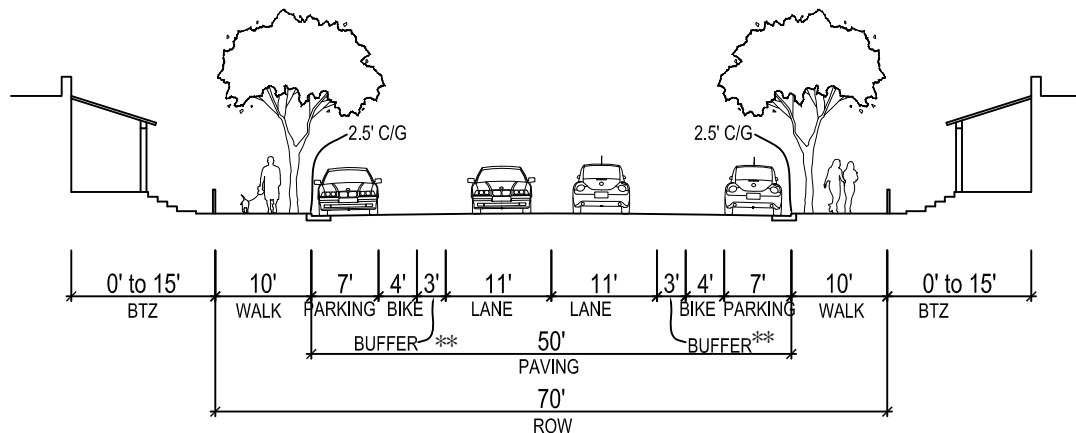


EXHIBIT 10.22 – STREET TYPE 10.2: PARK EDGE DOUBLE-LOADED

* Note: C/G = Curb and Gutter

** Note: Buffer = Separation between the bicycle and vehicle lanes.

(ii) **Cross Sections:** Two cross sections are provided for the Park Edge Street.

a. Where the street abuts the Petroglyph National Monument and/or where development is only intended on the west side of the road, Street Type 4.1 is to be constructed. [See **Exhibit 10.10.**]

b. Where development will occur on both sides of the street, Street Type 4.2 is to be used. [See **Exhibit 10.11.**]

c. The Park Edge and additional east-west streets in the SU-2 Volcano Heights Escarpment Transition (VHET) zone should ~~shall~~ be sited to provide pedestrian access to the Petroglyph National Monument. Access shall be determined by the National Park Service Monument Visitor Plan and/or by the City Open Space Division in lieu thereof.

d. Where a median is incorporated, it should be perforated for hydrology and rainwater drainage and control, subject to approval by the City Hydrologist.

(iii) **Frontage Standards:** See Site Development Standards in **Section 5** starting on page 77.

(iv) **Streetscape Standards:** See **Section 11** starting on page 205.

10.0 STREET STANDARDS

- (v) **Linear pond/bioswale:** The median and/or eastern edge of the Park Edge Road is an appropriate and beneficial location for a bioswale/linear pond. Such a pond, designed in consultation with the City Engineer can help to meet the City's water quality goals. [See also **Goal 12.5.5** starting on page 222 and **Policy 13.5.3** starting on page 242.]

ST 10.1: PARK EDGE SINGLE-LOADED

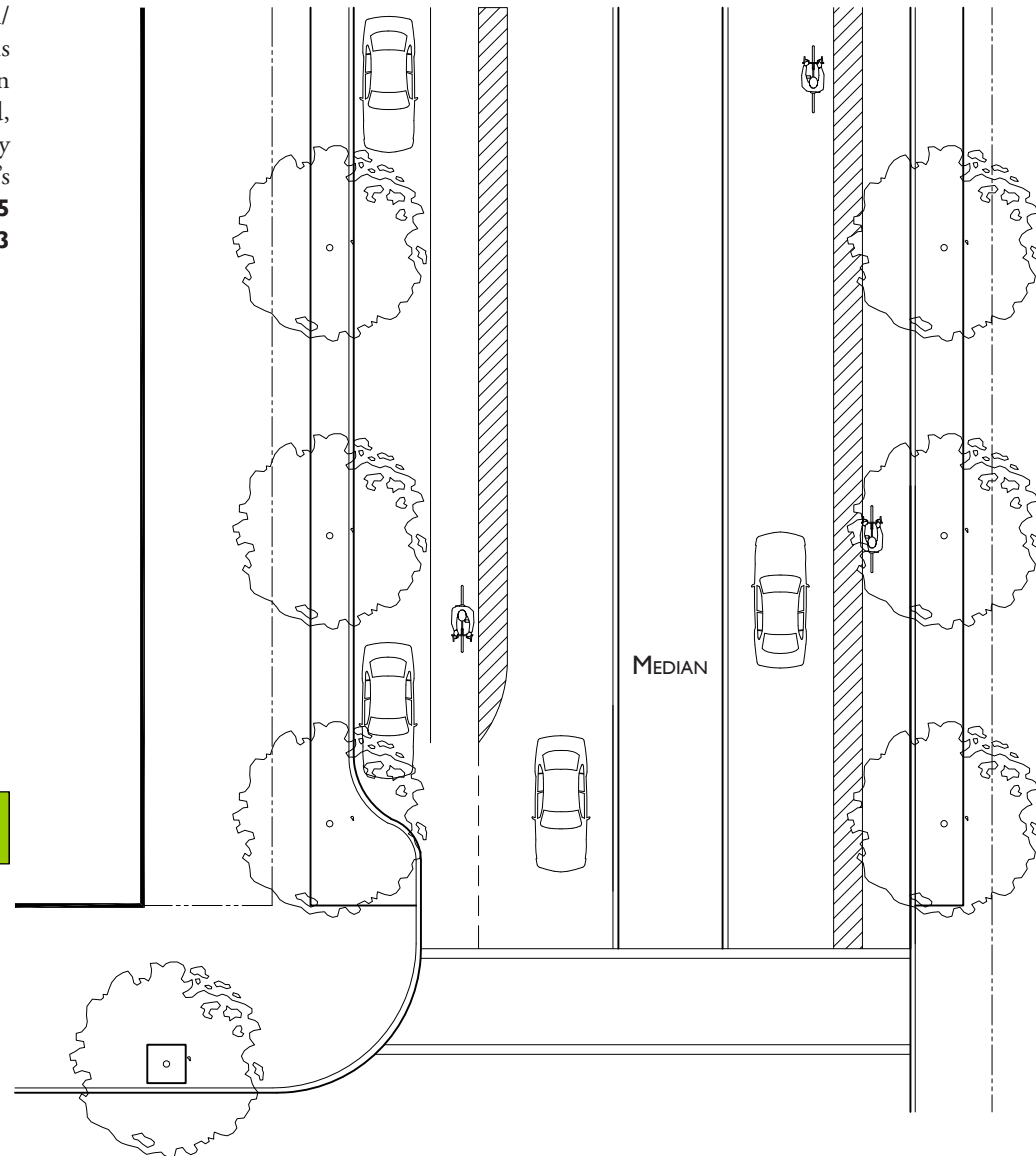


EXHIBIT 10.23 – STREET TYPE 10.1: TYPICAL INTERSECTION (PLAN VIEW)

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ST 10.2: PARK EDGE DOUBLE-LOADED

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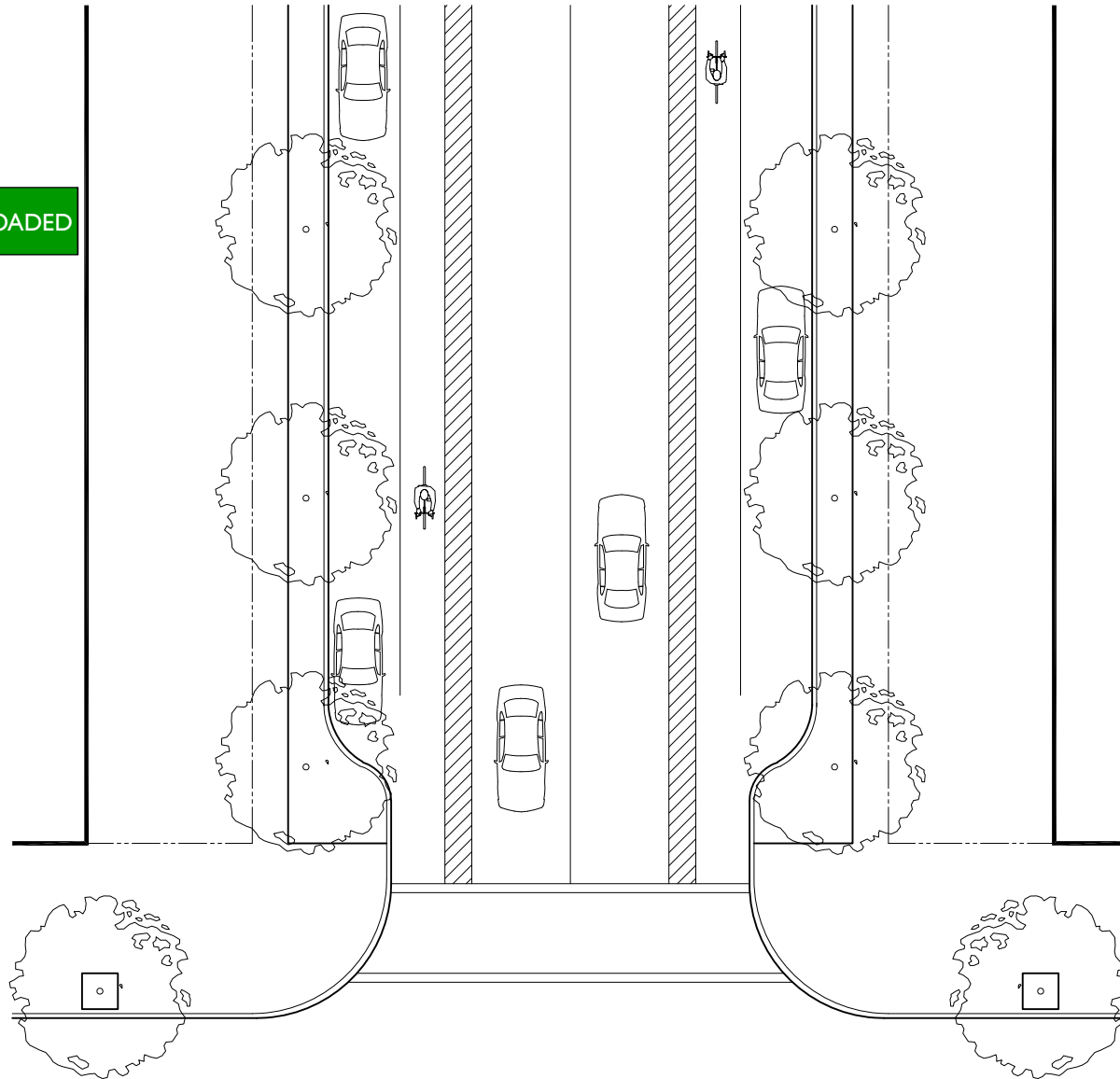


EXHIBIT 10.24 – STREET TYPE 10.2: TYPICAL INTERSECTION (PLAN VIEW)

10.0 STREET STANDARDS

10.7. Secondary Street Design Standards

- 10.7.1. The platting of new dead-end streets and culs-de-sac that terminate the road is prohibited.
- (i) Stub streets or “knuckle” culs-de-sac are allowed where necessary to reach no more than 4 parcels beyond a corner or intersection.
 - (ii) Mid-block “bubble” culs-de-sac without throats are allowed.
 - (iii) Pedestrian/bike connections shall be provided to open space and/or road networks beyond knuckle or bubble culs-de-sac.

10.7.2. Required ‘A’ vs. ‘B’ Streets

- (i) New development shall include Secondary Streets to serve projects where needed to supplement Primary Streets, per the requirements in **Table 10.2**, which includes both Primary and Secondary Streets.
 - a. **‘A’ vs. ‘B’ Percentage:** The percentages given are ratios for the minimum number of **‘A’ Streets** and maximum number for **‘B’ Streets**. For example, for a project within Town Center, a minimum of 1 of every 2 **Secondary Streets** shall be planned as **‘A’ Streets**. If more than half the streets are planned as **‘A’ Streets**, the **‘B’ Street** percentage would be reduced accordingly. In Regional Center, for example, at least 1 of every 4 roads shall be an **‘A’ Street**. See **Exhibit 10.19**.

- b. **Connectivity: Secondary Streets** added in Volcano Heights shall maintain or improve street connectivity to serve pedestrians as well as dispersing auto traffic.



TABLE 10.2 – STREET REQUIREMENTS

CHARACTER ZONE		STREETS	
		‘A’ Street (min.)	‘B’ Street (max.)
	Town Center	50%	50%
	Regional Center	25%	75%
	Village Center	25%	75%
	Mixed Use	25%	75%
	Neighborhood Transition	0%	100%
	Escarpment Transition	25%	75%

[Amended November 5, 2014]

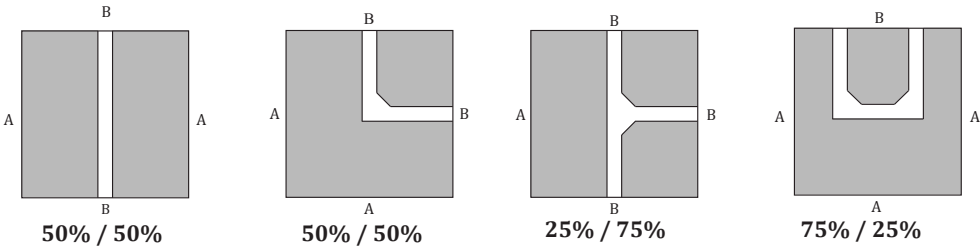


EXHIBIT 10.19 – EXAMPLE DIAGRAMS: ALLEY CONFIGURATIONS WITH ‘A’ vs. ‘B’ STREET PERCENTAGES

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10.0 STREET STANDARDS

- [Amended November 5, 2014]
- (i) The first development in shall determine Secondary Street designation (i.e. whether 'A' or 'B') for the block. Streets shall be platted as such during the TIDD/SAD/PID and/or Site Development Plan for Subdivision process. Street designations may only change at intersections. Street designations may only change from an 'A' Street to a 'B' street when intersecting with another 'A' street to ensure connectivity for the pedestrian.

10.7.3. Secondary Street Cross Sections

- (i) **Table 10.3** specifies typical sections for **Secondary Streets**.
- (ii) The elements may be arranged to best meet local conditions and intended character of the corridor.
- (iii) Where a Secondary Street crosses property lines, **adjacent** property owners may be required to sign a legally binding agreement duly executed and acknowledged for the agreed-to cross section as the first project is being planned and before final project approval is granted.

- (iv) Typical cross sections for '**A**' Streets and '**B**' Streets are illustrated in **Exhibit 10.20** and **Exhibit 10.21**, respectively. Typical Cross Sections for Residential and Commercial Alleys are illustrated in **Exhibit 10.22** and **Exhibit 10.23**, respectively.

TABLE 10.3 – TYPICAL SECONDARY STREET AND ALLEY CROSS SECTION OPTIONS

STREET ELEMENTS	STREET ROW	#VEHICULAR LANES	VEHICULAR TRAVEL LANE WIDTHS (max.)	BIKE LANE	ON-STREET PARKING	PEDESTRIAN SIDEWALK WIDTH (max.) * includes easement(s)	PARKWAY/TREE WELL
'A' Street	54-96 feet	2-3 (includes 12-ft. center turn lane)	10 (11) feet	None	7-18 feet (reverse-angle parking requires 16-18 feet)	10 (12) feet	(optional within sidewalk width)
'B' Street	48-96 feet	2-4	11 (13) feet	None	7 feet	6 (10) feet	(optional with sidewalks at least 8 feet wide)
Commercial Alley	20-36 feet (all paved)	N/A	N/A	None	None	None	None
Residential Alley	20-30 feet (12 feet minimum paved)	N/A	N/A	None	None	None	None

10.7.4. Typical 'A' Street

- (i) **Intent/Purpose:** **Secondary 'A' Streets** are intended to provide the primary pedestrian access to development. They should be pedestrian-friendly and attractive, including streetscape amenities and landscaping. See **Exhibit 10.20**.
- (ii) Streets are to have 10-foot minimum sidewalks but 12 feet where possible. Larger sidewalks are encouraged as long as the primary **building** is positioned **abutting** the sidewalk.
- (iii) Drive lanes are to have a typical dimension of 10 feet but may be increased to no more than 11 feet wide for each lane where transit is anticipated.
- (iv) On-street parking may be parallel or angled parking. Where angled parking is used, the ROW shall be increased to add that element (reverse-angle parking typically requires 16-18 feet) while still maintaining appropriate dimensions for all other elements. A median is also recommended with reverse-angle parking.
- (v) When incorporating a median, the median is to have a minimum of 2 feet wide and provide enough additional width to allow vegetation to be planted and sustain itself within the entire median, including turn bays.
- (vi) For streetscaping, see **Section 11.2** starting on page 206 of this Plan.
- (vii) For street lighting, see **Section 11.4** starting on page 209 of this Plan.

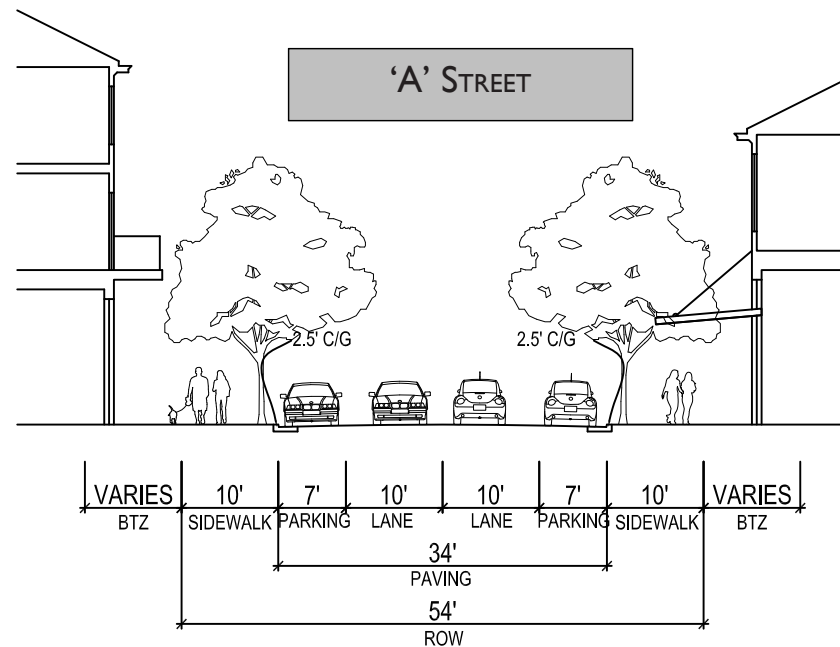


EXHIBIT 10.20 – TYPICAL 'A' STREET CROSS SECTION

10.0 STREET STANDARDS

10.7.5. Typical 'B' Street

- (i) **Intent/Purpose:** **Secondary 'B' Streets** are intended to provide the primary automobile access to development. They should serve both potential customers and residents as well as service, delivery, and maintenance vehicles. See **Exhibit 10.21**.
- (ii) Streets are to have 6-foot minimum sidewalks but 8 feet where possible. Where street trees are added to the cross section within the allowance for the sidewalk, the sidewalk portion, including the tree well, is to be no less than 10 feet wide.
- (iii) Drive lanes are to have a typical dimension of 11 feet where trucks and transit are expected but may be decreased to no less than 10 feet wide for each lane for streets that will largely accommodate autos and where slower speeds are desirable, such as residential and retail areas.
- (iv) On-Street parking is to be parallel.
- (v) Off-street parking visible from the public **ROW** along the **'B' Street** is to have a **street screen** of masonry, metal railing, vegetation or a combination of these. This street screen is to be a minimum of 3 feet and no more than 6 feet tall.
- (vi) Medians are not permitted on **'B' Streets**.
- (vii) For streetscaping, see **Section 11.2** starting on page 206 of this Plan.
- (viii) For street lighting, see **Section 11.4** starting on page 209 of this Plan.

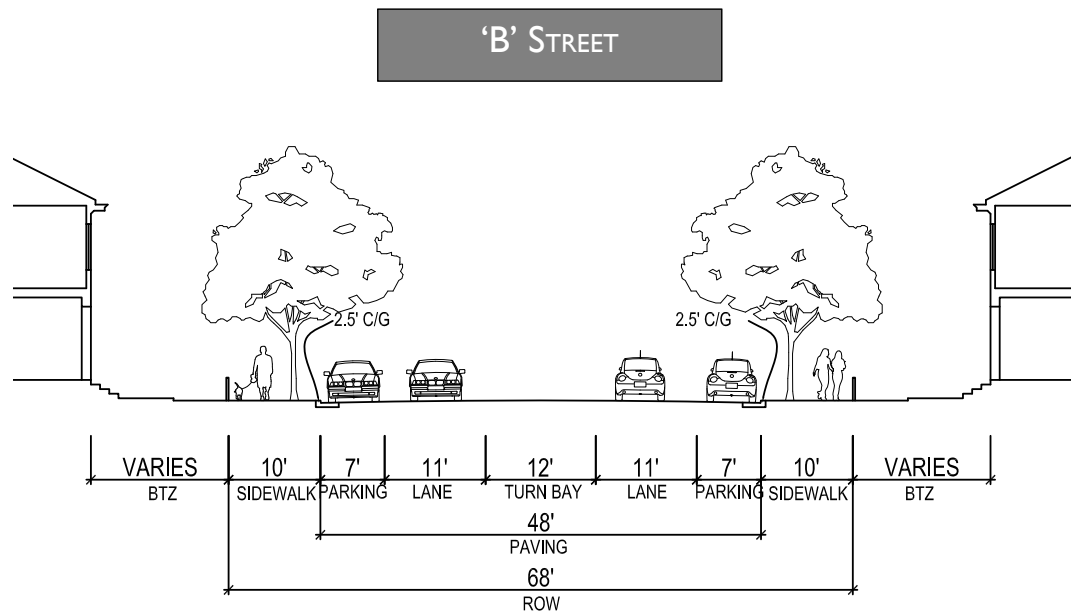


EXHIBIT 10.21 – TYPICAL 'B' STREET CROSS SECTION

10.7.6. **Typical Alleys:** Prior to site development, an exhibit may be required to demonstrate appropriate truck turning movements for proposed alley configurations.

(i) **Residential**

- a. *Purpose / Intent:* Provides access to parking, outbuildings, and service areas in back. Contains utility easements.
- b. *ROW width:* 20 feet
- c. *Pavement width:* 12 feet minimum
- d. *Design speed:* 10 miles per hour

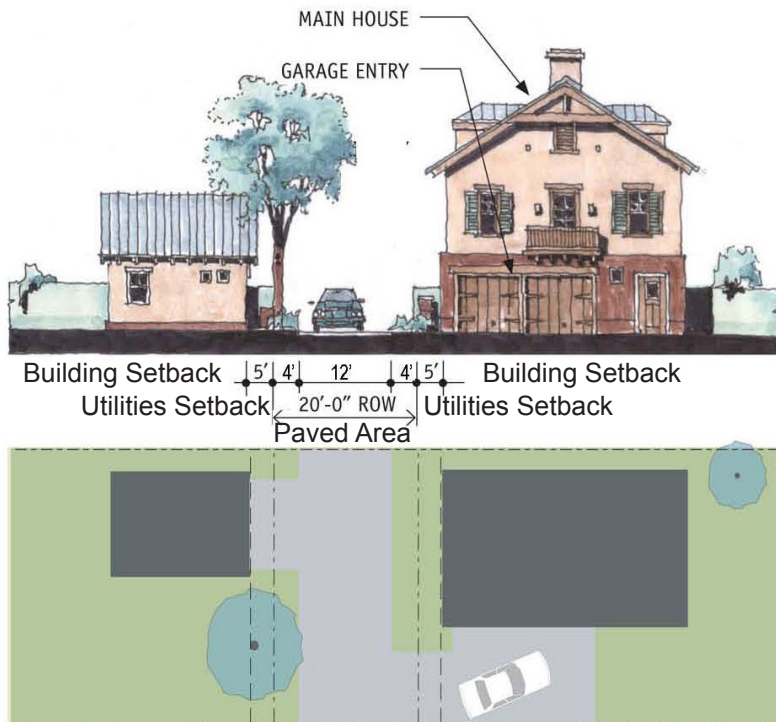


EXHIBIT 10.22 – TYPICAL RESIDENTIAL ALLEY CROSS SECTION

(ii) **Commercial**

- a. *Purpose / Intent:* Provides access to parking, outbuildings, and service areas in back. Contains utility easements.
- b. *ROW width:* 20 feet
- c. *Pavement width:* 20 feet minimum
- d. *Design speed:* 15 miles per hour

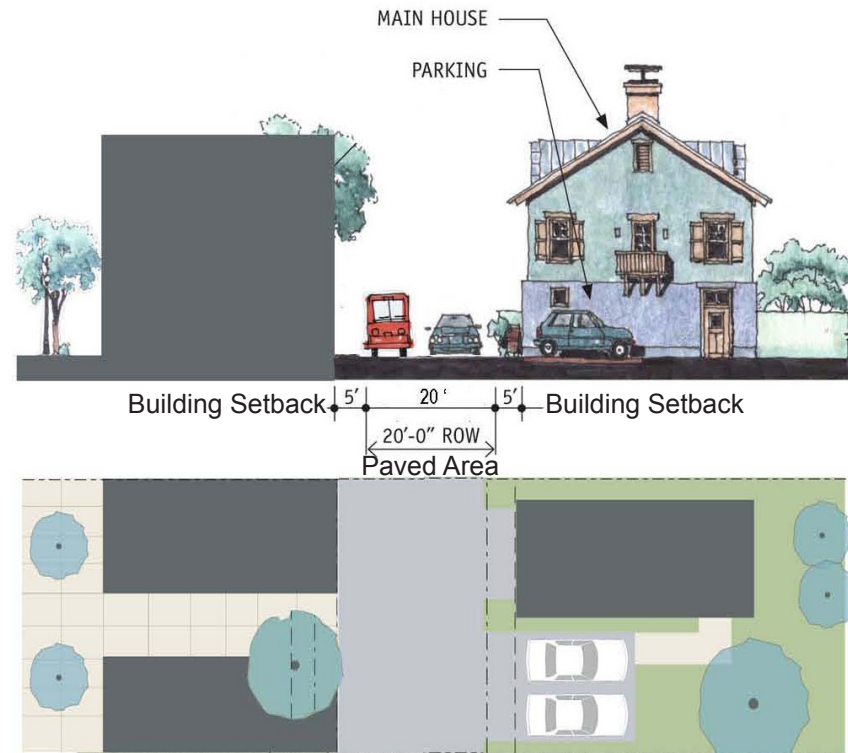


EXHIBIT 10.23 – TYPICAL COMMERCIAL ALLEY CROSS SECTION

CHAPTER III: STREET AND STREETScape STANDARDS

10.0 STREET STANDARDS

10.7.7. **Typical Streets with Public Utility Easement**

- (i) Utilities are typically to be provided via alleys. Where alley access is not possible, electric utility facilities need to be accommodated on streets.
- (ii) Where electric utility facilities must be accommodated on streets, a 10-foot setback is to be placed between the sidewalk and the Build-to-Zone behind the private property line for this purpose. This setback may be landscaped with the understanding that it might be removed as necessary for maintenance and/or repair of utilities.

III.0 STREETScape STANDARDS

11.0 STREETScape STANDARDS

11.1. Adjustments

- 11.1.1. The following streetscape standards, including street tree planting and street lighting, may be adjusted based on the development context and street cross section.
- 11.1.2. Any adjustments to the streetscape standards should be assessed based on specific development context such as vegetation, natural features, drainage, and fire access and are subject to approval by the Planning Director or his/her designee and/or relevant City department.

11.2. General Streetscape Standards

11.2.1. Groundcover:

- (i) Where clearly visible from a street or **alley**, all unpaved ground areas are to be planted with low-growing shrubs or ground cover, ornamental grasses, or a combination thereof selected from the Plant List in **Table 9.5** starting on page 153. [For more detail, see **Section 9.7.3** starting on page 151.]
- (ii) Within 200 feet of the Petroglyph National Monument, only species listed as native in the Plant List in **Table 9.5** starting on page 153 are to be used, except for street trees. [See **Section 11.3** for street tree standards.]

- 11.2.2. **Irrigation:** Irrigation is to be provided by the property owner for all plants and trees in the streetscape, per City standards. [Contact City Design Review/Construction (DRC) Section in the Planning Department for the latest standards].

- 11.2.3. **Streetscape Maintenance:** Maintenance of all landscape materials is the responsibility of the **adjacent** property owner and shall meet the requirements of Chapter 6, Article 6 in the City Code of Ordinances.

- 11.2.4. **Sidewalk Design:** Sidewalks in the public **ROW** are to be designed to facilitate pedestrian accessibility and efficient travel. Curvilinear sidewalks are strongly discouraged. Where possible, landscape strips should be used to buffer pedestrians from vehicle traffic and set the pedestrian path back from driveway ramps.

- 11.2.5. **Grading: Bikeways** and other amenities within the **ROW** are to be provided in such a way as to minimize the extent of disturbance to slopes and vegetation and the need for cut and fill.

- 11.2.6. **Medians:** Medians are to be constructed and landscaped per City standards. [For medians: **DPM** Chapter 23, Section 5, Part C. For landscaping: contact **DRC** Section for the latest standards.]

11.2.7. Bike Lanes and Bike Buffer

- (i) Where cross sections incorporate a bike buffer in addition to a bike lane, the buffer is to be no less than 2 feet wide.
- (ii) Best practices to minimize conflict between bicycles and vehicles turning right at intersections are to be followed, including design solutions, pavement painting, signage, and/or other accommodations.

11.2.8. Encroachments

- (i) Encroachments are permitted by a revocable permit and subject to license and fees per the **DPM**, Chapter 8.
- (ii) Projections such as, portals, stoops, colonnades, arcades, shop fronts, projecting signs in public utility easements and other projections are to be coordinated with the electric utility to accommodate existing easements and to avoid conflicts with utility infrastructure. Projections adjacent to electric utilities are to be carefully located in order to avoid interference and to accommodate equipment for the maintenance and repair of electric utilities.

11.3. Street Tree Standards

11.3.1. **Purpose/Intent:** Street trees are an amenity first for pedestrian comfort and enjoyment, next for enhancement of **abutting** properties, and finally for passing motorists, cyclists, or transit riders. Street trees are to be chosen and incorporated to serve the following intents:

- (i) Enclose or frame the space of the street with a canopy.
- (ii) Provide shade.
- (iii) Provide a buffer between traffic and pedestrian to enhance the feeling of safety for the pedestrian.
- (iv) Provide an aesthetic accompaniment to nearby architecture.
- (v) Reduce the heat island effect created by paved surfaces.
- (vi) Aid in storm water management through transpiration.
- (vii) Work within their context (i.e. region- and climate-appropriate, native species that are disease resistant and drought-tolerant).

11.3.2. On all '**A**' Streets, street trees are to be provided, irrigated, and maintained by adjacent property owners per the Street Tree Ordinance, Section 6-6-2-1.

11.3.3. Wherever used, all street trees shall be maintained by the adjacent property owner, per the Street Tree Ordinance, Section 6-6-2-1.



CHAPTER III: STREET AND STREETScape STANDARDS

11.0 STREETScape STANDARDS

- 11.3.4. Street tree location and selection is to be coordinated with the Planning Director or his/her designee and consistent with the Street Tree Ordinance 6-6-2-1.
- (i) PNM will need to provide input on street tree location and selection if impacting electric facilities.
 - (ii) Shade structures may be substituted for street trees in select locations subject to approval of the Planning Director or his/her designee. An encroachment permit may be required. [See **Section 11.2.8** starting on page 207 for details about encroachments.]
- 11.3.5. In order to ensure that street trees are appropriate for the region and climate and are not invasive species, street trees are to be selected from the Plant List in **Table 9.5** starting on page 153 of this Plan [see also **Section 9.7.3** starting on page 151]. Non-invasive low-water and/or xeric species may be selected with **approval** from the Planning Director or his/her designee in consultation with the City Forester. Street trees should be disease resistant and drought tolerant.
- 11.3.6. Where available, street trees are to be planted within the landscape area in the public right-of-way. [See cross sections in **Section 10.0** starting on page 163.] Otherwise, street trees are to be planted between the sidewalk and the street curb using tree grates.
- 11.3.7. Where provided, spacing is to be an average of 30 feet on center (measured per block face) in order to provide a continuous canopy. On narrow streets, spacing may vary on each side of the street. Spacing may be adjusted as appropriate to accommodate optimum root growth for native species.
- 11.3.8. Each planting area is to be no less than 36 square feet (SF). The tree well is to be no less than 25 SF. On **'A' Streets**, trees are to be in a grated or permeable planting square a minimum of 4 feet wide. Metal tree grates are preferred for **'A' Streets**.
- 11.3.9. The minimum **caliper** size (i.e. diameter of the tree trunk measured six inches above grade) for each tree is to be 3 inches at planting. Caliper size for a multi-trunk tree is to be the total of the diameter of the largest trunk and half (1/2) the diameter of each additional trunk, measured at a height of 4 1/2 feet above the ground.
- 11.3.10. Planting is to be planned to provide a canopy with a base no less than 7 feet high at time of maturity for vertical clearance of pedestrians and vehicles. On **'A' Streets**, the base of the canopy is to be planned for a minimum of 14 feet so as to not obscure windows and signage.
- 11.3.11. Planters for street trees are to be a minimum of 36 inches wide.

III.0 STREETScape STANDARDS

11.4. Street Lighting Standards

11.4.1. Purpose/Intent

- (i) Outdoor lighting should create and encourage a pedestrian-friendly environment, which is especially beneficial to residential neighborhoods and neighborhood business districts. Pedestrian-scale lights should improve walkway illumination for pedestrian traffic and enhance community safety and business exposure.
- (ii) Street lighting should be designed to be appropriate to location and context. Lamp post height, lamp head, lighting source, and spacing should all be calibrated. The light standard selected should be compatible with the design of the street and dominant architectural style of **adjacent buildings**.

11.4.2. Street lights are to be placed at 30 feet on center and in-line with street trees. Street trees and light poles are to be alternated along the street.

11.4.3. All street lighting is to be “full-cutoff” or “fully shielded” to minimize light pollution and save energy, per the New Mexico Night Sky Ordinance [74-12-1 to 74-12-10 NMSA 1978].

11.4.4. Lamp post height is to be designed to be proportional to the width of the street. Street lamps are to be 12 to 15 feet high along **‘A’ Streets**. **‘B’ Streets** are to incorporate 15-foot lampposts. [See **Section 9.8** starting on page 159 for parking area lighting requirements.]

11.4.5. For those intersections that require more light, the 20-foot lamppost can be instituted for safety, but should be used only if necessary.

11.4.6. **Cobraheads** are to only be used on Paseo del Norte and Unser Boulevard to light vehicle lanes as necessary. A supplemental non-cobrahead light is to be mounted between 12 to 14 feet to light sidewalks, pedestrian paths, or multi-use trails.

11.4.7. The minimum clearance from a street light pole to the face of curb is 2 feet. The minimum clearance from a street light pole to the edge of a sidewalk is 1 foot. The minimum clearance from a street light pole to the centerline of a street is 20 feet.

11.4.8. Light posts are to be placed within the landscape strip where available.

11.4.9. All lamp posts are to have a base, middle, and top.

11.4.10. Shoe box style lighting is not to be used, except in large parking areas. Metal halide lights are encouraged. High pressure sodium lights are discouraged since they visually render all colors the same.

11.4.11. **Column streetlights** are to be used on **‘A’ Streets**.

11.4.12. Multi-head **column streetlights** are to be used on **‘A’ streets**, Unser Boulevard, and Paseo del Norte.

11.4.13. All new **alleys** are to have lights mounted on outbuildings or garages.



11.0 STREETScape STANDARDS

11.5. Street Furniture and Materials Standards

11.5.1. Purpose/Intent

- (i) Street furniture should create and encourage a pedestrian-friendly environment, which is especially beneficial to residential neighborhoods and neighborhood business districts.
- (ii) Street furniture should be designed to be appropriate to location and context. Street furniture should be compatible with the design of the street and dominant architectural style of **adjacent buildings**.
- (iii) Materials for paving and street furniture should be selected based on durability, quality, and minimal maintenance requirements.

11.5.2. **Responsibility:** Street furniture and streetscape amenities are the responsibility of the property owner and/or property owner association or merchants association. The cost for construction, maintenance, operations, and liability is to be borne by private entities.

11.5.3. **Placement:** Street furniture placement and procedure is to follow the **DPM** Chapter 8.

- (i) Street furniture is not to be placed within the public ROW without the approval of the relevant City agency, which may include the City Engineer, Zoning Enforcement Officer, and/or Code Administration Division.
- (ii) Where street furniture is placed within a public utility easement, approval by utility companies will be required.

11.5.4. Trash receptacles and bike racks are to be placed along **'A' Streets** within Town Center, with a minimum of one each per block face.

11.5.5. Where provided, street furniture and pedestrian amenities such as benches are to be placed to maximize pedestrian access and circulation along **'A' Streets**. All street furniture is to be located in such a manner as to allow a clear sidewalk passageway of a minimum of 6 feet.