





4. Street and Streetscape Standards

- Intent/Purpose: Streets in Volcano Heights need to support the overall intent for 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.
- **4.2. Applicability:** Street and streetscape standards shall apply to all streets and development within Volcano Heights.
 - 4.2.1. Property owners and/or developers are responsible for constructing all streets within Volcano Heights per the standards in this Plan.
 - 4.2.2. Streetscape standards shall 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.
 - 4.2.3. Street sections and frontage standards take precedence over Site Development Standards for each **character zone** in order to provide a consistent, predictable built environment along corridors, across property lines, and over time.
 - 4.2.4. Maintenance of all streetscape shall be according to the standards in City Zoning Code Chapter 6, Article 5. See Section 12.3.13 in this Plan for policies relating to roles and responsibilities for maintenance.

4.3. How to Use These Standards

- 4.3.1. Mandatory Streets: The character of streets in Volcano Heights will vary based on location. The Mandatory Street Map (see Exhibit 4.1) designates the minimal, required street network within the Plan area. These streets have been planned to coincide with the existing 20-foot access easement on the edge of each parcel as much as possible. This section specifies the typical configuration of each Mandatory street type. The specifications address vehicular lane width, parkway widths, **ROW** widths, number of travel lanes, on-street parking, and pedestrian accommodation.
 - (iv) Once fully built by developers, Paseo del Norte will become the purview of the New Mexico Department of Transportation (NMDOT), while the remaining streets, once constructed by the developers, will become City streets.
 - (v) The Mandatory Cross Sections depict the required elements and associated dimensions for each Mandatory Street. The order of these elements may change to suit local conditions, particularly when a Mandatory Street is intended for **Bus Rapid Transit (BRT)**. A study by the Mid-Region Council of Governments (MRCOG) is analyzing 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. The final location of these lanes shall be determined during the road design process.

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Exhibit 4.1 – Mandatory Streets and Designations Map



4.0 Streets and Streetscape Standards



Exhibit 4.2 - Character Zones and Street Types

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4.0 Streets and Streetscape Standards

- (vi) See Section 3.2 and Table 3.2 and Table
 3.3 for allowable deviations from the Mandatory Street network and/or cross section requirements.
- 4.3.2. **Non-Mandatory Streets:** This section specifies standards for all new streets in Volcano Heights. New streets shall be addressed on a project-by-project basis and shall be reviewed by the City Department of Municipal Development (DMD).
- 4.4. Mandatory Streets and Street Designations Map: See Exhibit 4.1.
 - 4.4.1. Recommended Limited-Access Intersections: Much of the development in Volcano Heights will be highly dependent on additional access from the regional limited-access roads— Unser Boulevard and Paseo del Norte. This Plan recommends that the City submit a request for Access Modification through the official process outlined in Appendix A for the access points shown in Exhibit 4.3 or through an alternative process that involves all the jurisdictional agencies. See additional Transportation Policies in Section 12.3.

A traffic assessment was conducted as part of this planning effort that assessed the traffic function of the mandatory roads, as well as the additional intersections on Paseo del Norte and Unser Boulevard. See **Appendix C**.





* 1/4 mile = 1320 feet

Exhibit 4.3 – Recommended Intersections





- **4.5. Street Designations:** The following **street designations** shall be established for all streets within the Plan area:
 - 4.5.1. 'A' Streets: 'A' Streets are intended to provide the most pedestrian-friendly development context. Buildings along 'A' Streets shall be held to the highest standard of **pedestrianoriented** design. These streets are the main connectors for local development and **adjacent** neighborhoods.
 - Curb cuts shall not be allowed on 'A' Streets.
 - (ii) Development on 'A' Streets may incorporate a parking court, surrounded on three sides by the development, served via one-way access, and 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, private walkways shall be provided every 300-500 feet. These walkways shall count toward usable open space requirements per Section 10.4 starting on page 155 of this Plan.
 - (iv) In order to support their purpose as pedestrian and cyclist-friendly corridors as well as supportive of retail and neighborhood services, 'A' Streets shall be designed for speeds within 5 miles per hour of intended posted speeds.
 - (v) More 'A' Street standards are included in Section 4.6 for Mandatory Streets, as well as Section 4.7.3 for non-mandatory streets.

- 4.5.2. 'B' Streets: 'B' Streets are intended to accommodate more auto-oriented uses, surface parking, and service functions on a site with automobile orientation. Standards are included in individual Mandatory Streets standards for Unser Boulevard in Section 4.6.6 and Paseo del Norte in Section 4.6.7 and non-mandatory 'B' Street standards in Section 4.7.5.
- 4.5.3. Alleys: Alleys are an optional way to provide vehicle, parking, and service access to local development while screening these vehicle uses from the public realm. Alleys can be either Residential or Commercial.
 - (i) Typically narrower than 'B' Streets and with fewer curb cuts, 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 4.7 and 4.9 in this Plan.
 - See Section 12.3.13 in this Plan for Policies relating to roles and responsibilities for alley maintenance.

4.0 Streets and Streetscape Standards

4.6. Mandatory Street Cross Sections and Frontage Standards: Mandatory Streets are those mapped in Exhibit 4.1 – Mandatory Streets and Designations Map starting on page 55, which designates which segments are 'A' vs. 'B' streets. The following subsections provide cross sections and frontage requirements for each Mandatory Road in order to regulate a predictable built environment along corridors, across property lines, and over time.

4.6.1. Street Type 1: Town Center

 (i) Intent/Purpose: These streets are intended to be the most pedestrianfriendly while supporting multiple modes of transportation circulating throughout the Plan area and surrounding region.

Cross Section: See Exhibit 4.4.

Frontage Standards

(ii)

(iii)

- a. Front Setback: 5 feet
- b. Side Setback: 0 feet
- c. Build-to Zone (BTZ): 5-10 feet
- d. Frontage requirement: 80%
- e. Civic open space within the BTZ shall count toward the frontage requirement.
- f. Any paved area within the **setback** shall match the material of the sidewalk and be constructed at the same grade level.

- g. Where a surface parking lot is visible from the public **ROW**, a street screen shall be used.
- h. See **Section 4.9** for other Streetscape Standards.
- Encroachments are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]



Exhibit 4.4 – Street Type 1: Town Center Cross Section



4.0 Streets and Streetscape Standards



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Exhibit 4.5 – Street Type 1: Typical Intersection (Plan Perspective)

4.0 Streets and Streetscape Standards

- 4.6.2. **Street Type 2: Connector Street**
 - Intent/Purpose: These streets are (i) intended to access neighborhood streets and promote multi-modal transportation to reach businesses and residences within the Plan area.
 - Cross Section: See Exhibit 4.6. (ii)

(iii) **Frontage Standards**

- a. Front Setback: 5 feet
- b. Side Setback: 0 feet
- Build-to Zone (BTZ) along 'A' Streets c. and Civic Spaces: 5-10 feet
- d. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet
- e. Building Frontage requirement along 'A' Streets and Civic Spaces: 60%
- f. Building Frontage requirement along 'B' Streets: 30%
- g. Civic open space within the BTZ shall count toward the frontage requirement.

- h. Any paved area intended for pedestrians, within the setback, shall match the material of the sidewalk and be constructed at the same grade level.
- i. Where a surface parking lot is visible from the public ROW, a street screen shall be used.
- i. See Section 4.9 in this Plan for other Streetscape Standards.
- **k.** Encroachment regulations are regulated by character zone and can be found in **Section 6** of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]





Exhibit 4.6 – Street Type 2: Connector Street Cross Section

4.0 Streets and Streetscape Standards



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Exhibit 4.7 – Street Type 2: Connector Street – Typical Intersection (Plan Perspective)

4.0 Streets and Streetscape Standards

4.6.3. Street Type 3: Neighborhood Street

- (i) Intent/Purpose: These streets are intended to access local uses, predominantly businesses and residences within the Plan area.
- (ii) Cross Section: See Exhibit 4.8.

(iii) Frontage Standards

- a. Front Setback: 5 feet
- b. Side Setback: 0 feet
- c. Build-to Zone (BTZ) along 'A' Streets and Civic Spaces: 5-10 feet
- d. Build-to Zone (BTZ) along 'B' Streets: 5-25 feet
- e. Frontage requirement along 'A' Streets and Civic Spaces: 60%
- f. Frontage requirement along 'B' Streets: 30%
- g. Civic open space within the BTZ shall count toward the frontage requirement.
- h. Any paved area intended for pedestrians, within the setback, shall match the material of the sidewalk and be constructed at the same grade level.
- i. Where a surface parking lot is visible from the public **ROW**, a **street screen** shall be used.
- j. See **Section 4.9** in this Plan for other Streetscape Standards.
- k. Encroachment regulations are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]



Exhibit 4.8 – Street Type 3: Neighborhood Street Cross Section

4.0 Streets and Streetscape Standards



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Exhibit 4.9 – Street Type 3: Neighborhood Street – Typical Intersection (Plan Perspective)

4.0 Streets and Streetscape Standards

4.6.4. Street Type 4: Park Edge

- (i) Intent/Purpose: These streets are intended to access local uses. residences predominantly 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 edge. Major Public Open **Space** is best preserved as a public amenity by designing a single-loaded road along Major Public Open Space edges. Landscaping and medians act as transitions from the built environment to sensitive lands within the Monument.
- (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 east side of the road, it shall be single-loaded, and Street Type 4.1 shall be constructed.
 - b. Where development will occur on both sides of the street, Street Type
 4.2 shall be used. (See Exhibit 4.10 and Exhibit 4.11.)
 - c. The Park Edge and additional local streets in the SU-2 Volcano Heights Escarpment Transition (VHET) zone shall be sited to provide regular but controlled 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.



Detail of Exhibit 4.2 – Character Zones and Street Types: Park Edge Road

4.0 Streets and Streetscape Standards







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(iii) Frontage Standards

- a. Front Setback: 5 feet
- b. Side Setback: 0 feet
- c. Build-to Zone (BTZ) along 'A' Streets and Civic Spaces: 5-15 feet
- d. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet
- e. Frontage requirement along 'A' Streets and Civic Spaces: 60%
- f. Frontage requirement along 'B' Streets: 30%
- g. Civic open space within the BTZ
 shall count toward the frontage requirement.
- Where a surface parking lot is visible from the public ROW, a street screen shall be used.
- i. See **Section 4.9** in this Plan for other Streetscape Standards.
- j. Encroachment regulations are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]





Exhibit 4.12 – Street Type 4.1: Typical Intersection (Plan Perspective)

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4.0 Streets and Streetscape Standards



Exhibit 4.13 – Street Type 4.2: Typical Intersection (Plan Perspective)

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4.0 Streets and Streetscape Standards

4.6.5. Street Type 5: Transit Corridor

- Intent/Purpose: The Transit Corridor (i) serves multiple modes of transportation, including the proposed **BRT**. The walkable, dense, urban Town Center is organized around this Transit Corridor. which acts as a "Main Street" for Volcano Heights.
- Cross Section: See Exhibit 4.14. (ii)

Frontage Standards (iii)

- a. Front Setback: 5 feet
- b. Side Setback: 0 feet

- c. Build-to Zone (BTZ) along 'A' Streets and Civic Spaces: 5-15 feet
- d. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet
- e. Frontage requirement along 'A' Streets and Civic Spaces: 60%
- Frontage requirement along 'B' f. Streets: 30%
- **Civic open space** within the BTZ g. shall count toward the frontage requirement.
- h. A commercial-ready ground floor shall be required for buildings along Mandatory 'A' portions of and/ or Civic Spaces along the Transit Boulevard.
- Any paved area intended for i. pedestrians, within the setback. same grade level.

- i. Where a surface parking lot is visible from the public ROW, a street screen shall be used.
- k. See Section 4.9 in this Plan for other Streetscape Standards.
- Ι. **Encroachment** regulations are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]
- m. Beginning 500 feet from intersections on Paseo del Norte. Unser Boulevard, and any other potential station locations, an extra 36 feet in the ROW shall be dedicated for BRT lanes and/or station platforms.





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4.0 Streets and Streetscape Standards

4.6.6. Street Type 6: Unser Boulevard

- (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: See Exhibit 4.16.
- (iii) Frontage Standards
 - a. Front Setback: 5 feet
 - b. Side Setback: 0 feet
 - c. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet
 - d. Frontage requirement along Civic Spaces: 60%

- e. Frontage requirement along 'B' Streets: 30%
- f. Civic open space within the BTZ shall count toward the frontage requirement.
- g. Any paved area intended for pedestrians, within the setback, shall match the material of the sidewalk and be constructed at the same grade level.
- h. Where a surface parking lot is visible from the public **ROW**, a **street screen** shall be used.

- i. Outdoor **storage** of vehicles or other products sold shall not exceed 50% of a lot's frontage.
- j. See **Section 4.9** in this Plan for other Streetscape Standards.
- k. Encroachment regulations are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]
- Beginning 500 feet from an intersection with Paseo del Norte, the transit boulevard, or any potential station locations, an extra 36 feet in the ROW shall be dedicated for BRT lanes and/or station platforms.





Exhibit 4.16 – Street Type 6: Unser Boulevard Cross Section



- 4.6.7. Street Type 7: Paseo del Norte
 - (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: See Exhibit 4.17.
 - (iii) Frontage Standards
 - a. Front Setback: 5 feet
 - b. Side Setback: 0 feet
 - c. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet

- d. Frontage requirement along Civic Spaces: 60%
- e. Frontage requirement along 'B' Streets: 30%
- f. Civic open space within the BTZ shall count toward the frontage requirement.
- g. Any paved area intended for pedestrians, within the setback, shall match the material of the sidewalk and be constructed at the same grade level.
- h. Where a surface parking lot is visible from the public **ROW**, a **street screen** shall be used.

- i. Outdoor **storage** of vehicles or other products sold shall not exceed 50% of a lot's frontage.
- j. See **Section 4.9** for other Streetscape Standards.
- k. Encroachment regulations are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]
- Beginning 500 feet from an intersection with Unser Boulevard, the transit boulevard, or any potential station locations, 36 feet in the ROW shall be dedicated for BRT lanes and/or station platforms.



Exhibit 4.17 - Street Type 7: Paseo del Norte Boulevard Cross Section

4.6.8. Street Type 8: Universe Boulevard

- (i) Intent/Purpose: Universe Boulevard is a major 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 4.18.
- (iii) Frontage Standards
 - a. Front Setback: 5 feet
 - b. Side Setback: 0 feet
 - c. Build-to Zone (BTZ) along 'B' Streets: 5-75 feet
 - d. Frontage requirement along Civic Spaces: 60%
 - e. Frontage requirement along 'B' Streets: 30%

4.0 Streets and Streetscape Standards

- f. Civic open space within the BTZ shall count toward the frontage requirement.
- g. Any paved area intended for pedestrians, within the **setback**, shall match the material of the sidewalk and be constructed at the same grade level.
- h. Where a surface parking lot is visible from the public **ROW**, a **street screen** shall be used.
- i. See **Section 4.9** for other Streetscape Standards.
- j. Encroachments are regulated by character zone and can be found in Section 6 of this Plan. [Encroachments are subject to license and fees per the DPM, Chapter 8.]

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Exhibit 4.18 – Street Type 8: Universe Boulevard Cross Section



4.7. Non-Mandatory Street Design Standards

- 4.7.1. The platting of new dead-end streets and culsde-sac that terminate the road is prohibited.
 - 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) Where dead-ends cannot be avoided, pedestrian/bike connections shall be provided to open space and/or road networks beyond the dead-end.

TABLE 4.1 - NON-MANDATORY ROAD REQUIREMENTS



Exhibit 4.19 – Example Diagrams: Alley Configurations with 'A' vs. 'B' Street Percentages

4.7.2. Required 'A' vs. 'B' Streets

- (i) New development shall include nonmandatory roads to serve projects, per the requirements in **Table 4.1.**
 - 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 non-mandatory 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.
 - b. Connectivity: Non-mandatory roads added in Volcano Heights shall maintain or improve street connectivity to serve pedestrians as well as dispersing auto traffic.
- (ii) The first development in shall determine non-mandatory road designation (i.e. whether 'A' or 'B'). Roads shall be platted as such during the TIDD/SAD/ PID and/or Site Development Plan for Subdivision process.

4.7.3. Non-mandatory Street Cross Sections

- (i) Non-mandatory streets shall be developed per **Table 4.2**.
- (ii) The elements may be arranged to best meet local conditions and intended character of the corridor.
- (iii) Where a non-mandatory road crosses property lines, adjacent property owners shall be required to coordinate and sign a development agreement for the agreed-to cross section as the first project is being planned.

4.0 Streets and Streetscape Standards

 (iv) Typical cross sections for 'A' Streets and 'B' Streets are illustrated in Exhibit 4.20 and Exhibit 4.21, respectively. Typical Cross Sections for Residential and Commercial Alleys are illustrated in Exhibit 4.22 and Exhibit 4.23, respectively.

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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

TABLE 4.2 - TYPICAL NON-MANDATORY STREET AND ALLEY CROSS SECTION OPTIONS



VARIES 10' 7' 10' 10' 7' 10' VARIES BTZ SIDEWALK PARKING LANE LANE PARKING SIDEWALK BTZ
A 34' A PAVING
54'
k J4 k ROW

4.7.4. Typical 'A' Street

- (i) Intent/Purpose: Non-mandatory '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 4.20.
- Streets shall 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 shall 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 reversed angle parking. Where reversed angled parking is used, the ROW shall be increased to add that element (typically requiring 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 shall be 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) Streetscaping shall refer to **Section 4.2** of this Plan.
- (vii) Street lighting shall be per **Section 4.9** of this Plan.

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Exhibit 4.20 – Typical 'A' Street Cross Section

4.0 Streets and Streetscape Standards

4.7.5. Typical 'B' Street

- (i) Intent/Purpose: Non-mandatory '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 4.21.
- (ii) Streets shall 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, shall be no less than 10 feet wide.
- (iii) Drive lanes shall 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 accomodate autos and where slower speeds are desirable, such as residential and retail areas.
- (iv) On-Street parking shall be parallel.
- (v) Parking visible from the public ROW along the 'B' Street shall have a street screen of masonry, metal railing, vegetation or a combination of these. This street screen shall be a minimum of 3 feet and no more than 6 feet tall.
- (vi) Medians are not permitted on **'B'** Streets.
- (vii) Streetscaping shall be per **Section 4.2** of this Plan.
- (viii) Street lighting shall be per **Section 4.**9 of this Plan.

A N 2.5' C/G VARIES VARIES 10' 12' 10' 11 11 TURN BAY SIDEWALKPARKING LANE LANE PARKING SIDEWALK BTZ BTZ 48' PAVING 68' ROW

Exhibit 4.21 – Typical 'B' Street Cross Section

4.0 Streets and Streetscape Standards



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

- (ii) Commercial
 - a. Purpose / Intent: Provides access to service areas in back, parking, and outbuildings. Contains utility easements.
 - b. ROW width: 20 feet

Building

Setback

- c. Pavement width: 20 feet minimum
- d. Design speed: 15 miles per hour



Exhibit 4.22 – Typical Residential Alley

Exhibit 4.23 – Typical Commercial Alley

4.8. Street Tree Standards

- 4.8.1. **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 shall be chosen and incorporated to serve the following intents:
 - 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 transvaporation.
 - (vii) Work within their context (i.e. regionand climate-appropriate, native species that are disease resistant and droughttolerant).
- Street trees shall be provided, irrigated, and maintained by abutting property owners on all 'A' Streets.
- 4.8.3. Street tree location and selection shall be coordinated with the Planning Director or his/ her designee and shall be consistent with the Street Tree Ordinance 6-6-2-1.

- 4.8.4. In order to ensure that street trees are appropriate for the region and climate and are not an invasive species, street trees shall be selected from the Native Plant List A in Appendix E of this Plan (see also Section 10.6.8 on page 167 of this Plan). Low-water xeric species may be selected with approval from the Planning Director or his/her designee. Street trees should be disease resistant and drought tolerant.
- 4.8.5. Where available, street trees shall be planted within the tree strip. Otherwise, street trees shall be planted between the sidewalk and the street curb using tree grates.
- 4.8.6. All street trees shall be maintained by property owner, per the Street Tree Ordinance, Section 6-6-2-1.
- 4.8.7. Spacing shall be an average of 30 feet on center (measured per block face) along all streets 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.
- 4.8.8. Each planting area shall be no less than 36 square feet (SF). The tree well shall be no less than 25 SF. On 'A' Streets, trees shall be in a grated or permeable planting square a minimum of 4 feet wide. Metal tree grates are preferred for 'A' Streets.







- 4.8.9. The minimum **caliper** size (i.e. diameter of the tree truck measured six inches above grade) for each tree shall be 3 inches at planting. Caliper size for a multi-trunk tree shall 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.
- 4.8.10. Planting shall be planned to provide a canopy with a base no less than 8 feet high at time of maturity for vertical clearance of pedestrians and vehicles. On 'A' Streets, the base of the canopy shall be planned for a minimum of 10 feet so as to not obscure windows and signage.
- 4.8.11. Planters for street trees shall be a minimum of 36 inches wide.

4.9. Streetscape Standards

- 4.9.1. Groundcover: When clearly visible from a street or alley, all unpaved ground areas shall be planted with low-growing shrubs or ground cover, ornamental grasses, or a combination thereof selected from Plant List A or B in Appendix E (see also Section 10.6.8 on page 167 of this Plan). Turf grass must be installed as solid sod, not seed.
- 4.9.2. Irrigation: Irrigation shall be provided by the property owner for all plants and trees in the streetscape, per standards in the DPM [reference pending].

- 4.9.3. Streetscape Maintenance: Maintenance of all landscape materials shall be the responsibility of the **abutting** property owner and shall meet the requirements of Chapter 6, Article 6 in the City Zoning Code.
- 4.9.4. Sidewalk Design: Sidewalks in the public ROW shall be designed to facilitate pedestrian accessibility and efficient travel. Curvilinear sidewalks are strongly discouraged. Where possible, planting strips should be used to buffer pedestrians from vehicle traffic and set the pedestrian path back from driveway ramps.
- 4.9.5. **Sidewalk Locations:** The location of sidewalks shall reflect the desired character and density of the surrounding land uses. In Center and Mixed-Use Zones, sidewalks are essential to creating a vibrant, pedestrian lifestyle.
- 4.9.6. **Grading: Bikeways** and other amenities within the **ROW** shall be provided in such a way as to minimize the extent of disturbance to slopes and vegetation and the need for cut and fill.
- 4.9.7. **Medians:** Medians shall be constructed and landscaped per City standards [reference pending].



4.10. Street Lighting Standards

4.10.1. Purpose/Intent:

- 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.
- 4.10.2. Street lights shall be placed at 30 feet on center and in-line with street trees. Street trees and light poles shall be alternated along the street.
- 4.10.3. All street lighting shall 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].
- 4.10.4. Lamp post height should be designed to be proportional to the width of the street. Street lamps shall be 12 to 15 feet high along 'A' Streets. 'B' Streets shall incorporate 15-foot lampposts. See Section 10.6 for parking area lighting requirements.

- 4.10.5. For those intersections that require more light, the 20-foot lamppost can be instituted for safety, but should be used only if necessary.
- 4.10.6. **Cobraheads** shall only be used on Paseo del Norte and Unser Boulevard to light vehicle lanes. A supplemental non-cobrahead light shall be mounted between 12 to 14 feet to light sidewalks, pedestrian paths, or multi-use trails.
- 4.10.7. The minimum clearance from a street light pole to the face of curb shall be 2 feet. The minimum clearance from a street light pole to the edge of a sidewalk shall be 1 foot. The minimum clearance from a street light pole to the centerline of a street shall be 20 feet.
- 4.10.8. Light posts shall be placed within the tree planting strip where available.
- 4.10.9. All lamp posts shall have a base, middle and top.
- 4.10.10. Shoe box style lighting shall not 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.
- 4.10.11. Column streetlights shall be used on 'A' Streets.
- 4.10.12. Multi-head **column streetlights** shall be used on **'A' streets**, Unser Boulevard, and Paseo del Norte.







4.10.13. All new **alleys** shall have lights mounted on outbuildings or garages. These lights should be connected to a circuit separate from the main **building**.

4.11. Street Furniture and Materials Standards

- 4.11.1. **Purpose/Intent:**
 - Street furniture should create and encourage a pedestrian-friendly environment, which is especially beneficial to residential neighborhoods and neighborhood business districts.
 - 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.
- 4.11.2. 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 shall be borne by private entities.
- 4.11.3. Street furniture shall not be placed within the Public ROW without the approval of the relevant City agency. [confirm relevant agencies]

- 4.11.4. Trash receptacles and bike racks shall be required along 'A' Streets within Town Center. A minimum of one each per block face shall be required.
- 4.11.5. Where provided, street furniture and pedestrian amenities such as benches shall be placed to maximize pedestrian access and circulation along **'A' Streets**. All street furniture shall be located in such a manner as to allow a clear sidewalk passageway of a minimum of 6 feet.
- 4.11.6. Materials selected for paving and street furniture shall be of durable quality and require minimal maintenance.

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