CONTENTS

Article 1: General Provisions (Installment 3)
Article 2: Zoning Districts (Installment 1)
Article 3: Land Uses (Installment 1)
Article 4: Development Standards
Article 5: Subdivision Standards
Article 6: Historic Preservation (Installment 4)
Article 7: Signs (Installment 4)
Article 8: Administration & Procedures (Installment 3)
Article 9: Definitions

Public Review Draft
October 2023
# Contents

**Article 1: General Provisions** ................................................................. 1

**Article 2: Zoning Districts** ................................................................. 1

**Article 3: Land Uses** ........................................................................... 2

**Article 4: Development Standards** ..................................................... 2

## 4.1 Purpose............................................................................................. 2

## 4.2 Landscaping...................................................................................... 2

4.2.1 Purpose ................................................................................................. 2

4.2.2 Applicability ....................................................................................... 3

4.2.3 Administration .................................................................................... 4

4.2.4 Landscape Materials Standards ......................................................... 7

4.2.5 Minimum Landscaping Requirements .............................................. 7

4.2.6 Parking Lot Landscaping ..................................................................... 10

4.2.7 Irrigation .............................................................................................. 15

4.2.8 Sight Distance and Visibility ............................................................ 15

4.2.9 Clearance ........................................................................................... 16

4.2.10 Maintenance and Enforcement ....................................................... 17

## 4.3 Tree Preservation and Tree Removal .................................................. 18

4.3.1 Purpose ................................................................................................. 18

4.3.2 Applicability ....................................................................................... 18

4.3.3 Tree Survey and Preservation/Replacement Plan .............................. 19

4.3.4 Tree Removal Permit ........................................................................ 20

4.3.5 Minimum Preservation Requirements ............................................. 21

4.3.6 Tree Mitigation and Replacement ................................................... 22

4.3.7 Preservation Credit ........................................................................... 22

4.3.8 Protection Measures ........................................................................ 23

4.3.9 Tree Removal Permit Approval Authority and Appeal .................... 24

4.3.10 Tree Preservation Request for Relief ................................................. 24

## 4.4 Buffering and Residential Adjacency ................................................. 25

4.4.1 Buffering ............................................................................................. 26

4.4.2 Fences ................................................................................................ 30

4.4.3 Residential Adjacency ........................................................................ 33

## 4.5 Off-Street Parking............................................................................... 38

4.5.1 Purpose ................................................................................................. 38

4.5.2 Applicability ....................................................................................... 38

4.5.3 Minimum Off-Street Parking ............................................................ 41

4.5.4 Calculation of Parking and Loading Requirements .......................... 51

4.5.5 Parking Alternatives .......................................................................... 52

4.5.6 Design of Off-Street Parking Areas ................................................... 61

4.5.7 Accessible Parking ............................................................................. 67

4.5.8 Parking and Storage of Oversized Vehicles ....................................... 68

4.5.9 Off-Street Loading ............................................................................. 69
Table of Contents

4.5.10 Bicycle Parking........................................................................................................... 70

4.6 Site and Building Design............................................................................................ 72
   4.6.1 Purpose...................................................................................................................... 72
   4.6.2 Applicability ............................................................................................................ 72
   4.6.3 General Standards .................................................................................................. 73
   4.6.4 Additional Standards for Single-Family Attached and Detached Residential........ 78
   4.6.5 Additional Standards for Multi-Family Residential ................................................. 80
   4.6.6 Additional Standards for Mixed-Use Development .............................................. 82
   4.6.7 Additional Standards for Non-Residential Development ....................................... 91

4.7 Sensitive Area Protection .......................................................................................... 95
   4.7.1 Edwards Aquifer .................................................................................................. 95

4.8 Exterior Lighting......................................................................................................... 97
   4.8.1 Purpose .................................................................................................................. 97
   4.8.2 Applicability .......................................................................................................... 97
   4.8.3 Lighting Types Not Permitted ............................................................................... 99
   4.8.4 Lighting Plan Required ......................................................................................... 99
   4.8.5 Exterior Lighting Standards .................................................................................. 99

4.9 Access and Circulation ............................................................................................. 104
   4.9.1 Purpose ................................................................................................................ 104
   4.9.2 Applicability ........................................................................................................ 104
   4.9.3 Circulation Plan ................................................................................................... 104
   4.9.4 Streets, Alleys, and Vehicular Circulation ......................................................... 105
   4.9.5 Driveways and Access to Lots ............................................................................ 108
   4.9.6 Pedestrian Circulation ....................................................................................... 112
   4.9.7 Bicycle Circulation ............................................................................................. 114
   4.9.8 Developer Responsibility for Access and Connectivity Improvements ............ 114

Article 5: Subdivision Standards ................................................................................... 116

5.1 General Standards ................................................................................................... 116
   5.1.1 Purpose ................................................................................................................ 116
   5.1.2 Authority ............................................................................................................. 116
   5.1.3 Jurisdiction ......................................................................................................... 116
   5.1.4 Consistency with Comprehensive Plan .............................................................. 117
   5.1.5 Applicability ..................................................................................................... 117
   5.1.6 Special Provisions ............................................................................................. 119
   5.1.7 Payment of All Indebtedness Attributable to a Specific Property ...................... 120

5.2 Administration and Platting Procedures .................................................................. 120

5.3 Design Standards .................................................................................................... 120
   5.3.1 Generally ............................................................................................................. 120
   5.3.2 Blocks ................................................................................................................. 120
   5.3.3 Lots ..................................................................................................................... 125
   5.3.4 Streets ................................................................................................................ 127
   5.3.5 Alleys ............................................................................................................... 133
   5.3.6 Utilities and Utility Easements ......................................................................... 134
   5.3.7 Sidewalks .......................................................................................................... 134
   5.3.8 Off-Street Bikeways and Trails ......................................................................... 136
   5.3.9 Water, Sewer, and Drainage Facilities; Flood Hazards ..................................... 137
   5.3.10 Escrow Policies and Procedures .................................................................... 140
Table of Contents

5.3.11 Extraterritorial Jurisdiction Regulations .......................................................... 141
5.3.12 Monuments and Lot Markers ............................................................................. 141
5.3.13 Landscaping and Maintenance ......................................................................... 142
5.4 Park Land .................................................................................................................. 143
  5.4.1 General Provisions .............................................................................................. 143
  5.4.2 Applicability ....................................................................................................... 143
  5.4.3 Park Land Dedication Requirements ................................................................ 144
  5.4.4 Park Land Dedication Procedures ..................................................................... 144
  5.4.5 Park Land Acceptance Criteria ......................................................................... 145
  5.4.6 Fee-in-Lieu of Park Land .................................................................................... 147
  5.4.7 Reimbursement for City-Acquired Park Land .................................................... 147
  5.4.8 Park Development Fee ....................................................................................... 147
  5.4.9 Public Park Improvement in lieu of Park Development Fees ............................... 147

Article 6: Historic Preservation ...................................................................................... 152

Article 7: Signs ................................................................................................................ 152

Article 8: Administration and Procedures ..................................................................... 152

Article 9: Definitions ...................................................................................................... 153
  9.1 Rules of Construction .............................................................................................. 153
  9.2 Definitions ............................................................................................................... 153
    9.2.1 A ....................................................................................................................... 153
    9.2.2 B ....................................................................................................................... 158
    9.2.3 C ....................................................................................................................... 160
    9.2.4 D ....................................................................................................................... 164
    9.2.5 E ....................................................................................................................... 167
    9.2.6 F ....................................................................................................................... 169
    9.2.7 G ....................................................................................................................... 171
    9.2.8 H ....................................................................................................................... 172
    9.2.9 I ....................................................................................................................... 174
    9.2.10 J ...................................................................................................................... 174
    9.2.11 K ...................................................................................................................... 175
    9.2.12 L ...................................................................................................................... 175
    9.2.13 M ...................................................................................................................... 179
    9.2.14 N ...................................................................................................................... 181
    9.2.15 O ...................................................................................................................... 182
    9.2.16 P ...................................................................................................................... 185
    9.2.17 R ...................................................................................................................... 189
    9.2.18 S ...................................................................................................................... 192
    9.2.19 T ...................................................................................................................... 198
    9.2.20 U ...................................................................................................................... 200
    9.2.21 V ...................................................................................................................... 200
    9.2.22 W ...................................................................................................................... 202
    9.2.23 X ...................................................................................................................... 204
    9.2.24 Y ...................................................................................................................... 204
    9.2.25 Z ...................................................................................................................... 204
<table>
<thead>
<tr>
<th>Article 10: Appendix A, Approved Plant List</th>
<th>205</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 11: Appendix B, Undesirable Trees</td>
<td>211</td>
</tr>
</tbody>
</table>
Article 1: General Provisions

[To be included in Installment 3]
Article 2: Zoning Districts

[Included in Installment 1]
Article 3: Land Uses

[Included in Installment 1]
Article 4: Development Standards

4.1 Purpose

This article includes standards that regulate the physical layout and design of development within New Braunfels to ensure the protection of the health, welfare, safety, and quality of life. These standards address the physical relationship between development and adjacent properties, public streets, neighborhoods, and the natural environment, in order to implement the comprehensive plan vision for a more attractive, efficient, and livable community.

4.2 Landscaping

COMMENTARY
As recommended in the Assessment Report, this section proposes new landscaping requirements for both multi-family and non-residential development. These requirements focus mainly on the provision of street trees, along with a requirement for a certain percentage of site area to be landscaped. To allow for some flexibility, how this percentage is achieved is left to the developer, subject also to the newly proposed limitation on turf grass coverage. Landscape planting is required for all development except one-to-four-family, townhomes of up to four attached units, and mobile home parks.

This draft carries forward the parking lot landscaping standards from Chapter 144-5.3 with significant edits, as noted below.

Throughout this section, the proposed minimum diameter for tree planting has been increased from one and one-half inches to two inches. This increase should not significantly increase costs for tree installation, but it should provide slightly more robust tree specimens at planting.

Enhanced sustainability features located throughout this section include:
- Where plantings are required, the focus is on provision of trees rather than shrubs or other groundcover that does provide shade or contribute to reducing heat island effects.
- Limitations on the use of turf grass, which is water-intensive to maintain, are proposed.
- Larger tree size required at time of planting.
- In addition to stronger tree requirements for parking lots, LID elements are required in the landscape design.

4.2.1 Purpose

The purpose of this section is, through the preservation, protection, maintenance, and planting of trees and other plant materials, to:

A. Provide visual buffering and enhance the visual appeal of the city, and eliminate or minimize conflicts between potentially incompatible but otherwise permitted land uses on adjoining lots through buffering;

B. Promote native and/or adapted, drought-tolerant species to conserve water and promote local biodiversity;

C. Reduce the heat island effect that is generated by excessive amounts of hardscape by providing for organic ground cover and shade;

9 Based on 144-5.3-1(b)(1).
D. Realize the environmental benefits of landscaping such as: storm water retention; recharging groundwater; retaining soil moisture; preventing erosion; providing bird and wildlife habitat; and improving air quality, while mitigating water pollution, dust, noise, heat, and glare;

E. Establish an attractive streetscape that contributes to the character and appearance of the city; and

F. Improve the appearance of development to protect and enhance public and private investments and property values.

4.2.2 Applicability

The requirements of this §4.2 shall apply to development within the city limits, as described below.

A. New Development

Landscaping as described in this section is required for all new construction that requires a building permit.

B. Additions and Redevelopment

1. Any expansion or enlargement of an existing primary structure that results in an increase of floor area of up to 25 percent shall provide additional landscaping in proportion to the extent of expansion. An expansion of 25 percent of greater shall be required to comply with all landscaping requirements of this section.

2. Landscaping as described in this section is required for redevelopment of a lot that involves the demolition of 50 percent or more of an existing primary structure, and its replacement with any new construction, whether to the same, greater, or lesser extent than the building footprint that previously occupied the lot.

3. When an expansion or redevelopment of a building on a lot requires the removal of landscaping, that landscaping shall be replaced elsewhere on the lot.

4. Expansion is measured cumulatively, so that separate expansions that add up to a 25 percent or greater increase in building area within a span of five years shall be required to meet the requirements of this section.

C. Expansion of Parking Area

1. Landscaping as described in this section is required for an existing parking lot that is being expanded or altered to an extent between 25 and 50 percent of the lot’s surface area prior to expansion.

2. Only the parking lot area being added shall be required to meet the standards of this section. For instance, if a parking lot is expanded in an area not adjacent to a street, no street yard landscaping is required, and only the expanded area shall be subject to the parking lot landscaping standards in §4.2.6, Parking Lot Landscaping.\(^\text{12}\)

3. When a parking lot is expanded by more than 50 percent of its surface area, the entire parking lot shall meet all of the requirements of §4.2.6, Parking Lot Landscaping.

4. Expansion is measured cumulatively, so that separate expansions that add up to a 25 percent or greater increase in parking lot surface area within a span of five years shall be required to meet the landscaping requirements of §4.2.6, Parking Lot Landscaping.

\(^{10}\) 144-5-3-1(a) with new and expanded content regarding instances when requirements apply.

\(^{12}\) 144-5-3-1(b)(2)(iv)(a).
D. **Change of Use**

1. Any change of use that requires the expansion of the parking area shall result in a requirement for landscaping within the expanded area of the parking lot to be brought into conformance with the requirements of this section.

2. If the change of use requires the expansion of the existing parking lot by 50 percent or more of its surface area, the entire parking lot shall meet all the requirements of §4.2.6, *Parking Lot Landscaping*, as well as any applicable requirements in §4.4, *Buffering and Residential Adjacency*.

E. **Exceptions**

1. **Minor Deviation or Variance**
   
   A development that cannot meet the standards of this section may request a minor modification, as described in §X.X, to allow for deviation of up to ten percent from a specified standard, or a variance, as described in §X.X, to allow for a deviation of greater than ten percent from a specified standard, or deviation from more than one of the standards described in this §4.2.

2. **Downtown**
   
   Within the boundaries of the New Braunfels Downtown historic district, the standards of this §4.2 shall not apply.

3. **Agricultural Uses**
   
   Agricultural uses within the AG zoning district shall not be required to provide landscaping if there is no operational component open to the public, such as a farm stand or retail shop.

4. **Airfields**
   
   Along the inside or "air side" of an airport's perimeter boundary fence for airfields that have a concrete runway at least 5,000 feet in length, the minimum landscape requirements of this section shall not apply. However, airports and airfields must comply with parking lot landscaping and parking area buffering requirements, including the planting of street trees.

5. **Parking Lot Maintenance**
   
   This section does not apply to parking lot re-striping and repaving where there is no expansion of the parking area.

6. **Natural Disaster or Other Structural Damage**
   
   During a 12 month period subsequent to a structure being damaged by a fire, explosion, flood, tornado, other natural disaster, civil unrest or other accident of any kind, while the damaged structure is being restored.

---

**4.2.3 Administration**

A. **Landscape Plan**

1. A landscape plan shall accompany all development applications and/or building permit requests that require landscaping pursuant to this §4.2, and shall include the minimum information specified by the City.

---

13 New.
14 144-5.3-31(b)(4)
15 Many communities require that the landscape plan/alternative landscaping plan be prepared by a registered landscape architect or landscape designer. Should that requirement be added?
16 This does not carry forward the submittal requirements from Section 144-5.3-31(b)(5). We generally recommend keeping the submittal requirements (along with related materials like fee schedules) outside the code where they may be updated without going through formal code amendments.
2. If the landscape plan complies with the requirements of this §4.2, the landscape plan shall be approved. If the landscape plan does not comply, the plan shall be disapproved, accompanied by a written statement setting forth the changes necessary for compliance.

B. Permits and Certificate of Occupancy\(^{18}\)

1. Permits

No building permit shall be issued until a landscape plan is submitted and approved by the Planning and Development Services Department. A landscape plan shall be required as part of the building permit application submission for all applicable properties.

2. Certificate of Occupancy

a. No certificate of occupancy shall be issued for any building or structure until all landscaping is in place in accordance with the landscape plan, unless extenuating circumstances beyond the control of the owner and related to climate conditions (too wet, too dry, too hot, or too cold) prevent installation of trees, shrubs, or groundcover, or the successful establishment of turf areas.

b. When landscaping installation is deferred on account of such circumstances, a certificate of occupancy may be issued to a property that does not have all landscaping installed, if the property owner provides the City with a financial guarantee (escrow deposit, bond, letter of credit, or other guarantee acceptable to the City). The landscaping shall be installed within six months, unless further deferral is requested in writing, and approved by the City because circumstances still preclude installation of the landscaping.

c. Financial guarantee shall be provided prior to issuance of the certificate of occupancy, and the obligations and responsibilities of the property owner shall become those of the property owner’s transferees, successors and assigns; and the liability therefore shall be joint and several.

d. If landscaping is not installed according to the timeline agreed between the property owner and the city, the city may use the funds provided in the financial guarantee to install landscaping according to the approved landscape plan.

C. Alternative Landscaping Plan\(^{19}\)

\[\text{COMMENTARY}\]

The description of the current Alternative Landscaping Plan in Chapter 144 indicates that it is used both for flexibility (to accommodate innovative landscaping proposals, or efforts to conserve existing mature trees & landscaping) and also as a variance, when the request to deviate from standards is less than 25% of the standard (more than 25% requires an actual variance).

We carry forward the possibility for submission of an Alternative Landscaping Plan. It would still be used for innovative proposals, but we propose two alternative approaches for its use when an applicant cannot meet a standard.

**Option 1:** Apply a points system, similar to what is employed in Austin. There, the Alternative Compliance system deducts a defined number of points for requirements that are not met (e.g., inadequate percentage of street yard devoted to landscaping = minus 20 points; inadequate parking lot landscaping = minus 10 points) and then requires the applicant to “regain” those points by including alternative landscaping options to compensate (e.g., use of all native plantings = positive 5 points; buffer increased above minimum = positive 10 points).

- One advantage of this system is that it includes allowance for alternative options such as shaded seating or public art, if New Braunfels decides it would like to consider those options.

---

\(^{18}\) 144.5.3-1(b)(3).

\(^{19}\) 144.5.3-4(b)(4)(ii). If Alternative Landscaping Plan carried forward according to current usage, ensuing drafts can revisit this language, to add greater detail about what is “appropriate.”
A potential disadvantage is the complexity of administration. Since the new standards proposed here are relatively basic, it adds a level of possibly unnecessary complication to assign points and tradeoffs to requests for flexibility. A somewhat simpler approach is proposed as option 2.

**Option 2:** A similar requirement for exchange could be implemented without using a points system. In this approach, a request to provide less than the required street yard landscaping would be approved if a greater number than the required trees are provided on site; or a request to provide less than the required parking lot landscaping would be approved if a larger buffer is provided.

- This offers a similar benefit to the system that Austin uses, but would be simpler to administer, once appropriate correlations were determined.

Once discussion on the proposed base landscaping standards determines what level of detail to proceed with, further discussion on the options for Alternative Landscaping Plan will be included as part of the Installment 3, Administration and Procedures, discussion.

**Questions to consider:**

Should an Alternative Landscaping Plan be permitted if there is no site constraint that precludes installation of landscaping as required in this section?

Should it allow for installation of features other than landscaping, such as public art or other public-facing site amenities such as water features or plazas?

1. **Purpose**
   - The purpose of this section is to provide an opportunity for a property owner to propose innovative alternatives that meet or exceed the quality and/or quantity of the landscaping otherwise required by this §4.2.

2. **Applicability**
   - An alternative landscaping plan may be approved by the Planning and Development Services Department when the proposed landscape design does not meet the requirements of this §4.2, but proposes innovative, high-quality alternatives that enhance the physical environment of the site and the surrounding area to an equal or greater extent than would be achieved by strict compliance with these standards.
   - An alternative landscaping plan may also be approved by the Planning and Development Services Department to allow for the preservation of existing, mature landscaping, or on-site trees, in the same quantity but in different locations than is required by this §4.2. Such preserved plantings may not be substituted for buffering as required in §4.4, *Buffering and Residential Adjacency*, unless they are in the location where buffering is to be installed, or interior parking lot landscaping requirements, as described in §4.2.6D.
   - The alternative landscaping plan shall not be used to alleviate inconveniences, financial burdens, or self-imposed hardships.
   - The burden of proof for demonstrating that the alternative landscaping plan satisfies the purpose and meets or exceeds the standards of §4.2 rests with the applicant, who shall describe the reasons for deviation from the provisions of §4.2, and demonstrate why the alternative plan is appropriate, and how it is consistent with the purpose of this section, as described in §4.2.1.
   - Alternative landscaping plans may be submitted for lots that receive approval to provide parking above the maximum allowance, as described in §4.5.3B.2; however, the plan may not vary from the requirements for parking lot landscaping described in §4.2.6, *Parking Lot Landscaping*, unless the request is to preserve heritage or protected trees, as described in §4.3, *Tree Preservation and Tree Removal*, within a parking lot.
3. Alternative Landscaping Plan Equivalencies\textsuperscript{20}

[Reserved, pending determination on options for different implementation approaches.]

4.2.4 Landscape Materials Standards\textsuperscript{21}

The following standards apply to landscape materials and installation:

A. All landscaping shall be selected from the Approved Plant List in Appendix A.

B. Artificial plant materials shall not be used to satisfy the requirements of this section, except for limited use of inorganic materials such as mulch, pea gravel or river rocks, or granite that may be allowed as ground cover under the dripline of trees, in an area extends one and one-half feet out from the trunk of a tree.

C. Plant materials shall conform to the standards of the current edition of the “American Standard for Nursery Stock” (as amended), published by the American Association of Nurserymen.

D. Grass seed, sod, and other material shall be clean and free of noxious or invasive weeds and noxious pests and insects.

E. Grass areas shall be sodded, plugged, sprigged, hydro-mulched and/or seeded, except that solid sod or other erosion control devices shall be used in swales, earthen berms, or other areas subject to erosion.

F. Grass or turf areas over the Edwards Aquifer Recharge Zone may not be painted.

G. Ground covers shall be planted in such a manner as to present a finished appearance and reasonably completed coverage within one year of planting.

H. Any healthy trees preserved on a site may be credited toward meeting the total tree requirement of this section, except those undesirable species included in Appendix B of this chapter. See §4.3.7 for information on Tree Survey and Preservation/Replacement Plan.

I. Canopy trees shall be planted, unless a combination of canopy trees and ornamental trees is required, as described in §4.4.1, Buffering, or as described in provision J below.

J. No trees or other landscaping may be planted on public or private property that will mature within ten lateral feet of any overhead utility wire, or over or within five lateral feet of any underground water line, sewer line, electric line, or other utility. Where required canopy trees would intersect with overhead lines at maturity, understory or ornamental trees as listed in Appendix A, Approved Plant List, shall be substituted in the affected landscaping areas as required. Two ornamental trees are required as a replacement for one canopy tree.

4.2.5 Minimum Landscaping Requirements\textsuperscript{22}

\begin{center}
\textbf{COMMENTARY}
\end{center}

New basic standards for both non-residential and residential development – including new development of one- to four-family dwellings where there are five or more units -- are included. The street frontage and site coverage requirements are common in many communities and are set here at modest thresholds. Street frontage requirements focus on trees, without additional requirements for accompanying shrubs and grasses. As concern about water usage increases in many areas, limitations on turf grass are becoming more common and are proposed here for discussion in support of greater sustainability.

\textsuperscript{20} 144-5.3-1(b)(4)(iv). The approval criteria have been removed from this draft, and will be included as part of installment 3, Administration and Procedures. Criteria will be adapted based on thresholds established during public review for what procedures apply to requests for flexibility/deviation from standards.

\textsuperscript{21} 144-5.3-1(b)(6), with edits.

\textsuperscript{22} New, for subsections 1-4.
Questions to consider:

Should the city proceed with the adding requirements for one-to four-family developments?

This draft focuses on landscaping and tree planting in the street yard. It does not include street tree requirements, which are trees that have to be planted in the right-of-way, generally in the area between the back of the curb and the edge of the sidewalk (when there is a detached sidewalk). Should there be requirements for street trees in addition to the on-site requirements listed below?

Should street frontage requirements, if separated from general requirements, be tied to street type, as listed in the Thoroughfare Plan? This would add detail to the requirements, with the benefit of ensuring that planting is appropriately spaced and sized based on the adjacent street; however, it would also require more staff time and expertise to implement.

A. General Standards

1. Any part of a site not used for building coverage, parking areas, driveways, sidewalks, or other site improvements shall be landscaped with live plant material according to the standards of this §4.2. This landscaped area may exceed but shall not be less than the minimum landscape standards specified below.

2. When a buffer area is required, as described in §4.4.1, Buffering, the plantings may be counted towards the overall site coverage and tree planting requirements.

3. Canopy trees shall be used, unless there is a potential conflict with overhead or underground utility lines, as described in §4.2.4J above, in which case ornamental trees may be substituted at the rate specified.

4. All proposed landscaping shall be appropriate for the site in relation to both proposed use and location within the site, and in relation to the underlying geology, i.e., proximity to a river/watershed, over the Edwards Aquifer Recharge Zone, on the more arid and thin-soiled escarpment as opposed to in the fertile clay valley, or on slopes with a grade of 15 percent or greater.

5. For multi-family and non-residential development, turf grass shall comprise no more than 25 percent of required street yard landscaping, unless provided as part of required open space for multi-family development, as described in §4.6.3A. Grass areas not using one of the grasses listed on the Approved Plant List in Appendix A will not be credited as landscaped areas except in shaded areas receiving less than six hours of sunlight per day.

B. Exceptions

These requirements do not apply to existing one- to four-family residential development, development of a one to four residential units on a previously subdivided lot, or manufactured homes in manufactured home parks.

C. Minimum Requirements

1. Tree planting and site landscaping is required as described in Table 4-2 below.

2. The street yard area is calculated by finding the total lot square footage which lies between the street right of way line and the front wall of a building or buildings on a site.\(^{24}\) This street yard boundary extends from the outward most corners of the front wall, parallel to the street until it intersects with the side property lines.

<table>
<thead>
<tr>
<th>Type of Development</th>
<th>Tree Planting Requirement</th>
<th>Site Landscaping Requirement</th>
</tr>
</thead>
</table>

\(^{24}\) Street yard is a defined term.
Article 4: Development Standards

4.2 Landscaping

4.2.5 Minimum Landscaping Requirements

<table>
<thead>
<tr>
<th>Development Standards</th>
<th>Landscaping Standards</th>
<th>Minimum Landscaping Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>One- to Four-Family Residential Development [1]</td>
<td>1 canopy tree per 1,000 sq feet of lot area up to 10,000 square feet; at least one tree in street yard area</td>
<td>All site area</td>
</tr>
<tr>
<td>Multi-Family Residential Development</td>
<td>1 canopy tree per 1,000 sq feet of street yard area</td>
<td>50% of street yard area</td>
</tr>
<tr>
<td>Mixed-Use Development</td>
<td>1 canopy tree per 1,000 sq feet of street yard area</td>
<td>25% of street yard area</td>
</tr>
<tr>
<td>Non-Residential Development</td>
<td>1 canopy tree per 1,000 sq feet of street yard area</td>
<td>15% of street yard area</td>
</tr>
<tr>
<td>Industrial Development [2]</td>
<td>1 canopy tree per 1,000 sq feet of street yard area</td>
<td>10% of street yard area</td>
</tr>
</tbody>
</table>

[1] If there is insufficient space to plant a tree on the lot in the street yard area with at least ten feet of distance from the building foundation, the tree may be planted as a street tree in the right-of-way.

[2] An industrial use that provides enhanced landscaping as described in §4.2.5F.2 may count that landscaping towards fulfilling the requirement in this Table 4-2.

D. Additional Standards for One- to Four-Family Residential Development

1. Plating requirements apply to any new development that contains five or more residential units, whether in the form of detached single dwellings, duplex, triplex, quadplex, townhome, or cottage home, in any zoning district. The requirements apply per building, not per unit.

2. This requirement may be waived if a sufficient number of existing trees are preserved on the development site, as described in §4.3, Tree Preservation and Tree Removal.

3. All site area not covered by a building, parking area, driveway, sidewalk, or other site improvements shall be landscaped.

E. Additional Standards for Multi-Family, Mixed-Use, and Non-Residential Development

Parking lot landscaping as described in §4.2.6 is also required.

F. Industrial Development

1. Parking lot landscaping as described in §4.2.6 is also required.

2. An industrial use in an industrial zone that does not comply with the building design standards in §4.6.7, shall be required to provide enhanced landscaping as follows:

   i. A minimum of one canopy tree and four shrubs for every 40 linear feet or portion thereof of building facade that is visible from a public roadway, public park, or residential district.

   ii. Canopy trees shall be planted no closer than 20 feet apart, ornamental trees shall be planted no closer than ten feet apart, and planting areas shall be a minimum of six feet in width.

   iii. Trees shall be planted a sufficient distance from the front of the building so that anticipated crown spread at maturity does not interfere with the building.

   iv. Ornamental trees may be substituted for canopy trees at the rate specified in §4.2.4, above, to avoid conflicts with utility lines.

---

[1] Should this be instead of what is specified in provision 1., or in addition to it? We did add a provision that parking lot trees can count, if they are within fifty feet of the building (see provision vi).
v. Canopy trees shall be provided with a permeable surface of 90 square feet per tree under the drip line. Ornamental trees shall be provided with a permeable surface of 60 square feet per tree under the drip line.

vi. If a tree installed to meet the requirements of §4.2.6, Parking Lot Landscaping, is installed within fifty feet of the façade of the building, it may be counted towards fulfilling this requirement.

4.2.6 Parking Lot Landscaping

A. The following standards apply to surface parking lots.

B. An existing parking area that is voluntarily retrofitted to meet the standards of this section shall qualify for a 15 percent reduction in the minimum parking space requirement.

**COMMENTARY**

This section provides additional detail, and slightly higher requirements, than presently required by Chapter 144 for parking lots. To reduce unshaded expanses of parking lot asphalt, this draft is more specific about landscaping being distributed throughout the parking lot through the use of landscape islands. Since one of the primary objectives of parking lot landscaping is to create shade and mitigate heat island effects, the focus here is on planting trees rather than shrubs and ground cover.

As a means of promoting LID principles, the draft also proposes that parking lot landscaping is installed slightly below grade, with openings in the surrounding curb to allow infiltration.

This draft proposes requiring a certain number of trees per number of parking spaces; an alternate approach would be to require a certain percentage of parking lot area to be shaded based on anticipated tree crown at maturity. While this approach is more difficult for staff to administer, it can offer greater flexibility to developers. If staff would rather approach parking lot landscaping that way, it can be adjusted in the public draft.

Interior parking lot landscaping subsection proposes a change to the number of spaces when a tree is required from every 14 to every ten, increases the minimum caliper for the tree, and specifies the tree must be a canopy tree. The intention of these provisions is to ensure higher quality plantings that, at maturity, will provide shade in the lot, lessening heat island effects.

In this subsection, street frontage requirements are separated from internal landscape island requirements. This should avoid development that fulfills the requirement by placing all trees on the parking lot perimeter, with none dispersed throughout the parking area to provide shade.

Planting strips between parking rows are proposed as an alternative to landscape islands dispersed throughout the lot. Both islands and planting strips are required to be installed slightly below grade and surrounded by permeable curbs to allow for stormwater runoff and infiltration. Only trees and ground cover are required in planting strips and islands, since shrubs and other low plantings don’t contribute to shading the lot. Two alternatives are provided to these requirements, by means of covered parking (including cover provided by solar canopy), or parking rows separated by walkways.

Standards related to parking (and other development) over the Edwards Aquifer are addressed in a section on Sensitive Lands.

C. Street Frontage Landscape Buffer Area

Where a parking lot is adjacent to and within 50 feet of public street right-of-way, and there is no building located between the parking area and the right-of-way, a Level 1: Basic buffer, as described in Table 4-4: Buffer Types and Configurations, adjacent to the right-of-way is required to screen the parking area from the street view.\(^27\) Plantings required are per 100 linear feet of street

---

\(^26\) 144-5.3-2(b)(7), with edits as noted.

\(^27\) 144-5.3-2(b)(7)(i)(c).
frontage. If the area to be buffered is less than this distance, a quantity of plantings commensurate with the reduced length shall be provided.

1. Lots adjacent to more than one street frontage shall be required to observe the Level 1: Basic buffer on all frontages.\(^{28}\)

2. Minimum specifications at time of planting for trees and other ground cover is described in §4.4.1E.2, Minimum Planting Specifications. Existing trees may be preserved to meet this requirement.

3. Where an existing canopy tree is being preserved, or where overhead utility lines may intersect with the spread of the tree canopy at maturity, utility-friendly ornamental trees included on the Approved Plant List in Appendix A must be substituted for canopy trees at a rate of two ornamental trees for each required canopy tree.\(^{30}\)

4. Plants shall be chosen from the Approved Plant List in Appendix A.\(^{31}\)

5. All new canopy trees shall be provided with a permeable surface of 90 square feet per tree under the drip line. Ornamental trees shall be provided with a permeable surface of 60 square feet per tree under the drip line.\(^{32}\)

6. Trees within street rights-of-way shall not count toward the number of trees required for a development site, unless site constraints preclude installation of trees as required by this §4.2.6.\(^{33}\)

7. Plantings in the Clear Vision Area at the intersections of streets and driveways shall not interfere with Sight Distance and Visibility requirements in §4.2.8.

D. Interior Parking Lot Landscaping

COMMENTARY

This section provides two options for consideration regarding landscaping requirements in parking lots. Both are presented for further discussion on which approach is best suited to New Braunfels.

**OPTION 1** is more detailed, but would offer less flexibility to developers in meeting requirements. It would likely be easier for staff to administer, as the requirements are explicit.

**OPTION 2** has less detail, and would allow more flexibility for developers in its implementation. Because this is less prescriptive, it could lead to negotiation on what meets the requirement, and additional staff time in review to ensure projects comply.

1. **Applicability**

   In addition to complying with any applicable requirements for street frontage landscaping, all parking lots with 10 or more parking spaces shall provide either landscape islands or planting strips pursuant to §4.2.6D.2 or 4.2.6D.3.\(^{34}\)

2. **OPTION 1: Landscape Islands**\(^{35}\)

   a. An interior landscape island shall be provided for every ten parking spaces, and a terminal island shall be provided at both ends of each row of parking. See Figure 4.2.6-1.\(^{36}\)

   b. Interior and terminal landscapes island shall be no less than six feet wide and no shorter than the length of the adjacent parking space(s).

---

\(^{28}\) 144-5 § 3-1(b)7)1(k).  
\(^{30}\) 144-5 § 3-1(b)7)1(k).  
\(^{31}\) 144-5 § 3-1(b)7)1(k).  
\(^{32}\) 144-5 § 3-1(b)7)1(k).  
\(^{33}\) 144-5 § 3-1(b)7)1(k).  
\(^{34}\) New.  
\(^{35}\) This increases the minimum diameter of trees to be planted, and specifies height.  
\(^{36}\) Though related to 144-5 § 3-1(b)7)1(k), additional detail regarding provision of landscape islands, their frequency, and location is new.
Article 4: Development Standards

4.2 Landscaping

4.2.6 Parking Lot Landscaping

c. An island adjacent to the length of one parking space shall contain at least one canopy tree, a minimum of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting, surrounded by 90 square feet of permeable surface area.

d. A double-length island adjacent to the length of two parking spaces shall provide at least two canopy trees of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting.

e. Trees in double length islands shall be planted no less than 15 apart. Each tree shall have a minimum permeable surface area of 90 square feet.

f. Trees shall be selected from the Approved Plant List, and the species chosen shall have a root spread at maturity that will not be constrained by the island width.  

g. Any remaining surface area of the island shall be covered with living plant material.

Figure 4.2.6-1: Landscape Islands

![Diagram of Landscape Islands]

It would be helpful to have input from the city’s arborist on whether the combination of these requirements is practical or not.
h. Each landscape island shall be depressed slightly below the grade of the parking lot to allow stormwater to infiltrate, and shall be protected by raised concrete curbs, which shall include openings at grade as necessary to allow storm water to flow into any below grade landscaped areas. See Figure 4.2.6-2. This requirement for the surface of the island to be below grade shall not apply to existing trees that are being preserved within a parking lot.

i. Parking lot lighting shall not be installed within landscape islands.

3. **Median Planting Strip**

Median planting strips may be installed as an alternative to landscape islands dispersed throughout the parking lot.

a. The planting strip shall be a minimum of eight feet wide, installed slightly below grade between facing rows of parking stalls, as shown in Figure 4.2.6-3.

b. One canopy tree of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting shall be installed for every 30 linear feet of planting strip or portion thereof.\(^3\)

c. The remaining surface area of the island shall be covered with living plant material, except the 60 or 90 square foot mulched area located around the base of each tree.

d. The planting strip shall be protected by raised concrete curbs, which shall include openings at grade as necessary to allow storm water to flow into any below grade landscaped areas.

---

\(^3\) This increases the minimum diameter of trees to be planted, and specifies height and ground cover requirements.

*Figure 4.2.6-2: Landscaping Permeable Perimeter*
e. If this planting strip is provided, only terminal landscape islands shall be required at the terminus of each row of parking. Parking lot lighting may be installed within the planting strip, at the midpoint between adjacent canopy trees.

Figure 4.2.6-3: Median Planting Strip

4. OPTION 2: Landscape Islands
   a. For every 12 parking spaces in a parking lot, a minimum of 90 square feet of landscaped area shall be required within the interior of the parking lot. Landscaped areas shall be disbursed throughout the lot, rather than clustered in one location.
   b. In addition to the interior landscaping described above, terminal islands shall be provided at both ends of each row of parking.

Grey highlighted material is the same content as is included in OPTION 1.

   c. Terminal landscapes island shall be no less than six feet wide and no shorter than the length of the adjacent parking space(s).
   d. An island adjacent to the length of one parking space shall contain at least one canopy tree, a minimum of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting, surrounded by 90 square feet of permeable surface area.
   e. A double-length island adjacent to the length of two parking spaces shall provide at least two canopy trees of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting.
   f. Trees in double length islands shall be planted no less than 15 apart. Each tree shall have a minimum permeable surface area of 90 square feet.
   g. Island landscape island shall be depressed slightly below the grade of the parking lot to allow stormwater to infiltrate, and shall be protected by raised concrete curbs, which shall include openings at grade as necessary to allow storm water to flow into any below grade landscaped areas. See Figure 4.2.6-2. This requirement for the surface of the island to be below grade shall not apply to existing trees that are being preserved within a parking lot.
   h. Parking lot lighting shall not be installed within landscape islands.
   i. Trees shall be selected from the Approved Plant List, and the species chosen shall have a root spread at maturity that will not be constrained by the island width.\(^{39}\)
   j. Any remaining surface area of the island shall be covered with living plant material.

---

\(^{39}\) It would be helpful to have input from the city’s arborist on whether the combination of these requirements is practical or not.
5. No parking space shall be located more than 50 feet from a landscaped area, or more than 50 feet from a tree. Trees installed as part of street frontage or lot line buffers may be counted in this calculation.

E. **Additional Buffer Requirements**
   When a parking lot is located along a property line shared by a residential use or zone, additional buffering, as described in §4.4.1, is required.

### 4.2.7 Irrigation

A. All landscaped areas shall be irrigated, except where preserved landscaping is established, and the irrigation system must provide sufficient moisture to sustain plant growth on a permanent basis.

B. An underground automatic drip or bubbler system is preferred. If spray-type irrigation heads are used, irrigation spray outside of the landscaped area is prohibited.

C. Landscaped areas located more than 100 feet from an outside hose bib (faucet) are required to have an underground automatic irrigation system.

D. Rain and freeze shutoff sensors shall be installed in all irrigation systems.

E. Irrigation lines shall be installed in a manner that does not disturb the critical root system of existing trees.

F. All necessary permits and approvals must be obtained prior to installation.

G. Irrigation must be operational for final inspection, or fiscal surety must be posted. The irrigation system shall be maintained in operational condition, even after plantings are established, to be used in event of drought or prolonged heat.

H. Any request to not provide irrigation shall require approval of a variance, as described in §X.X.

### 4.2.8 Sight Distance and Visibility

A. To ensure that landscape materials do not constitute a driving or pedestrian hazard, a “clear vision area” shall be observed at all intersections of driveways with streets, street intersections, and street and alley intersections.

B. Within the clear vision area, no landscape material, fence, or other obstruction shall be permitted between the height of two and one-half feet and seven feet above the street, alley, or driveway elevation.

---

40 144-5.3-3(b)(9)(ii), with edits.
41 144-5.3-3(b)(8).
C. The clear vision area shall comply with the linear distance along the curb line, on each street
frontage, described in Table 4-2. Where intersections are not 90 degrees, dimensions having a
similar effect on obstructed views shall be applied.

Table 4-2: Clear Vision Area Requirements

<table>
<thead>
<tr>
<th>Street</th>
<th>Length along the curb on outer edge of the shoulder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled street with two or fewer through lanes in one direction [1]</td>
<td>25 feet</td>
</tr>
<tr>
<td>Controlled street with two or fewer through lanes in one direction, driveways, and alleys</td>
<td>15 feet</td>
</tr>
<tr>
<td>Uncontrolled street with more than three lanes in one direction [1]</td>
<td>40 feet</td>
</tr>
</tbody>
</table>

[1] Uncontrolled street means a street without a yield, stop, or traffic signal at the intersection.

4.2.9 Clearance

It shall be unlawful for any tree, shrub, vine, palm, or any plant of any description to overhang or
obtrude upon or over any surface or structure without the minimum clearances between the ground
and the plant, as specified below.

A. Over Sidewalks and Rights-of-Way

A seven-foot clearance shall be maintained between the surface of the sidewalk or right-of-way
and the overhanging tree, limb, shrub, vine, palm, or plant.

B. Over Streets

A 12-foot clearance shall be maintained between the surface of the street or highway and the
overhanging tree, limb, shrub, vine, palm, or plant.

C. Near Fire Hydrants

A minimum ten-foot distance shall be maintained between any plant and any fire hydrant in the
city; provided, however, that all canopy trees growing prior to March 10, 1975, between the
sidewalk and/or the city's right-of-way and the curb on any public street or highway in the city less
than ten feet from any such fire hydrant shall not be affected by the terms of this section.

44 144-5.3-1(b)(9)(iii), with edits for brevity.
4.2.10 Maintenance and Enforcement

**COMMENTARY**

To avoid repetition, we generally recommend that code text related to enforcement, penalties, and remedies be consolidated into one section in the General Provisions chapter of the code that will be drafted as part of installment 3, Administration and Procedures. However, for review purposes, enforcement information is maintained in this draft, and can be relocated when the third installment is prepared.

A. The land or property owner, tenant, and/or their agent, if any, shall be jointly and severally responsible for the maintenance of all landscaping.

B. All required landscaping shall be maintained in a neat and orderly manner at all times. This shall include, but not to be limited to, mowing, edging, pruning, fertilizing, watering, weeding, and other such activities common to the maintenance of landscaping.

C. Landscaped areas shall be kept free of trash, litter, noxious weeds and invasive species, and other such material or plants not a part of the landscaping.

D. All plant material shall be maintained in a healthy and growing condition as is appropriate for the season of the year. Plant materials that die shall be replaced with plant material of similar variety, including replacement trees of at least two inches in diameter measured six inches above the ground and at least six feet in height at time of planting. To be granted landscaping credit towards meeting the requirements of this section, all trees must be a species on the Approved Plant List in Appendix A.

E. For all landscaping installed as a requirement of this section, if at any time after the issuance of a certificate of occupancy, the approved landscaping dies or is otherwise determined not to be in conformance with the standards and criteria of this §4.2, the code compliance division shall issue notice to the owner, citing the violation and describing what action is required to comply with this article. The owner shall have 30 days from date of said notice to establish, replace, or restore the landscaping, as required. If the violation is not remedied within the allotted time, then the owner shall be in violation of this chapter, and subject to penalties and remedies as described in §X.X, [General Provisions/Remedies and Penalties].

F. A time extension of six months may be granted by the Planning and Development Services Department for remedying any violation identified in a citation if extenuating circumstances beyond the control of the owner and related to climate conditions (too wet, too dry, too hot, or too cold) prevent installation of trees, shrubs, or groundcover, or the successful establishment of turf areas.

G. The provisions of this article are subject to the provisions of Chapter 130, Utilities. However, trees or other landscaping which die or are permanently damaged for lack of water during periods of required water conservation must nevertheless be replaced in accordance with the provisions of this §4.2.

---

43 §44.5-3-3(b)(g)(ii), with minor edits.
45 §44.5-3-3(b)(g)(iv).
46 §44.5-3-3(b)(g)(v).
4.3 Tree Preservation and Tree Removal

COMMENTARY
The current standards in Chapter 144 focus mainly on how to protect trees during construction, and the approval process for removal, without emphasizing tree preservation generally. Further, the section does not apply to residential zoning districts, and only concerns itself with protected and heritage trees (75" or greater diameter).

This draft defines “heritage tree,” “protected tree,” and “trunk circumference,” and proposes new standards for preserving protected and heritage trees. This draft suggests that the standards should apply to any property within a defined historic district, including existing single-family residences, and all new construction (also including one- to four-family developments, with some exceptions). The need to obtain a clearance and grading permit is proposed, as is a defined procedure for surveying trees on a site, a minimum preservation requirement, and a replacement requirement for trees that are being removed. There is also the possibility for obtaining credit for preserved trees, protected or not, as long as they are not Undesirable Trees in Appendix B.

Prior to drafting this section, we reviewed the examples of both Austin and San Antonio. The regulations proposed here do not go as far as the programs in those cities, for the following reasons:

- This section proposes a significant broadening of the regulations, but recognizes that a more ambitious prior effort to extend tree protections in New Braunfels was not successful.
- Applying new requirements to almost every property within the city may generate significant pushback. This section “starts smaller,” but could be expanded over time.
- Administering these regulations will require staff time and staff knowledge, in greater amounts as the regulations become more complex.

4.3.1 Purpose
The purpose of this section is to promote the preservation and expansion of tree canopy, to facilitate site design and construction that contributes to the retention and long-term viability of existing trees, and to establish a process to manage the protection of protected and heritage trees.

4.3.2 Applicability

A. Generally
This section shall apply to all activities on private property in any zoning district that may result in the removal of protected trees, including:

1. Clearing and grading to prepare land for development;
2. New construction including the installation of infrastructure (roads, utilities, etc.);
3. Redevelopment in any zoning district that involves replacement of an existing structure or expansion of the gross floor area beyond the footprint of the original structure;
4. Any property within a defined historic district, including one- to four-family residential uses, applying for a tree removal permit for any tree on the property;
5. Construction of new parking lots, or the redesign or reconfiguration of existing parking lots.

---

48 The addition of “in any zoning district” in this provision and #3 below is intended to eliminate the exception in the current Chapter 144 regulations that allows site work and/or tree removal in one- and two-family residential districts prior to any review and approval being issued.
49 This provision relies on the need for a clearance or grading permit, which would need to be created, as New Braunfels currently does not require such a permit.
50 This draft proposes these regulations apply to single-to four-family dwellings. Since we understand that Texas law may preclude or limit this possibility, we would ask for feedback from the City Attorney on this topic.
B. Exceptions
The following are exempt from this section:

1. Properties used or zoned for agriculture; and
2. A project in any zoning district that involves interior remodeling, or exterior alterations that do not require the removal of trees on the property.

4.3.3 Tree Survey and Preservation/Replacement Plan

A. When Required
Any land use application, preliminary plat, replat, Master Development Plan, a clear and grade permit, or building permit subject to this section per §4.3.2, Applicability, shall include a tree survey documenting all protected trees on a development site and a preservation/replacement plan. Any proposed removal of a protected tree shall also require application for a tree removal permit per §4.3.4, Tree Removal Permit.

B. Contents
Each tree survey and preservation/replacement plan shall contain, but not be limited to, the following required elements:

1. The locations of all protected trees to be preserved and removed on the subject site.
2. A table containing the following information:
   a. For all protected trees:
      i. Tree number;
      ii. Common name of each tree;
      iii. Circumference of each tree;
      iv. Diameter (DBH) of each tree;
      v. General health and condition of each tree;
      vi. Average canopy spread;
      vii. Classification (protected or heritage) and status (preserve or remove) for each tree; and
   b. Any non-protected trees on a site that are not of a variety listed in Appendix B, Undesirable Trees, that are eligible for tree preservation credit, as described in §4.3.7.

C. Preparation Requirements

1. The tree survey and preservation/replacement plan shall be prepared by or under the supervision of an ISA-certified or ASCA-registered arborist, a SAF-certified forester, botanist, professional land surveyor that has documented completion of at least eight hours of training in Texas tree identification, or a registered landscape architect.
2. If there are no protected trees on a property, then a signed and notarized letter indicating such shall be prepared by or under the supervision of an ISA-certified or ASCA-registered arborist, a SAF-certified forester, botanist, professional land surveyor that has documented completion of at least eight hours of training in Texas tree identification, or a registered landscape architect and submitted with the initial development application.

---

51 New.
52 This should be revisited following drafting of the new procedures chapter to ensure all appropriate application types are listed.
D. Relation to Other Applications

1. Residential subdivisions that are to be developed in phases per a Master Development Plan shall provide a plan that complies with the preservation requirements at full build-out as approved on the preliminary plat or Master Development Plan.

2. A notation shall be placed on the preliminary plat, final plat, approved land use application, and building permit identifying the DBH of trees to be preserved and the location of the lots that contain preserved trees. The notation shall limit any future unauthorized land-disturbing activity or construction that would impact and/or damage the tree(s) preserved.

E. Action on Application

A tree survey and preservation/replacement plan shall be approved if the minimum preservation and replacement requirements are met.

4.3.4 Tree Removal Permit

A. When Required

1. General

   No person or corporation shall recklessly remove, or cause the removal, of any tree without first applying for a tree removal permit and receiving approval pursuant to this subsection.

2. Exceptions

   a. A tree removal permit is not needed if the protected or heritage tree(s) to be removed is/are removed by a state or federal government agency in the scope of its authority.

B. Application

1. An application for tree removal permit shall provide the following information:

   a. The location of the tree;
   b. The trunk circumference of the tree;
   c. The approximate drip-line area of the tree;
   d. The species/common name of the tree; and
   e. The reason for removal, including assessment of tree health.

2. The Planning and Development Services Department may require a professional arborist's report that defines the impact of the development upon existing trees affected by proposed construction. This report shall further define methods of tree protection during construction, impervious cover limitations adjacent to protected trees, proposal for tree replacement, and maintenance requirements for new planting.

3. Where practical, an application for protected or heritage tree removal shall be combined with any other applications required for development projects.

4. Failure to provide any of the above and foregoing information may constitute the sole grounds for denial of the permit.

C. Action on Application for Tree Removal Permit

1. Upon receipt of an application to remove a protected or heritage tree, the Planning and Development Services Department shall promptly inspect the tree to be removed and shall approve or deny the application in accordance with the provisions of this article.

---

53. 144-5.3-2.(c)(2).
54. Penalty removed, per general approach to remove all specific fees from the code to a separate administrative handbook or manual.
55. Should “promptly” be qualified by some timeframe? It will mean different things to different people.
2. The Planning and Development Services Department shall approve an application for the removal of a protected or heritage tree when a valid application is received and a determination is made that:
   a. The tree is so located as to prevent reasonable access to the property or as to preclude reasonable and lawful use of the property; or
   b. The tree is dead, dying, or diseased such that recovery is not practicable, or that an infestation is likely; or
   c. The tree constitutes a hazard to life or property which cannot be mitigated without its removal; and
   d. The applicant includes an approved code-required plan for mitigation/replacement.
3. If the application for a tree removal permit is denied, and the applicant disputes the decision of the Planning and Development Services Department, the applicant may appeal the decision according to the procedures described in §XX, [Appeal of Administrative Decision].

4.3.5 Minimum Preservation Requirements

A. Heritage Trees
   All heritage trees on a site shall be preserved.

B. Protected Trees
   1. Fifty percent of the total DBH of all the protected trees on a site shall be preserved.
   2. Any development that proposes to preserve 50 percent or more of the total DBH of the protected trees on a site shall be eligible for one of the following incentives:
      a. Ten percent reduction in minimum lot size for all lots in the development;
      b. Ten percent increase in allowable density for multi-family projects;
      c. Increase of one story above the maximum permitted height; or
      d. Reduction of required on-site parking by ten percent.
   3. Any development that proposes to preserve 75 percent or more of the total DBH of the protected trees on a site shall be eligible for two of the following incentives:
      a. Ten percent reduction in minimum lot size for all lots in the development;
      b. Fifteen percent increase in allowable density for multi-family projects;
      c. Increase of two stories above the maximum permitted height; or
      d. Reduction of required on-site parking by fifteen percent.
   4. Removal of trees shall require replacement in accordance with §4.3.6 below.

C. Non-Protected Trees
   There is no minimum requirement for preserving non-protected trees; however, tree preservation credit shall be granted for any healthy, non-invasive non-protected trees listed in Appendix A that are preserved on-site, in accordance with Table 4-3: Tree Preservation Credit.

D. Preservation Relief
   The Board of Adjustment may approve relief of the minimum preservation requirements in accordance with §4.3.10, Tree Preservation Request for Relief, and where required by State law.

Footnote:
^56 New.
4.3.6 Tree Mitigation and Replacement

A. For every one inch of DBH of protected tree that is removed from a site, one inch of replacement tree shall be provided.\(^{57}\)

B. Should any required tree designated for preservation in the tree survey die within one year of approval of the application containing the tree survey, the owner shall replace the tree with one two-inch diameter tree for every two inches of tree credit originally granted for preservation.\(^{58}\)

C. Any replacement tree required by this section shall be of a species on the Approved Plant List in Appendix A, and shall be a minimum of two-inch diameter measured six inches above the ground, and at least six feet tall, at time of planting. At least 60 percent of trees shall be canopy trees, unless near utility lines where a higher percentage of utility-friendly ornamental trees from the Approved Plant List may be used. See §4.2.4J.\(^{59}\)

D. Replacement trees shall not be credited towards fulfilling any landscaping requirements for the site, nor shall trees included in required landscaping be counted as replacement trees.

E. Standards for planting shall conform to current Texas Forest Service standards, and the following requirements:
   1. Tree replacement must occur within three months of the removal of a protected tree.\(^{60}\)
   2. Replacement trees that do not survive shall be replaced by the current property owner.
   3. If ten or more replacement trees are required, no more than 25 percent of the trees shall be of the same species.
   4. No artificial plant materials may be used to satisfy the requirements of this article.

F. Planting must be complete prior to final inspection of a development. If planting is not complete, fiscal surety must be posted before the final Certificate of Occupancy is granted.

G. Replacement relief may be granted by the Board of Adjustment, who may approve payment of a fee in lieu which will go to a tree replacement fund administered by the City and used to plant trees on public property, in the right-of-way, in parks, and on public school grounds. Alternately, the Board of Adjustment may approve a request for the applicant to plant replacement trees off-site, in the same locations specified above in this provision.

4.3.7 Preservation Credit

**COMMENTARY**

Table 4-2 increases the credit for preserved trees and applies to both preservation of protected trees beyond the minimum 50% requirement, and any healthy, non-invasive non-protected trees listed in Appendix A that are preserved. This is a higher ratio than the current Chapter 144, which, in combination with the new requirement for replacement, may function as a greater incentive to preservation.

A. Preserving existing, healthy trees on a site, provided the trees appear on the Approved Plant List in Appendix A, shall earn credit toward meeting the tree planting requirements for new development or redevelopment on that site.

B. Tree preservation credit applies for any protected trees preserved on-site beyond the minimum 50 percent requirement, and any non-protected trees listed in Appendix A that are preserved.

\(^{57}\) New.

\(^{58}\) This proposes a higher replacement ratio (1 replacement tree per two inches of credit granted, rather than per four inches of credit granted), and requires a two-inch diameter replacement, rather than one and 1/2 inch diameter. Should a lower rate be required if the preserved tree dies because of a natural disaster?

\(^{59}\) \(444.5\cdot3\cdot2C7(96)\), with edits.

\(^{60}\) \(444.5\cdot3\cdot2C7(96G)\), edited to remove 12 month time limitation.
To encourage the preservation of healthy trees that are already established and growing, particularly heritage trees, additional credit as outlined in Table 4-3 shall be given for existing trees. To receive credit, the existing tree must be preferred species included in the Approved Plant List in Appendix A. Tree credits for preserving existing trees can be used to meet either the landscaping requirements for trees or the mitigation requirements for other removed trees.

Credit shall be granted according to Table 4-3.  

### Table 4-3: Tree Preservation Credit

<table>
<thead>
<tr>
<th>Diameter of Existing Tree measured 4.5 feet above ground [1]</th>
<th>Credit Toward Tree Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0” to 2½”</td>
<td>No credit</td>
</tr>
<tr>
<td>2½” to 8”</td>
<td>Two inch credit for each inch diameter of existing tree</td>
</tr>
<tr>
<td>8” to 16”</td>
<td>Four inches of credit for each inch diameter of existing tree</td>
</tr>
<tr>
<td>16” to 24”</td>
<td>Eight inches of credit for each inch diameter of existing tree</td>
</tr>
<tr>
<td>24” or more</td>
<td>Twelve inches of credit for each inch diameter of existing tree</td>
</tr>
<tr>
<td>Multi-Trunk Trees</td>
<td>Credit assigned based on total caliper inches of the cluster as indicated above</td>
</tr>
</tbody>
</table>

For tree preservation credit, the diameter of a multi-trunk tree = sum of the diameter of the largest trunk, plus ½ diameter of each additional trunk.

[1] Applicant may request additional tree preservation credit for preserving native understory trees, including but not limited to Texas Madrone, Texas Mountain Laurel, Redbuds, Yaupons, Buckeyes, Texas Persimmon, as these species will not achieve the same size upon maturity as the shade trees, which may be appropriate based on site conditions.

### 4.3.8 Protection Measures

**A. Marking and Fencing**

1. Prior to any land-disturbing activities on a site, the developer shall clearly tag or mark all trees that are to be preserved.

2. Trees to be preserved shall be surrounded by minimum four-foot-tall safety fencing around the root protection zone. Tree protection measures must remain in place until the final building/site inspection.

**B. Root Protection Zone**

1. **Identification**

   The root protection zone is an area with a radius of one-half-foot for each inch of trunk diameter measured four and one-half feet above the ground, or if branching occurs at four and one-half feet, the diameter is measured at the point where the smallest diameter closest to the branching occurs. The zone need not be exactly centered around the tree or circular in shape, but it should be positioned so that no disturbance occurs closer to the tree than one-half of the radius of the zone or within five feet of the tree, whichever is less. For any tree or groups of trees, the zone need not exceed 1,000 square feet in size. The radial root protection...
zones of trees may overlap one another so that the area of protection required for one tree may be shared by the area of protection required for another tree to minimize the total square footage of protected area where possible.

2. **Activities Prohibited**
The following activities shall be prohibited in the root protection zone:

   a. **Material Storage**
   No materials intended for use in construction or waste materials shall be placed within the limits of the root protection zone of any tree being preserved.

   b. **Equipment Cleaning/Liquid Disposal**
   No cleaning or other liquids shall be deposited or allowed to flow over land within the limits of the root protection zone of any tree being preserved. This includes, but is not limited to paint, oil, solvents, asphalt, concrete, mortar or similar materials.

   c. **Tree Attachments**
   No signs, wires, nails, screws, zip ties, or other attachments, other than those of a protective nature, shall be attached to any tree being preserved.

   d. **Construction Equipment/Vehicular Traffic**
   No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any tree being preserved other than on existing street pavement. This restriction does not apply to access within the root protection zone for purposes of clearing underbrush, establishing the building pad and associated lot grading, vehicular traffic necessary for routine utility maintenance, emergency restoration of utility service, or routine mowing operations. No heavy equipment including trucks and tractors shall be allowed inside the drip-line of any tree on any construction site.

   e. **Grade Changes**
   i. No grade changes shall be allowed within the limits of the root protection zone of any tree being preserved unless the City Arborist approves the construction methods.
   ii. No grading or filling shall be permitted within the required critical root protection zone of the protected tree to be preserved.
   iii. Grading adjacent to the protected tree to be preserved shall require a retaining wall or tree well of rock, brick, landscape timbers or other approved materials constructed around the tree to separate the area impacted by the grading from the critical root zone of the tree, which shall remain at natural grade.
   iv. The retaining wall shall be no closer than the drip line of the protected tree. The top of the retaining wall or tree well shall be constructed at the new grade.

   f. **Paving in Root Protection Zone Prohibited**
   Unless a health, safety, and welfare issue arises due to access and circulation requirements, and a corresponding variance is approved by the Board of Adjustment, no paving with asphalt, concrete, or other materials may be placed within the limits of the root protection zone of a tree that is being preserved.

### 4.3.9 Tree Removal Permit Approval Authority and Appeal

[Reserved – Installment 3, Administration and Procedures]

### 4.3.10 Tree Preservation Request for Relief

| COMMENTARY |

---

63 Some provisions new; others add greater detail to current content in Section 144.5.3.2(c)(6).
64 New.
The procedure described below is one way for an applicant to request relief from the Tree Preservation Requirement. There are, however, other methods the City could consider, in addition to or instead of this procedure.

One option some cities implement is a payment-in-lieu. This payment is not permitted in cases where a project can meet the requirement, but just does not want to - there must be some hardship or limitation with the project site that prevents complying with the requirement. If approved, the payment goes into a tree fund (such as is already under consideration for creation in New Braunfels) devoted to purchasing and planting trees elsewhere in the city, as needed.

Alternately, an applicant may donate trees to the Parks Department, in an equal number to those that would have been required on the site, subject to the approval of the Parks Department Director. This option avoids the complication of who would administer a new financial instrument, and how, but does pose the risk of more donated trees than can be used at a given time and place.

The procedure below is based on the notion of hardship. It does not propose any alternative for tree provision if it is approved by the Council, but it certainly could. It could, in fact, be combined with either or both of the options above.

A. **Purpose**

The purpose of this provision is to allow an applicant to request a determination from the Planning and Development Services Department regarding the possibility of relief from complying with the tree preservation requirements of this section. Relief may be granted if the Planning and Development Services Department determines that compliance with the requirements places an unreasonable burden on the development of the property.

B. **Review Procedure**

1. A property owner or their authorized agent may file an application for relief under this subsection demonstrating why and how compliance with the requirements of the section poses a hardship upon development of the subject property.

2. No application shall be accepted for filing until it is complete and the fee established by the City Council has been paid.

3. If the Planning and Development Services Department grants full or partial relief based on the request, a tree removal permit shall be issued by the Planning and Development Services Department, and the accompanying land use application shall be proposed in accordance with the applicable provisions of this LDO.

4. A denial of an application for relief by the Planning and Development Services Department may be appealed to the Board of Adjustment, as described in §X.X, [Appeal of Administrative Decisions].

C. **Criteria for Approval**

In deciding whether to grant relief to the applicant, the City shall consider whether there is any evidence from which it can reasonably conclude that the application of all or a part of the provisions of this subsection that apply to tree preservation may deprive the applicant of all economically viable use of the property, based on the following factors:

1. Whether there is a unique physical circumstance on the property.
2. Whether the proposed design has minimized the loss of trees to the extent possible.
3. Whether preservation and/or mitigation unduly burdens the development of the property.

### 4.4 Buffering and Residential Adjacency

**COMMENTARY**
This section proposes more detailed requirements than those in Chapter 144 to help minimize conflicts between residential and non-residential zones, particularly as land uses change and grow more intense with community growth over time.

Buffering and screening is required only between different zoning districts. This avoids “punishing” a non-residential use next to a residential one if the residential use is in a non-residential zoning district. It also avoids the unintended consequence of requiring significant buffering when, for example, a single-family residence is converted to a small office, as occurs downtown, and then has to install fences and 20 feet of buffering.

Residential adjacency, on the other hand, does apply in some cases between uses, and not just between districts. This is to address situations where buffering would be required regardless of district, because of an adjoining site feature, such as with a parking lot, drive-through, or loading zone. Other situations are described, and each specifies if it applies only between different districts, or between uses, regardless of zone.

### 4.4.1 Buffering

**A. Purpose**

Buffering shall be provided as required by this section along a shared lot line between two different zoning districts with varying intensities of use. The intent of a buffer zone is to mitigate impacts to existing development from adjacent new development of a different scale or intensity.

**B. Applicability**

It is the responsibility of development in the more intense zoning district to provide buffering along shared interior and rear lot lines where a more intense zoning district abuts a less intense zoning district, per the requirements of this section. See also §4.4.3, Residential Adjacency, for additional requirements that may apply to uses adjacent to residential development.

**C. Deferral of Installation**

1. When development in the more intense district occurs abutting a vacant parcel in the less intense district, the more intense district may be granted a deferral for installing required screening fences and buffers.

2. The deferral is valid until development on the less intense parcel begins. At that time, any required screening fences and buffers shall be installed by the property owner of the parcel in the more intense zoning district, unless a notarized agreement from the property owner in the less intense district is provided to the Planning and Development Services Department, as described in §111.

3. A request to defer installation of required screening fence and buffers shall be submitted to the Planning and Development Services Department along with a financial guarantee to be held by the Department against future installation costs. This financial surety shall accompany any request for a building permit, or submittal of a land use application.

4. Staff shall approve the deferral request upon verification that the less intense abutting parcel is vacant, and has no pending building permit or land use applications.

**D. Exceptions**

The standards of this section do not apply:

1. To development that exists at the time of adoption of this ordinance; however, with any redevelopment of the parcel in the more intense district, the requirements of this §4.4 shall apply.

---

65 New. This section addresses the issue with applying buffering standards when development in the more intense district is “there first;” for example, if a more intense district develops adjacent to a vacant lot zoned for future residential development. This draft proposes allowing the first-established use to defer installation of required fences and buffers until development occurs on the abutting vacant parcel.
E. Buffer Types

1. Buffer Levels

Four levels of buffers are described in Table 4-4 and illustrated in Figure 4.4.1-1: Buffer Level Illustrations. The levels vary in extent of required planting and screening, depending on the intensity of the districts they separate.

### Table 4-4: Buffer Types and Configurations

<table>
<thead>
<tr>
<th>Type and Configuration</th>
<th>Description</th>
<th>Minimum Requirements per 100 Linear Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Basic</td>
<td>Functions as a basic edge demarcating individual properties with a slight visual obstruction</td>
<td>Minimum width of 10 feet, 2 canopy trees, 2 understory/ornamental trees, and 2 shrubs. No screening fence required.</td>
</tr>
<tr>
<td>Level 2: Aesthetic</td>
<td>Functions as an intermittent visual obstruction and creates the impression of spatial separation without eliminating visual contact between adjacent properties</td>
<td>Minimum width of 15 feet, 3 canopy trees, 4 understory/ornamental trees, and 6 shrubs. Screening fence optional.</td>
</tr>
<tr>
<td>Level 3: Strong</td>
<td>Functions as a strong buffer to help mitigate impacts from the differing intensity associated with the two adjacent districts</td>
<td>Minimum width of 20 feet, 6 canopy trees, 5 understory/ornamental trees, and 20 shrubs. Screening fence required.</td>
</tr>
<tr>
<td>Level 4: Opaque</td>
<td>Functions as an opaque screen that prevents visual contact between abutting properties, and creates an impression of total separation</td>
<td>Minimum width of 25 feet, 6 canopy trees, 5 understory/ornamental trees, 20 shrubs. Screening fence or berm required.</td>
</tr>
</tbody>
</table>

---

68 Can any existing procedure be used to request small deviations from these standards, aside from a hardship variance? If not is there any interest in allowing an alternative similar to what could be proposed with an Alternative landscaping Plan?

69 New.
2. Minimum Planting Specifications

   Figure 4.4.1-1: Buffer Level Illustrations

   - **Level 1: Basic**
     - 10' planting/100'

   - **Level 2: Aesthetic**
     - 15' planting/100'

   - **Level 3: Strong**
     - 20' planting/100'

   - **Level 4: Opaque**
     - 25' planting/100'

At time of planting, the minimum specifications for the required plants are as follows:

- **Canopy Trees**
  A minimum of two inches in diameter measured six inches above the ground and at least six feet in height at time of planting.

- **Ornamental Trees**
  A minimum of one and one-half inches in diameter measured six inches above the ground at time of planting.

- **Multi-Trunk Trees**
  The sum of the diameter of the largest trunk plus ½ diameter of each additional trunk shall be a minimum of two inches at time of planting, with anticipated height at maturity between 8 and 12 feet.

- **Shrubs**
  May be 1 or 5 gallon, provided that anticipated height at maturity is a minimum of three feet tall.

**F. When Required**

Buffers of the level specified shall be provided as shown in Table 4-5.

<table>
<thead>
<tr>
<th>Table 4-5: Minimum Buffer Required Between Zoning Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Use</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Agricultural</td>
</tr>
<tr>
<td>One-to-four-family residential</td>
</tr>
<tr>
<td>Multi-family</td>
</tr>
</tbody>
</table>
### Table 4-5: Minimum Buffer Required Between Zoning Districts

<table>
<thead>
<tr>
<th>Developing Use</th>
<th>Existing Adjacent Use</th>
<th>Agricultural</th>
<th>One-to-four-family residential</th>
<th>Multi-family</th>
<th>Mixed-Use</th>
<th>Commercial</th>
<th>Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed-Use</td>
<td></td>
<td>Level 2</td>
<td>Level 3</td>
<td>Level 2</td>
<td>N/A</td>
<td>None</td>
<td>Level 3</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td>Level 2</td>
<td>Level 4</td>
<td>Level 3</td>
<td>None</td>
<td>N/A</td>
<td>Level 2</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td>Level 2</td>
<td>Level 4</td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Notes:**

[1] Six feet is the minimum required fence height; taller fences may be installed where permitted. All fences required by this section shall be screening fences as described in §4.4.1G.2 below.

### G. Screening Standards

1. **Buffer Materials**
   
   Plant materials shall be installed to provide a continuous screen of living materials at maturity. Material requirements are as follows:
   
   a. Canopy trees shall be planted for every 20 linear feet of buffer length, or fraction thereof.
   
   b. At least 50 percent of canopy trees shall be evergreen with a minimum height of six feet at time of planting.\(^70\)
   
   c. The remainder of the buffer area shall be planted with understory trees and shrubs, in quantities as described in Table 4-4: *Buffer Types and Configurations*, distributed evenly throughout every 20 linear feet.
   
   d. Other living ground cover that will attain a height of three feet at maturity may be used in place of shrubs, and perennials may be interspersed with other plantings along the length of the buffer.
   
   e. Open ground beneath trees and shrubs, or ground not otherwise occupied with plantings in the buffer area, may be planted with shade- and drought-tolerant turf grasses.
   
   f. Areas within the dripline extending one and on-half feet outward surrounding a tree trunk may be covered with wood chips, mulch, or pea gravel.
   
   g. Level 2, 3, and 4 buffers may contain sidewalks, bike paths, multi-use trails, seating areas, or stormwater facilities, provided that the planting requirements for the specified level of required buffer are met.

2. **Screening Fences**
   
   a. Where a screening fence is required by Table 4-4, the screening fence shall be constructed of materials that are 90 percent or more opaque along the length of the shared property line. See §4.4.2E for permitted fence materials.
   
   b. When Table 4-4 requires a screening fence next to an adjacent, existing screening fence, the requirement for a new fence may be waived:
      
      i. If the property owner of the existing fence provides a signed and notarized letter of consent, agreeing that the existing fence is sufficient screening, regardless of the height of the existing fence.
      
      ii. Any other required buffer plantings on the developing property side of the fence shall still be required.

---

\(^70\) Is this requirement valid in Texas? It normally applies to conifers; however, if canopy trees can be evergreen, perhaps this is not needed, as minimum specifications for height of canopy tree at time of planting is six feet.
iii. If the existing fence is removed for any reason, invalidating the notarized letter of consent, the property owner of the developing property may be required to install any fencing that was deferred while the notarized letter of consent was valid.\textsuperscript{71}

3. Parking Lot Screening
Additional standards may apply when a parking or loading area is located along the shared lot line or within 30 to 50 feet of an adjacent residential use or zone. See §4.4.3E.8, Off-Street Parking and Loading Areas.

4. Utility and Mechanical Equipment Screening
Requirements for the screening of utility and mechanical equipment are described in §4.6.3B, Utility and Mechanical Equipment Screening.

5. Trash and Dumpster Screening
Requirements for the screening of trash receptacles and dumpsters are described in §4.6.3C, Trash and Dumpster Screening.

4.4.2 Fences\textsuperscript{72}

<table>
<thead>
<tr>
<th>COMMENTARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>This section carries forward content from Section 144-5.3-2, with edits as indicated in the footnotes. The term “wall” is no longer used to indicate a solid masonry (or other opaque material) fence. Instead, the term “screening fence” is used to indicate a solid fence. This is included as a new defined term.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question to consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there instances, aside from those outlined below, when a fence taller than eight feet should be permitted?</td>
</tr>
</tbody>
</table>

A. Fence Height\textsuperscript{73}
1. Unless a different height is specified elsewhere in this Code, the maximum height for fences in any zoning district is eight feet.
2. Ornamental features may be placed on top of the fence, and may exceed the fence height limit on top of fence posts, pillars, or columns.

B. Measuring Fence Height
1. Fence height shall be calculated as the vertical distance measured from the lowest adjacent ground level (inside or outside the fence) to the top of the tallest element of the fence, not including ornamental features affixed to the top of any fence post, pillar, or column.

---

\textsuperscript{71} What should happen if the existing fence is removed, for example, due to deterioration, and the property owner just doesn't replace it? Should it then be the responsibility of the other property owner to install a fence? Should the code try to control for such instances, or leave them to enforcement?

\textsuperscript{72} Section 144-5.3-2.

\textsuperscript{73} Section 144-5.3-2(a).
2. When a fence is erected on top of a retaining wall, fence height measurement shall include the height of the retaining wall and the height of the fence, except when the retaining wall is:
   a. Necessary to the structural soundness of building construction on the lot; or
   b. Abutting a drainage easement or other drainage infrastructure.

C. Exceptions
A fence of up to ten feet in height may be approved when:

1. The ground floor elevation of either the principal dwelling on the property or the principal dwelling on an abutting lot is at least four feet higher than the elevation at the shared lot line;

2. The fence is erected along a side or rear lot line which abuts an alley, railroad, or a street that is not classified as local by the Thoroughfare Plan;

3. The fence is a sound dampener or a security fence for a public, institutional, or industrial use;

4. In any side or rear yard where a slope is present, the height of a fence may be adjusted to allow the top of the fence to be level, and perpendicular to the support posts at a height
greater than eight feet, provided that the height of the fence at the highest elevation does not exceed eight feet; or

5. The City Council authorizes a taller fence height as part of any land use application review.

D. Fence Location

1. Front Yards
   a. A fence in the front yard shall be no taller than 36 inches, unless the fence is at least 50 percent open, in which case the fence may be four and one-half feet tall.
   b. If an existing, legally non-conforming building has more or less than the required setback, the front yard shall be measured from the front building line.
   c. A fence from the front or rear corners of a building may extend through the side yard at the maximum height allowed.

   Figure 4.4.2-3: Permitted Front Yard Fence Height

2. Corner Lots
   Fences on corner lots shall not encroach into the clear vision area, as described in §4.2.8, Sight Distance and Visibility.

3. Fences in Easements
   a. Fences are prohibited within drainage easements.
   b. A fence within any other type of public easement shall have a gate or removable panel to allow for maintenance access to the easement, and shall be approved by the entity responsible for the public easement.

E. Fence Materials

1. Screening Fences
   a. When a screening fence is required by §4.4.1, Buffering, the fence shall be constructed of one of the following materials, to form a solid screen, or one that is opaque for at least 90 percent of its length:

---

75 Section 144-5-3-2.(b), (c), and (d).
76 It is not clear how provision relates to fences. Does provision a. above suffice to explain how tall a fence can be for a nonconforming building, regardless of whether it has a full front yard or not?
78 Section 144-5-3-2.(f) and (g), with edits.
Article 4: Development Standards
Development Standards – October 2023 PUBLIC REVIEW DRAFT

4.4 Buffering and Residential Adjacency

4.4.3 Residential Adjacency

i. Brick;
ii. Stone;
iii. Cast stone;
iv. Rock;
v. Marble;
vi. Granite;
vii. Split-face concrete block;
viii. Poured-in place concrete; or
ix. Precast concrete.

b. In no instance shall a screening fence be constructed of fiber cement, such as James Hardie brand products or equivalent.

c. Any new screening fence shall be consistent with any existing fence, as long as the existing fence complies with the materials requirements described in subsection §4.4.2E.1.a.

2. Other Fences

Fences that are not required for screening may be opaque, or may be constructed of materials that allow for transparency along their length. Such fences may use wood, wrought iron or other decorative metal, decorative concrete block, or a combination of opaque and transparent materials.

3. All Fences
No fence may use barbed wire or razor wire.

F. Permit Required

All fences require building permits and shall comply with all permit/plan review submittal requirements including engineered foundation when necessary.

4.4.3 Residential Adjacency

COMMENTARY

Question to consider:

Many of the topics in this section -- such as lighting, site design, trash and recycling areas -- are related to information covered in other sections of this LDO.

-Is it easier to find and use these standards when they are consolidated in one location, as in this draft, or should they be re-organized into their respective topic sections in future drafts?

A. Purpose

The purpose of this section is to promote compatible transitions between land use areas of differing intensities and to reduce potential negative impacts that may occur when mixed-use and non-residential development is located near residential zoning districts.

B. Applicability

This section applies to all non-residential development built on or within 150 feet of any property in a residential zoning district, exempting non-residential developments that are no greater than three stories in height or 10 acres in size and are separated from residentially zoned property by a freeway or major arterial. For mixed-use development, this section applies to non-residential project components, including access and circulation routes. This section applies in addition to any applicable buffering and screening required by §4.4.1, Buffering.

82 Section 144.5.3-2.(e).
83 New.
C. **Use Limitations**

1. Where these residential adjacency standards apply, outdoor storage shall not be permitted as principal or accessory use.
2. Drive-through lanes shall not be located within 100 feet of single- to four-family residential zones or uses, unless separated by a principal building, or screening and buffering as described in §4.4.1, *Buffering*, and §4.4.2, *Fences*, or where all owners of adjacent residential property within 100 feet of the drive-through lane provide notarized written consent.

D. **Grading**

1. All grading for subdivision improvements or building permits shall comply with the following:
   a. No fill shall be placed within five feet of the shared property line.
   b. Within 20 feet of the shared property line with residentially zoned property, fill depths shall not exceed the natural grade by more than four feet.
   c. Within 50 feet of the shared property line with residentially zoned property, fill depths shall not exceed the natural grade by more than eight feet. See Figure below.
2. Grading for non-residential development adjacent to residentially zoned property shall not include fill slopes that exceed the pad grades of the adjoining residential development within 20 feet of the property line of the residential development.

   **Figure 4.4.3-1: Grading Near Property Line**

3. Exceptions or variations from these standards may be approved with written consent of the adjoining residential property owner or when the decision-making body determines that the proposed variation from the strict application of these standards is consistent with development patterns in the area and would not significantly impact the adjoining residence. Alternative features for compatibility may be required when approving exceptions.

E. **Site and Building Orientation**

1. **Site Orientation**
   a. To the extent feasible, non-residential developments shall be designed with higher activity areas, such as parking, circulation, loading, and delivery areas, oriented away from any abutting residential uses.
   b. Where site limitations necessitate higher activity levels abutting residential uses, screening and buffering as described in §4.4.1, *Buffering*, and §4.4.2, *Fences*, shall be required.
2. Building Configuration
   a. Multi-building developments shall be configured to locate the tallest and largest
      structures within the core of the site and provide a gradual decrease in building height
      and mass towards adjacent residential land uses.
   b. Horizontally integrated mixed-use developments shall locate non-residential uses away
      from the adjacent residential district.

3. Building Facades
   Developments shall be constructed such that the I design, including roof lines and roof
   treatments, is consistent on all sides of the building that are visible from public streets or
   residential districts.

4. Signage Adjacent to Residential
   a. No advertising signage shall be permitted on a rear or side building façade that faces an
      abutting residentially zoned property.
   b. Internally illuminated signs and electronic message signs may not be oriented toward
      residential districts. Those that are visible to adjacent residential districts may only be
      illuminated during allowed hours of operation per §X.X, (signs reference).
   c. Additional regulations as described in §X.X, Signs, may apply.

5. Spillover Lighting
   In addition to complying with the general standards in §4.8, Exterior Lighting, development
   subject to these residential adjacency standards shall comply with the following:
   a. Lighting Standard
      Lighting from a non-residential property shall not create greater than 0.25-foot-candle of
      spillover light at a property line of any one-to-four family residential zoning district or
      manufactured home park, and 0.5 spillover light at a property line of a multi-family zone.
   b. Redirecting/Screening of Light Sources
      All sources of light, including security lighting, illuminated signs, vehicular headlights, and
      other sources, shall be directed away from residentially zoned property; or screened so
      that the light level stated in provision a, above, is not exceeded.
   c. Lighting Near Residential Areas
      Light fixtures within 100 feet of any one-to-four family residential zoning district shall not
      exceed 20 feet in height. The Planning and Development Services Department may permit
      up to an additional ten feet of height provided such lights are a sharp cut-off lighting
      system and shorter light fixtures are not feasible.
   d. Exclusions for Existing Higher Light Levels
      Where existing light levels already exceed the standards of this article as of [effective date
      of LDO], the light source may continue to be used, but existing light levels may not
      increase. If the nonconforming light source is replaced, it shall be required to meet all
      applicable standards of this LDO.

6. Noise
   Noise level is governed by Chapter 82, Section 82-9, Noise Regulations, in the code of
   ordinances.

7. Trash and Recycling Areas
   a. For multi-family and non-residential properties, areas containing outdoor garbage or
      recycling containers shall not be located within 25 feet of an adjacent residential use or
      zoning district, unless no other feasible options are available owing to topography such as
      steep slopes, preservation of heritage trees, or access requirements of the trash service
      provider.
   b. All trash and recycling areas shall, at a minimum, meet the screening standards described
      in §4.6.3C, Trash and Dumpster Screening, and may be required to incorporate screening
and buffering measures if located less than 25 feet from the adjacent residential use or zoning district.

8. Off-Street Parking and Loading Areas
   a. To minimize the impacts of off-street parking and loading areas adjacent to residential uses or zones, these areas shall be established in one or more of the locations listed below. The locations are listed in priority order from highest to lowest; the applicant shall select the highest feasible location from this list and, if applicable, shall demonstrate why that application was selected over other, higher priority locations.
      i. Adjacent to off-street parking lots serving non-residential uses on abutting lots;
      ii. Adjacent to lot lines abutting non-residential or mixed-use development;
      iii. Behind the building;
      iv. On the side of a corner lot not facing the primary street frontage; or
      v. Adjacent to lot lines abutting residential uses.
   b. If the parking area for a multi-family, mixed-use, or non-residential development is located within 30 feet of a single- to four-family residential district or use, or the loading area is within 50 feet of any residential district or use, including multi-family, buffering and screening as described in §4.4.1, Buffering, shall be provided.
   c. Loading facilities for large tractor trailers (not including package delivery services such as Federal Express or UPS) shall be designed to not directly face residentially zoned property.
   d. In the event that tractor trailer loading facilities are located adjacent to a residential zone or use, in addition to the standards of §4.4.1, Buffering, the loading bay(s) and truck loading space(s) shall be fully screened from the adjacent property with a building or a solid screening fence not less than 14 feet in height, plus a wing wall extending at least 25 feet along the length of the loading space. See Figure below.

   **Figure 4.4.3-2: Loading Area Design**

   ![Diagram of Loading Area Design]

9. Cut-Through Traffic
   a. Non-residential sites shall orient primary access to the highest classification of street adjacent to the property as indicated on the City's Thoroughfare Plan. While secondary access on to residential local streets may be authorized to facilitate connectivity, the
intent of this provision is to minimize cut-through traffic onto local streets that primarily serve adjacent residentially zoned properties.

b. Primary access on to residential local streets may be granted if no other alternative is available.

c. For non-residential sites that serve the public (grocery stores, other retail uses, restaurants, etc.), multimodal access for pedestrians and bicyclists from adjacent neighborhoods may also be required.

10. **Use of Alleys**

Commercial truck and automobile traffic shall be prohibited on alleys that are shared with residentially zoned properties between the hours of 10:00 p.m. and 7:00 a.m. This includes, but is not limited to, deliveries, and commercial parking lot access. Garbage collection is not subject to this standard.
4.5 Off-Street Parking

4.5.1 Purpose

The section establishes regulations for the provision of safe and efficient parking, queueing, and loading facilities in amounts sufficient to meet existing and/or proposed development in New Braunfels, while balancing these needs against equally important safety, environmental, aesthetic, and cultural considerations. Parking, queueing, and loading facilities shall be designed and located in a manner consistent with the desired character and development patterns of the Comprehensive Plan. This section is intended to help protect the public health, safety, and general welfare by:

A. Avoiding and mitigating traffic congestion;
B. Avoiding and mitigating the adverse visual and environmental impacts of large concentrations of exposed parking;
C. Reducing stormwater runoff, reducing heat island effect from large expanses of pavement, improving water quality, and minimizing dust pollution;
D. Providing necessary access for service and emergency vehicles;
E. Providing for safe and convenient interaction between vehicles and pedestrians; and
F. Providing flexible methods of responding to the transportation and access demands of various land uses in different areas of the city.

4.5.2 Applicability

A. New Development

All new development shall provide off-street parking, queueing, and loading areas in accordance with the standards of this section, unless otherwise exempt by this code.

B. Redevelopment, Expansion or Enlargement

1. Any redevelopment, expansion, or enlargement of an existing use that results in an increase of floor area of greater than 15 percent, or any increase in the number of dwelling units, or any expansion or enlargement that requires a special use approval, shall provide additional parking spaces in proportion to the extent of the expansion or enlargement, as required by Table 4-6: Minimum Required Off-Street Parking. Additional off-street parking and loading spaces shall be required only to serve the enlarged or expanded area, not the entire building or use.

2. When an existing use with nonconforming parking requests approval of any redevelopment, expansion, or enlargement, that use shall be required come into compliance with the requirements of this section, providing the full amount of required parking for the current use to remedy the nonconformity, in addition to providing the additional spaces required by the redevelopment, expansion, or enlargement. The requirement to eliminate the nonconformity may be waived upon approval of a parking demand study as described in §4.5.5A, Parking Demand Study, if the study demonstrates the additional parking is not required to serve the current use. Any such approval does not waive the requirement to provide additional parking in proportion to the extent of redevelopment, expansion, or enlargement of the existing use.

---

88 New.
89 Adapted and expanded from 144-5.1-1.
C. **Change of Use**
   When a new use or combination of uses requires 25 percent more parking than the previous use or combination of uses, the new use or combination of uses shall provide additional parking spaces in proportion to the increase, as required by Table 4-6: *Minimum Required Off-Street Parking.*

D. **Additional Spaces Required**
   As part of any land use application review, the City Council may require the applicant to provide additional parking beyond any minimum or maximum specified in this §4.5, or parking lot improvements such as repaving or change in access, as a condition of approval.

E. **Exceptions to Compliance with this Section**
   1. **Existing Nonconforming Parking**
      a. Where the parking for an existing use does not comply with the requirements of this section, and is deemed a legal nonconforming site feature, the use may continue with the existing nonconforming parking until an expansion of or change to the use triggers the requirement to comply with this section.
      b. A change to the property, such as a rezoning, shall require compliance with all applicable standards in this LDO.
   2. **Downtown Parking Exemption**
      a. Buildings existing in the area defined by the boundary shown on Figure 4.5.2-1: *Downtown Parking Exemption Boundaries* are not required to provide off-street parking spaces normally required by this section when a development application proposes to:
         i. Change the use of the building but not enlarge the building;
         ii. Reconstruct or renovate but not enlarge the building; or
         iii. Bring an existing building back into use after being vacant.
      b. Existing parking shall not be removed.
      c. Where an existing building is being enlarged or reconstructed and enlarged by more than 15 percent, parking shall be required for the expanded area only. Expansion is measured cumulatively, so that separate expansions to the same structure or on the same lot that add up to more than ten percent within a span of five years shall be required to meet the parking requirements specified in Table 4-6: *Minimum Required Off-Street Parking.*

---

90 144-5.1-1.(a), partial, with edits. If a use with nonconforming parking is abandoned, any new use on the site would be required to comply with the requirements of this section. If the abandoned use is to be re-established, should it be required to bring the nonconforming parking up to code standards to receive approval for re-establishment? This question is raised here for consideration; it can be resolved in drafting Installment 3, which will include the Nonconformities section.

91 144-5.1-1. (b). We have carried forward the downtown parking exemption. However, if the community disagrees or thinks the boundaries should be adjusted, this is subject to further discussion. We would also like to add in this subsection any parking exemptions/reductions that apply in designated historic districts, if there are any that apply.

92 For public discussion purposes in review of this draft, this provision changes the threshold at which it would apply from ten to 15 percent.
d. Where an existing building is being replaced, parking shall be required in accordance with the Reduced Tier column in Table 4-6: Minimum Required Off-Street Parking.

Figure 4.5.2-1: Downtown Parking Exemption Boundaries

F. Continuing Obligation

1. The requirements for off-street parking applicable to newly constructed or substantially altered structures, or necessitated by a change of use, shall be a continuing obligation of the owner of the property on which the structure or use is located, for as long as the structure or use is in existence, or is used in a manner that continues to require off-street vehicle parking.

2. No owner or operator of any structure or use subject to this section shall discontinue, change, dispense with, or cause the discontinuance of or change to, the required vehicle parking spaces for the structure or use. Required parking may only be eliminated in conjunction with demolition of the structure it serves, or a change in use that has a lower minimum parking

---

93 §44-5.1-1(d), with edits to use plain language.
4.5.3 Minimum Off-Street Parking

FOR DISCUSSION
Consider a small but significant change to this section. Instead of the word ‘required,’ change to ‘recommended.’

After community discussion, if this is a change that the City wishes to pursue, this section and all others that discuss parking requirements will be edited accordingly. For the purposes of this draft, however, the assumption is that parking requirements continue to apply.

A. Minimum Requirement

Unless otherwise specified by this section, each development or land use as listed in [Use Regulations] shall provide the minimum required off-street parking and queueing spaces in compliance with the schedule specified in Table 4-6: Minimum Required Off-Street Parking. Minimum parking standards are established by area as defined below.

1. Reduced Tier 94
   Lower minimum parking requirements for downtown uses and buildings not otherwise exempt as described in §4.5.2E.2, Downtown Parking Exemption, urbanized areas, and development atop the Edwards Aquifer Recharge Zone.

2. Standard Tier
   Minimum parking requirements for all other areas.

B. Maximum Parking

1. Provision in Excess of Minimum Requirement
   a. Provision of parking beyond the minimum requirements shown in the Reduced Tier column of Table 4-6: Minimum Required Off-Street Parking shall not be permitted in the Edwards Aquifer Recharge Zone without approval of a variance as described in §X.X. See also §4.7, Sensitive Area Protection.
   b. For provision of parking that exceeds the 115 percent allowance, see provision 2 below.

2. Provision in Excess of Maximum Allowance
   Multi-family and non-residential development shall not provide parking in an amount greater than 115 percent of the minimum parking required in Table 4-6: Minimum Required Off-Street Parking, unless:
   a. The applicant submits a parking demand study, as described in §4.5.5A, that demonstrates the need for additional parking, and that study receives approval from the Planning and Development Services Department; and

---

94 If the term “urban area” is included in this lower tier of parking requirements, a definition of where this applies will be needed. Normally we would suggest your corridors and nodes, but without transit, those are likely to be areas with significant traffic and parking needs. Could this instead be applied by district or overlay (Gruene, Castell Avenue, Sophienburg and other historic areas)?
b. Permeable pavers or other porous material are used for any parking spaces provided above the 115 percent maximum; and

c. All parking meets the applicable requirements described §4.2, Landscaping, and §4.4, Buffering and Residential Adjacency.

d. Alternative landscaping plans may be submitted for lots that receive approval to provide parking above the maximum allowance; however, the plan may not vary from the requirements for parking lot landscaping described in §4.2.6, Parking Lot Landscaping, unless the request involves preservation of heritage or protected trees, as described in §4.3, Tree Preservation and Tree Removal.

3. For calculation purposes, the following types of parking spaces shall not count against the maximum parking requirement:

   a. Accessible parking;
   b. Vanpool and carpool parking;
   c. Space(s) permanently reserved for car share vehicles;
   d. Required bus spaces;
   e. Spaces with electric vehicle charging stations;
   f. Fleet vehicle parking; and
   g. Structured parking, underground parking, and parking within, above, or beneath the building(s) it serves.

4. Any existing development that has off-street parking in excess of that required by this Code may remove the extra parking and convert the lot area to another use as permitted by the zoning district in which it is located. Any site with a combination of uses must maintain the minimum required by the combined total minimums of all the uses on the site, and any removal of parking spaces covered by a shared parking agreement shall invalidate that agreement, and may be subject to enforcement and penalties as described in §5XX.

C. Unlisted Uses

For uses not expressly listed in Table 4-6: Minimum Required Off-Street Parking, the Planning and Development Services Department shall have the authority to make the following determinations:

1. Apply the minimum off-street parking space requirement specified in Table 4-6 for the listed use described in the Land Based Classification System that is deemed most similar to the proposed use (based on operating characteristics, the most similar related occupancy classification, or other factors determined by the Planning and Development Services Department); or

2. Establish the minimum off-street parking space requirement by reference to standards in parking resources published by the National Parking Association, American Planning Association, or the Institute of Transportation Engineers (ITE) Parking Generation Manual.

3. An applicant who disagrees with the use classification or amount of parking required by this determination may appeal the decision of the Planning and Development Services Department according to the procedure described in §5XX [Appeals of Administrative Decisions].

D. Minimum Off-Street Parking and Queueing Requirements

<table>
<thead>
<tr>
<th>COMMENTARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historically, most communities have required more parking than was needed, and are now trying to “rightsize” parking. Where reductions are proposed here, they are aligned not only with that trend, but also with what other communities in Texas have been doing. Nevertheless, we kept in mind that New Braunfels</td>
</tr>
</tbody>
</table>

---

95 144.1-3.(a), expanded.
Article 4: Development Standards
4.5 Off-Street Parking
4.5.3 Minimum Off-Street Parking

does not presently have any public transportation, so residents are relying on cars to get to most places they need to go.

The table shows two tiers of parking requirements, Reduced Tier (with lower requirements) is intended for central areas that are more accessible by walking or biking. This could include areas of Downtown outside the parking exemption zone, parts of Gruene, and potentially other areas that fit this description. (See Questions to Consider, below).

**Questions to Consider:**

- Where should the different Tiers apply? Should the recharge zone be considered separately, possibly as a third Tier, that only applies to the recharge zone?

- Should there be an introductory statement explaining that uses listed in the Summary Table of Allowed Uses, but not included in this Table 4-5, do not require parking (subject to the clarifying caveat that this is not applicable to unlisted uses, described in §4.6.3.C)? That could shorten the table (e.g., by removing utilities that mostly do not require parking), and easier to use.

- Should Table 4-5 group together specific uses from a category, if they all require the same parking? For example, many industrial uses have the same requirement of “1 per 1,000 sq ft.” In cases like this, the category entry would say “Requirements for all uses in category, unless otherwise specified separately in this table.” This has been done with some dwelling unit requirements, but applied more broadly, would also shorten the table, and make it easier to use.

- Can certain uses where an appropriate requirement is very hard to determine because of widely varying use characteristics (e.g., utilities, transportation, industrial) be subject to an administrative approval on an individual basis, based on a site plan or parking plan demonstrating how much parking will be provided? While a parking study could demonstrate the need for less parking, allowing this without the study for uses where the need for such flexibility might reasonably be foreseen can reduce some of the time and cost associated with procuring a parking study. This can also avoid imposing seemingly arbitrary requirements for uses that have large buildings or site areas, but few employees, ultimately resulting in more parking than is needed for a site or use.

---

**Table 4-6: Minimum Required Off-Street Parking**

**DU = DWELLING UNIT**
**SQ FT = SQUARE FEET**
**GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED**

A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auction sales, livestock</td>
<td>1 per 1,000 sq ft GFA and lot area</td>
<td>1 per 1,000 sq ft GFA and lot area</td>
</tr>
<tr>
<td>Community garden⁶</td>
<td>None required</td>
<td>1 per garden plot</td>
</tr>
<tr>
<td>Farm</td>
<td>As required for dwelling, if noncommercial</td>
<td>As required for dwelling, if noncommercial</td>
</tr>
<tr>
<td>Farmers market</td>
<td>None required</td>
<td>1 per 500 sq ft of market area</td>
</tr>
<tr>
<td>Grain elevator</td>
<td>None, except loading spaces as required</td>
<td>1 per 500 sq ft office area, PLUS loading spaces as required</td>
</tr>
<tr>
<td>Plant nursery</td>
<td>1 per 500 sq ft indoor area</td>
<td>1 per 500 sq ft indoor area, PLUS 1 per 1,000 sq ft outdoor display area</td>
</tr>
<tr>
<td>Stable, commercial</td>
<td>1 per 4 stalls</td>
<td>1 per 2 stalls</td>
</tr>
</tbody>
</table>

⁶ Yellow shading indicates a new use.
Table 4-6: Minimum Required Off-Street Parking

|DU = DWELLING UNIT| SQ FT = SQUARE FEET| GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED| A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale farm sales</td>
<td>1 per 1,000 sq ft of publicly accessible sales area</td>
<td>1 per 1,000 sq ft of publicly accessible sales area</td>
</tr>
</tbody>
</table>

### Residential Uses

#### Household Living

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessory building or structure</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Accessory dwelling unit</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Cottage home development</td>
<td>1 per DU</td>
<td>1 per DU</td>
</tr>
<tr>
<td>Day care home</td>
<td>1 per 2 non-resident employees</td>
<td>1 per non-resident employee</td>
</tr>
<tr>
<td>Dwelling, live-work</td>
<td>2 minimum</td>
<td>1 per DU, PLUS space as required for GFA on non-residential use</td>
</tr>
<tr>
<td>Dwelling, multi-family</td>
<td>Efficiency/studio: 0.5 per DU</td>
<td>Efficiency/studio: 0.9 per DU</td>
</tr>
<tr>
<td></td>
<td>1 bedroom: .75 per DU</td>
<td>1 bedroom: 1 per DU</td>
</tr>
<tr>
<td></td>
<td>2 bedroom: 1.5 per DU</td>
<td>2 bedroom: 1.5 per DU</td>
</tr>
<tr>
<td></td>
<td>3 bedroom: 2 per DU</td>
<td>3 bedroom: 2 per DU</td>
</tr>
<tr>
<td>Dwelling, manufactured home, single-family attached (townhouse) or detached, duplex, triplex, or fourplex</td>
<td>1 per DU</td>
<td>2 per DU</td>
</tr>
<tr>
<td>Stable, accessory</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Tiny home, individual lot installation, or pocket neighborhood development</td>
<td>1 per DU</td>
<td>1 per DU</td>
</tr>
</tbody>
</table>

#### Group Living

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active/independent senior living facility</td>
<td>0.5 per DU</td>
<td>1 per DU</td>
</tr>
<tr>
<td>Assisted living facility</td>
<td>1 per 6 beds</td>
<td>1 per 4 beds</td>
</tr>
<tr>
<td>Boarding house</td>
<td>1 per 2 bedrooms</td>
<td>1 per bedroom</td>
</tr>
<tr>
<td>Group home, FHAA large or small</td>
<td>1 per 4 beds</td>
<td>1 per 2 beds</td>
</tr>
<tr>
<td>Residence hall</td>
<td>1 per 4 beds</td>
<td>1 per 2 beds</td>
</tr>
<tr>
<td>Supportive housing, large or small</td>
<td>1 per 4 beds</td>
<td>1 per 2 beds</td>
</tr>
</tbody>
</table>

#### Civic and Institutional Uses

### Community and Cultural Facilities

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cemetery</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Civic organization or member lodge</td>
<td>1 per 600 sq ft</td>
<td>1 per 300 sq ft</td>
</tr>
<tr>
<td>Community or recreation center</td>
<td>1 per 600 sq ft, PLUS 1 per 5,000 sq ft of outdoor area</td>
<td>1 per 300 sq ft, PLUS 1 per 5,000 sq ft of outdoor area</td>
</tr>
<tr>
<td>Conference or convention center</td>
<td>1 per 800 sq ft</td>
<td>1 per 500 sq ft</td>
</tr>
<tr>
<td>Crematorium</td>
<td>1 per 1,000 sq ft</td>
<td>1 per 800 sq ft</td>
</tr>
</tbody>
</table>
### Table 4-6: Minimum Required Off-Street Parking

**DU = DWELLING UNIT**  
**SQ FT = SQUARE FEET**  
**GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED**  
A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day care center</strong></td>
<td>1 per 5 children for which the facility is licensed by the state, PLUS 3 queueing spaces per pick-up/drop-off lane</td>
<td>1 per 3 children for which the facility is licensed by the state, PLUS 3 queueing spaces per pick-up/drop-off lane</td>
</tr>
<tr>
<td><strong>Fairground</strong></td>
<td>1 per 1,000 sq ft of lot area up to 20,000 sq ft, PLUS 1 per each 2,000 sq ft over 20,000 sq ft</td>
<td>1 per 1,000 sq ft of lot area</td>
</tr>
<tr>
<td><strong>Funeral home</strong></td>
<td>1 per 600 sq ft</td>
<td>1 per 400 sq ft</td>
</tr>
<tr>
<td><strong>Government or municipal facility</strong></td>
<td>1 per 400 sq ft</td>
<td>1 per 250 sq ft</td>
</tr>
<tr>
<td><strong>Museum</strong></td>
<td>1 per 1,000 sq ft</td>
<td>1 per 500 sq ft</td>
</tr>
<tr>
<td><strong>Public Park</strong></td>
<td>Determination of Parks &amp; Recreation Department</td>
<td>Determination of Parks &amp; Recreation Department</td>
</tr>
<tr>
<td><strong>Religious assembly</strong></td>
<td>1 per 500 sq ft of assembly space</td>
<td>1 per 250 sq ft of assembly space</td>
</tr>
</tbody>
</table>

#### Educational Facilities

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School, college or university</strong></td>
<td>1 per 500 sq ft office, research, and library area; PLUS 1 per 250 sq ft assembly areas and classrooms</td>
<td>1 per 500 sq ft office, research, and library area; PLUS 1 per 250 sq ft assembly areas and classrooms</td>
</tr>
</tbody>
</table>
| **School, K-12** | High School: 5 per classroom, PLUS 10 queueing spaces per pick-up/drop-off lane  
Elementary & junior high: 2.5 per classroom, PLUS 10 queueing spaces per pick-up/drop-off lane | High School: 8 per classroom, PLUS 10 queueing spaces per pick-up/drop-off lane  
Elementary & junior high: 2.5 per classroom, PLUS 10 queueing spaces per pick-up/drop-off lane |
| **School, vocational** | 1 per 500 sq ft of academic space                                              | 1 per 250 sq ft of academic space                                             |

#### Health Care Services

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinic, medical or dental</strong></td>
<td>1 per 300 sq ft</td>
<td>1 per 150 sq ft</td>
</tr>
<tr>
<td><strong>Hospice</strong></td>
<td>1 per 3 beds</td>
<td>1 per 2 beds</td>
</tr>
<tr>
<td><strong>Hospital</strong></td>
<td>1 per 3 beds</td>
<td>1 per 2 beds</td>
</tr>
</tbody>
</table>

#### Transportation and Utility Facilities

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Airport</strong></td>
<td>1 per 1,000 sq ft of publicly accessible area in passenger terminal up to 10,000 sq ft, PLUS 1 per 2,500 sq ft of publicly accessible area over 10,000 sq ft</td>
<td>1 per 1,000 sq ft of publicly accessible area in passenger terminal up to 10,000 sq ft, PLUS 1 per 2,500 sq ft of publicly accessible area over 10,000 sq ft</td>
</tr>
<tr>
<td><strong>Airstrip or landing field</strong></td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td><strong>Antenna</strong></td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td><strong>Bus barn</strong></td>
<td>1 per 1,000 sq ft office or other indoor area not used for bus</td>
<td>1 per 500 sq ft office or other indoor area not used for bus parking, PLUS 1 per bus stored on site</td>
</tr>
</tbody>
</table>
### Table 4-6: Minimum Required Off-Street Parking

DU = DWELLING UNIT  
SQ FT = SQUARE FEET  
GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED  
A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DESCRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus station</td>
<td></td>
</tr>
<tr>
<td>1 per 800 sq ft of passenger waiting area</td>
<td>1 per 400 sq ft of passenger waiting area</td>
</tr>
<tr>
<td>EV charging station, level 1 or 2</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>EV charging station, level 3</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heliport</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Railroad facilities</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Solar energy system, small-scale</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Solar farm, large-scale</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Utility, major</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Utility, minor</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Water storage</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Wind energy system, large</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Wind energy system, small</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Wireless communication facility</td>
<td>None required</td>
</tr>
<tr>
<td>None required</td>
<td>None required</td>
</tr>
</tbody>
</table>

### Commercial Uses

#### Animal Uses

| Animal boarding | 1 per 1,000 sq ft used for boarding (excluding exercise areas) | 1 per 500 sq ft used for boarding (excluding exercise areas) |
| Animal grooming | 1 per 500 sq ft | 1 per 300 sq ft |
| Pet day care | 1 per 1,000 sq ft (excluding outdoor exercise areas) | 1 per 500 sq ft (excluding outdoor exercise areas) |
| Stable, commercial | 1 per 5 stalls | 1 per 5 stalls |
| Veterinary clinic | 1 per 500 sq ft | 1 per 300 sq ft |
| Zoo | 1 per 2,500 sq ft of outdoor area | 1 per 1,000 sq ft of outdoor area |

#### Food and Beverage Uses

| Bar/tavern | 1 per 200 sq ft | 1 per 100 sq ft |
| Beverage stand | 1 PLUS 3 queueing spaces per drive-through lane | 1 PLUS 5 queueing spaces per drive-through lane |
| Catering | 1 per 1,000 sq ft | 1 per 1,000 sq ft |
| Coffee shop | 1 per 250 sq ft | 1 per 150 sq ft |
| Micro-brewery or micro-distillery | 1 per 500 sq ft of publicly accessible space | 1 per 300 sq ft of publicly accessible space |
| Mobile food court | 1 per 2 mobile food businesses | 1 per mobile food business |
| Neighborhood food and service | 1 per 500 sq ft | 1 per 250 sq ft |
| Restaurant | 1 per 300 sq ft | 1 per 200 sq ft |
Table 4-6: Minimum Required Off-Street Parking

DU = DWELLING UNIT  
SQ FT = SQUARE FEET  
GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED  
A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th>Use Type</th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With drive-through, 3 queueing spaces from point of placing order</td>
<td>With drive-through, 6 queueing spaces from point of placing order</td>
</tr>
<tr>
<td><strong>Lodging Uses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bed &amp; breakfast</td>
<td>1 per guestroom</td>
<td>1 per guest room, PLUS 1 for the owner/proprietor</td>
</tr>
<tr>
<td>Campground or RV park</td>
<td>1 per guest accommodation space</td>
<td>1 per guest accommodation space</td>
</tr>
<tr>
<td>Hotel</td>
<td>1 per guest room</td>
<td>1 per guest room, PLUS 1 per 300 sq ft of meeting space</td>
</tr>
<tr>
<td>Short-term rental[^7]</td>
<td>1 per unit</td>
<td>2 per unit</td>
</tr>
<tr>
<td><strong>Office and Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio or video studio</td>
<td>1 per 1,000 sq ft</td>
<td>1 per 500 sq ft</td>
</tr>
<tr>
<td>Automated teller machine</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Bank or financial institution</td>
<td>1 per 500 sq ft, PLUS 3 queueing spaces for drive-through service or drive-up ATM</td>
<td>1 per 300 sq ft, PLUS 3 queueing spaces for drive-through service or drive-up ATM</td>
</tr>
<tr>
<td>Check cashing</td>
<td>1 per 600 sq ft</td>
<td>1 per 400 sq ft</td>
</tr>
<tr>
<td>Donation collection container</td>
<td>None required</td>
<td>None required</td>
</tr>
<tr>
<td>Drive-through facility</td>
<td>Queueing spaces as required by primary use</td>
<td>Queueing spaces as required by primary use</td>
</tr>
<tr>
<td>Event or reception center</td>
<td>1 per 250 sq ft of indoor area, PLUS 1 per 1,000 sq ft of outdoor event area</td>
<td>1 per 150 sq ft of indoor area, PLUS 1 per 1,000 sq ft of outdoor event area</td>
</tr>
<tr>
<td>Laundry, commercial</td>
<td>1 per 1,000 sq ft</td>
<td>1 per 600 sq ft</td>
</tr>
<tr>
<td>Laundry, drop-off and self-service</td>
<td>1 per 600 sq ft</td>
<td>1 per 400 sq ft</td>
</tr>
<tr>
<td>Manufacturing, artisan</td>
<td>1 per 1,000 sq ft</td>
<td>1 per 1,000 sq ft, PLUS 1 per 500 sq ft of publicly accessible area</td>
</tr>
<tr>
<td>Office</td>
<td>1 per 500 sq ft</td>
<td>1 per 300 sq ft</td>
</tr>
<tr>
<td>Office, contractor's</td>
<td>1 per 1,000 sq ft of indoor office area</td>
<td>1 per 500 sq ft of indoor office area</td>
</tr>
<tr>
<td>Personal instruction facility</td>
<td>1 per 400 sq ft</td>
<td>1 per 300 sq ft</td>
</tr>
<tr>
<td>Personal services</td>
<td>1 per 250 sq ft</td>
<td>1 per 200 sq ft</td>
</tr>
<tr>
<td>Research and development</td>
<td>1 per 1,200 sq ft</td>
<td>1 per 750 sq ft</td>
</tr>
<tr>
<td>Service and repair shop</td>
<td>1 per 500 sq ft</td>
<td>1 per 400 sq ft</td>
</tr>
</tbody>
</table>

[^7] Because regulatory content for short-term rentals is being carried forward without change, should this draft avoid proposing a change to the parking requirements?
### Table 4-6: Minimum Required Off-Street Parking

<table>
<thead>
<tr>
<th></th>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amphitheater</strong></td>
<td>1 per 8 seats of assembly space, PLUS 1 per 3,000 sq ft of outdoor area</td>
<td>1 per 4 seats of assembly space, PLUS 1 per 1,000 sq ft of outdoor area</td>
</tr>
<tr>
<td><strong>Arcade</strong></td>
<td>1 per 800 sq ft</td>
<td>1 per 400 sq ft</td>
</tr>
<tr>
<td><strong>Country club</strong></td>
<td>1 per 300 sq ft indoor area, PLUS 1 per 3,000 sq ft of outdoor area</td>
<td>1 per 150 sq ft indoor area, PLUS 1 per 3,000 sq ft of outdoor area</td>
</tr>
<tr>
<td><strong>Dance hall or dancing facility/Nightclub</strong></td>
<td>1 per 200 sq ft</td>
<td>1 per 100 sq ft</td>
</tr>
<tr>
<td><strong>Day camp</strong></td>
<td>1 per 500 sq ft indoor area PLUS 1 per 1,000 sq ft outdoor activity area used by campers</td>
<td>1 per 300 sq ft indoor area PLUS 1 per 1,000 sq ft outdoor activity area used by campers</td>
</tr>
<tr>
<td><strong>Golf course</strong></td>
<td>2 per hole</td>
<td>4 per hole</td>
</tr>
<tr>
<td><strong>Music performance venue</strong></td>
<td>1 per 250 sq ft</td>
<td>1 per 150 sq ft</td>
</tr>
<tr>
<td><strong>Recreation, indoor</strong></td>
<td><strong>Bowling, axe-throwing or similar use:</strong> 1 per lane</td>
<td><strong>Bowling, axe-throwing or similar use:</strong> 2 per lane</td>
</tr>
<tr>
<td></td>
<td><strong>Theaters, auditoriums, stadiums, or similar use:</strong> 1 per 4 seats in assembly areas or 1 per 8 linear feet of seating</td>
<td><strong>Theaters, auditoriums, stadiums, or similar use:</strong> 1 per 4 seats in assembly areas or 1 per 8 linear feet of seating</td>
</tr>
<tr>
<td></td>
<td><strong>Sports courts:</strong> 2 per court</td>
<td><strong>Sports courts:</strong> 4 per court</td>
</tr>
<tr>
<td></td>
<td><strong>Other uses not listed separately:</strong> 1 per 400 sq ft indoor area</td>
<td><strong>Other uses not listed separately:</strong> 1 per 400 sq ft indoor area</td>
</tr>
<tr>
<td><strong>Recreation, outdoor</strong></td>
<td><strong>Playing fields with fixed seating:</strong> 1 per 4 seats or 1 per 8 linear feet of seating</td>
<td><strong>Playing fields with fixed seating:</strong> 1 per 4 seats or 1 per 8 linear feet of seating</td>
</tr>
<tr>
<td></td>
<td><strong>Playing fields with no fixed seating:</strong> 10 per field</td>
<td><strong>Playing fields with no fixed seating:</strong> 20 per field</td>
</tr>
<tr>
<td></td>
<td><strong>Outdoor theaters, stadiums, or similar uses:</strong> 1 per 4 seats in assembly areas or 1 per 8 linear feet of seating; if no seating, 25 percent of maximum capacity</td>
<td><strong>Outdoor theaters, stadiums, or similar uses:</strong> 1 per 4 seats in assembly areas or 1 per 8 linear feet of seating; if no seating, 25 percent of maximum capacity</td>
</tr>
<tr>
<td></td>
<td><strong>Miniature golf or driving range:</strong> 2 spaces per hole; or 1 per driving bay</td>
<td><strong>Miniature golf or driving range:</strong> 2 spaces per hole; or 1 per driving bay</td>
</tr>
<tr>
<td></td>
<td><strong>Sports courts:</strong> 2 per court</td>
<td><strong>Sports courts:</strong> 4 per court</td>
</tr>
</tbody>
</table>

---

98 Should this just be combined with indoor Theatre below, or are there single-purpose music venues, music venues apart from bars, where noise and traffic could be an issue?
Table 4-6: Minimum Required Off-Street Parking

DU = DWELLING UNIT  
SQ FT = SQUARE FEET  
GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED  
A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.

<table>
<thead>
<tr>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DU = DWELLING UNIT</strong></td>
<td><strong>SQ FT = SQUARE FEET</strong></td>
</tr>
<tr>
<td><strong>GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED</strong></td>
<td><strong>A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.</strong></td>
</tr>
<tr>
<td><strong>River entrance/exit</strong></td>
<td>None required</td>
</tr>
<tr>
<td><strong>River outfitter</strong></td>
<td>[reserved]</td>
</tr>
<tr>
<td><strong>Shooting range, indoor</strong></td>
<td>1 per firing lane; PLUS 1 per 250 sq ft of retail, classroom, or office area</td>
</tr>
<tr>
<td><strong>Shooting range, outdoor</strong></td>
<td>1 per firing lane</td>
</tr>
<tr>
<td><strong>Movie theater</strong></td>
<td>1 per 6 seats</td>
</tr>
<tr>
<td><strong>Theater, drive-in</strong></td>
<td>1 per speaker box</td>
</tr>
<tr>
<td><strong>Waterfront recreation</strong></td>
<td>[reserved]</td>
</tr>
<tr>
<td><strong>Retail Sales Uses</strong></td>
<td><strong>Retail sales, small, medium, or large</strong></td>
</tr>
<tr>
<td><strong>Lumberyard or building supply store</strong></td>
<td>1 per 1,200 sq ft</td>
</tr>
<tr>
<td><strong>Outdoor display of merchandise as a principal use</strong></td>
<td>1 per 800 sq ft</td>
</tr>
<tr>
<td><strong>Retail sales, small, medium, or large</strong></td>
<td>1 per 800 sq ft</td>
</tr>
<tr>
<td><strong>Vehicle-Related Uses</strong></td>
<td><strong>Fleet services</strong></td>
</tr>
<tr>
<td><strong>1 per 1,000 sq ft, PLUS</strong></td>
<td><strong>1 per 1,000 sq ft, PLUS</strong></td>
</tr>
<tr>
<td><strong>1 per 250 sq ft of indoor area, PLUS</strong></td>
<td><strong>1 per 250 sq ft of indoor area, PLUS</strong></td>
</tr>
<tr>
<td><strong>Vehicles fuel sales</strong></td>
<td><strong>1 per 800 sq ft of indoor area, with 50% of spaces at fuel pumps counted towards total required</strong></td>
</tr>
<tr>
<td><strong>Vehicles repair, major</strong></td>
<td><strong>1 per 500 sq ft of indoor sales/office area, PLUS 1 per service bay</strong></td>
</tr>
<tr>
<td><strong>Vehicles repair, minor</strong></td>
<td><strong>1 per 400 sq ft of indoor sales/office area, PLUS 1 per service bay</strong></td>
</tr>
<tr>
<td><strong>Vehicles repair, paint and body shop</strong></td>
<td><strong>1 per 400 sq ft of indoor sales/office area, PLUS 1 per service bay</strong></td>
</tr>
<tr>
<td><strong>Vehicles sales and rental</strong></td>
<td><strong>1 per 400 sq ft of indoor sales/office area, PLUS 1 per 1,000 sq ft lot area</strong></td>
</tr>
</tbody>
</table>
| **Vehicles wash** | Automated: 2 queueing spaces per wash tunnel  
With staff: 1 per wash bay |
| **Automated: 4 queueing spaces per wash tunnel** | **Automated: 4 queueing spaces per wash tunnel** |

100 Feedback indicates that fixed requirements have not been working to produce adequate parking for these uses. While the use is proposed as permitted by-right in certain districts, should that be changed to require A) special use approval so that parking provision could be reviewed as part of the approval; or B) staff approval of parking, even where the use is permitted by right, subject to review criteria that we would need help refining?  
101 Pending further discussion, the definition of this use may be changed from accessory to primary, in which case parking requirements will need to be provided.
Table 4-6: Minimum Required Off-Street Parking

<table>
<thead>
<tr>
<th>DU = DWELLING UNIT</th>
<th>SQ FT = SQUARE FEET</th>
<th>GFA = GROSS FLOOR AREA MEASURED IN SQ FT, UNLESS OTHERWISE INDICATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A REDUCED TIER USE THAT HAS NO PARKING REQUIRED MAY ELECT TO PROVIDE THE AMOUNT OF PARKING REQUIRED IN STANDARD TIER, SUBJECT TO MAXIMUMS AS DECRIBED IN §4.5.3B.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduced Tier</th>
<th>Standard Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrial Uses</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Extraction Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Resource or mineral extraction</td>
<td>1 per 800 sq ft of office, trailer, or other indoor area. No indoor area: 1 per 1,500 sq ft of lot area</td>
</tr>
<tr>
<td><strong>Manufacturing and Processing Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Food Processing</td>
<td>1 per 1,500 sq ft</td>
</tr>
<tr>
<td>Lumber mill</td>
<td>1 per 1,500 sq ft indoor area</td>
</tr>
<tr>
<td>Manufacturing, heavy</td>
<td>1 per 1,500 sq ft</td>
</tr>
<tr>
<td>Manufacturing, light</td>
<td>1 per 1,500 sq ft</td>
</tr>
<tr>
<td><strong>Storage and Warehousing Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Distribution center</td>
<td>1 per 3,000 sq ft</td>
</tr>
<tr>
<td>Freight terminal</td>
<td>1 per 800 sq ft indoor/office area</td>
</tr>
<tr>
<td>Outside storage as a principal use</td>
<td>None required</td>
</tr>
<tr>
<td>Self-service storage</td>
<td>1 per 800 sq ft office area, PLUS 1 per 25 storage units</td>
</tr>
<tr>
<td>Vehicle storage facility</td>
<td>1 per 800 sq ft office area</td>
</tr>
<tr>
<td>Warehouse and storage</td>
<td>1 per 2,500 sq ft</td>
</tr>
<tr>
<td><strong>Waste-Related Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Recycling center</td>
<td>1 per 1,500 sq ft, PLUS 2 queueing spaces</td>
</tr>
<tr>
<td>Waste transfer station</td>
<td>None required</td>
</tr>
<tr>
<td><strong>Wholesale Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Wholesale sales</td>
<td>1 per 1,500 sq ft</td>
</tr>
<tr>
<td><strong>Temporary uses</strong></td>
<td></td>
</tr>
<tr>
<td>Itinerant merchant</td>
<td>None required</td>
</tr>
<tr>
<td>Mobile storage unit</td>
<td>None required</td>
</tr>
<tr>
<td>Seasonal sales</td>
<td>As determined with temporary use permit</td>
</tr>
<tr>
<td>Temporary on-site contractor's office</td>
<td>None required</td>
</tr>
<tr>
<td>Temporary real estate office</td>
<td>1 per 800 sq ft</td>
</tr>
<tr>
<td>Temporary roll-off dumpster</td>
<td>None required</td>
</tr>
</tbody>
</table>
4.5.4 Calculation of Parking and Loading Requirements

A. Area Measurement
All square footage-based parking and loading requirements shall be computed on the basis of gross floor area of the subject use, unless otherwise indicated in Table 4-6: Minimum Required Off-Street Parking. Structured parking within or attached to a building shall not be counted in such computation.

B. Fractions
1. When the requirement for each separate use is computed, fractions shall be counted at their actual value. When units of measurements determining the total number of required off-street parking spaces result in a requirement of a fractional space, any fraction less than one-half shall be disregarded. Any fraction of one-half or over shall require one off-street parking space.\footnote{102}
2. When calculating parking requirements for a combination of uses, individual fractional numbers are not subject to rounding. Only the cumulative total of the combined uses is subject to rounding.

C. Parking for Multiple Uses
For sites with multiple uses, the required parking shall be the sum of the required parking for each of the uses on the site.

D. Mixed Uses\footnote{103}
1. Where more than one use exists on the same site or in the same building, the portion of the site or building devoted to each use shall be used in computing the number of off-street parking spaces required.
2. The total requirement for off-street parking spaces shall be the sum of the requirements of the various uses computed separately. The off-street parking space for one use shall not be considered as providing the required off-street parking space for another use, unless there is a shared parking agreement, as described in §4.5.5C.
3. If a use changes in a building with multiple uses or tenant spaces such as a strip shopping center, and the new use requires more parking than the previous one (e.g., a restaurant replaces a self-service laundromat), the new use shall demonstrate that the existing on-site parking spaces meet the sum of the requirements of the various uses computed separately. The new shall only be required to provide additional parking if the shortfall is more than 25 percent of the existing spaces, or more than ten additional spaces are needed, whichever is greater.
4. If there is more parking in an existing lot shared by multiple uses or tenants than the sum of the separate requirements, spaces do not have to be removed.

E. Uses with Non-Single-Occupancy Seating\footnote{104}
Where Table 4-6: Minimum Required Off-Street Parking references “linear feet of seating,” this applies to benches, bleachers, or other seating that is not single-occupancy seating. Such seating shall be measured as one seat per every 20 inches of length.

\footnote{102}{144-5.1-2(b).}
\footnote{103}{144-5.1-2(a).}
\footnote{104}{144-5.3-3.(b), edited.}
4.5.5 Parking Alternatives

**COMMENTARY**

This section offers additional flexibility for meeting the new minimum parking requirements. If administrative approval as suggested for some of these reductions seems too broad a discretion, Deferred Parking is an alternative that may accomplish the same thing, but relies on the basis of evidence. It allows an applicant to temporarily provide less than the required amount of parking, and then demonstrate over time that the parking is not needed or, conversely, the study shows it is needed, and so has to be installed.

**Questions to consider:**

- What extent of reduction in car spaces should be allowed for providing more than the basic required bike parking?
- Should a reduction in car spaces be permitted for using permeable paving (except over the Edwards Aquifer, where untreated infiltration is undesirable?)
- Should a reduction in car spaces be permitted when LID principles are employed in lots atop the Edwards Aquifer?
- Some of the latter opportunities for reduction allow for deviations up to 25%. Where a parking study is not required, this is proposed as an administrative decision. Is that 25% too high a threshold for an administrative decision? In the absence of data from a parking study, what objective criteria could apply so that staff can make this decision? Or should it be a matter for a board or Council?

Applicants may combine opportunities for reduction in required parking up to a sum of 25 percent overall reduction. Where a parking demand study is required per the description of parking alternatives in this section, the amount of reduction may be greater than 25 percent. Applicants may also submit a parking demand study to demonstrate the need for a greater number of on-site spaces than is permitted by the 115 percent maximum. In both instances, if the data supports the request for increase or reduction, the request shall be approved by the Planning and Development Services Department.

**A. Parking Demand Study**

Some of the alternatives described in this section may require the provision of a parking demand study, which may be submitted to demonstrate the need for a higher or lower quantity of off-street parking than required by Table 4-6.

1. The parking demand study shall be prepared by a traffic engineer and shall estimate parking demand for the proposed use based on the recommendations of the Institute of Traffic Engineers (ITE), Urban Land Institute, the American Planning Association, or other acceptable source of parking demand data for uses and/or combinations of uses of comparable activities, scale, bulk, area, and location.

2. The parking demand study shall be subject to review and approval by the Planning and Development Services Department, confirming that the information and assumptions used in the study are reasonable and that the study accurately reflects anticipated off-street parking demand for the proposed use, development, or combination of uses.

3. If an applicant submits a parking demand study demonstrating that anticipated off-street parking demand for the proposed use, development, or combination of uses will be less/more than that required in Table 4-6 and the Planning and Development Services Department determines that the information and assumptions used in the study are reasonable and that the study accurately reflects anticipated off-street parking demand for the proposed use, development, or combination of uses, the Planning and Development Services Department shall authorize a reduction in required off-street parking spaces based on that study.

---

105 New. Parking study is mentioned in 144-5.1, but there is limited to providing specific pieces of information in limited circumstances (in support of shared and valet parking) and there is not information on who may prepare it.
B. **On-Street Parking Credit**

On-street parking may be credited toward the minimum number of required vehicle parking spaces on a one-to-one basis, subject to the following standards:

1. For private streets or gated developments, on-street parking abutting the lot line of the subject property may be used to satisfy the requirement for one of the required spaces per single-family or duplex dwelling unit. For three- or four-unit buildings, one on-street space may be substituted for an on-site space for every 20 linear feet of street frontage abutting the lot.

2. Where parking spaces are available on a local public street adjacent to a use or development, one on-street space may be substituted for an on-site space for every 20 linear feet of street frontage abutting the lot. On public streets, this reduction may not be used for single- to four-family dwellings (attached or detached).

3. On-street parking spaces shall be available for general public use at all times. On-street parking that is subject to residential parking permit restrictions, or time restrictions (for example, metered parking, sign-posted hour limitations on spaces or no overnight parking) except occasional street-cleaning, shall not be used to meet any off-street minimum parking requirements for any use.

4. Only those legal on-street parking spaces abutting any lot line of the subject property may be counted. Areas in front of or within the clear vision area of a street intersection or within five feet of a fire hydrant shall not be counted toward meeting the minimum parking requirements for any use.

5. There must be a public sidewalk abutting the full length of the lot frontage of the subject property.

6. On-street parking along an arterial street shall not be used to meet any minimum parking requirements for any use.

---

106 New. This draft proposes the requirement that there must be a sidewalk along the full length of the lot asking to count on-site parking. Should this say anything about the condition of the sidewalk or a requirement for street trees to be present? If added, we suggest an exception if street trees were not provided because of lot constraints. In that case, it does not seem like a requestor should be precluded from requesting this credit.

107 Because dwellings in the Reduced Tier area are proposed as only requiring one on-site space, should this be edited to say that at least one on-site space must be provided? Or would it be okay for a dwelling to rely exclusively on street parking, given that the credited space is not reserved for the use of the dwelling that claims the credit? Could a credited space on a private street be reserved?

108 Should this be changed to allow this on residential local streets, subject to a caveat about driveway spacing? Since there has to be 20 linear feet of frontage, that meets the driveway separation requirement. Allowing this raises the same possibility about eliminating the one space required in Reduced Tier, when the credited space is not reserved. See footnote 99.
7. Each on-street parking space may only be counted once toward meeting the minimum parking requirements of the abutting lot, regardless of the number of individual buildings or tenants on the lot.

8. No development or use approved with an on-street parking credit shall be considered nonconforming if the on-street parking is later removed by the City, state, or federal government, and the remaining off-street parking does not meet the minimum off-street parking requirements of this section.

C. Off-Site Parking

**COMMENTARY**

**Questions to consider:**

- Should the amount of parking provided off-site be subject to a limit, e.g., up to 50% of total required off-street parking? This could eliminate a site losing all its parking if for some reason the off-site location was no longer viable.

- Should the distance measurement be to property boundary or to building entrance?

- Should the pedestrian distance remain 800 feet, or should it be increased to one-quarter mile (1,320 feet)?

The Planning and Development Services Department may approve off-site parking to meet the requirements in Table 4-6, subject to the following requirements:

1. The proposed off-site parking location is no more than 800 feet, measured along a public sidewalk or trail, from the subject property requesting to use it to satisfy off-street parking requirements.

2. This distance shall be measured from the nearest edge of the closest parking space of the off-site parking location to the closest property boundary of the subject property.

3. The pedestrian route between the parking space and subject property shall be continuous and uninterrupted. If the route requires crossing an arterial or collector street, any such crossings shall have a crosswalk and traffic control to allow for safe pedestrian crossing.

4. The off-site parking may be shared with another use, provided the two (or more) uses can also meet any applicable requirements described in §4.5.5D below.

5. The off-site parking spaces shall meet all applicable standards regarding parking lot design and maintenance in §4.5.6.

6. Directional signage shall be provided:

   a. On the subject property, stating and/or showing where the off-site parking is located.

   b. At the entrance to the off-site parking, indicating that the location allows parking for the establishment using the off-site parking.

7. An applicant who wishes to request off-site parking approval shall submit an access plan that demonstrates the request complies with the allowable distance between locations, and that the locations are connected by a safe, accessible, public sidewalk or trail. The access plan shall also include a site plan of the off-site location, showing the layout and accessibility of any off-site spaces that will be used to satisfy the requirements in Table 4-6.

8. The applicant shall submit an attested off-site parking agreement between the off-site parking property owner and the property owner of the subject property, in a form approved by the City Attorney. The agreement shall state that there is no foreseeable limit to the timeframe

---

109 144-5.1-1.(i) with edits.

110 The range we see most often is between 500 feet to 1,000 feet; however, a quarter mile is generally considered an acceptable distance for most pedestrians. Are there situations where sites might be connected by something other than a public sidewalk or trail? We are trying to simplify the language, but don't want to miss any common public connections.
during which the off-site parking may be used by the subject property, and that the agreement may not be cancelled or amended unless without written agreement from the City, or unless the required parking for the subject property is replaced with on-site parking in accordance with this Code, or is replaced with another off-site parking agreement. The attested agreement, once approved by the Planning and Development Services Department, shall be recorded with the County Clerk.

9. Failure by the subject property to maintain access to the off-site parking agreement for required parking may result in loss of compliance with off-street parking requirements resulting in the revocation of the certificate of occupancy.

D. **Shared Parking Spaces**

The Planning and Development Services Department may approve shared parking for developments and/or uses with different operating hours or different peak business periods, subject to the following requirements:

1. **Parking Demand Study Required**
   a. Shared parking shall only be approved if the applicant clearly demonstrates the feasibility of shared parking through a parking demand study, as described in §4.5.5A, *Parking Demand Study*.
   b. The parking study must demonstrate that the separate uses proposing to share parking both have access to the parking location by means of a contiguous property line, or the parking area being on the lot for one of the uses. The study must also demonstrate that the uses are not operated simultaneously.
   c. The shared parking arrangement may be allowed if it is in accordance with the Institute of Transportation Engineers (ITE) Standards for shared parking (current edition).

2. **Shared Parking Requirements**

**COMMENTARY**

This section shows three options to consider regarding counting shared parking. Option 1 is the simplest and allows any shared reductions to be determined case-by-case as part of an application. Option 2 continues the current approach for counting spaces, and Option 3 shows a possible alternative (and simpler) tabular way of counting allowable reductions.

**Question to consider:**
- Is 50 percent the right number? This can be adjusted widely, all the way up to 100 percent shared. One reason why fifty percent is suggested is that, if this is used for off-site as proposed in that section, it avoids a situation where all of a use’s parking is lost if there is some change to or redevelopment of the shared site.
- There is a tradeoff in simplicity of implementing and administering these options, versus providing greater certainty that enough parking will always be available. Which concern is more important in New Braunfels?

   a. **Option 1: Simple 50%**
      Up to 50 percent of the number of parking spaces required for a use may be used to satisfy the number of parking spaces required for other uses that generate parking demands during different times of the day or different days of the week.

   b. **Option 2: Based on Use and Time of Day**
      Developments may allow parking spaces to be shared by various land uses that operate at different times from one another throughout the day, per Table 4-7. A minimum of two uses is required to apply the calculations established in Table 4-7.

---

112 New. There is a Shared Parking section on 144-5.1.1.(g), but this is substantially more detailed.
### Table 4-7: Shared Parking Schedule

<table>
<thead>
<tr>
<th>Use</th>
<th>Weekdays Midnight – 7 am</th>
<th>Weekdays 7 am – 6 pm</th>
<th>Weekdays 6 pm – Midnight</th>
<th>Weekends Midnight – 7 am</th>
<th>Weekends 7 am – 6 pm</th>
<th>Weekends 6 pm – Midnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office, Medical/Dental Clinics, Financial Services &amp; Industrial</td>
<td>5%</td>
<td>100%</td>
<td>5%</td>
<td>0%</td>
<td>60%</td>
<td>10%</td>
</tr>
<tr>
<td>Retail</td>
<td>0%</td>
<td>100%</td>
<td>80%</td>
<td>0%</td>
<td>100%</td>
<td>60%</td>
</tr>
<tr>
<td>Residential</td>
<td>100%</td>
<td>55%</td>
<td>85%</td>
<td>100%</td>
<td>65%</td>
<td>75%</td>
</tr>
<tr>
<td>Restaurant, Bar/Lounge/Tavern</td>
<td>50%</td>
<td>70%</td>
<td>100%</td>
<td>45%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>Hotel</td>
<td>100%</td>
<td>65%</td>
<td>90%</td>
<td>100%</td>
<td>65%</td>
<td>80%</td>
</tr>
<tr>
<td>Theatre</td>
<td>0%</td>
<td>70%</td>
<td>100%</td>
<td>5%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>Place of Worship</td>
<td>0%</td>
<td>5%</td>
<td>20%</td>
<td>0%</td>
<td>100%</td>
<td>40%</td>
</tr>
</tbody>
</table>

**How to use this Shared Parking Schedule:**

1. Calculate the number of spaces required for each use if it were freestanding, based on the requirements in Table 4-6.
2. Applying the applicable general land use category to each proposed use, use the percentages to calculate the number of spaces required for each time period (six time periods per use).
3. Add the number of spaces required for all applicable land uses to obtain a total parking requirement for each time period.
4. Select the time period with the highest total parking requirement and use that total as your shared parking requirement.

**c. Option 3: Alternate shared parking table for calculating reductions (Based on Use)**

The total off-street parking requirement may be reduced by the factors shown in Table 4-8. Off-street parking required shall be the sum of the parking requirements for the two uses divided by the factor for that combination of uses. If more than two uses share a parking lot or structure, the required parking shall be calculated by applying Table 4-8 to the two uses with the largest parking requirements and then adding the required parking for the additional use(s).

**How to Use Table 4-7:**

A mixed-use project within the Reduced Tier urban area proposes 20 two-bedroom dwelling units and 20, one-bedroom dwelling units, and 15,000 square feet of gross floor area for retail, plus a coffee shop of 5,000 square feet.

**Step 1:** Identify basic parking requirements from Table 4-5, Minimum Required Off-Street Vehicle Parking and Queueing Spaces.

- Dwellings: $20 \times 1.5 = 30$ spaces for the 2BR units
  $20 \times .75 = 15$ spaces for the 1BR units
  $= 45$ spaces
- Retail, Medium: 15,000 sq ft times 1 space per 600 sq ft = 25 spaces
- Coffee shop: 5,000 sq ft times 1 space per 250 sq ft = 20 spaces

**Step 2:** Add the 2 largest parking requirements: 45 + 25 = 70 spaces.

**Step 3:** Divide by the factor in Table 4-7. For multi-family residential and retail the factor is 1.2.

- 70 divided by 1.2 = 58.3 spaces; rounded down to 58.

**Step 4:** Add the third (smallest) parking requirement without adjustment.

- 58 + 20 = 78 spaces = final adjusted parking requirement.
### Table 4-8: Shared Parking Reduction Factors

<table>
<thead>
<tr>
<th></th>
<th>Multi-Family Residential</th>
<th>Civic or Institutional</th>
<th>Food &amp; Beverage or Indoor Recreation</th>
<th>Retail</th>
<th>Other Non-Residential (including Mixed-Use)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Family Residential</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic or Institutional</td>
<td>1.1</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food &amp; Beverage or Indoor Recreation</td>
<td>1.1</td>
<td>1.2</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Other Non-Residential (including Mixed-Use)</td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>1.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### 3. Shared Parking Agreement

a. An approved shared parking arrangement shall be enforced through written agreement among all the owners or long-term lessees of lands containing the uses proposed to share off-street parking spaces.

b. The agreement shall provide all parties the right to joint use of the shared parking area for as long as the shared parking spaces are needed to comply with this LDO and shall be binding on subsequent owners or long-term lessees.

c. The agreement shall be submitted to the Planning and Development Services Department for review and approval. An attested copy of an approved and executed agreement shall be recorded with the County Clerk before issuance of a Certificate of Compliance/Occupancy for any use to be served by the shared parking area.

d. Any termination of the agreement does not negate the parties' obligations to comply with parking requirements and thus shall constitute a violation of this Code. No use served by the shared parking may be continued if the shared parking becomes unavailable to the use unless substitute off-street parking spaces are provided in accordance with this section.

e. If inspection indicates that the shared parking arrangement has been terminated and the City determines that the termination has resulted in traffic congestion, overflow parking in residential neighborhoods, or threats to pedestrian, bicycle, or motor vehicle safety, the property owners involved in the shared parking arrangement may be held in violation of this Code.

#### E. Affordable and Senior Housing

The minimum parking requirement for multi-family residential structures shall be reduced by 25 percent if:

1. At least 25 percent of the dwelling units are income-restricted for a period of at least 30 years to households earning 80 percent of the Area Median Income (AMI) of New Braunfels/San Antonio region.

2. At least 75 percent of the dwelling units are restricted for purchase or occupancy by persons 55 years of age or older.

#### F. Motorcycle Spaces\(^{114}\)

One percent of the required vehicular spaces may be provided as motorcycle spaces.

\(^{114}\) Does the City have current standards for dimensions of such spaces? If not, we will provide based on what is common in other communities.
G. Car Share Spaces\textsuperscript{115}

For multi-family residential and mixed-use developments, when one space on-site is permanently reserved for a car share vehicle, the total number of required on-site spaces may be reduced by five.

H. Compact Vehicle Parking Spaces\textsuperscript{116}

1. Up to five percent of the required number of off-street vehicle parking spaces may be designed to accommodate compact vehicles.

2. A compact parking space shall be not less than nine feet wide and 16 feet long, if in a 90-degree parking arrangement; 18 feet long for 60-degree parking spaces; 14 feet long for 30-degree parking spaces and 20 feet long for parallel parking.

3. Compact vehicle parking spaces shall consist of one or more group(s) of contiguous spaces located where they can be readily identified by vehicle drivers through signage and/or pavement marking.

I. Electric Vehicle (EV) Charging Stations

\textbf{COMMENTARY}

This draft proposes installation of EV spaces as an incentive to earn a parking reduction to overall on-site parking requirements. Mandatory requirements would be an alternative approach. Three types of spaces are described below, using current terminology for EV spaces. This terminology is evolving, as is the minimum number of spaces required or encouraged.

Most communities that are setting standards in this area require some percentage of just the first two types of EV infrastructure installation, but we also propose a reduction for when EV spaces are installed.

1. \textbf{EV Infrastructure}

   There are three types of EV spaces.

   a. An EV-capable space requires just the infrastructure (conduit, breaker space, junction box, etc.) for the future installation of an EV charging station. These types of spaces do not require any charging equipment to be installed at the time of permit.

   b. An EV-ready space requires both the infrastructure and a wired outlet. While the charging unit is still absent, an EV-ready stall allows for the electric car driver to simply plug-in their portable charger into the outlet.

   c. An EV-installed space requires all infrastructure plus the actual charging station itself.

2. \textbf{Installation Incentives}

   a. Each installed EV-capable space shall count as two of the spaces required by Table 4-6.

   b. Each installed EV-ready space shall count as two of the spaces required by Table 4-6.

   c. Each installed EV-installed space shall count as four of the spaces required by Table 4-6.

   d. The maximum cumulative reduction allowed is 25 percent of the minimum spaces for the use, as required in Table 4-6.

J. Structured Parking

The provision of structured parking rather than paved surface lots is encouraged, particularly in the Downtown, and when all required parking for a use is provided in structured parking, the Planning and Development Services Department may reduce the total off-street parking requirement for the use by 25 percent.

\textsuperscript{115} In some locations, this allowance is permitted only if the shared care is reserved for the exclusive use of residents of the building where the car is parked. However, some services do not operate in a way that allows this restriction. We suggest that the reduction should nevertheless be allowed, even if the car is not reserved for the exclusive use of residents.

\textsuperscript{116} Does the City have current standards for dimensions of such spaces? If not, we will provide based on what is common in other communities.
K. Commercial Parking Facilities
A public parking facility (either surface lot or structured garage) open for use by the public and located within 800 feet of the subject property may be counted for ten percent of the total amount of required off-street parking required by Table 4-6.

L. Deferred Parking

**COMMENTARY**
This provision can be particularly helpful in avoiding over-provision of parking for uses with characteristics that make determining a single parking ratio difficult, e.g., uses that occupy large buildings or site area, but have few employees. It is proposed here as being permitted for any use; however, it could also be limited to apply only for certain agricultural uses, transportation and utility uses, and industrial uses. If you wish to pursue that, the Public Draft can reflect those limitations.

The Planning and Development Services Department may approve a request to defer the construction of up to 25 percent of the required number of parking spaces specified in Table 4-6, if the request complies with the following standards:

1. **Reserve Parking Plan**
   The request is accompanied by a reserve parking plan identifying:
   a. The amount of off-street parking being deferred; and
   b. The area of the site that is to be reserved for future parking, if needed.

2. **Parking Demand Study**
   No later than 12 months after the initial certificate of occupancy is issued for the proposed development, the applicant shall submit a parking demand study to the Planning and Development Services Department that demonstrates the actual parking demand for the development and the adequacy of existing parking spaces.
   a. If the study indicates that the existing parking is adequate, then the construction of the remaining number of parking spaces shall not be required.
   b. If the study indicates additional parking is required, it shall be provided consistent with the reserve parking plan and the standards of this section within six months.
   c. An applicant may request one six-month extension on the submission of a parking demand study. Failure to submit a parking demand study shall result in the revocation of the deferred parking request.

3. **Limitations on Reserve Areas**
   Areas reserved for future parking shall be brought to the finished grade and shall not be used for buildings, storage, or loading. If the area can meet all applicable requirements of this LDO< the reserve area may allow temporary uses, such as itinerant vendors, food trucks, or seasonal sales.

4. **Landscape Required**
   If the Planning and Development Services Department determines that a reserved parking area will not be needed for parking purposes, the area shall be landscaped in compliance with all relevant standards of this Code, until the area is used for further development on the site.

M. Change of Use
The Planning and Development Services Department may approve a request to allow a reduction in required parking when the site of a proposed change of use has fewer than the required number of vehicle spaces, and the site for the proposed new use cannot accommodate the addition of the required spaces.

1. **Existing Spaces**
   The number of existing parking spaces must be within 25 percent of the number required by the new use.
2. **Parking Demand Study**

If the new use requires greater than a 25 percent increase in off-street parking, the applicant may submit a parking demand study as described in §4.5.5A, demonstrating that the proposed new use or combination of uses generates a lesser demand for parking than the requirement specified in Table 4-6.

### N. Valet Parking

#### COMMENTARY

The current valet parking regulations in Chapter 144 are more detailed than we typically see, extending beyond zoning issues, into details regarding operation of a valet business (dashboard ticket, customer receipt). Additionally, there are numerous rules that would be challenging to enforce (no holding for more than 5 minutes, cones only one hour before operation begins).

This draft proposes alternate standards that are more typical of the level of regulation in many communities. It covers the basics, which are: how many spaces, ensuring pick-up and drop-off areas do not impede pedestrian or other vehicular circulation, and how an agreement is processed and enforced.

- As is true for all application types, we recommend that specifics of what the parking plan must show to be approved be kept outside the code. Regardless of location, at a minimum the plan should include information on how many spaces are valet-restricted, if there are any time-limit restrictions on the use of the spaces, the layout and configuration of the spaces, and whether the spaces are on-site or off-site from the use(s) they serve.

- This example proposes reliance on a deed restriction to ensure on-going compliance, if that seems too binding or complicated to monitor over time, that provision could be replaced with a permit system, per current requirements. In that case, references to an “agreement” would revert to language about an approved parking plan and permit.

- A requirement to occasionally renew the permit could provide a good opportunity for periodic review of the valet operation, to ensure any complaints or problems with the way it is being operated are addressed prior to permit renewal.

The proposed standards are followed by the current requirements, to allow for comparison. The current standards have been copy edited, but the content has otherwise been carried forward without significant changes.

Valet parking may be used to meet a portion of the minimum number of off-street parking spaces required by Table 4-6. Valet parking shall be subject to the following standards:

1. **Number of Valet Spaces Allowed**

   Valet parking may be used to provide the following quantity of required spaces:

   a. Restaurants: up to 50 percent;
   b. Hotels: up to 60 percent; and
   c. Any other non-residential use: up to 35 percent.

2. **Drop-Off and Pick-Up Areas**

   A business using valet parking shall provide a designated drop-off and pick-up area. The drop-off and pick-up area may be located adjacent to the building being served, but may not be located in a public right-of-way, fire lane, or other location where its use would impede vehicular and/or pedestrian circulation, cause queuing in a public street, or impede an internal drive aisle serving the development. Drop-off and pick-up areas shall not be permitted to use sidewalks for any stationing of vehicles, even temporarily.

---

117 144-5.2-1(j).
3. **Valet Parking Agreement**
   a. Valet parking may be established and managed only in accordance with a valet parking agreement.
   b. The agreement shall be submitted to the Planning and Development Services Department for review and consideration of approval before being executed.
   c. An attested copy of an approved agreement shall be recorded with the County Clerk before issuance of a building permit for any use to be served by the valet parking.
   d. The agreement shall be considered a restriction that runs with the land, and shall be binding upon the heirs, successors, and assigns of the landowner.
   e. The agreement may be voided by any development or redevelopment that provides 100 percent of the on-site parking required by Table 4-6.
   f. No use serviced by valet parking may continue to operate if the valet parking service becomes unavailable for more than ten consecutive business days, unless alternate off-street parking space to serve the use are provided in accordance with the requirements of Table 4-6.
   g. A violation of the agreement shall constitute a violation of this LDO, and subject to penalty and enforcement as described in §X.X, [General Provisions].

### 4.5.6 Design of Off-Street Parking Areas

#### A. Minimum Parking Lot Layout Dimensions

Off-street parking facilities shall be designed to meet the following minimum dimensions and specifications.

<table>
<thead>
<tr>
<th>Parking Angle (&lt;°)</th>
<th>Aisle Width</th>
<th>Parking Space Length (min. ft.)</th>
<th>Parking Space Width (min. ft.)</th>
<th>Link to Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°</td>
<td>24 / 24</td>
<td>18</td>
<td>9</td>
<td>Figure 4.5.6-1: 90-Degree Angle Parking</td>
</tr>
<tr>
<td>60°</td>
<td>17.6 / 20</td>
<td>20</td>
<td>9</td>
<td>Figure 4.5.6-2: 60-Degree Angle Parking</td>
</tr>
<tr>
<td>45°</td>
<td>13.6 / 20</td>
<td>19</td>
<td>9</td>
<td>Figure 4.5.6-3</td>
</tr>
<tr>
<td>30°</td>
<td>12.8 / 20</td>
<td>15.11</td>
<td>9</td>
<td>Figure 4.5.6-4: 30-Degree Angle Parking</td>
</tr>
<tr>
<td>0° (parallel)</td>
<td>10 / 20</td>
<td>22</td>
<td>9</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**COMMENTARY**

The illustrations below are still in the process of being updated to add a dimension for the length of the driveway before intersecting with parking stalls (throat depth).

---

120 Section 144.5-1(f).

---

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT
1. **Ninety-Degree Angle Parking**
   Each parking space shall not be less than nine feet in width and 18 feet in length. Maneuvering space shall not be less than 24 feet for one-way or two-way traffic operation.

   ![Figure 4.5.6-1: 90-Degree Angle Parking](image)

2. **Sixty-Degree Angle Parking**
   Each parking space shall not be less than nine feet in width perpendicular to the parking angle and not less than 20 feet in length when measured at right angles to the building or parking line. Maneuvering space shall not be less than 17 feet six inches for one-way traffic operation, and 20 feet for two-way traffic operation perpendicular to the building or parking line.

   ![Figure 4.5.6-2: 60-Degree Angle Parking](image)
3. **Forty-Five-Degree Angle Parking**

Each parking space shall not be less than nine feet in width perpendicular to the parking angle and not less than 19 feet in length when measured at right angles to the building or parking line. Maneuvering space shall not be less than 13 feet six inches for one-way traffic operation and 20 feet for two-way traffic operation perpendicular to the building or parking line.\textsuperscript{121}

![Figure 4.5.6-3: 45-Degree Angle Parking](image)

4. **Thirty-Degree Angle Parking**

Each parking space shall not be less than nine feet in width perpendicular to the parking angle and not less than 15 feet 11 inches in length when measured at right angles to the building or parking line. Maneuvering space shall not be less than 12 feet eight inches for one-way traffic operation and 20 feet for two-way traffic operation perpendicular to the building or parking line.

![Figure 4.5.6-4: 30-Degree Angle Parking](image)

\textsuperscript{121} Original text in 144.5.1.1(f)(5) said 13 feet 5 inches. Here it has been updated to match the Figure, with 13 feet 6 inches for one-way aisle.
5. Parallel Parking
Each parking space shall not be less than nine feet in width perpendicular to the curb or parking line and not less than 22 feet in length measured parallel with the curb or parking line. Maneuvering space shall not be less than ten feet for one-way traffic operation and 20 feet for two-way traffic operation parallel to the parking line.

B. Parking Area Design
These standards shall apply to all required parking areas except those for one- to four-family dwellings.

1. Location
   a. The off-street parking required by this section shall be on the same lot or parcel of land as the structures the parking is intended to serve, unless a shared or off-site parking application is approved, in accordance with §4.5.5C.\textsuperscript{122} Required off-street parking shall not be located within a dedicated state right-of-way, unless approved by the Texas Department of Transportation.
   b. To the maximum extent possible, parking area location shall be established according to the order of priority described below, with locations listed in priority order from highest to lowest. When adjacent to residential development, additional standards as described in §4.4.3E.8, 
      
      Off-Street Parking and Loading Areas apply.
      
      i. Behind the building;
      
      ii. Beside the building; or
      
      iii. Between the building and the street.
   c. In mixed-use and neighborhood commercial zoning districts the area, and in the area covered by the Downtown Parking exemption as described in §4.5.2E.2, parking for new development shall not be located between the building and the street.\textsuperscript{123}

2. Interior Configuration\textsuperscript{124}
   a. No parking space shall be located so that another vehicle on the site has to be moved to access that space, except in conjunction with single-family residences, or approved valet parking, as described in §4.5.5N.
   b. Except for one- to four-family dwellings exiting onto local or private streets, the parking space or lot shall be designed so that exiting vehicles are not required to back out across any sidewalk and/or onto a street.
   c. Parking areas shall be designed so that car bumpers do not overhang public sidewalks. Unless otherwise specified in this code, bumpers may overhang internal walkways; however, the minimum clearance required by federal ADA standards shall be maintained.
   d. All off-street parking facilities shall have access to a street, alley, or other public right-of-way through a system of drive aisles and/or easements.
   e. Large parking lots with 500 or more parking spaces shall be divided into smaller subareas that each contain 250 or fewer parking spaces. Buildings, pedestrian walkways, private drives, or landscape areas shall be used to delineate the subareas.
   f. Clear visibility for all interior drive aisles shall be maintained to avoid pedestrian/vehicular conflicts. Speed bumps and humps are discouraged; however, the parking design should be configured to reduce speed, for example through installation of staggered landscape islands.
   g. Parking aisle length shall not exceed 400 feet without a break for circulation.

\textsuperscript{122} 444-5.2-3.18(2), with edits.
\textsuperscript{123} This prohibition may be expanded in Installment 4, which will include standards for historic districts.
\textsuperscript{124} New.
**Article 4: Development Standards**

### 4.5 Off-Street Parking

#### 4.5.6 Design of Off-Street Parking Areas

**h.** Dead-end parking areas exceeding 20 spaces (10 per side of a drive aisle) shall provide a turnaround at least the size of a standard parking space. The turnaround area shall be striped and signed “No Parking.”

**i.** Pedestrian walkways through parking areas and to buildings are required as described in §X.X [Pedestrian Connectivity, Access and Connectivity].

#### 3. Surfacing

**a. Generally**

**i.** Except as specified in provision b.iii below, all parking, drive aisle, aprons, and other areas subject to vehicular access or used for the parking, maneuvering, or storing of motor vehicles shall be surfaced with concrete, asphaltic concrete, or asphalt; unless pervious or semi-pervious surfacing is approved as described below.

**ii.** The use of coal tar sealant or any sealing products containing coal tar, coal tar pitch, or coal tar pitch volatiles, is not allowed. The use of asphalt-based sealant products is permitted.

**b. Pervious or Semi-Pervious Surfacing**

**i.** The use of pervious or semi-pervious parking lot surfacing material, including but not limited to pervious asphalt and concrete, open joint pavers, and reinforced grass/gravel/shell grids may be approved for off-street parking and loading areas, provided the applicant provides a maintenance plan and commits to an ongoing maintenance program (e.g. sweeping, annual vacuuming, repair of surface damage).

**ii.** Any pervious or semi-pervious surfacing used for aisles within or driveways to parking and loading areas shall be certified as capable of accommodating anticipated traffic loading stresses and maintenance impacts.

**iii.** Grass may be used as a parking lot surface only for overflow parking in accordance with a development approval or approval of a special event permit.

#### 4. Stormwater Management

See applicable standards in Stormwater Management manual under separate cover.

#### 5. Spaces Restricted for Certain Vehicles

If provided, restricted spaces (i.e., those dedicated to compact cars, EV charging spaces, or any high-occupancy vehicle spaces designated for carpools or vanpools) shall be signed to indicate what type of vehicle the space is reserved for. Mobility-impaired accessible parking shall be located in closest proximity to building entrances, but other restricted spaces may be prioritized next in proximity.
6. **Parking Space Overhang**
The length of a parking space may include a two-foot overhang of a curb or wheel stop, so long as the overhang is not over a walkway.

Figure 4.5.6-6: Parking Space Overhang

7. **Parking Lot Landscaping**
All parking lots, regardless of configuration, shall meet parking lot landscaping requirements, as described §4.2.6.

8. **Parking Lot Lighting**
All development shall comply with §4.8, Exterior Lighting.

9. **Compliance Required**
When off-street parking facilities are provided in excess of the minimum amounts herein specified, or when off-street parking facilities are provided but not required by this section, the off-street parking facilities shall comply with the minimum requirements for parking and maneuvering space herein specified.

C. **Maintenance**
Off-street parking facilities shall be constructed, maintained, and operated in compliance with the following specifications:

1. Parking area paving surface and associated landscaped areas shall be maintained in good condition, and shall be free of weeds, dust, trash, and debris.

2. Construction and location of entrances, exits, aprons, stops, etc., shall be according to standard specifications found in Chapter 114, and shall be located so as to minimize traffic congestion.

3. Except for one- to four-family residential uses, and display areas for vehicle sales and rental uses, all off-street parking spaces shall be striped or otherwise marked to clearly designate

---

106 144-5.1-3(d), with edits.
Article 4: Development Standards
4.5 Off-Street Parking
4.5.7 Accessible Parking

4.5.7 Accessible Parking

A. Mobility-Impaired Accessible Spaces

1. Required Spaces
In order to provide accessibility to facilities for people with mobility impairments, accessible parking shall be provided as shown in Table 4-10 except for residential buildings with fewer than 3 dwelling units and for the following uses which shall provide the specified percentage of accessible spaces of the total parking spaces provided:

a. Medical facilities specializing in treatment of people with mobility impairments: 20%.
b. Outpatient medical care facilities: 10%.
c. Apartment buildings containing accessible or adaptable dwelling units: one space for each accessible/adaptable unit. Where parking is provided within or beneath a building, accessible spaces shall also be provided within or beneath the building.

Table 4-10: Schedule of Required Accessible Parking

<table>
<thead>
<tr>
<th>Total Parking Spaces Required</th>
<th>Minimum Number of Accessible Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 25</td>
<td>1</td>
</tr>
<tr>
<td>26 to 50</td>
<td>2</td>
</tr>
<tr>
<td>51 to 75</td>
<td>3</td>
</tr>
<tr>
<td>76 to 100</td>
<td>4</td>
</tr>
<tr>
<td>101 to 150</td>
<td>5</td>
</tr>
<tr>
<td>151 to 200</td>
<td>6</td>
</tr>
<tr>
<td>201 to 300</td>
<td>7</td>
</tr>
<tr>
<td>301 to 400</td>
<td>8</td>
</tr>
<tr>
<td>401 to 500</td>
<td>9</td>
</tr>
<tr>
<td>501 to 1,000</td>
<td>2% of total</td>
</tr>
<tr>
<td>More than 1,000</td>
<td>20 PLUS one for each 100 over 1,000</td>
</tr>
</tbody>
</table>

2. Van Spaces
One van-accessible space with a minimum vertical clearance of 98 inches shall be provided for every six accessible parking spaces, or fraction thereof.

3. Accessible Space Dimensions and Location

a. Van accessible spaces shall have a minimum width of 11 feet. Standard accessible spaces shall have a minimum width of eight feet.
b. The minimum vertical clearance alongside accessible spaces is 98 inches, and this clearance must also extend along one accessible access route.

---

127 New. Though these spaces are required whether they are included in a zoning ordinance or not, it is a measure of user-friendliness to include them, so all applicable parking-related requirements are accessible in one location.
**Article 4: Development Standards**

4.5 Off-Street Parking

4.5.8 Parking and Storage of Oversized Vehicles

---

c. Access aisles shall be parallel to and level with the accessible space(s) with no barriers and impediments to movement between the access aisle and the access route to the building. Figure 4.5.7-1 below illustrates some of the applicable requirements.

![Accessible Parking Dimensions](image)

**Figure 4.5.7-1: Accessible Parking Dimensions**

- Accessible parking spaces shall be located on the shortest possible access route from the parking space to an accessible building entrance. In facilities with multiple accessible building entrances with adjacent parking, accessible spaces shall be generally distributed to be located near the accessible entrances. In commercial parking facilities that do not serve a particular building, accessible parking shall be located on the shortest possible route to an accessible pedestrian entrance of the parking facility.

- The access route shall be a minimum of three feet wide, and no car bumper overhang shall be permitted to encroach upon this width.

- Accessible spaces, van accessible spaces, access aisles, access routes, and passenger loading zones shall be paved, and posted with appropriate signage indicating their restriction for use only by mobility-impaired individuals.

---

4.5.8 Parking and Storage of Oversized Vehicles\(^{128}\)

A. Oversized vehicles shall not be parked upon any private premises, private street, private alley, private parkway, vacant or undeveloped lot/land, or public place within a residential district.

B. This section shall not prevent the temporary parking or standing of oversized vehicles in residential zoning districts for the purpose of expeditiously loading and unloading of passengers, freight, merchandise, or property.

C. This section shall not apply to street construction, maintenance and repair equipment trucks, rollers and implements; or to trucks, equipment, trailers, and vehicles used by any utility company, the City or its contractors engaged in repairing or extending utilities, providing city services, or engaged in an active permitted construction project.

---

\(^{128}\) 14.4.5.1-4, with edits.
4.5.9 Off-Street Loading\(^{130}\)

To avoid impeding the free flow of traffic on adjacent public streets, non-residential uses that receive delivery of material or merchandise shall provide adequate off-street space for standing, loading, and unloading.

A. Number of Spaces Required

1. The number of spaces required shall be based on the gross square footage of the building, as shown in Table 4-11.

<table>
<thead>
<tr>
<th>Gross Floor Area</th>
<th>Number of Loading Spaces</th>
<th>Size of Each Loading Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30,000 sq ft</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>More than 30,000 sq ft</td>
<td>1 space + 1 for every additional 30,000 sq ft beyond the first 30,000 sq ft</td>
<td>10 ft wide x 25 ft long x 14 ft vertical clearance</td>
</tr>
</tbody>
</table>

2. More than the minimum number of required spaces may be provided, but all spaces shall meet the dimensional and location requirements described in this section.

B. Location and Design Standards

1. Location
   
   a. Required off-street loading spaces shall not be permitted in any fire lane, front setback area, or in any required side street setback area.
   
   b. Off-street loading spaces may occupy all or any part of a required rear setback area where visibility from public streets and windows of neighboring buildings will be minimized.
   
   c. Customer parking shall be separated from loading areas, and pedestrian walkways shall not cross or traverse these areas.
   
   d. Loading spaces and access to loading spaces shall not block or restrict the access of surrounding uses.
   
   e. Public rights-of-way shall not be used for loading and unloading purposes.

2. Design
   
   a. Loading spaces shall be designed to allow loading vehicle access onto a street, but shall not require the loading vehicles to reverse into or out of a public right-of-way.
   
   b. At a minimum, the following areas for access and maneuvering shall be provided:
      
      i. An access aisle with a minimum width of 18 feet shall be provided for one way aisles and a minimum of 24 feet for two-way aisles.
      
      ii. The minimum turning radius for truck traffic areas shall be 40 feet.
      
      iii. The loading berth shall be located adjacent, or as close as possible, to the main structure.
   
   c. Loading areas with roll-up, overhead doors, and areas intended for large semi-truck parking shall be located in the rear of the complex in a service yard with adequate screening provided to buffer their view from public streets.
   
   d. A loading area adjacent to a residential use shall additionally be subject to the standards described in §4.4.3E.8.

\(^{130}\) New.
4.5.10 Bicycle Parking

Bicycle parking is required pursuant to this section to encourage the use of bicycles by providing secure and convenient places to park bicycles.

A. Minimum Requirements

1. Except for one- to four family residential development, all new development shall provide on-site parking spaces for bicycles in accordance with Table 4-12.

2. When the calculated number of spaces results in a number containing a fraction, the number is rounded up to the nearest whole number. When a site or building contains a combination of uses, the bicycle parking requirement is based on the sum of the individual uses.

Table 4-12: Minimum Required Bicycle Parking Spaces

<table>
<thead>
<tr>
<th>Use</th>
<th>Minimum Bicycle Parking Requirement</th>
</tr>
</thead>
</table>
| Residential (multi-family, group living) | 5-10 units: minimum 4 spaces  
                             | Over 10 units: 1 space for every 4 units                                  |
| Commercial / Mixed-Use   | Minimum 2, or 1 per 5,000 sq ft, whichever is greater                     |
| Civic / Institutional    | Minimum 2, or 1 per 10,000 sq ft, whichever is greater                    |
| Industrial               | Minimum 2, or 1 per 20,000 sq ft, whichever is greater                    |

B. Facility Design

1. Bicycle spaces may be provided as short-term outdoor spaces, or long-term indoor or secured spaces.

2. Bicycle parking facilities shall be racks securely anchored on a hard surface or enclosed lockers installed to prevent removal except by authorized personnel.

3. A bicycle rack must allow a bicycle to be securely held upright with its frame supported in at least two places and allow the frame and one wheel to be locked with a U-lock, or other high-security lock. Figure 4.6.10-23 shows three examples of acceptable bicycle rack design, but other designs that meet the standards described in this provision are also permitted.

Figure 4.5.10-1: Short-Term Bicycle Rack Design Examples

---

131 New.
C. Location

1. Multi-family buildings with 50 or more dwelling units shall provide at least 20 percent of the required bicycle parking spaces in long-term storage lockers or other secured indoor area.

2. Non-residential uses may be approved to provide the required bicycle spaces in the right-of-way, along a sidewalk adjacent to the building's frontage, in compliance with the City's right-of-way license agreement process as administered by the Transportation and Capital Improvements Department. Any requests to provide racks in the right-of-way shall not interfere with traffic and pedestrian movement.

3. All outdoor bicycle parking areas shall be located in publicly accessible, highly visible, well-lighted areas.

4. At least 50 percent of the required bicycle spaces must be within 50 feet of the main entrance to the building. If a site has more than one publicly accessible entrance, bicycle parking location shall be distributed among entrances.

D. Request for Reduction

The Board of Adjustment may, by special exception, approve a request to reduce the number of bicycle spaces required by this section when the applicant has demonstrated to the Board's satisfaction that fewer spaces than those required will adequately serve the use.
4.6 Site and Building Design

COMMENTARY
The general focus for this section is to improve the quality of site and building design through more detailed standards, while also offering flexibility in meeting the requirements through menus of options.

Building materials. Content from 144-5.22-4, Exterior Building Materials, is not carried forward on account of HB2439, which prohibits regulation of building materials except in narrowly defined circumstances (e.g., historic districts).

Trash receptacle: Content has been updated with new standards that no longer reference what materials must be used for construction of the container.

Standards for Industrial Buildings: This draft proposes that industrial structures should not be exempt from design standards. However, if staff disagree, the requirements could be adjusted to be lesser for industrial buildings (particularly in industrial districts or over a certain size), or it could revert to no requirements. If that is the direction for the Public Draft, we will restore the requirement for enhanced landscaping for metal buildings, which has not been carried forward here.

Common Open Space: Chapter 144 has limited open space requirements. Though mentioned in 144-3.5, Planned Development Districts, open space is not required for multi-family development or mixed-use development. The Districts and Uses installment included Common Open Space requirements for multi-family, mixed-use, attached single-family dwellings (townhouses), and cottage home developments. This draft explains what forms of common open space can fulfill those requirements. (Because subdivisions are required to dedicate parkland, we do not suggest that common open space also be required; however, in many communities, it is not unusual to do so. If staff would like to see that requirement added, it can be included in the public draft.)

Appeal Procedures (144-5.22-10) was not carried forward. Appeal procedures should be standard across all code sections. As such, there is no need to repeat the content in individual sections. Appeals will be covered in the Administration and Procedures installment, and will apply to any instance where an appeal may be filed.

4.6.1 Purpose
This section is intended to promote high-quality development and construction; protect property values; encourage visual variety and architectural compatibility; and promote the unique character of both residential and commercial neighborhoods in New Braunfels. Specifically, these standards:

A. Promote new residential developments that are distinctive, have character, fit within and connect to established neighborhoods;
B. Provide variety and visual interest in the exterior design of buildings;
C. Enhance the streetscape and diminish the prominence of parking areas and garages along street frontage; and
D. Improve the compatibility of infill projects, particularly attached and multi-family residential development, with the character of surrounding neighborhoods.

4.6.2 Applicability

A. General
Unless exempted in subsection B below, this §4.6 shall apply to the following:

1. Development of any new structure; and
2. An addition or renovation to an existing structure where the total gross floor area of the proposed addition is 50 percent or more than that of the total gross floor area of the existing structure before addition or renovation. In cases where modifications are subject to these standards, only the modification shall be subject to compliance with this Section.
4.6.3 General Standards

A. Common Open Space

COMMENTARY
This is a new section intended for the city’s consideration, based on discussions with staff and in the Assessment Report. In contrast to public park land, common open space is not required to be publicly dedicated and is intended primarily for the users and occupants of individual developments (though such areas may be open to the public). For this first draft, we have included the standards within the overall Site/Building Design section, but an alternative location might be to have the section stand on its own as a new Section 4.8.

1. Purpose
The purpose of this section is to ensure that residential development of five or more units includes or contributes to the provision of common open space for the use and enjoyment of the development’s occupants and users, while minimizing urban sprawl.

2. Applicability
a. This section shall apply to:
   i. Multi-family development of five or more units;
   ii. Mixed-use developments with five or more residential units;
   iii. New manufactured home parks of five or more units;
   iv. Planned Development (PD) district rezonings with five or more residential units; and
   v. Commercial development.

b. This section shall not apply to:
   i. New subdivisions of one- to four-family dwelling units;
   ii. Townhomes of five or more attached units;
   iii. Cottage home developments; and
   iv. Industrial development.

3. Areas Counted as Common Open Space
The following features and areas shall be credited towards the common open space requirements of this section:

---

134 Use-specific standards specify the extent of open space for multi-family and mixed-use development. What extent of open space should be required for iii through v?
### Table 4-13: Allowable Common Open Space Areas

<table>
<thead>
<tr>
<th>Area Counted as Common Open Space</th>
<th>Description</th>
<th>Design and Maintenance Requirements</th>
</tr>
</thead>
</table>
| **Natural Resource and Hazard Areas** | Natural water features (including lakes, ponds, rivers, streams, rivers, wetlands, drainageways), riparian buffers, flood hazard areas, existing tree canopy and specimen trees, steep slopes, and wildlife habitat protection areas | • Preservation of any existing natural resource and hazard areas shall have highest priority for locating open space.  
• Maintenance is limited to the minimum removal and avoidance of hazards, nuisances, or unhealthy conditions.                                                                                                                                                                                   |
| **Active Recreation Areas**       | Land occupied by areas and facilities used for active recreational purposes, such as pools, playgrounds, tennis courts, jogging trails, ball fields, and clubhouses                                                                 | • Land shall be compact and contiguous unless used to link or continue an existing or planned open space resource.  
• Areas shall have at least one direct access to a building or to a street, bikeway, or walkway accessible to the public or the development's occupants and users.                                                                                                                                                                               |
| **Passive Recreation Areas**      | Land occupied by areas and facilities used for passive recreation, including but not limited to walking and/or biking paths, picnic areas, preservation of natural areas and scenic resources, environmental education areas, and wildlife habitat protection | • To the extent possible, access to natural areas and walking or biking paths should be public. But features such as picnic areas may be restricted for use only to residents of the development.                                                                                                                                                                                |
| **Stormwater Management Devices** | One hundred percent of land area occupied by stormwater management devices (including retention and detention ponds and other bioretention devices, and drainage easements), when such features are treated as an open space site amenity; or 25 percent of land area occupied by stormwater management devices that are not treated as amenity areas | • To qualify for 100 percent credit, stormwater management devices shall support active or passive recreation uses by providing access and amenities including pedestrian elements such as walking paths and benches.  
• Stormwater management devices that use concrete basins without landscaping and amenities, or that are surrounded by fencing, shall only be eligible for 25 percent credit.                                                                                                                                 |
Table 4-13: Allowable Common Open Space Areas

<table>
<thead>
<tr>
<th>Area Counted as Common Open Space</th>
<th>Description</th>
<th>Design and Maintenance Requirements</th>
</tr>
</thead>
</table>
| Formal Plantings and Gardens     | Formally planned and regularly maintained open areas that provide passive recreation opportunities, including arranged plantings, gardens, gazebos, and similar structures, as well as roof gardens | • Formal plantings and gardens shall have at least one direct access to a building, or to street, bikeway, or walkway accessible to the public or the development's occupants and users.  
• Such features shall be oriented to surrounding development. |
| Squares, Plazas, Courtyards, Roof Decks, and Outdoor Dining Areas | Squares, plazas, courtyards, roof decks, and outdoor dining areas that provide gathering places or active and passive recreational opportunities | • Squares, forecourts, plazas, courtyards, and outdoor dining areas shall be at least 200 square feet, but no more than one acre, in area.  
• Such features shall have at least one direct access to a principal building, or to a street, bikeway, or walkway accessible to the public or the development's occupants and users.  
• Surrounding principal buildings shall be oriented toward the square, forecourt, plaza, or outdoor dining area where possible. |
| Required Buffer and Landscape Areas | All areas occupied by required buffers and landscaping, except interior parking lot landscaping and planting strips between the sidewalk and street. Buffers required within front setbacks or along public rights-of-way to screen parking shall count as common open space | • See landscaping standards in §4.2, Landscaping. |

4. **Areas Not Credited**
   Lands within the following areas shall not be counted towards required common open space:
   a. Public or private streets or rights of way;
   b. Open parking areas and driveways for dwellings; and
   c. Land covered by structures not intended solely for recreational uses.

5. **Design**
   Land set aside for common open space shall meet the following design criteria, as relevant:
   a. The lands shall be compact and contiguous unless the land shall be used as a continuation of an existing trail, or specific topographic features require a different configuration. An example of such topographic features would be the provision of a trail or private open area along a riparian corridor.
   b. Where open space areas, trails, parks, or other public spaces exist adjacent to the development site, the common open space shall, to the maximum extent feasible, be located to adjoin, extend, and enlarge the existing trail, park, or other open area land.
c. In larger projects, open space should flow through the site linking recreation facilities to dwellings with uninterrupted green belts.

6. Location
   a. Open space areas shall be located to be easily accessible and useable by residents throughout the development, unless the lands are sensitive natural resources and access should be restricted.
   b. Where possible, the open space should be designed as a single, continuous space, rather than multiple smaller spaces.

7. Ownership and Maintenance
   a. All common open space areas shall be owned jointly or in common by the owners of the development, a homeowners’ or property owners’ association, or by an organization chosen by the property owners.
   b. The property owner, homeowners’ or property owners’ association, or other organization chosen by the property owners shall be responsible for the on-going maintenance and upkeep of the common open space, which shall be kept in workable order and a clean and usable condition.
   c. Failure to maintain common open space is a violation of this LDO, subject to punishments and remedies as described in §X.X [Violations and Penalties].

B. Utility and Mechanical Equipment Screening135
   1. Ground- or Building-Mounted Equipment
      a. Ground-mounted mechanical equipment visible from any public street shall be screened one foot past the height of the equipment.
      b. Screening fences, walls, or opaque landscaping may be used for screening. When landscaping is used, it must provide an opaque screen for the mechanical equipment, of sufficient height as described in (a) above.
      c. Building-mounted utility boxes or meters visible from any public street shall be screened using architectural features, or opaque landscaping.
      d. Use of architectural features for screening shall be integrated into the design of the building and constructed of materials similar to or compatible with the building.

   2. Roof-Mounted Equipment
      a. Roof-mounted equipment visible from any public street or adjacent property within 100 feet of the building shall be screened to at least the height of the equipment.
      b. Parapets may be used to conceal rooftop equipment on flat roofs.136
      c. If a sight line drawing provided with the site plan shows that no rooftop equipment will be visible from a public street or adjacent property within 100 feet, then a parapet wall or other screening shall not be required.

---

135 Most content in this section is new, except as otherwise indicated in footnotes.
136 Section 4.6.3 General Standards.

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT
Article 4: Development Standards
4.6 Site and Building Design
4.6.3 General Standards

Figure 4.6.3-1: Sight Line Example

d. Where overhanging eaves are used, overhangs shall extend no more than 18 inches beyond the supporting walls.

C. Trash and Dumpster Screening\(^ {137}\)

All development except one- to four-family dwellings shall provide interior or exterior areas for dumpsters, trash cans, or any other refuse and recycling containers, and refuse collection areas that meet the standard of the local trash service provider. When an exterior area is provided, trash receptacles shall be stored within an enclosure that meets the following standards:

1. Walls surrounding the trash receptacle shall be at least one foot higher than the height of the trash receptacle (See Figure 4.6.3-2);
2. Walls shall be opaque and durable, and provide an opening with a screened gate;
3. Enclosure shall have a concrete floor extending five feet beyond the gates;
4. Screening gates shall not open into any drive aisle or street in a manner that would obstruct the movement of vehicles;
5. Enclosure may not be located between the building and the street, unless there is no other location option available;
6. Enclosure may be located within the building’s rear setback;

Figure 4.6.3-2: Trash Enclosure

\(^ {137}\) New. This content is intended to replace that contained in Section 144-5.3-1(b)(7)(ii).
7. At least one enclosure shall be located within 200 feet of each multi-family residential building in a development; and
8. Ventilation shall be provided if the enclosure is covered.
9. Residential adjacency standards as described in §4.4.3E.7 may also apply.

D. Consolidated Mailbox Units
These standards shall apply when a development has a centralized, consolidated mailbox for all residents or tenants of a development.

1. A pull-out area along the adjacent public or private street, or drive aisle shall be provided. The pull-out shall be of sufficient length and width to accommodate one vehicle, without the vehicle infringing on the travel lane.
2. The mailbox unit shall be served by a sidewalk that connects to the building(s) of the development, and provides a minimum width a five feet at all points along the walkway.
3. If the adjacent street has a bicycle lane, it shall continue along roadway adjacent to the pull-out, but curb ramps shall be provided at both ends of the pull-out so cyclists can access the mailbox from the sidewalk.

4.6.4 Additional Standards for Single-Family Attached and Detached Residential

A. Applicability
These design standards apply to all one- to four-family residential dwellings, including attached townhome dwellings. Unless otherwise indicated, manufactured homes on individual lots are subject to these standards.

B. Architectural Features
Each dwelling shall incorporate at least two of the following architectural features on any street-facing façade (See Figure 4.6.4-1):

1. Covered entry;
2. Recessed windows with overhangs or functional shutters to shade glass;
3. Porch or balcony;
4. Patio or deck;
5. Walls off-set a minimum 3 feet;
6. Variable roof line;
7. Varied building materials;
8. Dormers on sloped roofs; or
9. Other unique or varied architectural features that meet the intent of this Section, as approved by the Planning and Development Services Department.

Figure 4.6.4-1: Examples of Design Features for Attached and Detached Single-Family

138 New.
C. **Building Additions**

Building additions shall be architecturally compatible with or complementary to the existing residence, including exterior materials, colors, and architectural features.

D. **Common Open Space**

1. Development of attached single family dwellings (townhouses) with five or more attached units shall provide a minimum of ten percent of the total site area as common open space that meets the standards of §4.6.3A, *Common Open Space*.
2. This requirement may be reduced by the provision of individual yards, balconies, decks, or patios, or any combination thereof, for the exclusive use of individual units, provided to each of the units in the development, which each may count for up to 250 square feet of open space credited against the common open space requirement.

E. **Driveways and Garage Setback**

Where a driveway is located in front of a garage, the garage shall be set back a minimum of 20 feet from the right-of-way, or the distance of driveway to the garage shall be at least 20 feet long as measured from the property line, to provide enough space for a vehicle to park without overhanging into the right-of-way or blocking the sidewalk, if the garage door is closed. See Figure 4.6.4-2.

![Figure 4.6.4-2: Garage Setback from Street](image)

F. **Variation of Garage Location**

1. Single-family detached housing projects greater than five acres shall provide a variety of garage styles, including but not limited to the following configurations:
   a. Side-loaded garage;
   b. Garage recessed behind the front façade, or recessed behind the front façade of a porch or courtyard wall;
   c. Garage recessed beneath a second-floor bay with a living unit cantilevered over the garage;
   d. Garage flush with the dwelling portion of the building; and
   e. Detached garages offset, not flush, with the primary structure.
2. Each acre of the development shall include at least three of the five variations, and no single variation may account for more than 33 percent of the options provided.

---

139 Section 444-5.1-1(h).
140 New.
3. Each garage variation shall comply with the 20-foot setback requirement as described in subsection E above.

4. [Reserved for review and approval explanation]

G. Side-Loaded Garages

Side-loaded garages shall provide windows or other architectural details that mimic the features of the living portion of the dwelling on the side of the garage facing the front street.

4.6.5 Additional Standards for Multi-Family Residential

**COMMENTARY**

Chapter 144 applies architectural requirements to the front of multi-family structures, or when they “are adjacent to or front a public roadway, public park or residential district.” This section proposes instead that four-sided architecture standards apply for multi-family development, regardless of adjacency. This change is proposed so that dwellings places meet higher quality design requirements than, for example, the Landa Street Dollar General, and also because higher quality multi-family structures can help to increase community acceptance of this type of housing.

A question for further discussion is whether affordable housing projects should be required to meet all of the standards below, or if some can be relaxed to help bring down costs on construction for such projects?

This draft proposes allowing private open space (balconies, patios, decks) to count towards minimizing the overall site requirement for common open space. Allowing this reduction – or allowing these amenities to count towards fulfilling the open space requirement – can be helpful in promoting acceptance of this new requirement. This section could also include other on-site amenities that could count towards the requirement, such as fitness centers, screening rooms, cowork spaces, game areas, grill pits, child play areas, dog grooming and/or walking areas, etc. If staff would like to see those options included as well, they can be incorporated into the public draft.

A. Applicability

1. New development of five or more units in one structure or on one parcel shall comply with the standards of this section.

2. Expansion of existing multi-family development up to and including 50 percent of existing floor area shall have the new construction comply with the standards of this section.

3. Expansion of existing multi-family development by more than 50 percent of existing floor area shall bring the entire structure into compliance with the requirements of this section.

4. Expansion is measured cumulatively, so that separate expansions that add up to a 50 percent or greater increase in floor area within a span of five years shall be required to bring the entire structure into compliance with the requirements of this section.

5. Proposals for affordable housing development may propose alternative design in lieu of provisions C through E and H below. Such proposals are subject to administrative approval if they meet the following standards:
   a. Include at least two of the Architectural Features described in provision E below.
   b. Provide ten percent of site area as Common Open Space, unless located within one quarter mile of an existing public park, in which case on-site Common Open Space is not required.

B. Four-Sided Architecture

Multi-family structures shall incorporate architectural features on all sides of a building. Blank walls void of architectural features are not allowed.

C. Horizontal Articulation Requirements

Façades greater than 50 feet in length shall incorporate wall plane projections or recesses extending at least 20 percent of the length of the façade, to a minimum depth or projection of two feet.
D. **Variable Roof Lines**
Multi-family buildings with roof lines longer than 50 feet shall include one vertical elevation change of at least two feet for every 50 feet of roofline, or portion thereof. Parapet walls should be interrupted by setbacks or varying heights to provide variety to the roof line. Use of cap treatments can provide detail and character.

E. **Architectural Features**
Each façade of a multi-family building shall be articulated through the incorporation of three or more of the following architectural features (See Figure 4.6.5-1):

1. Porch or balcony;
2. Patio or deck;
3. Covered entry;
4. Recessed windows, or windows with shade elements such as awnings, overhangs, or functional outdoor shutters;
5. Varied colors or building materials;
6. Window size and shape variation;
7. Vertical elements that demarcate building modules;
8. Walls off-set a minimum three feet; or
9. Other unique or varied architectural features that meet the intent of this Section, as approved by the Planning and Development Services Department.

F. **Pedestrian Entrances**
1. The main building entrance shall be oriented to face an adjacent public street, rather than a parking lot.
2. Buildings with multiple street frontages shall provide one building entrance along each street frontage.
3. Entrances shall be connected to a public sidewalk by a walkway not routed through a parking lot.
4. Street-facing entrances and entrances that face a surface parking lot shall incorporate at least two of the following features:
   a. A porch or landing;
   b. Double doors;
   c. A roofed structure such as a portico, awning, canopy, or marquee;
   d. Side-lights (glazed openings to the side of the door), and transom-lights (glazed opening above the door) at the entryways;
   e. Decorative lighting; or
   f. Enhanced landscaping.
5. Building entrances accessed from an enclosed garage or structured parking are not required to meet these standards.
6. Catwalks or long corridors fronting outdoor entrances to individual units are strongly discouraged.
G. Parking and Garages
1. Surface parking lots shall not be located between a multi-family building and a street frontage.
2. If a building fronts more than one public right-of-way, parking shall not be located between the building and the primary frontage on the public right-of-way. Parking may be located along the side of the building, adjacent to the secondary street frontage.
3. If the development contains more than one building, the parking lots shall be internalized in building groups to minimize their visibility from adjacent streets, or located to the side of or behind the primary building.
4. Detached garages and carports shall use compatible architectural styles or complementary colors to the primary building, incorporating similar forms, scale, materials, color, and details.
5. When underground parking, structured parking, or parking within, above, or enclosed beneath the building it serves is provided, a reduction of up to 15 percent of the minimum required parking spaces as described in Table 4-6: Minimum Required Off-Street Parking is allowed.

H. Common Open Space
1. Multi-family development of five or more units shall provide a minimum of 15 percent of the total site area as common open space that meets the standards of §4.6.3A, Common Open Space.
2. This requirement may be reduced to 10 percent of site area with the provision of individual balconies, decks, or patios, for the exclusive use of individual units, provided to a minimum of 60 percent of the units in a development. No such feature shall be less than 60 square feet.\(^{141}\)

### 4.6.6 Additional Standards for Mixed-Use Development

**COMMENTARY**
This section proposes detailed new standards for development in New Braunfels’ new mixed-use districts. Each subsection is preceded by commentary that explains why this feature or element is important in creating mixed-use development.

#### A. Streetscape Design

1. **Sidewalks**

**COMMENTARY**
Standards that create a well-designed, pedestrian-friendly streetscape are a core element of effective mixed-use site design. Sidewalk standards for the new mixed-use districts should supplement general sidewalk standards and require specific physical layout requirements focused on walkability.

Sidewalks shall consist of two zones: a clear zone and an amenity zone. The clear zone is intended to provide a clear path of travel for pedestrian movement and the amenity zone is intended for the placement of street trees and street furniture including seating, streetlights, waste receptacles, fire hydrants, traffic signs, bus shelters, bicycle racks, public utility equipment such as electric transformers and water meters, and similar elements in a manner that does not obstruct pedestrian access or motorist visibility. The following standards shall apply to these zones.

**Table 4-14: Sidewalk Zone Requirements by Zoning District**

<table>
<thead>
<tr>
<th>MXT - Traditional Neighborhood Development</th>
<th>MXC - Corridor Mixed-Use Development</th>
<th>MXR - Mixed-Use Regional</th>
</tr>
</thead>
</table>

\(^{141}\) This is where an allowance for other amenities could be included.
Clear Zone
The clear zone shall be:
• A minimum width of 6 feet;
• Hardscaped;
• Located adjacent to the street tree/furniture zone;
• Unobstructed for a minimum width of 6 feet and a minimum height of 8 feet; and
• Compliant with ADA and Texas Accessibility Standards.

Amenity Zone
The amenity zone shall:
• Have a minimum with of 8 feet;
• Be continuous and uninterrupted for the full length of the lot frontage; and
• Be located adjacent to the curb.

The clear zone shall be:
• A minimum width of 8 feet;
• Hardscaped;
• Located adjacent to the street tree/furniture zone;
• Unobstructed for a minimum width of 8 feet and a minimum height of 8 feet; and
• Compliant with ADA and Texas Accessibility Standards.

The amenity zone shall:
• Have a minimum with of 10 feet;
• Be continuous and uninterrupted for the full length of the lot frontage; and
• Be located adjacent to the curb.

B. Pedestrian Amenities

COMMENTARY
Similar to the sidewalk requirements, standards requiring pedestrian amenities are intended to help create an inviting, pedestrian-friendly streetscape. The pedestrian amenities described below may be placed within the “amenity zone” described above or elsewhere on the site.

1. Applicability
This section sets forth a range of options for pedestrian amenities to enhance the streetscape and foster a pedestrian-oriented built environment. For all development subject to this section, applicants shall select amenity options from Table 4-15 below to achieve the minimum number of points required for that development.

2. Incentives
If additional pedestrian amenities are included beyond the minimum required, the Planning and Development Services Department may approve no more than one of the following incentives:
   a. Increase in building height of up to 10 percent;
   b. A reduction in minimum required parking of up to 10 percent;
   c. [reserved]142

3. Pedestrian Amenity Options

COMMENTARY
As a starting point for discussion, the table below includes a total of 13 amenity options and 20 potential points. This draft proposes a base requirement of 10 points for new development and redevelopment (50% of potential points) and 5 points for minor expansions (25% of potential points). The points attributed to each amenity are generally weighed based on a number of factors including cost of construction and overall public benefit.

---

142 What other incentives may be considered appropriate here?
### Table 4-15: Menu of Pedestrian Amenity Options

<table>
<thead>
<tr>
<th>Amenity Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spaces and Areas</strong></td>
<td></td>
</tr>
<tr>
<td>An enhanced landscaped area, provided such landscaped area has a minimum depth and width of 10 feet and a minimum total area of the lesser of 650 square feet or two percent of the net site area. Enhanced landscaping includes: additional plant quantity and varieties, pedestrian accommodations, raised beds, landscape walls or similar hardscape elements, or any improvement that goes beyond the minimum requirements.</td>
<td>1 point</td>
</tr>
<tr>
<td>A playground, patio, or plaza with outdoor seating areas, provided the playground, patio, or plaza has a minimum depth and width of ten feet and a minimum total area of 300 square feet.</td>
<td>3 points</td>
</tr>
<tr>
<td><strong>Site Features</strong></td>
<td></td>
</tr>
<tr>
<td>At least one blank wall treatment:</td>
<td></td>
</tr>
<tr>
<td>• Install trellises with climbing vines or plant materials along wall;</td>
<td>1 point</td>
</tr>
<tr>
<td>• Provide a planting bed with plant material that screens at least 50 percent of the wall surface; or</td>
<td></td>
</tr>
<tr>
<td>• Provide artwork on the surface.</td>
<td></td>
</tr>
<tr>
<td>Creative, ornate or decorative art installations, sculptures, murals, or other intentional artwork</td>
<td>2 points</td>
</tr>
<tr>
<td>Pedestrian-scaled lighting poles or bollards, no more than 15 feet in height installed at intervals of 50-70 feet on center and located an equal distance from street trees</td>
<td>1 point</td>
</tr>
<tr>
<td>Rain gardens, street-side swales, soil and turf management or other appropriate storm water infiltration system(s) to capture and infiltrate a minimum of 25 percent of site-generated stormwater (subject to approval by the Transportation and Capital Improvements Department)</td>
<td>3 points</td>
</tr>
<tr>
<td>Seating every 30 feet along the building frontage, provided such seating includes a variety of seating types and figurations, accommodates solitary and social activities, and provides a safe, comfortable seating surface with smooth, even surfaces and curved edges. The following kinds of seating may be used to meet the requirement: moveable seating, fixed individual seating, fixed benches with and without backs, and seating designed into architectural features (e.g., walls, planter ledges, and seating steps).</td>
<td>1 point</td>
</tr>
<tr>
<td>Shade structures such as awnings, screens, or other architectural devices on at least 50% of the south- and west-facing glazing</td>
<td>2 points</td>
</tr>
<tr>
<td><strong>Street trees in an amount that at least doubles the base requirement of §X.X.</strong></td>
<td>2 points</td>
</tr>
<tr>
<td>Trash and recycling receptacles installed every 250 feet along the building frontage and at each building entrance adjacent to a pedestrian walkway</td>
<td>1 point</td>
</tr>
<tr>
<td><strong>Enhanced Connectivity</strong></td>
<td></td>
</tr>
<tr>
<td>Block faces ranging between a minimum of two hundred feet (200 feet) and a maximum of six hundred feet (600 feet)</td>
<td>1 point</td>
</tr>
<tr>
<td>Clear and continuous pedestrian paths from every primary building entrance to all crosswalks directly adjoining the site</td>
<td>1 point</td>
</tr>
<tr>
<td>Where a sidewalk must cross a parking lot, internal street, or driveway to make a required connection, the crosswalk is clearly marked using a change in color, change in materials, change in elevation, or some combination of those techniques</td>
<td>1 point</td>
</tr>
</tbody>
</table>

143 To be removed if street tree requirements not included.
4. **Pedestrian Amenities Required for Large/Multi-Building Developments**

   Developments in the MXR district with more than 100,000 square feet shall be organized to create pedestrian-friendly spaces and streetscapes. This shall be accomplished by using the buildings to frame and enclose at least one of the following:

   a. The corners of street intersections or entries into the development site;
   b. A “main street” pedestrian or vehicle access corridor within the development site; and/or
   c. A plaza, pocket park, square, or other outdoor gathering space for pedestrians.

### Figure 4.6.6-1: Pedestrian Amenities for Large/Multi-Building Development

C. **Building Design**

   1. **Building Orientation and Entrances**

   **COMMENTARY**

   Building orientation requirements address where building entrances are located, helping to ensure they are facing pedestrian access points and sidewalks, and not turned inward towards auto-oriented areas.

   a. Each building and separate lease space at grade along the street edge shall have a functioning primary entry from the sidewalk. Corner entries may count as a primary entry for both intersecting street frontages.
   b. Primary building entrances shall be defined and articulated with architectural elements such as:
      i. Pediments or columns;
      ii. Portico, awning, canopy, or marquee;
      iii. Porche or landing;
      iv. Double doors;
      v. Side-lights (glazed openings to the side of the door), and transom-lights (glazed opening above the door) at the entryways;
      vi. Decorative lighting; or
      vii. Enhanced landscaping.
   c. For buildings with multiple tenant entries, each entrance shall be defined and articulated with architectural elements.
Article 4: Development Standards
4.6 Site and Building Design
4.6.6 Additional Standards for Mixed-Use Development

**d.** All ground-floor pedestrian entrances shall be covered or inset.

Figure 4.6.6-2: SAMPLE GRAPHIC (numbering under revision) Building Entrances

**e.** Building entries shall be oriented towards the primary street frontage, unless direct pedestrian access is provided that connects the primary street frontage to all building entrances fronting courtyards or plazas, or internal pedestrian walkways, as shown in Figure 4.6.6-28.

**f.** Corner lots may have buildings oriented to the side property line if direct pedestrian access is provided from the primary street frontage and the façade along the primary street frontage is located at the front setback line.

2. **Minimum Street Frontage**

**COMMENTARY**
The intent of requiring building street frontage is to encourage a more prominent and continuous street that promotes a multi-modal, pedestrian friendly environment while reducing the visual dominance of large surface parking lots.

**a.** Building facades shall be located within the area between the property line and the maximum setback for a minimum of 70 percent of the primary street frontage of the parcel.

**b.** On corner lots, building facades shall be located within the area between the property line and the maximum setback for a minimum of 30 percent of the side street frontage of the parcel.
**Article 4: Development Standards**

4.6 Site and Building Design

4.6.6 Additional Standards for Mixed-Use Development

**Figure 4.6.6-3: Minimum Street Frontage**

![Minimum Street Frontage Diagram](image)

- **Required street frontage shall apply only to the ground floor of the building.**
- **The minimum frontage requirement may be reduced for an outdoor seating or dining area, provided the area is designed and located:**
  - **To avoid interference with any pedestrian access ramp from any abutting street onto the sidewalk, and to avoid all areas required for maneuvering of wheelchairs and other ambulatory devices at the top of any pedestrian access ramp; and**
  - **To meet the standards for a clear zone set forth in Table 4-14: Sidewalk Zone Requirements by Zoning District.**

**Figure 4.6.6-4: Minimum Frontage and Outdoor Seating/Dining Areas**

![Minimum Frontage and Outdoor Seating/Dining Areas Diagram](image)

**3. Grade-Level Design**

**COMMENTARY**

A pedestrian-oriented streetscape also requires an active grade or ground floor-level.

- **Residential At-Grade**
  - **All buildings that have residential unit floor plates within six feet of finished grade shall include a primary front door entrance into the unit accessible from the sidewalk.**
  - **The entry shall be located a minimum of two feet above the sidewalk elevation and include a minimum 24 square foot stoop.**

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT
iii. Units shall also include windows that provide residents a view of the street and sidewalk area.
iv. Lobbies that provide access to upper stories may be located at grade level.
v. Balcony and patio railings and fences shall be constructed of wrought iron or metal. Wood fences and railings and chain-link fencing are prohibited. Masonry columns may be used on patios provided that they are used as accents.

b. Non-Residential At-Grade
i. The ground floor entry shall be located at the approximate elevation of the adjacent sidewalk.
ii. Non-residential uses adjacent to the sidewalk at grade shall:
   a. Comply with meet fire code separation requirements from any other uses constructed above;
   b. Have a minimum clear height of 16 feet between finished floor and the ceiling or top plate. Mezzanines within the retail space shall be allowed per building code; and
   c. Have an awning or canopy that extends at least six feet over the sidewalk for at least 75 percent of the frontage on any portion of a building. Such awning or canopy shall maintain a minimum seven and one-half foot clearance over the sidewalk; or
   d. Have an arcade that:
      i. Is open and unobstructed for a height of at least 12 feet;
      ii. Is open for its entire length with the exception of columns;
      iii. Is open to a street or to a public open space on the property;
      iv. Extends at least 50 feet or the full length of the street frontage if less than 50 feet; and
      v. Is accessible to the public at all times.

4. Building Form

**COMMENTARY**

Building mass requirements are intended to mitigate the negative impacts created by the scale and bulk of large buildings and promote variety and visual interest in the exterior design of buildings. They ensure a variety of buildings in a mixed-use development that are compatible with other buildings in the development and the surrounding area.

a. **Four-Sided Architecture**
   Mixed-use structures shall incorporate architectural features on all sides of a building. Blank walls void of architectural features are not allowed.

b. **Horizontal Articulation**
   Each street-facing façade shall incorporate at least three of the following elements within each 50 horizontal feet of building façade:
   i. Use of vertical piers or columns;
   ii. Providing vertical building modulation of at least 12 inches in depth;
   iii. Projections, recessions, or reveals such as, but not limited to, columns, pilasters, cornices, and bays, and having a change of wall plane that is a minimum of six inches in depth; and/or
   iv. A change in building material, siding style, or color.
c. **Vertical Articulation**

Buildings of three stories or more shall reduce mass with a clearly identifiable base, middle, and top to the structure, with horizontal courses separating these components. The body or middle must constitute a minimum of 50% of the total building height. See Figure 4.6.6-33.

---

**COMMENTARY**

Providing fenestration (windows) encourages interaction between the pedestrian and the ground-floor space and allows pedestrians to view activities inside the building or displays related to those activities.

---

144 This draft does not propose vertical articulation requirements for one- and two-story structures; however, we believe that the combination of horizontal articulation requirements plus architectural feature requirements should suffice to prevent more Dollar General-type structures.
i. **Ground-Floor Transparency**
   a. If the ground floor of the building is occupied by non-residential uses, and located within 10 feet of the sidewalk, at least 40 percent of the ground floor, street-facing façade between four and eight feet above the sidewalk, shall be transparent.
   b. If the ground floor of the building is occupied by non-residential uses, and located between 10 and 20 feet from the sidewalk, at least 25 percent of the ground floor, street-facing façade between four and eight feet above the sidewalk shall be transparent.
   c. If the ground floor of the building is occupied by residential uses, at least 15 percent of the street-facing façade (all vertical surfaces generally facing the street) shall be transparent.

![Figure 4.6.6-7: SAMPLE GRAPHIC (numbering under revision) Ground Floor Transparency](image)

ii. **Other standards**
   a. Upper floors of each façade facing a public street shall contain a minimum of 20 percent windows.
   b. Windows and other materials intended to meet the minimum transparency requirements shall not be reflective.
   c. Windows shall be individually defined with detail elements such as frames, sills and lintels, and placed to visually define the building stories.

### D. Parking Location

**COMMENTARY**
Parking location requirements are intended to ensure that the siting and orientation of buildings creates a comfortable pedestrian environment, limiting the potential conflict between pedestrians and vehicles while also enhancing the visual character and definitions of streets.

1. Any surface parking area for mixed-use development shall not be located between the front building façade and the street. Parking shall be located beside or behind the building.

2. Parking located beside a structure shall occupy no more than 20 percent of the linear street frontage of the lot.

3. Structured parking that is located within the building shall not occupy the ground floor street frontage. Ground floor parking may be accessed from the primary street frontage, but shall be fronted by linear space of a sufficient depth to accommodate street-facing nonresidential uses.

4. Parking areas shall comply with §4.5.6, Design of Off-Street Parking Areas, §4.2.6, Parking Lot Landscaping, and where applicable, §4.4, Buffering and Residential Adjacency.

E. Common Open Space

1. Mixed-use development that has five or more residential units shall provide a minimum of ten percent of the total site area as common open space that meets the standards of §4.6.3A, Common Open Space.

2. This requirement may be eliminated with the provision of individual balconies, decks, or patios, for the exclusive use of individual units, provided to all of the residential units in the development. No such feature shall be less than 60 square feet.

4.6.7 Additional Standards for Non-Residential Development

COMMENTARY

Generally, this section carries forward requirements for vertical and horizontal articulation, though with a more straightforward approach for applying those requirements, and proposes some additional, more detailed standards for non-residential development.

This draft does carry forward the allowance that if a building façade is not visible from a parking lot or “a public roadway, public park or residential district,” it is not required to comply with these standards.

A. Applicability

1. All facades of a non-residential building that are visible from or adjacent to a parking lot, public roadway, public park, or residential district or use shall comply with the standards of this section.

2. Structures for industrial uses in industrial zoning districts shall comply with the standards of this section, or shall be subject to the provision of enhanced landscaping, as described in §X.X.
B. **Horizontal Articulation Requirements**\(^{145}\)

Façades greater than 50 feet in length shall incorporate wall plane projections or recesses extending at least 20 percent of the length of the façade, to a minimum depth or projection of two feet.

C. **Vertical Articulation**\(^{146}\)

Buildings of three stories or more shall reduce mass with a clearly identifiable base, middle, and top to the structure, with horizontal courses separating these components. The body or middle must constitute a minimum of 50% of the total building height. See Figure X.X.

---

**Figure 4.6.7-1: Vertical Articulation**

---

D. **Architectural Features**

Each façade of a building that is visible from or adjacent to a parking lot, public roadway, public park, or residential district or use, shall incorporate at least two of the following components (See Figure 4.6.7-2):

1. Awnings;
2. Canopies;
3. Alcoves;
4. Windows;
5. Recessed entries;
6. Ornamental cornices;
7. Engaged columns or pillar posts;
8. Variations in roof line or variations in roof height of two feet or more;
9. Variations in the arrangement and recessing of windows;
10. Recognizable changes in texture, material, or surface colors;
11. Minimum 2-foot parapet return; or

---

\(^{145}\) This section carries forward the intent of 144-5.22-3.c.1; however, the method for determining the frequency with which articulation is required is simplified.

\(^{146}\) This draft does not propose vertical articulation requirements for one- and two-story structures; however, we believe that the combination of horizontal articulation requirements plus architectural feature requirements should suffice to prevent more Dollar General-type structures.
12. Other building elements that contribute to the human scale of a building.

E. Building Entrance Treatments and Pedestrian Routes\textsuperscript{147}

1. Any front entry shall be set back from the drive a minimum distance of 15 feet.
2. Single-use or multi-tenant buildings over 60,000 square feet in size must provide clearly defined, highly visible customer entrances that include an outdoor patio area, at least 200 square feet in area, that incorporates the following:
   a. Benches or other seating components;
   b. Decorative landscape planters or wing walls that incorporate landscaped areas;
   c. Structural or vegetative shading; and
   d. Pedestrian routes between parking areas and buildings. See §XX for pedestrian circulation requirements.

F. Building Height Stepdown in Transitional Zones

1. When a non-residential structure in a non-residential zoning district shares a common lot line with an existing dwelling in a one-to four-family residential zoning district, the height of the non-residential building within 100 feet of that common lot line is limited to the height permitted in the residential zoning district. Portions of the non-residential structure that are more than 100 feet from the shared lot line may be taller, as permitted by the applicable non-residential zoning district.

2. If the height limits are the same in the adjacent districts, the non-residential structure may build to the full height permitted as permitted by the applicable non-residential zoning district.

G. Schools\textsuperscript{148}

1. Purpose
This section is intended to establish building height allowances and clarify landscaping, fencing and articulation requirements for public and private schools to ensure schools can achieve their public purpose of education in a safe environment while minimizing potential impacts on surrounding land uses.

2. Height
   a. The height of any point on a structure on a school property must have at least an equal distance setback from an adjacent property used or zoned for one- to four-family residential.

\textsuperscript{147} 144-5.22-8. These requirements are carried forward from the current code. If edits are needed, please advise.

\textsuperscript{148} In the Consolidated Draft, this section will be relocated to use-specific standards.
b. Except for auditoriums/performing arts centers, stadiums, stadium press boxes, and associated lighting, the maximum height of any structure on a school property may not exceed 65 feet.

c. For the purposes of calculating building height, rooftop appurtenances such as air conditioners, elevator shafts, chimneys, solar panels, telecommunications equipment, fly lofts, roof access doors, safety barriers, etc. are not calculated in height as long as they do not exceed a height of ten feet above the rooftop. Decorative elements such as parapets, cupolas, ornamental steeples, and dormers are encouraged and are also not counted toward the building height.

3. Landscaping, Tree Preservation, Fences and Buffer
   b. In consideration of student and staff safety, as well as the unique utilization of school grounds, schools may avail themselves of the following alternate landscaping and fencing options and processes.
   c. Alternate Landscaping Plan
      i. The Planning and Development Services Department may approve an alternate landscaping plan. The applicant shall demonstrate that the reasons for the deviation from landscaping requirements and the alternative plan is appropriate, and why it is consistent with the purposes of this section.
      ii. The Planning and Development Services Department's decision must include findings consistent with the purpose and objectives described in §4.2.3C, Alternative Landscaping Plan, and how the applicant's proposal does not negatively impact surrounding residential uses.
      iii. The Planning and Development Services Department may forward the alternate landscaping plan to the Board of Adjustment for any reason for its consideration as an appeal.
      iv. The applicant may appeal a denial by the planning and Planning and Development Services Department to the Board of Adjustment according to the procedures described in §XX [Appeals of Administrative Decisions].
   d. Fencing
      Schools shall comply with the screening fence standards in §4.4.2, Fences. To ensure schools have all tools at their disposal to protect students, faculty, staff and visitors, schools may meet this requirement with alternative fencing materials and/or additional landscaping or wider tree buffers if demonstrated to the city that the alternatives will enhance security or safety while not negatively impacting abutting residential uses.

4. Design Standards
   a. Purpose
      The intent of articulation requirements is to prevent future urban blight, uninteresting and out-of-character structures, and unsafe public spaces due to long stretches of unbroken walls with no variation, and to ensure streetscape visual interest and pedestrian scale design. However, some structures have a unique intent that inhibits the strict adherence to the letter of this LDO. In consideration of student and staff safety, as well as the unique utilization of school buildings, schools may avail themselves of the following alternative options to the articulation requirements for non-residential structures that would otherwise apply.
   b. Alternative Articulation Requirements
      i. Other visual elements that are not otherwise required can be added as an alternative to the articulation requirements. At least three of the following elements per wall can be used in place of the horizontal and vertical articulation requirements for each wall:
Article 4: Development Standards

1.1

Development Standards

1.1.1

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT

a. Awnings extending 50 percent or more along the wall;
b. Windows comprising 35 percent or more of the façade;
c. Balconies;
d. Vertical breaks;
e. Columns;
f. Arches;
g. Pediments;
h. Pilasters;
i. Terracing to accommodate topographic elevation changes; or
j. Other decorative or functional elements approved by the Planning and Development Services Department.

ii. If the specific depth or height requirements for each required horizontal or each required vertical offset cannot be achieved, then the requirements can be met if the cumulative depth or height of all horizontal or all vertical offsets equal the dimensions that would have been required otherwise.

iii. Horizontal offsets do not have to be precisely perpendicular.

4.7 Sensitive Area Protection

COMMENTARY
This section proposes regulatory protections in the areas of the city over the Edwards Aquifer. The proposed regulations are intended as a starting point for discussion about the possibility of regulating development in these areas.

Question to consider:
- Are there other sensitive zones that should be included in this section? Other communities regulate waterfront/riverfront development, wildlife habitat or sensitive natural areas, areas with views that are to be preserved, development over certain kinds of delicate soil, view protection zones, among others.
- Are there uses that should not be allowed in this zone? A truck stop is one use that could be harmful, along with other vehicle-related uses such as repair or paint shops, as could uses such as exterminator that require storage of chemicals on-site.

4.7.1 Edwards Aquifer

A. Purpose
This section is intended to protect water quality and prevent infiltration of pollutants into the water supply by applying regulations to proposed development within New Braunfels city limits that are atop the Edwards Aquifer.

B. Applicability
The standards of this section apply to land designated as recharge zone, transition zone, and contributing zone by the Texas Commission on Environmental Quality, and shown on the TCEQ Edwards Aquifer map, accessible at https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=2e5afa3ba8144c30a49d3dc1ab49edcd

C. Geologic Assessment
1. Prior to any earthmoving activities on a site within the aquifer recharge, transition, or contributing zones, a geologic assessment prepared by a qualified professional geologist shall be submitted to the Planning and Development Services Department.
Article 4: Development Standards

4.7 Sensitive Area Protection

4.7.1 Edwards Aquifer

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT

2. This assessment shall contain all information required for Geologic Assessments under the TCEQ Edwards Aquifer rules and shall identify any sensitive features on the proposed development site, including caves, solution cavities, solution enlarged fractures, sinkholes or other karst surface expressions.

D. Excavation and Construction

If, during the process of excavation or construction on the development site, new sensitive features are discovered in the recharge or transition zones, or the extent of identified sensitive features is greater than indicated in the Geologic Assessment, the following actions are required:

1. Construction and excavation activities shall be immediately suspended;
2. A qualified geologist shall be retained to inspect the sensitive feature and make recommendations on how it should be treated in on-going construction on the site;
3. The geologist recommendation shall be submitted along with an updated site plan to the Planning and Development Services Department;
4. If the property owner intends to comply with the geologist recommendation, construction or excavation may resume when an updated permit is approved by the Planning and Development Services Department; and
5. If the property owner is unable to or does not intend to comply with the geologist recommendation, approval by the City Council is required as described in §X.XX. Such approval shall only be granted after consideration of input provided by TCEQ, New Braunfels Utilities, the geologist, the City's Watershed Management department, and the City's Watershed Advisory Committee, when applicable.

E. Development Limitations

1. Sensitive Features
   a. Development proposals shall describe how any sensitive features identified in the Geological Assessment will be treated in the process of development.
   b. Sensitive features should not be sealed, but instead protected from the potential impacts of pollutant infiltration from stormwater runoff or other point source pollutants from any new development in the area.

2. Impervious Cover Limits
   a. Sensitive Features
      Sensitive features identified on any development site shall not be covered with impervious surfacing.
   b. Recharge Zone
      i. Sites within the recharge zone shall have an impervious cover limit of 25 percent of the total site area.
      ii. Parking lots in this zone containing 25 or more vehicle spaces shall install stormwater mitigation measures to include some combination of sedimentation, filtration, and adsorption designed to treat stormwater runoff prior to infiltration.
   c. Transition Zone
      i. Sites within the transition zone shall have an impervious cover limit of 40 percent of the total site area.
      ii. Parking lots in this zone containing 50 or more vehicle spaces shall install stormwater mitigation measures to include some combination of sedimentation, filtration, and adsorption designed to treat stormwater runoff prior to infiltration.

---

150 This has been added as a new defined term.
d. **Contributing Zone**

   Sites within the transition zone shall have an impervious cover limit of 40 percent of the total site area.

3. **Individual Wastewater Systems**
   a. Any lot within 500 feet of access to a public wastewater system shall connect to that system.
   b. Lots that cannot connect to a public wastewater system shall use sewage disposal systems that are installed in accordance with applicable state regulations.

4. **Underground Storage Tanks**

   In the recharge and transition zones, underground storage tanks shall not be used to store hazardous materials, including gasoline.

---

### 4.8 Exterior Lighting

**COMMENTARY**

The current lighting standards in Chapter 144-5.3-4 are, according to stakeholders and staff, inadequate and outdated. As a result, this section replaces the current regulations, proposing more robust and modern exterior lighting regulations for the City.

Lighting regulations can become very complicated and detailed, but this draft proposes a basic approach to regulation, with lighting intensity (low, medium, high) tied to zoning districts. To respond to concerns regarding stadiums and other recreation fields, and vehicle fuel station canopies, new content is included with standards for both of those uses.

#### 4.8.1 Purpose

The purpose of this section is to provide for exterior lighting that enhances safety, preserves the city's nighttime character, and improves the ability to view the nighttime sky from within city limits. This section is intended to decrease light pollution, increase energy efficiency, and promote high quality lighting design as it relates to the built environment. The lighting regulations are also intended to:

A. Ensure that parking areas, public gathering places, and other public places have adequate outdoor illumination;

B. Ensure that light levels are uniform to enhance night vision and security;

C. Minimize adverse impacts on public safety and neighborhood enjoyment due to excessive glare;

D. Minimize spillover of light onto adjacent or nearby properties; and

E. Minimize the effects of skyglow.

#### 4.8.2 Applicability

A. **New Lighting**

   New exterior lighting within city limits shall be installed in conformance with the requirements of this section, the building code, the electrical code, and other applicable City regulations.

B. **Existing Lighting**

   Existing exterior lighting that does not meet the provisions of this ordinance and requires luminaire or electrical investment to conform, shall be considered a legal nonconforming site feature.
C. Change of Use
A change of use on a property where exterior lighting is considered a nonconforming site feature shall be required to bring the site lighting into compliance with these standards for the change of use to be approved.

D. Redevelopment
Exterior lighting as described in this section is required for redevelopment of a lot that involves the demolition of 50 percent or more of an existing primary structure, and its replacement with any new construction, whether to the same, greater, or lesser extent than the building footprint that previously occupied the lot.

E. Expansion of Parking Area
1. Exterior lighting as described in this section is required for an existing parking lot that is being expanded or altered to an extent between 25 and 50 percent of the lot’s surface area prior to expansion. Only the parking lot area being added shall be required to meet the standards of this section.
2. When a parking lot is expanded by more than 50 percent of its surface area, the entire parking lot shall meet all of the requirements of this section.
3. Expansion is measured cumulatively, so that separate expansions that add up to a 25 percent or greater increase in parking lot surface area within a span of five years shall be required to meet the requirements of this section.

F. Exemptions
The following are exempt from the requirements of this section:
1. Emergency Lighting
   Lighting used only under emergency conditions.
2. Seasonal Lighting
   Temporary seasonal lighting, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties.
3. Lighting Required by FAA or FCC
   Lighting required by the Federal Aviation Administration or the Federal Communications Commission.
4. Special Events
   Special events that have been issued a special event permit pursuant to Chapter 91, shall be allowed temporary lighting for the duration of the event, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties.
5. Street Lighting
   These requirements shall not apply to street lighting within City, County, or state rights-of-way.
6. Underwater Lighting
   Underwater lighting used for the illumination of swimming pools and decorative water fountains shall not be subject to this section, though they must conform to all other provisions of this LDO.
7. String Lighting
   Permanently exposed string lighting typically used for patio or roadway ambiance, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties.
8. Lighting Required by Building Code
   Any lighting that is required by the building code for life safety purposes such as stairway lighting, walkways, and building entrances, shall not be prohibited by this section, but shall be subject to the lighting standards contained herein.
4.8.3 Lighting Types Not Permitted

The following types of exterior lighting are not permitted:

A. Unshielded lights, lamps, or floodlights that produce glare and light trespass in excess of that allowed in Table 4-16: Maximum Light Trespass at Property Line;

B. Lights affixed to the top of a roof, except where required by building code;

C. Lights that flash, move, revolve, blink, flicker, vary in intensity, change color, or use intermittent electrical pulsation, except for temporary Seasonal Lighting, as described in §4.8.2F.2;

D. Searchlights and rotating beacons;

E. Mercury vapor and low-pressure sodium lighting; and

F. Upward-directed lighting that allows spillage into the sky.

4.8.4 Lighting Plan Required

A. Unless lighting is expressly exempt by §4.8.2F, all new multi-family, mixed-use, or non-residential developments shall submit a lighting plan as part of the applicable land use application and/or building permit request.

B. **Option 1:** The lighting plan shall include sufficient information to enable the Planning and Development Services Department to determine whether proposed lighting complies with this LDO.

C. **Option 2:** Lighting plans shall include the following:
   1. The location and height above grade of light fixtures;
   2. The type of light source (such as incandescent, fluorescent, high pressure sodium, metal halide, LED), rated lumens, and wattage of each light source;
   3. The type of fixture (such as full-cutoff, cut-off, lantern, wall pack);
   4. Calculations for site illumination resulting from the lighting, including minimum and maximum;
   5. If building walls are to be illuminated, or if façade-mounted fixtures are to be used, drawings of all relevant building elevations showing the fixtures and the portions of the walls to be illuminated calculated point-by-point and light levels; and
   6. Other information deemed necessary to document compliance with the provisions of this section.

4.8.5 Exterior Lighting Standards

A. **Hours of Illumination**

Hours when outdoor lighting may be operated at maximum illumination are between 6 a.m. and 11 p.m., unless otherwise specified by this section. Outside of those hours, all outdoor lighting shall be dimmed by at least 50 percent or turned off, with the following exceptions:

1. Street lighting, and other Department of Transportation lighting.
2. Code-required lighting for public steps, stairs, walkways, and building entrances.
4. Parking lot lighting, which may be equipped with motion detecting sensors to temporarily illuminate the lot outside of business hours.
5. Other permitted exceptions, such as lighting for flags, seasonal, sports fields, and businesses which operate during overnight hours; such lighting may remain illuminated only while the establishment is open for business.
B. **On-Site Lighting Level**
Maximum on-site illumination, including spillage from doorways, signs, and windows, shall not exceed 10 footcandles, unless otherwise allowed in this LDO.

C. **Light Trespass**

1. **Maximum Light Trespass Levels**
The maximum measured light levels (footcandles) shall not exceed those provided in the following table:

<table>
<thead>
<tr>
<th>Table 4-16: Maximum Light Trespass at Property Line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intensity Level</strong></td>
</tr>
<tr>
<td>High intensity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Medium intensity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Low intensity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

2. **Measurement**
   a. Light trespass shall be measured at grade level unless otherwise noted.
   b. Lighting measurements shall be taken under normal conditions. Measurements to determine compliance shall not be taken when conditions are present that will influence the outcome of measurements including snow, snowpack, rain, fog, or other influences.
   c. Light sources from a property shall be measured as cumulative of all sources on the subject property, except for internally illuminated signs.

3. **Transitions between Zoning Districts**
The maximum level for light trespass when a more intense zoning district borders a less intense zoning district shall be the lower of the two values, along that border only. Where separated by a public street or right-of-way, the levels shall apply at the center line of the street adjacent to the light source.
D. **Shielded Light Source Required**

1. All luminaires located shall be designed so that the light source (bulb or lamp) is completely shielded from direct view at a point three feet above grade on a property line abutting a residential zone or use.

2. In all other instances, the light source must be completely shielded from direct view at a point six feet above grade on a bounding property line.

3. Examples of shielded or cutoff fixtures are shown in Figure 4.8.5-1:

   **Figure 4.8.5-1: Acceptable Light Source Shields**

   - **Permitted**
     - Opaque reflector (lamp inside)
     - Typical "shoe box" fixture
     - Area flood light with hood/shield

   - **Prohibited**
     - Typical "barn light" fixture
     - Typical "wall pack" fixture
     - Area flood light

E. **Cutoff Angle**

1. All luminaires must have a total cutoff angle equal to or less than 90 degrees, unless a more restrictive standard is specified by this code.
2. The use of exterior lighting with a cutoff angle greater than 90 degrees shall be permitted only when the Planning and Development Services Department finds the following:
   a. That the proposed lighting is not in conflict with the Purpose of this section;
   b. That the proposed lighting will not have a negative impact on adjacent properties; and
   c. The proposed lighting will not result in an impairment of vision creating a hazard for vehicular or pedestrian traffic.

**F. Height for Freestanding Luminaires**
1. The maximum permitted height for freestanding luminaires is as follows:
   a. Low Intensity Areas: 12 feet.
   b. Medium Intensity Areas: 20 feet.
   c. High Intensity Areas: 30 feet.
2. Lighting mounted higher than 30 feet may be approved as a minor deviation or a variance, as described in §X.X.
3. The standards of this subsection do not apply to lighting for Outdoor Recreation Facilities, or canopies over Vehicle Fuel Sales.

**G. Pedestrian-Scale Lighting**
Low-level pedestrian lighting may be used along walkways pursuant to the following:
1. Light shall be directed downward;
2. Shatterproof lamp coverings are required;
3. Lighting shall not cause the site to exceed the maximum trespass levels described in Table 4-16: Maximum Light Trespass at Property Line;
4. Light shall not be located to present hazards for pedestrians or vehicles; and
5. Post or bollard-type lights shall be painted dark colors such as black, dark gray, dark brown, or dark earth tone.

**H. Security Lighting**
1. **Applicability**
   Security lighting shall be allowed in all lighting districts. The need for security lighting shall be demonstrated as part of any development permit application package.
2. **Standards**
   a. **Examples of Appropriate Security Lighting Techniques**
      i. Recessed lights under a canopy.
      ii. Full cut-off fixtures on parking lot poles.
      iii. Fully shielded wall packs or other fixtures.
      iv. Floodlights that are down-directed, fully shielded, and are controlled by motion sensors.
   b. **Fixtures**
      i. Security lighting fixtures shall be fully shielded and directed only to the designated area.
      ii. Security lighting shall not be directed above a horizontal plane through the top of the lighting fixture.
      iii. Security lighting fixtures shall include shields that prevent the light source from being visible from adjacent properties and roadways to the maximum extent practicable.
   c. **Light Levels**
      i. Security lighting may illuminate building entrances and exits up to a level eight feet above grade or the bottom of doorways, windows, or entries, whichever is greater.
ii. Security lighting for entrances, stairways, and loading docks shall not exceed five footcandles at the designated area illuminated. Parking lot lighting used for after-hours security shall not exceed three footcandles at the designated area illuminated.

iii. Security lighting on a parcel in a higher-intensity district that shares a common lot line with a parcel located in a lower-intensity district shall comply with specifications for light levels and maximum mounting heights in the lower intensity district, unless the Board of Adjustment approves a variance, as described in §X.X, upon finding that higher-intensity lighting will have no negative impact.

I. Canopy Lighting for Vehicle Fuel Sales
Canopies shall be illuminated so that the minimum horizontal illuminance at grade level is at least five footcandles, and the maximum horizontal illuminance under canopies is 25 footcandles.

1. Light fixtures mounted on canopies shall be installed so that the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy or the fixture.

2. Lights shall not be mounted on the top or sides of the canopy. The sides (fascias) of the canopy shall not be illuminated for any purpose, with the exception of internally illuminated signage, which shall comply with §X.X [Internally Illuminated Signs].

J. Lighting of Outdoor Recreation Facilities
Because of their unique requirements for nighttime visibility and their limited hours of operation, outdoor recreation uses, such as stadiums, playing fields, and baseball diamonds, are exempt from §4.8.5, Exterior Lighting Standards, and are instead subject to the following standards:

1. Lights at outdoor recreation uses may not exceed a maximum permitted post height of 60 feet.

2. Lighting fixtures shall be mounted and directed no higher than 62 degrees up from vertical so that no direct illumination extends off the site.

3. No flickering or flashing lights are permitted.

4. Unless an hour for extinguishing illumination is otherwise specified, lights may not remain illuminated for more than one hour after the end of an event.

5. Lighting shall be designed, to the maximum extent practicable, to minimize adverse impacts on traffic safety and nuisance impacts on residentially zoned property.

6. Lighting plans must be provided prior to approval of any request for recreation facility lighting, and as-built plans are also required upon the completion of the project.

7. Mitigation, when necessary, can be required via extra landscaping, limited hours of operation for the lights, the use of cutoff fixtures or shields (where practicable), and other techniques as determined necessary by the Planning and Development Services Department.
4.9 Access and Circulation

COMMENTARY
This is generally a new section for the City's consideration; all provisions are new unless otherwise noted. This section consolidates standards related to access and circulation to give them more consistency and prominence in the LDO. While some existing New Braunfels regulations address issues of connectivity (including the subdivision design standards and the non-residential and multifamily design standards), they are minimal and could be strengthened.

This section is included in the general development standards, versus the subdivision standards, so that many of these improvements will be applied to redevelopment projects and individual sites, not just new subdivisions. The subsections cover vehicular, pedestrian, and bicycle connectivity independently.

The current Chapter 114 (Streets, Sidewalks and Other Public Places) addresses some related issues including sidewalk encroachment and automobile access on public roadways. Pending additional discussion, this draft text does not carry forward any regulations from Chapter 114, since that chapter was not proposed for consolidation into the new unified LDO. However, we note that a staff comment included in the Assessment Report noted “Obstructions in r-o-w in the downtown area vs outside downtown - items prohibited, items allowed by right, etc. needs to be reevaluated including the process and ensuring conformance to court rulings regarding signage." We believe that may require edits to Chapter 114 outside the LDO.

4.9.1 Purpose

The purpose of this section is to support the creation of a highly connected transportation system within the City in order to:

A. Support the goals of Envision New Braunfels that call for better connectivity for all modes of transportation to improve access to green space, enhance the tourism experience, and support vibrant urban centers;
B. Promote multimodal travel by providing options for automobiles, bicycles, pedestrians, and future transit;
C. Connect neighborhoods to each other and to local destinations such as employment, schools, parks, and shopping centers;
D. Reduce vehicle miles of travel and travel times;
E. Reduce emergency response times;
F. Mitigate the traffic impacts of new development and redevelopment;
G. Improve air quality; and
H. Reduce stormwater runoff, reduce heat island effect from large expanses of pavement, improve water quality, and minimize dust pollution.

4.9.2 Applicability

Except as otherwise provided in this section, the standards of this section shall apply to all development.

4.9.3 Circulation Plan

A. All development, except for one- to four-family residential uses within previously platted subdivisions, shall prepare a circulation plan. The circulation plan shall be submitted with the respective site plan or subdivision application, as appropriate.
B. The circulation plan shall meet the requirements of the Transportation and Capital Improvements Department and shall address, at a minimum: street connectivity, emergency and service vehicle access, parking movements, accommodation of loading and unloading operations, turning radii,
traffic calming measures where future “cut-through” traffic is likely, and similar issues identified by the Planning and Development Services Department.

C. The Transportation and Capital Improvements Department may waive the requirement for a circulation plan upon determining that a proposed development is expected to have no impact on circulation because it proposes no change in existing circulation patterns, such as additional parking, driveways, or substantial modifications to the existing pedestrian network. A development proposal that includes any of these changes shall not be exempt from the requirement of providing a circulation plan. 155

4.9.4 Streets, Alleys, and Vehicular Circulation

A. Purpose
Street and block patterns should include a clear hierarchy of well-connected streets that distribute traffic over multiple streets and avoid traffic congestion on principal routes. Within each development, the access and circulation system should accommodate the safe, efficient, and convenient movement of vehicles, bicycles, and pedestrians through the development, and provide ample opportunities for linking adjacent neighborhoods, properties, and land uses. Local neighborhood street systems are intended to provide multiple direct connections to and between local destinations such as parks, schools, and shopping.

B. Uniform Street Standards
All streets and related improvements shall be constructed in accordance with the standards in the Thoroughfare Plan and current engineering design standards.

C. Layout and Design
1. The street pattern shall be designed to afford safe and convenient access to all lots.
2. The street pattern shall have a logical relationship to topography.
3. Where a proposed development borders an existing principal or minor arterial, new street intersections with the existing arterial street shall be at intervals of one-quarter mile or greater to prevent intersections from being close together, unless small spacing is approved by the Transportation and Capital Improvements Department.
4. Bicycle lanes are required in the design of all arterial and collector streets where low traffic speeds and volumes allow bicyclists and motorists to share the road safely, as prescribed in the Thoroughfare Plan.

D. Street Connectivity
1. Street Standards
a. The vehicular access and circulation network for a new residential development shall continue and connect public streets and associated rights-of-way that extend or connect to the boundary of the development site from existing or approved abutting developments.
b. The vehicular access and circulation network for a development shall provide for the extension or connection of proposed internal public streets and associated rights-of-way to the boundaries of the development site whenever such extensions or connections are or may be necessary to ensure that the development site or the abutting property will have:
   i. Convenient and efficient access by vehicles needed to provide police, fire, and emergency services;

155 Is the Transportation and Capital Improvements Department the correct decision-making authority for this provision?
ii. Convenient and efficient access by vehicles needed to provide other public services; and

iii. At least two vehicular access points to and from the street system outside the development boundaries, preferably connecting to two separate streets (for new developments of at least 30 residential lots).

c. An extension or connection of a public street roadway and right-of-way to an abutting property shall also extend or connect any integrated bikeways and sidewalks.

d. The Planning and Development Services Department and/or the Transportation and Capital Improvements Department may require a temporary turnaround at the end of a roadway extension if needed to facilitate traffic flow or to accommodate solid waste and emergency vehicles pending the roadway's connection to other roadways.

e. The Planning and Development Services Department and/or the Transportation and Capital Improvements Department may waive or modify the requirements or standards for extension or connection of a public roadway from or to an abutting property if such extension is impractical or undesirable because it would:

i. Require crossing a significant physical barrier or environmentally sensitive area (e.g., watercourses, floodplains, riparian areas, steep slopes; wildfire hazard areas);

ii. Require the extension or connection of a proposed internal public street to an abutting property with existing development whose design makes it unlikely that the street will ever be part of a network of public streets (for example, the abutting existing development has no public streets, or there are no “stubbed-out” street rights-of-way or open corridors between the proposed development site and public streets in the abutting development to accommodate a current or future extension or connection); or

iii. Require the extension or connection of a proposed internal public street to an abutting property owned by a government or public utility to which vehicular access is restricted, or other property to which vehicular access is restricted by public easement or deed.

2. Culs-de-sac and Dead-End Streets

a. Permanent culs-de-sac and dead-end streets shall generally be used only when topography, the presence of natural features, and/or vehicular safety factors make a vehicular connection impossible. Such culs-de-sac and dead-end streets shall comply with the City's Engineering Standards.
b. Where residential developments have culs-de-sac or dead-end streets, such streets shall be connected to the closest local or collector street or to culs-de-sac in adjoining subdivisions via a sidewalk or multi-use path. See Figure 4.9.4-1.

**Figure 4.9.4-1: Sidewalk Access for Cul-De-Sac or Dead-End Streets**

3. **Cross Access Between Abutting Development**
   To facilitate vehicular, pedestrian, and bicycle access between abutting developments, encourage shared parking, and minimize access points along streets, new single-family attached, multi-family, non-residential, and mixed-use development shall comply with the following standards:

   a. The internal circulation system shall be designed to allow for cross-access between the development’s common use areas and common use areas in an abutting single-family attached, multi-family, non-residential, or mixed-use development, or to the boundary of abutting vacant land zoned to allow single-family attached, multi-family, non-residential or mixed-use development. See Figure 4.9.4-2.

   b. Required vehicular cross access between abutting lots shall be provided by a frontage or service street (if the lots front on a major arterial thoroughfare right-of-way), a single two-way driveway or drive aisle, or two one-way driveways or aisles that are sufficiently wide to accommodate traffic by automobiles, service vehicles, loading vehicles, and emergency vehicles.

   c. The Planning and Development Services Department, in conjunction with the Transportation and Capital Improvements Department, may waive or modify the requirement for cross access upon determining that such cross access is impractical or undesirable because it would require crossing a significant physical barrier or environmentally sensitive area (e.g., railroad, watercourse, floodplain, wetlands, steep slopes), or would create unsafe conditions or impede the application of other design requirements in this LDO.
d. Easements allowing cross access to and from properties served by a vehicular, pedestrian, or bicycle cross-access, along with agreements defining maintenance responsibilities of property owners, shall be recorded with the County Clerk before issuance of a building permit for the development.¹⁵⁶

**Figure 4.9.4-2: Internal Circulation System for Cross Access**

---

**Use and Maintenance**

1. Access and circulation routes are intended to provide pedestrian, bicycle, and vehicle access. Vehicle parking, garbage containers, merchandise storage or display, utility boxes and poles, signs, and other obstructions shall not encroach into the required minimum width of any required access or circulation route, unless otherwise authorized by this LDO.

2. Access and circulation routes required by this LDO shall be maintained in usable condition throughout the year.

### 4.9.5 Driveways and Access to Lots

#### A. General

1. Every lot shall have access that provides a means of ingress and egress for emergency vehicles, as well as for those needing access to the property in its intended use.

2. All driveway entrances and other openings onto streets shall be constructed so that:
   a. Vehicles may safely enter and exit from the lot in question; and
   b. Interference with the free and convenient flow of traffic in abutting or surrounding streets is minimized;
   c. Joint driveways are utilized whenever possible in order to minimize the number of access points to streets and access easements.

3. Driveways located near intersections shall maintain the vision clearance areas as required by §1.1, and the Transportation Technical Standards.

¹⁵⁶ This recording could be done with an associated plat or as a separate instrument.
B. Location

1. Residential
   In addition to the above general requirements, all residential development shall be subject to the following:
   a. There shall be no direct driveway access (ingress or egress) from any one- to four-family residential lot to any arterial street or highway unless no other legal access alternative is available.
   b. Access to collector or major thoroughfare streets shall not be allowed for residential lots that require backing maneuvers onto a street. Residential lots having direct access on a collector or major thoroughfare streets may be platted only if:
      i. All lots are greater than one acre in size, have a minimum lot frontage of 100 feet, and provide for permanent vehicular turnaround on the lot to prevent backing onto the street. A note shall be placed on the plat stating a permanent vehicular turnaround shall be provided on each lot to prevent a vehicle from backing onto the street.
      ii. Access points which would permit vehicular access to lots less than one acre in size may be allowed if a marginal access street or easement to serve two or more lots spaced a minimum of 200 feet apart and 200 feet from an existing driveway or street is constructed. The marginal access street or easement shall be designed to prevent a vehicle from backing onto collector or major thoroughfare streets.
      iii. The street is classified as a residential collector with a minimum of 36 feet of pavement, has daily traffic volumes of less than 2,000 vehicles per day, and includes traffic calming measures.
      iv. The street is classified as a residential collector with a minimum of 40 feet of pavement, has daily traffic volumes of less than 4,000 vehicles per day, and includes traffic calming measures.
   c. Multi-family development sites greater than five acres shall include a minimum of two through-access drives. The Board of Adjustment may approve a variance to this requirement where a site is landlocked by existing development or other physical constraints, or where existing natural features on the site require the use of protective measures that would otherwise make a second access drive infeasible. See §X.X., Variance.
   d. Driveways shall have a minimum setback of five feet from side lot lines. This requirement shall not apply to zero-lot-line or rowhouse developments, provided there is a five-foot wide landscaping strip between driveways.

2. Non-Residential and Mixed-Use Development
   In addition to the above general requirements, all non-residential and mixed-use buildings, structures, and parking and loading areas shall be subject to the following:
   a. Driveways and access ways shall be physically separated from all non-arterial or collector streets by vertical curbs and other suitable barriers and landscaping to prevent unchanneled motor vehicle access. Each property shall not have more than two access ways to any one street unless approved by the Transportation and Capital Improvements Department.
   b. Driveways and access ways shall be located a minimum of two feet from an interior side property line unless prior approval has been obtained from the adjoining property owner and recorded as required. Where driveways are located parallel and adjacent to a side street property line, a minimum of five feet shall be provided between the surface and the property line.

C. Removing or Relocating Driveways
   1. Where the removal or relocation of one or more existing driveways or portions of driveways is necessary to comply with this LDO, any driveway or portion of driveway that is removed shall be replaced with the installation of curb and gutter along the gutter line of the street, in
Article 4: Development Standards
4.9 Access and Circulation
4.9.5 Driveways and Access to Lots

accordance with Public Works and/or Transportation and Capital Improvements Department specifications.

2. If there is no existing curb and gutter on the street, the driveway shall be removed in the manner specified by the Transportation and Capital Improvements Department.

3. The removal or relocation of one or more existing driveways or portions of driveways shall require the developer to maintain or improve drainage patterns to meet the standards of this LDO.

4. The removal or relocation of a driveway shall also require the installation of landscape treatments for that portion of the site pursuant to the standards in this LDO.

D. Surfacing

1. All driveways and access drives to improved parking surfaces shall be constructed as a continuous improved surface of concrete, brick pavers, pavestone, or other approved surfacing material designed to support vehicular weight and installed on an approved base course or other hard surfaced durable material designed to support vehicular weight approved by the Transportation and Capital Improvements Department.

2. Driveway surfacing for one- to four-family residential may consist of two strips or ribbons of concrete under the tire pathways, with grass in between and on the outsides of the paved strips.

3. Driveways and improved parking surfaces shall be designed and constructed in compliance with the improved driveway standards of the City.

E. Vehicle Maneuvering

1. Except for one- to four-family residential uses, groups of more than five vehicle parking spaces per lot shall be provided with adequate aisles or turn-around areas so that all vehicles may enter the public right-of-way in a forward manner. See Figure 4.9.5-1.

2. Except for one- to four-family residential uses, more than five vehicle parking spaces shall be served by a driveway designed and constructed to facilitate the flow of traffic on or off the site, with due regard to pedestrian, bicycle, and vehicle safety, and shall be clearly and permanently marked and defined.

Figure 4.9.5-1 Vehicle Maneuvering
3. Vehicle parking lots exceeding one drive aisle and 75 spaces shall be designed with a clear hierarchy of circulation. The hierarchy shall consist of:
   a. Major entry driveways without parking spaces; then
   b. Major circulation drives with little or no parking; then
   c. Parking aisles for direct access to parking spaces.

F. Marginal Access Street or Easement
Where a developer furnishes a marginal access street or easement, it shall be designed to allow for emergency access, on-street parking, sidewalk connection to the collector or major thoroughfare street, and solid waste operations that do not require backing within the marginal access street or easement.

G. Vision Clearance

For all lots on which a front setback or build-to is required:

1. No obstruction over 18 inches that will obscure or partly obscure the view of vehicle drivers shall be placed within the triangular area formed by joining points measured 35 feet along the property line from the intersection of two streets. See Figure 4.9.5-1.
2. No obstruction over 30 inches that will obscure or partly obscure the view of vehicles drivers shall be placed within the triangular area determined by site-specific AASHTO standards.
3. This restriction shall not apply to traffic control signs and signals, street signs, or utility poles placed within such area by the City or State.
4. The use of plant material in a vision clearance area is intended to provide aesthetic appeal while not unduly limiting or restricting visibility, whether as a pedestrian or a passenger in a vehicle. Plants shall not reduce or limit visibility to such an extent that a safety hazard is presented as determined by the by the Transportation and Capital Improvements Department. Plants normally considered as effective screens shall not be allowed within a vision clearance area unless adequately and routinely maintained to meet the above measurement criteria.
5. Trees may be placed within the vision clearance area with approval by the Planning and Development Services Department and shall be single trunked and have a minimum branching clearance of six feet from the ground to the first branch.
6. Vertical measurement shall be made from the top of the curb on the street adjacent to the nearest street of the vision clearance triangle or, if no curb exists, from the edge of the nearest traveled way.\textsuperscript{158}

\textsuperscript{157} Replaces more general material in 144-5.21-1(d) of the New Braunfels Municipal Code.
\textsuperscript{158} Staff questions if the measurement when no curb exists should be from a higher point than the nearest traveled way to account for views from tall vehicles.
4.9.6 Pedestrian Circulation

COMMENTARY
The current chapter 144 requires that non-residential and multi-family development provide "pedestrian routes between parking areas and building entrances" but does not include any standards or requirements for such routes and does not address pedestrian access to and from the site or surrounding area.

A. Sidewalks
Sidewalks shall be installed on both sides of all streets and within and along the frontage of all new development or redevelopment, as required by the Thoroughfare Plan.

1. Where Required
   a. Sidewalks shall be provided by the developer to allow convenient pedestrian access through or across the development and joining with pedestrian ways of adjacent properties.
   b. Sidewalks shall be installed on both sides of all arterials, collector streets, and local streets, and within and along the frontage of all new development and redevelopment.

2. When Required
   [reserved]

3. Design and Materials
   Sidewalks shall be constructed in accordance with the Thoroughfare Plan and current engineering design standards.

B. On-Site Pedestrian Walkways
All multi-family, non-residential, and mixed-use development shall provide an on-site system of pedestrian walkways that meets the following standards:

1. Areas to Connect
   On-site pedestrian walkways shall provide direct access and connections to and between:
   a. The primary entrance or entrances to each building, including pad-site buildings;

---

159 Fill this out as part of the procedures installment. Currently, only platting triggers sidewalk installation, but the City intent is to broaden that to zoning and building permitting, also.
b. Any sidewalks, walkways, or multi-use paths on adjacent properties that extend to the boundaries shared with the development;

c. Any parking areas intended to serve the development;

d. Any sidewalk system along the perimeter streets adjacent to the development;

e. Any public transit station areas, transit stops, park and ride facilities, or other transit facilities on-site or along an adjacent street; and

f. Any adjacent or on-site public park, trail system, open space, greenway, or other public or civic use or amenity.

2. Walkway Design

Required on-site pedestrian walkways shall be a minimum width of five feet. All required walkways shall:

a. Be distinguishable from areas used by vehicles using one or more of the following techniques:

i. Changing surfacing material, patterns, and/or paving color, but not including the painting of the paving material;

ii. Changing paving height;

iii. Decorative bollards;

iv. Raised median walkways with landscaped buffers or low-impact development BMPs;

b. Be designed with similar and/or complementary details, colors, and finishes as other interconnected walkways;

c. Have adequate lighting for security and safety;

d. Be conveniently and centrally located on the subject property;

e. Be ADA-accessible; and

f. Not include barriers that limit pedestrian access between the subject property and required connections to adjacent properties.

C. Pedestrian Access through Parking Areas

All parking lots that contain more than two double rows of vehicle parking shall include pedestrian walkways through the parking lot to the primary building entrance or a sidewalk providing access to the primary building entrance. At a minimum, walkways shall be provided for every three driving aisles or at a distance of not more than 150-foot intervals, whichever is less. See Figure 4.9.6-2.

---

160 City wants to make shade mandatory on some sidewalks. This will be addressed as part of the downtown design standards coming in a forthcoming installment.
D. Pedestrian Access through Parking Garages
Pedestrian walkways shall be provided through parking garages from the parking area to the abutting public right-of-way and sidewalk and/or to the primary entrance of the building served. Pedestrian walkways shall not use vehicle entrance or exit driveways from the parking area to a public right-of-way.

E. Active Transportation Connectivity
Off-street trails, enhanced pedestrian paths, and active transportation corridors shall be installed in all new development or redevelopment, as required by the Thoroughfare Plan.

4.9.7 Bicycle Circulation
A. Bicycle routes shall be established in accordance with the Thoroughfare Plan and Public Works and/or Transportation and Capital Improvements Department specifications.

B. The development's internal bicycle circulation system shall permit safe, convenient, efficient, and orderly movement of bicycles between the development's internal origin and destination points and adjacent parts of an existing or planned external, community-wide bicycle circulation system, as well as any adjacent transit stations, bus stops and shelters, public parks, greenways, schools, community centers, and shopping areas.

C. Sidewalks shall not be used to satisfy the bicycle circulation requirement unless at least 10 feet wide.

4.9.8 Developer Responsibility for Access and Connectivity Improvements
A. On-Site Improvements

1. If a street is proposed within a development site, the developer shall provide roadway, bikeway, sidewalk, and other access and circulation improvements in accordance with the standards in this section, the Thoroughfare Plan, and current engineering design standards,

---

161 Further discussion needed on whether some of these requirements may be applied to private streets in “build-to-rent” communities, which may have hundreds of duplexes or townhouses on one platted lot.
and shall dedicate any required rights-of-way or easements as determined necessary by the City.

2. If a development site includes the proposed corridor of a street designated on an adopted plan, the development shall incorporate provision of the street into the design of the development and shall dedicate right-of-way that meets the right-of-way width standards for the street. If a traffic impact analysis shows that the development itself is expected to generate sufficient traffic to warrant design of the street as a principal or minor arterial thoroughfare, the developer shall be responsible for constructing the street (including any bikeway, sidewalk, and other associated access and circulation improvements) in accordance with the City’s standards for a principal or minor arterial thoroughfare, as appropriate; otherwise, the developer shall be responsible for constructing the street (including any bikeway, sidewalk, and other associated access and circulation improvements) to meet at least those standards in the Thoroughfare Plan for a local or collector street as determined by City staff.

B. Off-Site Improvements

1. If a development site fronts on and obtains vehicular access from an existing street, the developer shall be required to dedicate additional right-of-way along the street frontage or in the vicinity of the development and to provide roadway, bikeway, sidewalk, and other access and circulation improvements within the street right-of-way that are reasonably necessary to ensure the safe, convenient, efficient, and orderly accommodation of vehicular and pedestrian traffic demands and impacts generated by the proposed development.

2. Such improvements may include, but are not limited to, turn lanes, deceleration and acceleration lanes, widening or paving of substandard roadways, medians, bikeways, sidewalks, sidewalk ramps and crossings, street lights, bus shelters, and the relocation or improvement of utility lines and facilities needed to accommodate street improvements. The extent of required dedications and improvements related to the abutting street shall be roughly proportional to the traffic demands and impacts generated to and along that street by the proposed development.
Article 5: Subdivision Standards

5.1 General Standards

5.1.1 Purpose
The purpose of this article is to provide for the safe, efficient, orderly, and environmentally sound development of the City, and the provision of adequate streets, utilities, services, and facilities, all in accordance with the Comprehensive Plan for the City.

5.1.2 Authority
This chapter is adopted under the authority of the Constitution and laws of the state, including Texas Local Government Code chapters 42, 43, 212, and 311, and the City Charter.

5.1.3 Jurisdiction

A. Filing of Plats and Subdivision of Land
This chapter shall be applicable to the filing of plats and to the subdivision of land, as that term is defined herein and in Texas Local Government Code Ch. 212, within the corporate limits of the city and its extraterritorial jurisdiction as they may be from time to time adjusted by annexation or de-annexation. The city shall have all remedies and rights provided by said chapter 212 with regard to the control and approval of subdivisions and plats both within the city and within its extraterritorial jurisdiction in accordance with associated county interlocal agreements pursuant to the Texas Local Government Code.

B. Zoning Required
If property located within the City is not zoned, permanent zoning shall be obtained prior to filing a plat for recordation.

C. Edwards Aquifer Recharge Zone
Any plat that is located over the recharge zone of the Edwards Aquifer shall have approval from the Texas Commission on Environmental Quality (TCEQ), and such approval shall be filed with the City prior to the final plat being recorded.

---

162 Based on current Chapter 118, Article I.
163 New.
164 118-7.
5.1.4 Consistency with Comprehensive Plan

A. It is the intent of the City that this article shall be consistent with the adopted comprehensive plan, the zoning regulations of this Code, and any supplemental land use and community development policies that may be adopted by the City Council. No plat or subdivision of land within the city or its extraterritorial jurisdiction, as determined by the Texas Local Government Code, shall be approved unless it conforms to such plans, policies, and ordinances.

B. The City's comprehensive plan was adopted as a guide, not as a mandate, for growth and development of the entire city and its extraterritorial jurisdiction. The future land use plan shall not be, nor be considered, a zoning map, nor constitute zoning regulations or establish zoning boundaries and is not site- or parcel-specific and shall be used to illustrate generalized locations. Also, the Thoroughfare Plan depicts generalized locations of new alignments which are subject to modification to fit local conditions and refinement as development occurs.

5.1.5 Applicability

A. Platting Required

This article shall apply to the following forms of land subdivision and development activity within the city's limits and its extraterritorial jurisdiction; subject to the applicable provisions and exemptions of Texas Local Government Code Ch. 212 and exceptions to this article:

1. The division of land into two or more tracts, lots, sites, or parcels; or
2. All subdivisions of land whether by metes and bounds division or by plat, which were outside the jurisdiction of the city's subdivision regulations, and which subsequently came within the jurisdiction of the city's subdivision regulations through:
   a. Annexation (a subdivision started in another jurisdiction prior to annexation shall be allowed to continue provided it is in conformance with, and within the provisions of, Texas Local Government Code § 43.002); or
   b. Extension of the city's extraterritorial jurisdiction; or
   c. Through adoption of interlocal agreements; or
3. The combining of more than two contiguous tracts, lots, sites, or parcels for the purpose of creating one or more legal lots in order to achieve a more developable site, except as otherwise provided herein; or
4. When a building permit is required for the following uses on unplatted property.
   a. One- to four-family residential dwellings:
      i. Construction of a new dwelling unit; or
      ii. Moving a primary structure or a main building onto a piece of property; or
   b. Non-residential and multi-family:
      i. Construction of a new non-residential or multi-family structure; or
      ii. Moving a primary structure onto a piece of property; or
5. For tracts where any public improvements are proposed; or
6. When a property owner proposes to divide land within city limits or within the extraterritorial jurisdiction into two or more tracts, and claims exemption from subchapter A of Chapter 212 of the Texas Local Government Code for purposes of development, that results in parcels or lots all greater than five acres in size in the city limits or ten acres in the ETJ; or in the event

---

165 Combines 118-9 and 118-10.
166 Rewritten to exempt the combination of two legal lots from the platting requirement, per the Assessment recommendation.
that development of any such tract is intended, and where no public improvement is proposed to be dedicated, the owner shall first obtain approval of a development plat that meets the requirements of Texas Local Government Code Ch. 212, subchapter B, Regulation of Property Development, §§212.041—212.050, as may be amended. See §X.X for requirements for development plats.

B. **Platting Not Required**

The provisions of this article shall not apply to:

1. Development of legally platted land (i.e., land having final plat approval and having a recorded or recordable final plat) and approved prior to the effective date of this chapter, except as otherwise provided for herein (construction of facilities and structures shall conform to design and construction standards in effect at the time of construction) and for which no re-subdivision is sought;

2. The combining of contiguous legal tracts, lots, sites, or parcels for the sole purpose of erasing internal boundary lines and creating one legal lot in order to achieve a more developable site;¹⁶⁸

3. Sale, inheritance, or gift of land by metes and bounds of tracts upon which no improvements, development, subdivision, or alteration is occurring;

4. Existing cemeteries complying with all state and local laws and regulations;

5. A division of land created by order of a court of competent jurisdiction;

6. When a building, trade, or other permit is requested for unplatted or already platted parcels for one or more of the following activities:
   a. Replacement or reconstruction of an existing primary one- to four-family structure, but not to exceed the square footage, nor deviate from the original location, of the original structure;
   b. Building additions;
   c. Accessory buildings;
   d. Remodeling or repair which involves no expansion of square footage;
   e. Moving a structure off a lot or parcel; or
   f. Demolition.

7. A division of land in the ETJ for which all lots or tracts in the subdivision or development are at least ten acres in size and have at least 60 feet of frontage on a public street. However a development plat may be required, as described in §X.X,¹⁶⁹ or

8. A division of land within the corporate limits of the city into parts greater than five acres, where each part has at least 60 feet of frontage on a public street and no public improvement is being dedicated; provided, however, dedication of a public improvement pursuant to a development plat will not be deemed to require that the owner/developer obtain a subdivision plat. However a development plat may be required, as described in §X.X or

---

¹⁶⁸ Proposed new exception to platting requirement, as discussed in Assessment.
¹⁶⁹ X-ref to procedures article, installment 3.
Article 5: Subdivision Standards
5.1 General Standards
1.1.1

5.1.6 Special Provisions

A. Septic Tanks
No permit shall be issued by the City for the installation of septic tanks upon any lot in a subdivision for which a final plat has not been approved and filed for record, or upon any lot in a subdivision in which the standards contained in this article have not been complied with in full.

B. Grading and Building Permits
No site work such as grading and clearing may be initiated prior to issuance of a grading and clearance permit, and no building permit shall be issued by the City to begin construction on any structure on a lot in a subdivision for which a final plat has not been approved and filed for record unless exempt from platting as described in §5.1.5B, nor for any structure on a lot within a subdivision in which the standards contained in this article have not been complied with in full.

C. Street and Utility Installation, Maintenance, and Repair
The City shall not repair, maintain, install, or provide any streets or allow the provision of public utility services in any subdivision for which a final plat has not been approved and filed for record, nor in which the standards contained in this article or referred to in this article have not been complied with in full.

D. Utility Service
The City shall not permit the sale, supply, or approval of any utility service within a subdivision for which a final plat has not been approved and filed for record, nor in which the standards contained in this article or referred to in this article have not been complied with in full.

E. Final Plat Not Approved or Standards Not Complied With
If any subdivision exists for which a final plat has not been approved or in which the standards contained in this article or referred to in this article have not been complied with in full, the City Council shall pass a resolution reciting the fact of such noncompliance or failure to secure final plat approval, and reciting the fact that the provisions A, B, C, D, above apply to the subdivision and the lots therein. The city secretary shall, when directed by the City Council, cause a certified copy of such resolution under the corporate seal of the City to be filed in the deed records of the county or counties in which such subdivision or part thereof lies. If full compliance and final plat approval are secured after the filing of such resolution, the city secretary shall forthwith file an instrument in the deed records of such county or counties stating that provisions A, B, C, D, above no longer apply.

F. Filing of Security Prior to Recordation of Final Plat
Notwithstanding any contrary provisions in this article, if an applicant meets all other applicable requirements of this article and chooses to file security prior to recordation of the final plat and meets all requirements for posting security in this article, then provisions A, B, C, D, above shall not apply and permits may be issued, and improvements may be installed and maintained.

G. Regulations in Place at Time of Application Filing
The orders, regulations, ordinances, rules, expiration dates, or other properly adopted requirements or standards in effect at the time the original application is filed shall be the sole basis for consideration of all subsequent plans and plats required for the completion of the project. Subdivision master plans and related plats, and all other development plats for land

---

170 118-6. New subheadings. This is carried forward per the Assessment and detailed review table. However, it may require some additional fine-tuning to clarify the term "special provisions." We believe that term is used to collectively refer to subsections A-D here, and subsections E-G refer to the applicability of those special provisions in certain circumstances. Also, some of this material may be more appropriate to include the with the subdivision procedures.
covered by the subdivision master plans and plats, are considered collectively to be one series for a project.

5.1.7 Payment of All Indebtedness Attributable to a Specific Property\textsuperscript{171}

No person who owes delinquent taxes, delinquent assessments, delinquent fees, or any other delinquent debts or obligations to the city, and which are directly attributable to a piece of property, shall be allowed to record any plat or replat until the taxes, assessments, debts or obligations directly attributable to said property and owed by the property owner or a previous owner thereof shall have been first fully discharged by payment, or until an arrangement satisfactory to the city has been made for the payment of such debts or obligations. It shall be the applicant’s responsibility to provide evidence or proof that all taxes, assessments, debts or obligations have been paid before any plat is recorded.

5.2 Administration and Platting Procedures\textsuperscript{172}

[REMOVED; RESERVED FOR INSTALLMENT 3]

5.3 Design Standards\textsuperscript{173}

5.3.1 Generally\textsuperscript{174}

A. Conformity to Design Requirements

No plat shall be approved by the Planning Commission, and no completed improvements shall be accepted by the Transportation and Capital Improvements Department, unless they conform to the following design requirements and applicable standards, or unless waived by the Planning Commission in accordance with §X.X. Although the intention of this section is to establish uniform design standards, it neither replaces the need for engineering judgment nor precludes the use of information not presented. Other accepted engineering procedures may be used if approved by the Transportation and Capital Improvements Department.

B. Adequate Public Facilities Policy

The land to be divided or developed must be served adequately by essential public facilities and services. No subdivision shall be approved unless and until adequate public facilities exist or provision has been made for water, wastewater, drainage, electric and road facilities which are necessary to serve the development proposed, whether or not such facilities are to be located within the property being platted or off-site. This policy may be defined further and supplemented by other ordinances adopted by the city. Wherever the subject property adjoins undeveloped land, or wherever required by the city to serve the public good, utilities and drainage systems shall be extended to adjacent property lines to allow connection of these utilities and drainage systems by adjacent property owners when such adjacent property is platted and/or developed.

5.3.2 Blocks

\textbf{COMMENTARY}

\textsuperscript{171} 118-14.
\textsuperscript{172} 118 Chapter 118, Article II.
\textsuperscript{173} 118 Chapter 118, Article IV.
\textsuperscript{174} 118 Section 118-43.
A connectivity index or ratio, such as in the Mayfair DDCD, was suggested by some as an alternative to maximum block lengths. However, our experience in jurisdictions that have adopted those has been that they are unnecessarily challenging to explain and administer. We can provide sample language if staff still wants to consider them.

A. Maximum Block Length

**COMMENTARY**

Numerous stakeholders cited block length as challenging in practice and subject to frequent waiver requests, both on account of the length, and lack of clarity in how it should be measured. The current standards in 118-44 is that block lengths shall not exceed 1,200 feet, except along arterials, which may be 1,600 feet.

Various alternative options are proposed here for discussion, with most reducing maximum block length for residential areas to improve walkability.

- The first ties block length to street type, as specified in the Thoroughfare Plan. This approach is similar to what is used in San Antonio, but they have a more detailed street classification system (e.g., Local Type A, Local Type B, Collector A). Some numbers are included to start below but this would need to be further elaborated if this approach is selected for New Braunfels.

- The second would impose a simple average for residential blocks and no maximums for other blocks.

- The third approach is related to the zoning district in which streets are constructed. This approach is used in many communities as it is relatively simple to administer. It does not always work well for some transition areas where a road divides separate districts, in some mixed-use contexts, and where PD is proposed.

- The fourth option proposes a connectivity index, similar to what has been implemented in Mayfair. A block length is specified for local residential streets, but otherwise, the development simply has to meet the connectivity ratio, so block length can vary beyond the one basic standard (it is also possible to implement a connectivity index without the basic minimum standard). This approach largely eliminates issues with block length measurement, but it can be complicated for the public to understand, and staff to administer. Because of the complexity, such an approach is typically only applied where there are large tracts (20 acres and more) remaining to be developed.

For all options, a provision for added flexibility based on topography and other site-specific conditions is included.

1. **OPTION 1:**
   
   The maximum block length shall be based on the adjacent street type(s) in accordance with the Thoroughfare Plan.
   
   a. Local residential streets: 600 feet
   b. Minor/Major Collector: 1,200 feet
   c. Minor/Principal Arterial or Parkway: 1,600 feet
   d. Other classifications: no limit.

2. **OPTION 2:**

   Blocks where dwellings front a street within a subdivision or site plan shall not be less than 300 feet nor more than 600 feet in length.

3. **OPTION 3:**

   a. The maximum block length shall be based on the zoning district.

### Table 5-1: Block Length by Zoning District

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Maximum Average Block Length (ft)</th>
<th>Maximum Block Length (ft)</th>
<th>Maximum Block Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4, R2.5, RMX, RMF1, MXT, CN</td>
<td>550</td>
<td>650</td>
<td>2,200</td>
</tr>
</tbody>
</table>
### Article 5: Subdivision Standards

#### 5.3 Design Standards

#### 5.3.2 Blocks

| R12, R8, R6.6, R5.5, RMF2, MXC | 600 | 800 | 2,400 |
| R12, R8, R6.6, R5.5, RMF2, MXC | 600 | 800 | 2,400 |
| RMF3, MXR, CG | 800 | 1,000 | 2,600 |
| All Other Districts | None | None | None |

b. Within a single phase of any subdivision, individual blocks may exceed the maximum average block length up to the length allowed in the Maximum Block Length column in Table X.X above, provided that the average length of all blocks in the phase does not exceed the maximum.

### 4. **OPTION 4:** Connectivity Ratio

#### a. Purpose

The intent of applying a connectivity ratio to new development is to ensure that:

i. There is a minimum level of access to and from destinations in a neighborhood, including more than one route to and from a destination;

ii. Traffic is distributed over multiple roads in the network, rather than channeled on to one or two congested access roads; and

iii. There are enhanced options for non-vehicular travel, with shorter, more walkable blocks, and provisions for bicycles.

#### b. Applicability

This connectivity ratio shall be required for new subdivisions of at least 20 acres.

#### c. Minimum Standards

i. The maximum block length for local residential streets shall be 750 feet.

ii. There is no maximum block length for collector and arterial streets, however, the subdivision overall shall achieve an internal connectivity ratio between links and nodes of 1.4.

iii. A link is a street section or block face along a traveled way. A node is an intersection of streets, or an intersection of a street and a non-vehicular connection (such as a pedestrian easement that connects the end of a cul-de-sac to the closest adjacent street or walkway beyond the end of the cul-de-sac. See Figure 4.9.4-1.)

#### d. Calculating Connectivity Ratio

The connectivity ratio is calculated by dividing the number of street sections by the number of intersections.

#### e. Example Calculation

In the Figure below, the street section links are numbered, and the nodes are diamonds. The example on the left does not have sufficient connectivity to meet the 1.4 connectivity ratio requirement, while the example on the right does meet the requirement.
5. FOR ALL OPTIONS:
The Board of Adjustment may approve a shorter or longer block length when necessary to accommodate natural features such as steep slopes, environmentally sensitive lands, and pedestrian linkages; or for blocks adjacent to the outer perimeter of the property.

B. Measurement
1. The length of a block is measured along the longest axis, as illustrated below:

   **Figure 5.3.2-3: Block Length Measurement**

2. The perimeter of a block is measured along the edge of the properties adjoining the public right-of-way, except for the measurement of dead end streets (including culs-de-sac), which are measured from intersecting centerlines, as shown below.
3. To measure an irregularly shaped block:
   a. Length is measured along the longest uninterrupted axis of the block, as illustrated below.

   **Figure 5.3.2-5: Irregular Block Length Measurements**
   NOTE: This illustration is being updated to include lots and streets. A second graphic will be created to show intersections that meet the maximum block length standards.

   b. **Option 1:** Along the length of this longest axis, a connection such as an intersection or pedestrian pathway to an adjacent street shall be provided at an interval not greater than the maximum allowed block length, on at least one side of the street, in order to meet the block length requirement.\(^\text{177}\)

   c. **Option 2:** The length of a block where residential uses front a street within a subdivision or site plan shall be measured from the edge of the property line of the street siding the furthest lot of the block width or to the center of a cul-de-sac, 90° Elbow, or 90° Knuckle.\(^\text{178}\)

\(^{177}\) New.
\(^{178}\) From San Antonio. Intended to help with measurement in unusual block configurations, which was cited as an issue.
5.3.3 Lots

A. Purpose
The purpose of standards for lots and access is to ensure that:

1. Each lot conforms to the minimum requirements of the established zoning district, if located within the city's corporate limits.
2. The minimum lot dimensional requirements ensure each lot is "buildable," with sufficient area for a structure and any required setbacks and open space as mandated by zoning district requirements, and that relatively uniform lot sizes maintain a consistent character among different lots in the same development.
3. There is space for the proper provision of utilities to serve the lot (above or underground), and for driveway access and spacing.
4. Each lot has adequate access to an improved public or private street, to facilitate egress and ingress, as well as access for emergency services.

B. Minimum Lot Frontage and Street Access
1. Each lot on a subdivision plat shall front onto a dedicated, improved public street unless platted as an approved private street subdivision in accordance with this chapter. Lot width and access shall conform with the provisions of this article; Chapter 114, Streets, Sidewalks, and Other Public Places; the comprehensive plan; and any other applicable city code or ordinance.
2. In all cases, minimum allowable street frontage shall not be less than minimum lot width specified by the applicable zoning district.\(^\text{180}\)
3. Non-buildable lots such as drainage lots shall have a minimum street frontage of 15 feet to ensure access to the site for maintenance.\(^\text{181}\)

C. Lot Depth-to-Width Ratio\(^\text{182}\)
To avoid the creation of long narrow lots, the depth of a lot shall not exceed three times the width of the lot measured at road frontage.

D. Irregular-shaped Lots
1. Irregular-shaped lots shall have sufficient width at the building line to meet lot width and frontage requirements of the appropriate zoning district (if within the city's limits) and shall provide a reasonable building pad without encroachment into front, side or rear yard setbacks or into any type of easement.
2. The rear width shall be sufficient to provide access for all necessary utilities, including access for driveways and solid waste collection when rear alleys are present (minimum 20-foot alley frontage).
3. The Planning Commission may disapprove any lot that, in its sole opinion, will not be suitable or desirable for the purpose intended, which is an obvious attempt to circumvent the purpose

\(^{179}\) Section 118-45. New subheadings added.
\(^{180}\) This provision was changed to recognize that minimum lot width in some of the proposed zoning district is less than what this provision originally specified.
\(^{181}\) New per staff comment in Assessment.
\(^{182}\) Proposed new standard based on staff comments. A minimum lot width-to-depth ratio is intended to prevent the creation of long and narrow lots, as well as the crowding of buildings along access roads while leaving the land behind buildings vacant and unserviceable.
and intent of lot configuration or lot width minimums, or which is so oddly shaped as to create a hindrance to the logical lot layout of surrounding properties.

E. **On-Site Sewage Facilities (OSSF)—Septic Tanks**

Where public wastewater lines are not available, as determined in chapter 130, OSSF such as septic tanks may be used. Minimum lot sizes shall be as follows:

1. **One-to-Four-Family Lots Within City limits**
   a. Lots served by public water supply: One-half acre.
   b. Lots not served by public water supply: One acre.
   c. Any lot over the Edwards Aquifer Recharge Zone: governed by the Texas Commission on Environmental Quality (TCEQ); please see TCEQ’s current standards.

2. **Multi-Family and Non-Residential Lots**
   As determined by the City based on a study provided by the subdivider/developer.

3. **ETJ**
   If in the ETJ or otherwise outside the city limits, the respective county’s standards apply.

F. **Extra Depth and Width in Certain Cases**

1. Where a lot in a one-to-four-family residential area backs up to a railroad, a high-pressure gasoline easement, oil or gas line easement, electric transmission lines (69 kv or higher) easement, an arterial street, an industrial area or other land use that may have a depreciating effect on the residential use of the property, and where no marginal access street or other street is provided at the rear of such lot, additional depth may be required by the Planning Commission.

2. Where a lot sides to any of the above-described cases, additional width may be required by the Planning Commission.

G. **Lots Adjacent to or in Floodplains**

1. Subdivision of property in a designated floodplain must meet the requirements of the adopted ordinances of the city regulating land use and development in the floodplain.

2. In no instance shall development be allowed in the floodway.

H. **Common Areas**

1. Areas held in common by a homeowners’ or property owners’ association shall be shown on the plat as a separate lot.

2. If the common areas or easements shown on a plat are not properly maintained as determined by the Planning and Development Services Department and the Transportation and Capital Improvements Department, the City may make notice to the association to begin maintenance. Notice shall be given at least 14 days prior to any action on the part of the City to enforce proper maintenance provisions of this or any other chapter of this Code. If the common area is not properly maintained, the city may take any appropriate action allowed by law in a court of competent jurisdiction to enforce the provisions of this section.

3. In addition, the city may, after at least 14 days’ notice to the association, complete such improvements or maintenance as determined necessary by the Transportation and Capital Improvements Department and place a lien on all the property in the subdivision in which common improvement or easement is located for each lot’s pro-rata share of the work completed by the City at the City’s expense. A note to this effect shall be placed on the final plat of any subdivision which has common areas or easements maintained by a homeowners’ or property owners’ association.
5.3.4 Streets

**COMMENTARY**

In this section, where text appears, that indicates content included in the new Access and Circulation section. It is maintained in this Article in this draft to allow reviewers to see what content will be relocated out of Subdivision standards in future drafts, unless reviewers indicate reasons particular provisions should be maintained in this Article.

A. **Street Layout**

1. Adequate streets shall be provided by the subdivider. The arrangement, character, extent, width, grade, and location of each shall be considered in their relation to existing and planned streets, topographical conditions, public safety and convenience, and in their appropriate relationship to the proposed uses of land to be served by such streets, with a grid pattern layout preferred to the greatest extent possible. Local residential streets should be laid out to discourage their use by through traffic, by the use of curving streets, T-intersections, roundabouts, and other traffic calming measures.

2. A waiver may be considered for local residential streets as defined in subsection (X.X) that may curve, meander, and otherwise deviate from the radius and tangent requirements set forth in subsection (X.X) when:
   a. The developer's engineer designs streets that meet recognized standards, and
   b. The Planning Commission determines that such design is not contrary to the best interest of the city, public safety, and the users of its street system.

B. **Streets on City Comprehensive Plan or Thoroughfare Plan**

The City Council has adopted the *Envision New Braunfels* comprehensive plan as a guide for growth and development of the entire city and its extraterritorial jurisdiction.

1. When a tract to be platted borders on or embraces any part of any street shown on the Thoroughfare Plan, all parts of such proposed street shall be shown on the master plan or the plat.

2. All arterial and collector street locations, alignments, right-of-way widths, pavement widths, and cross sections shall be determined by the Planning Commission and City Council in accordance with its adopted Thoroughfare Plan.

C. **Relation to Adjoining Street System**

Where necessary to the neighborhood pattern, existing streets in adjoining areas shall be continued and shall be at least as wide as such existing streets and in alignment therewith.

D. **Projection of Streets**

Where adjoining areas are not subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such unsubdivided area.

E. **Street Names**

Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of or in alignment with existing streets, in which case names of existing streets shall be used.

F. **Street Jogs**

Street jogs with centerline offsets of less than 150 feet shall be prohibited. A street intersecting with or extending to meet an existing street shall be tied to the existing street on centerline with distances and angles to show relationships.

G. **Half Streets or Half Alleys**

All subdivisions shall have access to an adequate perimeter street or approach street as defined in this section.
H. **Street Intersections**
Street intersections shall be as nearly at right angles as practicable, giving due regard to terrain and topography, site distances and safety. Roundabouts are encouraged to resolve issues when right angle intersections are impractical. Curb radii shall conform to city standards.

I. **Dead-End Streets**
Permanent dead-end streets shall be prohibited except as short stubs to permit future expansion and shall not exceed the depth of one lot or 250 feet, whichever is less, unless a temporary turnaround is installed in accordance with subsection J below.

J. **Temporary Turnarounds**
Temporary turnarounds shall be required if:
1. The stub street extends beyond one buildable lot or 250 feet, whichever is less, or
2. Where the buildable lot width fronts and only has access to the stub street. For purposes of this subsection only, a stub street is measured from the centerline of the nearest intersecting street with the stub street, as illustrated below.

![Figure: 5.3.4-1: Measurement from Stub Street](image)

K. **Cul-de-Sac**
1. A cul-de-sac shall not be more than 1,000 feet in length unless:
   a. A “turn-around bubble” is provided in accordance with this chapter, or
   b. It is recommended by the Transportation and Capital Improvements Department and approved by the Planning Commission for specific reasons of topography or engineering design.
2. All culs-de-sac longer than 1,000 feet shall have a “turn around bubble” with the same radius and driving surface noted above located at least every 1,000 feet. “T” or “hammerhead” turnarounds may be approved by the Planning Commission if recommended by the Transportation and Capital Improvements Department.
3. All cul-de-sac streets greater than 150 feet from the centerline of the cross street’s pavement to the center point of the cul-de-sac turnaround shall be designed with a minimum right-of-way radius of 65 feet and a minimum driving surface radius of 55 feet. Cul-de-sac streets less than or equal to 150 feet shall be designed with a minimum right-of-way radius of 58 feet and a minimum driving surface radius of 48 feet. Larger culs-de-sac may be required dependent on the development as recommended by the Transportation and Capital Improvements Department and approved by Planning Commission and City Council.
L. Medians and Traffic Calming
   1. A median is the portion of the roadway separating traffic traveling in opposite directions.
      a. Medians are desirable on collectors and arterials carrying four or more lanes of traffic for operations, access management and safety. Medians may also offer an open green space, provide a refuge area for pedestrians, and control the location of intersection traffic conflicts.
      b. Median design shall meet recognized engineering design standards.
      c. Landscaping, vegetation, and other natural features in medians may constitute roadside obstacles and shall meet recognized roadside and sight distance standards.
   2. Traffic calming is the use of physical devices to influence vehicle operations in order to reduce anticipated speeds and through traffic, and increase driver awareness in residential areas. Traffic calming may be placed on local and residential collector streets adjacent to one- to four-family residential lots.
      a. Traffic calming measures may include road narrowing, midblock medians, cul-de-sac islands, curb extensions, traffic circles, speed tables, and roundabouts.
      b. Traffic calming measures shall meet recognized engineering design standards.

M. Local Residential Streets
Local streets serving residential property shall be laid out so as to discourage their use by through traffic.

N. Pavement Widths and Rights-of-Way of Streets Forming the Subdivision Boundary
   Where a proposed subdivision abuts an existing street or half-street that does not conform to the requirements of this section, the subdivider shall dedicate or reserve the needed right-of-way width.

O. Reserve Strips Prohibited
   There shall be no reserve strips controlling or preventing access to land dedicated or intended to be dedicated to public use or to street or trail connections from one subdivision to another.

P. Non-Access Easement
   Where deemed necessary by the Planning Commission, a vehicular non-access easement may be required on a lot or lots for the purpose of controlling ingress and egress to vehicular traffic.

Q. Responsibility for Right-of-Way Dedication and Public Street Construction
   1. Internal Streets
      a. The developer shall be responsible for the dedication and construction of all local and collector streets within the proposed subdivision at their own expense. The developer may also be required to construct at least two lanes of an arterial street, if a traffic impact analysis (TIA) demonstrates that this is necessary to support traffic anticipated to be generated by the subdivision.
      b. The developer may be required to dedicate additional right-of-way and construct additional lanes of an arterial street or TxDOT road based on the Planning Commission’s review of a traffic impact analysis (TIA), and if such construction does not impose a disproportionate burden on the property owner or their property.
      c. The Planning Commission may allow in lieu of construction an escrow be deposited for a period no longer than ten years equal to the developer’s roughly proportionate share of the cost of constructing streets, the value of which shall be approved by the Transportation and Capital Improvements Department.
      d. Streets shall be constructed in accordance with this chapter.
2. **Perimeter Streets**
   a. The developer shall, at their own cost, dedicate or reserve right-of-way for approach and perimeter streets, if such dedication or reservation does not impose a disproportionate burden on the property owner or their property.
   b. The city may, at the city's sole option, pay for street right-of-way acquisition or street construction that is in excess of the demand caused by the subdivision or development.
   c. **Adequate access**
      i. All subdivisions shall have access to an adequate perimeter or approach street. An adequate perimeter or approach street is a dedicated public street that has an average pavement width of at least 24 feet adjacent to the area being platted, even though such pavement is not to city standards at the time of platting. If the approach or perimeter street is adequate, the developer shall not be required to build additional approach or perimeter streets, but shall be required to dedicate or reserve right-of-way according to this section. If a subdivision does not have access to an adequate perimeter or approach street, as defined above, the Planning Commission may deny the plat, the developer may construct an adequate street as determined by the Commission, or the developer may offer to enter into a development agreement with the city for sharing in the cost of constructing an adequate street. Such development agreement may be approved by the City Council.
      ii. If there is more than one perimeter or approach street adjacent to the area being platted, at least one of those streets must be adequate, or be constructed to be adequate, and improvement of the other(s) perimeter or approach street(s) is (are) not required to be adequate. However, right-of-way shall be dedicated or reserved according to this section for all perimeter or approach roads.
      iii. If the area being platted has adequate access but is adjacent to other inadequate perimeter or approach street(s), the developer may either improve the inadequate street(s) to city specifications in the area adjacent to the area being platted or not take access to the inadequate street(s). The Planning Commission may require a “stub out” of an internal street to the inadequate perimeter or approach street and the developer may be required to provide a temporary turn around for a dead end street in accordance with this chapter.
      d. The construction of an adequate access shall be according to the standards of this LDO and Chapter 114.

3. Based on a traffic impact analysis, the Planning Commission may require a developer to dedicate or reserve right-of-way and/or construct street improvements to mitigate adverse traffic impacts shown by the analysis which the Commission deems appropriate and roughly proportionate to the development's impact.

R. **TxDOT Access**
All plats that require access from a TxDOT-maintained roadway shall be submitted by the applicant to the TxDOT district office for review prior to submission of a plat application to the city. No final plat shall be recorded unless TxDOT has notified the city in writing that the proposed access to and proposed right-of-way dedication or reservation to the TxDOT roadway is acceptable.

S. **Slope Easements**
The dedication of easements, in addition to dedicated rights-of-way, may be required whenever, due to topography, additional width is necessary to provide adequate earth slopes.

T. **Intersection Improvements and Traffic Control Devices**
Intersection improvements and traffic control devices shall be installed as warranted in accordance with the traffic impact analysis required by this section, or as may be required by the Planning Commission for traffic safety and efficiency. Construction and design standards shall be in accordance with this chapter.
U. **Private Streets**¹⁸⁷

The layout for new subdivisions with private streets may be approved at the time of master plan or plat approval. All private streets must be designated as a lot or lots on the subdivision plat and must be conveyed by the developer or owner to a homeowners’ association or property owners’ association. The subdivision plat shall provide a note that the street is a private street and shall be maintained by the homeowners’ or property owners’ association and that the city shall have no maintenance or repair responsibilities. The city may periodically inspect private streets and may require any repairs necessary to ensure efficient emergency access and to protect the public health, safety, convenience and welfare. The following are the requirements for subdivisions with private streets:

1. **Construction and Maintenance Cost**
   
The dimensional, but not structural, standards for private streets shall be designed by a licensed professional engineer, and do not have to meet the standards for public streets contained in this chapter, if a waiver of such standards is approved by the Planning Commission in accordance with this chapter. The city shall not pay for any portion of the cost of constructing or maintaining a private street. A HOA or property owners’ association is required to maintain private streets.

2. **Restricted Access**
   
The entrances to all private streets shall be clearly marked with a sign, placed in a prominent and visible location, stating that the streets within the subdivision are private and that they are not maintained nor regularly patrolled by the city. All restricted access entrances shall provide a reliable means of ensuring access into the subdivision by the city, by emergency service providers, and by other utility or public service providers, such as postal carriers and utility companies. The method to be used to ensure city and emergency access into the subdivision shall be approved by the city’s fire department and by any other applicable emergency service providers. If the association fails to maintain reliable access as required herein, the city may enter the private street subdivision and remove any gate or device that is a barrier to access at the sole expense of the HOA or property owners’ association.

3. **Waiver of Services**
   
Certain city services may not be provided for private street subdivisions. Among the services that may not be provided are: routine law enforcement patrols, enforcement of traffic and parking regulations, and preparation of accident reports. Depending upon the characteristics of the development and upon access limitations posed by the design of entrances into the subdivision, other services (such as sanitation) may not be provided as well.

4. **Petition to Convert to Public Streets**
   
The HOA or property owners’ association may petition the City Council to accept private streets and any associated property as public streets and right-of-way upon written notice to all association members and upon the favorable vote of a majority of the membership. Such petition shall be submitted to the Planning Commission in accordance with the Commission’s calendar for master plans and plats, who shall make a recommendation to the City Council. However, in no event shall the city be obligated to accept said private streets as public streets. Should the city elect to accept the private streets as public streets, the city has the right to inspect the private streets and to assess the lot owners for: (i) the expense of improving the private streets to meet city standards for public streets and (ii) the expense of needed repairs, if any, prior to the city’s acceptance of the streets. The city shall be the sole judge of whether improvements and/or repairs are needed. The city may also require, at the association’s or the lot owners’ expense, the removal of any guard houses, access control devices, landscaping or

¹⁸⁷ Current 128-46(x).
other aesthetic amenities, appurtenances or objects, located within the street lot or within any other common area.

5. **Gated Subdivision Streets**
When a gated entry is installed on a private street, the following provisions shall be met:

a. **Emergency Access**
   An approved keyed or keyless entry system shall be provided on all gates. This security access system shall include the following for the specified type of gate:

   i. **Electric-Operated Gates**
      a. A gate override in case of power failure;
      b. Access provided to the school district, law enforcement, and utility providers; and
      c. A fire department lock box for the fire department having jurisdiction.

   ii. **Non-Electric-Operated Gates**
      a. A fire department lock box. If within the ETJ, the key or code of the fire department lock box shall be provided to the appropriate county office of emergency management.
      b. Non-electric operated gates shall only be utilized at secondary access points.

   iii. Written approval from the responding fire department confirming their satisfaction with the access being provided shall be submitted.

b. **Queuing**
At gated entrances where traffic can queue into public streets, the gate and entrance design must provide for sufficient storage capacity so that no vehicles will queue into the public street. Gated entrance shall be designed as follows:

   i. The gated entryway vehicle storage length measured from the call box to the public right-of-way shall meet the following requirements:
      a. A minimum of 40 feet for up to 100 peak hour trips.
      b. For developments over 100 peak hour trips, the traffic impact analysis shall include a queuing analysis to determine the minimum entryway vehicle storage length for the gated entry.

   ii. The gated entryway distance from the call box to the entry gate shall be a minimum of 30 feet.

   iii. The gated entryway pavement width for each egress and ingress shall be a minimum of 20 feet.

   iv. The gated entryway center median shall be a minimum of four feet wide.

   v. The gated entryway area between the entry gate and public right-of-way shall be free from overhead structures, mail boxes or other objects that may limit the safe movement of vehicles or restrict sight distance.

   vi. The subdivider shall provide for vehicle turnaround capability based on the single unit design (SU-30) vehicle as provided in the 2011 American Association of State Highway and Transportation Officials A Policy on Geometric Design of Highways and Streets, or latest revision thereof or be able to make a three-point turning movement to prevent a motorist from backing onto the public street.

c. **Connectivity**
The street system shall comply with other street standards of this chapter.

d. **Completion and Acceptance**
Gates shall be installed and operational prior to completion of construction of required public/subdivision improvements as defined in this chapter, and be accepted by the fire marshal and Transportation and Capital Improvements Department.
## 5.3.5 Alleys

**A.** Alleys may be required or provided in residential, commercial, and industrial areas. Alleys, if required or provided, shall be constructed at the expense of the developer and shall conform to the provisions of this chapter.

**B.** Dedicated alleys must be approved by the Planning Commission at the time of plat approval before they can become public alleys. Otherwise, they shall be treated as service drives or private alleys and the developer, HOA, or property owners’ association shall be responsible for maintenance.

**C.** Alley rights-of-way, except as provided in subsection F below, shall be a minimum of 20 feet wide, with 20 feet of paving in business and industrial areas and a minimum of 12 feet of paving in residential areas. All alley paving shall be done in accordance with city standards.

**D.** Where two alleys or utility easements intersect or turn at a right angle, a cutoff or corner clip of not less than ten feet from the normal intersection of the property or easement line shall be provided along each property or easement line.

**E.** If alleys are not themselves straight within each block, or if the alleys do not connect on a straight course with the alleys of adjoining blocks, then an easement shall be provided for the placing of guy wires on lot division line in order to support poles set on curving or deviating rights-of-way of alleys. Alternately, utilities shall be placed underground as described in §5.3.6A - Underground Utilities.

**F.** Lots that have rear entry garages or access will be provided with a service drive or private or public alley abutting the rear lot line. The service drive or alley shall have a minimum right-of-way width of 25 feet, a minimum paved surface width of 22 feet, and shall be constructed in accordance with city standards. Service drives and private or public alleys shall not exceed 1200 feet in length without providing access at the midsection of the alley to a public street. Dead-end service drives serving less than eight units will be permitted. Service drives shall not be dedicated to the city and maintenance of such service drives shall be the responsibility of the owner, HOA, or property owners’ association within the subdivision.

---

191 Section 128-47.
192 Increased from the current 900 feet per stakeholder suggestion.
5.3.6 Utilities and Utility Easements

A. Underground Utilities
   1. All wires, cables, or other equipment for the distribution of electric energy and telecommunication signals, with the exception of transformers, meters, junction boxes, and like equipment, shall be placed underground where practicable.
   2. Where subdivisions or developments are approved along or crossing existing overhead power and communications facilities, energy and telecommunications may be obtained from these existing facilities. The connections to these facilities shall be placed underground unless otherwise approved by the Transportation and Capital Improvements Department due to economic, engineering, or aesthetic reasons.

B. Utility Easements
   1. Utility easements and rights-of-way shall be provided in the subdivision or development that meet the requirements of City systems for the installation and maintenance of energy distribution, telecommunication facilities, water, wastewater, and storm drainage facilities.
   2. The location and width of sanitary sewer system, water, electrical, communication or other such utility easements shall be determined by the appropriate utility in accordance with the utility's applicable standards, and the standards described in §X.X [Construction Plans]. Drainage and storm water easements and rights-of-ways shall be determined in accordance with chapter 143 and the Drainage and Erosion Control Design Manual.
   3. Where easements are required for other than public utilities, then the location and width must be acceptable to the private utility company concerned with the approval of the Planning Commission.
   4. Where any public or private utility line is required to be adjusted in location or elevation, the developer shall implement changes pursuant to the approval of the Transportation and Capital Improvements Department and the utility using the easement.
   5. Where the proposed subdivision adjoins an unplatted property and a utility easement is to be dedicated on the adjacent property, then the adjacent property owner shall join in the dedication of the easement, which shall be shown on the plat.
   6. Where utility easements are not themselves straight within each block, or if such easements do not connect on a straight course with the utility easements of adjoining blocks, then an additional easement shall be provided for the placing of guy wires on lot division lines in order to support utility poles, or utilities shall be placed underground.
   7. Where two utility easements intersect or turn at a right angle, a cutoff or corner clip of not less than ten feet from the normal intersection of the property or easement line shall be provided along each property or easement line.

5.3.7 Sidewalks

A. Requirement for Installation
   Sidewalks shall be required at the time of platting, or building permit issuance, unless a variance is granted by the City Council, in accordance with the following:
   1. On the subdivision or development side or sides of all major thoroughfares or arterial streets as indicated on the city's Thoroughfare Plan, and on perimeter streets.

---

193 Proposed new standards.
194 First provision is new. Others carry forward current Section 118-48.
195 Section 118-49.
2. On both sides of a street that serves as a local or collector street, except:
   a. No sidewalks are required along a local residential large-lot street section, as shown in this chapter, where there is no parking on the street and where each lot has at least 100 feet of frontage;
   b. When an alternative pedestrian access plan is approved; and
   c. When a variance as described in §5.X, [Variance] is granted by the City Council.
3. As deemed necessary by the Planning Commission in any area based on uniformity along the street and conformity with the surrounding area.

B. Installation
Sidewalks shall be installed at the street front of lots, along the street side of corner lots, and as required on perimeter streets. Sidewalks shall be constructed by the builder or developer in accordance with city standards and specifications at such time as the lot is improved unless otherwise determined by the Planning Commission. For instance, where there would be no building improvement to the area adjacent to the sidewalk.

C. Escrow
Upon request of the applicant, the City Council may allow the applicant to deposit in escrow the cost of sidewalks on perimeter streets, as approved by the Transportation and Capital Improvements Department, for installation of sidewalks at a later date. The escrow money or letter of credit shall be deposited with the city prior to approval of a requested rezoning or building permit, or prior to plat recordation, whichever is first.

D. Plat Note
A note shall be placed on the final plat indicating that sidewalks were required, upon which streets sidewalks were required and who is responsible for installation.

E. Location of Sidewalks
1. Sidewalks shall be constructed in the right-of-way of the adjacent street, but may be in easements as approved by the Planning Commission. For instance, along TxDOT right-of-way where future improvements would damage the sidewalk or the sidewalk is not adjacent to a street.
2. Sidewalks adjacent to one- to four-, along a local street, shall be placed in the right-of-way at least three feet from the curb or adjacent to the curb.
3. All sidewalks adjacent to collector streets, arterial streets, or TxDOT highways shall be separated by at least four feet from the curb or edge of the shoulder.

F. Pedestrian and Bikeways
Pedestrian and bikeways, six feet or greater in width, located in the right-of-way or in a public access easement, shall be dedicated and constructed where identified in the Comprehensive Plan or other adopted plan, or deemed necessary by the Planning Commission, to provide circulation or access to schools, playgrounds, parks, shopping centers, arterial streets, and community facilities, or to provide pedestrian circulation within subdivisions. For instance, the Commission may require such pedestrian or bikeways along perimeter streets. All culs-de-sac shall have a pedestrian or bicycle path connecting to the sidewalk, street, or trail behind the cul-de-sac lots. See Figure X.X.

---

196 Struck-through language is proposed to be deleted in response to stakeholder requests for more flexibility in the timing of sidewalk installation.
197 Is it standard practice to require financial surety prior to approval of a request?
198 Does this only apply in the event of sidewalk being deferred? If so, it would be clearer to specify that.
199 Is there a difference between a pedestrian way and a sidewalk? Pedestrian way is a defined term, but the definition is very brief. If more information can be added, that would be helpful.
Pedestrian and bikeways shall be constructed by the developer with a surface approved by the Transportation and Capital Improvements Department.

G. Sidewalk Widths
Minimum sidewalk widths shall be as follows:
1. Along one- to four-family lots: Four feet.
2. Along multi-family or non-residential lots: Six feet.
3. In front of a commercial or multi-family building(s) where there is less than a ten-foot building setback: Ten feet.

H. Variances
A variance as described in §X.X from sidewalk requirements may be requested in the following circumstances:
1. There are unique or unusual topographic, vegetative, or other natural conditions that make strict adherence to the sidewalk requirements contained herein physically infeasible;
2. Strict adherence to the sidewalk requirements contained herein is not in keeping with the purposes and goals of the Code of Ordinances and the city’s comprehensive plan; or
3. There are public sidewalk or roadway improvements already are planned in the area.

I. Alternate Pedestrian Access Plan
Rather than requiring sidewalks on both sides of all streets within a subdivision, or along a perimeter street, the applicant may present for Planning and Development Services Department approval an alternate plan showing pedestrian access within and to destinations outside the subdivision such as schools and shopping. Such a plan might provide for no sidewalks on cul-de-sac bubbles, on both sides of all streets, or where the street was wider than the minimum standards.

1. Alternate pedestrian access plans may be approved, disapproved or approved with conditions by the Planning and Development Services Department.
2. The alternate pedestrian circulation plan shall contain at a minimum the following information:
   a. Letter explaining the purpose of the request;
   b. Location and arrangement of sidewalks, multiuse trails and pathways;
   c. Phasing or time schedule for the construction of the sidewalks, multiuse trails and pathways; and
   d. Identification of the sidewalk segments required under this section that will not be constructed.

5.3.8 Off-Street Bikeways and Trails

A. Off-street bikeways or trails shall be provided by the subdivider/developer as shown on the bikeway plan of the comprehensive plan and as required in this section, if the city agrees to maintain the bikeway or trail.

---

200 Suggest changing this to further differentiate it from the Variance option. A variance could be pursued if an applicant does not intend to provide a sidewalk, owing to topography or hardship, and proposes no alternative. If an alternative is proposed, it could be reviewed under this option.

201 Section 118-50.
B. The easement or right-of-way width and surface width of the bikeway or trail shall be determined by the Planning Commission at the time of plat approval.

### 5.3.9 Water, Sewer, and Drainage Facilities; Flood Hazards

**A. Generally**

The subdivider/developer shall dedicate, at their own cost, such rights-of-way and/or easements, and construct such water mains, water lines, fire hydrants, sanitary sewers, storm sewers, and drainage of such a size as to adequately serve the area being subdivided, as determined by the Transportation and Capital Improvements Department or the utility company under whose jurisdiction the subdivision falls. All facilities shall be constructed in accordance with the standards as set forth in this chapter and approved infrastructure construction plans.

**B. Water**

1. All subdivisions or developments shall be provided with water supply and water distribution systems constructed in compliance with this chapter.
2. Standard fire hydrants shall be installed as part of the water distribution system per specifications established by this chapter.
3. All subdivisions or developments shall provide each lot with fire flow according to the standards of chapter 54. Any subdivision or development that does not provide each lot with fire flow according to chapter 54 shall be declared to have an inadequate water system.

**C. Wastewater**

All subdivisions or developments shall be provided with a sewage disposal system constructed in compliance with this chapter and approved construction plans. Connection with the sanitary sewer system shall be required except where the Planning Commission, upon the recommendation of the Planning and Development Services Department, determines that such connection will require unreasonable expenditure, when compared with other methods of sewage disposal.

**D. Extension to Adjacent Development**

Wherever the subject property adjoins undeveloped land served by the same utility provider, or wherever required by the Planning Commission to serve the public good, utilities shall be extended within proposed public rights-of-way to adjacent property lines to allow connection of these utilities by adjacent property owners when such adjacent property is platted and/or developed.

**E. Drainage**

1. **Drainage Requirements**
   2. The subdivider or developer shall be responsible for submitting a drainage study with construction plans to the Transportation and Capital Improvements Department in accordance with the requirements of this chapter, chapter 143, and the drainage and erosion control and design manual. The drainage study shall be prepared by a professional engineer registered in the state. The study shall demonstrate to the Transportation and Capital Improvements Department’s satisfaction that all ordinance and drainage and erosion control manual requirements are met. The developer shall be responsible for constructing the drainage improvements in accordance with the construction plans approved by the Transportation and Capital Improvements Department. The requirements of chapter 143 are

---

202 Section 118-51.

203 Proposed new language “served by the same utility provider” and “within public rights-of-way” in response to stakeholder comments.
adopted by reference in this chapter, except that in the ETJ, no provision concerning fees or charges is applicable.

3. **Easement**
   Natural waterways and channels should be used to carry runoff, wherever practical. Any modification to existing waterways and channels must be approved by the Transportation and Capital Improvements Department. Where a subdivision is traversed by a watercourse, drainageway, natural channel or stream, there shall be provided an easement or right-of-way conforming substantially to the one percent annual chance floodplain limits of such watercourse, plus additional width to accommodate future needs.
   a. Storm drainage easements of 15 feet minimum width shall be provided for existing and proposed enclosed drainage systems. Easements shall be centered on the systems. Larger easements, where necessary, shall be provided as directed by the Transportation and Capital Improvements Department.
   b. Storm drainage easements along proposed or existing open channels shall provide sufficient width for the required channel and such additional width as may be required to provide ingress and egress of maintenance equipment, to provide clearance from fences and space for utility poles, to allow maintenance of the channel bank, and to provide adequate slopes necessary along the bank.
   c. Storm drainage easements shall provide emergency overflow drainageways of sufficient width to contain within the easement stormwater resulting from a one percent annual chance frequency storm assuming fully developed upstream watershed frequency storm less the amount of stormwater carried in any enclosed system.
   d. For one- to four-family residential subdivisions, drainage easements crossing lots and property lines are prohibited. Drainage easements shall be placed in separate common area lots.

4. **Installation of Drainage System**
   The subdivider/developer shall be responsible for providing an adequate drainage system approved by the Transportation and Capital Improvements Department that may consist of pipes, swales, natural features and manmade improvements that effectively carry runoff from the development. Detention ponds, retention ponds, and siltation ponds and/or improved storm water conveyance facilities, either on or off site, shall be used individually or in concert to control runoff and protect downstream interests from increased flooding from the subdivision or development.

5. **Topography of the Land**
   In order to help reduce storm water runoff and resulting erosion, sedimentation and conveyance of non-point source pollutants, the layout of the street network, lots and building sites shall, to the greatest extent possible, be sited and aligned along natural contour lines and shall minimize the amount of cut and fill on slopes in order to minimize the amount of land area that is disturbed during construction.

F. **Flood Hazards**
   1. **Generally**
      Proposed subdivisions or developments shall be developed to ensure that:
      a. All such proposals are consistent with the need to minimize flood damage.
      b. All public utilities and facilities, such as sewer, gas, electric and water systems are located, elevated, and constructed to minimize or eliminate flood damage.
      c. Adequate drainage is provided to reduce exposure to flood hazards.
   2. **Water and/or Wastewater Systems**
      New or replacement water supply systems and/or wastewater systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems discharges from the systems...
into floodwaters and to require on-site waste disposal systems to be located to avoid impairment of them or contamination from them during flooding.

3. **Floodplain**
   a. When a proposed subdivision or development has within it a drainageway where no regulatory floodway has been designated, no new construction, substantial improvements or other development, including fill, shall be permitted in an area that may have flood hazards, unless it is demonstrated that the cumulative effect of the proposed development or improvements, when combined with all other existing and anticipated development and improvements will not substantially increase the water surface elevation.
   b. In areas where there is an approved and mapped floodway, the subdivider or developer shall designate a drainage easement(s) for the floodway.
   c. In areas where a floodway is mapped and approved by the city, a flood study or demonstration of “no flood height increase” shall be required.
   d. If a proposed subdivision is within an area where flooding may occur, where there is no floodplain shown on a city-approved floodplain map, or where there is located an approved floodplain but no floodway, the subdivider shall:
      i. Conduct a study of where the base flood elevation would be, assuming a fully developed watershed, show a drainage easement on the plat, and show the elevation of the flood plain at intervals of every 500 lineal feet;
      ii. Conduct a study, using HEC or similar modeling that is approved by the Transportation and Capital Improvements Department, to ensure that the proposed development would not increase the elevation of the one percent annual chance base flood; or
      iii. Request a variance from the above requirements. The variance request shall be assessed with respect to proposed density, land use, lot sizes, building sizes, anticipated impervious cover, and the width and depth of the existing floodplain. All requests for a variance from this section shall be considered and decided by the City Council after a recommendation by the Planning Commission.

4. **System Design Requirements**
   Drainage improvements shall accommodate runoff from the upstream drainage area in its anticipated maximum “build-out” or “fully developed” condition, and shall be designed to prevent overloading the capacity of the downstream drainage system.

5. **Alterations to Existing Drainageways**
   No person, individual, partnership, firm or corporation shall deepen, widen, fill, reclaim, reroute or change the course or location of any existing ditch, channel, stream or drainageway without first obtaining written permission (or approved engineering and drainage studies) and a grading permit from the Transportation and Capital Improvements Department and any other applicable agency having jurisdiction, such as FEMA or the U.S. Army Corps of Engineers. The costs of such study, if required, shall be borne by the developer.

6. **Access to Subdivision**
   New “island” subdivisions, lots or streets that would be surrounded by the floodwater of the one percent annual chance flood shall not be allowed unless:
   1. The area is accessible to high ground by a street elevated above the one percent annual chance flood level.
   2. The evidence presented shows that the surface area and elevation of the “island” is sufficient to sustain the residents safely during a 0.75 percent annual chance flood.
H. Drainage and Floodplain Easements
All storm drainage and flood easements and all base flood elevations shall be shown on the final plat with a plat note stating that no development or building or structure is permitted within the easement and stating who will be responsible for maintaining the easement. Flood and storm drainage easements shall be of adequate width to accommodate drainage flows and the width of such easements shall be subject to approval of the Transportation and Capital Improvements Department.

5.3.10 Escrow Policies and Procedures

A. Request for Escrow
1. Whenever this chapter requires a property owner to construct a street, sidewalk, drainage improvement, or other type of public improvement, the property owner may petition the city to construct the street or other public improvement at a later date, in exchange for deposit of escrow as established in this section, if unusual circumstances, such as a timing issue due to pending roadway improvements by another agency such as TxDOT or the applicable county, exist that would present undue hardships or that would impede public infrastructure coordination or timing.
2. If more than one street or thoroughfare must be constructed in order to meet adequacy requirements for roadways, for instance as demonstrated by a traffic impact analysis, the City Council may prioritize roadways for which escrow is to be accepted and require the deposit of all funds attributable to the development in escrow accounts for one or more of such affected roadways.
3. The Transportation and Capital Improvements Department shall review the particular circumstances involved (a traffic impact analysis may be required to facilitate the Transportation and Capital Improvements Department's deliberations on the matter), and shall determine, at its sole discretion, whether or not provision of escrow deposits will be acceptable in lieu of the property owner's obligation to construct the street, sidewalk or other public improvement with their or her development.

B. Escrow Deposit with the City
Whenever the City Council agrees to accept escrow deposits in lieu of construction by the owner of the property under this chapter, the property owner or developer shall deposit in escrow with the city an amount equal to their share of the costs of "turnkey" design, construction, permits, reviews and approvals, inspections, any additional land acquisition, and an appropriate inflation factor to be determined by the Transportation and Capital Improvements Department to ensure that the actual "future dollar" costs will be covered when actual bid pricing and construction occur in the future. Such amount shall be reviewed by the Transportation and Capital Improvements Department, and shall be paid prior to release of construction plans by the Transportation and Capital Improvements Department, or if there are no construction plans, prior to recording the plat. The obligations and responsibilities of the property owner shall become those of the property owner's transferees, successors and assigns; and the liability therefore shall be joint and several.

C. Termination of Escrow
Escrows or portions of escrowed amounts, which have been placed with the city under this section and which have been held for a period of ten years from the date of such payment or agreement, in the event that the city has not authorized the preparation of plans and specifications for construction of such roadway facilities for which the escrow was made, shall, upon written request, be returned to the property owner along with one-half of its accrued interest. Such return

Section 118-52.
does not remove any obligations of the property owner for construction of the required facilities if a building permit has not been issued on the subject lot or if a new building permit is applied for.

D. Refund
If any street or highway for which escrow is deposited is constructed by a party other than the city or is reconstructed by another governmental authority at no cost to the city, the escrowed funds and accrued interest shall be refunded to the property owner or applicant who originally paid the escrow amount after completion and acceptance of the public improvements. In the event that a portion of the cost is borne by the city and the other portion of the cost by another party or governmental authority, the difference between the property owner's actual proportionate cost and the escrowed funds, including accrued interest, if any, shall be refunded after completion and acceptance of the improvements.

E. Interest Limitation
If money is refunded within six months of deposit, only the principal will be refunded. Monies returned after this date will be refunded with one-half of the accrued interest.

F. Credit Toward Impact Fees
All escrowed funds may be subject to credits against applicable impact fees.

G. Petition for Relief
The requirements of this section are subject to a petition for relief from a dedication or construction requirement, pursuant to this chapter.

5.3.11 Extraterritorial Jurisdiction Regulations

<table>
<thead>
<tr>
<th>COMMENTARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETJ regulations are under separate review, and will be restored to the LDO draft once finalized.</td>
</tr>
</tbody>
</table>

5.3.12 Monuments and Lot Markers

A. Location of Monuments
Monuments shall be set at each corner of the survey boundary of the subdivision and permanent lot markers shall be placed at each lot corner. Monuments and lot markers shall be set immediately after completion of utility installations and street construction, or as the Transportation and Capital Improvements Department may require.

B. Requirements
Monuments and lot markers shall be artificial monuments. An artificial monument considered permanent shall be construed as any mark or marker of relative permanence that if left undisturbed will remain in place for a period of at least 25 years. Monuments must be set at sufficient depth to retain a stable and distinctive location and be of sufficient size to withstand the deteriorating forces of nature. All monuments should be set in such a fashion as to remain stable against an applied force of approximately ten pounds from any direction for a duration in time of at least ten seconds. The monument material should be chosen in regard to the terrain and situation that exists at the site of monumentation. Where the view is obstructed between any two adjacent monuments, due to topographical conditions, permanent structures, or other conditions, intermediate monuments shall be so set as to assure a clear view between adjacent monuments. Lot markers shall be artificial monuments set at all angle points and at all points of curves.

206 Section 118-54.
C. **Registered Surveyor**
   A public surveyor, registered in the state, shall certify that the monument criteria of this section have been met.

### 5.3.13 Landscaping and Maintenance

#### A. **Vegetation**
Trees and groundcover should be preserved whenever possible. Existing trees, substantial vegetation and new plantings will be allowed within the right-of-way in accordance with this section. New planting shall only be those listed in the approved plant list in Appendix A.

#### B. **Landscape Features**
Subdivision entrance features, medians, median landscaping, islands, fence screening, landscaping, trees, and meandering sidewalks within the right-of-way are encouraged in locations where future street improvement, sidewalks, drainage improvements or utilities would not be located, or such landscaping or other improvements would not interfere with such utilities. Such features should be maintained by a property owner’s association.

#### C. **Tree Location**
Trees shall be planted no closer than six feet from the street's curb or edge of a street's shoulder.

#### D. **Power Lines**
In no event may trees other than ornamental trees as described in §4.2, Landscaping, be planted under or within ten lateral feet of any overhead utility wire.

#### E. **Underground Utilities**
In no event may trees be planted over or within five lateral feet of any underground water line, sewer line, electric line or other utility line unless written consent of utility provider(s) is obtained.

#### F. **Maintenance**
It shall be the duty and the obligation of all owners and occupants of real property abutting upon a tree or tree part, including those trees or tree parts situated in the right-of-way, (excluding any median in a street), parkway, utility easement, drainage easement or other public way, to maintain, at the expense of said owner/occupant the tree or tree part in a safe condition and to trim, prune or remove any tree or tree part that is in an unsafe or hazardous condition.

#### G. **Maintenance of Lots/Property**
After completion of construction, it shall be the responsibility of the developer and/or lot owner to clean and keep clean the lot or lots to a condition satisfactory to the fire marshal and to remove and prevent grass and/or weed growth in the paved street area.

---

207 Section 128-55.
5.4 Park Land

5.4.1 General Provisions

A. Purpose
This section is adopted to provide public recreational areas in the form of neighborhood/community and regional park facilities as a function of subdivision and site development in the city and its extra-territorial jurisdiction (ETJ).

B. Designation of Necessity and Public Welfare
It is hereby declared by the City Council that public recreational areas in the form of neighborhood/community and regional parks are necessary in the public welfare, and that the only adequate procedure to provide neighborhood/community and regional parks is to integrate such requirements into the procedure for planning and developing property or subdivisions in the city and its ETJ.

C. Planning Policy Guidance for Parks
The city has adopted by council action the comprehensive plan and the parks and recreation strategic master plan, as well as other master plans that serve as planning policy and guidance for the development of a municipal park and recreation system for the city. The plans assess the needs for park land and park improvements.

D. Establishment of Parks Districts
The park districts established by the City Council are shown in appendix X to this LDO and shall be prima facie proof that any park located therein is within a convenient distance from any residence located therein. The primary cost of neighborhood/community parks shall be the primary beneficiaries of such facilities.

E. Authority
This article is enacted in accordance with the home rule powers of the city granted under the Texas Constitution, and the statutes of the State of Texas, including, but not by way of limitation, Texas Local Government Code Ch. 212 as may be amended from time to time.

F. Administration of this Section
The Planning and Development Services Department shall administer this section, with certain review, recommendation and approval authorities being assigned to the Planning Commission, the parks and recreation advisory board, and various city departments as specified herein.

5.4.2 Applicability

A. This article applies to a landowner who develops land within the city or within its ETJ for residential use located. Typically, the landowner of a proposed residential development is the developer.

B. Non-residential use is exempt.

C. This article does not apply to activities involving the remodeling, rehabilitation, or other improvements to an existing residential structure, or to the rebuilding of a damaged structure.

---

208 Chapter 118, Article V.
209 Section 118-57. These new subheadings break up what is currently all grouped together in a long purpose statement.
210 Relocated from current 118-60. Changed from city manager in current ordinance.
211 Section 118-58.
D. If a dedication requirement arose prior to enactment or amendment of this article, subsequent
development for the subject tract to which the dedication requirement applies may be subject to
vesting as set forth in Texas Local Government Code Ch. 245. Additional dedication may be
required if there is an increase in the number of dwelling units from what was originally proposed.

5.4.3 Park Land Dedication Requirements

As a condition of subdivision development, a developer of residential property shall be required to
dedicate land for neighborhood/community and regional parks, pay of a fee in lieu thereof or a
sanctioned alternative or a combination of both. In addition to the land dedication a developer of
residential property shall park development fees for neighborhood/community and regional parks.

A. Dwelling Unit Count
Requirements in this section are based on actual dwelling units for an entire development.
Increases or decreases in final unit count may require an adjustment in fees paid or land
dedicated.

B. Dedication/Fee Amounts
The required land dedications and schedules of fees are attached to this LDO as Appendix X and
incorporated and made a part of this section for all purposes.

C. Dedication Standards
Implementation process, minimum design and construction standards are set forth by the parks
and recreation department in the park land dedication manual and the minimum drainage
standards set forth by the city’s drainage manual, as may be amended from time to time,
referred herein and incorporated by reference.

D. Dedication Specifications
The total amount of land dedicated for the development, public or private, shall be dedicated:

1. In fee simple by filed deed, if dedicated to the city; and
2. Prior to the issuance of any site development building permits for multi-family development,
3. Prior to recordation of the final plat for a one- to four-family or townhouse development, or
4. For a phased development the entire park shall be platted concurrently with the plat of the
first phase of the development.

5.4.4 Park Land Dedication Procedures

A. Any land dedicated under this article must be suitable for park and recreation uses and meet
requirements in this §5.4.

B. The following guidelines and requirements shall be used in the dedication and design of park land
in conjunction with the park land dedication manual.

C. When considering park land dedication, the developer should meet with the Parks and Recreation
Department (PARD) before a development application is submitted to evaluate the suitability of
the land. Additionally, PARD may request a site visit as a part of its determination. The following
information may be required as a part of the process prior to accepting public park dedication:

1. Lot dimensions or metes and bounds acreage of park land to be dedicated;
2. Total acreage of floodplain, as well as land located outside floodplain;

213 Section 118-60. New subheadings.
214 Section 118-61. Revisit this section following drafting of Administration provisions in installment 3.
5.4.5 Park Land Acceptance Criteria

Any site proposed to be dedicated as park land to the city pursuant to the terms, conditions, and requirements under this section must be suitable for park and recreation uses; should support the goals of the parks strategic master plan and the city's comprehensive plan; and shall meet the criteria in this section.

A. Encumbrances

The site shall be free and clear of any and all liens and encumbrances that interfere with its use for park purposes and permit the city's representatives to make onsite inspections of the property for the purposes of determining site suitability and identification of any visual hazards or impediments to park development and use.

1. A current title report shall be provided with the land dedication.
2. The property owner shall pay all taxes or assessments owed on the property up to the date of acceptance of the dedication by the city. A tax certificate from the county tax assessor shall be submitted with the dedication or plat.

B. Environment and Natural Conditions

1. Any soils, if disturbed, shall be restored and the soil stabilized by vegetative cover by the developer prior to dedication to the city.
2. The site shall not be severely sloping or have unusual topography that would render the land unusable for recreational activities.
3. The site shall not exceed a 20 percent grade on more than 50 percent of the land.
4. Where appropriate, sites with existing trees or other scenic elements are preferred and may be reviewed by the city's urban forester to make recommendations.
5. Rare, unique, endangered, historic, or other significant natural areas will be given a high priority for dedication pursuant to this section. Areas that provide an opportunity for linkages between parks or that preserve the natural character of the surrounding environment may be required by the city to be included in the park land dedication.
6. The site should have well-drained and suitable soils and level topography.
7. Consideration will be given to land that is in the floodplain or may be considered "floodable" even though not in a federally regulated floodplain if, due to its elevation, it is suitable for park improvements. At the discretion of the city, land in floodplains may be considered as part of a dedication requirement on a three for one (3:1) basis. That is, three acres of floodplain will be equal to one acre of park land or not more than 50 percent shall be allowed in a floodplain.
8. Detention/retention areas may not be used to meet dedication requirements but may be accepted in addition to the required dedication. If accepted as part of the park, the detention/retention area design must meet specific specifications in the city's drainage manual.
9. If the property owner or developer has any form of environmental assessment on the site, a copy of that assessment shall be provided to the city. The city may initiate and/or require the

---

215 Section 118-62. We have reorganized these requirements by topic group (currently they are random and cleaned up language for clarity and consistency.
developer to initiate specific environmental studies or assessments if the visual inspection of the site gives rise to the belief that an environmental problem may exist on the site. The Director of Parks and Recreation may require the employment of consultants necessary to evaluate any environmental issues relating to the site providing that the city makes such determination in good faith. If an environmental hazard is identified on the site, the developer must remove the hazard prior to its acceptance into the park and recreation system of the city. The city will not accept park land dedication sites encumbered by hazardous and or waste materials or dump sites.

C. Accessibility and Location

1. The site should be easy to access and open to public view to benefit area development, enhance the visual character of the city, protect public safety, and minimize conflict with adjacent land use.
2. Where possible, the site should provide a connection to existing or future city park land, or provide an opportunity to expand an existing or future city park or trail.
3. Park sites should be adjacent to residential areas in a manner that serves the greatest number of users and should be located to minimize users having to cross arterial roadways to access them.
4. Park sites shall be located within one-half mile from all residences and the distance should be uninterrupted by roads or free from physical barriers that would prohibit walkable access to the park.
5. Where feasible, park sites should be located adjacent to schools to encourage shared facilities and joint development of new sites, access ways may be required to facilitate access to the park.
6. At least 25 percent, or proportionate to the size of the park, of the perimeter of a park, should abut a public street.
7. The site shall have direct street access for ease of pedestrian, bike, or parking accommodations.
8. No more than two sides of the park may abut the rear of homes.
9. The site shall include at least visible, attractive and suitable means of ingress and egress proportionate to the size and amenities in the park.

D. Land Requirements

1. Park land requirements will be no less than two acres of contiguous land or the total park land required by appendix B.
2. Land parcels that are unsuitable for development are typically unsuitable for a neighborhood park, and therefore should be selected prior to a subdivision being platted and acquired as a part of the development process.

E. Utilities

1. The developer shall be responsible for certain minimum utilities as listed below. The Director of Parks and Recreation shall approve such location prior to final approval and release of fiscal requirements of said subdivision.
   a. A metered water supply located 12 feet behind the curb in accordance with the size of the park; and
   b. A six-inch sewer stub, or in accordance with the size of the park, ten feet behind the curb.

216 Proposed reduction from the current one mile, to make this closer in line with industry standard of one-quarter mile. Other options could include making this based on walking or biking time, as opposed to just linear distance.
2. The site should not be encumbered by overhead utility lines or easements of any type which might limit the opportunity for park and recreation development.

5.4.6 Fee-in-Lieu of Park Land\textsuperscript{217}

The city may, from time to time, require that a fee be submitted in lieu of land dedication in amounts as set forth in appendix B for, either, both, some or all of neighborhood/community and regional park land dedications. Likewise, the city may, from time to time, require that land be dedicated in amounts as set for in appendix B that no fee in lieu of land will be accepted. Such fees shall be due at the same time as park development fees are due for final platting.

5.4.7 Reimbursement for City-Acquired Park Land\textsuperscript{218}

The city may, from time to time, acquire land for parks in advance of actual or potential development. If the city does acquire park land in a park quadrant for a neighborhood/community or regional park, the city may require subsequent dedications to be in fee in lieu of land only. This will be to reimburse the city for the cost(s) of acquisition.

5.4.8 Park Development Fee\textsuperscript{219}

A. In addition to the park land dedication requirements, park development fees are established herein, sufficient to develop neighborhood/community and regional public parks in ways that meet the city's standards.

B. The amount of development fees assessed to a development and the basis for the calculation is as shown in appendix B. The process for the approval and collection of development fees shall be the same as for the park land dedication requirements as specified in sections 118-60.1 and 118-60.3. The park development fees shall be processed simultaneously with the park land dedication requirements.

5.4.9 Public Park Improvement in lieu of Park Development Fees\textsuperscript{220}

A. With approval of the city,\textsuperscript{221} a developer may elect to construct required park improvements in lieu of paying the associated development fee as set forth herein. In such event, facilities and improvements provided by a developer shall be constructed on lands dedicated as public park land and shall be designed and installed to meet the terms, conditions and requirements under this article, or as otherwise approved by the Director of Parks and Recreation, in accordance with related federal, national, state or local codes including but not limited to the following:

1. International Play Equipment Manufacturer's Association (IPEMA);
3. American Society for Testing and Materials (ASTM and ASTM F08);
4. Accessibility Standards for Play Areas through the ADA Accessibility Guidelines (ADAAG);
5. Illuminating Engineering Society of North American (IESNA RP-6-01); and

B. General requirements for public park improvements.

\textsuperscript{217} Section 118-63.
\textsuperscript{218} Section 118-65.2.
\textsuperscript{219} Section 118-64.
\textsuperscript{220} Section 118-65.
\textsuperscript{221} What entity at the city can approve this? Provision should be more specific.
1. A park site plan, developed in cooperation with the parks and recreation department staff, is submitted and approved by the Director of Parks and Recreation or their designee prior to submission of final plat or upon application for a site building permit, whichever is applicable.

2. Any public park improvements must be shown on the site plan or construction plan, unless the Director of Parks and Recreation authorizes another method of approval, and requires review and approval of the Transportation and Capital Improvements Department.

3. Detailed plans and specifications for park improvements hereunder shall be due and processed in accordance with the procedures and requirements pertaining to public improvements for final plats and for building permit issuance, whichever is applicable.

4. All plans and specifications shall meet or exceed the city's standards in effect at the time of submission.

5. If the improvements are constructed on land that has already been dedicated to and/or is owned by the city, then the developer must post payment and performance bonds equal to park development fees or value of the park agreed upon, whichever is greater to guarantee the payment to subcontractors and suppliers and to guarantee the developer completes the work in accordance with the approved plans, specifications, ordinances, and other applicable laws. This includes guaranteeing performance in lieu of completing the park improvements prior to final plat recordation.

6. Park improvements may be constructed on park land dedicated to the city that satisfies requirements of section 118-62; or, if approved by the Director of Parks and Recreation, improvements may be made in an existing or proposed city park that is located in the appropriated park district, within a one-half-mile to one-mile walking or biking distance to the residents it will serve.

7. For a public park, the developer shall be required to provide a two-year maintenance bond that is equal in amount to the 20 percent of the construction cost of said park improvements and a manufacturer's letter stating any play structure, equipment, and safety surfaces were installed in accordance with the manufacturers' installation requirement.

8. For a public park, the developer shall provide a copy of the application and subsequent inspection report prepared by the state department of licensing and regulation of their contracted reviewer for compliance with the Architectural Barriers Act, codified as Vernon's Ann. Civ. St. art 9102.

9. For a public park, all manufacturers' warranties shall be provided for any equipment installed in the park as part of these improvements.

10. For a public park, upon issuance of a certificate of completion and acceptance, the developer shall warrant the improvements for a period of two years.

11. For a public park, the developer shall be liable for any costs required to complete park development if:
   a. Developer fails to complete the improvements in accordance with the approved plans; or
   b. Developer fails to complete any warranty work.

12. All public park improvements shall be inspected by the city while construction is in progress and when complete to verify park requirements have been satisfied.

13. Once the public park improvements are constructed, and after the Director of Parks and Recreation has accepted such improvements, the developer shall convey such improvements to the city free and clear of any lien or other encumbrances.

14. The public park improvements will be considered complete with a letter of completion and acceptance from the city and will be issued after the following requirements are met:
   a. Improvements have been constructed in accordance with the approved plans;
b. Improvements have been inspected and reviewed by PARD staff for satisfying park ordinance pursuant to the terms, conditions and requirements under this article.

C. Private Parks

1. Credit for Private Parks
   a. The fee in-lieu-of land dedication is not eligible for reimbursement and shall be paid at the amount calculated in appendix B and section 118-63.
   b. Up to 75 percent of the park development fees paid by a developer may be eligible for reimbursement toward the construction of private park facilities pursuant to the terms, conditions, and requirements under this article and in the park land dedication manual. The amount retained for deposit in the city's park land dedication fund are for purposes of defraying the financial burden private subdivisions impose on the existing public park system in New Braunfels.

2. Private Park Improvements Requirements
   a. Yards, court areas, setbacks and other open areas required to be maintained by the zoning and subdivision rules and regulation ordinances shall not be included in the computation privately-owned and maintained by the future residents of the subdivision or by the owner of the rental facility.
   b. Private ownership and maintenance of the private park and open space is adequately provided for by recorded agreement, covenants or restrictions.
   c. Use of the private park is restricted for park and recreation purposes by recorded covenant, which runs with the land in favor of future owners of the property and which cannot be defeated or eliminated without the written consent of the city or its successors.
   d. Facilities must be similar or comparable to what would be required to meet public park standards and recreational needs as set forth in sections 118-62 and 118-65 and the park land dedication manual, city drainage manual, and other national, federal, state and local laws.
   e. Eligible private park improvements include various active and passive outdoor amenities.
   f. Private park design must be reviewed and approved by the Director of Parks and Recreation prior to the platting of the first unit, if a multi-phased development.
   g. Private park must include at least three signature elements, two complementary park elements and include the standard park improvements requirements set forth in the park dedication manual.
   h. The cost of construction for private parks must meet or exceed the full park development fee per dwelling unit from appendix B.
   i. Before a reimbursement is approved, the city shall make written findings that the certain conditions are met, pursuant to this article and the park land dedication manual, including the following, but not limited to:
      i. Developer is required to submit all invoices and checks paid toward the construction of the private park.
      ii. Developer must allow PARD staff to conduct a site visit to verify private park improvements.
      iii. Developer must provide an affidavit stating the cost of private park improvements meet or exceed the required full park development fee per dwelling unit from appendix B.
   j. All private parks should be constructed no later than prior to the application of the final unit. Fees for in-lieu-of land and park development are due at the time of recordation.

---
222 Section 118-65.1.
3. Required documentation. In order to receive the reimbursement for private parks, the developer shall submit the required documentation in section 118-60 to the city at the time of final plat filing sufficient to establish that the requirements of above have been satisfactorily met. The Director of Parks and Recreation shall evaluate and approve the documentation submitted prior to any credit being given.

D. Application Review Process
With each subdivision application, planned development application, mixed-use and multi-family site development permit, the developer shall submit to the Planning and Development Services Department and the Parks and Recreation Department a completed park land dedication worksheet, identified in Appendix X and a letter indicating the developer’s intent to meet the park land dedication requirements pursuant to this article.

E. Appeal Process
1. Any decision under this article made by the Director of Parks and Recreation may only be appealed to the city parks and recreation advisory board and must be appealed within ten working days of the city's decision.
2. The Director of Parks and Recreation may refer approval of park land dedication or park development fees to the city parks and recreation advisory board for any reason.
3. Within ten working days, any decision made by the city parks and recreation advisory board may only be appealed in writing through the city manager to the City Council.

F. Submitting Park Fees
Any fees required to be paid pursuant to this article shall be remitted:
1. Prior to the issuance of any site development building permits for multi-family development, or mixed-use development; or
2. At the time of plat recordation for one- to four-family or townhouse development; however
3. All development in the ETJ must pay fees at the time of plat recordation.

G. Use of Park Fees
All park land dedication and park development fees for neighborhood/community parks will be deposited in a fund referenced to the park district to which they relate. Regional park land dedication fees will be deposited in a fund referenced to regional parks. Funds shall be used solely for the acquisition or leasing of park land and the development, improvement, or upgrades of new and existing parks. All expenditures shall be administered in accordance with the current purchasing requirements of the city. Funds shall not be used for the operation and maintenance of parks.

H. Right to Refund
The city shall account for all fees in lieu of land and all development fees paid under this article with reference to the individual plat(s) involved. Any fees paid for such purposes must be expended by the city within seven years from the date received by the city for acquisition and/or development of a park as required herein. Such funds shall be considered to be spent on a first-in, first-out basis. If not so expended, the payor shall be entitled to a prorated refund of such sum.

---

223 Section 118-65.3. Consider relocating to the Administration article with installment 3.
224 Section 118-65.4. This is somewhat different from a Common Procedures appeal, but could become part of the application-specific procedures.
225 Section 118-65.5.
226 Section 118-65.6.
227 Section 118-65.8.
computed on a square footage of area basis. The payor must request such refund within one year of entitlement, in writing, or such right shall be barred.
Article 6: Historic Preservation
[To be included in Installment 4.]

Article 7: Signs
[To be included in Installment 4.]

Article 8: Administration and Procedures
[To be included in Installment 3.]
Article 9: Definitions

9.1 Rules of Construction

[placeholder]

Shall/may. The word "shall" is always mandatory, while the word "may" is merely permissive.

9.2 Definitions

COMMENTARY
This section contains definitions for terms used in this LDO. New definitions are highlighted yellow. Existing definitions that have been carried forward are only footnoted if the definition has been amended or copy-edited.

The content is partial, and additional definitions will be added in ensuing installments, as new terms are introduced.

9.2.1 A

**Abutting**
Lots, buildings, uses, or other features regulated by this LDO share a common lot line for a distance greater than a point. Lots that are separated by a street, right-of-way, platted alley, trail, or railroad track are not abutting.

**Accessory Building or Structure**
A subordinate structure or building having a use customarily incident to and located on the lot occupied by the main residential building; or a use customarily incident to the main residential use of the property. This term is not applicable for commercial property, as multiple buildings are allowed on commercial lots where each is considered a main structure and is subject to the restrictions of the zoning district.

**Accessory Dwelling Unit**
A separate, complete housekeeping unit with a separate entrance, kitchen, sleeping area, and full bathroom facilities, which is an attached or detached extension to an existing single-family structure.

**Active/Independent Senior Living Facility**
A development that is planned, designed, and operated to provide a full range of accommodations and services for older adults, including independent living, congregate care housing, and limited or intermittent medical care or personal assistance. Dwellings may include, but are not limited to, attached or detached houses, apartments, or townhomes, offering private or semi-private rooms, and may be either rental or owner-occupied units. This use generally incudes a variety of housing types and provides residents with varying levels of assistance and care so that residents may continue to live independently, accessing higher levels of care and service as they age without having to move to another residential care facility.

**Acreage, gross**
The total acreage of a subdivision.

---

228 Active/independent senior living facility was listed among definitions in 4.1, but was not included in the Land Use Matrix. The use name has been carried forward, while providing a new definition that encompasses a combination of existing uses that were not defined, except for “Sanitarium,” which has not been carried forward.
Acreage, net
The total acreage of a subdivision less areas dedicated to public use such as rights-of-way (streets and alleys), and recreation areas. Easements shall be included in net acreage calculations.

Adjacent
Lots, buildings, uses, or other features regulated by this LDO that would be bordering or touching except for an intervening street, right-of-way, platted alley, trail, drainage infrastructure, or railroad track, if the lot lines for the properties containing the building, use, or other feature in question were extended across the intervening street, right-of-way, platted alley, trail, or railroad track, until they intersected, unless otherwise stated in this LDO or an adopted City regulation or manual.

Administrative Officers
Any officer of the city referred to in this Chapter by title, including but not limited to the Planning and Development Services Director, City Manager, Fire Chief, Police Chief, Transportation and Capital Improvements Director, and Chief Building Official, or and person acting as their duly authorized representative or designee. This definition shall also include civil engineering, planning, legal, financial, traffic engineering and other consultants retained by the city to supplement or support existing city staff, as deemed appropriate by the city.

Agricultural Uses
Uses characterized by raising, producing, or keeping plants or animals, or cultivation and management of farm products. Accessory uses may include dwellings for proprietors and employees, barns, storage of grain, animal raising, feed preparation, and wholesale sales of products produced on-site.

Airport Definitions
When used in the context of §X.X, AHO -- Airport Hazard Overlay District, the following words, terms, and phrases shall have the meanings ascribed to them in these definitions, except where the context clearly indicates a different meaning.

Airport
A landing area, runway, or other facility designed, used, or intended to be used for the landing or taking off of aircraft, including all necessary taxiways, aircraft storage and tie-down areas, hangars, facilities for the fueling of aircraft, office uses relating to the airport function, associated fixed-base operations (FBO), and other necessary buildings and open spaces. In this code, the airport referenced is the New Braunfels National Airport, formerly known as both the New Braunfels Regional Airport and the New Braunfels Municipal Airport and the Clear Springs Auxiliary Air Force Base.

Airport Elevation
The established elevation of the highest point on the useable landing area measured in feet from mean sea level.

Airport Hazard
A structure or object of natural growth that obstructs the air space required for the taking off, landing, and flight of aircraft or that interferes with visual, radar, radio, or other systems for tracking, acquiring data relating to, monitoring, or controlling aircraft.

Airport Hazard Area
Any area of land or water upon which an airport hazard might be established if not prevented as provided in §X.X, AHO -- Airport Hazard Overlay District.

Airport Reference Point

229 144-5.20-1.
The point established as the approximate geographic center of the airport landing area and so designated.

**Approach Surface**
A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zones height limitation slope set forth in § X.X. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.

**Approach, transitional, horizontal, and conical zones**
These zones are set forth in § X.X, *Approach Zones*, of this Code.

**Conical Surface**
A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to one for a horizontal distance of 4,000 feet.

**Hazard to Air Navigation**
An obstruction determined to have a substantially adverse effect on the safe and efficient utilization of the navigable airspace.

**Height**
For the purpose of determining the height limits in all zones set forth in this section and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.

**Horizontal Surface**
A horizontal surface 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.

**Landing Area**
The surface area of the airport used for the landing, takeoff or taxiing of aircraft.

**Nonconforming Use**
For the purposes of airport-related nonconformities, this term refers to any preexisting structure, object of natural growth, or use of land which is inconsistent with the provisions of § X.X or an amendment thereto.

**Non-Precision Instrument Runway**
A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned.

**Obstruction**
Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in § X.X, *Height Limitations*.

**Overlay Zone**
In the context of airport-related terms, the defined areas establishing land use restrictions set forth in § X.X, *Overlay Zones*.

**Precision Instrument Runway**
A runway having an existing instrument approach procedure utilizing Instrument Landing System (ILS) or Localizer Precision, Vertical (LPV) air navigation facilities with vertical and horizontal guidance for which a straight-in precision instrument approach procedure has been approved or planned.

**Primary Surface**
A surface longitudinally centered on a runway. When the runway has a specially prepared or planned hard surface, the primary surface extends 200 feet beyond each end of that hard surface runway; but when the runway has no specially prepared hard surface or planned hard surface, the primary surface ends at each
end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations for the most precise approach existing or planned for either end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is 500 feet for the non-precision instrument runway and 1,000 feet for the precision runways having visibility minimums greater than three-fourths statute mile.

**Runway**
A defined area on an airport prepared for landing and takeoff of aircraft along its length.

**Runway Protection Zone (RPZ)**
An area off the runway end to enhance the protection of people and property on the ground in a trapezoidal shape established in guidelines published in the Advisory Circular 150/5300-13A by the FAA. Structure means an object, including a mobile object, constructed, or installed by man, including, but not limited to, buildings, towers, cranes, smokestacks, earth formations, and overhead transmission lines.

**Airstrip or Landing Field**
A private area of land used for the landing and take-off of personal private aircraft, excluding receiving cargo, picking up passengers, or fueling aircraft.

**Alley**
A minor public right-of-way, not intended to provide the primary means of access to abutting lots, which is used primarily for vehicular service access to the back or sides of properties otherwise abutting a street.

**Alternative Tower Structure**
In the context of wireless communication facilities, an alternative tower structure may be a clock or bell tower, steeple, light pole, or similar alternative-design mounting structure.

**Amended or Amending Plat**
A revised plat correcting errors or making minor changes to a recorded plat.

**Amended Master Plan**
A master plan previously approved by the Planning Commission with major revisions that has been approved by the Planning Commission.

**Amended Master Plan (Minor Revisions)**
A master plan, previously approved by the Planning Commission, that has minor revisions approved by the Planning and Development Services Department or the Planning Commission.

**Amenity**
An improvement to be dedicated to the public or to the common ownership of the lot owners of the subdivision and providing an aesthetic, recreational or other benefit, other than those prescribed by this chapter.

**Amphitheater**
An open-air venue used for entertainment, performance, ceremonies, or sports purposes. An amphitheater may or may not have fixed or designated seating, a partial or temporary roof, or be under tents.

---

230 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.


**Animal Boarding**
A commercial establishment that provides boarding, grooming, training, and other non-medical services for domestic pets, primarily dogs and cats, and other small animals (e.g., rabbits). Outdoor facilities, including runs and exercise yards, may or may not be included in this use. This use does not include medical or veterinary treatment and services.

**Animal Grooming**
An establishment where small animals such as dogs, cats, and other household pets are bathed, clipped, or combed for compensation for hygienic or aesthetic reasons. This use does not include the overnight boarding of animals.

**Animal Uses**
Uses in this category include the boarding and care of animals on a commercial basis. Accessory uses may include confinement facilities for animals, parking, and storage areas.

**Antenna**
Any exterior apparatus designed for telephonic, radio, or television communication through the sending and/or receiving of electromagnetic waves, but not including a wireless communication tower (which may include antennas on the structure).

**Apartment**
A room or a suite of rooms arranged, intended, or designed as a place of residence for a single family, individual, or group of individuals.

**Applicant**
A person or entity who submits an application for an approval required by this chapter. Also sometimes referred to as “developer”, “subdivider”, or other similar term.

**Application**
A written request, on forms provided by the city, for an approval required by this chapter.

**Arcade**
An establishment where more than ten percent of the public floor area is devoted to four or more amusement devices that are operated for a profit, whether the same is operated in conjunction with any other business or not, including but not limited to such amusement devices as coin- or card-operated pinball machines, video games, electronic games, shuffle boards, pool tables or other similar amusement devices. However, the term "amusement device," as used in this definition, shall not include musical devices, billiard tables which are not coin-operated, machines that are designed exclusively for small children, and devices designed to train people in athletic skills or golf, tennis, baseball, archery, or other similar sports.

**Artificial Plant Materials**
Any inorganic material intended as a substitute for live plantings, including but not limited to artificial turf, or imitation plants created from plastic or other inorganic material. Aside from use of inorganic materials as ground cover (granite, gravel, mulch), such materials are prohibited from use in satisfying the landscaping requirements of this LDO.

---

231 Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with clarifications to distinguish from the telecommunications tower use.

232 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
**Assisted Living Facility**\(^{233}\)
A facility combining housing, supportive services, personalized assistance, and health care, designed to respond to the individual needs of those who need help with activities of daily living, such as dressing, grooming, bathing, diet, financial management, evacuation of a residence in the event of an emergency, or medication prescribed for self-administration, but who do not require hospitalization.

**Attic**
The area between roof framing and the ceiling of the rooms below that is not habitable, but may be reached by ladder and used for storage or mechanical equipment. Improvement to habitable status shall make it a story.

**Auction Sales, Livestock**
An area or building at which livestock are offered for sale through an auction.

**Audio or Video Studio**\(^{234}\)
An establishment which is used to record and broadcast music, videos, television, and other oral and visual related media productions.

**Automated Teller Machine (ATM)**
A mechanized device operated by or on behalf of a bank or financial institution that allows customers to conduct automated banking or financial transactions.

---

**9.2.2 B**

**Bank or Financial Institution**
An establishment that provides financial and banking services to individuals and businesses. These services may include deposit banking and closely related functions such as making loans, investments, and fiduciary activities. This definition does not include check cashing, title loans, or payday lending uses. Accessory uses may include automated teller machines and, where permitted as an accessory use, drive-through access.

**Bar or tavern**
A commercial establishment that operates under license from the Texas Alcohol and Beverage Commission which is principally engaged in the retail sale of alcoholic beverages, with food only incidental to the sale of alcohol.

**Barrier, Natural or Artificial**
Any river, pond, canal, railroad, levee, embankment, or screening fence of masonry or solid wood not less than six feet high.

**Base Flood**
A flood having a one percent chance of being equaled or exceeded in any given year.

**Base Zoning District**
The zoning district, or combination of zoning districts, either under an overlay district or which will be applied to a property zoned PD.

---

\(^{233}\) Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.

\(^{234}\) New definition and new name for existing use “Studio for radio or television, without tower.”
Basement
A story partly or wholly underground. For purposes of height measurement, a basement shall be counted as a story where more than one-half of its height is above the average level of the adjoining ground.

Bed & Breakfast
A dwelling or grouping of dwellings that is owner- or manager-occupied, at which breakfast is served and sleeping accommodations are provided/offered in rooms or unattached units (such as cabins) for transient guests for compensation for periods of 30 days or fewer.

Beverage Stand
A small, freestanding structure with a drive-through where customers can purchase coffee, tea, and other beverages, along with pre-made bakery goods or other light, pre-made meals such as sandwiches or burritos.

Block
A piece or parcel of land entirely surrounded by public highways or streets, other than alleys. In cases where the platting is incomplete or disconnected, the Planning and Development Services Department shall determine the outline of the block.

Boarding House
A facility other than a hotel where lodging or meals are provided for five or fewer people for compensation, pursuant to previous arrangements, with rental or lease periods of no less than one month.

Bond
Any form of a surety bond in an amount and form satisfactory to the city.

Buffer
An area of land used to physically and/or visually separate one use or lot from another.

Building
A structure enclosed within exterior walls, built, erected, and framed of a combination of materials, whether portable or fixed, having a roof, to form a structure for the shelter of people, animals, or property.

Building Setback Line
A line defining an area on the building lot between the street right-of-way line or property line and the building line within which no building shall be constructed, encroach, or project except as specifically authorized in an adopted ordinance of the city.

Bus Barn
A facility where buses are stored and maintained.

---

235 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions and adds time limitation.
236 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
**Bus Station**
A facility where patrons wait for and board or depart from buses. This use may include ticket sales, accessory vehicle maintenance facilities, and retail sales.

**Business Day**
Any day except Saturday, Sunday, or a legal holiday.

**9.2.3 C**

**Campground**
An outdoor facility designed for overnight accommodation of human beings in tents, rustic cabins and shelters for recreation, education, naturalist, or vacation purposes. Ancillary services such as a convenience store, restrooms, power, and electric hook-ups may be provided.

**Canopy Tree**

**Capital Improvements Program (CIP)**
The official proposed schedule, if any, of all future public projects listed together with cost estimates and the anticipated means of financing each project, as adopted by City Council.

**Carport**
A permanent structure consisting of a roof and supported on posts with three or four open sides used as a minimal shelter for an automobile. It may be freestanding or attached to another structure on one side.

**Catering**
An establishment that prepares food on-site which is transported and served at another location off-site. On-site sale and consumption of food or beverages to patrons is limited to taste-testing.

**Cemetery**
Land used or intended to be used for the burial of the dead and dedicated for cemetery purposes including columbaria, mausoleums, and funeral establishments, when operated in conjunction with and within the boundary of the cemetery.

**Certificate of Occupancy**
A certificate, issued by the building official, certifying that all work on any building or project has been inspected by the official, meets all building requirements, and is ready for occupancy.

**Check Cashing**
An establishment that, for compensation, engages in the business of cashing checks, warrants, drafts, money orders, or other commercial paper serving the same purpose. This definition shall not include a bank or financial institution use, and does not include retail uses, such as grocery stores, where the cashing of checks or money orders is incidental to the main purpose of the business.

**City**
The City of New Braunfels, Texas.

**City Attorney**
An attorney, or firm of attorneys, that has been specifically employed by the city to assist in legal matters. This term shall also apply if the city retains a person to perform the functions of city attorney as an official city employee.
**City Council**
The duly elected governing body of the City of New Braunfels, Texas.

**City Engineer**
The duly authorized person in charge of engineering for the city, or that person’s designated representative.

**City Officials**
Includes but is not limited to the following: Building official, local health authority, city sanitarian, fire chief, policeman, Planning and Development Services Department Director, and tax assessor-collector.

**City Standards**
The city's standards and specifications, together with all tables, drawings, and other attachments as may be approved by the Council or the Commission, which once approved become a part of this chapter.

**Civic Club**
A nonprofit membership organization that holds regular meetings and pursues a common interest, usually cultural, civic, religious, or social, and has formal written membership rules along with the requirement for members to pay dues. A "club or lodge" may, subject to other regulations controlling such uses, maintain dining facilities; engage professional entertainment for the enjoyment of members and their guests; or store, sell, possess, or serve any alcoholic beverage permitted by the law of the State of Texas. This definition does not include any form of sleeping accommodations.

**Clear Vision Area**
An area of unobstructed vision at intersections of streets, alleys, and driveways. Sometimes also called a vision triangle, the area is determined by extending the intersection of the two curb lines from their point of intersection, and connecting these points with an imaginary line, thereby making a triangle.

**Clinic, Medical or Dental**
A facility that provides medical, dental, psychiatric, or surgical services for sick or injured individuals exclusively on an out-patient basis, including emergency treatment, diagnostic services, training, administration, and services to outpatients, employees, or visitors. This use includes facilities that principally provide emergency treatment.

---

*237 Revises the existing definition of “Clinic” in Sec. 144-1.4 of the Code of Ordinances.*
**Coffee Shop**
An establishment that primarily prepares sells and serves coffee, tea and other beverages, and which may sell baked goods and light meals such as soups and sandwiches, but does not serve full meals, and which has a seating area which serves as an informal conversation or lounging place.

**Co-location**\(^2\)
In the context of wireless communication facilities, the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

**Commission**
The Planning Commission of the City of New Braunfels, Comal County, Texas.

**Common Open Space**
Private property under common ownership, designated as recreation area, private park (for use of property owners within the subdivision), play lot area, or ornamental areas open to general view.

**Community and Cultural Facilities**
Uses including buildings, structures, or facilities to provide a service to the public. Accessory uses may include limited retail, concessions, parking, and maintenance facilities.

**Community Building**
A place, structure, area, or other facility used for and providing cultural, social, educational, or recreational programs or activities, or swimming pools, tennis courts, and similar facilities, which is owned and operated by a homeowners’ association or similar organization and that is intended for use by members of the residential community in which it is located. The use may be open to the general public or a designated part of the public.

**Community Garden**
A lot or area used for the cultivation of food and/or horticultural crops. Community Garden may be divided into separate plots for cultivation by one or more individuals or may be farmed collectively by members of a group and may include common areas maintained and used by group members. Any crops or produce grown in a community garden are for individual consumption only, and may not be sold to members of the public.

**Comprehensive plan**
The comprehensive plan of the city and includes any unit or a part of such unit separately adopted and any amendment to such plan or parts thereof.

**Conditional Use (CU)**
An authorization of a use that is not allowed by right in a specific zoning district, but through certain conditions may be found by City Council to be compatible at a specific location in that zoning district. Conditional uses are not permits, but rather are a zoning overlays and, as such, follow the procedures outlined in 5XX of this LDO which include a public hearing and report by the Planning Commission, and final public hearing and decision by the City Council.

**Condominium**
A form of real property with portions of the real property designated for separate ownership or occupancy, and the remainder of the real property designated for common ownership or occupancy solely by the owners of the portions. Real property is a condominium only if one or more of the common elements are directly owned in

\(^2\) Definition from 47 CFR §1.6100.
undivided interests by the unit owners. Real property is not a condominium if all of the common elements are owned by a legal entity separate from the unit owners, such as a corporation, even if the separate legal entity is owned by the unit owners.

**Conference or Convention Center**
A facility used for service, business, or professional conferences, conventions, seminars, training programs, and similar events. The facility may be either freestanding or incorporated into a hotel or office facility and may include eating and drinking establishments.

**Conforming**
A conforming use, building, or site feature is one that is in compliance with all applicable regulations of this LDO.

**Construction plans**
The drawings and technical specifications, including bid documents and contract conditions, where applicable, that provide a graphic and written description of the character and scope of the work to be performed in construction of a subdivision.

**Contiguous**
Lots are contiguous when at least one boundary line or point of one lot touches a boundary line, or lines, or point of another lot.

**Controlled Street**
In the context of the clear vision area, or sight visibility triangle, a controlled street is one with a traffic control device, such as a yield or stop sign, or traffic signal, at the intersection.

**Cottage Home Development**
A cluster of at least five attached or detached dwellings located within a common development that has shared access, parking, and common spaces. Cottage developments can include homes on individual lots, homes owned as condominiums, or leased homes. This use can include communities of five or more factory-built small detached dwellings, provided that each home meets applicable building codes or is a modular or industrialized home as defined in Chapter 1202, Occupations Code, of the Texas state statutes.

**Country Club, Private**
Land area and buildings containing facilities such as tennis courts, golf courses, other recreational facilities, a clubhouse, swimming pools, food services, and other customary accessory uses which are open only to members and their guests.

**Court or Courtyard**
An open, unoccupied space, other than a yard, on the same lot with the building or group of buildings and which is bounded on two or more sides by such building or buildings.

**Coverage, Building**
The lot area that is covered by all buildings located thereon, including the area covered by all overhanging roofs and canopies.

---

239 Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
240 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
Coverage, Lot
The combined area of all yards on a given lot.

Crematorium
A facility used for the purification and reduction of bodies by fire.

Cul-de-Sac
A short, minor street having but one outlet to another street and terminating on the opposite end by a vehicular turnaround.

Curb Level
The elevation of the established curb in front of a building measured at the center of such front.

9.2.4 D

Dance Hall or Dancing Facility
An establishment where dancing and musical entertainment are the primary activity. Dance halls may or may not serve alcoholic beverages for on-site consumption.

Day Camp
An establishment including buildings and open land areas that offers supervised recreational and sporting activities for children, especially in summer and during school vacations, but does not include sleeping accommodations for camp attendees.

Day Care Center
A facility where care, protection, and supervision are provided for children or adults on a regular basis away from their primary residence for less than 24 hours a day, with or without compensation and with or without stated educational purposes. The term includes, but is not limited to, facilities commonly known as day-care centers, day nurseries, nursery schools, preschools, play groups, day camps, summer camps, and centers for mentally disabled children, but specifically excludes any day care home uses or kindergartens.

Day Care Home
A facility that regularly provides care in the caretaker’s own residence for no more than six adults or six children under 14 years of age, excluding the caretaker’s own children, and that provides care after school hours for not more than six additional elementary school siblings of the other children given care, provided that at no time shall more than 12 children and adults, including the caretaker’s own, be provided care.

Dead-End Street
A street, other than a cul-de-sac, with only one outlet.

Deck
A roofless platform, either freestanding or attached to a building that is supported by pillars or posts.

---

241 Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
242 New definition for a use that consolidates previous separate adult and child day care uses.
243 Carries forward and consolidates the current definition for “Family home (adult care in place of residence)” and “Family home (child care in place of residence)” in Sec. 144-1.4 of the Code of Ordinances with revisions for clarity; some portions of the current definition have been included as use-specific standards.
Dedication
A conveyance or donation of property by the owner to the city or Comal or Guadalupe County.

Density, Residential
The number of dwelling units per gross acre of subdivision, excluding any areas that are non-residential in use.

Department
The department, division or personnel otherwise designated by the city manager to administer or enforce any or all of the provisions of this LDO.

Depth of Rear Yard
The horizontal distance between the rear line of the main building and the rear lot line.

Developer
An individual, partnership, corporation, or governmental entity undertaking the subdivision or improvement of land and other activities covered by this LDO, including the preparation of a master plan or subdivision plat showing the layout of the land and the public improvements involved therein. The term “developer” is intended to include the term “subdivider,” even though personnel in successive stages of a project may vary.

Development
The laying out of a subdivision through the platting process, construction of one or more new buildings or structures on one or more building lots, the moving of an existing building to another lot, or the use of open land for a new use. "To develop" shall mean to create development.

Development Agreement
A contract entered into by the applicant and the city, by which the applicant promises to complete the required public improvements or perform other required obligations within the subdivision or addition within a specified time period following final plat approval. A development agreement may be used to deal with current and future platting issues for a proposed project.

Development Application
This term has the same meaning as “application.”

Diameter at Breast Height (DBH)
A standard method of expressing the diameter of the trunk or bole of a standing tree, measured at 4.5 feet above the ground.

Director
Unless otherwise specified, Director, Planning and Development Services Department, or Planning and Development Services Director means the Director of the Planning and Development Services Department. This designation also includes any person designated by the Director (their “designee”) to carry out their assigned responsibilities and authorities in their stead.

Distance Between Buildings
The shortest horizontal distance between the vertical walls of two structures.

Distribution Center
A specialized warehouse that serves as a hub to store finished goods, streamline the picking and packing process, and ship goods out to other locations or final destinations. Also referred to as a fulfillment center, a distribution center is distinguished from a warehouse by the far more rapid turnover of inventory.
Donation Collection Container

Dripline
A vertical line extending from the outermost portion of the tree canopy to the ground.

Drive-Through Facility
A facility used to provide products or services to customers who remain in their vehicles, whether through a window or door in a building, a machine in a building or detached structure (e.g., Automated Teller Machine), or through a mechanical device (e.g., a pneumatic tube system). In addition to the pick-up window or door, drive-through service facilities also may include remote menu boards and ordering stations.

Driveway
A minor, private way off a common access route within the community to an off-street auto parking area serving one or more mobile homes.

Duplex
A building designed as a single structure containing two separate living units, each of which is designed to be occupied as a separate permanent residence for one family or individual. Alternately a duplex may be two separate structures on one lot, each of which is occupied separately.

Dwelling
A building or structure, or portion of a building or structure, designed for residential purposes as a single housekeeping unit, but not including a motor home, trailer coach, automobile chassis, tent, or portable building. Examples of dwellings include single-family detached dwellings, single-family attached dwellings (townhouses), two-family (duplex) dwellings, three-family (triplex) dwellings, four-family (fourplex) dwellings, multi-family dwellings, manufactured home dwellings, and cottage home development.

Dwelling, Four-Family (Fourplex)
A building located on its own lot that contains four separate living units, each of which is arranged, intended, or designed for occupancy as a residence by one family.

Dwelling, Live-Work
A dwelling unit containing an integrated living and working space in different areas of the unit.

Dwelling, Manufactured Home
A structure constructed on or after June 15, 1976, according to the rules of the National Manufactured Home Construction and Safety Standards Act of 1974 and Title of the Housing and Community Development Act of 1974. Generally, manufactured homes are designed and built in a factory, may be transported in pieces, and assembled on site.

Dwelling, Multi-family
One or more buildings or portions of buildings on a single lot or tract that contains five or more dwelling units, each of which is occupied or intended to be occupied by people living independently of each other and

---

244 This updates the current definition in Sec. 144-1.4 of the Code of Ordinances.
245 Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with references to household living uses in this Code.
246 Simplifies the current definition in Sec. 144-1.4 of the Code of Ordinances, and changes the minimum configuration from three or more dwelling units to five or more dwelling units to allow for separate triplex and fourplex uses which may simplify the development of those housing options.
maintaining separate cooking facilities, and where each unit has an individual entrance to the outdoors or a common hallway.

**Dwelling, Single-Family Detached**\(^{247}\)

A building located on its own lot that contains one dwelling unit that is not physically attached to any other principal structure and is arranged, intended, or designed for occupancy by one family. This definition includes a modular or industrialized home as defined in Chapter 1202, Occupations Code, of the Texas statute statutes, but does not include a Manufactured Home or Recreational Vehicle.

**Dwelling, Two-Family (Duplex)**\(^{248}\)

A building designed as a single structure that contains two separate living units, each of which is designed to be occupied as a separate permanent residence for one family. This definition includes a modular or industrialized home as defined in Chapter 1202 of the Occupations Code, but does not include a Manufactured Home Dwelling or Recreational Vehicle.

**Dwelling, Three-Family (Triplex)**

A building located on its own lot that contains three separate living units, each of which is arranged, intended, or designed for occupancy as a residence by one family.

**Dwelling, Tiny Home**

A single-family detached dwelling that is less than 500 square feet and more than 300 square feet in size. The dwelling is constructed on a frame and capable of being transported on its own wheels, but when used for permanent habitation, the wheels must be removed, and the dwelling installed on a permanent foundation. To be distinguished from a Recreational Vehicle, a tiny home must meet either the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Sections 5401 et. seq.) or the international building code.

**Dwelling, Zero Lot Line**

A single-family dwelling that is built adjacent to one side property line.

---

\(^{247}\) Updates the current definition of “One-family dwelling” in Sec. 144-1.4 of the Code of Ordinances. The separate definition of a “Single-family industrialized home (also called modular prefabricated structure or modular home) been consolidated into this new definition, and the definition in the current code replaced with a reference to state law. Also incorporates the “Zero lot line/patio homes” use.

\(^{248}\) Simplifies the current definition in Sec. 144-1.4 of the Code of Ordinances, renames the use “Duplex/two-family/duplex condominiums),” makes revisions for consistency with the single-family detached dwelling use, and removes the alternative definition of two buildings on a single lot as that is just two single-family detached homes on a single lot, not a duplex.
Article 9: Definitions
9.2 Definitions
9.2.5 E

inspecting, patrolling, maintaining, and adding to or removing all or part of their respective systems without the necessity at any time of procuring the permission of anyone.

**Educational Facilities**

Uses in this category include public, private, and parochial institutions at the primary, elementary, middle, high school, or post-secondary level, or vocational or trade schools. Accessory uses commonly include cafeterias, indoor and outdoor recreational and sport facilities, auditoriums, and day care facilities.

**Eligible Facilities Request**

In the context of wireless communication facilities, this is any request for modification of an existing WCF that involves the co-location of new transmission equipment, removal of transmission equipment, or replacement of transmission equipment.

**Eligible Support Structure**

In the context of wireless communication facilities, this is any WCF as defined in this LDO that is in existence at the time an application is filed.

**Enforcing Agency**

Any officer of the city, or health agency of this state, who is charged by law to enforce the provisions of this Code and other applicable regulations.

**Engineer**

A person duly authorized under the provisions of the Texas Engineering Registration Act, as amended, to practice the profession of engineering.

**Escrow**

A deposit of cash with the city in accordance with this chapter.

**EV Charging Station**

An electrical component assembly or cluster of component assemblies (battery charging station) designed and intended to transfer electric energy by conductive or inductive means from the electric grid or other off-board electrical source to a battery or other energy storage device within a vehicle that operates partially or exclusively on electric energy. The charging station may include a digital display for control of the charging station. There are three types of electric vehicle charging stations.

1) A Level 1 charging station is a slow-charging station that typically operates on a 15- or 20-amp breaker on a 120-volt Alternating Current (AC) circuit.
2) A Level 2 charging station is a medium-speed charging station that typically operates on a 40- to 100-amp breaker on a 208- or 240-volt AC circuit.
3) A Level 3 charging station is an industrial-grade charging station that operates on a high-voltage circuit to allow for fast charging.

**EV Charging Station, Level 1 or 2**

A Level 1 or Level 2 EV charging station.

---

249 Definition from 47 CFR §1.6100.
250 Definition from 47 CFR §1.6100.
251 Definition from 47 CFR §1.6100.
252 This replaces the definition for "Battery charging station" in Sec. 144-1.4 of the Code of Ordinances.
Article 9: Definitions

9.2 Definitions

9.2.6 F

**EV Charging Station, Level 3**
A Level 3 EV charging station.

**Event or Reception Center**
A commercial or non-profit facility that may have indoor or outdoor components, or both, that can be rented to accommodate large groups of people for entertainment, wedding receptions, reunions, and similar gatherings.

**Existing**
In the context of wireless communication facilities, existing applies to any WCF that has already been constructed, and was reviewed and approved in accordance with all requirements of applicable law as of the time of an eligible facilities request.

**Extraction Uses**
Uses in this category include the excavation or extraction of raw materials from the earth.

**Extraterritorial jurisdiction (ETJ)**
The unincorporated area, not a part of any other city, which is contiguous to the corporate limits of the city, the outer limits of which are measured from the extremities of the corporate limits of the city outward for such distances as may be stipulated in the Texas Municipal Annexation Act in accordance with the total population of the incorporated city, and in which area, within the terms of the act, the city may enjoin the violation of its subdivision ordinance.

9.2.6 F

**FAA**
The Federal Aviation Administration.

**Façade**
A side of a building or accessory structure which consists of a separate architectural elevation as viewed horizontally from the ground, street or other nearby location. The area of a façade is defined by the outer limits of all of its visible exterior elements. Separate faces of a building oriented in the same direction or within 45 degrees of each other are considered part of the façade.

**Fairground**
An area where outdoor fairs, rodeos, circuses, or exhibitions are held.

**Farm**
Land used for the primary purpose of agriculture, horticulture, floriculture, or viticulture.

**Farmers Market**
An occasional or periodic market held in an open area or structure where multiple individual vendors offer for sale to the public items such as fresh produce, seasonal fruits, prepared foods, fresh flowers, arts and crafts items, and food and beverages dispensed from booths located on-site.

**FCC**
The Federal Communications Commission.

---

253 Definition from 47 CFR §1.6100.
Fence
A tangible enclosure or barrier generally erected to provide a boundary or separation of properties.

Final Plat
The one official and authentic map of any given subdivision of land prepared from actual field measurement and staking of all identifiable points by a surveyor or engineer, with the subdivision location referenced to a survey corner, and with all boundaries, corners and curves of the land division sufficiently described so that they can be reproduced without additional references. A final plat shows the exact layout and proposed construction of a proposed subdivision into lots, blocks, streets, and alleys, and may include parks, school sites, drainageways, easements, and/or any other elements as required by this chapter and which an applicant shall submit for approval in accordance with this chapter and is recorded with the appropriate county clerk. A final plat includes: amended, amending, development and minor plats and replats.

Fleet Services
A central facility for the distribution, storage, loading, and repair of fleet vehicles, with or without associated dispatch services and offices. This use includes limousine services and taxi services.

Floodplain
An area of land that is subject to a one-percent or greater chance of flooding in any given year, based on developed conditions existing as of the date a development application is accepted for filing, and not based on projected or anticipated future build-out for a watershed.

Floodplain
Any and all land area adjoining the channel of a river, stream, lake, watercourse, marshy area, or other drainage element, which has been or may be inundated by stormwater runoff. The extent of the floodplain shall be determined by the crest of a flood having a one percent chance of occurrence in one year.

Floodway
The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Food and Beverage Uses
Uses in this category are involved in the preparation and service of food or beverages for consumption on or off the premises.

Food Processing
A facility that produces food for human consumption in its final form, including but not limited to candy, baked goods, tortillas, or ice cream, for distribution to retailers or wholesalers for resale on or off the premises. This use does not include the slaughter of small or large livestock, meatpacking, or animal feeding operations.

Freight Terminal
A building or outdoor area used primarily for the temporary parking of trucks of common or contract carriers during loading or unloading and for receiving and dispatch of freight vehicles, including necessary warehouse space for storage of transitory freight. Incidental uses may include, but are not limited to, a truck wash, overnight truck parking, and loading and unloading from rail spurs.

Front Building Setback Line
A line parallel to the street right-of-way which the building faces, and takes its primary access from and that is the required minimum distance establishing the area within which the principle must be exited or placed.
**Frontage**
The lineal distance measured along all abutting street rights-of-way.

**Funeral Home**
An establishment for the care, preparation, or disposition of the deceased for burial, and the display of the deceased and rituals connected with and conducted before burial or cremation. This use includes mortuaries, which are facilities in which dead bodies are prepared for burial, but does not include the separate crematorium use. Accessory uses may include:

1) Embalming and the performance of other services used in preparation of the dead for burial;
2) The performance of autopsies and other similar surgical procedures;
3) The storage of caskets, funeral urns, and other related funeral supplies;
4) The storage of funeral vehicles; and
5) A funeral chapel.

**Funeral Services**
Uses in this category provide services related to the care and disposition of deceased bodies.

**Garage, Detached**
A private garage wholly separated and independent of the principal building.

**Garage, Public**
A building or portion thereof, designed or used for the storage, sale, hiring, care, or repair of motor vehicles, which is operated for commercial purposes, also referred to as structured parking, or a structured parking lot.

**Golf Course**
A tract of land laid out with a course having nine or more holes for playing the game of golf, including any accessory clubhouse, driving range, office, restaurant, picnic tables, pro shop, maintenance building, restroom facility, or similar accessory use or structure.

**Governing Authority**
The City Council of the City of New Braunfels, Texas.

**Government Agency**
Any department, agent, or employee of the City of New Braunfels, County of Comal, County of Guadalupe, State of Texas, United States Government as well as any public utility, school district or other political subdivision of the State of Texas.

**Government or Municipal Facility**
Any government office or publicly accessible county or municipal facility, including but not limited to libraries, public recreation or community centers, public swimming pools, and athletic fields or sports courts (which may be part of public parks, or may be standalone facilities).

**Grain Elevator**
A facility or area for the temporary storage of grain for transfer to trucks, train cars, or other forms of transportation.

**Gross Density**
The number of dwelling units per gross acre within the subdivision.
**Gross Floor Area**\(^{254}\)

The total area of a building measured by taking the outside dimensions of the building at each floor level intended for occupancy or storage.

**Group Home**\(^{255}\)

A residential dwelling or facility where people are living, together with staff, as a single housekeeping unit providing care, supervision, and/or treatment, for the exclusive use of citizens protected by the provisions of the federal Fair Housing Act Amendments of 1988, as defined in that Act and interpreted by the courts, or by any similar legislation of the State of Texas, including but not limited to facilities providing housing for physically challenged, mentally ill, or developmentally disabled individuals. The limitation on the number of individuals with disabilities applies regardless of the legal relationship of those individuals to one another.

- **Group Care Home, FHAA Small**
  A facility designed for and occupied by six or fewer residents living together.

- **Group Care Home, FHAA Large**
  A facility designed for and occupied by seven or more residents living together.

**Group Living**

Uses characterized by residential occupancy of a structure by a group of people who do not meet the definition of “household living.” Tenancy is arranged on a monthly or longer basis and the living structures generally have a common eating area for residents. Residents may receive care, training, or treatment, and caregivers may or may not also reside at the site. Group living as a category includes but is not synonymous with “group home,” which is a specific type of group living.

**Habitable Space**

The enclosed area of a building used for living area, including but not limited to bedrooms, bathrooms, kitchens, living rooms, family rooms, dining rooms, recreation rooms, utility rooms, and workshops.

**Hazardous Materials Storage**

Bulk storage of fuel and flammable liquids (except liquefied petroleum gas) shall be any aboveground tank for storage of subject liquids which exceeds 500 gallons water capacity, or any facility for which the total aggregate capacity of belowground storage tanks shall exceed 50,000 gallons. Bulk storage of liquefied petroleum gas shall be any facility for which the total aggregate capacity of storage tanks (including truck and/or trailer tanks) exceeds 2,000 gallons water capacity.

**Health Care Services**

Uses characterized by activities focusing on medical services, particularly licensed public or private institutions that provide preventative health care, primary health services, and medical or surgical care to individuals suffering from illness, disease, injury, or other physical or mental conditions. Accessory uses may include laboratories, outpatient, or training facilities, or other amenities primarily for the use of patients or employees in the firm or building such as cafeteria and limited retail sales.

\(^{254}\) Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances.

\(^{255}\) Carries forward portions of the current definition of “community home” in Chapter 144-1.4, with revisions to incorporate reference to current federal law. The threshold for small group homes being six or fewer residents and large group homes being seven or more is based on the current definition of community home.
**Height, Building**

The vertical distance of a structure measured from the average elevation of the finished grade surrounding the structure to the highest point of the structure. The average finished grade is calculated by averaging the midpoints of the four finished exterior walls of the building.

**Height, Tower**

When referring to a tower or other structure, the distance measured from the natural ground level to the highest point on the tower or other structure, even if said highest point is an antenna.

**Heliport**

An area of land or water or a structural surface designed, used, or intended for use for the landing and taking off of helicopters, including all facilities related to the operation of the heliport such as hangers, fueling facilities, and office uses relating to the heliport function.

**Heritage Tree**

Any tree attaining a circumference of one-half of the state record for that tree species as defined by the Texas Forest Service, or a tree having a trunk circumference of 75 inches or more (about 24 inches in diameter) measured four and one half feet (4 ½’) above the ground.

**Home Occupation**

An occupation carried on in a dwelling unit, or in an accessory building to a dwelling unit, by a resident of the premises, and which is clearly incidental and secondary to the use of the premises for residential purposes.

**Hospice**

An establishment that provides a coordinated program of inpatient care and services including the coordination of nursing care, social services, medical supplies, physician's services, counseling, and bereavement services for patients' families to hospice patients and families, through a medically directed interdisciplinary team using interdisciplinary plans, to meet the physical, psychological, social, spiritual, and other special needs that are experienced during the final stages of illness, dying, and bereavement.

**Hospital**

An institution that provides primary health services and medical or surgical care to individuals, primarily inpatients, suffering from illness, disease, injury, deformity, and other abnormal physical or mental conditions and including, as an integral part of the institution, related facilities, such as laboratories, outpatient facilities, training facilities, medical offices, and staff residences. This includes institutions that provide rehabilitation services to individuals who require intensive medical services. A hospital may include a helistop as an accessory use.

**Hotel**

A building providing, for compensation, sleeping accommodations and customary lodging services. Related ancillary uses typically include 24-hour front desk service, housekeeping service, conference and meeting rooms, restaurants, bars, and recreational facilities. Stays are typically for 30 days or less, although an extended stay hotel which permits stays longer than 30 days is included in this definition.

---

256 Carries forward the existing definition in Sec. 144-1.4 of the Code of Ordinances with revisions for consistency and clarity.
257 Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
258 Consolidates the existing definitions of “Hospital, general” and “Hospital, rehabilitation” in Sec. 144-1.4 of the Code of Ordinances.
259 New definition that replaces the definition in Sec. 144-1.4 of the Code of Ordinances.
### Household
An individual or a group of people living together in a single dwelling unit, with common access to and common use of all living and eating areas and all areas and facilities for the preparation and serving of food within the dwelling unit.

### Household Living
Uses characterized by residential occupancy of a dwelling unit by a person or group of people. Common accessory uses include recreational activities, raising of household pets, personal gardens, personal storage buildings, swing sets, playground equipment, swimming pools, hobbies, and resident parking.

### Hydrogeologist
A person with at least five years of progressively more responsible professional experience, following receipt of a baccalaureate degree, during which full competence has been demonstrated in the application of scientific or engineering principles and methods to the execution of work involving:

1. The understanding of the occurrence, movement, and composition of ground water in relation to the geologic environment,
2. The development, management, or regulation of ground water, or
3. The teaching and research of ground water subjects at the university level.

### Idling
The operation of an engine in the operating mode where the engine is not engaged in gear, where the engine operates at a speed at the revolutions per minute specified by the engine or vehicle manufacturer for when the accelerator is fully released, and there is no load on the engine.

### Industrialized Home
Industrialized homes, also called prefab or modular homes, are designed and built in a factory, may be transported in pieces, and assembled on site. This type of housing is distinguished from manufactured housing in that, in the State of Texas, it is constructed to meet the same building codes as site-built housing, and must be installed upon a permanent foundation. According to the Texas Department of Licensing and Regulation, no municipality may differentiate between modular homes built under the Texas Industrialized Housing and Buildings (IHB) program and site built homes.

### Itinerant Merchant Operation
Activity by any person involving the display, sale, offering for sale, offering to give away, or giving away of anything of value including any food, beverage, goods, wares, merchandise, or services including food, which takes place in a temporary structure.

### Junkyard
A building or outdoor area used for the abandonment, storage, keeping, collecting, or bailing of paper, rags, scrap metals, or other discarded materials, or where three or more non-operative vehicles are stored for the
9.2 Definitions

9.2.11 K

Kitchen
Any room or portion of a room within a building designed and intended to be used for the cooking or preparation of food.

9.2.12 L

Landfill
A facility for the collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid waste. Ancillary facilities may include a waste transfer station or materials recovery operations.

Landscaped Area
The area of a lot which is devoted to and consists of plant material adaptable to this region, including but not limited to trees, shrubs, grass, vines, ground cover, and other plant materials, along with planters, brick, stone walkways, natural forms, water forms, and other landscape features, but not including any paved area of smooth concrete or asphalt.

Laundry, Commercial
An establishment that performs laundry and linen cleaning services for commercial and industrial customers, including but not limited to hotels and hospitals. Commercial laundries do not serve individuals or the general public.

Laundry, Drop-Off and Self-Service
An establishment where laundry may be dropped off and picked up by customers (wash-and-fold), or where customers may pay to use self-service washing and drying machines on the premises. This use may include tailoring services, but does not include dry-cleaning services.

Letter of Certification (LOC)
A formal document that is provided to a subdivider/developer by a reviewing entity; an LOC certifies a proposal's compliance with all standards administered by the respective reviewing entity.

License
A document issued by the local health authority which will allow a person to operate and maintain a mobile home community under the provisions of this [appendix] and other applicable regulations.

Licensee
Any person who holds a valid license to operate and maintain a mobile home community under the terms of this [appendix] and other applicable regulations.

Living Unit
A residential unit complete with facilities to accommodate one person or family with provisions for eating, sleeping, and sanitation.
Lodging uses
Uses in this category provide lodging services for a defined period of time with incidental food, drink, and other sales and services typically intended for the convenience of guests. Accessory uses may include food preparation areas, offices, and parking.

Lot
A parcel of land occupied or to be occupied by one building, or group of buildings, and the accessory buildings or uses customarily incident thereto, including such open spaces as are required by this LDO.

Lot, corner
A lot abutting upon two or more streets at their intersection.

Lot Coverage
See Coverage, lot.

Lot Depth
The length of a line connecting the midpoints of the front and rear lot lines.

Lot, Double Frontage
Any lot, not a corner lot, with frontage on two streets that are parallel to each other or within 45 degrees of being parallel to each other. When there is a non-access easement along a property line adjacent one of the streets of a platted double frontage lot, the property line with said easement is to be considered the rear lot line for purposes of this ordinance and is subject to the rear building setback.

Lot Frontage
The length of street frontage between property lines.

Lot, Interior
A lot whose side lines do not abut upon any street.

Lot, Irregular
Any lot not having equal front and rear lot lines, or equal side lot lines; a lot, the opposite lot lines of which vary in dimension and the corners of which have an angle of either more or less than 90 degrees.
**Lot Lines**
The lines bounding a lot as defined herein.

**Lot Line, Front**
The boundary between a lot and the street on which it fronts.

**Lot Line, Rear**
The boundary line which is opposite and most distant from front street line; except that in the case of uncertainty the Planning and Development Services Department shall determine the rear line.

**Lot Line, Side**
Any lot boundary line not a front or rear line thereof. A side lot line may be a part lot line, a line bordering on an alley or place or a side street line. Lots may have more than two side lot lines.

**Lot, Through**
An interior lot having frontage on two streets, also called a double frontage lot.

**Lot Width**
The horizontal distance between side lines, measured at the front building line, as established by the minimum front yard requirement of this LDO.
**Low Income Elderly**
Any person 55 years of age or older with low or moderate income, according to HUD standards.

**Lumber Mill**
An establishment that processes and treats raw logs to create lumber products that can be used for construction and other purposes.
**Article 9: Definitions**

9.2 Definitions

**9.2.13 M**

**Manager or Owner**

In the context of a manufactured home park, the person who owns or has charge, care, or control of the mobile home community.

**Manufactured Home**

A structure constructed on or after June 15, 1976, according to the rules of the National Manufactured Home Construction and Safety Standards Act of 1974 and Title of the Housing and Community Development Act of 1974, and certified as attaining certain safety and construction standards by the Department of Housing and Urban Development. Generally, manufactured homes are designed and built in a factory, may be transported in pieces, and assembled on site. Manufactured homes are distinct from industrialized or modular homes which, while also factory-built, comply with local, state and regional building codes.

**Manufactured Home Community**

A unified development of manufactured or mobile home spaces restricted to manufactured and mobile home use, with community facilities and permitted permanent buildings; this development being located on a single tract of land under one ownership and meeting the requirements of this ordinance.

**Manufacturing and Processing Uses**

Uses in this category includes the transporting, manufacture, fabrication, processing, reduction, destruction, or any other treatment of any article, substance, or commodity, in order to change its form, character, or appearance. Accessory uses may include retail sales, offices, storage, cafeterias, employee amenities, parking, warehousing, and repair facilities.

**Manufacturing, Artisan**

An establishment or business where an artist, artisan, or craftsperson teaches, makes, or fabricates crafts or products by hand or with minimal automation and may include direct sales to consumers. This definition includes but is not limited to small-scale fabrication or manufacturing operations conducted entirely within a building, that have no external impact on adjacent properties. Examples of this use include but are not limited to: artistic production such as sculpting or pottery, handicrafts such as weaving or soap-making, 3-D printing, small-scale food processing such as coffee roasting, and by-hand furniture production. This use does not include alcohol production.

**Manufacturing, Heavy**

An establishment engaged in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of, or manufacturing processes using flammable or explosive materials, or storage or manufacturing processes that potentially involve hazardous conditions. These uses have the potential to create significant impacts on surrounding areas due to the types of materials used, byproducts created, hours of operations, volumes of truck or rail traffic, or other factors. Typical uses

---

263 This combination of uses reflects the current "Lumberyard or building material sales" use in 144-4.2. (There is also a separate "Lumberyard" use, not carried forward).

264 This revises the definition for "Industry, heavy" in Sec. 144-1.4 of the Code of Ordinances and includes references to current uses that have been consolidated into the new Heavy Manufacturing use.
include acid manufacture, concrete or asphalt mixing, blooming or rolling mills, large-scale breweries or distilleries, canning or preserving facilities, cement or concrete manufacture or mixing, chemical manufacture, fertilizer manufacture, iron or steel manufacture, meat or fish packing, chrome plating, paint production, petroleum refining, slaughterhouse, smelting, stockyard, and wood distillation.

Manufacturing, Light
The production, processing, fabrication, assembly, treatment, repair, or packaging of finished products, predominantly from previously prepared or refined materials (or from raw materials that do not need refining), and that do not create noise, smoke, fumes, odors, glare, or health or safety hazards outside of the building or lot where the industrial activities take place. Warehousing, wholesaling, and distribution of the finished products produced at the site is allowed as part of this use. Typical uses include bottling, electronics assembly, forging, furniture manufacture, industrial laundries, printing plant, metal fabrication, plastics molding, poultry dressing, sheet metal, sign fabrication, and stone/clay/glass manufacture.

Marginal Access Street
A local street, parallel and adjacent to an arterial or other major thoroughfare, but separated from it by a long strip, which provides access to abutting properties and control of intersections with the major street.

Master Plan, Subdivision
The first or introductory plan of a proposed subdivision, in such case where the developer intends to develop and record only an individual portion to such subdivision, and which exhibits the proposed development of the balance of the subdivision.

Micro-Brewery or Micro-Distillery
A facility for the production and packaging of alcoholic beverages for distribution, retail, or wholesale, either on- or off-premises. Other uses commonly collocated with this use are a restaurant or bar. The use is permitted to produce either malt beverages of low alcoholic content with a capacity of not more than 15,000 barrels per year, or up to 100,000 gallons per year of distilled alcohol, such as whiskey, rum, gin, vodka, and other spirits.

Minor Plat
A subdivision resulting in four or fewer lots, which does not create any new street or necessitate the extension of any municipal facilities to serve any lot within the subdivision. Any property to be subdivided using a minor plat shall already be adequately served by all required city utilities and services, and all lots will have frontage on a public roadway.

Mixed-Use Building
This refers to the use of a structure for non-residential use in conjunction with a residential dwelling unit.

Mobile Food Court
A parcel of land where two or more mobile food establishments congregate to offer food or beverages for sale to the public as the principal use of the land. This definition shall not be interpreted to include a congregation of mobile food establishments as a secondary, accessory use, and/or temporary use on existing commercially developed land, which is an itinerant merchant operation.
Article 9: Definitions
9.2 Definitions
9.2.14 N

Mobile Food Unit
A business that serves food or beverages from a self-contained unit, either motorized or in a trailer on wheels, and conducts all or part of its operations on premises other than its own and is readily movable, without disassembling, for transport to another location. This definition does include individual non-motorized vending carts.

Mobile Food Vending, Base of Operation
The location where a mobile food vending vehicle originates, and is returned for cleaning, storing or stocking. Food preparation for catering is permitted. This does not include activities associated with the Mobile Food Court use.

Mobile Storage Unit
A container designed and rented or leased for the temporary storage of commercial, industrial, or residential household goods, and does not contain a foundation or wheels for movement. This definition includes facilities such as piggyback containers that can be transported by mounting on a chassis, and "POD" type boxes that can be transported on a flatbed or other truck; but do not include prefabricated sheds that are not designed for transport after erection, or commercial trailers used by construction or other uses in the regular performance of their business.

Modular Home
This term is synonymous and interchangeable with Industrialized Home.

Movie Theater
A facility designed or used primarily for the commercial exhibition of motion pictures to the general public, or for the presentation of plays by actors or live performances by musicians and other artists.

Municipal Infrastructure
Water, wastewater, drainage, road, pedestrian and bicycle, utility, and communication easements, rights-of-way, and facilities.

Museum
An establishment operated as a repository for a collection of nature, scientific, literary curiosities, or objects of interest or works of art, not including the regular sale or distribution of the objects collected. A museum may also include meeting rooms, offices for museum personnel, supportive visitor uses such as eating establishments, and similar facilities.

Music, Live or Recorded
As a use, any facility or venue that features live or recorded music for the enjoyment of patrons. Music may be an accessory use, as in the case of a bar or tavern, or it may be the primary use of a venue, as in a concert facility.

9.2.14 N
NBU
New Braunfels Utilities.

269 Carries forward the current definition in Sec. 144-5.26-2 of the Code of Ordinances with minor revisions.
270 Carries forward the current definition in Sec. 144-5.26-2 of the Code of Ordinances with minor revisions.
**Neighborhood Food and Service**

An establishment containing not more than 2,000 square feet of gross floor area, and intended to serve the local neighborhood, whose primary business is the sale of food and/or non-alcoholic beverages including a restaurant, bakery, coffee shop, ice cream parlor, deli, grocery, or similar use.

**Nonconforming Use**

A use, building or yard which does not, by reason of design, use, or dimensions conform to the regulations of the district in which it is situated. It is a legal nonconforming use if established prior to passage of [LDO adoption date], and an illegal nonconforming use if established after [LDO adoption date], and not otherwise approved as provided herein.

**9.2.15 O**

**Oak Wilt**

A disease caused by the fungus Ophiostoma fagacearum (Ceratocystis fagacearum).

**Office**

An establishment where services are provided and/or business is conducted including administrative, professional, consulting, governmental, or clerical operations. Typical examples include accounting, bookkeeping, tax preparation, investment, financial, law, computer programming, telemarketing, call centers, insurance, engineering, architecture, design, surveying, legal services, medical security monitoring, government departments or agencies, real estate, political and philanthropic, insurance, property management, investment, financial, employment, travel, and similar offices. This use does not include the contractors’ office, personal services, or research and development uses.

**Office and Services**

Uses in this category provide executive, management, administrative, governmental, or professional services, but do not sell merchandise except as incidental to a permitted use, or provide individual services related to personal needs directly to customers at the site of the business, or that receive goods from or return goods to the customer, which have been treated or processed at that location or another location. Accessory uses may include cafeterias, health facilities, parking, or other amenities primarily for the use of employees in the firm or building.

**Office, Contractor’s**

A building used as office space with related outdoor areas used to store and maintain construction equipment and other materials and facilities customarily required in the building trade by a construction contractor.

**Off-Site Facilities or Improvements**

Those facilities or improvements that are required to serve the site but that are not located within the boundaries of the plat.

**On-Site Facilities or Improvements**

The existing or proposed facilities or improvements constructed within the property boundaries of a plat. Facilities and improvements include, but are not limited to, streets, alleys, water lines, sewer lines, storm drainage facilities, sidewalks, screening devices, and curbs and gutters.

---

271 This is a new definition that makes specific reference to most of the current uses in the Code of Ordinances that have been consolidated into the new use “Office.”

272 Carries forward and consolidates the definitions in Sec. 144-1.4 of the Code of Ordinances for “Contractor’s office/sales (with outside storage)” and “Contractor’s storage yard” with minor revisions.
**Open Space**
Private property designated for recreational area, private park (for use of property owners within the subdivision), play lot area, plaza area, building setbacks (other than those required by city ordinance), and ornamental areas open to the general view within the subdivision. “Open space” does not include streets, alleys, utility easements, public parks or required setbacks.

**Ornamental Tree**

**Outdoor Display of Merchandise**
The placement of goods, equipment, or materials for sale, rental or lease in a location not enclosed by a structure consisting of walls and a roof.

**Outside Storage**
As a primary use, a property or area used for the long term (more than 24 hours) storage of materials, merchandise, products, stock, supplies, machines, operable vehicles, equipment, manufacturing materials, or other items not enclosed within a structure having four walls and a roof. Outdoor sales and display areas shall not be defined as outside storage.

**Overlay District**
A set of zoning regulations that is applied in a defined area in addition to the standards of the underlying base zoning district. Developments within the overlay zone must conform to the requirements of both the base district and the overlay zone district, or the more restrictive of the two. Overlay districts are created by ordinance to implement policies or objectives in the comprehensive plan.

---

273 This new definition is proposed as a replacement for an existing definition in 144-1.4, to place greater emphasis on the characteristics of Outside storage as a primary use.
Oversized Vehicle

Any vehicle designated as Class 6, Class 7 or Class 8 vehicles as illustrated herein, including but not limited to the following designated vehicles: dump trucks, truck-tractors, tractor-trailers, semi-trailers, 18-wheelers, concrete mixing trucks, buses, or other similar vehicles. The weights referenced in the table are a vehicle's maximum gross weight or maximum load carrying capacity as set forth in the vehicle's registration or as designated by the vehicle manufacturer, whichever amount is greater. Oversized vehicle shall include the aforementioned vehicles that can be used or modified for sleeping. The term shall exclude recreational vehicles as defined in this section.

<table>
<thead>
<tr>
<th>Class 1: 6,000 pounds or less</th>
<th>Class 5: 16,001 to 19,500 pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Size Pickup</td>
<td>Bucket</td>
</tr>
<tr>
<td>Mini Pickup</td>
<td>City Delivery</td>
</tr>
<tr>
<td>SUV</td>
<td>Large Walk In</td>
</tr>
<tr>
<td>Utility Van</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class 2: 6,001 to 10,000 pounds</th>
<th>Class 6: 19,501 to 26,000 pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew Size Pickup</td>
<td>Beverage</td>
</tr>
<tr>
<td>Full Size Pickup</td>
<td>Rack</td>
</tr>
<tr>
<td>Mini Bus</td>
<td>School Bus</td>
</tr>
<tr>
<td>Minivan</td>
<td></td>
</tr>
<tr>
<td>Step Van</td>
<td>Stake Body</td>
</tr>
<tr>
<td>Utility Van</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class 3: 10,001 to 14,000 pounds</th>
<th>Class 7: 26,001 to 33,000 pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Delivery</td>
<td>City Transit Bus</td>
</tr>
<tr>
<td>Mini Bus</td>
<td>Furniture</td>
</tr>
<tr>
<td>Walk In</td>
<td>High Profile Semi</td>
</tr>
<tr>
<td></td>
<td>Home Fuel</td>
</tr>
<tr>
<td></td>
<td>Mediun Semi Tractor</td>
</tr>
<tr>
<td></td>
<td>Refuse</td>
</tr>
<tr>
<td></td>
<td>Tow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class 4: 14,001 to 16,000 pounds</th>
<th>Class 8: 33,001 pounds and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Delivery</td>
<td>Cement Mixer</td>
</tr>
<tr>
<td>Conventional Van</td>
<td>Dump</td>
</tr>
<tr>
<td>Landscape Utility</td>
<td>Fire Truck</td>
</tr>
<tr>
<td>Large Walk In</td>
<td>Home Fuel</td>
</tr>
<tr>
<td></td>
<td>Heavy Semi Tractor</td>
</tr>
<tr>
<td></td>
<td>Refrigerated Van</td>
</tr>
<tr>
<td></td>
<td>Semi Sleeper</td>
</tr>
<tr>
<td></td>
<td>Tour Bus</td>
</tr>
</tbody>
</table>

Owner

The person or entity having legal title to the property or a lessee, agent, employee, or other person acting on behalf of the title holder with authorization to do so.

Owner

In the context of subdivision, may also be referred to as "applicant," "subdivider," or "developer." Any person or firm, association, syndicate, general or limited partnership, corporation, trust or other legal entity, or any agent thereof, that has sufficient proprietary interest in the land to be subdivided or developed, to commence and maintain proceedings to subdivide or develop the same under this Chapter. In any event, the term "property owner" shall be restricted to include only the owner(s) or authorized agent(s) of such owner(s), such as a developer of land sought to be subdivided.
9.2.16 P

Park

Land dedicated to, or purchased by, the city for the purpose of providing public recreation and/or open areas. Parkland may be developed or unimproved but is created, established, designated, maintained, provided, or set aside for purposes of serving the general population's need for rest, enjoyment, play, assembly, and recreation. The term includes all facilities, structures, and buildings located on that land. A park may include playgrounds, maintenance facilities, swimming pools, dressing rooms, concessions, community centers, museums, and parking.

Community Park
A community park is generally ten to 75 acres in area, located within one-mile to three-mile of the majority of the residences to be served by the park, and can be linear in nature.

Neighborhood Park
A neighborhood park is generally five to ten acres in area, located within half-mile to one-mile from a majority of the residences to be served by the park, and can be linear in nature.

Regional Park
A regional park provides outdoor recreational opportunities for all city residents, rather than only those residents who reside in proximity to the park. The acquisition and development of the "basic" infrastructure and facilities for the usage of these parks should be based upon the demand from the area residents they are intended to serve. The primary cost of regional parks should be borne by all city residents.

Park, Parking or Store
When prohibited, means the standing of an oversized vehicle, whether occupied or not, otherwise than temporarily for the purpose of and while actually engaged in the loading or unloading of merchandise or passengers.

Parking Lot, Structured
A structure designed to accommodate motor vehicle parking spaces that are fully or partially enclosed or located on the deck surface of a building. This use does not include parking lot structures that are accessory to another principal use.

Parking Lot, Surface
A paved surface on ground level designed, used, or intended for use for the temporary storage of motor vehicles, paid or non-paid. This use does not include surface parking lots that are accessory to another principal use, or areas used for the sale, display, or storage of motor vehicles for sale.

Parking Space, Off-Street
An area not less than nine feet wide and 18 feet long, having unobstructed access from a street within the community and located on a mobile home lot or in a common parking area, or in a common parking and storage area located within 100 feet of the lot it serves.

274 This heavily modifies the definition of "Parking Lot" ins Sec. 144-1.4 of the Code of Ordinances to conform with the goal of this use (previously undefined).
Parking Space, Off-Street
Space for the parking or temporary storage of one motor vehicle, not on a public street or alley, having a driveway connecting the parking space with a street or alley permitting free ingress and egress without encroachment on the street or alley.

Pavement, Permeable
A pavement system with traditional strength characteristics, but which allows rainfall to percolate through it rather than running off. A permeable pavement system utilizes either porous asphalt, pervious concrete, pavers interlaid in a running bond pattern and either pinned or interlocked in place, or other permeable technology. Porous asphalt consists of an open graded coarse aggregate held together by asphalt with sufficient interconnected voids to provide a high rate of permeability. Pervious concrete is a discontinuous mixture of Portland cement, coarse aggregate, admixtures, and water which allow for passage of runoff and air.

Pavement Width
The portion of street available for vehicular traffic; where curbs are laid, it is the portion between the face of curbs.

Pawn Shop275
An establishment that engages, in whole or in part, in the business of loaning money on the security of pledges of personal property, or deposits or special sales of personal property, or the purchase or sale of personal property. The retail sale of primarily used items is also allowed in accordance with local, state, and federal regulations.

Pedestrian Way
An area which provides pedestrian circulation.

Perimeter Street
Any existing or planned street which is adjacent to the subdivision or addition to be platted.

Permanent Building
Any building that is not an accessory building.

Permit
A written document issued by the building official permitting the construction, alteration, or expansion of mobile home community facilities.

Person
For the purposes of this LDO, means every natural person or individual, firm, trust, partnership, public or private association, governmental agency, political subdivision, corporation, or society.

Personal Instruction Facility
An establishment that provides teaching or instruction to groups of people on various topics, including but not limited to yoga studio, gyms or health clubs, art instruction, martial arts training, and music lessons. This use is distinguished from personal service by the larger number of individuals accessing the facility at any given time, and distinguished from primary, secondary, or vocational instruction by the non-academic nature of instruction.

275 Builds on the current definition in Sec. 144-1.4 of the Code of Ordinances.
Personal Services

An establishment that provides individuals with services related to non-medical personal or household care needs. Typical examples include but are not limited to barber shops and hair salons, day spas, massage services, nail salons, tanning salons, tattooing and body piercing, as well as services such as dry cleaners, tailors. Personal services facilities typically do not have large groups of patrons on site at any given time, and may include related incidental retail sales.

Pet Day Care

An establishment where dogs are cared for during the day for compensation. This use may include indoor play areas, outdoor play areas, and ancillary grooming services. This use does not include the overnight boarding of animals.

Place

An open, unoccupied space other than a street or alley permanently established or dedicated as the principal means of access to property abutting thereon.

Planned Development

A subdivision that may consist of a variety of land use types, incorporating a single or variety of types of residential dwelling units, and/or compatible commercial and industrial land uses, and may include public land uses and common open space and recreational areas, adequate to service the needs of the tract when fully developed and populated, and which is to be developed as a single entity under unified control.

Planning Commission

The Planning Commission of the city, also referred to as the Commission.

Planning and Development Services Department

The Director of the Planning and Development Services Department, or that person’s designee. Also referred to as Planning and Development Services Director.

Plant Nursery

An establishment, including a building or open space, for the growth, display, and/or sale of plants, trees, and other materials to be used in indoor or outdoor planting. This use may conduct wholesale sale of plant materials, but does not include the retail sales of plant products to the public, which are included in the Retail Sales use.

Plat

A map, drawing, chart or plan showing the exact layout and proposed construction of a proposed subdivision into lots, blocks, streets, and may include parks, school sites, drainageways, easements, alleys, and/or any other elements as required by this chapter and which an applicant shall submit for approval in accordance with this chapter.

Plat, Preliminary

A plat that is submitted to the city for its review of the concept and performance of the subdivision as related to the provisions of this chapter. The preliminary plat and the review thereof are intended to produce a subdivision design in which all planning factors are recognized and reconciled, prior to submission of the final plat.

---

This builds on the current definition in Sec. 144-1.4 of the Code of Ordinances with specific reference to most of the current uses in the Code of Ordinances that have been consolidated into this use.
**Plat Revision, Replat, or Resubdivision**
A plat vacating an existing subdivision in lieu of a new pattern of development, the subdivision of an existing or duly recorded lot or lots, the combining of two or more lots to create one lot, or the subdividing of an existing platted but undeveloped subdivision into a new pattern of lots and blocks.

**Porch**
A one-story, usually covered entrance to a building, with or without a separate roof, that is not used for livable space and extends along the building.

**Power Generation**
A large-scale facility or area that generates electricity from mechanical power produced by the firing of fossil fuels, or that produces heat or steam for space heating and other similar uses from thermal plants or biomass facilities. This does not include power generation uses that employ renewable sources that have generally lower impact on surrounding areas, such as solar, wind, or geothermal power generation systems.

**Preliminary Approval**
Approval expressed by the Commission as to the arrangement and approximate size of streets, alleys, parks, reserves, easements, blocks and lots indicated on a preliminary plat.

**Premises**
A parcel or tract of land or one or more platted lots under the same ownership and use, together with the buildings and structures located thereon.

**Primary Façade**
Any building façade oriented toward the street.

**Private Club**
An establishment owned or operated by a corporation, association, person, or group of people, for a social, educational, or recreational purpose, but not primarily for profit, and which provides social and dining facilities only to members and invited guests, and which may include service of alcoholic beverages in accordance with the provisions of Chapter 32, Title 3, Alcoholic Beverage Code, of the Texas state statutes.

**Private Street**
A vehicular access way, including an alley, that is shared by and that serves two or more lots, which is not dedicated to the public, and which is not publicly maintained.

**Project**
An endeavor over which the city exerts its jurisdiction and for which one or more plans or plats may be required to initiate, continue, or complete a development.

**Protected Tree**
Any tree on the Approved Plant List (Appendix A), having a trunk circumference of 25 inches or more (about eight inches in diameter) measured four and one-half feet (4-1/2') above the ground. As used in the text of this ordinance, the term “protected tree” includes all heritage trees.

**Public Improvements**
Also referred to as “subdivision improvements,” these are facilities, infrastructure, and other appurtenances, typically owned and maintained by the city (but not necessarily located upon city-owned property or right-of-
Article 9: Definitions
9.2 Definitions

way—public improvements can be located upon private property), which serve a public purpose in providing a needed service or commodity, such as wastewater collection and treatment and water storage and distribution, and which protect the general health, safety, welfare, and convenience of the city's citizens, including efficiency in traffic circulation and access for emergency services. Required public improvements may include, but shall not be limited to, street and alley paving, including any necessary median openings and left turn lanes on major thoroughfares; water lines and pumping stations; sanitary sewer lines and lift stations; storm drainage structures and storm water management devices; water quality and erosion controls; screening and retaining walls; fire lane paving and fire hydrants; landscaping, where such is used for required screening or other required landscaped area, and associated irrigation system; and any required public sidewalks, street lights and street name signs. The term "public improvements" shall not include facilities or infrastructure of private providers of utility services other than water and wastewater, but shall be deemed to include facilities and infrastructure that the city would normally require of a development but which will be owned and maintained by an entity such as a homeowners association, as in the case of private streets.

Public Property
All parks, esplanades, traffic islands, municipal and utility easements and rights-of-way, and miscellaneous property owned by a governmental entity or the public.

Public Trees
All trees and shrubs having 50 percent or more of its diameter, measured at existing grade, resting on public property.

Public Water System
A system approved by the TCEQ for the provision to the public of water for human consumption through pipes or other constructed conveyances.

9.2.17 R

Railroad Facilities
Land, buildings, and structures used to support railroad operations, including facilities such as tracks, sidings, signal devices and structures, maintenance shops and yards, loading platforms, and passenger and freight terminals and yards.

Reconstruction
The rehabilitation or replacement of a structure which either has been damaged, altered or removed or which is proposed to be altered or removed to an extent exceeding 50 percent of the replacement cost of the structure at the time of the damage, alteration or removal.

Recreation and Entertainment
Uses in this category include indoor and outdoor recreation and entertainment activities. Accessory uses may include limited retail, concessions, parking, and maintenance facilities.

Recreation, Indoor
A facility that provides entertainment or recreation activities in an enclosed area for the entertainment of customers or members. Uses may include, but are not limited to bowling alleys, ice skating rinks, racquetball or handball clubs, indoor tennis courts or clubs, indoor swimming pools or scuba diving facilities, indoor rock

---

278 This makes substantial revisions to the definition for "Amusement services (indoors)" in Sec. 144-1.4 of the Code of Ordinances.
climbing, and other similar types of uses. Accessory uses may include administrative offices, concessions, and maintenance facilities.

**Recreation, Outdoor**\(^{279}\)
Recreation and entertainment activities that are mostly outdoors, including picnic areas, archery, outdoor swimming pools, skateboard parks, sports courts and athletic fields, golf driving ranges, miniature golf course, tennis courts, small amphitheaters, arenas, batting cages, go-cart tracks, ziplines, amusement parks, and similar types of activities. This use does not include a river outfitter, although a river outfitter may be included on the same site as an outdoor recreation use provided all outfitter standards are met. Accessory uses may pro shops, offices, concessions, and maintenance facilities.

**Recreational Vehicle**\(^{280}\)
Any travel trailer, pickup camper, motor home, camping trailer, tent trailer, or mobile home less than eight feet wide and 35 feet long according to the certificate of title, that has its own sink, lavatory, flush toilet, and tub or shower, designed for temporary human habitation and most often used for outdoor recreation.

**Recycling Center**
A facility used for the collection and temporary storage of empty beverage containers, aluminum, glass, paper, or clothing for recycling purposes. This definition does not include processing except for can banks that crush cans as they are deposited.

**Regulatory Agency**
The governing body of, or a bureau, department, division, board, commission, or other agency of, a political subdivision acting in its capacity of processing, approving, or issuing a permit.

**Religious Assembly**\(^{281}\)
An establishment used for religious worship and customary accessory educational, cultural, and social activities. This use may include the place of residence for ministers, priests, nuns, rabbis, or other religious leaders on the premises.

**Removal**
As applied to trees means uprooting, severing the main trunk of the tree or any act which causes, or may reasonably be expected to cause the tree to die, including but not limited to, damage inflicted upon the root system by machinery, storage of materials, or soil compaction; substantially changing the natural grade above the root system or around the trunk; excessive pruning; or paving with concrete, asphalt, or other impervious materials in a manner which may reasonably be expected to kill the tree.

**Replatting or Replat**
The re-subdivision of any part or all of a block or blocks of a previously platted subdivision, addition, lot or tract.

**Research and Development**
An establishment with facilities for scientific research, and the design, development, and testing of electrical, electronic, magnetic, optical, and mechanical components in advance of product manufacturing. These facilities are not associated with a manufacturing facility on the same site, except as incidental to the main purpose of

\(^{279}\) This makes substantial revisions to the definition for “Amusement services (outdoors)” in Sec. 144-1.4 of the Code of Ordinances.

\(^{280}\) Carries forward the current definition in Sec. 144-5.26-2 of the Code of Ordinances with edits.

\(^{281}\) Simplifies the current definition in Sec. 144-1.4 of the Code of Ordinances of “Church/place of religious assembly” with minor revisions and removes the references to tax-exempt status and exemption of at-home bible study and like activities.
Article 9: Definitions
9.2 Definitions
9.2.17

9.2 Definitions

9.2.17

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT

the facility. This use includes but is not limited to chemical, biotechnology, pharmaceutical, and medical research and development, software development, and soils and other materials testing laboratories.

Reserve Strip
A privately owned strip of land, 20 feet wide or less, adjacent to a public right-of-way or easement preventing the extension of such right-of-way or easement without the expressed consent of the adjacent land owner.

Residence Hall
A building used or intended to be used principally for sleeping accommodations where the building is related to an educational or public institution, including religious orders, and typically includes common areas and shared food preparation facilities.

Resource or Mineral Extraction
The extraction of sand, gravel, soil, rock, minerals, oil, gas, mineral substances or organic substances other than vegetation, from water or on land or underground, whether exposed or submerged. Accessory use may include the transport of extracted resources or minerals away from the site.

Restaurant
An eating establishment where customers are primarily served at tables or are self-served, and where food is consumed on the premises, carried out, picked up “curbside,” or delivered. Drive-through service is allowed as an accessory use only in districts which permit the drive-through accessory use.

Retail Sales
An establishment engaged in selling goods or merchandise to the general public for personal or household consumption and rendering services incidental to the sale of such goods. These uses are found individually or with other retail sales and/or personal sales uses in shopping centers. Typical examples include auto tire sales, prepared food sellers such as bakeries, bicycle sales, bookstores, computer and electronic sales, consignment shop, department stores, drug stores or pharmacies, furniture sales, grocery stores, hardware stores, major appliance stores, manufactured home sales, pawn shops, pet supply stores, plant nurseries, propane sales, or tool rental or sales. There are three types of retail sales establishments.

Retail Sales, Small
A retail sales establishment with up to 5,000 square feet of gross floor area.

Retail Sales, Medium
A retail sales establishment with more than 5,000 and up to 50,000 square feet of gross floor area.

Retail Sales, Large
A retail sales establishment with more than 50,000 square feet of gross floor area.

Retail Sales Uses
Uses involving the sale, lease, or rent of new or used products directly to the final consumer for whatever purpose but not specifically or exclusively for the purpose of resale. Accessory uses may include offices, parking, storage of goods, assembly, repackaging, or repair of goods for on-site sale.

---

New definition for an existing use.
Carries forward the current definition from Sec. 144-1.4 of the Code of Ordinances.
These thresholds are offered as a departure point for discussion. Use categories of small, medium, and large for retail operations are common, but the square footage allowed in each of these categories varies by community. What do you think will work in New Braunfels?
Definition for Retail establishment, large scale from 144-1.4 not carried forward. That use definition specifies a threshold of 100,000 sq ft and above. That kind of development would still be in this same use category, with the threshold changed from 50,000 sq ft to 100,000 sq ft.
Review
To read, analyze, assess, and act upon.

Right-of-Way
A parcel of land occupied, or intended to be occupied, by a public road, street or alley. Where appropriate, right-of-way may include other facilities and utilities such as sidewalks; electrical, communication, oil and natural gas lines and facilities; and water and sanitary and storm sewer facilities. The use of right-of-way shall also include parkways and medians outside of the paved portion of the street. The usage of the term right-of-way for land platting purposes shall mean that every right-of-way hereafter established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way, and shall not be included within the dimensions or areas of such lots or parcels.

River Entrance/Exit
[definition to be added]

River Outfitter
A facility that rents equipment for swimming, boating, or floating, and that may also use private transportation vehicles to drop patrons off at a river entrance as well as pick patrons up downstream at a river exit.

Roof Pitch
The amount of slope of the roof in terms of angle or other numerical measure; one unit of horizontal rise for three units of horizontal run is expressed as "1 in 3" or "4:12."

RV Park
An outdoor facility designed for overnight accommodation of human beings in a recreational vehicle for recreation, education, naturalist, or vacation purposes. Ancillary services such as a convenience store, restrooms, power, and electric hook-ups may be provided.

School, College or University
An institution that provides full-time or part-time education beyond high school that leads towards associates’, bachelors’, or graduate degrees, not including vocational schools. This use also includes post-high school education facilities for special needs, mentally disabled, or physically challenged individuals.

School, Pre-K-12
An establishment, public or private, that provides educational services in accordance with the standards and requirements of the compulsory education laws of the State of Texas, between the grades of pre-kindergarten and 12th grade. This use includes pre-kindergarten schools, elementary schools (grades K-5), middle schools and junior high schools (grades 6-8), and high schools (grades 9-12).

School, Vocational
A private or public educational facility offering instruction in a skill, trade, industry, or technical field such as construction, cosmetology, data processing, health care, legal services manufacturing, truck driving, or vehicle maintenance.

Screening Fence
Define as continuous and opaque (wall) as opposed to a perimeter fence which can be wrought iron, chain link, or other non-opaque material.
Seasonal Sales
The temporary display and sale of products outside of a building or structure. Seasonal sales may include but are not limited to temporary farm stands selling produce, pumpkin patches, and Christmas tree sales. Seasonal sales are distinct from outdoor display of merchandise, associated with a retail establishment as an accessory use.

Secondary Facade
Any building façade that is not oriented toward the street.

Self-Storage
An establishment that provides individual storage units for rent or lease, restricted solely to the storage of items, which are typically used for the storage of household or business goods, but not including the conduct of sales, business, or any other activity within the individual storage units. This use may include the outdoor storage of large equipment such as boats and RVs.

Sensitive Feature
In the context of the Edwards Aquifer protection zone, a sensitive feature, as defined by the Texas Commission on Environmental Quality, is a permeable geologic or manmade feature located on the recharge zone or transition zone where a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer exists, and rapid infiltration to the subsurface may occur.

Septic Tank
A watertight receptacle that receives the discharge of sewage from a building, sewer, or part thereof, and is designed and constructed so as to permit settling of solids from this liquid, digestion of the organic matter, and discharge of the treated liquid portion into a disposal area.

Service Building
A building housing toilet and sanitary facilities, as required by this ordinance.

Service and Repair Shop
A workshop or studio that provides on-site maintenance and repair service of consumer goods, or offers a service to be performed off-site. Such facilities include but are not limited to computer and cell phone repair, small appliance repair, carpet cleaning, electrical repair, exterminator, locksmith, janitorial service, plumbing service, shoe repair, carpenters, or upholsterers. This use does not include service or maintenance on any item with a combustion engine.

Sewerage Disposal System, Individual or Private
Any system designed to provide on-site treatment and disposal of sewage flows from individual residences, duplexes, businesses, or any other buildings. The system may be anaerobic, e.g., a septic transpiration bed, or other. The system must not require a permit from the state.

Sewerage System, Public
A system designed for the wastewater collection, treatment and disposal that is wholly owned and operated by the city or any other legally incorporated town or city or public systems approved by the state.

286 Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
Screening
A method of visually shielding or obscuring an abutting or nearby use or structure from another by fencing, walls, berms, or densely planted vegetation.

Setback Line
A line running parallel to a lot line or property line defining the boundary of a setback. Area between the property line and this setback line is the setback, or yard, and is typically required to remain open from the ground to the sky.

Sexually-Oriented Business
See definition in Sec 18-231 of the Code of Ordinances.

Shooting Range, Indoor
An enclosed facility used for firearm target practice, instruction, competitions, or similar activities, including but not limited to skeet, trap, and similar shooting activities. All activity at an indoor shooting range is conducted within an enclosed building.

Shooting Range, Outdoor
An area or facility to be used for firearm target practice, instruction, competitions, or similar activities, including but not limited to skeet, trap, and similar shooting activities. Outdoor shooting ranges may include both indoor and outdoor facilities.

Short Term Rental
The rental for compensation of all or part of a privately owned dwelling, including but not limited to a one- to four-family dwelling, multi-family dwelling, apartment house, tiny home, townhouse, manufactured home, , or garage apartment/accessory dwelling unit, for dwelling, lodging, or sleeping purposes for a period of not less than one night and not more than 30 days other than ongoing month-to-month tenancy granted to the same renter for the same unit. This term use is distinct from bed and breakfasts, hotels, residence halls, group homes, RV parks, hospitals and other health care facilities, continuing care retirement communities, nursing homes, foster homes, halfway houses, transitional housing facilities, resort properties as defined in this LDO, or resort condominiums. Short-Term Rentals are subject to the regulations described in §X.X.

Sidewalk
A paved pedestrian way generally located within the public or private street right-of-way, but outside of the roadway.

Site
1) A tract of property that is the subject of a development application.
2) In the context of wireless communication facilities, the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground. The current boundaries of a site are the boundaries that existed as of the date that the original support structure or a modification to that structure was last reviewed and approved by the city, if the approval of the modification occurred prior to the Spectrum Act or otherwise outside of the section 6409(a) process.

Site Plan
A detailed plan showing the roads, parking, footprints of all buildings, existing trees, proposed landscaping, parkland, open space, grading and drainage, and similar features needed to verify compliance with the approved land use plan and development standards.
**Solar Energy System, Small-Scale**

Equipment for the collection of solar energy or its conversion to electrical energy for use on the same property, or for incidental sale to a public utility, when that equipment is accessory to a principal use of the property. Components are typically mounted on the roof(s) of principal or accessory structures, but may be mounted on other parts of structures or on the ground.

**Solar Farm, Large-Scale**

A facility consisting of solar panels, modules, and related equipment (e.g., heat exchanger, pipes, inverter, wiring, and storage) that collects solar energy and converts it into electricity or transfers it as heat to a carrier fluid for use in hot water heating or space heating and cooling. This use is generally designed to produce electricity to accommodate demands of a neighborhood or larger area and is typically mounted on the ground.

**Special-Purpose Base District**

Special-Purpose Base Districts, also called special districts, are created to accomplish or preserve certain forms of development and desired uses in defined areas. Special districts replace the underlying base zoning that would have applied in the area within the special district's defined boundary.

**Special Event**

A festival, celebration, or gathering that involves the reservation and temporary use of a portion of a private property that includes activities such as dancing, music, dramatic productions, art or cultural exhibitions, other types of entertainment activities, and the sale of merchandise, food, or beverages. The term does not pertain to buildings or properties that host public events on a regular basis such as the Wurstfest grounds, the Comal County Fairgrounds, the New Braunfels Civic/Convention Center, Heritage Village, Conservation Plaza, school grounds, private event centers, home owners' association amenity centers/property, and similar areas.

**Stable, Accessory**

A building or structure used to keep horses, ponies, or mules owned by occupants of the premises, and not kept for remuneration, hire, or sale.

**Stable, Commercial**

A building or structure in which horses, ponies, or mules are housed, boarded, or kept for hire.

**Steep Slope**

Areas that contain slopes over 15 percent grade and are characterized by increased runoff, erosion, and sediment hazards.

**Storage And Warehousing Uses**

Uses in this category are engaged in the storage or movement of goods for themselves or other businesses. Goods are generally delivered to other businesses or the final consumer, except for some will-call pickups, and there are typically few customers present. Accessory uses may include offices, truck fleet parking, and maintenance areas.

**Story**

That part of a building included between the surface of one floor and the surface of the floor next above, or if there be no floor above, that part of the building which is above the surface of the highest floor thereof. A top

---

*Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.*

*Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.*

*Carries forward the definition in Sec. 144-1.4 of the Code of Ordinances of “Stable, riding” with revisions to fit this more general use.*
story attic is a half story when the main line of the wall plates is not above the middle of the interior height of such story. A basement that is no more than four feet above average grade shall not be considered a story.

**Street**

A public maintained thoroughfare or privately maintained public access easement which affords principal means of access to property abutting thereon, and normally consists of the road surface, ditch or curbs, and sidewalk or parking areas.

**Street**

A public or private right-of-way that provides primary vehicular access to adjacent land, whether designated as a street, highway, thoroughfare, parkway, throughway, avenue, lane, boulevard, road, place, drive, or however otherwise designated.

**Street, Arterial**

A thoroughfare designated as a freeway, expressway, major arterial, or minor arterial in the most recently adopted city Thoroughfare Plan. The primary function of an arterial is to carry traffic through the city, and is designed for as high a speed as possible, to carry as much traffic as possible. Also known as a "major thoroughfare."

**Street, Collector or Sub-Collector**

A street that primarily carries traffic from local or residential streets to major thoroughfares and highways, including the principal entrance streets for circulation to schools, parks, and other community facilities within such a development, and also including all streets which carry traffic through or adjacent to commercial or industrial areas.

**Street, Local or Residential**

A street that is used primarily for access to abutting residential property and circulation of traffic within residential neighborhoods. It is of a width and design to discourage through traffic, thereby protecting the residential area. A local street serves the same purpose in a commercial or industrial district.

**Street, Marginal Access**

A street that is parallel and adjacent to an arterial street and which primarily provides vehicular access to abutting properties and protection from through traffic.

**Street, Standard**

A street or road that meets or exceeds the minimum specifications in the city's standard street specifications, and which is constructed to the ultimate configuration for the type of roadway it is designated for on the city's Thoroughfare Plan.

**Street, Substandard**

An existing street or road that does not meet the minimum specifications in the city's standard street specifications, and which is not constructed to the ultimate configuration for the type of roadway it is designated for on the city's Thoroughfare Plan.

**Street Improvements**

Any street or thoroughfare, together with all appurtenances required by city regulations to be provided with such street or thoroughfare, and including but not limited to curbs and gutters, walkways (sidewalks), drainage facilities to be situated in the right-of-way for such street or thoroughfare, traffic control devices, street lights and street signs, for which facilities the city will ultimately assume the responsibility for maintenance and operation.

**Street Line**

The dividing line between the street right-of-way and the abutting property, normally to the lot property line.
Article 9: Definitions
9.2 Definitions

9.2.18 Definitions

Street Yard
The area of a lot that lies between the street right-of-way line and the actual front wall line of a building, as such building wall line extends from the outward corners of the building, parallel to the street, until such imaginary extensions of such front building wall intersect the side property lines.

Structure
Anything built, constructed, or erected, an edifice or building of any kind, or any piece of work built up or composed of parts joined together in some definite manner, which requires location on the ground, or attached to something having a location on the ground; including, but not limited to, advertising signs, billboards, and poster panels, but exclusive of customary fences or boundary or retaining walls.

Structural Alterations
Any change in the supporting members of a building, such as bearing walls, columns, beams, or girders.

Subdivider
Any person or any agent of the person dividing or proposing to divide land so as to constitute a subdivision, as that term is defined in this LDO. In any event, the term "subdivider" is restricted to include only the owner, equitable owner, or authorized agent of the owner or equitable owner of land to be subdivided.

Subdivision
A division or sub-division of any tract of land situated within the city's corporate limits or its extraterritorial jurisdiction into two or more parts, lots, or sites, for the purpose, whether immediate or future, of sale, division of ownership, or building development. Subdivision includes re-subdivisions of land or lots which are part of a previously recorded subdivision.

Supportive Housing
A dwelling where people are living, together with staff, as a single housekeeping unit providing care, supervision, and treatment for the exclusive use of individuals requiring medical, correctional, or other mandated supervision or a protective environment to avoid past or likely future violence or addiction and whose right to live together is not protected by the federal Fair Housing Act Amendments, as amended and as interpreted by the courts. This includes and is not limited to:

1) Transitional housing for released offenders or individuals exiting structured rehabilitation programs.
2) A shelter for individuals experiencing temporary homelessness.
3) A domestic violence shelter, which is a public or private building or structure housing residents for the purpose of the rehabilitation or special care for victims of domestic violence or emotional or mental abuse.
4) Sober living facilities for those recovering from substance addiction.

Supportive Housing, Small
A facility designed for and occupied by six or fewer residents living together.

Supportive Housing, Large
A facility designed for and occupied by seven or more residents living together.

Surveyor
A licensed state land surveyor or a registered professional land surveyor as authorized by the state statutes to practice the profession of surveying.
**Swimming Pool**
A self-contained body of water at least 18 inches deep and eight feet in diameter or width and used for recreational purposes. It may be above or below ground level. As an accessory use, a swimming pool is accessory to a principal residential use.

**9.2.19 T**

**Tandem Parking**
A tandem parking space is a standard width, and a sufficient length to allow two cars, with one parked behind the other. Tandem spaces may be used in valet parking operations, or multi-family developments, if use of a tandem space is assigned to a single unit.

**Telecommunication Tower**
A structure that is designed and constructed primarily for the purpose of supporting one or more antennas, including self-supporting lattice towers, guy towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, and wireless communication facilities.

**Temporary Housing**
Housing for a time period of six to 24 months for individuals/families who do not have current accommodations.

**Temporary Improvements**
Improvements built and maintained by the property owner that are needed to remedy a circumstance that is temporary in nature, such as a temporary drainage easement or erosion control device, that will be removed upon completion of the subdivision or development or shortly thereafter.

**Temporary On-Site Contractor’s Office**
A structure or shelter used in connection with a development or building project for housing on the site of temporary administrative and supervisory functions and for sheltering employees and equipment.

**Temporary Real Estate Office**
A structure, including but not limited to a trailer, modular unit, or a model home, which is used a real estate sale office in a new residential development for the sale and promotion of properties within the project and its future sales.

**Temporary Roll-off Dumpster**
A roll-off style dumpster that is placed on a site for a temporary period to facilitate construction or disposal of items from the site.

**Temporary Uses**
Temporary uses are activities that take place for a defined period of time, generally from one day to ninety days in duration, and that may be accessory to an established primary use on the site, or may be unrelated to such primary use. Examples include but are not limited to: model homes, temporary storage or waste containers, temporary construction buildings, outdoor fairs, festivals, or other special events, and seasonal sales.

**Theater, Drive-In**
An establishment including a large outdoor movie screen, a projection booth, and a large parking area for automobiles from which films projected outdoors may be seen.
Thoroughfare Plan
The street plan, which is part of the comprehensive plan of the city.

Tiny Home
A detached structure built for either temporary or permanent habitation, typically with living area of 600 square feet or less.

Townhouse or Rowhouse
One of a group of not less than four nor more than eight adjoining single-family dwelling units sharing a common wall with one or more of such adjoining dwelling units, each dwelling unit located on a separate lot.

Transient housing
Short-term accommodations for visitors or travelers, such as a hotel or motel.

Transitional Surfaces
Surfaces that extend outward at 90-degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal surface.

Transmission Equipment
In the context of wireless communication facilities, this is equipment that facilitates transmission for any Federal Communications Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

Transportation and Utility Facilities
Uses in this category include a broad range of uses including those primarily associated with train, bus, and aircraft facilities or uses and facilities for utility systems such as water, sewer, gas, power, and broadband. Accessory uses may include incidental repair, storage, and offices.

Tree
A woody plant having a well-defined stem, trunk, or multi-trunk and a more or less definitely formed crown, usually attaining a mature height of at least eight feet. For purposes of this LDO, the following publications may be used as a reference in defining which plants may be classified as trees:


Tree Canopy Coverage
The percentage of an area covered by the tree canopy. The area of the tree canopy is the sum of the drip-line areas of all trees within the lot plus the portion of the drip-line area that lies within the lot for trees on the perimeter of the lot.

---

290 Definition from 47 CFR §1.6100.
Truck Stop
An establishment engaged primarily in the fueling, servicing, repair, or parking of tractor trucks or similar heavy commercial vehicles, including the sale of accessories and equipment for such vehicles. A truck stop may also include facilities such as overnight accommodations, showers, a convenience store, or restaurants primarily for the use of truck crews.

Trunk Circumference
The distance around the trunk of a tree measured at six inches above the ground for trees to be planted, and four and one half feet (4 ½') above the ground for existing trees. In the case of multi-trunk trees, the trunk circumference of the tree as a whole is the sum of the diameter of the largest trunk, plus ½ of the diameter of all additional trunks.

9.2.20 U

Uncontrolled Street
In the context of the clear vision area, or sight visibility triangle, an uncontrolled street is one that does not have a traffic control device, such as a yield or stop sign, or traffic signal, at the intersection.

Use
The classification of the purpose or activity for which land or buildings are designated, arranged, intended, occupied or maintained.

Utility, Major
A facility used to convert electric power, natural gas, telephone signals, cable/fiber optic communications, and water services from a form appropriate for transmission over long distances to a form appropriate for residential household or commercial use, or vice versa. Major public utilities are of a size and scale found only in scattered sites within city limits. This use includes but is not limited to electric substations, natural gas regulator stations, telephone switching stations, water pressure control facilities, sewage lift stations, regional stormwater drainage facilities, and water and sewer treatment facilities.

Utility, Minor
A facility used to convert electric power, natural gas, telephone signals, cable/fiber optic communications, and water services from a form appropriate for transmission over long distances to a form appropriate for residential household or commercial use, or vice versa. Minor public utilities are of a size and scale commonly found in numerous areas within city limits, including but not limited to electrical distribution lines, poles, or cables; switch boxes; communication facilities; transformers, water towers; transformer boxes; relay and booster devices; and well, water and sewer pump stations.

9.2.21 V

Vacate or Vacation
To cancel, rescind, or render an act that has the effect of voiding a subdivision plat as recorded in the county clerk's office.

Valet Parking
When used in the context of §4.5.5F, the following words, terms, and phrases shall have the meanings ascribed to them in these definitions, except where the context clearly indicates a different meaning.

29¹ Carries forward the current definition in Sec. 144-1.4 of the Code of Ordinances with minor revisions.
**Attendant**
A person employed by a licensee who drives a vehicle while providing valet parking.

**Sponsor**
Any person who operates, or causes to be operated, a valet parking operation at the sponsor's place of business or function.

**Valet Parking Operation**
The receiving, taking possession of, driving, moving, parking, or leaving standing, any vehicle that is left at one location to be driven to another location for parking, whether or not a charge is levied and whether or not done under contract to the business or organization for which the vehicles are being parked, or done independently. It does not include operators of public or private off-street parking operations or facilities where customers park their own vehicles and remove the keys themselves.

**Valet Parking Operator**
A person who employs one or more attendants for the purpose of providing a valet parking service or who provides such services as a contractor, but not in the capacity of employee, at any business establishment, for the purpose of providing a valet parking service to such establishment.

**Valet Parking Service**
A parking service provided to accommodate patrons of any business establishment, which service is incidental to the business of the establishment and by which an attendant on behalf of the establishments takes temporary custody of the patron's motor vehicle and moves, parks, stores, or retrieves the vehicle for the patron's convenience.

**Vehicle Fuel Sales**
An establishment at which gasoline or other motor vehicle fuel is offered for sale to the public. Repair services are not provided. Accessory uses may include a retail sales use such as a convenience store.

**Vehicle-Related Uses**
Uses in this category relate to the sale, lease, rental, repair, storage, and fueling of motor vehicles, including cars, light trucks, and heavier vehicles. Accessory uses may include incidental retail sales.

**Vehicle Repair, Major**
An establishment primarily engaged in providing repair services to motor vehicles that may have particular noise or other impacts on nearby properties, such as engine overhauls, welding, and similar activities, or such services to heavy farm vehicles. This use may also engage in the less impactful repair activities that are included in the minor vehicle repair use.

**Vehicle Repair, Minor**
An establishment primarily engaged in providing motor vehicle repair services that have limited noise or odor impacts on other properties such as lubrication, oil and tire changes, engine tune-ups, brake repair, tire replacement, interior and exterior cleaning and polishing, installation of after-market accessories such as tinting, auto alarms, spoilers, sunroofs, headlight covers, and similar items.

**Vehicle Repair, Paint and Body Shop**
An establishment primarily engaged in providing motor vehicle repair services that are limited to painting vehicles or body repair.

---

292 New definition that incorporates the definition of “Convenience store with (or without) fuel sales” in Sec. 144-1.4 of the Code of Ordinances.
**Article 9: Definitions**

**9.2 Definitions**

**Vehicle Sales and Rental**

An establishment engaged in the sale or lease of new or used motor vehicles, motorcycles, trailers, boats, all-terrain vehicles, and recreational vehicles, along with the rental of motor vehicles. This use may include facilities for motor vehicle servicing and repair, indoor and outdoor storage, and ancillary uses such as offices, display areas, and waiting areas for patrons.

**Vehicle Storage Facility**

A garage, parking lot, or any facility owned or operated by a person, other than a governmental entity, for storing or parking ten or more vehicles per year, without the consent of the owners of the vehicles, and which is licensed by the Texas Department of Transportation's Motor Carrier Division.

**Vehicle Wash**

A facility for washing, cleaning, drying, and waxing of passenger vehicles, recreational vehicles, or other light duty equipment, but not including buses or heavy trucks. A car wash may be self-service or full service.

**Vending**

Any activity by any person involving the display, sale, offering for sale, offering to give away, or giving away of anything of value including any food, beverage, goods, wares, merchandise, or services.

**Veterinary Clinic**

An establishment for the care and treatment of animals, including household pets and larger domesticated animals, operated by a licensed veterinarian. A veterinary clinic may include the boarding of household pets and kennels that is incidental to the veterinary care.

**9.2.22 W**

**Wall**

A solid vertical structure of building material allowed by this LDO or other chapters of the City Code as applicable that forms the exterior of buildings, separates portions of buildings or separates properties.

**Warehouse and Storage**

An establishment engaged in storage, wholesale, and distribution of manufactured products, supplies, and equipment. Warehouses may include accessory offices and showrooms, but any retail sales to the general public are incidental to the inventory storage purpose of the establishment.

**Wastewater Service**

The collection of waste-bearing water that requires treatment prior to its return to nature and the system of pipes and equipment used to collect and transmit this water to treatment facilities; also called sanitary sewer service.

**Waste-Related Uses**

Uses in this category are engaged in the receipt of solid or liquid waste and the transfer to other locations for final disposal, or for disposal on site. Accessory uses may include recycling, offices, and parking.

---

293 Carries forward the current definition in Sec. 144-5.26-2 of the Code of Ordinances.

294 Consider differentiating between a clinic (which is g-to-gish) and Vet Hospital, which is 24 hours. Similarly, important to differentiate between all indoors (clinic), or outdoor areas as well if boarding is allowed.
Waste Transfer Station
A solid waste collection or storage facility at which solid waste is transferred from collection vehicles to hauling vehicles for transportation to a separate solid waste management facility.

Water Distribution Facility
A system of network of pipes and valves designed to deliver potable water to users.

Water Production Facility
A collection of pumps, treatment equipment, tanks and other devices designed to extract water from a source, provide necessary treatment to purify and disinfect, pressurize, pump, and store potable water.

Water Storage
Any structure or container used for surface, underground, or overhead storage of water, also including water wells and pumping stations that are part of a public or municipal system.

Water Supply
A source of water.

Waterfront Recreation
Recreation activities that are located on or near a river, lake, or other body of water, including boat berthing and fuel storage facilities, boat landing piers and launching ramps, swimming and wading facilities, and other types of activities included in the outdoor recreation use.

Wholesale Farm Sales
An establishment, including a building or open space, used for the storage and wholesale sale of products used in agricultural operations such as hay, grain, or feed.

Wholesale Sales
Establishments or places of business primarily engaged in selling merchandise to retail, industrial, commercial, institutional, or professional business users or to other wholesalers, but not to the public at-large.

Wind Energy System, Large
A facility or equipment that converts wind energy into electrical power for the primary purpose of sale, resale, or off-site use and that has an output rating greater than 100 kW.

Wind Energy System, Small
A facility or equipment that converts wind energy into electrical power primarily to support the principal use(s) on the same property, which is mounted to the ground or a rooftop, and that has a rated capacity of 100 kW or less.

Wireless Communication Facility (WCF)
A facility used to provide personal wireless services as defined at 47 U.S.C. Section 332(c)(7)(C); or wireless information services provided to the public or to such classes of users as to be effectively available directly to the public via licensed or unlicensed frequencies; or wireless utility monitoring and control services. A wireless communications facility includes an antenna or antennas, including without limitation, directional, omnidirectional and parabolic antennas, support equipment and permitted supporting structures, but does not include a communications tower.

Unresolved issue: “Clarification needed on resort property and resort condominiums. Differentiate between an apartment house where the units have been sold as condominiums and some owners are STR renting them vs a time share/condominium building where all units are intended to be rented for less than 30 days but each unit may be owned separately.”
include the support structure to which the wireless communications facility or its components are attached if the use of such structure for the wireless communications facility is not the primary use. The term does not include mobile transmitting devices used by wireless service subscribers, such as vehicle or handheld radios/telephones and their associated transmitting antennas. This LDO defines the following types of WCF:

**Building-Mounted**
An antenna that is mounted on a building with a primary purpose to be a use other than as an antenna support structure.

**Roof-Mounted**
An antenna that is mounted on a structure that is located on the roof of a building.

**Ground-Mounted**
An antenna that is mounted on a freestanding support structure, such as a monopole or tower.

9.2.23 **Xeriscape or Xeriscaping**
a set of garden design and landscape maintenance principles that promote good horticultural practices, efficient use of water, and means water-conserving drought-tolerant landscaping.

9.2.24 **Yard**
An open space between a building and the nearest lot line, unoccupied and unobstructed by any portion of a structure from the ground upward. In measuring a yard for the purpose of determining the width of a side yard, the depth of a front yard or the depth of a rear yard, the least horizontal distance between the lot line and the main building shall be used.

**Yard**
A required open space, other than a court, unoccupied and unobstructed by any structure or portion of a structure from the general ground level of the graded lot upward; provided however, that fences, walls, poles, posts and other customary yard accessories, ornaments and furniture are not deemed to be obstructions if height limitations and requirements limiting obstruction of visibility are observed.

**Yard, Front**
A yard across the full width of the lot extending from the front line of the main building to the front line of the lot.

**Yard, Rear**
A yard between the rear lot line and the rear line of the main building.

**Yard, Side**
A yard between the main building and the adjacent side line of the lot, and extending entirely from the front yard to the rear yard thereof.

9.2.25 **Zero Lot Line**
A lot where no setback is required along one of the side property lines of the lot.
# Article 10: Appendix A, Approved Plant List

## Scientific Name | Common Name
---|---
* Carya illinoensis | Pecan
* Catalpa bignoniodes | Catalpa
* Ehretia anacua | Anaqua
Fraxinus Pennsylvanica | Green ash
* Fraxinus texensis | Texas ash
* Juglans major | Arizona walnut
Juglans microcarda | Nogalillo, river walnut
* Juglans nigra | Black walnut
* Maclura pomifera | Osage Orange, Bois d'Arc
* Magnolia grandiflora | Magnolia
* Platanus mexicana | Mexican sycamore
Platanus occidentalis | Texas sycamore
* Quercus buckleyi (texana) | Texas red oak
* Quercus canbyi | Canby's oak
* Quercus durandii | Durand oak
* Quercus fusiformis | Escarpment live oak
Quercus glauoides | Lacey oak
* Quercus gravesii | Chisos red, Graves
* Quercus laceyi (glauoides) | Lacey's oak
* Quercus macrocarpa | Bur oak
Quercus mohriana | Shin oak
* Quercus muhlenbergii | Chinkapin or Chinquapin oak
* Quercus polymorpha | Mexican live or Monterey oak
Quercus pungens var. vaseyana | Vasey oak
* Quercus virginiana | Southern live oak
Quercus texana | Red oak
* Sapindus drummondii | Soapberry
* Taxodium distichum | Bald cypress
* Taxodium mucronatum | Montezuma cypress
Tilia caroliniana | Carolina basswood
* Ulmus Americana | American elm
* Ulmus crassifolia | Cedar elm

## ORNAMENTAL TREES

* Acacia roemeriana | Roemer's acacia
* Acer grandidentatum | Bigtooth maple
Arbutus xalapensis | Texas madrone
* Bauhinia congesta | Anacacho orchid tree
* Cercis canadensis var. texensis | Texas or Oklahoma redbud
* Cercis reniformis | Mexican redbud
* Chilopsis linearis | Desert willow
* Cordia hookeri | Cordalia, brazil
Cordia boissieri | Wild olive, Mexican wild olive
**Article 10: Appendix A, Approved Plant List**

### 9.2 Definitions

<table>
<thead>
<tr>
<th>9.2.25 Z</th>
<th>Appendix A, Approved Plant List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Braunfels, Texas</strong> – Land Development Ordinance</td>
<td>Development Standards – October 2023 PUBLIC REVIEW DRAFT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>9.2 Definitions</strong></th>
<th><strong>Z</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cotinus obovatus</em></td>
<td>American smoketree</td>
</tr>
<tr>
<td><em>Diospyrus texana</em></td>
<td>Texas persimmon</td>
</tr>
<tr>
<td><em>Eriobotrya japonica</em></td>
<td>Loquat (exotic)</td>
</tr>
<tr>
<td><em>Fraxinus cuspidate</em></td>
<td>Fragrant ash</td>
</tr>
<tr>
<td><em>Hamamelis virginiana</em></td>
<td>Witch hazel</td>
</tr>
<tr>
<td><em>Ilex decidua</em></td>
<td>Possum-haw holly</td>
</tr>
<tr>
<td><em>Ilex vomitoria</em></td>
<td>Yaupon holly</td>
</tr>
<tr>
<td><em>Juglans microcarpa</em></td>
<td>Little, Texas walnut</td>
</tr>
<tr>
<td><em>Koelreuteria bipinnata</em></td>
<td>Goldenrain tree (exotic)</td>
</tr>
<tr>
<td><em>Lagerstroemia indica, fauriei, and X's</em></td>
<td>Crepe myrtle, etc. (exotic)</td>
</tr>
<tr>
<td><em>Leucaena retusa</em></td>
<td>Goldenball leadtree</td>
</tr>
<tr>
<td>Malus sp.</td>
<td>Blanco crabapple</td>
</tr>
<tr>
<td><em>Myropernum sousanum</em></td>
<td>Arroyo sweetwood</td>
</tr>
<tr>
<td>Parkinsonia aculeate</td>
<td>Retama, Jerusalem Thorn</td>
</tr>
<tr>
<td><em>Pistacia texensis</em></td>
<td>Texas pistache</td>
</tr>
<tr>
<td>Prunus barbonia</td>
<td>Redbay</td>
</tr>
<tr>
<td><em>Prunus caroliniana</em></td>
<td>Cherry laurel</td>
</tr>
<tr>
<td><em>Prunus mexicana</em></td>
<td>Mexican plum</td>
</tr>
<tr>
<td><em>Prunus virginiana</em></td>
<td>Chokeberry</td>
</tr>
<tr>
<td><em>Pyrus calleryana</em></td>
<td>Callery pear (exotic)</td>
</tr>
<tr>
<td>Pyrus ioensis</td>
<td>Blanco crabapple</td>
</tr>
<tr>
<td><em>Rhamnus caroliniana</em></td>
<td>Carolina buckthorn</td>
</tr>
<tr>
<td><em>Rhus lanceolata</em></td>
<td>Flameleaf sumac</td>
</tr>
<tr>
<td>Rhus virens</td>
<td>Evergreen Sumac</td>
</tr>
<tr>
<td><em>Sophora affinis</em></td>
<td>Texas sophora or Eve's</td>
</tr>
<tr>
<td><em>Sophora secundiflora</em></td>
<td>Mountain laurel or mescal bean</td>
</tr>
<tr>
<td><em>Ungnadia speciosa</em></td>
<td>Mexican buckeye</td>
</tr>
<tr>
<td><em>Viburnum rufidulum</em></td>
<td>Rusty blackhaw</td>
</tr>
<tr>
<td>Vitex agnus-castus</td>
<td>Lavender tree</td>
</tr>
<tr>
<td>Zizyphus jujuba</td>
<td>Chinese date, Jujube</td>
</tr>
</tbody>
</table>

**EVERGREEN TREES**

| **Cupressus arizonica** | Arizona cypress |
| *Juniperus virginiana* | Eastern red cedar |
| Pinus cembroides | Mexican pinyon pine, Remote pine |
| Pinus heldrica | Afghan pine |
| *Pinus halepensis* | Aleppo pine (exotic) |
| *Pinus pinea* | Italian stone pine (exotic) |

**PALMS**

| *Chamaerops humilis* | Mediterranean fan palm (exotic) |
| *Phoenix canariensis* | Canary Island or false date (exotic) |
| *Sabal mexicana* | Mexican or Texas sabal |
| *Sabal texana* | Palm, sabal and dwarf sabal |
| *Washingtonia filifera* | California fan (exotic) |

**SHRUBS, VINES, AND HERBACEOUS PERENNIALS**

<p>| <em>Achillea millefolium</em> | Yarrow |
| Agave americans | Century Plant |
| Amorpha fruticosa | Amorpha, Indigobush |
| Anisacanthus spp. | Hummingbird Bush |
| Antigonon leptopus | Coral Vine, Rosa-De-Montana, Queens Wreath |
| Aquilegia spp. | Columbine |
| Aster spp. | Aster |</p>
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bamboo spp.</td>
<td>Bamboo, non-invasive/clumping</td>
</tr>
<tr>
<td>Berberis (Mahonia) trifoliata</td>
<td>Agarita, Agarito</td>
</tr>
<tr>
<td>Berberis spp.</td>
<td>Agarita, Tx. Barberry</td>
</tr>
<tr>
<td>Bignonia capreolata</td>
<td>Crossvine</td>
</tr>
<tr>
<td>Bougainvillea</td>
<td>Bougainville</td>
</tr>
<tr>
<td>Buddleia spp.</td>
<td>Butterfly</td>
</tr>
<tr>
<td>Caesalpinia gilliesi</td>
<td>Bird of Paradise</td>
</tr>
<tr>
<td>Caesalpinia mexicana</td>
<td>Mexican Bird of Paradise</td>
</tr>
<tr>
<td>Caesalpinia pulcherrima</td>
<td>Pride of Barbados</td>
</tr>
<tr>
<td>Callicarpus americana</td>
<td>American Beauty</td>
</tr>
<tr>
<td>Callistemon spp.</td>
<td>Bottlebrush</td>
</tr>
<tr>
<td>Campsis radicans x &quot;Madame Galen&quot;</td>
<td>Trumpet Vine, Trumpet Creeper</td>
</tr>
<tr>
<td>Capsicum annuum</td>
<td>Chilipiquin</td>
</tr>
<tr>
<td>Cassia alata</td>
<td>Candlestick Tree</td>
</tr>
<tr>
<td>Cassia spp.</td>
<td>Cassia</td>
</tr>
<tr>
<td>Cassia lindheimeriana</td>
<td>Lindheimer Senna</td>
</tr>
<tr>
<td>Callirhoe involucrata</td>
<td>Winecup</td>
</tr>
<tr>
<td>Calylophus spp.</td>
<td>Calylophus</td>
</tr>
<tr>
<td>Cephalanthus occidentialis</td>
<td>Buttonbush</td>
</tr>
<tr>
<td>Chrysactinia mexicana</td>
<td>Damianita</td>
</tr>
<tr>
<td>Clematis pitcheri</td>
<td>Purple Leatherflower</td>
</tr>
<tr>
<td>Clematis texanis</td>
<td>Texas Clematis</td>
</tr>
<tr>
<td>Clematis texensis</td>
<td>Scarlet Leatherflower</td>
</tr>
<tr>
<td>Cooperia drummondi</td>
<td>Rain Lily</td>
</tr>
<tr>
<td>Cornus drummondi</td>
<td>Rough-Leaf Dogwood</td>
</tr>
<tr>
<td>Coursetia axillaris</td>
<td>Baby Bonnets</td>
</tr>
<tr>
<td>Crataegus spp.</td>
<td>Hawthorn</td>
</tr>
<tr>
<td>Crinum spp.</td>
<td>Crinum Lily</td>
</tr>
<tr>
<td>Cuphea spp.</td>
<td>Cigar Plants</td>
</tr>
<tr>
<td>Dasylium spp.</td>
<td>Sotol, Desert Spoon</td>
</tr>
<tr>
<td>Dasylium texanum</td>
<td>Sotol</td>
</tr>
<tr>
<td>Desmanthus illinoensis</td>
<td>Illinois Bundleflower</td>
</tr>
<tr>
<td>Duranta repens</td>
<td>Brazilian Sky Flower</td>
</tr>
<tr>
<td>Echinacea purpurea</td>
<td>Purple Coneflower</td>
</tr>
<tr>
<td>Elaeagnus pungens vars.</td>
<td>Silverberry</td>
</tr>
<tr>
<td>Eriobotrya x &quot;Coppertone&quot;</td>
<td>Coppertone Loquat</td>
</tr>
<tr>
<td>Erythina crist-galli</td>
<td>Fireman's Cap, Coral Tree</td>
</tr>
<tr>
<td>Erythina herbacea</td>
<td>Coral Bean</td>
</tr>
<tr>
<td>Eupatorium spp.</td>
<td>Mist Flower</td>
</tr>
<tr>
<td>Euryops pecinatus</td>
<td>Golden Shrub Daisy</td>
</tr>
<tr>
<td>Euryops pacnatinus</td>
<td>Grayleaf Euryops</td>
</tr>
<tr>
<td>Eysenhartia texana</td>
<td>Kidneywood</td>
</tr>
<tr>
<td>Foristeriera pubeseebs</td>
<td>Texas Elbow Bush</td>
</tr>
<tr>
<td>Gymnopus chrysanthesoides</td>
<td>Golden Shrub Daisy</td>
</tr>
<tr>
<td>Garrya ovata lindheimer Mx.</td>
<td>Silk Tassel</td>
</tr>
<tr>
<td>Gaura spp</td>
<td>Guara</td>
</tr>
<tr>
<td>Gelsemium sempervirens</td>
<td>Caroline Jessamine</td>
</tr>
<tr>
<td>Gymnopus chloroglossum</td>
<td>Tataleneho</td>
</tr>
<tr>
<td>Hamamelis virginiana</td>
<td>Witchhazel</td>
</tr>
<tr>
<td>Heimia salicifolia</td>
<td>Willow-leaf Heimia</td>
</tr>
<tr>
<td>Hesperaloe parviflora</td>
<td>Red Yucca</td>
</tr>
<tr>
<td>Hibiscus coccineus</td>
<td>Hibiscus, Texas Star</td>
</tr>
<tr>
<td>Hibiscus cardiophyllus</td>
<td>Heartleaf Hibiscus</td>
</tr>
<tr>
<td>Hibiscus syriacus</td>
<td>Althea, Rose-of-Sharon</td>
</tr>
<tr>
<td>Common Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Hymenoxys scaposa</td>
<td>Four-nerve Daisy</td>
</tr>
<tr>
<td>Hypericum spp.</td>
<td>St. John's Wort</td>
</tr>
<tr>
<td>Ilex cornuta</td>
<td>Dwarf Chinese Holly</td>
</tr>
<tr>
<td>Ilex decidua</td>
<td>Possumhaw</td>
</tr>
<tr>
<td>Ilex vomitoria</td>
<td>Yaupon</td>
</tr>
<tr>
<td>Ilex vomitoria nana</td>
<td>Dwarf Yaupon</td>
</tr>
<tr>
<td>Ipomoea quamoclit</td>
<td>Cypress (Cardinal) Vine</td>
</tr>
<tr>
<td>Ipomoea sinuata</td>
<td>Alamo Vine</td>
</tr>
<tr>
<td>Iris spp.</td>
<td>Iris</td>
</tr>
<tr>
<td>Jasminium floridum</td>
<td>Italian Jasmine</td>
</tr>
<tr>
<td>Jasminum mesnyi</td>
<td>Primrose Jasmine</td>
</tr>
<tr>
<td>Jatropha spp.</td>
<td>Jatropha</td>
</tr>
<tr>
<td>Juniper spp.</td>
<td>Juniper</td>
</tr>
<tr>
<td>Justicia brandegeana</td>
<td>Shrimp Plant</td>
</tr>
<tr>
<td>Justicia spp.</td>
<td>Shrimp Plant</td>
</tr>
<tr>
<td>Justicia suberecta</td>
<td>Mexican Shrimp Plant</td>
</tr>
<tr>
<td>Lantana spp.</td>
<td>Lantana</td>
</tr>
<tr>
<td>Leucophyllum frutescens</td>
<td>Texas Silverleaf, Sage, Cenizo</td>
</tr>
<tr>
<td>Liatris spp.</td>
<td>Gayfeather</td>
</tr>
<tr>
<td>Lindera benzoin</td>
<td>Spicebush</td>
</tr>
<tr>
<td>Lonicera albiloba</td>
<td>White Bush Honeysuckle</td>
</tr>
<tr>
<td>Lonicera sempervirens</td>
<td>Coral Honeysuckle</td>
</tr>
<tr>
<td>Malpighia glabra</td>
<td>Barbados Cherry</td>
</tr>
<tr>
<td>Malvaviscus drummondi</td>
<td>Turk’s Cap</td>
</tr>
<tr>
<td>Manfreda spp.</td>
<td>Manfreda</td>
</tr>
<tr>
<td>Mascagnia spp.</td>
<td>Butterfly Vine</td>
</tr>
<tr>
<td>Mimosa bluncifera</td>
<td>Cat Claw Mimosa, Fragrant Mimosa</td>
</tr>
<tr>
<td>Moraea spp.</td>
<td>African Iris</td>
</tr>
<tr>
<td>Myrica cerifera</td>
<td>Wax Myrtle—Dwarf, Standard</td>
</tr>
<tr>
<td>Nandina domestics spp.</td>
<td>Nandina</td>
</tr>
<tr>
<td>Nandina domestics “nana” etc.</td>
<td>Dwarf Nandina</td>
</tr>
<tr>
<td>Parthenocissus heptaphylla</td>
<td>Seven Leaf Creeper</td>
</tr>
<tr>
<td>Parthenocissus quinquefolia</td>
<td>Virginia Creeper</td>
</tr>
<tr>
<td>Passiflora allatocaerrulea (P. pfordtii)</td>
<td>Passion Vine</td>
</tr>
<tr>
<td>Passiflora incarnate</td>
<td>Passionflower</td>
</tr>
<tr>
<td>Pavonia lasiopetala</td>
<td>Rock Rose</td>
</tr>
<tr>
<td>Penstemon spp.</td>
<td>Penstemon</td>
</tr>
<tr>
<td>Philadelphus spp.</td>
<td>Mock Orange</td>
</tr>
<tr>
<td>Phlox spp.</td>
<td>Prairie Phlox</td>
</tr>
<tr>
<td>Physostegia spp.</td>
<td>Obedient Plant</td>
</tr>
<tr>
<td>Poliomentha longiflora</td>
<td>Mexican Oregano</td>
</tr>
<tr>
<td>Pistache texana</td>
<td>Texas Pistache</td>
</tr>
<tr>
<td>Plumbago auriculata (P. capensis)</td>
<td>Blue Plumbago</td>
</tr>
<tr>
<td>Podocarpus macrophyllus</td>
<td>Yew</td>
</tr>
<tr>
<td>Poliomentha longiflora</td>
<td>Mexican Oregano</td>
</tr>
<tr>
<td>Primrose spp.</td>
<td>Primrose</td>
</tr>
<tr>
<td>Ptelea trifoliolata</td>
<td>Hop Tree</td>
</tr>
<tr>
<td>Puncia granatum</td>
<td>Pomegranate (Regular and Dwarf)</td>
</tr>
<tr>
<td>Phyracantha spp.</td>
<td>Firethorn, Phyracantha</td>
</tr>
<tr>
<td>Rosa Banksiae</td>
<td>Lady Banksia Rose</td>
</tr>
<tr>
<td>Rosemarinus spp.</td>
<td>Rosemary</td>
</tr>
<tr>
<td>Ruellia spp.</td>
<td>Mexican Petunias</td>
</tr>
<tr>
<td>Russelia equisetiformis</td>
<td>Firecracker Plant</td>
</tr>
</tbody>
</table>
### Article 10: Appendix A, Approved Plant List

#### 9.2 Definitions

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sabal minor</strong></td>
<td>Palmetto Palm</td>
</tr>
<tr>
<td><strong>Salvia spp.</strong></td>
<td>Salvia</td>
</tr>
<tr>
<td><strong>Salvia farenaceae</strong></td>
<td>Blue Sage, Mealy Sage</td>
</tr>
<tr>
<td><strong>Salvia greggii</strong></td>
<td>Autumn Sage</td>
</tr>
<tr>
<td><strong>Salvia regia</strong></td>
<td>Mountain Sage</td>
</tr>
<tr>
<td><strong>Salvia ballotaeflora</strong></td>
<td>Blue Shrub Sage</td>
</tr>
<tr>
<td><strong>Sambucus Canadensis</strong></td>
<td>Elderberry</td>
</tr>
<tr>
<td><strong>Santolina spp.</strong></td>
<td>Santolina</td>
</tr>
<tr>
<td><strong>Scutelleria spp.</strong></td>
<td>Pink Skullcap</td>
</tr>
<tr>
<td><strong>Senecio confuses</strong></td>
<td>Mexican Flame Vine/Love Vine</td>
</tr>
<tr>
<td><strong>Solidago spp.</strong></td>
<td>Goldenrod</td>
</tr>
<tr>
<td><strong>Stigmaphyllum littorale</strong></td>
<td>Butterfly Vine</td>
</tr>
<tr>
<td><strong>Tagetes lucida</strong></td>
<td>Mexican Marigold</td>
</tr>
<tr>
<td><strong>Tecoma stans</strong></td>
<td>Yellowbells, esperanza</td>
</tr>
<tr>
<td><strong>Tecoma capensis</strong></td>
<td>Cape Honeysuckle</td>
</tr>
<tr>
<td><strong>Teucrium laciniatum</strong></td>
<td>Dwarf Germander</td>
</tr>
<tr>
<td><strong>Thyrralis glauca</strong></td>
<td>Yellow Plumbago</td>
</tr>
<tr>
<td><strong>Trachelospermum jasminoides</strong></td>
<td>Confederate Jasmine</td>
</tr>
<tr>
<td><strong>Vauquelinia angustiflora</strong></td>
<td>Chisos Rosewood</td>
</tr>
<tr>
<td><strong>Viburnum rufidulum</strong></td>
<td>Viburnum Rusty Blackhaw</td>
</tr>
<tr>
<td><strong>Viguiera stenoloba</strong></td>
<td>Skelton-leaf goldeneye</td>
</tr>
<tr>
<td><strong>Wisteria macrostachya</strong></td>
<td>Texas Wisteria</td>
</tr>
<tr>
<td><strong>Wisteria milletia vetriculata</strong></td>
<td>Wisteria, evergreen</td>
</tr>
<tr>
<td><strong>Yucca spp.</strong></td>
<td>Yuccas</td>
</tr>
<tr>
<td><strong>Yucca agustifolia</strong></td>
<td>Narrow-leaf Yucca</td>
</tr>
<tr>
<td><strong>Yucca constricta</strong></td>
<td>Buckley Yucca</td>
</tr>
<tr>
<td><strong>Yucca rupicola</strong></td>
<td>Twisted-leaf Yucca</td>
</tr>
<tr>
<td><strong>Yucca pendula</strong></td>
<td>Softleaf Yucca</td>
</tr>
<tr>
<td><strong>Yucca thompsonia</strong></td>
<td>Thompson Yucca</td>
</tr>
<tr>
<td><strong>Yucca treculeana</strong></td>
<td>Spanish Dagger</td>
</tr>
<tr>
<td><strong>Zexmenia hispidia</strong></td>
<td>Zexmenia</td>
</tr>
</tbody>
</table>

### GROUND COVER

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aptinia condifolia</strong></td>
<td>Heart Leaf Ice Plant</td>
</tr>
<tr>
<td><strong>Asparagus sprengeri</strong></td>
<td>Asparagus Fern</td>
</tr>
<tr>
<td><strong>Aspidistra elatior</strong></td>
<td>Aspidistra, Cast Iron Plant</td>
</tr>
<tr>
<td><strong>Hedera canariensis</strong></td>
<td>Algerian Ivy</td>
</tr>
<tr>
<td><strong>Juniper spp.</strong></td>
<td>Juniper</td>
</tr>
<tr>
<td><strong>Lantana spp.</strong></td>
<td>Lantana</td>
</tr>
<tr>
<td><strong>Liriopoe gigantea</strong></td>
<td>Giant Liriopoe</td>
</tr>
<tr>
<td><strong>Liriopoe muscaria vars</strong></td>
<td>Lily Turf, Liriopoe (Std., &quot;Big Blue&quot;)</td>
</tr>
<tr>
<td><strong>Ophiopogon japonica</strong></td>
<td>Mondo Grass, Monkey Grass</td>
</tr>
<tr>
<td><strong>Roserarinus officinales vars.</strong></td>
<td>Prostrate Rosemary</td>
</tr>
<tr>
<td><strong>Setcreasea purpurea</strong></td>
<td>Purple Heart</td>
</tr>
<tr>
<td><strong>Trachelospermum asiaticum</strong></td>
<td>Asian Jasmine</td>
</tr>
<tr>
<td><strong>Trachelospermum jasminoides</strong></td>
<td>Confederate Jasmine, Star Jasmine</td>
</tr>
<tr>
<td><strong>Verbena spp.</strong></td>
<td>Verbena</td>
</tr>
<tr>
<td><strong>Vinca major</strong></td>
<td>Large Vinca</td>
</tr>
<tr>
<td><strong>Vinca minor</strong></td>
<td>Small Vinca</td>
</tr>
<tr>
<td><strong>Wedelia trilobata</strong></td>
<td>Wedelia</td>
</tr>
<tr>
<td><strong>Acacia hirta</strong></td>
<td>Fern Acacia</td>
</tr>
<tr>
<td><strong>Artemesia spp.</strong></td>
<td>Artemesia</td>
</tr>
<tr>
<td><strong>Dalea spp.</strong></td>
<td>Dalea</td>
</tr>
<tr>
<td><strong>Dyschorista linearis</strong></td>
<td>Snake Herb</td>
</tr>
</tbody>
</table>
### Article 11: Appendix A, Approved Plant List

9.2 Definitions
9.2.25 Z

<table>
<thead>
<tr>
<th><strong>Marsilea macropoda</strong></th>
<th>Water Clover</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oenothera speciosa</strong></td>
<td>Evening Primrose</td>
</tr>
<tr>
<td><strong>Phyla humilis</strong></td>
<td>Frogfruit</td>
</tr>
<tr>
<td><strong>Rivina humilis</strong></td>
<td>Pigeonberry</td>
</tr>
<tr>
<td><strong>Sedum acre</strong></td>
<td>Stonecrop</td>
</tr>
<tr>
<td><strong>Stachys coccinea</strong></td>
<td>Texas Betony</td>
</tr>
<tr>
<td><strong>Symphoricapus orbiculatus</strong></td>
<td>Coralberry</td>
</tr>
<tr>
<td><strong>Thryallis augustifolia</strong></td>
<td>Thryallis</td>
</tr>
</tbody>
</table>

**ORNAMENTAL GRASSES AND GRASS-LIKE PLANTS**

<table>
<thead>
<tr>
<th><strong>Agropyron smithii</strong></th>
<th>Western Wheatgrass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Andropogon gerardii</strong></td>
<td>Big Bluestem</td>
</tr>
<tr>
<td><strong>Bouteloua curtipendula</strong></td>
<td>Sideoats grama</td>
</tr>
<tr>
<td><strong>Chasmanthium latifolium</strong></td>
<td>Inland Sea Oats</td>
</tr>
<tr>
<td><strong>Erianthus giganteus</strong></td>
<td>Sugarcane Plume grass</td>
</tr>
<tr>
<td><strong>Muhlenbergia capillaris</strong></td>
<td>Gulf Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia dubia</strong></td>
<td>Pine Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia dubioides</strong></td>
<td>Weeping Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia dumosa</strong></td>
<td>Bamboo Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia lindheimer</strong></td>
<td>Lindheimer Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia rigens</strong></td>
<td>Deer Muhly</td>
</tr>
<tr>
<td><strong>Muhlenbergia revereonii</strong></td>
<td>Seep Muhly</td>
</tr>
<tr>
<td><strong>Nolina spp.</strong></td>
<td>Beargrass</td>
</tr>
<tr>
<td><strong>Panicum virgatum</strong></td>
<td>Switch Grass</td>
</tr>
<tr>
<td><strong>Schizaachyrium scoparium</strong></td>
<td>Little Bluestem</td>
</tr>
<tr>
<td><strong>Schoenocauleon texanum</strong></td>
<td>Green Lily</td>
</tr>
<tr>
<td><strong>Sorghastrum nutans</strong></td>
<td>Indian Grass</td>
</tr>
<tr>
<td><strong>Stipa tenuissima</strong></td>
<td>Mexican Feathergrass</td>
</tr>
<tr>
<td><strong>Tripsacum dactyloides</strong></td>
<td>Eastern Gama grass</td>
</tr>
<tr>
<td><strong>Cyperus alternifolius</strong></td>
<td>Umbrella Grass</td>
</tr>
</tbody>
</table>
## Article 11: Appendix B, Undesirable Trees

### UNDESIRABLE TREES

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia farnesiana</td>
<td>Huisache or Sweet Acacia</td>
</tr>
<tr>
<td>Acer negundo</td>
<td>Box Elder</td>
</tr>
<tr>
<td>Ailanthus altissima</td>
<td>Tree of Heaven</td>
</tr>
<tr>
<td>Albizia julibrissin</td>
<td>Mimosa</td>
</tr>
<tr>
<td>Broussonetia papyrifera (L.) (L(HER. ex. Vent.))</td>
<td>Paper Mulberry</td>
</tr>
<tr>
<td>Celtis laevigata</td>
<td>Sugarberry or Hackberry</td>
</tr>
<tr>
<td>Eriobotrya japonica</td>
<td>Chinese Loquat or Loquat</td>
</tr>
<tr>
<td>Firmiana simplex</td>
<td>Chinese Parasol/Varnish Tree</td>
</tr>
<tr>
<td>Fraxinus velut</td>
<td>Arizona Ash</td>
</tr>
<tr>
<td>Koelreuteria paniculata</td>
<td>Golden-Rain Tree</td>
</tr>
<tr>
<td>Juniperus ashei</td>
<td>Ashe-Juniper or Mountain Cedar</td>
</tr>
<tr>
<td>Ligustrum japonicum</td>
<td>Ligustrum or Privet</td>
</tr>
<tr>
<td>Melia azedarach</td>
<td>L. Chinaberry tree</td>
</tr>
<tr>
<td>Populus nigra &quot;italica&quot;</td>
<td>Lombardy Popular</td>
</tr>
<tr>
<td>Prosopis glandulosa</td>
<td>Mesquite</td>
</tr>
<tr>
<td>Prunus salicina</td>
<td>Japanese Plum</td>
</tr>
<tr>
<td>Pyrus calleryana</td>
<td>Bradford Pear</td>
</tr>
<tr>
<td>Sapium sebiferum</td>
<td>Chinese Tallow</td>
</tr>
<tr>
<td>Tamarix ramosissima</td>
<td>Lede. Saltcedar</td>
</tr>
</tbody>
</table>

New Braunfels, Texas – Land Development Ordinance
Development Standards – October 2023 PUBLIC REVIEW DRAFT