Q. What are the requirements for a conceptual utility plan included with the master development plan for a multi-phase subdivision?
A. The plan must include utilize size and location. Backup calculations and/or models must be included when necessary.

Unified Development Code 2.6(D)(3)(j)

Q. What should be included with the infrastructure documents submittal package?
The following should be submitted with the correct number of hard copies and PDF copies as listed in the Engineering Design Manual (if applicable): Infrastructure Documents application form, vested rights determination, review fees, design compliance letter, construction drawings, opinion of probable cost, TIA or TIA compliance letter, geotechnical report, drainage study, LID design, fire protection plan, letters of approval (TCEQ, LCRA, GBRA, electric provider), TXDOT driveway permit, and a will service letter and construction plans/specifications (for developments with water and sewer providers other than the City of Boerne).

Engineering Design Manual 1.7(B)

Q. Does the City of Boerne have general construction notes?
The City of Boerne adopted general construction notes which can be located on the City's website. Other notes to be included in the plans can be found in the Engineering Design Manual.

Engineering Design Manual 1.7(C)

Q. When can I begin construction?
Construction can begin once a construction release permit is issued. Some requirements for the permit include the Infrastructure Documents LOC, final plat approval, tree removal permit, a pre-construction meeting, payment of review and permit fees, etc. The applicant may also choose to apply for a grading permit to begin grading prior to obtaining a construction release permit.

Unified Development Code 2.7

Q. Are stormwater management facilities required for my project?
Stormwater management facilities (detention ponds) are required for all proposed impervious cover unless the development meets the exemption requirements.

Unified Development Code 7.2(A)(2)

Q. Can I build the stormwater management facilities concurrently with the streets and utilities?
Detention ponds must be constructed prior to site construction or clearing. A separate grading permit may be applied for to begin grading and construction of stormwater management facilities prior to issuance of the construction release permit.

Unified Development Code 7.7(A)(3)(a)
Q. What is the required width of drainage easements for enclosed systems and open channels?
A. The width of drainage easements for enclosed systems must equal five feet plus two times the depth of soil cover over the pipe or box structure plus the diameter or width of the box structure.
The width of drainage easements for open channels must equal the width of the channel plus 15 feet on one side (20 feet with utilities) plus two feet on the opposite side.
*Engineering Design Manual 5.9.2 and 5.9.3*

Q. What type of channel lining is required for certain velocities?
A. The type of lining required is provided in Table 5-13 below. Stormwater outfall may require flow attenuation with backup calculations to prevent erosion.
*Engineering Design Manual 5.6.3*

<table>
<thead>
<tr>
<th>Type of Channel Lining Required</th>
<th>Maximum Velocity (feet/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetated earth</td>
<td>3.0</td>
</tr>
<tr>
<td>Sod lined</td>
<td>5.0</td>
</tr>
<tr>
<td>Gabion basket/mattress lined *</td>
<td>12.0</td>
</tr>
<tr>
<td>Concrete lined</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Q. Is waterline looping required for each phase of development in a master planned community?
A. Each phase of the development must have two points of connection, one connection to a minimum 8" main, and the second connection may be a stub to a future phase within the MDP. There are separate external connections required for the master plan. Dead end mains with a permanent cul-de-sac up to 600 feet are allowed.
*Engineering Design Manual 7.2.3, 7.2.4, and 7.2.5*

Q. Should I include tree removal in the infrastructure drawings?
A. A Tree Preservation Plan is required to be submitted in the infrastructure drawings. However, a separate tree removal permit must be issued by Code Enforcement prior to removal of any trees within the City Limits.
*Engineering Design Manual 1.7.1(C)(4)(f)*

These requirements are based on Unified Development Code and Engineering Design Manual adopted July 27, 2021. Refer to these codes for additional information. Additional or different requirements may apply to developments vested to an older ordinance.