



# City of Pflugerville

## Legislation Text

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**File #:** ORD-0558, **Version:** 2

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Approving an ordinance on second reading with the caption reading: An Ordinance of the City of Pflugerville amending Section 1 for General Provisions to the 2014 Engineering Design Manual and Construction Standards, replacing all Engineering and Construction Standards in conflict; containing a severability clause; and providing for publication and an effective date.

In accordance with Section 3.14 of the City charter which requires an ordinance for the adoption or amendments to an administrative code or regulations pertaining to land use or development, Section 1 of the Engineering Design Manual has been updated to reflect current industry engineering and construction standards.

The purpose of the proposed Ordinance is to provide added clarifications to Section 1, "General Provisions" adding subsections related to the Title, Purpose, Interpretation, and Enforcement as well as minor revisions to denote how and when changes can occur related to the Engineering Design Manual. In addition, Section 1.2, "Plans and Specifications," the related to public infrastructure specifications and construction standards have been updated and will be provided on the city's engineering webpage.

City of Pflugerville Standard Specifications and Standard Construction Details has been reviewed and updated under the direction of the City Engineer. City policy is to use the City Standard Specifications and Details when applicable to a City public infrastructure component for related improvements constructed by both the development and city in order to provide consistency and to simplify design, construction, and maintenance. It remains the design professional's responsibility to ensure the suitability of these Standards for the specific project requirements and application. The design professional is solely responsible for the design submitted under his/her seal. If the design professional determines that the design mandates a change in or from these Standards, he/she needs to discuss the proposed changes with the City Engineer or his/her authorized representative prior to making the proposed change.

The City Standard Specifications presented to City Council as a policy document for Council to review and approve, but there are some elements, which reflect or further expound upon the policies and are more technical in nature. These elements may change more rapidly over time due to technological advances or changes in the industry. This includes the information in the appendices, the standard details, and the approved materials lists. Staff is requesting that Council allow these sections approved administratively as needed. Staff will continue to work with our outside technical consultants and legal counsel to finalize documents to bring before City Council for final approval. This update is an opportunity for Council to become familiar with the document, provide direction to staff, and ask questions as needed. Proposed revisions to the City Standards directly and indirectly supports the following Council's 2016-2017 Strategic Plan Pfocus Areas:

1. Fiscal Responsibility and Economic Development

2. Public Safety
3. Infrastructure and Transportation
4. Public Engagement and Quality of Life

In October 2018 the City retained the services of Kasberg, Patrick, and Associates (KPA), LP to perform a comprehensive review and update of the City's Standard Specifications, Standard Details and Standard Material Products List (SPL). KPA, as directed, utilized the City of Austin Specifications as a basis starting point for development and updates to the 2005 specifications and determined new numbering, layout and information for the section. Consultant took a holistic look at updating all specifications to ensure consistency with all City codes, standard details, and requirements. KPA led an effort among multiple City departments to update the City's Standard Construction Specifications. The current draft being presented to City Council represents the work of many people in many disciplines coming together over the last twenty-four months to restructure and bring up to date the City of Pflugerville Public Infrastructure Design Standards and Construction Specifications.

KPA is present to assist City staff with the presentation as updates for approval and formal adoption by the City Council. During June through July 2020 with the COVID-19 pandemic, staff coordinated with PIO's communications team to set up a website as designed and implemented to reach the local developers, consultants, and contractors for input. An email list compiled from the participants of past and current year Development Pforum attendees and registrant database and a link to the website provided. Stakeholders such as engineers, developers and contractors were allowed general review and comment periods throughout the process prior to final recommendation to the City Council.

The major areas of change include modifying Specifications similar to the City of Austin Specifications into and Sections as follows (refer to the attached pdf draft copy of specifications documents and summary of changes):

- \* Series 100 - Earthwork
- \* Series 200 - Subgrade and Base Construction
- \* Series 300 - Street Surface Courses
- \* Series 400 - Concrete Structures and Miscellaneous Concrete
- \* Series 500 - Pipe and Appurtenances
- \* Series 600 - Environmental Enhancement
- \* Series 700 - Incidental Construction
- \* Series 800 - Urban Transportation
- \* Series 1200 - Traffic Signals
- \* Series 1300 - Parks and Recreation

Previously, City staff anticipated the effort as a short term, one-year project to revise and improve the City's specifications and details with industry standard changes. In August 2019 with the assistance of Freese and Nichols, Inc. (FNI) through staff augmentation, city staff provided support through review teams to address known conflicts and omissions along with known dated regulatory requirements in the current City Standard Construction Specifications. The focus targeted the

Standard Construction Specifications most commonly required for use on City public infrastructure projects, including Capital Improvement Projects.

The Review Process as Described:

Engineering (Project Managers, Construction Inspectors and administrative technicians), in conjunction with Public Works (Operations, Streets, Water, Wastewater, Drainage and Maintenance), Parks, Planning & Development Services (including GIS staff) worked diligently over the past twenty-four (24) months with strong support to bring forward a revision to the Public Improvements Design Standards and Construction Specifications to City Council for your consideration and ultimately your approval. There is evidence for drafts prepared in 2007, by the Engineering and Planning groups to the City Specifications and Standards, yet due to workload, other duties prevented these drafts from being forwarded to City Council and changes, were never brought for formal approval. Since that time, there have been many changes in standard practices, guiding documents, and regulations, so that an update needed to ensure the city infrastructure constructed in a quality manner for the use and service to the residents of Pflugerville.

A committee for each Specification section was comprised of a coordinating engineering consultant, a senior staff team member in the discipline, a construction inspector, and an operations supervisor. The subcommittees met for many weeks over the course of reviewing, editing and writing the draft documents. City Staff has worked through comments with KPA and KPA provided concurrence they have reviewed all changes and updates performed. The newly added Traffic Signals as well as the Parks and Recreation section reviewed by Kimley-Horn in compliance with the TxDOT traffic signals specifications and respectively the ADA Transition Plan. Kimley-Horn provided comments, which were been discussed and addressed by staff.

Background information:

The first (1<sup>st</sup>) Design Standards and Construction Specifications adopted by City Council in 2005 to address the need for consistent and reliable construction practices to aid in the City's overall asset management. By creating minimum standards, the City is able to provide better service to the residents and responsibly conduct ongoing maintenance. The current standards include design criteria for public streets, storm drainage systems, water systems, sanitary sewer systems, arterial, trails and traffic signals infrastructure. These standards are technical in nature and apply to the way in which the improvements are to be constructed and are complimentary to the Unified Development Code, which include zoning regulations and guide the overall use and layout design for development within the city. Over the last 24 months, each of the sections of the City Standards reviewed and updated through a rigorous process to reflect current construction practices, as well as national and state standards.

The City Standards are the minimum requirements for how public infrastructure constructed throughout the City. Public Works & Engineering works closely with the Planning & Development Services, as well Parks Departments for review and approval of development plans through the Development Review Committee (DRC) and utilizes the City Standards to relay to the development community the minimum requirements for construction. This allows for a more uniform delivery of public infrastructure to the residents of Pflugerville. Over 80% of the streets, water, sewer, storm drainage, public landscaping, and power and communications infrastructure constructed through the development process. The City Capital Improvement Projects program designs and constructs the other portion of public infrastructure including large-scale regional projects such as the Weiss Lane

project and new 1849 park and recreation facility. The CIP program also includes maintenance and replacement of existing infrastructure so that the City continues to provide excellent services to its residents. All public infrastructure needs to be constructed in a manner that provides the best service by addressing long-term maintenance and reliability while balancing the cost of service. Meeting asset management goals along with material specifications reduces consumption overall and strengthens the sustainability of the community. Staff has worked with the development, consulting, and contracting community in the past to prepare modifications to the standards to build relationships and balance the needs of the community and those that invest in the growth of the city.

**COUNCIL OPTIONS:**

1. Adoption of the proposed Public Infrastructure Design Standards, Construction Specifications and Special Products List as an ordinance first reading as reviewed and approved by legal counsel.
2. Direct Staff to make modifications to the proposed Public Infrastructure Design Standards, Construction Specifications and Special Products List for staff to bring forward for second reading adoption as an ordinance.

**Prior City Council Action**

9/15/2014 Planning and Zoning Commission voted unanimously to recommend the Engineering Design Manual and Construction Standards as proposed

10/28/2014 A public hearing conducted by the City Council

11/11/2014 A worksession held with the City Council

2/10/2015 The ordinance approved by the City Council on first reading on with a vote of 3-2. Second reading of the ordinance postponed to provide time for additional public input  
The ordinance approved by the City Council on second reading with a vote of 3-0.

2/24/2015 The 2014 Engineering Design Manual and Construction Standards were adopted by City Council of the City of Pflugerville on February 24, 2015 by Ordinance No. 1206-15-02-24, and revised by the City Council of the City of Pflugerville, Texas, by Ordinance No. 1290-16-11-22

09/11/2018 Approving the selection of Kasberg, Patrick and Associates, LP (KPA) for professional engineering services associated with updating the City's Standard Construction Specifications and authorizing the City Manager to enter into an agreement with KPA in the amount of \$97,440.00 for these professional engineering services

City staff received one (1) statements of qualifications (SOQs). As the only firm to submit a statement of qualifications, KPA recommended for selection as the firm to lead this effort for the City.

Staff requested both the selection and award of the agreement this evening to expedite this project so the project can begin. City staff has negotiated with KPA to establish a scope, schedule and fee for this project. Given the services necessary to complete the

project, staff finds value in the qualifications of the project team and proposed project fee.

The \$100,000 allocated funding for this project in the FY 18 General Fund CIP Engineering budget under Other Professional Fees as the Specifications Update line item.

11/26/2019 Update Section 4 to include Atlas 14

12/08/2020 This ordinance was approved by the City Council on first reading.

**Deadline for City Council Action**

Action is requested on second and final reading on January 12, 2021.

**Funding Expected:** Revenue  Expenditure  N/A

**Budgeted Item:** Yes  No  N/A

**Amount:** N/A

**1295 Form Required?** Yes  No

**Legal Review Required:** N/A  Required  Date Completed: 11/30/2020

**Supporting documents attached:**

Ordinance

Record of Revisions to EDM Section 1

Technical Memorandum

Complete Summary of Changes for Specifications

Index of Standard Specifications

Public Infrastructure Specifications

Special Products List

**Recommended Action**

Approve the ordinance on the second and final reading amending Section 1 of the 2015 Engineering Design Manual and Construction Standards, replacing all engineering and construction specifications, standards and special products in conflict; containing a severability clause; and providing for publication and effective date.