

SECTION 1 INTRODUCTION

1.1. *Title*

1.1.1. These standards are hereby adopted as the Engineering Design/Development Manual (Manual), Sections 1 – 11 and Appendices, which will be in full force and effect from and after the effective date of adoption of the Manual.

1.2. *Purpose*

1.2.1. The purpose of the Manual is to protect the health, safety, and welfare of the public by establishing standard engineering practices and minimum engineering criteria for the City of Midland (City), Texas and its extraterritorial jurisdiction (ETJ).

1.3. *Interpretation*

1.3.1. In the interpretation and application of the provisions of these regulations, it is the intention of the City that the principles, standards, and requirements provided herein will be minimum requirements for the design of both public and municipal capital projects in the City and its ETJ. The Engineer of Record (Engineer) is expected to meet all City, County, state, and federal ordinances and regulations. The Manual contains City-specific criteria. Where other City, state, federal, or other jurisdiction regulations are more restrictive than the Manual, such other ordinances or regulations will govern.

1.3.2. The City has adopted various ordinances, master plans, policies, and documents which address requirements not explicitly included in the Manual, including, but not limited to, the following below. The Engineer is responsible for requesting additional City requirements, such as corridor-specific or planned development master plans, that may not be included in this list. The Engineer is responsible for understanding and complying with the City's various ordinances and master plans. In order to ensure that the Engineer has the City's latest ordinances and master plans, he/she is directed to the City's website to acquire the latest versions.

- A. City of Midland Standard Details
- B. City of Midland Standard Specifications
- C. Storm Drainage Design Manual
- D. Master Drainage Plan - Cover & Table of Contents
- E. Master Drainage Plan - Executive Summary
- F. Master Drainage Plan - Section 1 - Introduction
- G. Master Drainage Plan - Section 2 - Jal Draw
- H. Master Drainage Plan - Section 3 - Midland Draw
- I. Master Drainage Plan - Section 4 - Scharbauer Channel
- J. Master Drainage Plan - Section 5 - Mulberry Channel
- K. Master Drainage Plan - Section 6 - Industrial Channel
- L. Master Drainage Plan - Section 7 - South Channel
- M. Northeast Feasibility Study

- N. Zoning Ordinance
- O. City of Midland Subdivision Code
- P. Tall City Tomorrow Comprehensive Plan
- Q. SMART Downtown Plan
- R. Thoroughfare Plan
- S. Compatible Land Use Zoning AOZ-4

- 1.3.3. Any work occurring in City public Right-of-Way (ROW) or Easements is required to comply with all City standards and requirements, including all work by franchise owners in public ROW or Easements.
- 1.3.4. Any work occurring within Texas Department of Transportation (TxDOT) maintained roadways and/or ROW must comply with TxDOT requirements.
- 1.3.5. Any work occurring within railroad ROW must comply with the requirements set forth by the railroad company owner.
- 1.3.6. Any work occurring within navigable airspace must comply with the Federal Aviation Administration requirements.

1.4. Enforcement

- 1.4.1. The Manual is issued by the Engineering Services Department. The Engineering Services Department is hereby authorized to enforce the provisions of the Manual. The standards and any updates will be available on the City's website.
- 1.4.2. The Manual will be in full force and effect immediately upon being filed with the City Secretary. Projects will be required to comply with all requirements. The Manual includes the various design criteria which are considered minimum requirements for the design of adequate public facilities within the City. The Engineer will bear the sole responsibility for meeting the Engineering Standard of Care for all aspects of the design and providing a design that is required by the site-specific conditions and intended use of the facilities, while at a minimum meeting the City's design and construction requirements.

1.5. Amendment

- 1.5.1. The City may amend the Manual at any time without advanced notice. In order to ensure that the Engineer has the City's latest design standards, he/she is directed to the City's website to acquire the most current Manual. The Manual will include a Record of Revisions to identify any revisions.
- 1.5.2. A formal request to modify current design criteria or add new design criteria may be submitted in writing to the Engineering Services Director for consideration. All revisions to the Manual will require approval by the Mayor and City Council.

1.6. Variance Requests

- 1.6.1. The policies included in this document are the standard for all development within the City and its ETJ. Requests for variances to these standard policies will be evaluated case-by-case based on the specific circumstances of the project in question. Any variances requested must be submitted in writing and will be subject to review and approval or denial by the Engineering

Services Director, the Director of Development Services, the Fire Code Official, and the Director of Utilities of the City or their representative. If a variance request is denied it may be appealed to the City Manager.

- 1.6.2. A formal request to vary from the Manual may be submitted in writing to the Engineering Services Director for consideration. All variance requests will require approval by the Mayor and City Council. An Engineer who wishes to request a variance regarding the design of public facilities may do so as long as the request, if granted:
 - A. Is not detrimental to the public welfare;
 - B. Does not adversely impact the public facility in question;
 - C. Is supported by a signed and sealed engineering analysis performed by a Professional Engineer licensed in the State of Texas; and,
 - D. Is not based solely on financial interests.
- 1.6.3. All deviations from the requirements included in the Manual must be approved by the Engineering Services Director or their representative/designee prior to implementation. A grant of an alternative material, design, or method of construction will not affect nor relieve the Engineer of the obligation and responsibility of such material, design, or method of construction for the intended purposes.
- 1.6.4. In the event that specific circumstances dictate requirements not already included in the Manual, it will be the responsibility of the Engineer to provide the additional information in writing for review as deemed necessary by the Engineering Services Director or their representative/designee.
- 1.6.5. Variance requests for standards regulated by the Engineering Services Department are to be submitted in writing to the Engineering Services Director or their designee for review, and written approval of the variance request must be received from the Engineering Services Director or their designee before the variance is officially approved and allowed to take effect.
- 1.6.6. Variance requests for standards regulated by the City's Utilities are to be submitted in writing to the Utilities Director or their designee for review, and written approval of the variance request must be received from the Utilities Director or their designee before the variance is officially approved and allowed to take effect.
- 1.6.7. Variance requests for standards regulated by the City's Fire Department are to be submitted in writing to the Fire Marshall or their designee for review, and written approval of the variance request must be received from the Fire Marshall or their designee before the variance is officially approved and allowed to take effect.
- 1.6.8. Variance requests for standards regulated by the City's Development Services Department are to be submitted in writing to the Development Services Director or their designee for review, and written approval of the variance request must be received from the Development Services Director or their designee before the variance is officially approved and allowed to take effect.

1.7. Applicability

- 1.7.1. The Engineer will be responsible for the applicability of the information contained in the Manual to the design of his/her project. The Engineer will also be responsible for the applicability and accuracy of the information furnished in his/her design. Acceptance by the

City of the study or plans for construction will not be construed to relieve the Engineer of any responsibility.

1.8. *Applicability in ETJ and Midland County*

- 1.8.1. Improvements within the City ETJ will be in accordance with the Manual and Midland County design requirements. Refer to the “Midland County Subdivision Regulations.”
- 1.8.2. Midland County requirements differing from the Manual will require County concurrence and/or a Memorandum of Understanding (MOU) between the City and the County prior to acceptance.

1.9. *Definitions and Abbreviations*

- 1.9.1. Refer to Appendix A – Definitions and Abbreviations for applicable definitions of terms and abbreviations for the Manual.

DRAFT