Water and Sewer Department: Updated Design Criteria Standards and Specifications

City Council

Introduction and First Reading of Ordinance to Adopt – Jan. 17, 2023



Goals

- Alignment with:
 - 2021 Water and Sewer Master Plans
 - 2022 Water Efficiency Plan
 - Other City Plans, Policies, and Procedures
- Updated technology and equipment standards
- Potential cost savings
- Comprehensive and easy to follow
- Conformance with new statewide
 Subsurface Utility Engineering (SUE) Laws

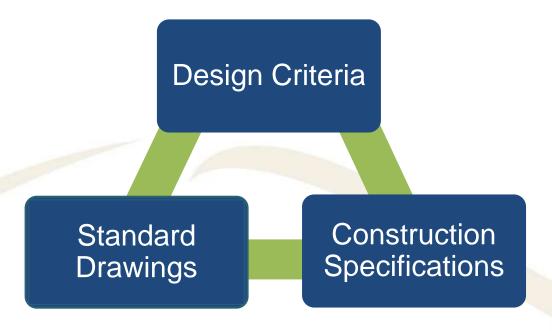


Public Outreach & Engagement

- ✓ City Water and Sewer Board 4/20/22, 7/20/22, & 11/16/22
- **✓** Planning Commission 3/8/22, 8/10/22, 11/8/22 & 12/13/22
- ✓ City Department Reviews (2020-current)
 - ✓ Engineering Development, Planning, CPRD & Civil Inspections
- √ Targeted local businesses & development community stakeholders
 - ✓ Builders, Realtors, & Developers Workshops-7/19/21, 3/2/22, 3/3/22, & 4/29/22
 - Engagement and Feedback (December 2021-December 2022)
 - Landscape & Irrigation stakeholders 3/2/22, 3/3/22,
 4/29/22, 9/30/22, 11/8/22 & 12/5/22



Design Criteria Standards & Specifications



Section 1: General Requirements of Development

Section 2: Submittal Requirements

Section 3: Potable Water

Section 4: Sanitary Sewer

Section 5: Non-potable water

Section 6: Commercial Landscape and Irrigation



Sections 1 and 2

Section 1: General Requirements of Development

Minor updates and streamlined with Engineering Development
 Reviews

Section 2: Submittal Requirements

- Consistent modeling
- Better survey verifications and as-built drawings
- More details for reimbursement of oversized public infrastructure





Sections 3 and 4

Section 3: Potable Water

- Demand management per development type
- Ensure flows are more accurately calculated
- Protects infrastructure from corrosion
- Aligns with wastewater for consistency

Section 4: Sanitary Sewer

- Flows per development type
- Detailed lift station criteria
- Aligns with potable water for consistency





Section 5: Non-Potable Water

- Aligns with 2021 Non-Potable Master Plan
- Plans for sub-regional systems and oversizing
- Consistency of systems & sizing
- Conservation strategy
 - Reduces energy, controls chemical costs & manages peak water demands on water infrastructure





Section 6: Commercial Landscape & Irrigation

Goals

- Provides long-range water wise planning
- Support attractive and sustainable landscapes

Applicable to:

- Common areas
- Right-of-ways
- Municipal buildings
- Non-residential (commercial/industrial)
- Multi-family residential



Section 6: Commercial Landscape & Irrigation

- Landscape & Irrigation Plans
 - Site Plan & Construction Drawings
 - Certified Irrigation Designer
- Hydrozones
 - Pairs irrigation with right plant type
 - Aligns with Comprehensive Plan
- Landscape water demand guidance
- Irrigation Equipment & Installation Specifications
- Irrigation Performance Verifications
- Maintenance (irrigation)
 - Leak repair obligations that align with code



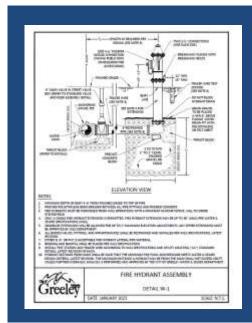






Standard Drawings & Construction Specifications

- Details with current material & equipment
- Added Standard lift station drawings, restraint details, and PRV, and many others
- Utility locating details in accordance with the new SUE law in Colorado (SB 18-167)











Recommendations

Specification

- Greeley Water & Sewer Board approved and recommended the Updated
 Criteria and Standards to City Council on July 20, 2022
- Planning Commission reviewed on August 9th 2022, and subsequently approved and recommended to City Council on December 13th 2022

Staff Recommendation: Adopt the ordinance to amend Title 20 of the Greeley Municipal Code concerning the adoption of the Water & Sewer Department Design Criteria and Construction











