

SECTION 1 – GENERAL

1.1. PURPOSE

These specifications set forth District regulations, engineering, design, materials specifications and construction procedures for all water facilities intended to become a part of the District System, and for privately owned water facilities connected thereto, to the extent regulated hereby. These Specifications supplement the Denver Water Engineering Standards and the District's Rules and Regulations. The Denver Water Engineering Standards are available for review or download from Denver Water's website www.denverwater.org. The District's Specifications are available for review or download free of charge from the District's website www.southgatedistricts.org.

All water systems shall comply with the requirements of these *Water System Specifications* and may include special criteria established by the District. Special criteria shall be outlined at pre-design meetings, as determined necessary by the District. Any correspondence with Denver Water regarding the Engineering Standards shall also include the District.

1.2. DISTRICT SERVICE AREA

The Southgate Water District Service Area consists of approximately 9,100 acres located in both Douglas and Arapahoe Counties, Colorado. Generally, the District is located south of East Quincy Avenue and west of Interstate Highway I-25. The District's Service Area is more particularly shown on the District Service Area Map found on the preceding page.

1.3. AUTHORITY

These Specifications shall be administered by the District, and all matters involving the interpretation and enforcement hereof shall be finally determined by the District.

1.4. REVISIONS

These Specifications are effective as of June 2016. Revisions to these Specifications may be made from time-to-time by the District and shall be in effect at the date of issuance by the District. Any person using these Specifications should contact the District for information relative to revisions.

1.5. DEFINITION OF TERMS

As used in these Specifications and the District Rules and Regulations, unless the context clearly indicates otherwise, the words defined below shall have the respective meanings set forth for them:

1.5.1. ACTUAL COSTS

Actual Costs comprise all direct and indirect costs attributable to any project or undertaking. Actual costs to the District shall include its engineering, legal, labor, material, equipment, administrative, and overhead expenses, calculated in accordance with the rates set forth in the Rules and Regulations, and all direct payments to third parties, at cost.

1.5.2. BOARD OR BOARD OF DIRECTORS

The duly constituted Board of Directors of the District.

1.5.3. CONTRACTOR

Any person who performs any work, either for oneself or another, on any water facilities, public or private, within the District, including all subcontractors, agents, employees, officers and other representatives of such person.

1.5.4. CONSTRUCTION PLANS

Plans and Specifications for the construction of a specific water system project which have been reviewed and signed by the District.

1.5.5. DENVER WATER; DENVER

The plant, facilities, system, assets, and personnel controlled by the Board of Water Commissioners as established by the Charter of the City and County of Denver.

1.5.6. DISTRICT

The Southgate Water District, Arapahoe and Douglas Counties, Colorado, its employees, agents, officers, directors, insurers, and professional consultants.

1.5.7. DISTRICT ENGINEER

The District's Staff Engineer.

1.5.8. DISTRICT MANAGER

The Manager of the Southgate Water District appointed by the Board of Directors, or any other person duly authorized to perform the duties of the District Manager.

1.5.9. DISTRICT SYSTEM

The facilities, systems, assets, and appurtenant property rights owned or directly controlled by the District, but excluding all privately-owned water facilities.

1.5.10. FOREIGN MATERIALS

Any objects or substances other than treated potable water.

1.5.11. LICENSE

The written authority to receive water at specified premises for specified purposes.

1.5.12. LICENSED PREMISES

The land area and improvements thereto to which water service is limited under any particular License.

1.5.13. MAIN OR WATER MAIN

Those pipes and appurtenant facilities used for distributing potable water, along public streets or appropriate rights of way deeded or licensed to the District, directly to various Licensed Premises.

1.5.14. MAIN EXTENSION

The construction of any facilities, or the facilities themselves, which are intended to become a part of the District System upon acceptance by the District in accordance with Article 6 of the Rules and Regulations.

1.5.15. PERMITTED PREMISES

The land area and improvements thereto to which potable water service is limited under any particular Tap/Service Connection Permit.

1.5.16. PERSON

Associations, corporations, firms, partnerships and bodies politic and corporate, as well as individuals.

1.5.17. PROJECT/WORK

The term "Work" shall mean and include all labor, materials, equipment, and all appliances, machinery, transportation and appurtenances necessary or convenient to the successful completion and performance of the construction plans, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item indicated or described and as required by good practice to provide a complete and satisfactory system or structure. As used herein, "provide" shall be understood to mean "furnish and install, complete, in-place." "Work" and "Project" are synonymous and may be used interchangeably.

1.5.18. PROJECT ACCEPTANCE

A project can be accepted and may enter the warranty period if all of the following requirements have been fulfilled: satisfactory chlorine and clear water tests, completed final connection(s), completed set of compaction test results have been submitted to the District and applicable city/county, completed first lift of paving, completed punch list, surveyed record drawings have been submitted and approved by the District, recorded address plat (if applicable), and warranty funds have been submitted to the District in the form of a letter of credit or check equal to ten percent (10%) of the total cost of the water improvements.

1.5.19. PROPERTY OWNER/OWNER/DEVELOPER

All of these terms shall be synonymous with each other and shall mean any person who, whether solely or with others, owns real property within the District. When property is owned by more than one person, the term includes all owners thereof. As used in these Specifications, the term shall apply to such person only in connection with their ownership of any specific parcel of real property involved in any specific matter governed by these Specifications or Rules and Regulations.

1.5.20. RECORD OR AS-BUILT DRAWINGS

A separate set of scaled construction plans marked to indicate completely and accurately the field-installed condition of facility construction as completed, as required by Appendix E of these Specifications.

1.5.21. RULES AND REGULATIONS

The comprehensive set of operating rules and requirements, as now or hereafter constituted, adopted by the Board of Directors for the purpose of regulating the design, construction, operation, maintenance, use, repair and replacement of the District System.

1.5.22. SERVICE LINES

All pipe, fittings, and appurtenances, owned by Property Owner, which convey water from the District System to the plumbing of the Licensed Premises. The dividing point between the District System and privately-owned service lines is the plug on the corporation stop tapped into the Main or, where applicable, the discharge side of the tapping valve closest to the Main.

1.5.23. STUB-IN

A tap made for the purpose of installing service lines prior to the paving of streets. Such connection shall include fittings necessary to extend the service line to the valve at the property line.

1.5.24. TAP OR SERVICE CONNECTION

The physical connection to a District Main which, together with the Tap License for same, affects water service to any Licensed Premises.

1.6. STANDARDS AND SPECIFICATIONS

These Specifications utilize and otherwise make reference to other Standards and Specifications. Where these references are made, they shall refer to the latest edition or revision thereof.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction, Inc.
ANSI	American National Standards Institute, Inc.
ASA	American Standards Association
ASTM	American Society of Testing Materials
ASCE	American Society of Civil Engineers
AWWA	American Water Works Association
OSHA	Occupational Safety Health Administration
UL	Underwriter's Laboratories
UNI	Uni-Bell Association
UPC	Uniform Plumbing Code

1.7. ABBREVIATIONS

DIP	Ductile Iron Pipe
DW	Denver Water
FPS	Feet Per Second
GPCD	Gallons Per Capita Per Day
GPD/SF	Gallons Per Day Per Square Feet Developed Floor Space
GPD/AC	Gallons Per Day Per Acre
Multi-Family	Attached Single-Family Residential Dwelling (e.g. Apartment Building)
N/A	Not Applicable
PVC	Polyvinyl Chloride Pipe
SEMSWA	Southeast Metro Stormwater Authority
SF	Square Feet Developed Floor Area
Single-Family	Detached Single-Family Residential Dwelling
Stu	Student
Townhome	Attached Single-Family Residential Dwelling