

WATER STANDARD PLANS

2025

PREFACE

These standard plans incorporate current Water regulations and City water system operation, maintenance, and asset management considerations.

The plan numbering structure of this document follows the same basic structure as the APWA Standard Plans, however, there are some differences. Following is an explanation of the structure of this document:

1. Part 5 – Water Systems. Standard Plan divisions for Water system related details are:
 - Preface, Updates, and Table of Contents
 - Water Notes
 - Fire Hydrants
 - Water Meters
 - Corrosion Protection Systems
 - Piping
 - Thrust Blocks
 - Valves
 - Trenching
 - General
 - Water System Field Observation Guidelines
2. Numbering – A plan number having a suffix of “S” identifies that the plan contains index, legend, detail specific notes, and acceptable manufacturer and parts numbers related to the standard plan.

This document is intended to be altered periodically to ensure that the most current Park City Standards are available for public use. This document will be revised and published on the City’s web site as updates are approved and adopted.

THE FOLLOWING IS A SUMMARY OF CHANGES MADE TO DRAWINGS

2025

500: Updated notification requirements. Added record drawing and geospatial data requirements.

Updated water interruption requirements. Updated backflow and booster pump information.

520: Updated water meter sizing calculations. Updated water main tapping requirements.

523 S: Added double check backflow assembly. Updated approved manufacturers and models.

526 S: Added double check backflow assembly. Updated approved manufacturers and models.

527 & 527 S: Added swing check backflow assembly.

528 & 528 S: Added swing check backflow assembly. Updated backflow information.

547-B: Added DDW exception requirement. Removed looped water line.

572: Added hoop steel size

573-E.3: Updated backpanel requirements.

FIELD OBSERVATION GUIDELINES: Updated AWWA Standards.

*All drawing updates are shown with updated date and revision in title block.

TABLE OF CONTENTS

PART 5 – WATER SYSTEMS

Water Notes

500.1	General Water Notes
500.2	General Water Notes
500.3	General Water Notes

Fire Hydrants

511	Fire Hydrant
511 S	Fire Hydrant

Water Meters

520.1	General Requirements – Water Meter, Meter Vault, and Service Line
520.2	General Requirements – Water Meter, Meter Vault, and Service Line
521	3/4" and 1" Single Meter – Outside Setting
521 S	3/4" and 1" Single Meter – Outside Setting
522	3/4" and 1" Dual Meters – Outside Setting
522 S	3/4" and 1" Dual Meters – Outside Setting
523	3/4" and 1" Meter – Inside Setting
523 S.1	3/4" and 1" Meter – Inside Setting
523 S.2	3/4" and 1" Meter – Inside Setting
524	1-½" and 2" Single Meter – Outside Setting
524 S	1-½" and 2" Single Meter – Outside Setting
525	1-½" Dual Meters – Outside Setting
525 S	1-½" Dual Meters – Outside Setting
526	1-½" and 2" Meter – Inside Setting
526 S.1	1-½" and 2" Meter – Inside Setting
526 S.2	1-½" and 2" Meter – Inside Setting
527	3" and Larger Meter – Outside Setting
527 S	3" and Larger Meter – Outside Setting
528	3" and Larger Meter – Inside Setting
528 S.1	3" and Larger Meter – Inside Setting
528 S.2	3" and Larger Meter – Inside Setting
529	Meter Vault Frame and Cover / MXU Device Location
529 S	Meter Vault Frame and Cover / MXU Device Location
530	Remote MXU Device
531	Temporary Hydrant Meter Assembly

Corrosion Protection Systems

534.1	Metallic Pipe Corrosion Protection
534.2	Metallic Pipe Corrosion Protection
535-A	Type A Test Station
535-B	Type I Test Station
535-C	Type F Test Station
535-D	Type T Test Station
536-A	Horizontal Galvanic Anode Installation without Test Station
536-B	Horizontal Galvanic Anode Installation

537-A	Steel and Ductile Iron Pipe Wire Connection
537-B	Ductile Iron Pipe Joint Bond
537-C	Flexible Joint Bond
537-D	Flanged and Mechanical Joint Bond
537-E	Galvanic Anode Wire Splice
537-F	Insulating Flange
537-G.1	Metallic Pipe Appurtenance and Fitting Cathodic Protection
537-G.2	Metallic Pipe Appurtenance and Fitting Cathodic Protection
537-G.3	Metallic Pipe Appurtenance and Fitting Cathodic Protection
537-G.4	Metallic Pipe Appurtenance and Fitting Cathodic Protection
538-A	Post Style Test Station - Wood
538-B	Post Style Test Station - Plastic
538-C	Flush Style Test Station Box
538-D	Flush Style Test Station Terminal Board

Piping

540-A	Water Main – Ductile Iron Pipe – 4” to 12” Diameter
540-B	Water Main – PVC Pipe – 4” to 12” Diameter
540-C	Water Main – HDPE Pipe – 4” to 16” Diameter
540-D	Connection to Existing Water Main – Asbestos Cement & Permastrand Pipe – 4” to 12”
540 S.1	Water Main and Fire Lines
540 S.2	Water Main and Fire Lines
541	Water Service Line – 3/4” to 2” Meters
541 S	Water Service Line – 3/4” to 2” Meters
542	Hot Taps 4” and Larger
543	Water Service Line Loop
544-A	Water Main Loop
544-B	Water Main Loop
544-C	Water Main Loop
545-A	Tracer Wire – Valve Box Terminations
545-B	Tracer Wire – Access Box Terminations
546	Pipe Insulation at Storm Drain Crossings
547-A	Water - Sanitary Sewer Separation
547-B	Water - Sanitary Sewer Separation
548	3/4” to 2” Service Line Abandonment

Thrust Blocks

561	Direct Bearing Thrust Block
562-A	Tie-down Thrust Restraints
562-B	Tie-down Thrust Restraints

Valves

570	Buried Valve and Valve Box
570 S	Buried Valve and Valve Box
572	Valve Box Collar
573-A	Pressure Reducing Valve Vault
573-B.1	Pressure Reducing Valve Vault
573-B.2	Pressure Reducing Valve Vault
573-C.1	Pressure Reducing Valve Vault

573-C.2	Pressure Reducing Valve Vault
573-C.3	Pressure Reducing Valve Vault
573-C.4	Pressure Reducing Valve Vault
573-D.1	Pressure Reducing Valve Vault
573-D.2	Pressure Reducing Valve Vault
573-D.3	Pressure Reducing Valve Vault
573-D.4	Pressure Reducing Valve Vault
573-E.1	Pressure Reducing Valve Vault
573-E.2	Pressure Reducing Valve Vault
573-E.3	Pressure Reducing Valve Vault
573-E.4	Pressure Reducing Valve Vault
573-E.5	Pressure Reducing Valve Vault
574	Air Release / CAV Valve Manhole
574 S	Air Release / CAV Valve Manhole
575-A	Heat Tape Installation for Air Release / CAV Valve
575-B	Heat Tape Installation for Air Release / CAV Valve
576	Air Vent Stand Pipe
577-A	Culinary Water - Irrigation Backflow Preventer
577-B	Culinary & Secondary Water - Irrigation Swing Check Connection
578	Pipe Support

Trenching

580	Water Trench Bedding and Backfill
581	Water Trench Cut-off Wall

General

592	Meter Vault and Water Manhole Grading – Landscape Areas
593	Meter Vault and Water Manhole Collar – Pavement Areas
594.1	Water Service Line Flow Chart
594.2	Water Service Line Flow Chart
595	NFPA 13D or 13R Residential Fire Sprinkler Services
595 S	NFPA 13D or 13R Residential Fire Sprinkler Services
596	Waterline Reference Marker
597	Waterline Casing
597 S	Waterline Casing

Water System Field Observation Guidelines 2025