

RULES AND REGULATIONS

ADOPTED APRIL 5, 2010

Amended: 01/01/22

TABLE OF CONTENTS

SECTION ONE – GENERAL INFORMATION

- 1.1 Authority
- 1.2 Amendments
- 1.3 Variances
- 1.4 Scope
- 1.5 Effective Dates

SECTION TWO – GENERAL DEFINITIONS

SECTION THREE – DISTRICT ORGANIZATION

- 3.1 Board of Directors Authority

SECTION FOUR – LIABILITY

- 4.1 District Not Liable
- 4.2 Officials Not Liable
- 4.3 Non-Liability for Work of Others
- 4.4 Control of Water
- 4.5 Adequacy of Water

SECTION FIVE – GENERAL OPERATING PROCEDURES

- 5.1 Ownership & Maintenance of Water Main lines and Water Service Lines
 - A. Water Main Lines
 - B. Water Service Lines
- 5.2 Prohibited Uses of Water
- 5.3 Responsibilities of the Customer
- 5.4 Fire Hydrants

SECTION SIX – PERMIT REQUIREMENTS

- 6.1 Required Connection and Inspection Permit
- 6.2 Connection and Inspection Permit Application
- 6.3 Duration of Connection Permit and Permit Fee
- 6.4 Revocation or Suspension of Permit
- 6.5 Connections to District Facilities
 - A. Revocation of Connection Permit
 - B. Denial of Permit Application
 - C. Contractor Qualifications
 - D. Inspection of Water Service Line
 - E. Penalties

- F. Special Arrangements
- G. Separate Connections

- 6.6 Road Cuts
- 6.7 Water Well Permit

SECTION SEVEN – TAP PURCHASE REQUIREMENTS

- 7.1 Water Tap Fee
- 7.2 Application for Water Tap
- 7.3 Tapping of Water Main

SECTION EIGHT – FEES AND CHARGES

- 8.1 User Rates
- 8.2 Rate Schedule
- 8.3 Owner Responsible for All Charges
- 8.4 Billing Procedure
- 8.5 Delinquent Charges and Fees
- 8.6 Disconnection of Water for Non-Payment of Fees
- 8.7 Notice and Hearing
- 8.8 Activation of Terminated Service
- 8.9 Delinquent Account Collection Costs
- 8.10 Costs for Service Outside of District
- 8.11 Certification to the Grand County Treasurer

SECTION NINE – INCLUSIONS/EXCLUSIONS

- 9.1 Procedures for Inclusions
- 9.2 Inclusion Fees
- 9.3 Land Owner Requirements for Service
- 9.4 Procedures for Exclusions
- 9.5 Exclusion Fees

SECTION TEN – TECHNICAL SPECIFICATIONS, WATER SYSTEM CONSTRUCTION STANDARDS AND MINIMUM DESIGN CRITERIA

- 10.1 Authority
- 10.2 Revisions, Amendments or Additions
- 10.3 Local Distribution System Standards
- 10.4 Design Documents for Main Line Construction
- 10.5 Required Easements for Main Line Construction
- 10.6 Potable water Distribution Systems
 - A. Demands
 - B. Design/Sizing
- 10.7 Pipes, Valves and Fittings for Water Main Construction
 - A. Pipes
 - B. Fittings

- C. Sheathing
- D. Line Valves
- E. Buried Valves
- F. Valve Boxes
- G. Fire Hydrants
- H. Blow-Offs
- I. Air Release Valves
- 10.8 Water Main Installation – Minimum Requirements for Design Documents
 - A. Pipeline Installation
 - B. Pipe Bedding and Backfill
 - 1. Trench Zones
 - a. Bedding Zone
 - b. Pipe Zone
 - c. Backfill Zone
 - 2. Material
 - a. Sand Bedding or Sand Backfill Material
 - b. Roadbase Bedding Material or Roadbase Backfill Material
 - c. Squeegee Sand
 - d. Granular Bedding or Granular Backfill Material
 - e. 7/8 Inch Aggregate Material
 - f. Select Material
 - g. Trench Stabilization Material
 - h. Backfill Material
 - C. Bedding and Backfill Installation
 - 1. Compaction
 - 2. Bedding Zone Installation
 - 3. Pipe Zone Installation
 - 4. Backfill Zone Installation
 - 5. Backfill Zone Installation in Roads and Streets
 - D. Maintenance of Backfill
 - E. Erosion Control
- 10.9 Fire Hydrant Installation
- 10.10 Water Main Line Testing
- 10.11 Disinfection
- 10.12 Electrical Continuity
- 10.13 Checklist for Acceptance of Main Line Facilities
- 10.14 Water Service Line Standards
 - A. Prior Approval
 - B. Sizing Responsibility
 - C. Ownership
 - D. Applicable Code Requirements
 - E. Backflow Prevention Device
- 10.15 Potable Water Services
 - A. Sizing
 - B. Service Connections
 - C. Cross Connections
 - D. Water Service Materials
 - 1. Water Service Line

2. Corporation Stops
3. Curb Stops
4. Service Saddles

10.16 Construction of Water Service Line

10.17 Water Service Line Excavation, Bedding and Backfill

EXHIBIT A Connection and Inspection Permit

EXHIBIT B Water Tap Fee

EXHIBIT C Application for Water Tap

EXHIBIT D Water Rate Schedule

SECTION ONE: GENERAL INFORMATION

It is hereby declared that the following Rules and Regulations will serve a public purpose and will promote the health, comfort, convenience, safety, and welfare of the residents and visitors of the North Shore Water District.

1.1 Authority

These Rules and Regulations are adopted in accordance with the authority conferred in Title 32, Articles 1 and 10 of the Colorado Revised Statutes, by the North Shore Water District Board of Directors, a political subdivision of the State of Colorado and body corporate and politic, with those powers of a municipal corporation which are specifically granted to the District, or are necessary to or implied from powers specifically granted by statute, constitution or other law, for carrying out the objectives and purposes of the District.

1.2 Amendments

Except as otherwise provided by law, these Rules and Regulations may be amended at any regular meeting of the Board or at a special meeting of the Board of Directors called for that purpose. Any such amendment shall require an affirmative vote of a majority of the members of the Board of Directors present.

The enactment of these Rules and Regulations or any amendment thereof, or the repeal of any prior existing Rules and Regulations shall not deny or limit any right, action, cause of action, penalty, charge or fee which arose under previous Rules and Regulations.

1.3 Variances

Any user/owner seeking a variance of a provision of the Rules and Regulations shall have the burden of proving that the operation of such a provision as it is applied would cause undue hardship or should not be applied to the person or property for another justifiable reason, and such variance shall not adversely affect the health, safety and welfare of the residents and visitors of the District. The Board's decision to grant or to deny the variance shall be final.

1.4 Scope

These Rules and Regulations shall be considered a comprehensive set of Rules and Regulations governing certain aspects of the control, management and operation of the North Shore Water District. It should be noted, however, that not every conceivable aspect of the control, management and operation of the District and its systems is covered in these Rules and Regulations, and that the District's Board reserves the right to make rulings concerning matters not covered herein as and when appropriate, in the opinion of the Board.

1.5 Effective Dates

Any additions or deletions to these Rules and Regulations shall be effective immediately upon adoption by a majority of the District's Board of Directors present at any regular meeting of the Board or at a special meeting of the Board called for that purpose.

SECTION TWO: GENERAL DEFINITIONS

Whenever the following terms, or pronouns in place of them, are used in any part of these Rules and Regulations, the intent and meaning shall be as follows:

- (1) **Applicant:** Any person who applies to the District for a service connection or disconnection, a main line extension or other such service agreement, or who attempts to have real property included within, or excluded from the District.
- (2) **Applicant's Engineer:** A Professional Engineer hired by an Applicant, usually for a proposed extension of a water main line.
- (3) **AWWA:** American Water Works Association.
- (4) **Backflow:** the flowing back of water toward the source.
- (5) **Board and Board of Directors:** shall mean the governing body of the District.
- (6) **CDOT:** Colorado Department of Transportation.
- (7) **CRS:** Colorado Revised Statutes.
- (8) **Cohesionless Soils:** soils that do not stick or stay together.
- (9) **Compaction:** A mechanically induced compaction of the ground to a certain degree.
- (10) **Connection:** The connecting of the water service line to the District's water system.
- (11) **Contractor:** An independent contractor hired by the District or other persons or entities to perform work and/or furnish materials for the benefit of the District, or for the benefit of those persons or entities.
- (12) **Cross Connection:** The intersection of two lines.
- (13) **Customer:** Person, or persons, who is the owner of property serviced with water by the District.
- (14) **District:** The North Shore Water District.
- (15) **Easement:** An acquired legal right for the specific use of land owned by others.
- (16) **Geotextile Envelope:** That area in which permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain, are required to be used.
- (17) **Inspector:** The District Chief Operator or a duly authorized deputy.
- (18) **Involuntary Terminated Service:** Termination of water service by and at the request of the District, and not by the land owner.
- (19) **Lien:** a recorded secured interest on an affected parcel of land.
- (20) **Management:** The District Manager or Chief Operator.
- (21) **Owner:** The owner of record of fee simple title according to the records in the office of the Grand County Clerk and Recorder.
- (22) **Permit:** The written permission to connect to or use the water system of the District pursuant to the Rules and Regulations of the District.
- (23) **Permitee:** The holder of a Permit.

- (24) **Shall:** As used in these Rules and Regulations, is mandatory.
- (25) **Special District Act:** Title 32 of the Colorado Revised Statutes.
- (26) **Statutory Lien:** an automatic secured interest on an affected parcel of land as provided by Statute.
- (27) **Subdividers:** Those individuals in the process of or having completed the subdividing one parcel of land into many parcels of land, usually for the purpose of development.
- (28) **Shut off:** Terminate water service by physical disconnection.
- (29) **Tracer Wire:** Usually 16-gauge wire securely attached at regular intervals throughout the entire distribution system, to facilitate later location of buried pipelines.
- (30) **User Fees:** Those fees applied to a property receiving water service from the District.
- (31) **Variance:** to deviate from the requirements of the Rules and Regulations.
- (32) **Voluntary Terminated Service:** Termination of water service at the request of the property owner.
- (33) **Water Distribution Lines:** Those water mains of the District which carry and distribute water to service lines owned by Property Owners.
- (34) **Water Tap Fee:** That fee contributed by a customer for proportionate payment of the expenses attributable to construction and development of the water facilities.
- (35) **Water Main Line:** Any pipe, system of piping and appurtenances used as a conduit for water, owned by the District, which is primarily a pipe 2 inches or greater in diameter.
- (36) **Water Service Line:** Any pipe, line or conduit used or to be used to provide water service from a water main to each dwelling, which is a pipe primarily $\frac{3}{4}$ to 1 inch in diameter. This includes the tapping saddle, corporation stop, pipe, curb stop and box, and any and all fittings that transport water from the water main to the dwelling.
- (37) **Water System:** Any water main, line, appurtenance, accessory or portion thereof owned and maintained by the District.

SECTION THREE: DISTRICT ORGANIZATION

3.1 Board of Directors Authority

The business and affairs of the District shall be managed by the Board in accordance with the Special District Act. All powers, privileges and duties vested in or imposed upon the District by law shall be exercised and performed by and through the Board, whether set forth specifically or implied in these Rules and Regulations. The Board may delegate to officers and employees of the District any or all executive, administrative, and managerial powers.

SECTION FOUR: LIABILITY

4.1 District Not Liable

The District and its officials and employees shall not be liable or responsible for, and no claim for damage shall be made against the District by reason of damage resulting from any of the following: breaking or failure of any public water main, any pipe, cock, valve, or meter; interruption of service and the conditions resulting there from where said interruption of service is brought about by request of claimant, or by circumstances beyond the District's control; the making of connections or extensions; damage to property resulting from work on any portion of the District's system; burst service lines or other facilities not owned by the District; or for doing anything to the water systems of the District deemed necessary by the Board of Directors or its agents. This section shall not relieve the District from liability for negligence, if such liability would otherwise have existed; however, the foregoing statement shall not constitute a waiver by the District of the defense of sovereign immunity or the Colorado Governmental Immunity Act, or any other defenses it may have due to an action against the District, its officials or employees, nor a waiver of its insurance coverage. This section shall be construed in such a manner as to be consistent with the District's resolution indemnifying such officials and employees.

These Rules and Regulations shall not be construed to hold the District in any manner responsible for any damages to persons or property resulting from any inspection as herein authorized or resulting from any failure to so inspect, or resulting from the issuance or denial of any Permit as herein provided, or resulting from the institution of court action as allowed by law, or the forbearance by the District to so proceed.

4.2 Officials Not Liable

Any District official or employee, charged with the enforcement of these Rules and Regulations acting in good faith and without malice on behalf of the District in the discharge of his official duties, shall not thereby render himself personally liable for any damages which may accrue to persons or property resulting from any such act or omission committed in the discharge of such duties. Any suit or proceeding instituted against such official or employee, stemming from any act or omission performed by him in the enforcement or attempted enforcement of any provision of these Rules and Regulations, shall be defended by the District until final termination of the proceedings. This subsection shall be construed in such a manner as to be consistent with the District's Resolution indemnifying such officials and employees.

4.3 Non-liability for Work of Others

The District does not assume any liability for any work performed by others. No claim shall be made against the District or any of its officers or employees on account of errors of omission or commission made by the District.

4.4 Control of Water

A. Only persons authorized by the District shall turn water on to premises where water service has previously not been provided or where water service has been shut off by the District.

B. There shall be no liability to the District for damage occurring by reason of the shutting off of water or the escaping of water.

C. The District may at any time shut off water for the making of repairs without liability for any damage which might result there from.

D. Water conservation shall be practiced at all times. The Board of Directors or its management may from time to time call upon property owners whom in their opinion, are not practicing water conservation methodology.

4.5 Adequacy of Water

It is an obligation of the District to provide a fair and proportionate amount of the water supply to each customer. In the event of a water shortage, whether by reason of supply or mechanical failure, the Board may impose uniform restriction and limitations on usage by written notice mailed to customers. Such restrictions may contain priorities of use and limit water usage to specific purposes. Failure of any user or property owner to abide by the terms of any imposition of restrictions shall give rise in the District to the right to forthwith terminate service.

The District is responsible for the maintenance, repair and replacement of the water mains, hydrants, valves and service facilities owned by the District, but shall not be liable or responsible for inadequate pressure or interruption of service brought about by circumstances beyond its control.

The District is generally responsible for providing water storage and treatment facilities, and shall endeavor to plan for, capitalize and build adequate capital improvements as demand requires.

SECTION FIVE: GENERAL OPERATING PROCEDURES

5.1 Ownership and Maintenance of Water Main Lines and Water Service Lines

A. Water Main Lines

Except as otherwise provided in this Section, all existing and future structures, equipment and processes connected with and forming an integral part of the water facilities shall become and are the property of the District. Said ownership will remain effective regardless of whether such property is constructed, financed, paid for, or otherwise acquired by the District, or by other persons. No unauthorized person shall uncover, make any connection with or opening into, use, alter or disturb any of the District's facilities without first obtaining written approval from the District. No unauthorized person shall remove or tamper with any plug or lock installed by the District. The District will impose a penalty assessment for such unauthorized acts in an amount sufficient to cover any damages suffered by the District as a result of such unauthorized act plus an appropriate punitive charge.

The District is responsible for the operation and maintenance of the water system and in a reasonable and economical manner, in accordance with these Rules and Regulations. The right to any use of the District's water system is only by permission of the District. The District reserves full right to determine all matters related to the control and use of its water system. The right to use of the District's water system shall be subject to suspension or revocation as set forth herein.

B. Water Service Lines

The owner of any premises served is the owner of the water service line and is responsible for the maintenance thereof as provided in Section 5.3 below.

5.2 Prohibited Uses of Water

A. Water provided to the consumer shall be used at the premises of the consumer and not elsewhere.

B. No cross connections shall be made between lines carrying District water with lines carrying water from other sources. All cross connections which could impart a contaminant to the District's water supply as a result of backflow are subject to Colorado State statutory regulations. Where a potential of back flow is present, an acceptable protective device or system shall be installed to prevent its occurrence and such installations shall meet Colorado statutory requirements, as well as the rules and regulations of the Colorado Department of Health.

C. Water shall be used for domestic and other public and private uses as authorized by Title 32, Article 1, Section 103 (25) C.R.S., as amended.

5.3 Responsibilities of the Customer

Each customer shall be responsible for maintenance and cost of repair of their water service line, curb box, and the connection to the water main line. Leaks or breaks in any portion of the water service line shall be repaired by the property owner within a reasonable period of time after notification of such condition by the District. The District reserves the right to shut off the water service, effect a repair and collect the cost thereof from the customer, if notification of the customer cannot be accomplished in a timely manner, if₁₂ the customer does not act promptly to effect the

repair, or if, in the sole opinion of the District Manager, other circumstances make such action necessary and in the best interests of the District. Without limiting the generality of the foregoing, the District may charge the customer for repairs if the source of a leak is not obvious, and upon investigation by the District, the source of the leak is determined to be the customer's service line. In all such cases where a leak occurs in a service line, the customer shall be responsible for costs of repairing the service line and any collateral damage caused by the leak, including any damage to adjoining streets. No adjustment shall be made on water charges by reason of a leak in a service line. Any water leak is considered an emergency and shall be handled as such.

The District is entitled to a statutory lien against a customer's property to secure payment of any fees or charges owed, including any costs of repair chargeable to the customer. If any such charges are unpaid, the District may, but is not required to, record a notice of lien in the office of the County Clerk and Recorder to further evidence such lien and may foreclose such lien in the manner provided by law.

5.4 Fire Hydrants

The District shall provide fire hydrants for fire protection on the District's water distribution lines on street right-of-ways. Water to be used for purposes other than extinguishing fires may be withdrawn from hydrants only if permission therefore shall have been issued by the North Shore Water District.

SECTION SIX: PERMIT REQUIREMENTS

6.1 Required Connection and Inspection Permit

No connection may be made to any facility of the District until the District has issued a Connection and Inspection Permit (Permit). The Permit issued pursuant to the provisions hereof shall be conditioned upon the holder of the Permit doing the work in conformity with these Regulations and being liable personally for failure to so conform.

6.2 Connection and Inspection Permit Application

Persons requesting a Permit shall make application on a special form as shown on attached Exhibit "A", and furnished by the District.

6.3 Duration of Connection Permit and Permit Fee

Each Permit issued pursuant to these Rules and Regulations shall be for a period of one year from the date of issuance, unless otherwise limited at the direction of the Board.

6.4 Revocation or Suspension of Permit

The District shall have the authority to suspend the effectiveness of any Permit issued pursuant to the Rules and Regulations when the Permittee has engaged in work activities contrary to the provisions of these Rules and Regulations within the District of mains or lines served by the District. The period of such suspension shall be determined by the Board at the next regular meeting of the Board following the suspension. At such Board meeting, Permittee whose Permit has been suspended may appear in person or be represented by an attorney and may advise the Board with reference to the fact involved in the suspension order.

6.5 Connections to District Facilities

A. Revocation of Connection Permit

The District reserves the right in its sole discretion, for cost-related reasons, lack of capacity, or when necessary to protect the health, safety and welfare of the residents and visitors of the District, to revoke a Permit previously granted, before service has been provided, and therewith refund all fees previously paid which have not been expended for evaluation of the Permit.

B. Denial of Permit Application

The District reserves the right to deny a Permit when, in the opinion of the Board, the service applied for would create an excessive seasonal or other demand on the District's facilities.

C. Contractor Qualifications

To obtain a Permit to connect a water line to the water main of the District, the person performing the work must be a master plumber licensed under the laws of the State of Colorado or a contractor meeting District qualifications for installation of water lines within the District.

D. Inspection of Water Service Line

No water connection shall be back-filled until an inspection has been made and approved by a representative of the District.

E. Penalties

Whenever the written approval to commence work on a connection and/or the inspection has not been completed before backfilling as required by the Rules and Regulations, the District may impose penalties in such an amount as may be necessary to indemnify the District for any damages incurred by the failure of the Permittee to act in accordance with the Rules and Regulations and the District shall have the authority to revoke or suspend any work performed by the Contractor within the District's boundaries until the District has been indemnified for the damages incurred and the penalties are paid.

F. Special Arrangements

Nothing herein contained shall prevent the District from making special arrangements with sub-dividers or other like users for a reduction or elimination of connection fees if such arrangements are found by the Board to be in the best interests of the District.

G. Separate Connections

Each residence or each building connected to or with mains, lines, or facilities of the District shall be individually connected by a separate service line.

6.6 Road Cuts

Issuance of a Connection and Inspection Permit, or any other permission granted by the District, does not authorize the holder thereof to make any cut in a public road or street or to do anything for which separate permission is required of another governmental entity.

6.7 Water Well Permit

No property owner shall be permitted to drill or dig a well within the boundaries of the North Shore Water District without the written permission of the District's Board of Directors.

SECTION SEVEN – TAP PURCHASE REQUIREMENTS

7.1 Water Tap Fee

A water tap fee shall be collected from all customers of the District. The amount of the water tap fee is as shown on Exhibit "B". The fee shall be determined by the District in its sole discretion, taking into account all the expenses and costs associated with providing such water service. The water tap is for the privilege of being entitled to use the District's water system, and is not permission to connect to the District's lines.

7.2 Application for Water Tap

Persons requesting a Water Tap shall make application on a special form entitled "Application For Water Tap" and as shown on attached Exhibit "C", and furnished by the District. The application shall be supplemented by any other information considered pertinent in the judgment of the District.

7.3 Tapping of Water Main

No tapping of a water main of the District shall be made unless prior arrangements have been made to have a District representative present and the District approves of the manner in which tapping shall be made. Supervision and control of all such tapping procedures shall be exclusive in the District.

SECTION EIGHT – FEES AND CHARGES

8.1 User Rates

The user rates to be paid by consumers within the District shall be the rates determined by the Board in accordance with the Rules and Regulations of the District and shall be in accordance with the Water Rate Schedule attached hereto and made a part of these Regulations as Exhibit "D".

8.2 Rate Schedule

The Rate Schedule may be changed by the Board of Directors of the District from time to time but no more frequently than quarterly and any change in the Rate Schedule shall be made not less than 30 days prior to the beginning of the next calendar quarter at which time the rate change becomes effective. Notice of rate change shall be given to the consumers by ordinary mail at their last known address as shown by the records of the District, not later than 30 days prior to the effective date of the rate change.

8.3 Owner Responsible for All Charges

The Owner of any building that is connected to the District facilities shall be responsible for the user fees. The District assumes no responsibility for any agreements between Owner and users, regardless of how made, or whether the District was notified of such agreements. The District will hold the Owner liable for all charges appurtenant to water service at the location where the service is provided.

8.4 Billing Procedure

Except as specifically provided by written agreement between the District and an Owner, all water charges and fees provided in these Rules and Regulations will be billed and are due on the first day of the quarter in advance of service at the office of the District. Billing shall commence at the time a physical tap is made at the water main for service to said property. Except as specifically provided by written agreement between the District and an Owner, Tap fees, Connection and Inspection Permit fees, disconnection and reconnection fees, and any other applicable fees and charges, are due when application for such is made.

8.5 Delinquent Charges and Fees

If any user fees are not paid or postdated within thirty (30) days after the date due, they shall become delinquent and shall be assessed interest at one percent (1%) per month plus all costs and attorney fees associated with the collection of delinquent charges and fees.

8.6 Disconnection of Water for Non-payment of Fees

Should any owner fail to pay the user fees and interest, or any fees or charges, the District may shut off or discontinue water service to the property after providing notice of hearing on the proposed termination of service and after a hearing has been held and a decision has been made by the Board to discontinue service.

8.7 Notice and Hearing

In all cases except for cases involving an imminent hazard to the health, safety or welfare of the residents or visitors of the District, or to the District's facilities, prior to the involuntary termination of service by the District, the District must give written notice to the Owner of the reason for the termination and advising the Owner that it may wish to attend a hearing on the disconnection or termination. Such notice shall be deemed complete and received upon the delivery of such notice to the Owner's residence or business if located within the District and mailing notice to the Owner's billing address if the Owner neither resides nor does business within the District. Any hearing will be held before the Board, and the Owner shall have an opportunity to present testimony and evidence. The Board's decision shall be final.

8.8 Activation of Terminated Service

No activation of terminated service shall occur until all fees and charges due the District are paid in full, including the fee for reactivation of involuntary terminated service. Activation shall be performed by District personnel only.

8.9 Delinquent Account Collection Costs

The Owner of any premises served shall also be liable for and shall reimburse the District for all costs incurred in connection with the collection of any fees, charges, penalties or other sums payable for the provision of water equipment or service to the premises, or in connection with the enforcement of these Rules and Regulations, including reasonable attorney fees, whether or not suit is brought. The District's statutory lien shall extend to and secure all such costs and other sums owed to the District

8.10 Costs for Service Outside of District

Rates for any water service provided outside the District boundaries as approved by the Board of Directors shall be double the rate for service within the District boundaries.

8.11 Certification to the Grand County Treasurer

In addition to or as an alternative to the other remedies provided in these Rules and Regulations, in the event that any of the District's tolls, rates, charges or fees are not paid when due, including, but not limited to, any quarterly user fee or tap fee, the Board may authorize the District's Manager to certify such delinquent amounts to the Treasurer of Grand County for collection in accordance with CRS § 32 1 1101(1)(e). Upon certification, the Treasurer of Grand County shall collect and remit such delinquent amounts to the District in the manner provided by law for the collection of general property taxes. The Treasurer of Grand County may impose a fee and add to the amount of such delinquency to defray the costs of collection.

SECTION NINE – INCLUSIONS/EXCLUSIONS

9.1 Procedures for Inclusions

The District is governed by Colorado Revised Statutes, Section 32-1-401 with regard to inclusion of additional real property into the District.

The Owner(s) of any real property capable of being served with facilities of the District may file with the Board a Petition in writing, pursuant to a form provided by the District, requesting that such property be included in the District. The Board shall act on said Petition pursuant to said Statute.

9.2 Inclusion Fees

The Petitioner is responsible for the payment of all fees and expenses associated with said inclusion process. The District may require the Petitioner to deposit an estimated cost as determined by the Board of Directors upon acceptance of said Petition.

9.3 Land Owner Requirements for Service

All land owners seeking to include their property within the District shall install water mains and any appurtenances therewith at land owners' expense and in accordance with the District's Rules and Regulations, and shall transfer said water mains and appurtenances free and clear to the District upon inclusion.

9.4 Procedures for Exclusions

The District is governed by Colorado Revised Statutes, Section 32-1-501 with regard to exclusion of real property from the District.

The land owners may file with the Board a Petition, in writing, pursuant to a form provided by the District, requesting that such property be excluded from the District. The Board shall act on said Petition pursuant to said Statute.

9.5 Exclusion Fees

The Petitioner is responsible for the payment of all fees and expenses associated with said exclusion process. The District may require the Petitioner to deposit an estimated cost as determined by the Board of Directors, upon acceptance of said Petition.

SECTION TEN: TECHNICAL SPECIFICATIONS, WATER SYSTEM CONSTRUCTION STANDARDS AND MINIMUM DESIGN CRITERIA

Minimum design standards, in conjunction with the Rules and Regulations, shall apply to the installation, operation, and maintenance of all potable water facilities, and to any and all other installations, repairs, replacements or other work on water facilities connected to or receiving service from the District. The design, construction and installation of new elements of infrastructure shall be administered and enforced by the District.

10.1 Authority

The administration, interpretation and enforcement of these minimum design standards shall be carried out by the District, acting through its District Manager or Chief Operator, as applicable. Any appeal and any request for variance or waiver shall be directed to the governing body of the District.

10.2 Revisions, Amendments or Additions

These minimum design standards may be revised, amended, or added to from time to time by the Board of Directors. Such revisions, amendments and additions shall be binding and of full force and effect when approved by the Board of Directors of the District.

10.3 Local Distribution System Standards

Local water facilities are considered to be engineered improvements, which are designed for specific applications. All designs, drawings and specifications must be prepared by, or under the direction of a Professional Engineer registered in Colorado, whose seal must be on a record set of documents. Local distribution systems are the responsibility of the Contractor and/or Developer, for the design and construction and the costs thereof and for payment of actual costs of design reviews.

The standard details and specifications contained herein are minimum design standards, which the District will accept in order to facilitate perpetual operation and maintenance procedures. In addition to these standards, the Professional Engineer must also design in accordance with the minimum standards of other applicable regulatory agencies. In cases of conflicting standards or requirements, the District will determine which requirements govern.

Review and approval of local facilities designs by the District, its Engineer, or other agencies shall not relieve the Contractor's Engineer from responsibility for adequate design. Contractors working for the District must perform all work between 8:00 a.m. and 5:00 p.m., Monday through Friday. No work will be allowed after these hours or on Saturday, Sunday or Holidays without advance approval from the District. Work performed outside of regular week day hours will require a

District Inspector to be on-site to oversee the project. The Contractor will be responsible for the compensation of the on-site inspector at a predetermined rate.

A District Inspector must be present to approve all taps before any trench is backfilled. If a tap is backfilled without being inspected by the District, the District may impose fines and/or require that the water line be dug up and exposed so that the District Inspector can approve it.

10.4 Design Documents for Main Line Construction

The following defines the process and minimum requirements for preparing and submitting the design documents:

A. Prior to the construction or installation of any water main extension proposal, the Contractor shall submit design documents to the District for review and approval. [The Contractor is encouraged to submit preliminary designs for review of the overall layout, prior to producing this set of design drawings for review.] Each review package submitted shall consist of four (4) blackline drawings, and a cover letter describing the project. Additional blackline copies may be required. The Contractor must also make an independent submittal to the Fire Protection District, which has its own requirements for submitting review packages. The District and/or its Engineer may request additional documentation or calculations, depending on the complexity of the application. Blackline drawings submitted for approval must be stamped and signed by Contractor's Engineer.

B. Unless otherwise approved by the District, all design drawings shall be on 24" x 36" bond, using ink for all background information and permanent pipeline work. Drawing scale for area plans shall be 1" = 50'.

C. Construction may not begin until the Design Documents have been approved by the District and the Fire Protection District. The Contractor must have a copy of the signed, approved design documents in its possession at the construction site.

D. After completion of construction, the Contractor/Developer shall provide to the District a complete set of record drawings ("as-builts") for the facilities. The record drawings shall show sufficient dimensioned ties to reasonably permanent surface features for all buried facilities to allow for future locating. The record drawings shall be mylar transparencies suitable for blackline reproductions. Record drawings shall be in general conformity to the Standard

Drawing "Typical As-Recorded Drawing Information," Drawing W.2. One blackline copy of the record drawings, stamped and signed by the Contractor/Developer's Engineer must also be

submitted for the District's records. The Contractor/Developer shall also submit an electronic media copy to the District in a version approved by the District.

10.5 Required Easements for Main Line Construction

Where water mains are to be located outside of the public right-of-way, the Contractor shall be responsible for obtaining easements required for the construction, maintenance, and operation of the facilities. The District may not accept alignments that could present access or construction problems in present or in the future (e.g., steep slopes or difficult vehicular access).

The legal description for the easements shall be prepared by the Contractor's Engineer. Easements shall be in a form acceptable to the District and shall be shown on the construction drawings. The District will not approve the design documents until all required easements have been deeded to it.

In general, the minimum width of easements for pipelines shall be 30 feet, 15 feet on either side of the pipeline. Temporary construction easements shall have a minimum width of 40 feet, 20 feet on either side of the pipeline. Wider easements may be required for deep sections of pipeline, multiple lines, steep terrain, or where otherwise required by the District.

10.6 Potable Water Distribution Systems

This section defines the minimum design criteria and materials specifications for the Design Documents.

A. Demands

1. Domestic Water Demands

	Peaking Factor	gpd/SFE	gpm/SFE
Average Day Demand		350	0.24
Max Day Demand	2.0	700	0.49
Peak Hour Demand	4.0	1,400	0.97

2. Fire Flow Demands

	Demand, Gpm	Duration, Hrs
Residential	1,500	2
Non-residential	2,500	3

B. Design/Sizing

Water mains shall be designed to meet the most stringent of the following conditions:

1. Peak hour demand with maximum design velocities in each pipeline no greater than 5 fps and residual pressures not less than 40 psi at any point of the distribution system, or

2. Maximum day demand plus fire flow demand (as determined in conjunction with ISO guidelines) with maximum design velocities in each pipeline no greater than 10 fps and residual pressures of not less than 20 psi at the hydrant.

3. The normal minimum size water distribution main shall be 8 inch, or 6 inch for short looped lines in single-family residential areas. 6-inch mains may be individually approved by the District for dead-end mains serving no more than 15 residences with a fire hydrant near the end of the line, if this location and delivery rate meets the requirements of the Fire Protection District.

4. Water main sizing and connections shall be reviewed with the District's Engineer prior to final detailing and drafting. The systems shall be designed to maximize interconnections and strengthening of the District's water system. Where certain lines may also have a transmission function in the opinion of the District, the District may direct that such lines be oversized, and the Design Engineer shall so design the system.

5. Colorado regulations normally require a 10 foot minimum horizontal separation between water, sewer and irrigation water mains. When located in public streets, potable water pipelines shall normally be located about 10 feet north or east of, and parallel to, the roadway centerline. Curved water line alignments are to be avoided if the water line is laid in the same easement or roadway as a sewer line. According to standard practice, water lines shall have 10 feet of horizontal separation from sewer lines, using fittings to make direction changes parallel to sewer line.

6. Whenever a crossing must occur where an irrigation water or sewer main passes within ten feet horizontally of the water main, and where the water main is not at least 18 inches vertically clear above the irrigation water or sewer main, special construction will be required in accordance with the Standard Details "Sewer Crossing Water Line Detail," Drawing W.3, and "Pipe Encasement Detail - Sewer," Drawing W.4. Adaptor couplings used in joining sections of sewer, per Drawing W.3, are to be Smith-Blair Style 411 steel pipe couplings or approved equal. The coupling's sleeves and followers are to be steel with interior and exterior epoxy coatings. Coupling bolts shall be high strength, low alloy steel meeting the requirements of ASTM A325, Type 3. These coupling assemblies are subject to the same requirements for polyethylene sheathing as specified for ductile-iron pipelines.

10.7 Pipes, Valves and Fittings for Water Main Construction

A. Pipes

All water mains shall be ductile-iron or C-900 PVC pipe. Pipe furnished shall be manufactured in accordance with AWWA C150. Pipe furnished shall be special thickness Class 52. Pipe joints shall be push-on type conforming to AWWA C111. Ductile iron pipe shall have a cement mortar lining meeting AWWA 104 and bituminous exterior coating.

B. Fittings

Fittings shall be ductile-iron or cast-iron, minimum 250 psi minimum working pressure, conforming to AWWA C153 or C110 with mechanical joint connections meeting AWWA C111. Lining and coating shall match pipe. Electrical conductivity (Pre-welded tabs, tracer wire, or other pre-approved means) shall be maintained throughout the entire distribution system, to facilitate later location of buried pipelines. Tabs must be corrosion-free, primed and painted at the factory prior to delivery to the site.

C. Sheathing

All ductile-iron pipelines, valves, and fittings shall be polyethylene sheathed in accordance with AWWA C105, 8 mil minimum thickness. Installation shall comply with Drawing W.5,

“Polyethylene Wrap Detail.” In certain circumstances and with technical documentation, the District may waive sheathing requirements.

D. Line Valves

Line valves shall be provided to allow isolation of parts of the system for maintenance or repair. They are required approximately every 600 feet, or more frequently at intersections of mains to allow isolation of loops and branches.

E. Buried Valves

Buried valves, 12 inch and smaller, shall be resilient wedge, non-rising stem, bronze mounted gate valves with mechanical joint ends conforming with AWWA C509. Valves shall have 2 inch square operating nuts and open left (counterclockwise rotation). Valves shall be Mueller, Clow, Waterous, or approved equal.

F. Valve Boxes

Each buried valve shall be provided with a cast-iron valve box and round cover. The box shall have a minimum inside diameter of 5 1/4 inch and be adjustable in length and of the screw type. The word "WATER" shall be cast on the cover. Valve boxes shall be “wide oval base” by Tyler, Clow, or approved equal. Valve boxes shall allow for at least 3 inches additional extension above the level required for final grade at the time of installation. The top of all valve stems (including extensions) shall be located between 36 inches and 48 inches below final grade. Installation shall comply with Drawings W.11A and W.11B, “Standard Fire Hydrant Detail.”

G. Fire Hydrants

Fire hydrants shall be *mountain specified hydrants* of the dry barrel type and conform to AWWA C502. Hydrants shall have a 5 1/4 inch main valve, two 2-1/2 inch hose connections and one 4 1/2 inch pumper connection. Height of connections shall comply with Drawings W.11A and W.11B, “Standard Fire Hydrant Detail”. Hydrants shall have 6 inch mechanical joint connections and safety traffic flange. Fire hydrants shall be Mueller Centurion No. A-423, Waterous Pacer WB-67-250 with bronze seat ring, or approved equal.

H. Blow-offs

Blow-offs shall comply with Drawing W.6, “Blow-Off Installation for 12" and Smaller Pipe.” The top of all blow-off valve stems (including extensions) shall be located between 36 inches and 48 inches below final grade.

I. Air Release Valves

Shall be provided at high points in the water distribution system. This may take the form of a fire hydrant or 2 inch blowoff (both manually operated), or an automatic air-vacuum valve. The proposed location and means must be pre-approved by the District.

10.8 Water Main Installation – Minimum Requirements for Design Documents.

A. Pipeline Installation

Water mains shall be installed in accordance with the Design Documents that have been approved by the District. The minimum bedding and backfill requirements for water mains and appurtenances shall be as shown on Drawing W.7 "Water Main Bedding and Backfill Detail". The minimum cover shall be 8 feet from top of water line to finished grade. Pipelines shall not be placed deeper than 10 feet without prior approval by the District. A minimum of seven (7) feet of cover will be allowed if at least two inches of an approved pipeline insulation is provided, per Drawing W.7. If insulation is installed, use approximately 6 inches of sand or squeegee for the pipe zone materials above and beneath the insulation to protect it from breakage during backfill.

If the bottom of the excavation is soft or unstable, and in the opinion of the District, is not a satisfactory support for the pipeline, further depth and/or width shall be excavated and refilled to 6 inches below the pipe outside diameter (excluding bells) with Trench Stabilization Material, as specified in "2.6.2 Pipe Bedding And Backfill".

All pipeline fittings (i.e., bends, tees, plugs, and caps) shall be installed with concrete thrust blocks adequately designed for the specific application. Thrust blocks shall be cast-in-place from concrete having a minimum compressive strength of 3,000 psi. Minimum requirements for thrust blocks are as shown on Drawing W.8 "Concrete Thrust Blocks."

Alternate means of thrust restraint may be considered and approved for use where proved to provide similar restraint. Supplemental restraint may also be required where the Engineer believes the soil bearing pressures to be inadequate, or where the Engineer is concerned about subsequent movement due to slope or other conditions of service. See Drawing W.9, "Mechanical Joint Restraint Detail", and Drawing W.10, "Length of Restrained Pipe". Valves near a fitting must be tied back to that fitting, using rodding or mechanical joint restraint.

B. Pipe Bedding and Backfill

1. Trench Zones: The terms "Bedding Zone", "Pipe Zone" and "Backfill Zone" shall refer to the trench zones identified in the Standard Details, "Water Main Bedding and Backfill Detail", Drawing W.7.

a. Bedding Zone. The bedding zone shall consist of all material placed below the pipe invert or, when permitted by the District's Engineer, the native materials graded and prepared for direct placement of the pipe.

b. Pipe Zone. The pipe zone shall consist of all material placed above the pipe invert to an elevation shown on the detail.

c. Backfill Zone. The backfill zone shall consist of all material above the pipe zone.

2. Material: All bedding and backfill material shall be approved by the District's Engineer. All bedding and backfill material shall be free of frozen material, organic material and debris. The materials to be used in each trench zone are indicated on the Standard Detail, Drawing W.7, and these materials are described below. All materials may be subject to gradation tests and compaction tests prior to approval of the use of that material as directed by the District's Engineer. The test results shall be submitted to the District's Engineer for approval and verified as to their accuracy. These tests shall be performed at no cost to the District or its agents.

a. Sand Bedding or Sand Backfill Material. This material shall be a clean, well-graded sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand

Sieve Size	Total Percent Passing by Weight
3/8-inch	100
No. 4	70 - 100
No. 8	36 - 93
No. 16	20 - 80
No. 30	8 - 65
No. 50	2 - 30
No. 100	1 - 10
No. 200	0 - 3

b. Roadbase Bedding Material or Roadbase Backfill Material. This material shall be Class 6 aggregate base course as specified by the State of Colorado Department of Highways; and shall meet the following gradation:

Sieve Size	Total Percent Passing by Weight
3/4-inch	100
No. 4	30 - 65
No. 8	20 - 55
No. 200	3 - 12

c. Squeegee Sand. This material shall be clean, well graded and conform to the following limits when tested by means of laboratory sieves:

Sieve Size	Total Percent Passing by Weight
3/8-inch	100
No. 4	20-80
No. 8	10-25
No. 16	0-10
No. 200	0-2

With this material, depending on the nature of the surrounding soils and ground water conditions, the District may require a geotextile envelope around the backfill zone and/or the installation of clay dams in the trench. Clay dams, if required, will typically be placed at about one per 400 feet of waterline.

d. Granular Bedding or Granular Backfill Material. This material shall be imported crushed rock or angular surfaced gravel and meet the following gradation (ASTM D448, No. 67):

Sieve Size	Total Percent Passing by Weight
1-inch	100
3/4-inch	90-100
3/8-inch	20-55
No. 4	0-10
No. 8	0-5

With this material, depending on the nature of the surrounding soils and ground water conditions, the District may require a geotextile envelope around the backfill zone and/or the installation of clay dams in the trench. Clay dams, if required, will typically be placed at about one per 400 feet of waterline.

e. 7/8-inch Aggregate Material:

Sieve Size	Total Percent Passing by Weight
12-inch	100
1-inch	90-100
3/4-inch	60-80
3/8-inch	0-15
No. 4	0-5

With this material, depending on the nature of the surrounding soils and ground water conditions, the District may require a geotextile envelope around the backfill zone and/or the installation of clay dams in the trench. Clay dams, if required, will typically be placed at about one per 400 feet of waterline.

f. Select Material. Select material shall not be permitted unless authorized by the Engineer. This material shall consist of suitable material screened from the excavated earth having no rocks or stones greater in size than 2 inches for ductile iron pipe (DIP) or reinforced concrete pipe (RCP) and 3/4-inch for all other pipe.

g. Trench Stabilization Material. This material shall be a 3/4 to 12-inch uniformly-graded, crushed rock or concrete aggregate.

h. Backfill Material. Backfill material shall consist of suitable material from the excavated earth, meeting all the requirements of the Specifications.

No boulders over 6 inches in any dimension shall be allowed in the backfill of the trench.

C. Bedding and Backfill Installation

1. Compaction

Unless accurate results cannot be obtained, the compaction requirements shall conform to maximum dry density according to ASTM D698, Moisture-Density Relations of Soils (Standard Proctor). When the ASTM D698 test is not applicable, the percentage compaction requirements shall conform to ASTM D2049, Test for Relative Density of Cohesionless Soils.

The Contractor is responsible for providing (at no cost to the District) adequate materials testing and/or geotechnical engineering resources to provide proper Quality Control and response to Quality Assurance directives by the District or its agents.

When required by the District's Engineer, the Contractor shall excavate backfilled trenches for the purpose of performing compaction tests at locations and depths required by the District's Engineer. The Contractor shall be responsible for reinstalling and compacting the test excavations at no additional cost to the District.

2. Bedding Zone Installation.

Bedding material shall consist of the material on which the pipe is placed in accordance with the Standard Detail, Drawing W.7. Bedding material shall be placed to the required elevation of the pipe invert. Tamping equipment shall be used to thoroughly tamp the bedding material to a minimum of 95 percent maximum dry density (Standard Proctor) or to 75 percent relative density. The moisture content of the material shall be within 2 percent of optimum.

3. Pipe Zone Installation.

After bedding material has been placed and approved by the Engineer and after the pipe has been installed and approved by the Engineer, the pipe zone backfill shall be installed to an elevation shown on the Standard Details.

The backfill material shall be as specified on the detail and shall be placed and compacted in distinct, separate lifts not to exceed 12 inches of loose depth; except that the first loose lift shall not be higher than the pipe centerline (springline). If select backfill materials are permitted in this zone by the Engineer but acceptable select backfill material (suitable for placement within 12 inches of the pipe barrel) is not available at any particular location, the Contractor shall use imported granular backfill material. Compaction shall meet the requirements of "Bedding Zone Installation", utilizing T-bars or mechanical tamping equipment.

4. Backfill Zone Installation.

Unless otherwise provided in the Design Documents, the following method of installation shall apply. After the pipe zone backfill has been placed and approved, the trench shall be backfilled. All backfill above the pipe zone backfill shall be carefully placed in the trench in lifts no greater than two feet. Each lift shall be compacted by mechanical equipment to 90 percent of maximum laboratory dry density (Standard Proctor). After the trench is backfilled to the ground surface, a loaded dump truck or loader placed in the trench line shall compact the backfill by its wheel load. No less than two passes shall be made. If the backfill is depressed below the finished grade

elevation, the depressed area shall be refilled and compacted. The backfill shall be mounded higher than the adjacent ground to allow for settlement.

5. Backfill Zone Installation in Roads and Streets.

The Contractor shall abide by all Grand County Road and Bridge Department and/or CDOT requirements for excavation in County or State roads and rights of way.

The Contractor may request approval of alternate means of compaction. Such request must be submitted to the District's Engineer in writing. Approval of the compaction method will be made by the Engineer only in writing. Use of specified or approved compaction methods does not relieve the Contractor from providing a completed project meeting the intent of this specification.

D. Maintenance of Backfill.

All backfill shall be maintained in a satisfactory condition and all places showing signs of settlement shall be filled and maintained for a period of two (2) years following the date of final acceptance of all work performed. When the Contractor discovers or is notified by the Engineer or the District that any backfill is not in compliance with these requirements, the Contractor shall correct such condition at once. Any utilities and road surfacing damaged by such settlement shall be repaired by the Contractor to the satisfaction of the District and its Engineer. In addition, the Contractor and/or Developer shall be responsible for the cost to the District of all claims for damages filed with the Court and actions brought against the said District for, and on account of, such damage.

E. Erosion Control

Erosion control is the responsibility of the Contractor and shall conform to guidelines as recommended by the Grand County Department of Planning and Zoning. Re-vegetation is required upon completion of all projects in the District.

10.9 Fire Hydrant Installation

Fire hydrants shall be located as required by the District and the Fire Protection District. The Contractor shall be required to obtain the approval of the Fire Protection District for fire hydrant locations, and to provide documentation of that approval to the District. Fire hydrants shall be installed in accordance with the drawing "Standard Fire Hydrant Detail," Drawings W.11A and W.11B.

10.10 Water Main Line Testing

All finished water main lines, after concrete thrust blocks are in place, shall be pressure and leakage tested at not less than 150 psi for a two-hour period. If working pressure is greater than 100 psi, the test shall be performed at 1.5 times the expected working pressure. Unless approved by the District's Engineer, no lines longer than 1200 feet shall be tested at one time.

No pipeline installation will be acceptable until the leakage is less than the amount computed by the following formula:

$$L = \frac{SD(P)^{0.5}}{133,200}$$

Where:

- L = Allowable leakage in gallons (per hour)
- S = Tested length of pipe (feet)
- D = Nominal diameter of pipe, inches
- P = Average test pressure during the test, psi

10.11 Disinfection

All water piping shall be disinfected in accordance with AWWA C601 after all construction work has been completed. Chlorine shall be added to the water at the necessary locations in the amount to form a 50 ppm free chlorine residual. The chlorine solution shall be left in the pipelines for not less than 24 hours, during which time all valves and fire hydrants shall be operated in order to disinfect the appurtenances. All chlorination work must be done in the presence of a District representative. At the end of 24 hours, a bacteriological test is to be performed to assure adequate disinfection, at the cost of the Contractor. Special provisions (at no additional cost to the District) must be made to assure any highly chlorinated water is not discharged to the ground. The Contractor must submit the "method of disposal" for this chlorinated water to the District's Engineer for written approval prior to any testing.

10.12 Electrical Continuity

The Contractor must demonstrate, to the satisfaction of the District, that all water mains constructed have electrical continuity between valves, hydrants and appurtenances either through the pipe itself or through the use of tracer wires.

10.13 Checklist for Acceptance of Main Line Facilities

The Contractor shall complete and submit the following checklist for preliminary acceptance of the facilities to the District's Engineer for written approval after construction and prior to any service connections.

- A. Construction of all facilities completed to the approved plans and specifications.
- B. All facilities tested to District Standards and accepted by the District's Engineer.
(Furnish copies of soils compaction and materials tests along with bacteriological test results).
- C. Permanent survey monuments set at the corners of all easements.
- D. Record drawings meeting District Standards and sealed by the Design Engineer.
- E. Furnish a summary of total construction costs (including design costs) of all applicable water facilities. Include only facilities to be deeded to the District.
- F. Warranty Deed or other written conveyance instrument for all lands and facilities to be owned by the District.
- G. Two-year warranty to begin after the date of preliminary acceptance, except that if deficiencies are identified and repaired, a new two year warranty for the repaired work is to begin starting on the date of preliminary acceptance of the repaired work.
- H. Payment of all fees and confirmation from the Contractor that it is not in default under any agreements with its sub-contractors or suppliers.

10.14 Water Service Line Standards

A. Prior Approval

No service line may be constructed without prior approval of the District. The Applicant must provide adequate information describing the nature of the building or development to be connected, the proposed service line size, and the proposed connection point of the service line to the water main.

B. Sizing Responsibility

The sizing of water service lines shall be the responsibility of the Applicant.

C. Ownership

The service line, from the main to the point of connection to the building(s) is the property of the Owner of the lot served. Repairs are the responsibility of the Owner, and the Owner is also responsible for obtaining necessary District and Grand County Permits to complete the repairs.

D. Applicable Code Requirements

All water service lines are to be constructed in accordance with applicable codes and the minimum standards and criteria presented in this document. The detail, “Service Line, Stop Box and Inside Meter Installation”, Drawing WS.1, is provided for standardization purposes only, and represents minimum design standards, which may require upgrading for specific applications.

E. Backflow Prevention Device

Each water service line shall have a backflow prevention device approved by the District and must meet AWWA standards for backflow prevention devices.

10.15 Potable Water Services

A. Sizing

Sizing for potable water services shall be made in general conformance with AWWA Manual M22, "Sizing Water Service Lines and Meters." When requested by the District, the Applicant shall, at his expense, furnish data, plans, calculations, or other information as required for the evaluation of the service size.

B. Service Connections

No connection between the water system of the District and the water facilities of the Owner may be made except in a public street adequate to accommodate this connection or in a similar place to which the District has a free right of access as it would have in a public street, and which otherwise is suitable for buried pipe.

If a water service line passes under a sewer main, the sewer is to be encased per Drawing W.4 or modified to have “no bell” construction per Drawing W.3.

The water service shall be laid at uniform grade and in straight alignment.

C. Cross Connections

Cross connections of any type that permit a backflow condition from any source other than the District's potable water mains are prohibited.

D. Water Service Materials

1. Water Service Line

The water service line shall be Type K, soft copper conforming to ASTM B88, unless otherwise specifically approved by the District. Fittings shall be brass or copper alloy. Connections shall be

by compression type fittings and no soldered joints shall be permitted underground.

2. Corporation Stops

Corporation Stops shall be used for the connection of services (2-inch and smaller) to the water main. Corporation Stops shall be brass and conform with AWWA C800. The inlet shall be standard AWWA corporation stop inlet thread and the outlet shall be for compression type "K", 1 inch or less, copper service pipe. Corporation Stops shall be Mueller H-15000, Ford F-600, or approved equal, provided with an insulating coupling for potable service.

3. Curb Stops

Curb Stops (sometimes called "stop boxes") shall be placed per Drawing WS.1 for all services 2 inch and smaller. Curb Stops shall be brass and conform with AWWA C800. Connections shall be for compression type "K" copper service pipe. Curb stops shall be Mueller H-15204, Ford B-22, or approved equal.

4. Service Saddles

Service saddles shall be used for all water taps on any pipe other than DIP. For DIP, ¾ inch taps may be made without using a service saddle on 6 inches pipe; ¾ inch and 1 inch size taps may be made without service saddles on pipe 8 inch size or larger. All other DIP taps shall be made with a double strap bronze saddle, Smith Blair No. 357, Rockwell No. 323, or approved equal.

10.16 Construction of Water Service Line

The service line connection shall be constructed as shown in Drawing WS.1, "Service Line, Stop Box and Inside Meter Installation."

All excavations for water service installations shall be adequately guarded with barricades and lights so as to protect the public from hazards per existing Governmental requirements. Utilities, streets, sidewalks, parkways, and other public or private property disturbed in the course of work shall be restored to their original condition in a manner satisfactory to the District or other affected owners.

10.17 Water Service Line Excavation, Bedding and Backfill

All excavations required for the installations of a water service shall be open-trench work, unless otherwise approved by the District. The services shall be bedded and backfilled in accordance with the minimum cover and/or insulation requirements of Section 3.2.2 and "Water Main Bedding and Backfill Detail," Drawing W.7. The bedding and pipe zone material within 12 inches of the water service line shall be select native soils with 3 inch maximum diameter rock. Backfill

materials shall be select native soils with 6 inch maximum diameter rock. If insulation is installed, use approximately 6 inches of sand or squeegee for the pipe zone materials above and beneath the insulation to protect it from breakage during backfill.

EXHIBIT "A"

Account No. _____

NORTH SHORE WATER DISTRICT
PO BOX 576
GRAND LAKE, CO 80447

CONNECTION AND INSPECTION PERMIT

Name of Owner(s): _____ Effective Date: _____

Physical Address of Property: _____

Legal Address: Lot: _____ Block: _____ Subdivision _____

Permit Paid By: _____ Inspection No.: _____

Company or Person approved by District for tapping of water main: _____

INSPECTION:

General Location of Water Line: _____

Type of Bedding: _____

Size of Water Service Pipe: _____ Depth and size of Water Main: _____

Were any other utilities found in the same trench: ___ Yes ___ No

If Yes, explain: _____

Location of Curb Valve: _____

Inspector: _____

Date: _____

Receipt of Applicant's Permit Fee in the amount of \$25.00 is hereby acknowledged.

Check No. _____

NORTH SHORE WATER DISTRICT

By: _____

Expiration Date: _____

EXHIBIT "B"
WATER TAP FEE

Water taps are charged according to pipe sizes, as follows:

5/8 Inch and 3/4 Inch:	\$6,600.00	Single Family Dwelling
1 Inch	\$13,000.00	
1 1/2 Inch	\$26,000.00	
2 Inch	\$52,000.00	

Any other dis-attached structures on the same parcel of land with a single family dwelling, but not considered single family, i.e. shed, garage, workshop and the like shall be assessed at a rate of one-half of the single family dwelling rate.

**THERE IS A MINIMUM CHARGE OF \$6,600 TAP FEE PER ACCOUNT
REGARDLESS OF ITS ASSESSMENT**

EXHIBIT "C"

Account No. _____

NORTH SHORE WATER DISTRICT
PO BOX 576
GRAND LAKE, CO 80447

APPLICATION FOR WATER TAP

Name of Applicant: _____

Mailing Address: _____

Telephone Number: _____

Applicant(s) (owns) the following property within the boundaries of the North Shore Water District for which a water tap is hereby requested:

Lot: _____ Block: _____ Subdivision: _____

Street Address: _____

If property is not within a platted subdivision, provide metes and bounds legal description: _____

Briefly describe the nature and use of existing or proposed improvements on the above-described property for which a water tap is requested: _____

Signed: _____

Date: _____

(FOR DISTRICT USE ONLY)

The foregoing Application is hereby approved and a ____ Inch Water Tap for the above-described property is hereby issued.

The foregoing Application is hereby approved and a one-half single family Water Tap assessment for the above-described property is hereby issued.

NORTH SHORE WATER DISTRICT

By: _____

Date: _____

EXHIBIT "D"
WATER RATE SCHEDULE

These rates are applicable to calendar quarters and are due in advance of service – January 1, April 1, July 1, and October 1 of each year. All water use charges to the property shall be billed directly to the owner of record and when billed, shall constitute an automatic lien on the property served, until paid in full per CRS 32-1-1001(1)(d)(II)(j)(I).

RESIDENTIAL CUSTOMERS WITHIN THE DISTRICT

Single family residences shall be billed at the rate of \$212.00 per quarter. A single family residence shall include guesthouses, apartments, and the like. These rates shall apply regardless of occupancy times.

Any other dis-attached structures on the same parcel of land with a single family dwelling, but not considered single family, i.e. shed, garage, workshop and the like, shall be assessed and billed a rate of one-half of the single family residence fee per quarter.

COMMERCIAL CUSTOMERS WITHIN THE DISTRICT

Lodges, Hotels and Motels:

- (a) The minimum rate of \$212.00 per quarter shall be charged to the owner/manage basic quarters.
- (b) The minimum rate of \$106.00 per quarter (or one-half of the single family residence rate) shall be charged to each rental unit. The rate shall apply regardless of occupancy times.

**ALL ACCOUNTS SHALL BE BILLED A MINIMUM \$212.00 PER QUARTER,
REGARDLESS OF ITS ASSESSMENT**