

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **Mary Rogren, General Manager**

Agenda: **February 10, 2026**

Date: **February 6, 2026**

Agenda Title: Consider Approval of Resolution 2026-01 Amending and Recodifying the Regulations Regarding Water Utility System Improvements, Including New and Modified Water Service Connections to Existing Water Mainlines.

Recommendation/Motion:

Adopt Resolution 2026-01 amending and recodifying the regulations regarding water utility system improvements, including new and modified water service connections to existing water mainlines.

Background:

The District's current regulations for water utility system improvements were last modified by resolution in 2003. This is a significant update and the amended regulations will provide more clarity for applicants required to complete a mainline extension or install a new water service. After this initial effort to bring the regulations up to date from 2003, future updates should take less effort.

Amended Regulations:

The regulations were modified and restructured to correspond to current workflow, current engineering practices, and industry standards. The modifications took place over numerous meetings with the General Manager, Administration, Engineering (EKI Environment and Water, Inc.), Operations, and Water Resources. The amended regulations will assist the District in effectively communicating requirements for mainline extensions and new or modified water services.

The amended regulations were restructured and include a Definitions section (A), a Water Utility System Improvements section that covers all the mainline extensions (B), a section on adding a Service Connection to an Existing Water Mainline (C), an Engineering and Construction section (D), and (E) Appeals section.

The following is a brief list of the modifications.

- 1) The title of the regulations was changed to Regulations Regarding Water Utility System Improvements, Including New and Modified Water Service Connections to Existing Water Mainlines. The name change also reflects the removal of the construction and materials section from the regulations.
- 2) The construction standards, approved materials, and standard drawings section was removed from the regulations and instead that section became the Standard Specifications and Standard Drawings document. This is now a stand-alone document. By keeping the Standard Specifications and Standard Drawings as a separate document, it allows the District Engineer and District staff the flexibility to update and create custom specifications if a development has unique site conditions, or if a specific material or pipeline appurtenance has been discontinued. It is not practical to create standards and drawings for every conceivable water utility installation. The most recent revisions were completed in June 2025 to include the District's Cross Connection Control Program and Plan requirements. These standards are revised routinely to keep up with changes to regulations, AWWA standards, materials, and product availability. If an applicant just needs to add a water service connection to an existing mainline, the Standard Specifications and Standard Drawings provide most of the information they will need for water and fire services.
- 3) Added language to help clarify the requirements for initial submittals, interim submittals, the final submittal, and the final acceptance procedures.
- 4) Removed dollar amounts for fees and charges from the regulations and refer applicants to the Rate and Fee Schedule. This will allow the applicant to look in one central document for all related fees for their development and make it easier to update fees.
- 5) The appeals section was added and it newly designates the General Manager to hear all appeals related to the regulations.
- 6) The definitions section was updated to reflect the changes in the regulations.
- 7) Required electronic (pdf) submittal documents (drawings) to reflect the District efforts to move away from paper.
- 8) Updated the "as-built" requirements to easily integrate into the District's geographical information system.
- 9) Updated the Engineering and Construction section.
 - a. Specified the minimum length of pipeline for pipeline extensions.
 - b. Removed outdated products (e.g., meter lids, fire hydrants, and valve boxes) from the regulations.

- c. Removed references to outdated backflow requirements and now reference the District's Cross Connection Control Program and Plan.
- d. Included revised maximum velocity (feet per second) requirements for pipelines.
- e. Updated sizing of water services and meters.
- f. Removed design criteria that referenced outdated standardized domestic daily demand and outdated fire flows.

10) Reference to the previous District Engineer – James Teter - was removed from the regulations.

11) Kept all references to Transmission and Storage fees. And kept the table depicting peak flow capacity, meter size, and equivalent water connections.

Next Steps

The District will post the amended regulations to the website. District Staff will focus their attention on modifying the General Regulations for Water Service and the Rate and Fee Schedule.

Fiscal Impact:

Any costs associated with the regulations will be borne by applicants.

Attachments:

- (A) Resolution 2026-01
- (B) Amended Regulations
- (C) Redlined Regulations
- (D) [Link to Standard Specifications and Standard Drawings](#) on the District's website

ATTACHMENT A

RESOLUTION No. 2026-01
A RESOLUTION OF THE
COASTSIDE COUNTY WATER DISTRICT
AMENDING AND RECODIFYING THE REGULATIONS REGARDING WATER
UTILITY SYSTEM IMPROVEMENTS, INCLUDING NEW AND MODIFIED
WATER SERVICE CONNECTIONS TO EXISTING WATER MAINLINES

WHEREAS, the Board of Directors of the Coastsde County Water District adopted the District's Regulations Regarding Water Service Extensions and Water System Improvements, Engineering and Construction Standards and Approved Materials as most recently amended in 2003 by Resolution No. 2003-11; and

WHEREAS, District staff, in conjunction with EKI Environment and Water, Inc., have evaluated these regulations and determined that they should be clarified, simplified, updated, and brought current to comply with District practices and procedures; and

WHEREAS, as part of this update, staff suggests that the title of these regulations should be changed to Regulations Regarding Water Utility System Improvements, Including New and Modified Water Service Connections to Existing Water Mainlines.

NOW, THEREFORE BE IT RESOLVED that the Board of Directors of the Coastsde County Water District hereby adopts the amended and recodified Regulations Regarding Water Utility System Improvements, Including New and Modified Water Service Connections to Existing Water Mainlines, which are attached and incorporated into this resolution.

PASSED AND ADOPTED this 10th day of February 2026 by the following votes of the Board of Directors:

AYES:

NOES:

ABSTAIN:

ABSENT:

Robert Feldman, President
Board of Directors

ATTEST:

Mary Rogren, General Manager
Secretary of the Board

ATTACHMENT B

UPDATED FEBRUARY 10, 2026 (based upon feedback from meeting with Facilities Committee on February 9, 2026).

ATTACHMENT B

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COASTSIDE COUNTY WATER DISTRICT

**REGULATIONS REGARDING WATER UTILITY SYSTEM IMPROVEMENTS, INCLUDING
NEW AND MODIFIED WATER SERVICE CONNECTIONS TO EXISTING WATER
MAINLINES**

Recodified through Resolution No. 2026-01

DRAFT – February 0310, 2026

A. DEFINITIONS.....	1
B. WATER UTILITY SYSTEM IMPROVEMENTS	3
1. Applicant's Responsibility	3
2. Initial Submittal - Tentative Development Maps, Drawings, and Data	<u>43</u>
3. Interim Submittal - Construction Plans, Specifications, and Other Documents ..	<u>54</u>
4. Final Submittal - Construction Plans, Specifications, and Other Documents.....	6
5. Water Supply, Storage, Treatment,Transmission and Distribution Facilities	<u>87</u>
6. Processing Fees and Deposits	8
7. Construction	<u>109</u>
8. Changes During Construction.....	<u>1244</u>
9. Easements and Property Rights	<u>1244</u>
10. "As-Built" Drawings.....	12
11. Final Acceptance	13
C. PROCEDURE FOR NEW AND MODIFIED WATER SERVICE CONNECTIONS TO EXISTING WATER MAINS	<u>1443</u>
D. ENGINEERING AND CONSTRUCTION STANDARDS	<u>1544</u>
1. General.....	<u>1544</u>
2. Basic Design Criteria	<u>1746</u>
E. APPEALS.....	<u>2423</u>

A. Definitions

Agent: The term "agent" means an applicant's engineer, legal counsel, or other consultant authorized to make decisions on behalf of the Applicant.

Applicant: Owner of property applying for water service

Approved Contractor's List: List of contractors approved by the District to construct Water Utility System Improvements, including water mainline extensions, water services, and fire services connecting to the District's water system.

"As-Built" or Record Drawing: A document that shows the final conditions of a completed Development, including all deviations, changes, and modifications made during construction that differ from the original design plans.

Assessor Parcel Number (APN): The San Mateo County Assessor's identification number for a specific property. The APN is used by the District to assign water connections to a property within the District's jurisdictional boundaries. Water connections are installed for a unique APN and cannot be shared.

Cross Connection Control Program and Plan (CCCPP): The plan and program prepared and implemented by the District in accordance with the requirements of the California Cross-Connection Control Policy Handbook to prevent backflow of water and/or other liquids, gases, or other substances into the public water system via a cross-connection, or interconnection between a potable water system and a non-potable source.

California Plumbing Code (CPC): This is part 5 of thirteen parts of compilation and publication of the California Code of Regulations, Title 24.

Development: The transformation of land or structures that involves water or fire service – from Coastsid County Water District - for residential, commercial, industrial, agricultural, or public purposes. It is generally managed through a cycle of planning, design, engineering, and regulatory approvals in cooperation with other local agencies

District: The Coastsid County Water District.

District Engineer: A qualified and licensed civil engineer retained by the District,

as deemed appropriate by the District in its sole discretion, acting either directly or through the District, acting within the scope of the particular duties delegated to them.

District Manager: The General Manager or Manager of the District or their assigned representative.

Mainline: A water pipeline owned and maintained by the District that is an artery of the District's distribution system and delivers water to smaller service lines that connect to individual customer connections. Also referred to as mains.

Maintenance Bond: A surety bond that guarantees a contractor will fix any defects in materials, workmanship, or design that appear during a specific maintenance or warranty period after a construction Development is completed.

Offsite: Located outside of the Development.

Onsite: Located within the Development.

Payment Bond: A surety bond that guarantees a contractor will pay its subcontractors, laborers, and material suppliers for their work on a Development.

Performance Bond: A surety bond that guarantees a contractor will complete the Development according to the terms of the Water Service Agreement.

Planning Authority: The determining authority for a given Development.

Proposal for Construction: A cost proposal for a licensed, qualified contractor to construct the Utility System Improvements.

Service Line: Smaller pipelines that connect from a water mainline to serve individual customers.

Site Utility Plans: Development's civil drawings that delineate the location and detail of all existing and proposed utilities.

SOPQ: Statement of Pre-Qualifications; required to be prepared according to the District's current "Request for SOPQ for Approved Contractors List" and submitted to the District by contractors requesting to be added to the District's Approved Contractors List.

Standard Specifications and Standard Drawings: The latest version of the Coastsides Water District's Standard Specifications and Standard Drawings.

Tentative Development Map: A map or maps that show the design,

improvements, and existing conditions of a proposed Development that meets the requirements of the Planning Authority.

Transmission and Storage Fee: The cost to establish water service is determined by the number of water connections required to provide water service to a Development. The number of water connections required is correlated with the size of the service. Water connections are assigned a designation of non-priority or priority, in conformance with the local planning authorities Local Coastal Program. Refer to the District's Rate and Fee Schedule for fees and charges.

Water Service Agreement: An agreement between the District and the Applicant that governs the terms and conditions for the District to provide water service.

Water Utility System Improvement: The modification of the District's water utility system (transmission, distribution, storage, and treatment) to provide water and fire service.

Water Utility System: The onsite and offsite water mainlines, service lines, fittings, valves and housing thereof, fire hydrants, manholes, storage facilities, pumping facilities, and all appurtenances thereto, as required for the District to provide water service for Developments. The Water Utility System does not include the water pipelines on the Applicant's side of the meter or the backflow prevention assemblies, all of which will be owned and maintained by the Applicant. Water Utility System is also referred to as "water system".

B. Water Utility System Improvements

1. *Applicant's Responsibility*

It is the District policy to require that improvements to its Water Utility System be done in accordance with the following procedures at the expense of those requesting an extension of service (i.e., Applicant).

2. *Initial Submittal - Tentative Development Maps, Drawings, and Data*

2.1 The Applicant shall submit to the District electronic Development maps, drawings, and other data sufficient in detail for the District to evaluate the Development with regard to water service. Maps and drawings shall be in PDF format and approximately 22" x 34". Based upon this submittal, the District will determine whether the proposed Development can be served and in what manner this may best be accomplished. This determination will be based upon an analysis of existing water supply, treatment plant storage, and transmission and distribution facilities capacity. The analysis shall be at the Applicant's expense and shall either be performed by the District Engineer or by a qualified and licensed civil engineer retained by the District, as deemed appropriate by the District in its sole discretion. The Applicant will be furnished with the design criteria to be utilized and a preliminary cost estimate for required Water Utility System Improvements prepared by the District Engineer. Any offsite water supply development, treatment, storage, or transmission and distribution facilities that may be required will be designed, at the Applicant's expense, by a licensed and qualified engineer selected by the Applicant and approved by the District. Proposed location and size of water lines need not be shown on the initial submittal. In addition, the District shall have received a planning or coastal development referral for the Development from the Planning Authority.

The initial submittal for Developments shall include the initial fee and contain the following minimum information relevant for the type of Development, such as:

- Tentative Development map showing the property lines, streets, and other dedicated rights of way; and
- Description of proposed Development that includes all relevant information relevant to water demand and Water Utility System Improvements; such as, number and location of single-family residences to be constructed, number and location of dwelling units for multi-family residences, number of students, number of employees, and irrigation requirements; and
- Development maps must show topographic contours and elevation of the highest

and lowest unit served and top floor elevation on multi-story buildings; and

- All available Site Utility Plans.

2.2 After the District has reviewed the initial submittal, the District will notify, in writing, the Planning Authority, if requested by the Applicant, that the Development is or is not within the service area of the District, and whether it can be feasibly served by the District. Copies will be sent to the Applicant and the District Engineer. This notification that the Development can be served does not constitute a commitment to serve water to the Development.

3. *Interim Submittal - Construction Plans, Specifications, and Other Documents*

3.1 After the District has informed the Applicant of required water service facilities, the Applicant may commence work on the detailed plans, specifications, and cost estimate for all required onsite and offsite Water Utility System Improvements. The Applicant shall acquaint themselves with District requirements as specified in these Regulations, the current version of the District's Standard Specifications and Standard Drawings, and all applicable County of San Mateo and City of Half Moon Bay standards. A copy of the current version of the District's Standard Specifications and Standard Drawings for installation of piping appurtenances is available free of charge at the District website and for a fee at the District office. All facilities shall be designed for low-cost maintenance and operation. The District Engineer will be available to the Applicant or Agent for the purpose of answering questions and confirming design details. Location of fire hydrants must be approved by the Coastside Fire Protection District.

3.2 This interim submittal shall consist of electronic copies of each of the following documents:

- (a)** Draft plans and specifications for onsite and offsite Water Utility System Improvements.
- (b)** Draft plans for building permits with water demand for each developable

lot, including fire sprinklers and irrigation systems.

(c) A draft utility site plan with the engineering drawings showing for each lot the service line and box locations of (1) Pacific Gas & Electric Co., (2) communications, (3) Coastsid County Water District, (4) United States Postal Service, (4) sanitary sewer and septic, (5) storm sewer and retention, and (6) cable/internet.

(d) Tentative Development Map, if modified from that included in Initial Submittal (new Development only).

The above documents will be reviewed by the District. The District will provide documentation to the Applicant indicating required modifications, if any, and whether any permits or waivers are needed from the California State Water Resources Control Board Division of Drinking Water (DDW) or other regulatory agencies. A minimum of 30 calendar days shall be allowed for this review. All documents that require modifications shall then be submitted for final review by the District as part of the final submittal.

3.3 Adequate water connections must be assigned to the developable lot(s) before the District will present the Water Service Agreement to the District Board for approval. The District and District Engineer will confirm the required water capacity as part of the interim submittal. The District shall also determine the nature, size, and location of all service connections and associated facilities (i.e., service lines, meters, backflow prevention assemblies, pressure reducing valves, etc.) based on the current submittals to the District.

4. *Final Submittal - Construction Plans, Specifications, and Other Documents*

4.1 After the District has reviewed the interim submittal, the Applicant may commence work on the final plans, specifications, and cost estimate for the required onsite and offsite Water Utility System Improvements. The District Engineer will be available to the Applicant's engineer for the purpose of answering questions and confirming design details. Location of fire hydrants must be approved by the Coastsid Fire Protection District.

4.2 This final submittal shall consist of electronic copies of each of the following documents:

- (a) Final plans and specifications for onsite and offsite Water Utility System Improvements.
- (b) Final plans for building permits with water demand for each developable lot, including fire sprinklers and irrigation systems.
- (c) Final utility site plan with the engineering drawings showing for each lot the service line and box locations of (1) Pacific Gas & Electric Co., (2) communications, (3) Coastside County Water District, (4) United States Postal Service, (4) sanitary sewer and septic, (5) storm sewer and retention, and (6) cable/internet.
- (d) A completed Water Service Agreement with all required information populated and all required attachments.
- (e) All required easements and deeds.
- (f) All required waivers and permits related to the Water Utility System Improvements. A separate and unique encroachment permit from the local public works authority is required for Water Utility System Improvements for work in the public right-of-way. The encroachment permit cannot be shared with other utilities or other work in the public rights-of-way.
- (g) Tentative Development Map, if modified from that included in Initial Submittal (new Developments only).

The above documents will be reviewed by the District. The District will provide documentation to the Applicant indicating required modifications, if any. A minimum of 30 calendar days shall be allowed for this review. All documents that require modifications shall then be submitted for final review by the District.

4.3 When all final documents are acceptable to the District, the Water Service Agreement, including the Development plans and specifications, will be presented to the District Board for approval. Board meetings are normally scheduled for the second

Tuesday of each month. This approval and execution of the Water Service Agreement by the District and Applicant constitutes a commitment by the District to serve water to the development, provided that the Applicant fully complies with all the requirements of the Water Service Agreement.

4.4 Following approval of the Water Service Agreement, the Applicant shall pay all fees and charges referenced to in the Water Service Agreement, which may include adequate Transmission and Storage Fees, plan check and inspection fees, and any applicable special fees and deposits as provided for by these Regulations.

4.5 A Water Service Agreement will be signed between the Applicant and the District within 45 days after board approval, provided that the Applicant has satisfied all the requirements.

5. *Water Supply, Storage, Treatment, Transmission and Distribution Facilities*

The District will provide water in the quantity and at the quality and pressure as is available. For Water Utility System Improvements requiring the Development of additional water supply, or construction of treatment plant capacity, distribution and transmission pipeline, and storage facilities, the total cost of these facilities shall be borne by the Applicant.

Design of all such facilities, including wells, treatment plants, dams, pumping stations, storage tanks, reservoirs, and transmission and distribution pipelines, must be accomplished by a qualified and licensed civil engineer selected by the Applicant and approved by the District. All costs, including environmental impact report preparation, engineering design, construction inspection, construction, land acquisition, and legal and administrative costs incurred by the District shall be borne by the Applicant.

6. *Processing Fees and Deposits*

6.1 The Applicant must pay the fees described below, and the amount of these fees are established in the current District Rate and Fee Schedule, which is available on the District's website.

6.2 Initial Filing Fee. Prior to processing of the initial submittal, the Applicant shall submit a filing fee with the District. This filing fee is not a deposit, and it is not subject to return if the Development is abandoned.

6.3 The Applicant shall pay to the District a Transmission and Storage Fee. The amount of this fee is based on meter size and peak demand in gallons per minute through the water service (see D. 2.8 (b) (6)), as described in the current District Rate and Fee Schedule.

6.4 All costs associated with environmental review and environmental document preparation shall be borne by the Applicant. The Applicant shall reimburse the District for all costs related to this environmental review, covering all legal, engineering, administrative, and other costs incurred by the District in the review of an environmental impact or similar report required by the proposed water service extension or water system improvement pursuant to applicable State or Federal law.

6.5 At least 10 (ten) days prior to the commencement of construction, the Applicant shall furnish to the District the following bonds:

(a) A Payment Bond in the amount of 100 (one hundred) percent of the Proposal for Construction amount, to guarantee payment of obligations referred to in Section 9550 et seq. of the Civil Code;

(b) A Performance Bond in the amount of 100 (one hundred) percent of the Proposal for Construction amount, to guarantee faithful performance of the terms of the Water Service Agreement; and

(c) A Maintenance Bond in the amount of 10 (ten) percent of the Proposal for Construction or the minimum bond purchase amount, whichever is greater, to guarantee against defective materials and faulty workmanship for a period of two (2) years from and after the acceptance of the work by the District.

The bonds shall be in a form satisfactory to the District. The surety and sureties must be qualified to do business in California.

7. Construction

7.1 Applicant shall commence installation of the Water Utility System

Improvements no later than as specified in the Water Service Agreement (up to three months after the date of the Water Service Agreement), subject to extension for force majeure events not the fault of the Applicant. The Applicant shall complete its installation of the Water Utility System Improvements within 12 months after the date of the Water Service Agreement. If installation has not commenced or has not been completed by such dates, the District may terminate the Water Service Agreement, unless the delay is solely attributable to force majeure events, such as fire, flood, or earthquake, which are beyond the control of, and not the fault of, the Applicant.

7.2 A minimum of twenty (20) days prior to the start of construction, the following requirements shall be met:

- (a)** The Applicant shall file a tentative construction schedule with the District.
- (b)** The Applicant shall provide the District with the bonds as described in the Water Service Agreement.
- (c)** The Applicant shall file with the District the insurance certificates as described in the Water Service Agreement.
- (d)** The Applicant shall file with the District the Proposal for Construction by a licensed qualified contractor for all Water Utility System Improvements.
- (e)** The Applicant shall submit the name and license number of the general contractor for the Development, names and license numbers of subcontractors, if any, who will construct Water Utility System Improvements. All contractors constructing Water Utility System Improvements including water mainline extensions, water services, or fire services connecting to the District's water system shall only be on the District's Approved Contractors List. Names of approved contractors are available from the District. To be added to the District's Approved Contractors List, a contractor must submit a fully complete Statement of Pre-Qualifications (SOPQ) based on the requirements of the District's current "Request for SOPQ for Approved Contractors List"

and be pre-qualified by the District. A copy of the current "Request for SOPQ for Approved Contractors" List is available by request from the District. The District will notify Contractors within 21 (twenty-one) calendar days after receipt date of the SOPQ if the Contractor meets the District's pre-qualification standards.

(f) The Applicant shall invite the District to a pre-construction meeting that shall take place at least 10 (ten) days prior to commencing construction.

(g) The Applicant shall submit all shop drawings and other construction submittals required by the District's Standard Specifications and Standard Drawings to the District. All shop drawings and construction submittals for Water Utility System Improvements shall be approved by the District Engineer prior to commencing construction.

7.3 Prior to water line construction, all road and easement areas where water lines are to be installed shall be staked and rough graded. All meter and valve box locations and finished grades shall be staked prior to water line construction to confirm that the boxes are set in accordance with the District's Standard Specifications and Standard Drawings relative to the finished grade for paved or non-paved areas.

7.4 The District shall observe and inspect facilities solely to protect the interest of the District and to determine if completed work is acceptable to the District and can be incorporated into the District system. No responsibility is assumed for the Contractor's operations or their safety practices. The Applicant is responsible for the correct location of facilities and for measurements and payments.

7.5 It will be the responsibility of the Applicant or their representative to notify the District at least ten (10) working days in advance of the proposed starting date, and to ascertain that the District Inspector is at the site of the work when Water Utility System construction begins. The Applicant shall not commence construction of Water Utility System Improvements unless the District Engineer or other authorized District inspector is at the site of the work when construction begins. If construction is not continuous, the District shall be notified at least 48 (forty-eight) hours in advance as to when construction will resume. Any work performed without knowledge or consent of

the District Inspector is subject to rejection by the District.

7.6 It will be the responsibility of the Applicant to file and obtain the necessary permits for the work. The Applicant is required to obtain permits specifically for the Water Utility System Improvement portion of the Development, independent from other aspects of the Development. The Applicant shall be responsible for completing all Water Utility System improvements within the valid permit periods.

8. *Changes During Construction*

8.1 Changes to the Water Utility System Improvements that are necessary to the work during construction shall be submitted to the District for review and approval prior to the incorporation in the work.

Changes to the site development plans that increase water fixtures or peak water demand shall be submitted to the District for review and approval.

8.2 The District may, at its discretion, waive all or portions of the submittal requirements, depending upon the complexity of the change.

9. *Easements and Property Rights*

Prior to acceptance of the final submittal, the Applicant will grant to the District all necessary easements and property rights deemed required by the District for pump stations, pipelines, treatment plants, wells, storage tanks, meters, hydrants, valves, and other sites of water facilities for the proposed Development. Pipeline easements shall be in accordance with Part D.2.4(g) of these Regulations. Recording of maps with public utility easements will not be sufficient. A separate deed for such easements shall be granted directly to the Coastsid County Water District or the Coastsid County Water District shall be named on the recorded tract map.

10. *“As-Built” Drawings*

The Applicant shall transmit the recorded Development Map in electronic PDF and AutoCAD formats of the completed improvements showing “As Built” conditions. “As-Built” drawings shall be submitted even if the improvements were constructed

without any deviations from the approved plans and specifications. Each drawing shall be signed by the Applicant's Engineer, who shall be a Registered Civil Engineer in the State of California, certifying that the drawings correctly indicate "As-Built" conditions.

The certificate shall be in the following form:

"Date _____

This is to certify that this Drawing has been corrected to show the water system and related facilities as constructed.

RCE No. _____ "

Name

10.1 The "As-Built" drawings shall show the location of all valves and bends with dimensioning in feet from two fixed points or coordinates provided in California State Plane, Zone 3, NAD83. Locations of all water lines shall be dimensioned in feet from front face of nearest curb. Valve and pipeline marker posts shall be installed in unpaved areas and shall be located in the field by the District.

10.2 After District approval of the As-Built drawings, the District will transfer all pertinent information on the As-Built Drawings to the District's official maps at the Applicant's expense. The Applicant will be responsible for the cost of updating the relevant maps with the information from the As-Built Drawings.

11. Final Acceptance

When the District is satisfied that all Water Utility System Improvements are in accordance with these regulations and the District's Standard Specifications and Standard Drawings, the Water Service Agreement, the approved plans and permits; the District shall certify in writing upon final acceptance by the District Board.

C. Procedure for New and Modified Water Service

Connections to Existing Water Mains

Certain applications for water service involving construction of new service connections to existing water mains to serve property located in previously subdivided locations may be processed under the provisions contained in this Part C as reasonably determined by the District, whereupon the District shall determine the nature, size, and location of the facilities necessary to render service to the property. Provisions contained in this Part C are intended for water service connections and facilities that do not require a water mainline extension and can rely on the District's Standard Specifications and Standard Drawings without the need for additional technical plans and specifications. Example facilities include domestic services, irrigation services, fire services, and hydrants that are installed on an existing water main. (The District receives additional requirements from the Coastsides Fire Protection District for fire services and fire hydrants). The most current edition of the California Plumbing Code shall be referenced for sizing and other miscellaneous requirements. The Applicant must comply with requirements of District Ordinances, including requirements related to water use efficiency and water conservation.

The Applicant shall agree in writing to pay for the entire cost of all such facilities required to provide water service to their property, which shall be in addition to the Transmission and Storage Fee and other applicable charges and deposits imposed by the District. An estimate of the design and construction costs associated with the Water Utility System Improvements needed shall be prepared by the District and submitted to the Applicant, and prior to the commencement of said design and construction work, the Applicant shall pay said estimated cost to the District upon receipt of invoice. The application must be approved by the District.

Upon completion of the work, any remaining portion of the sum previously submitted by the Applicant shall be returned; any shortage or additional funds required to fully reimburse the District for costs expended in completing the work shall be paid by the Applicant prior to the issuance of meter(s).

D. Engineering and Construction Standards

1. General

1.1 All Developments within the District shall meet the requirements of the current version of the District's Standard Specifications and Standard Drawings. It is the intent of the District's Standard Specifications and Standard Drawings to give a degree of uniformity to design of onsite facilities, construction procedures, materials and equipment used within the District. The District's Standard Specifications and Standard Drawings are to be used as a guide for those preparing plans and specifications for Developments within the District. These Standard Specifications and Standard Drawings may not cover all Development elements. Where additional engineering design is necessary, the District's Standard Specifications and Standard Drawings shall be supplemented with additional technical specifications and details.

1.2 Good, sound engineering practice precludes the use of a rigid set of standard specifications for every conceivable condition that may be encountered throughout the District. For all Developments except those determined by the District to be processed under Part C, herein, it is required that the Applicant's Engineer prepare a set of plans and specifications based upon the District's Standard Specifications and Standard Drawings. Plans shall be complete, showing all necessary dimensions and location of all fittings, fire hydrants, air releases, services and blowoffs. The drawings shall indicate the type of joint (mechanical or flanged) for each fitting; this will require providing a detail for each piping intersection.

1.3 The District's Standard Specifications and Standard Drawings shall not be adopted by reference unless a copy of the District's Standard Specification(s) and Standard Drawing(s) is appended to the Development plans and specifications. Where this is done, the inapplicable portions of the District's Standard Specifications and Standard Drawings shall be deleted.

1.4 The District's Standard Specifications and Standard Drawings are subject to revisions and additions at any time without notice. Latest revision dates are shown on

the title sheet of the District's Standard Specifications and Standard Drawings and each standard detail sheet; it shall be the duty of those using the District's Standard Specifications and Standard Drawings to see that the latest revision is used. A copy of the District's Standard Specifications and Standard Drawings may be reviewed at the District Office or on the District Website:

Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019
Telephone: (650) 726-4405
Website: <https://coastsidewater.org/engineering-department/>

1.5 In addition, the Development specifications shall contain the following:

(a) The Applicant shall designate in writing the name, address, telephone number and emergency telephone number of the individual who will have responsible charge of the Development and to whom District orders shall be directed.

(b) The Applicant shall give the District written notice not less than ten (10) working days in advance of the actual date on which the work will be started. Where work has been halted because of inclement weather or any other reason, it shall be the duty of the Applicant to notify the District at least forty-eight (48) hours before resumption of work. Any extra expense of the District due to failure to notify shall be charged against the Applicant. The Applicant shall immediately notify the District if work is to be halted for any reason.

(c) Any materials or equipment deemed salvageable by the District shall remain the property of the District and shall be delivered to the District, as directed by the District Representative.

(d) Connections to or modifications to the existing system shall only be made by a Contractor previously approved by the District. Names of approved Contractors are

available from the District.

2. Basic Design Criteria

2.1 General

The following basic design factors have been prepared as a guide for use in sizing water lines and storage facilities. Flows shall be increased to meet the actual demands of the user where required.

2.2 Storage

District water storage tanks shall be sized to meet domestic, irrigation, and fire flows as estimated by the District Engineer simultaneously. Tank elevations and service zones will be determined by the District. Generally, initial construction of storage volume sufficient to meet the full development of the projected service area will be required. Where construction of an incremental portion of the future requirements (fully developed service area) is permitted, sufficient property shall be provided and the site grading completed to meet the future requirements. Cathodic protection may be required.

Minimum volume of storage for a service area shall be determined as the sum of the following values:

(a) Operational Storage Volume: 25 (twenty-five) percent of max day demand (MDD) or four-hour storage of the peak hour demand (PHD), whichever is greater.

(b) Fire Storage Volume: The maximum required fire flow volume (flow times duration) within a service area as determined by the Coastsides Fire Protection District.

(c) Emergency storage Volume: Three-day storage of the average day demand (ADD).

2.3 Transmission Pipelines

(a) Transmission pipelines: are defined as pipelines that are 10 inches in diameter and larger. All transmission pipelines shall be initially sized to meet the future requirements of the fully developed service area (peak daily demands plus fire

demands) with the lowest practical pressure loss.

(b) Maximum pressurehead losses: design head losses shall not exceed:

(1) 3 feet per 1,000 feet of mainline at peak hour demand conditions ~~or~~.

(2) 10 feet per 1,000 feet of mainline ~~at~~under maximum day demand plus fire flow conditions ~~in~~design.

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(c) Maximum Velocities: Design velocities shall not exceed:

(1) 6 feet per second during peak hour demand conditions ~~or~~.

(2) 10 feet per second ~~at~~under maximum day demand plus fire flow conditions ~~in~~design.

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2.4 Distribution Mainlines, Other Pipelines, and Appurtenances

(a) All materials and installation procedures for piping and appurtenances shall conform to the latest edition of the District's Standard Specifications and Standard Drawings.

(b) The two following conditions shall be considered by the District for the design of all water mains:

- (1) At maximum day peak hour demand, the operating or "residual" pressure at all water service connections shall be at least 35 pounds per square inch.
- (2) At average maximum day demand plus fire flow, the operating or "residual" pressure in the area of the fire shall not be less than 20 pounds per square inch.

(c) Pipelines shall be sized by the District to serve the general water service vicinity; oversizing above the needs of a specific Development may be required.

Generally, the following minimum pipeline sizes will be applicable for residential areas without multiple dwelling units:

- (1) For pipelines with fire hydrants, minimum diameter shall be 8 inches;
- (2) For pipelines without fire hydrants, minimum diameter shall be 6 inches with a maximum length of 500 feet with no future extensions;

- (3) For pipelines between 500 feet and 1,500 feet the minimum diameter shall be 8 inches;
- (4) For pipelines more than 1,500 feet in length criteria will be developed on a case-by-case basis with the District;

(d) Maximum Velocities: For all pipelines, ~~maximum~~design velocities shall not exceed:

- (1) 6 feet per second during peak hour demand conditions ~~or~~.
- (2) 10 feet per second ~~at~~under maximum day demand plus fire flow conditions in~~design~~.

(e) Pipelines shall be installed with a minimum of 36-inches cover over the top of the pipe.

(f) Pipelines shall be looped to form a grid network. Dead-end water mainlines or distribution systems with single tie-in connections are to be avoided. Where dead ends are unavoidable, as determined by the District, provision shall be made for blowing off the mainline by means of a blow-off valve or hydrant.

(g) Pipelines shall be installed within the public right-of-way, whenever possible, and shall extend the entire length of the property line facing the public right-of-way. The District requires a 20-foot-wide permanent easement for water mainlines within private property from the center of the pipe 10' (ten feet) on either side of the water mainline. Additional easements will be required for laterals, meters, hydrants, valves, and other appurtenances as determined by the District.

(h) Water mainlines and non-potable pipelines shall be placed to conform to the California Code of Regulations Title 22, Division 4, Chapter 6, Section 64572. If the Applicant and the District agree that the requirements of the California Code of Regulations cannot be met, the Applicant must prepare and submit a waiver request to the State Water Resources Control Board. The waiver request shall be submitted to and approved by the District prior to submission to the State Water Resources Control

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Board.

(i) Each service zone (pressure zone) will normally have pressures in pipelines from 35-150 pounds per square inch (psi). Where pressures are at or above 80 psi in the distribution system, pressure regulating valves shall be installed on the private water supply line before the water enters the structure. In areas with lower service zone pressures, the District may require Applicants to acknowledge the pressure conditions in the Water Service Agreement, record a notice of low water pressure, and consider the lower pressures in the design of the Development's interior plumbing.

(j) Each domestic water service shall have a primary control valve installed on the private water supply line before the water supply enters the structure.

(k) Each domestic water service shall have a hose bib connection in the front or the side of each structure where the water enters the structure so that the private water supply line can be flushed without water entering the structure.

(l) Valves shall be installed at maximum intervals of 500 feet in pipelines and on all branched pipelines connected to the mainlines. Valves will be located at street intersections or where operationally necessary.

(m) Fire hydrants. Locations of fire hydrants are subject to the approval of the Coastside Fire Protection District. Hydrants shall be located at a maximum 500-foot spacing unless otherwise directed by the Coastside Fire Protection District. Hydrants shall be installed on the mainline with the largest available fire flow as determined by the District Engineer. Fire hydrants shall be located where flow can be provided from two directions, unless otherwise approved by the District.

(n) Air release valves shall be installed according to the District's Standard Specifications and Standard Drawings.

(o) Blow off connectors shall be installed according to the District's Standard

Specifications and Standard Drawings.

(p) Pumps shall not be permitted to be directly connected to the District pipeline. Where a water user requires greater pressure than is available at the water meter, an air gap system shall be constructed by the user between the water meter and the booster pump in accordance with the District's Standard Specifications and Standard Drawings and the District's current Cross Connection Control Program and Plan (CCCPP). District shall not be responsible for operating or maintaining pumps.

After completion, the District shall have the right to inspect the pumping system installation for conformance with District requirements upon 24 (twenty-four) hours notice. Pumping systems, while installed in conjunction with the District-owned service connection, shall be owned and maintained by the Applicant. District meters and service connections shall not be installed after a private pumping system.

(m) Backflow prevention assemblies shall be installed on water service connections in accordance with the District's Standard Specifications and Standard Drawings, the Coastsid County Water District CCCPP, and all State and local regulations.

2.5 Backfilling Trenches and Repaving

Trench materials, compaction requirements, repaving and guarantees shall comply with appropriate requirements of the Caltrans, City of Half Moon Bay, County of San Mateo, and the District's Standard Specifications and Standard Drawings.

2.6 Testing

The Water Utility System shall be tested in accordance with the District's Standard Specifications and Standard Drawings.

2.7 Disinfection

The water system shall be disinfected in accordance with the District's Standard Specifications and Standard Drawings.

2.8 Service Connection Requirements (Other Than Fire Protection Service)

(a) Sizing of Water Service Connections

- (1) Each service connection shall be sized by the District to provide adequate water supply service based on peak flow and fixture unit counts (in conformance with the requirements for "adequate flow", "maximum velocity" and "minimum water pressure"). Water meters will not be installed and water service will not be provided at a new location until the Applicant has demonstrated to the District that the total peak flow demand installed is within the capacity of the service connection previously purchased for that location. After a meter has been installed and water service initially provided, the Applicant shall not install additional water-using devices which will result in a total peak flow demand in excess of the peak flow capacity of the water service connection purchased.
- (2) High Peak Velocity and District Water Mainline Low Pressure. Maximum velocity in the water service connection pipeline (other than fire protection services) shall not exceed eight (8) feet per second. Where the velocities in the water service connection pipeline would exceed eight (8) feet per second based on the meter size table below and at locations of service connections with lower service zone pressures (as acknowledged in the Water Service Agreement), the District will allow for the size of the water service connection pipeline and/or meter as practicable to minimize pipeline velocities and friction losses without an additional Transmission and Storage Fee.

(b) Other Metering Considerations

- (1) The total estimated peak water supply demand on the service connection shall be calculated as the sum of (a) the peak flow based on the plumbing fixture count as determined by the method in Appendix A of the most current California Plumbing Code and (b) the peak flow of other devices such as irrigation systems and equipment.

The demand weight of plumbing fixtures not shown in the California Plumbing Code will be assigned by the District based on other recognized industry publications where applicable and based on engineering experience of the District in all other cases.

- (2) Service connections and meters are assigned to a parcel by assessor parcel number (APN) and shall provide water to that single parcel.
- (3) The location of the meter shall be determined by the District and consider the advanced metering infrastructure requirements for remote reading. Meters shall remain visible and accessible from the public right of way and shall not be placed behind fencing or vegetation/landscaping.
- (4) A dedicated irrigation meter is required for parcels with irrigated landscaped areas greater than or equal to 5,000 square feet.
- (5) Mixed-use developments on a parcel (residential with nonresidential) shall be required to meter each separate type of class of use based on the Rate and Fee Schedule.
- (6) Meter Size

Meter Size (inches)	Peak Flow Capacity (gallons per minute)	Equivalent Water Connections
5/8	20	1
3/4	30	1.5
1	50	2.5
1-1/2	100	5.0
2	160	8.0
3	350	17.5
4	600	30
6	1000	50

This table was established with the Crystal Springs Project and is used to determine the minimum meter size and the associated Transmission and Storage Fee and number of connections assigned to the water service. The service line

will be sized according to best engineering practices and with a maximum velocity of 8 feet per second. Service lines and meters with peak flows over 50 gallons per minute require review and approval of the District Engineer.

2.9 Service Connection Requirements for Dedicated Fire Service Connections

(a) Fire services are sized based on criteria (flow measured in gallons per minute at a corresponding pressure measured in pounds per square inch) provided by the Applicant and approved by Coastsid Fire Protection District.

- (1) Dedicated fire services shall not be installed on water distribution pipes less than four (4) inches in size. Fire services two (2) inches or larger may require a connection to a distribution pipe greater than four (4) inches, as determined by the District.
- (2) Maximum velocity in the fire service connection based on the flow criteria (gallons per minute) approved by Coastsid Fire Protection District shall not exceed 10 feet per second.
- (3) Dedicated fire services shall be designed to accommodate the pressure losses from the backflow prevention assembly.
- (4) The minimum fire service size for a single-family residence shall be one (1) inch.
- (5) The minimum fire service size for a non-single-family residence shall be two (2) inches.

(b) A Transmission and Storage Fee is not required for dedicated fire service connections.

E. Appeals

If the Applicant wishes to pursue an appeal of a District determination pertaining to these Regulations, the Applicant shall provide a detailed written basis for its appeal and address the appeal to the District's General Manager.

ATTACHMENT C

COASTSIDE COUNTY WATER DISTRICT

REGULATIONS REGARDING WATER SERVICE EXTENSIONS AND WATER UTILITY SYSTEM IMPROVEMENTS, INCLUDING NEW AND MODIFIED WATER SERVICE CONNECTIONS TO EXISTING WATER MAINLINES ENGINEERING AND CONSTRUCTION STANDARDS; APPROVED MATERIALS

Recodified through Resolution No. 2003-112026-01

MARCH 2003

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A. REGULATIONS REGARDING WATER SERVICE EXTENSIONS AND WATER SYSTEM IMPROVEMENTS	7
1. Service Areas	7
2. Initial Submittal – Tentative Maps, Drawings and Data	7
3. Final Submittal – Construction Plans, Specifications, and Other Documents	5
4. Water Development, Treatment, and Storage and Transmission Facilities	7
5. Processing Fees and Deposits	7
6. Bond and Insurance	9
7. Construction	10
8. Changes During Construction	11

PAGE

9. Easements and Property Rights	11
10. "As-Built" Drawings	11
11. Final Acceptance	12
B. REGULATIONS REGARDING PROCEDURE FOR NON-COMPLEX PIPELINE EXTENSIONS	12
C. ENGINEERING AND CONSTRUCTION STANDARDS	13
1. General	13
2. Basic Design Criteria	15
2.1 General	15
2.2 Abbreviations	15
2.3 Domestic Consumption	15
2.4 Fire Flows	15
2.5 Storage	15
2.6 Transmission Pipelines	16
2.7 Pipelines and Appurtenances	16
2.8 Refilling Trenches and Repaving	18
2.9 Testing	18
2.10 Disinfection	19
2.11 Service Connection Requirements (Other Than Fire Protection Service)	19
D. APPROVED MATERIALS	25
1. General	25
2. Pipe	25
2.1 Pipelines 4 Inches and Larger in Diameter	25
2.2 Pipelines Smaller Than 4 Inches in Diameter	27
3. Service Piping and Fitting	28
4. Service Saddles	28

5. Fire Hydrants.....	28
6. Valves.....	29
7. Valve Boxes.....	29
8. Air Release Valves and Combination Air and Vacuum Relief Valves.....	29
9. Meter boxes.....	29
10. Meters.....	30
11. Flexible Couplings.....	30
12. Tapping Sleeves.....	30
13. Backflow Preventers.....	30
14. Tracer Tape.....	31
E. LIMITED PURPOSE FACILITIES.....	31
1. General.....	31
2. Pro-Rata Contributions.....	31
3. Refunds.....	32
4. Notice.....	32
5. Procedure.....	33
F. SEPARABILITY.....	33
DERIVATION TABLE.....	34

**A. Regulations Regarding Water Service Extensions
and Water System Improvements**

1. Service Areas

<u>A. DEFINITIONS</u>	<u>1</u>
<u>B. WATER UTILITY SYSTEM IMPROVEMENTS</u>	<u>3</u>
1. Applicant's Responsibility	3
2. Initial Submittal - Tentative Development Maps, Drawings, and Data	4
3. Interim Submittal - Construction Plans, Specifications, and Other Documents	6
4. Final Submittal - Construction Plans, Specifications, and Other Documents	8
5. Water Supply, Storage, Treatment, Transmission and Distribution Facilities	10
6. Processing Fees and Deposits	11
7. Construction	14
8. Changes During Construction	17
9. Easements and Property Rights	17
10. "As-Built" Drawings	17
11. Final Acceptance	19
<u>C. PROCEDURE FOR NEW AND MODIFIED WATER SERVICE CONNECTIONS TO EXISTING WATER MAINS</u>	<u>19</u>

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D. ENGINEERING AND CONSTRUCTION STANDARDS.....	20
1. General.....	20
2. Basic Design Criteria	23
E. APPEALS.....	37

A. Definitions

Agent: The term "agent" means an applicant's engineer, legal counsel, or other consultant authorized to make decisions on behalf of the Applicant.

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Applicant: Owner of property applying for water service

Approved Contractor's List: List of contractors approved by the District to construct Water Utility System Improvements, including water mainline extensions, water services, and fire services connecting to the District's water system.

"As-Built" or Record Drawing: A document that shows the final conditions of a completed Development, including all deviations, changes, and modifications made during construction that differ from the original design plans.

Assessor Parcel Number (APN): The San Mateo County Assessor's identification number for a specific property. The APN is used by the District to assign water connections to a property within the District's jurisdictional boundaries. Water connections are installed for a unique APN and cannot be shared.

Cross Connection Control Program and Plan (CCCPP): The plan and program prepared and implemented by the District in accordance with the requirements of the California Cross-Connection Control Policy Handbook to prevent backflow of water and/or other liquids, gases, or other substances into the public water system via a cross-connection, or interconnection between a potable water system and a non-potable source.

California Plumbing Code (CPC): This is part 5 of thirteen parts of compilation and publication of the California Code of Regulations, Title 24.

Development: The transformation of land or structures that involves water or fire service – from Coastsid County Water District - for residential, commercial, industrial, agricultural, or public purposes. It is generally managed through a cycle of planning, design, engineering, and regulatory approvals in cooperation with other local agencies

District: The Coastsid County Water District.

District Engineer: A qualified and licensed civil engineer retained by the District.

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as deemed appropriate by the District in its sole discretion, acting either directly or through the District, acting within the scope of the particular duties delegated to them.

District Manager: The General Manager or Manager of the District or their assigned representative.

Mainline: A water pipeline owned and maintained by the District that is an artery of the District's distribution system and delivers water to smaller service lines that connect to individual customer connections. Also referred to as mains.

Maintenance Bond: A surety bond that guarantees a contractor will fix any defects in materials, workmanship, or design that appear during a specific maintenance or warranty period after a construction Development is completed.

Offsite: Located outside of the Development.

Onsite: Located within the Development.

Payment Bond: A surety bond that guarantees a contractor will pay its subcontractors, laborers, and material suppliers for their work on a Development.

Performance Bond: A surety bond that guarantees a contractor will complete the Development according to the terms of the Water Service Agreement.

Planning Authority: The determining authority for a given Development.

Proposal for Construction: A cost proposal for a licensed, qualified contractor to construct the Utility System Improvements.

Service Line: Smaller pipelines that connect from a water mainline to serve individual customers.

Site Utility Plans: Development's civil drawings that delineate the location and detail of all existing and proposed utilities.

SOPQ: Statement of Pre-Qualifications; required to be prepared according to the District's current "Request for SOPQ for Approved Contractors List" and submitted to the District by contractors requesting to be added to the District's Approved Contractors List.

Standard Specifications and Standard Drawings: The latest version of the Coastside Water District's Standard Specifications and Standard Drawings.

Tentative Development Map: A map or maps that show the design.

PAGE _____

Page 2 of 51

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improvements, and existing conditions of a proposed Development that meets the requirements of the Planning Authority.

Transmission and Storage Fee: The cost to establish water service is determined by the number of water connections required to provide water service to a Development. The number of water connections required is correlated with the size of the service. Water connections are assigned a designation of non-priority or priority, in conformance with the local planning authorities Local Coastal Program. Refer to the District's Rate and Fee Schedule for fees and charges.

Water Service Agreement: An agreement between the District and the Applicant that governs the terms and conditions for the District to provide water service.

Water Utility System Improvement: The modification of the District's water utility system (transmission, distribution, storage, and treatment) to provide water and fire service.

Water Utility System: The onsite and offsite water mainlines, service lines, fittings, valves and housing thereof, fire hydrants, manholes, storage facilities, pumping facilities, and all appurtenances thereto, as required for the District to provide water service for Developments. The Water Utility System does not include the water pipelines on the Applicant's side of the meter or the backflow prevention assemblies, all of which will be owned and maintained by the Applicant. Water Utility System is also referred to as "water system".

B. Water Utility System Improvements

1. Applicant's Responsibility

It is the District policy to require that extensions to its water system, both within and outside the District, improvements to its Water Utility System be done in accordance with the following procedures at the expense of those requesting an extension of service. If not already a part of the District, the area for which water service is requested shall be annexed to the District. (i.e., Applicant).

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2. **2-Initial Submittal - Tentative Development Maps, Drawings, and Data**

2.1 The DeveloperApplicant shall submit to the District three copies of electronic Development maps, drawings, and other data sufficient in detail for the District to evaluate the projectDevelopment with regard to water service. -Maps and drawings shall be in PDF format and approximately 22" x 3634". Based upon this submittal, the District will determine whether the proposed developmentDevelopment can be served and in what manner this may best be accomplished. -This determination will be based upon an analysis of existing water supply, treatment plant storage, and transmission and distribution facilities capacity. -The analysis shall be at the Developer'sApplicant's expense, and shall either be performed by the District Engineer or by a qualified and licensed civil engineer retained by the District, as deemed appropriate by the District in its sole discretion. -The DeveloperApplicant will be furnished with the design criteria to be utilized and a preliminary cost estimate for required Water Utility System Improvements prepared by the in-tact pipelines. District Engineer. Any out-of-tractoffsite water supply development, treatment, storage, or transmission and distribution facilities that may be required will be designed, at the Developer'sApplicant's expense, either by the District Engineer or anotherby a licensed and qualified engineer selected by the Applicant and retainedapproved by the District. Proposed location and size of water lines need not be shown on the initial submittal.

2.1 The initial submittal for subdivisions. In addition, the District shall contain the following minimum have received a planning or coastal development referral for the Development from the Planning Authority.

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information: tentative subdivision The initial submittal for Developments shall include the initial fee and contain the following minimum information relevant for the type of Development, such as:

- o Tentative Development map showing the property lines, streets, and other dedicated rights of way; and

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o Description of proposed Development that includes all relevant information relevant to water demand and Water Utility System Improvements; such as, number and location of single-family residences to be constructed; number of units and location of apartments; dwelling units for multi-family residences, number of students, number of employees, and location of schools; irrigation requirements, etc.; and

o Development maps ~~should~~must show topographic contours and elevation of ~~the~~ highest and lowest unit served and top floor elevation on multi-story buildings; and

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— The initial submittal for industrial or commercial areas and other developments not classified as subdivisions shall contain the following minimum information: site plan drawings; description of proposed development; desired irrigation requirements; resident population; number of employees; etc.

2.2. An initial filing fee, more particularly set forth hereafter in Paragraph 5.1 of the Regulations, shall be required at the time of initial submission.

o 2.3 All available Site Utility Plans.

2.2 After the District ~~Engineer and the Manager have~~has reviewed the initial submittal, the District ~~Manager~~ will notify, in writing, the ~~City of Half Moon Bay or Planning Authority, if requested by~~ the ~~appropriate political agency~~Applicant, that the ~~subdivision~~Development is or is not within the service area of the District, and whether it can be ~~feasibly~~ served ~~by the District~~. Copies will be sent to the ~~Developer~~Applicant and the District Engineer. This notification that the ~~development~~Development can be served does not constitute a commitment to serve water to the ~~development~~. One copy of the drawings accompanying this submittal will be returned to the Developer with the in-tract water requirements together with a description of any out-of-tract water facilities that may have to be constructed ~~Development~~.

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3. 3. Interim Submittal - Construction Plans, Specifications, and Other Documents

1. Final Submittal - Construction Plans, Specifications, and Other Documents

3.1 3.1 After the District has informed the DeveloperApplicant of required water service facilities, the DeveloperApplicant may commence work on the detailed plans, specifications, and cost estimate for the in-tract facilities. The Developer all required onsite and offsite Water Utility System Improvements. The Applicant shall acquaint himself with District requirements. A copy of "Engineering and Construction Standards," (Section C, infra), "Approved Materials," (Section D, infra) and "District Standard Drawings" themselves with District requirements as specified in these Regulations, the current version of the District's Standard Specifications and Standard Drawings, and all applicable County of San Mateo and City of Half Moon Bay standards. A copy of the current version of the District's Standard Specifications and Standard Drawings for installation of piping appurtenances is available, free of charge, at the District website and for a fee at the District office. All facilities shall stress be designed for low-cost maintenance and operation. The District Engineer and Manager will be available to the Developer's EngineerApplicant or Agent for the purpose of answering questions and working out confirming design details. Location of fire hydrants must be approved by the Half Moon BayCoastsde Fire Protection District.

3.2 3.2 This finalinterim submittal shall consist of threeelectronic copies of each of the following documents:

(a) (a) FinalDraft plans and specifications for onsite and offsite Water Utility System Improvements.

(b) Executed Subdivision Agreement with blanks filled in and all required

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(a) (c) All required easements and deeds.

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(b) (d) Draft plans for building permits with water demand for each developable lot, including fire sprinklers and irrigation systems.

(c) A draft utility site plan with the engineering drawings showing for each lot the service line and box locations of (1) Pacific Gas & Electric Co., (2) communications, (3) Coastside County Water District, (4) United States Postal Service, (4) sanitary sewer and septic, (5) storm sewer and retention, and (6) cable/internet.

(d) Tentative Subdivision Development Map, if modified from that included in Initial Submittal. (new Development only).

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(e) Construction cost estimate.

(f) Utility service box master plan.

The above documents will be reviewed by the District Manager and, The District Engineer. One copy will be returned provide documentation to the Developer Applicant indicating required modifications, if any, and whether any permits or waivers are needed from the California State Water Resources Control Board Division of Drinking Water (DDW) or other regulatory agencies. A minimum of 1430 calendar days shall be allowed for this review. All documents, which that require modifications, shall then be submitted for final review by the District as part of the final submittal.

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3.3 Adequate water connections must be assigned to the developable lot(s) before the District will present the Water Service Agreement to the District Board for approval. The District and District Engineer will confirm the required water capacity as part of the interim submittal. The District shall also determine the nature, size, and

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location of all service connections and associated facilities (i.e., service lines, meters, backflow prevention assemblies, pressure reducing valves, etc.) based on the current submittals to the District.

4. Final Submittal - Construction Plans, Specifications, and Other Documents

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4.1 After the District has reviewed the interim submittal, the Applicant may commence work on the final plans, specifications, and cost estimate for the required onsite and offsite Water Utility System Improvements. The District Engineer will be available to the Applicant's engineer for the purpose of answering questions and confirming design details. Location of fire hydrants must be approved by the Coastsid

e Fire Protection District.

4.2 This final submittal shall consist of electronic copies of each of the following documents:

(a) Final plans and specifications for onsite and offsite Water Utility System Improvements.

(b) Final plans for building permits with water demand for each developable lot, including fire sprinklers and irrigation systems.

(c) Final utility site plan with the engineering drawings showing for each lot the service line and box locations of (1) Pacific Gas & Electric Co., (2) communications, (3) Coastsid County Water District, (4) United States Postal Service, (4) sanitary sewer and septic, (5) storm sewer and retention, and (6) cable/internet.

(d) A completed Water Service Agreement with all required information populated and all required attachments.

(e) All required easements and deeds.

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(f) All required waivers and permits related to the Water Utility System Improvements. A separate and unique encroachment permit from the local public works authority is required for Water Utility System Improvements for work in the public right-

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of-way. The encroachment permit cannot be shared with other utilities or other work in the public rights-of-way.

(g) Tentative Development Map, if modified from that included in Initial Submittal (new Developments only).

The above documents will be reviewed by the District. The District will provide documentation to the Applicant indicating required modifications, if any. A minimum of 30 calendar days shall be allowed for this review. All documents that require modifications shall then be submitted for final review by the District.

When all final documents are acceptable to the District, the Developer shall pay the transmission and storage fee, plan checking and inspection fee, and any applicable special fees and deposits as provided for in Paragraph 5.2, 5.3 and 5.4 of these Regulations, infra.

4.3 3.4 Following receipt of all fees, the project plans and specifications Water Service Agreement, including the Development plans and specifications, will be presented to the District Board for approval. Board meetings are normally scheduled for the second Tuesday of each month. This approval by the Board and execution of the Water Service Agreement by the District and Applicant constitutes a commitment by the District to serve water to the development. A copy of the Subdivision Agreement will be made available to, provided that the City Applicant fully complies with all the requirements of Half Moon Bay the Water Service Agreement.

4.4 Following approval of the Water Service Agreement, the Applicant shall pay all fees and charges referenced to in the Water Service Agreement, which may include adequate Transmission and Storage Fees, plan check and inspection fees, and any applicable special fees and deposits as provided for by these Regulations.

A space Water Service Agreement will be provided on the cover sheet of the project drawings for the signature of signed between the Applicant and the District Manager with the following wording:

PAGE _____
Page 9 of 51

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APPROVED: COASTSIDE COUNTY WATER DISTRICT

District Manager

Date

4.5 The Developer shall furnish within 45 days after board approval, provided that the District with additional copies of plans, specifications, and other documents as requested by Applicant has satisfied all the District Manager. The District shall initially be furnished with five sets of prints bearing the Manager's signature of approval and five sets of specifications. All reproduction costs shall be at the Developer's expense requirements.

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5. **4. Water Development Supply, Storage, Treatment, and Storage and Transmission and Distribution Facilities**

The District will provide water in the quantity and at the quality and pressure as is available. For ~~water improvements~~Water Utility System Improvements requiring ~~development~~the Development of additional water supply, or construction of treatment plant capacity ~~of storage, distribution~~ and transmission pipeline, and storage facilities, the total cost of these facilities shall be borne by the ~~Developer~~Applicant.

Design of all such facilities, including wells, treatment ~~pantsplants~~, dams, pumping stations, storage tanks, reservoirs, and transmission and distribution pipelines, ~~may~~must be accomplished by ~~the District Engineer or by~~ a qualified and licensed civil engineer ~~retained selected by the Applicant and approved~~ by the District. All costs, including environmental impact report preparation, engineering-design, construction inspection, construction, land acquisition, and legal and administrative costs incurred by the District shall be borne by the ~~Developer~~. Except as provided in Section E, *Infra*, no ~~refund agreements will be entered into by the District~~Applicant.

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6. *5. Processing Fees and Deposits*

6.1 5.1 The Applicant must pay the fees described below, and the amount of these fees are established in the current District Rate and Fee Schedule, which is available on the District's website.

Initial Filing Fee. -Prior to processing of the initial Submittal, the

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6.2 DeveloperApplicant shall submit a filing fee with the District. -This filing fee is not a deposit, and it is not subject to return to the Developer if the projectDevelopment is abandoned. Filing fees shall be as follows:

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— (a) — For subdivisions of under 300 lots, the filing fee is \$5.00 per lot; for subdivisions of 300 lots or more, the fee is \$3.00 per lot. The fee will be based on the number of lots shown on the subdivision map regardless of the date of proposed construction. The minimum fee is \$250.00.

— (b) — For Land not subdivided or in the process of being subdivided, the filing fee is \$25.00 per gross acre. If this land is later subdivided, full credit for the gross acreage fees will be given towards any additional fee required based on the number of lots. No refunds will be given.

— (c) — For industrial or commercial areas, motels, trailer parks, multiple dwelling units, and other areas not covered in the above, the initial and minimum filing fee will be \$500.00. The Developer will be billed for any additional District costs incurred in reviewing the initial submittal in excess of this amount. District costs are defined as all costs incurred by the District including engineering, legal and administrative.

— (d) — The District reserves the right to reduce the minimum fees for projects involving only a single residential, multiple dwelling, commercial or industrial unit for which the review is of a non-complex nature.

— (e) — For complex projects involving any combination of residential lots, apartments, commercial areas, etc., the filing fee will be computed as the sum of the individual types of land uses as shown above.

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5.2 Storage and Transmission Fee

6.3 The DeveloperApplicant shall pay to the District a storageTransmission and transmission fee. Storage Fee. The amount of this fee, is based on meter size, is shown in and peak demand in gallons per minute through the water service (see D. 2.8 (b) (6)), as described in the current District Rate and Fee Schedule. This payment must be received before the District will agree to serve the proposed development, and before the construction plans (Final Submittal) will be presented to the Board for approval.

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5.3 Fee for Plan Checking and Construction Inspection

After approval of the amount of the construction cost estimate, the Developer shall file with the District a fee as required in the Subdivision Agreement. This fee is to cover the cost of plan checking, construction inspection, modifications of the water system maps, administrative, legal and auditing costs. The fee shall be a percentage of the approved construction cost estimate for the water system facilities: 5% for the first \$200,000 of construction costs, 3% for the incremental amounts over \$200,000. An additional 1% fee will be charged for plan checking for each resubmitted incorporating major project modifications. The minimum fee shall be \$250.00.

5.4 Special Deposits

When the estimated cost of analysis, design, inspection, Administration, and construction of required water-supply, treatment, storage and transmission facilities for a development exceeds the amount to be collected by the District pursuant to Sections 5.1 and 5.3, the Developer will be required to file a special deposit to cover the cost of this work. Prior to the District directing the District Engineer or, as the case may be, the engineering consultant retained by the District, to proceed with the analysis of facilities required by Section A.2.1, or design of facilities described in Section A.4, the Developer shall deposit sufficient funds with the District to cover the full cost of this analysis and design work. After the construction is completed and approved by the District, the Developer will receive a final refund or statement of the balance due amounting to the difference between the deposit and actual costs incurred by the District.

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5.5 Environmental Impact Report Fee

6.4 The Developer shall pay to the District an environmental impact Report fee, covering all legal, engineering, administrative and other costs incurred by the District in the preparation of the environmental impact report. All costs associated with environmental review and environmental document preparation shall be borne by the Applicant. The Applicant shall reimburse the District for all costs related to this environmental review, covering all legal, engineering, administrative, and other costs incurred by the District in the review of an environmental impact or similar report required by the proposed water service extension or water system improvement pursuant to applicable State or Federal law, and the submission of such reports with the appropriate governmental agencies or Federal law.

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6. Bond and Insurance

6.5 6.1 At least 10 (ten) days prior to the commencement of construction, the DeveloperApplicant shall post a faithful performance bondfurnish to the District the following bonds:

(a) A Payment Bond in the amount of 100 (one hundred) percent of the estimated cost of the work. As part of the faithful performance bond, or by a separate maintenance bondProposal for Construction amount, to guarantee payment of obligations referred to in Section 9550 et seq. of the Civil Code;

(b) A Performance Bond in the amount of 10-100 (one hundred) percent of the costProposal for Construction amount, to guarantee faithful performance of the work (with a \$2,000 minimum), the Developer shall guarantee the maintenance terms of the workWater Service Agreement; and

(c) A Maintenance Bond in the amount of 10 (ten) percent of the Proposal for Construction or the minimum bond purchase amount, whichever is greater, to guarantee against defective materials and faulty workmanship for a period of two (2) years following the time of completion of the work. Its final performance bond and/or from and after the maintenance bond shall name the District and the City of Half Moon Bay or

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other appropriate political agency as beneficiaries. The above bonds are the same as those described in the Subdivision Agreement acceptance of the work by the District.

6.2 The Developer**bonds** shall hold harmless be in a form satisfactory to the District, its Manager, The surety and Engineer, and each of their officers, employees and agents in the manner set forth in the Subdivision Agreement. **sureties must be qualified to do business in California.**

6.3 The Developer shall secure insurance in the amounts, of the types and containing the endorsements and requirements set forth in the Subdivision Agreement.

7. Construction

7.1 **7.1** Applicant shall commence installation of the Water Utility System Improvements no later than as specified in the Water Service Agreement (up to three months after the date of the Water Service Agreement), subject to extension for force majeure events not the fault of the Applicant. The Applicant shall complete its installation of the Water Utility System Improvements within 12 months after the date of the Water Service Agreement. If installation has not commenced or has not been completed by such dates, the District may terminate the Water Service Agreement, unless the delay is solely attributable to force majeure events, such as fire, flood, or earthquake, which are beyond the control of, and not the fault of, the Applicant.

7.2 A minimum of **tent****twenty (20)** days prior to the start of construction, the following requirements shall be met:

(a) **(a)** The Developer**Applicant** shall file a tentative construction schedule with the District **Manager**.

(b) **(b)** The Developer**Applicant** shall postprovide the District with the bonds as described in Paragraph 6.1 and the Subdivision Water Service Agreement.

(c) **(c)** The Developer**Applicant** shall file with the District the insurance

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certificates as described in Paragraph 6.2 and the Subdivision Water Service Agreement.

(d) (d) The DeveloperApplicant shall file with the District the Proposal for Construction by a licensed qualified contractor for all Water Utility System Improvements.

(e) The Applicant shall submit the name and license number of the general contractor for the projectDevelopment, names and license numbers of subcontractors, if any, who will construct water improvementsWater Utility System Improvements. All contractors constructing Water Utility System Improvements including water mainline extensions, water improvements must hold a valid Class A services, or C-34~~fire~~ services connecting to the District's water system shall only be on the District's Approved Contractors List. Names of approved contractors license in the State of California are available from the District. To be added to the District's Approved Contractors List, a contractor must submit a fully complete Statement of Pre-Qualifications (SOPQ) based on the requirements of the District's current "Request for SOPQ for Approved Contractors List" and be pre-qualified by the District. A copy of the current "Request for SOPQ for Approved Contractors" List is available by request from the District. The District will notify Contractors within 21 (twenty-one) calendar days after receipt date of the SOPQ if the Contractor meets the District's pre-qualification standards.

(f) 7.2 The Applicant shall invite the District to a pre-construction meeting that shall take place at least 10 (ten) days prior to commencing construction.

(g) The Applicant shall submit all shop drawings and other construction submittals required by the District's Standard Specifications and Standard Drawings to the District. All shop drawings and construction submittals for Water Utility System Improvements shall be approved by the District Engineer prior to commencing

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construction.

7.3 Prior to water line construction, all road and easement areas where water lines are to be installed ~~must~~shall be staked and rough graded. All meter and valve box locations and finished grades shall be staked prior to water line construction to confirm that the boxes are set in accordance with the District's Standard Specifications and Standard Drawings relative to the finished grade for paved or non-paved areas.

7.4 ~~7.3~~ The District shall observe and inspect facilities solely to protect the interest of the District and to determine if completed work is acceptable to the District and can be incorporated into the District system. No responsibility is assumed for the ~~contractor's~~Contractor's operations or ~~his~~their safety practices. The ~~Developer and his representatives are~~Applicant is responsible for ~~the~~ correct location of facilities and for measurements and payments.

7.5 ~~7.4~~ It will be the responsibility of the ~~subdivider~~Applicant or ~~his~~their representative to notify the District ~~Manager~~ at least ~~two (2)~~ten (10) working days in advance of the proposed starting date, and to ascertain that the District Inspector is at the site of the work when Water Utility System construction begins. The Applicant shall not commence construction of Water Utility System Improvements unless the District Engineer or other authorized District inspector is at the site of the work when construction begins. If construction is not continuous, the District ~~Manager~~ shall be notified at least 48 ~~(forty-eight)~~ hours in advance as to when construction will resume. Any work performed without knowledge or consent of the District Inspector is subject to rejection by the District.

7.6 8. It will be the responsibility of the Applicant to file and obtain the necessary permits for the work. The Applicant is required to obtain permits specifically for the Water Utility System Improvement portion of the Development, independent from other aspects of the Development. The Applicant shall be responsible for completing all Water Utility System improvements within the valid permit periods.

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8. Changes During Construction

8.1 Changes to the ~~project~~Water Utility System Improvements that are necessary to the work during construction shall be submitted to the District for review and approval prior to the incorporation in the work.

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8.2 Changes to the site development plans that increase water fixtures or peak water demand shall be submitted to the District for review and approval.

8.2 The District ~~Manager~~ may, at ~~his~~ discretion, waive all or portions of the submittal requirements, depending upon the complexity of the change.

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9. Easements and Property Rights

Prior to acceptance of the ~~plans and specifications~~final submittal, the ~~property owner~~Applicant will ~~dedicate~~grant to the District all necessary easements and property ~~rights deemed~~ required by the District for pump stations, pipelines, treatment plants, wells, storage tanks, meters, hydrants, valves, and other sites of water facilities for ~~this~~the proposed development. Pipeline easements shall be in accordance with Part 0 of these Regulations. Recording of maps with Public Utility Easements~~public utility easements~~ will not be sufficient. A separate deed for such easements shall be granted directly to the Coastsid County Water District or the Coastsid County Water District shall be named on the recorded tract map.

10. "As-Built" Drawings

The ~~Developer~~Applicant shall ~~furnish the District with a copy of~~transmit the recorded ~~Subdivision~~Development Map ~~together with mylar reproducible drawings in~~electronic PDF and AutoCAD formats of the completed improvements showing "As Built" conditions. "As-Built" drawings shall be submitted even if the improvements were constructed without any deviations from the approved plans and specifications. Each drawing shall be signed by the ~~Developer's~~Applicant's Engineer, who shall be a Registered Civil Engineer in the State of California, certifying that the drawings correctly

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indicate "As-Built" conditions.

The certificate shall be in the following form:

"Date _____"

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This is to certify that this Drawing has been corrected to show the water system
and related facilities as constructed.

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RCE No. _____"

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Name

The "As-Built" drawings shall show the location of all valves in accordance and bends with the District standard detail entitled "Gate Valve Location and Marking."
Location dimensioning in feet from two fixed points or coordinates provided in California State Plane, Zone 3, NAD83. Locations of all water lines shall be dimensioned in feet from front face of nearest curb. Valve and pipeline marker posts shall be installed in unpaved areas where curb and gutter do not exist.

1. 11. Final Acceptance

10.1 11.1 When the District Manager is satisfied that all improvements are in accordance with the approved plans and specifications, in accordance with good construction practices and that all pressure tests, bacteriological tests and compaction tests have been satisfactorily completed, he shall so certify in writing be located in the field by the District.

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11.2 The District Manager will place consideration of approval of the agenda of the next regular meeting for action by the Directors, after which the District Manager will immediately notify the City of Half Moon Bay or the appropriate political agency of the approval or acceptance.

10.2 11.3 After acceptance After District approval of the As-Built drawings, the

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District will transfer all pertinent information on the As-Built Drawings to the District's official maps at the Applicant's expense. The Applicant will be responsible for the cost of updating the relevant maps with the information from the As-Built Drawings.

11. Final Acceptance

B. Regulations-Regarding-When the District is satisfied that all Water Utility System Improvements are in accordance with these regulations and the District's Standard Specifications and Standard Drawings, the Water Service Agreement, the approved plans and permits; the District shall certify in writing upon final acceptance by the District Board.

C. Procedure for Non-Complex Pipeline ExtensionsNew and Modified Water Service Connections to Existing Water Mains

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Certain applications for water service involving construction of pipeline extensions of a non-complex naturenew service connections to existing water mains to serve property located in previously subdivided locations may be processed under the provisions contained in this Part C as reasonably determined by the Manager. In such circumstances, the applicant for water service shall submit a formal application for service, together with a non-refundable processing fee in the amount of One Hundred and Fifty Dollars (\$150.00),District, whereupon the District shall determine the nature, size, and location of the facilities necessary to render service to his/the property.

Provisions contained in this Part C are intended for water service connections and facilities that do not require a water mainline extension and can rely on the District's Standard Specifications and Standard Drawings without the need for additional technical plans and specifications. Example facilities include domestic services, irrigation services, fire services, and hydrants that are installed on an existing water main. (The applicantDistrict receives additional requirements from the Coastsid Fire Protection District for fire services and fire hydrants). The most current edition of the

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California Plumbing Code shall be referenced for sizing and other miscellaneous requirements. The Applicant must comply with requirements of District Ordinances, including requirements related to water use efficiency and water conservation.

The Applicant shall agree in writing to pay for the entire cost of all such facilities required to provide water service to histheir property, which costs shall be in addition to the storage Transmission and transmission feeStorage Fee and other applicable charges and deposits imposed by the District by resolution. An estimate of the design and construction costs associated with the Water Utility System Improvements needed water improvements shall be prepared by the ManagerDistrict and submitted to the applicant for serviceApplicant, and prior to the commencement of said design and construction work, the applicantApplicant shall pay said estimated cost, in cash, to the District. upon receipt of invoice. The application maymust be approved by the General Manager or may be submitted to the Board of Directors for its approval and, if such approval is granted, the District thereupon shall undertake and complete the workDistrict.

Upon completion of the work, any remaining portion of the sum previously submitted by the applicantApplicant shall be returned; any shortage or additional funds required to fully reimburse the District for costs expended in completing the work shall be paid, in cash, by the applicant as a prerequisiteApplicant prior to the issuance of a meter. Except as provided in Section E, infra, no refund agreements shall be entered into by the District.(s).

D. C.—Engineering and Construction Standards

1. 1. General

1.1 4.1—All Developments within the District shall meet the requirements of the current version of the District's Standard Specifications and Standard Drawings. It is the intent of the Coastside County Water District to publish certain typical standards which willDistrict's Standard Specifications and Standard Drawings to give a degree of uniformity to design of in-tractonsite facilities, construction procedures, materials and

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equipment used within the District. ~~The standards presented herewith~~The District's Standard Specifications and Standard Drawings are to be used as a guide for those preparing plans and specifications for ~~projects~~Developments within the District. ~~THEY ARE NOT A COMPLETE SET OF SPECIFICATIONS.~~These Standard Specifications and Standard Drawings may not cover all Development elements. Where additional engineering design is necessary, the District's Standard Specifications and Standard Drawings shall be supplemented with additional technical specifications and details.

1.2 ~~1.2~~ Good, sound engineering practice precludes the use of a rigid set of standard specifications for every conceivable condition that may be encountered throughout the District. ~~It~~For all Developments except those determined by the District to be processed under Part C, herein, it is required that the ~~Developer's~~Applicant's Engineer prepare a set of plans and specifications based upon the ~~District standards~~District's Standard Specifications and Standard Drawings. Plans shall be complete, showing all necessary dimensions and location of all fittings, fire hydrants, air releases, services and blowoffs. The drawings shall indicate the type of joint (~~push-on~~, mechanical or flanged) for each fitting; this will require providing a detail for each piping intersection. ~~A utility service master plan shall be submitted with the engineering drawings showing for each lot the service box locations of (1) Pacific Gas & Electric Co., (2) Pacific Telephone and Telegraph Co., (3) Coastsid County Water District, and (4) United States Postal Service.~~

1.3 ~~1.3~~ The ~~District standards~~District's Standard Specifications and Standard Drawings shall not be adopted by reference unless a copy of the ~~standards~~District's Standard Specification(s) and Standard Drawing(s) is appended to the ~~project~~Development plans and specifications. Where this is done, the inapplicable portions ~~of the District's Standard Specifications and Standard Drawings~~ shall be deleted ~~from the standards~~.

1.4 ~~1.4~~ The standards presented ~~The District's Standard Specifications and Standard Drawings~~ are subject to revisions and additions at any time without notice. Latest revision dates are shown on ~~each~~the title sheet ~~and~~of the District's Standard

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Specifications and Standard Drawings and each standard detail sheet; it shall be the duty of those using the standardsDistrict's Standard Specifications and Standard Drawings to see that the latest revision is used. Copies of the standardsA copy of the District's Standard Specifications and Standard Drawings may be seenreviewed at the District Office or the office ofon the District Engineer at the addresses indicated belowWebsite:

Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019
Telephone: (650) 726-4405

James S. Teter
Consulting Engineer
15 Bayview Drive
San Rafael, CA 94901
Telephone: (415) 453-0754

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1.5 Reference is made to "Regulations Regarding Water Service Extensions and Water System Improvements," Section A, supra, which state the procedures to be followed pertaining to submission of plans and specifications as well as other matters pertaining to water improvements.

1.6 Website: <https://coastsidewater.org/engineering-department/>

1.5 In addition, the projectDevelopment specifications shall contain the following:

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(a) The ContractorApplicant shall designate in writing the name, address, telephone

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(a) number and emergency telephone number of the individual who will have responsible charge of the projectDevelopment and to whom District orders shall be

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directed.

(b) The Contractor's representativeApplicant shall give the District written notice not

(b) less than two(2)ten(10) working days in advance of the actual date on which the work will be started. Where work has been halted because of inclement weather or any other reason, it shall be the duty of the ContractorApplicant to notify the District at least forty-eight (48) hours before resumption of work. Any extra expense of the District due to failure to notify shall be charged against the DeveloperApplicant. The ContractorApplicant shall immediately notify the District if work is to be halted for any reason.

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(c) All salvaged material and Any materials or equipment deemed salvageable by the District shall remain the property of the

(c) District and shall be delivered to the District Yard in Half Moon Bay or the District Property in Pilarcitos Canyon, as directed by the District Representative.

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(d) Connections to or modifications to the existing system shall only be

(d) made by a contractorContractor previously approved by the District.

Names of approved contractorsContractors are available from the District Manager.

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2. 2. **Basic Design Criteria**

2.1 2.1 General

The following basic design factors have been prepared as a guide for use in sizing water lines and storage facilities. Flows Shallshall be increased to meet the actual demands of the user where required.

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2.2 Abbreviations

gpdpc — gallons per day per capita gpapd — gallons per acre per day

pgadapd — gallons per average daily attendance per day

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gpm — gallon per minute

2.3 Domestic Consumption

Average annual per capita consumption	130 gpdpc
Commercial use	1,000 gpapd
Light industrial use	2,000 gpapd
Schools	50 gpadapd
Parks	500 gpapd
Peak monthly rate	165% of average

day

Peak daily rate	230% of average
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day

2.4 Fire Flows

Fire flows shall be in addition to average daily domestic demands. See storage and transmission requirements below:

Residential areas	1,000 gpm for	4 hours
Multiple dwelling areas	1,500 gpm for	4 hours
Schools and commercial areas	2,500 gpm for	4 hours
Industrial areas	3,000 gpm for	6 hours

Water requirements for fire sprinkler systems shall be given special consideration.

2.2 2.5 Storage

WaterDistrict water storage tanks shall be sized to meet domestic, industrial irrigation, and fire flows as estimated by the District Engineer simultaneously. Tank elevations and service zones will be determined by the District. Generally, initial construction of storage volume sufficient to meet the full development of the projected service area will be required. Where construction of an incremental portion of the future

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requirements (fully developed service area) is permitted, sufficient property shall be provided and the site grading completed to meet the future requirements. ~~All storage tanks shall be located to be concealed from view as much as possible, and shall be landscaped.~~ Cathodic protection may be required.

Minimum volume of storage for a service area shall be determined as the largersum of the following values:

(a) (a) 24Operational Storage Volume: 25 (twenty-five) percent of max day demand (MDD) or four-hour storage atof the peak daily rate of domestic consumption plushour demand (PHD), whichever is greater.

(b) Fire Storage Volume: The maximum required fire flow volume (flow times duration) within a service area as determined by the Coastside Fire Protection District.

(c) Emergency storage. Volume: Three-day storage of the average day demand (ADD).

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(b) ~~Volume required to meet 5-day peaks of domestic consumption plus fire storage. This 5-day value will be calculated as the deficit between the available flow of water into the service area on peak days and the peak daily consumption within the area.~~

2.3 2.6 Transmission Pipelines:

(a) Transmission pipelines are defined as pipelines 12that are 10 inches in diameter and larger. All transmission pipelines shall be initially sized to meet the future requirements of the fully developed service area (peak daily demands plus fire demands) with the lowest practical pressure loss.

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(b) 2.7 Maximum pressure losses shall not exceed 3 feet per 1,000 feet of mainline at peak hour demand conditions or 10 feet per 1,000 feet of mainline at

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maximum day demand plus fire flow conditions in design.

(c) Maximum velocities shall not exceed 6 feet per second during peak hour demand conditions or 10 feet per second at maximum day demand plus fire flow conditions in design.

2.4 Distribution Mainlines, Other Pipelines, and Appurtenances

(a) (a) All materials and installation procedures for piping and appurtenances shall conform to the list of Approved Materials, infra, published latest edition of the District's Standard Specifications and Standard Drawings.

(b) The two following conditions shall be considered by the District, and shall be installed in accordance with the District Standard detail for the design of all water mains:

- (1) (b) At maximum day peak hour demand, the operating or "residual" pressure at all water service connections shall be at least 35 pounds per square inch.
- (2) At average maximum day demand plus fire flow, the operating or "residual" pressure in the area of the fire shall not be less than 20 pounds per square inch.

(c) Pipelines shall be sized by the District to serve the general water service vicinity; oversizing above the needs of a specific subdivision Development may be required. Generally, the following minimum pipeline sizes will be applicable for residential areas without multiple dwelling units:

- (1) (1) For pipelines with fire hydrants, minimum diameter shall be 68 inches;

- (2) (2) For pipelines without fire hydrants, minimum diameter shall be 46 inches with a maximum length of 650500 feet; longer with no future extensions;

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(3) For pipelines between 500 feet and 1,500 feet the minimum diameter shall be 6-inch diameter; 8 inches; Formatted: Heading 5, Indent: Left: 0"

(4) (3) For cur-de-sac pipelines more than 1,500 feet in length criteria will be developed on a case-by-case basis with 4 services or less, minimum size the District;

(d) For all pipelines, maximum velocities shall be 2 inches; and not exceed 6 feet per second during peak hour demand conditions or 10 feet per second at maximum day demand plus fire flow conditions in design. Formatted: Heading 4, Indent: Left: 0"

(4) For cur-de-sacs with 5 or more services, minimum size shall be 4 inches.

(e) (e) Pipelines shall be installed with a minimum of 3036-inches cover over the top of the pipe. Formatted: Heading 4

(f) (d) Pipelines shall be looped to form a grid network. Dead ends shall end water mainlines or distribution systems with single tie-in connections are to be avoided wherever possible. Where dead ends are unavoidable, as determined by the District, provision shall be made for blowing off the line mainline by means of a blow-off valve or hydrant.

(e) Pipelines shall be installed within the public right-of-way wherever possible, whenever possible, and shall extend the entire length of the property line facing the public right-of-way. The District requires a 20-foot-wide permanent easement for water lines mainlines within private property.

(g) (f) Water lines shall not be located closer horizontally than 10-feet from a sanitary sewer, except where bottom of water the center of the pipe will be at least 12 inches above the top of the sewer pipe, in which case 6-foot minimum horizontal spacing will be permitted. Where water lines cross under sewer lines, the sewer pipe for a distance of at least 10 feet on each 10' (ten feet) on either side of the crossing shall be fully encased in concrete water mainline. Additional easements will be required for laterals, meters, hydrants, valves, and other appurtenances as determined by the

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District.

(h) (g) Water mainlines and non-potable pipelines shall be placed to conform to the California Code of Regulations Title 22, Division 4, Chapter 6, Section 64572. If the Applicant and the District agree that the requirements of the California Code of Regulations cannot be met, the Applicant must prepare and submit a waiver request to the State Water Resources Control Board. The waiver request shall be submitted to and approved by the District prior to submission to the State Water Resources Control Board.

(i) Each service zone (pressure zone) will normally have normal pressures in pipelines from 35-~~115-150~~ pounds per square inch (psi). Where pressures are at or above ~~7580~~ psi in the distribution system, pressure reducing/regulating valves shall be installed on the individual services. Pressure reducing valves on District pipelines will not be permitted. private water supply line before the water enters the structure. In areas with lower service zone pressures, the District may require Applicants to acknowledge the pressure conditions in the Water Service Agreement, record a notice of low water pressure, and consider the lower pressures in the design of the Development's interior plumbing.

(j) (h) Each domestic water service shall have a primary control valve installed on the private water supply line before the water supply enters the structure.

(k) Each domestic water service shall have a hose bib connection in the front or the side of each structure where the water enters the structure so that the private water supply line can be flushed without water entering the structure.

(l) Valves shall be installed at maximum intervals of ~~800500~~ feet in main pipelines and on all branchbranched pipelines connected to the main linesmainlines. Valves will be located at street intersections; the number of valves will ordinarily be one less than the number of radiating lines, or where operationally necessary.

(m) (i) Fire hydrants. Locations of fire hydrants are subject to the approval of the Half Moon Bay Coastside Fire Protection District. Hydrants shall be located at a

PAGE

maximum 500-foot spacing. Steamer connections are required on hydrants in commercial, industrial and school areas, unless otherwise directed by the Coastsides Fire Protection District. Hydrants shall be installed on the mainline with the largest size available main with hydrant on supply side of intersection cut-off valves fire flow as determined by the District Engineer. Fire hydrants shall be located where flow can be provided from two directions; fire hydrants on dead-end lines shall be avoided whenever possible, unless otherwise approved by the District.

(n) (j) Air release valves shall be installed at high points in water distribution lines where air may accumulate. Services shall be located at high points where possible according to minimize the need for air release valves. Combination air District's Standard Specifications and vacuum relief valves shall be installed at high points in water transmission pipelines Standard Drawings.

(o) (k) Blow off connectors shall be provided at low points in the system installed according to the District's Standard Specifications and Standard Drawings.

(p) (l) Pumps will shall not be permitted to be direct directly connected to the District pipeline. Where a water user requires greater pressure than is available at the water meter, an air gap system shall be constructed by the user between the water meter and the booster pump, in accordance with the District's Standard Specifications and Standard Drawings and the District's current Cross Connection Control Program and Plan (CCCPP). District shall not be responsible for operating or maintaining pumps.

After completion, the District shall have the right to inspect the pumping system installation for conformance with District requirements upon 24 (twenty-four) hours notice. Pumping systems, while installed in conjunction with the District-owned service connection, shall be owned and maintained by the Applicant. District meters and service connections shall not be installed after a private pumping system.

(m) Backflow preventors prevention assemblies shall be installed on water service connections in accordance with the District's Standard Specifications and

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Standard Drawings, the Coastside County Water District CCCPP, and all State and Countylocal regulations. These installations shall include, but not be limited to, C1) services which have an operational well on the site, and C2) Nurseries and similar users which distribute fertilizer by means of the irrigation water supply.

2.5 2.8 Refilling Backfilling Trenches and Repaving

Trench-backfill materials, compaction requirements, repaving and guarantees shall comply with appropriate requirements of the Caltrans, City of Half Moon Bay and, County of San Mateo County, and the District's Standard Specifications and Standard Drawings.

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2.6 2.9 Testing

The water systemWater Utility System shall be tested in accordance with Section 13, "Hydrostatic Tests," of the American Water Works Association the District's Standard Specifications for Installation of Cast-Iron Water Mains, except that leakage shall not exceed one-quarter of the volume allowed by the AWWA and Standard G600 as tabulated below: Drawings.

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Pipe-Diameter, Inches	Total Leakage Permitted for 4 hr Test Period per 100 Lineal Feet of Pipe, in Gallons
4"	0.09
6"	0.14
8"	0.19
10"	0.24
12"	0.29
14"	0.33
16"	0.38

PAGE

Page 30 of 51

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Test pressure shall be 200 psi. The system shall remain under test pressure not less than 4 hours. Water for testing shall be potable water purchased from the District at established District rates. All gages, meters and taps shall be furnished by the Contractor and shall be calibrated by a certified test laboratory within one week of their use.

2.7 2.10 Disinfection

The water system shall be disinfected by introducing sufficient chlorine solution to provide 50 ppm of available chlorine throughout the system. The chlorine shall be introduced at a point within 18 inches of the point of water service after the system has been thoroughly flushed. The chlorine solution shall be retained in the pipeline for not less than 24 hours. The system shall be considered disinfected upon satisfactory completion of bacterial examinations conducted by the District.

Water for disinfection and flushing shall be potable water purchased from the District at established District rates. Cost of bacteriological tests will be paid by the Contractor.

2.11 The water system shall be disinfected in accordance with the District's Standard Specifications and Standard Drawings.

2.8 Service Connection Requirements (Other Than Fire Protection Service)

(a) Definitions

(1) Service Connection. An assembly consisting of the District-owned pipeline from the water main to the outlet side of the water meter, the meter box, fittings, and water meter.

(2) Individual Service Connection. A service connection which includes the installation of only one water meter. The service connection size is the pipeline diameter between the District water main and the water meter, and

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this pipeline shall be the same diameter as the meter size.

(3) **Master Service Connection**. A service connection which includes the installation of more than one water meter. The service connection size is the pipeline diameter between the District water main and the water meters, and this pipeline shall be the same diameter that would be required if the premise was to be provided water service through an individual service connection.

(4) **U.P.C.** Uniform Plumbing Code, 1988 Edition or subsequent editions.

(5) **Adequate Flow**. The total estimated peak water supply demand of the premise on the water service connection.

(6) **Minimum Water Pressure**. At the plumbing fixture located at the highest elevation and the farthest distance away from the water service connection, a minimum water pressure of 25 psi for residential buildings and 15 psi for non-residential buildings during peak water supply demand periods.

(7) **Building**. A structure with a contiguous roof under which the structural walls and foundations are not separated by more than one access way.

(b) **Location**. Service connections shall be installed in such a manner that the water meters are conveniently accessible to District personnel and that the length of the service connection piping is minimized. Location of service connection facilities shall be subject to the approval of the District.

(c) **Individual/Master Service Connections**

(1) **Individual Service Connections**. All service connections shall be individual type except where master service connections are specifically permitted, under Section 3-Cb). Both domestic and irrigation water may be supplied through an individual service connection.

(2) **Master Service Connections**. Master service connections may be installed only under the following conditions:

i) For multiple residential units or commercial units within one building, all of which is owned by a single legal entity (examples could include duplexes and apartments). Irrigation water may be provided

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through the master service connection only if (a) the irrigation system peak-demand is included in the total estimated peak water demand calculations for the master service connection, or (b) if the irrigation system is automatically operated during non-peak water demand periods.

ii) For multiple residential units or commercial units within one building which is or may be owned by more than one legal entity only if (a) irrigation water is provided by a separate service connection or non-District water supply source, or (b) the building occupies the entire area of the land parcel and any adjoining land under common ownership is provided with irrigation water by a separate water service connection or non-District water supply source (examples could include condominiums and townhouses).

iii) For second dwelling units, as permitted by Section G of the District's "General Regulations Regarding Water Service".

No more than one building may be served by a master service connection. The District may require more than one master service connection for a building if necessary for conformance with good waterworks engineering practice.

(a) (d) Sizing of Water Service Connections

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(1) Each service connection shall be sized by the District to

provide adequate water

(1) supply service based on peak flow and fixture unit counts (in conformance with the requirements for "adequate flow", "maximum velocity" and "minimum water pressure") for the premise, and the sizing of the service connection shall be in conformance with the procedure described below. Water meters will not be installed and water service will not be provided at a new location until the owner/applicantApplicant has demonstrated to the District that the total peak flow demand installed is within the capacity of the service connection previously purchased for that location. After a meter has been installed and water service initially provided, the

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~~owner/applicant~~Applicant shall not install additional water-using devices which will result in a total peak flow demand in excess of the peak flow capacity of the water service connection purchased.

~~(2)~~ ~~The size of water service connections shall be determined by the following procedure:~~

~~(2) i) Step 1: High Peak Velocity and District Water Mainline Low Pressure. Maximum velocity in the water service connection pipeline (other than fire protection services) shall not exceed eight (8) feet per second. Where the velocities in the water service connection pipeline would exceed eight (8) feet per second based on the meter size table below and at locations of service connections with lower service zone pressures (as acknowledged in the Water Service Agreement), the District will allow for the size of the water service connection pipeline and/or meter as practicable to minimize pipeline velocities and friction losses without an additional Transmission and Storage Fee.~~

(b) Other Metering Considerations

~~(1) The total estimated peak water supply demand on the service connection shall be calculated as the sum of (a) the peak flow ~~of~~based on the plumbing ~~fixtures~~fixture count as determined ~~from~~Table A-2 and Charts A-2 and A-3~~by the method~~ in Appendix A of the U.P.C.,most current California Plumbing Code and (b) the peak flow of other devices such as irrigation systems and equipment. The demand weight of plumbing fixtures not shown in the U.P.C.California Plumbing Code will be assigned by the District based on other recognized industry publications where applicable and based on engineering experience of the District in all other cases ~~(Note: for master service connections, the total estimated peak water supply demand on each water meter must be calculated separately as well as the total peak~~~~

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water-supply demand on the service connection.).

ii) **Step 2:** Select the smallest size of service connection (or combination of Service connections) and meters are assigned to a parcel by assessor parcel number (APN) and shall provide water to that single parcel.

(3) The location of the meter shall be determined by the District and consider the advanced metering infrastructure requirements for remote reading. Meters shall remain visible and accessible from the Table below which has public right of way and shall not be placed behind fencing or vegetation/landscaping.

(4) A dedicated irrigation meter is required for parcels with irrigated landscaped areas greater than or have sufficient capacity for the total estimated peak water-supply demand calculated in Step 1:equal to 5,000 square feet.

(5) Mixed-use developments on a parcel (residential with nonresidential) shall be required to meter each separate type of class of use based on the Rate and Fee Schedule.

(6) Meter Size

SIZE Meter Size (inches)	Peak Flow Capacity in Service Connection Gallons Per Minute (gpm) (gallons per minute)	Equivalent Water Connections
5/8" x 3/4"	20 gpm	1
3/4"	30	1.5
1"	50	2.5
1-1/2"	100	5.0
2"	160	8.0
3"	350	17.5
4"	600	30
6"	1000	50

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This table was established with the Crystal Springs Project and is used to determine the minimum meter size and the associated Transmission and Storage Fee and number of connections assigned to the water service. The service line will be sized according to best engineering practices and with a maximum velocity of 8 feet per second. Service lines and meters with peak flows over 50 gallons per minute require review and approval of the District Engineer.

2.9 The Service Connection Requirements for Dedicated Fire Service

Connections

(a) Fire services are sized based on criteria (flow measured in gallons per minute at a corresponding pressure measured in pounds per square inch) provided by the Applicant and approved by Coastside Fire Protection District.

- (1) Dedicated fire services shall not be installed on water distribution pipes less than four (4) inches in size. Fire services two (2) inches or larger may require a connection to a distribution pipe greater than four (4) inches, as determined by the District.
- (2) Maximum velocity in the fire service connection size calculated by this procedure is the based on the flow criteria (gallons per minute) approved by Coastside Fire Protection District shall not exceed 10 feet per second.
- (3) Dedicated fire services shall be designed to accommodate the pressure losses from the backflow prevention assembly.
- (4) The minimum fire service size that the applicant may use for a single-family residence shall be one (1) inch.

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(e) Metering

(1) All separate residential or commercial units (other than residential units in multiple unit buildings in excess of three stories in height) shall be furnished water through separate individual water meters.

- (5) For individual The minimum fire service size for a non-single-family residence shall be two (2) inches.

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(2)(b) A Transmission and Storage Fee is not required for dedicated fire service

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connections, the water meter shall be.

E. Appeals

If the same size as Applicant wishes to pursue an appeal of a District determination pertaining to these Regulations, the service connection.

(3) For master service connections, each water meterApplicant shall be

sizedprovide a detailed written basis for the portion of the total demand for which it provides service. Select the smallest size water-meter from the Table below which has sufficient capacity for the estimated peak water-supply demand to be served:

<u>Water its appeal</u>	<u>Meter Size</u>	<u>Peak Flow</u>
<u>Minute</u>		<u>Capacity in</u>
		<u>Gallons per</u>
5/8" x 3/4"		20 gpm
3/4		30
1"		50
2"		160
3"		350

(f) Water Pressure

Step 1: Determine the preliminary size of the building-supply piping using U.P.C. Table 10-2, and the service-connection piping determined from Section 4. (Note: Consult District for pressure in address the appeal to the District's water main at the service-connection location.)

Step 2: Calculate the water pressure under estimated peak water-supply-demand conditions at the plumbing fixture located at the highest elevation and the farthest distance away from the water-service connection. The calculations shall be performed using Chart A-1 of Appendix A of the U.P.C. for

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friction losses through water meters, Table A-3 of Appendix A of the U.P.C. for friction losses through valves and fittings, and Chart A-4 of Appendix A of the U.P.C. for piping friction losses. The calculations shall be performed by a qualified professional engineer licensed in the State of California. If this calculated pressure meets the District's "minimum water pressure" requirements (see Section 2.11.1(f)), the preliminary size piping used for the calculations is acceptable. If this calculated pressure does not meet these minimum requirements, it is probable that resulting water service will not meet customer acceptance standards. It shall be the responsibility of the owner/applicant to improve water pressure by:

- (1) increasing the size of building piping; or
- (2) installing a larger service connection; or
- (3) installing a pumping system conforming to District requirements.

If the owner/applicant elects not to improve the pressure by any of these means, but the pressure meets minimum U.P.C. requirements, the District will approve the application only if the owner/applicant consents to recordation of a notice to future owners and applicants of the low water pressure situation and the owner/applicant's sole responsibility therefor and agrees to indemnify the District against any and all costs resulting from the low pressure.

District Water Main Low Pressure. At locations of service connections where the normal pressure in the District's water main is below 35 psi, the District will increase the size of the water service connection pipeline as practicable to minimize pipeline friction losses at no cost to the applicant.

(g) Pumping Systems. At service connections for which a gravity flow installation does not provide at least minimum water pressure for the premise, the owner/applicant may at his own risk and expense install and maintain a pumping system (hydro-pneumatic system) as required to maintain adequate water pressure to the premise at all times. These pumping facilities shall be installed on the downstream

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side of the water meter for individual service connections and on the upstream side of the water meters for master-service connections, and shall conform to the following installation requirements:

- (1) The District's water main and the pump shall be physically separated by an airgap as defined in the U.P.C. The airgap separation shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe;
- (2) The installation shall include standby pumping equipment with a capacity equal to the system total estimated peak water supply demand; and
- (3) The installation shall include a standby engine-generator system for operation during PG&E power outages. The pumping system shall be designed by a qualified professional engineer licensed in the State of California, and shall be submitted to the District for review for conformance with District requirements. After completion, the District shall have the right to inspect the pumping system installation for conformance with District requirements upon 72 hours notice.

Pumping systems, while installed in conjunction with the District-owned service connection, shall be owned and maintained by the owner/applicant.

(h) **Cross-Connection Control.** Service connections shall be installed in conformance with the regulations of the State of California (California Code of Regulations, Title 17, Section 7583 through 7605) and the County of San Mateo. Water meters will not be installed and water service will not be provided at a new service connection until the owner/applicant has completed installation at his expense of any backflow prevention device required for conformance with all applicable cross-connection control regulations. These devices, while installed in conjunction with the District-owned service connection, shall be owned and maintained by the owner/applicant.

D. Approved Materials

1. General Manager.

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Page 39 of 51

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The following list of approved materials for water system construction has been established for the purpose of standardizing all materials so as to minimize the supply of spare parts and repair materials to be stocked by the District. Substitution of types of materials will not be permitted, although similar and equal products of manufacturers not named will be given consideration for items not requiring stocking of spare parts by the District.

The materials described herein are suitable for use under normally encountered conditions. Use of special materials will be required for special circumstances.

References herein to standard specifications of various organizations shall pertain to the current revisions of those specifications.

2. Pipe

2.1 Pipelines 4 Inches and Larger in Diameter

a) General. These pipelines shall be ductile iron pipe. In areas where soil conditions are known to be quite corrosive to metallic pipe, the District may require installation of a polyethylene film sleeve around the pipe. If pipe of foreign manufacture is proposed for use, each length of pipe shall be given a witnessed pressure test of 500 psi after delivery to California to eliminate those pipes damaged in transit.

(b) Pipe shall be ductile iron designed in accordance with ANSI Specification A21.50 (AWWA C150) except that the minimum thickness class shall be as shown below, and manufactured in accordance with ANSI A21.51 (AWWA C151). Pipe shall be furnished with standard thickness cement mortar lining conforming to ANSI A21.4 (CWWA C104), and the manufacturer's standard bituminous coating approximately 1 mil thick. Pipe joints and corresponding pipe thickness class shall be in accordance with the following:

(1) Push-on type joints shall normally be used for all buried piping. Rubber gaskets for these joints shall conform to ANSI A21.11 (AWWA C111). Minimum thickness class for push-on joint pipe shall be Class 52.

(2) Mechanical joint pipe shall be used where required adjacent to

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valves or fittings (see specification under fittings below). Minimum thickness class for mechanical joint pipe shall be Class 52.

(3) Flanged joint pipe shall be used where required adjacent to valves or fittings, and shall conform to ANSI A21.15 (AWWA C115). See additional requirements under fittings below. Minimum thickness class for flanged joint pipe shall be Class 53.

(e) Fittings shall be gray iron or ductile iron conforming to ANSI A21.10 (AWWA C110) and ANSI A21.10a (AWWA C110a) with standard thickness cement mortar lining conforming to ANSI A21.4 (AWWA C104) and the manufacturer's standard bituminous coating approximately 1 mil thick. Fittings shall be in accordance with the following:

(1) Push-on fittings shall normally be used for all buried piping. Rubber gaskets shall conform to ANSI A21.11 (AWWA C111).

(2) Mechanical joint fittings shall be used where required adjacent to valves. Rubber gaskets shall conform to ANSI A21.11 (AWWA C111). Bolts and nuts shall be high-strength, heat-treated cast iron tee head bolts with hexagon nuts.

(3) Flanged fittings shall be used where required adjacent to valves. Flanges shall be threaded, screw-on type, 125 pound class, drilled in accordance with ANSI B16.1. Gaskets shall be 1/2 inch thick, of SBR or neoprene rubber. Bolts shall be standard black machine bolts with square heads and cold pressed hexagon nuts.

(d) Pipe taps without use of a service saddle will be permitted in accordance with ANSI A21.5i (AWWA C151) as shown below:

PIPE SIZE	MAXIMUM TAP SIZE
4"	3/4"
6"	1-1/4"
8"	1-1/2"
10"	2"
12"	2"
14"	2"

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16"	2"
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(e) **Polyethylene encasement** of pipe will be required in installation areas with severely corrosive soils. Polyethylene encasement shall be in accordance with ANSI A21.5.

2.2 Pipelines Smaller Than 4 Inches in Diameter

These pipelines shall be either PVC (polyvinyl chloride) or galvanized steel pipe as determined by the District based on the corrosiveness of the soil in the area of installation.

(a) **PVC pipe.** Material for this pipe shall conform to ASTM Specifications D1784 and D2241. The pipe shall be pressure class 200 psi (2:1 safety factor) with a SDR 21. Fittings shall be PVC meeting the same specifications, or cast iron or ductile iron. Joints shall be push-on-type with integral pipe bell and rubber rings meeting the requirements of ASTM Specification D1869. Each length of pipe shall be marked with the manufacturer's name, diameter, material type and grade, pressure rating and SDR number, and the NSF (National Sanitation Foundation) marking of approval for potable water.

(b) **Galvanized steel pipe.** This pipe shall conform to ASTM Specification A-120, Schedule 40. Fittings shall be galvanized malleable iron conforming to ASTM Specification A197. Joints shall be threaded conforming to ANSI Standard B2.1. Unions shall conform to ASTM Standard A197, 150-pound class malleable iron. Galvanizing of pipe, fittings and unions shall conform to ASTM Specification A-153. Threads shall be coated with Teflon tape prior to joining.

3. Service Piping and Fitting

Service piping from water main to meter shall be Type K, soft copper tubing. Fittings shall be brass or bronze; all shall conform to AWWA Specifications for materials and dimensions. Fitting and connections shall be angle-grip seal compression type not

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requiring flanging such as the Hayslite type. The following Hays model numbers are listed as a standard of quality; similar and equal products by Ford will be acceptable.

Corporation stops	Hays No. 5200-CF and 4400-CF
Meter stops	Hays No. 25012-CF
Unions	Hays No. 5615-CF
Tees	Hays No. 5622-CF

4. Service Saddles

Service saddles shall have malleable iron or ductile iron bodies, neoprene gaskets, and corrosion-resistant straps and nuts. The Rockwell (Smith-Blair) type 311 and 313; Superior style 31 and 32; and similar and equal Mueller model are acceptable models. Service saddles will be required in accordance with the following table:

<u>Pipe-Size Tap</u>	<u>Size Requiring Saddle</u>
4"	1" and larger
6"	1-1/2"
8"	2"
10"	2-1/2"
12"	2-1/2"
14"	2-1/2"
16"	2-1/2"

Threads for the outlet shall normally be CC type except where IPS type is specifically required.

5. Fire Hydrants

Fire hydrants shall be wet barrel type with two 2-1/2" hose nozzle outlets, and

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with one 4-1/2" steamer nozzle in areas zoned industrial, commercial or school. Hydrant piping connection shall be push-on or mechanical joint type. Hydrants shall be Claw Vanguard type 645N or 665N as required. Extension pieces may be required in some areas.

6. Valves

6.1 Buried valves smaller than 4 inch size shall be brass body gate valves with flanged or screwed end connections and non-rising stem handwheel operators. The Hammond model IB645 is listed herein as a standard of quality.

6.2 Buried valves 4 inch size through 10 inch shall be iron body, bronze mounted, double disc AWWA gate valves with push-on or mechanical joint end connections (except where flanged connections are required) and 2 inch square non-rising stem operating nuts. These valves shall be Mueller model A-2380.

6.3 Buried valves 12 inch size and larger shall be butterfly valves meeting the requirements of AWWA Specification C504-66, class 15-B, and shall be provided with 2 inch square non-rising stem operating nuts suitable for direct burial. End connections shall be mechanical joint type except where flanged type are specifically required. Butterfly valves shall be Pratt Groundhog model.

7. Valve Boxes

Valve boxes shall be adjustable, slip-type, minimum 8 inch diameter, with cast iron or ductile iron traffic covers with the word "water" cast into the cover. The following types are established as a standard of quality:

<u>Box Material</u>	<u>Model</u>
Cast iron	Rich 920-B
Ductile iron	Ironsides
Concrete	Christy G-5

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8. Air Release Valves and Combination Air and Vacuum Relief Valves

Air Release valves and combination air and vacuum relief valves shall be iron body-type, 1 inch minimum size, similar and equal to those manufactured by APCO, McCracken or Bailey. The air discharge opening shall be provided with two street ells (turned downward) screened with bronze or stainless steel insect screen.

9. Meter boxes

Meter boxes shall be concrete with concrete lids, except in traffic areas where traffic-type lids will be required. The following products of Christy Concrete Products, Inc. are established as a standard of quality.

Meter Size	Christy Box-No.	Christy Non-Traffic Lid-No.	Christy Traffic
3/4"	B-9	D-15	C-15
1"	B-16	D-30	C-30
1-1/2"	B-30	E-45	GIG-45
2"	B-36	E-70	GIG-70

10. Meters

Meters will be provided by the District.

11. Flexible Couplings

Flexible couplings shall have cast iron bodies, neoprene gaskets and corrosion-resistant bolts and nuts. Products of Rockwell (Smith-Blair) and Superior are established as standards of quality in accordance with the following:

11.1 Straight flexible couplings shall be Rockwell type 441 or Superior style 41 or 42.

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PAGE _____

Page 45 of 51

11.2 Transition flexible couplings shall be Rockwell type 433 or Superior type 43.

12. Tapping Sleeves

Tapping sleeves shall be heavy-welded steel, split-body type with Buna-Nor neoprene "O" ring gasket, test plug and corrosion-resistant bolts and nuts. Tapping sleeves shall be Superior style 822 or equivalent Rockwell (Smith-Blair) or Mueller model.

13. Backflow Preventers

Backflow preventers shall be reduced-pressure type with double-gate valves, with certification by both the California State Health Department and San Mateo County Health Department. Approved backflow preventers are Hersey Beeco Model 14 or G-C and Cla-Val Co. Model RP-2.

14. Tracer Tape

A tracer tape shall be installed in the trench directly above all non-metallic (PVC) pipe. This tracer tape shall consist of a continuous aluminum foil core bonded on both sides with layers of inert plastic films pigmented on both sides with non-corrosive material. The tracer tape shall be 3 inches wide, and be inscribed with the words "buried water lines below" at approximately 2 foot intervals. Tracer tape shall be similar and equal to Alarmtape as manufactured by Alarm Systems Division, Wheaton, Illinois.

E. Limited Purpose Facilities

1. General

The Board of Directors may determine, by resolution, any facility which the

PAGE

District constructs, causes to be constructed or accepts from a third party to supply water to a specific area to be a limited purpose facility and subject to the provisions of this section.

Any facility determined to be a limited purpose facility shall be deemed to be designed and intended to serve only the specific property described in such resolution and the District shall not be deemed to have assumed to serve any other areas with such a facility unless and until and to the extent that the Board of Directors expressly so declares by later resolution.

No person shall have the right to directly connect to, or make beneficial use of, a limited purpose facility except upon payment of a pro rata contribution toward its cost, either for retention by the District or for repayment to the party who financed the initial construction, as applicable.

2. Pro Rata Contributions

The District will determine the "area of benefit" of a limited purpose facility, which shall consist of those properties which require the installation of the limited purpose facility in order to obtain water service or which are directly and substantially benefited by it.

The District will also determine an equitable methodology for allocating the benefits of a limited purpose facility to undeveloped property within the area of benefit.

Premises already served at the date of installation of a limited purpose facility will be excluded in determining the pro rata contribution of undeveloped property within the area of benefit.

3. Refunds

An applicant who has financed a limited purpose facility will be refunded 90% of all pro rata charges collected by the District for permitting the connection of a standard water service to such facility within ten (10) years from the date of the resolution designating the facility to be a limited purpose facility.

The District will refund the amount specified within ninety (90) days of receipt,

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without interest. The total amount of all refunds made by the District to the applicant may not exceed the amount advanced by the applicant for construction of the limited purpose facility.

4. Notice

Where a limited purpose facility is installed pursuant to this Section E, and the initial applicant owns all, or a part of, the additional, prospective "service area" adjacent to or near the facility installed, the District may require the recordation, at the applicant's expense, of a special agreement designating the specific area served, and the additional area which is not served, so that future purchasers of the area not served will have notice of the pro-rata charge as to their property for water service. In addition, and in all cases, where the initial applicant owns none of such surrounding area, the District may give notice of the prospective charge by mail to the owners in the area and to the planning commission, or other agency having jurisdiction over the area, so that future subdivider or developers of the area will be made aware, prior to approval of subdivision maps and/or building permits, that the property is subject to an additional pro-rata charge for the cost of the limited purpose facility.

5. Procedure

A developer who is required to construct, or advance funds to the District for the construction of, a facility which he believes should be designated a limited purpose facility may submit an application to District for its designation as such, the determination of the area of benefit and the calculation of the pro-rata contribution for undeveloped properties within the area of benefit. The District will process such application upon the developer submitting a deposit against the estimated administrative cost of determining the area of benefit and benefit allocation methodology.

The application will be submitted to the Board of Directors for approval upon the

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developer's execution of a written contract with the District incorporating the terms of this resolution and such other terms as the District requires for the administration of the designation and refund process.

F. Separability

If any section, subsection, sentence, clause or phrase of this Resolution is, for any reason, held to be invalid or unconstitutional, such a decision shall not affect the validity of the remaining portions of the Resolution. The Board of Directors of the COASTSIDE COUNTY WATER DISTRICT hereby declares that it would have passed this Resolution by section, subsection, clause and phrase thereof, irrespective of the fact that any one or more other sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

DERIVATION TABLE

A.1	R	48		
	es.	7		
A.2	R	48		
	es.	7		
A.2.1-2.3				2003-11
			es	
A.3	R	48		
	es.	7		
A.4	R	48		2003-11
	es.	7,	es.	08
				es
A.5	R	48		
	es.	7		
A.5.2	R	48		
	es.	7,	es.	08,
A.5.1-5.5	R	74		2003-11
	es.	3		
			es	
A.6	R	48		
	es.	7		
A.7	R	48		
	es.	7		
A.8	R	48		
	es.	7		
A.9	R	48		
	es.	7		
A.10	R	48		
	es.	7		
A.11	R	48		
	es.	7		

PAGE

B	R	48	1
	es.	7,	es. 30
C.1	R	48	
	es.	7	
C.2-C.2.5	R	48	
	es.	7	
C.2.6	R	48	
	es.	7,	es. 13
C.2.7(a)	R	48	
	es.	7	
C.2.7(b)	R	48	
	es.	7,	es. 13
C.2.7(c)-	R	48	
(m)	es.	7,	es. 31
C.2.8	R	48	
	es.	7	
C.2.9	R	48	
	es.	7	
C.2.10	R	48	
	es.	7	
C.2.11	R	71	
	es.	3,	30
D	R	48	1
	es.	7,	es. 31
E	R	71	
	es.	3	

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