



Elsinore Valley Municipal Water District

**Elsinore Valley
Municipal Water District**

Final Report

**Rules and Regulations for
Recycled Water Use**

May 2005



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SECTION 1 INTRODUCTION

1.1 GENERAL

The Elsinore Valley Municipal Water District (EVMWD) is located in the City of Lake Elsinore in Riverside County. EVMWD provides wastewater collection and treatment for the City of Lake Elsinore and other sewered developments in the EVMWD service area, including the adjacent unincorporated communities of Wildomar and Lakeland Village. EVMWD owns and operates several wastewater reclamation plants, which will treat the domestic wastewater to the State's Title 22 quality standards for recycled water use.

The California Department of Health Services (DHS) is required to establish uniform statewide recycling criteria for each type of recycled water use to protect public health. State law requires regional water quality control boards to issue water reclamation requirements or a master water reclamation permit based on the DHS statewide criteria and other permit conditions on a case-by-case basis.

EVMWD's recycled water use is regulated by the California Regional Water Quality Control Board (RWQCB), Santa Ana Region, subject to a master reclamation permit. California Water Code Section 13510-12 establishes a state policy to encourage the use of recycled water. Use of recycled water is based on the ability to adequately treat domestic wastewater to meet the requirements, set forth in Division 4, Chapter 3 of Title 22 of the California Code of Regulations ("Title 22").

The following Rules and Regulations ("Rules") govern the distribution and use of recycled water for landscape irrigation and other permitted non-potable uses.

District approval of any proposed use will be contingent upon DHS approval as required. Only those uses specified in a Recycled Water Permit as defined in Section 2 are authorized uses.

Recycled water may only be used in approved areas. District approval of any proposed use area will be contingent upon regulatory agency approval as required. Only those use areas specified in the Permit are approved use areas.

The use of "gray water" is expressly excluded from these Rules.

1.2 POLICY

The State of California through its Water Code Section 13510 encourages the development of facilities to recycle water, which formerly contained wastes, to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state. Further, Water Code Section 461 sets forth the policy of conserving

all available water resources by requiring the maximum reuse of wastewater for the beneficial uses of water.

EVMWD's newly adopted Water Recycling Ordinance sets forth the District's policy that recycled water determined to be available pursuant to Section 13550 of the Water Code shall be used for non-potable uses within designated Recycled Water Use Areas within the District's jurisdiction. This policy will apply wherever there is not an alternative higher or better use for the recycled water, its use is economically justified, financially and technically feasible, and consistent with legal requirements, preservation of public health, safety and welfare, and the environment.

1.3 PURPOSE

These Rules establish procedures for the distribution and use of recycled water by EVMWD within the District's designated Recycled Water Use Areas. Because recycled water is considered unsafe for human consumption, it is important that these Rules contain provisions, which will minimize or eliminate the possible misuse of recycled water.

1.4 INTERPRETATION

These Rules shall be interpreted according to the purpose and policy of these Rules and the definitions set forth in Section 2 herein. To the extent these Rules depend upon or incorporate Title 22, any amendment thereto shall be incorporated by reference in these Rules accordingly.

SECTION 2 DEFINITIONS

The terms hereinafter set forth, unless otherwise specified, shall be defined as follows:

AIR-GAP SEPARATION shall mean a physical break between a supply line and a receiving vessel. The air-gap shall be at least double the diameter of the supply pipe, measured vertically above the flood rim of the vessel, and in no case less than one inch. The design shall be to the satisfaction of the Elsinore Valley Municipal Water District, and the regulatory agencies.

AMERICAN WATER WORKS ASSOCIATION (“AWWA”) shall mean the American Water Works Association.

APPLICANT shall mean any person, firm, corporation, association, agency or authorized representative who applies for recycled water service under the terms of these Rules.

APPLICATION RATE shall mean the rate at which recycled water is applied to an irrigation or construction area expressed in inches per hour (or cm/hr).

APPROVED BACKFLOW PREVENTION DEVICE shall mean a device installed to protect the potable water supply from contamination and pollution as approved by DHS and the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, School of Engineering (“USC”).

APPROVED USE AREA shall mean a site, with defined boundaries, designated in a Recycled Water Permit issued by the District to receive recycled water for an approved use.

APPROVED USE shall mean the use of recycled water in a manner, and for such purpose, According to a Recycled Water Permit issued by the District and in compliance with any and all applicable regulatory agency requirements.

AS-BUILT DRAWINGS (see RECORD DRAWINGS).

AUTOMATIC SYSTEM shall mean an electronic, electrical or mechanical system, which includes automatic controllers, valves, and associated equipment required for the programming of effective water application rates when using recycled water.

COMMERCIAL USE shall mean the use of recycled water for toilets, urinals, decorative fountains, and similar non-residential uses.

CONNECTION FEE shall mean a charge imposed by the District for establishing or reestablishing recycled water service, including construction and/or installation of offsite facilities.

Section 2 - Definitions

CONSTRUCTION USE shall mean the approved use of recycled water for construction activities such as soil compaction, mixing concrete, and dust control during grading.

CONTRACTOR shall mean a person, persons, or firm entering into a legal agreement with the Applicant, Owner, or the District for the performance of work on all or any portion of facilities subject to these regulations.

COUNTY shall mean the County of Riverside, California.

CROSS-CONNECTION shall mean any unprotected actual or potential connection between potable water system used to supply water for drinking purpose and any source or system containing unapproved water or a substance that is not or cannot be approved as safe and potable.

CROSS-CONNECTION SPECIALIST shall mean a person certified by California-Nevada Section of AWWA or approved equivalent who coordinates and monitors a cross-connection inspection and control program to prevent contamination of the potable system used to supply water for drinking purpose by any source or system containing unapproved water or a substance that is not or cannot be approved as safe and potable.

CUSTOMER shall mean any person, firm, corporation, association, or agency that holds a District Recycled Water Permit, including any agent or authorized representative thereof.

DEPARTMENT OF HEALTH SERVICES shall mean the Department of Health Services of the State of California (“DHS”).

DESIGN AREA shall mean a site, with well-defined boundaries, proposed to receive recycled water for an approved use, as delineated in the application for recycled water service.

DIRECT BENEFICIAL USE shall mean the use of recycled water, which has been transported from the point of treatment or production to the point of use without an intervening discharge to waters of the State.

DISCHARGE shall mean any release or distribution of recycled water to a sewerage system, or storm drain system, any water of the State, or any other release or distribution other than for a permitted use.

DISTRICT CHARGE shall mean a one-time connection charge determined from the Schedule of Rates of the District, and payable by the Customer for obtaining recycled water. The purpose of this charge is for the expansion of recycled water facilities to serve the customers.

DISTRICT shall mean the Elsinore Valley Municipal Water District, California.

Section 2 - Definitions

GENERAL MANAGER shall mean the General Manager of the Elsinore Valley Municipal Water District or his/her designee.

GPH shall mean the rate of recycled water delivery in gallons per hour.

GPM shall mean the rate of recycled water delivery in gallons per minute.

GRAY WATER shall mean untreated wastewater other than toilet and/or urinal (“sanitary”) wastes.

HCF shall mean hundreds of cubic feet.

INDUSTRIAL PROCESS WATER shall mean recycled water used in industrial facilities for non-potable uses including rinsing, washing, cooling, circulation, or boiler feed.

INFILTRATION RATE shall mean the rate at which water will penetrate the soil surface and enter the soil profile, expressed in inches per hour or centimeters per hour.

INSPECTOR shall mean any person authorized by the District to perform inspections of either onsite or offsite facilities or areas prior to construction, during construction, after construction and during operation.

NON-POTABLE WATER shall mean water not satisfactory for drinking, culinary and domestic purposes or that does not meet the requirements of the health authority having jurisdiction. Non-potable water includes recycled water.

NON-RESTRICTED RECREATIONAL IMPOUNDMENT shall mean an impoundment of recycled water in which no limitations are imposed on body-contact water recreational activities.

OFFSITE FACILITIES shall mean facilities under the control of the District including, but not limited to, recycled water transmission mains, recycled water pipelines, reservoirs, pumping stations, treatment plants, and other appurtenances and property. For recycled water service, offsite facilities shall be those upstream of the point of connection with the Customer’s onsite facilities, normally ending with the meter tailpiece.

ONSITE FACILITIES shall mean the facilities under the control of the Applicant, Owner or Customer including, but not limited to industrial water systems, landscape irrigation systems and agricultural irrigation systems. For recycled water service, the onsite facilities shall be those downstream of the recycled water service connection, which shall normally begin with the meter tailpiece.

OPERATIONS PERSONNEL shall mean any employee of the Owner, or Customer, whether permanent or temporary, or any contracted worker whose regular or assigned work involves the supervision, operation, or maintenance of equipment, facilities, or a system using recycled water.

PERMIT (see RECYLED WATER PERMIT)

PERMITTED CAPACITY OF RECYCLED WATER shall mean the amount of recycled water that the Customer is permitted to have for the use area specified in the Recycled Water Permit.

POINT OF CONNECTION shall mean the point of connection of the Customer's onsite facilities to the offsite facilities of the recycled water distribution system.

PONDING shall mean the retention of recycled water on the surface of the ground or other man-made surfaces, other than the approved use area, for a period of time following the cessation of an approved recycled water use activity such that a hazard or potential hazard to public health results.

POTABLE WATER shall mean water that is pure, wholesome and suitable for human consumption, and which conforms to the latest edition of the U.S. Environmental Protection Agency National Primary Drinking Water Regulations, the California Safe Drinking Water Act, and any other applicable standards.

RECORD DRAWINGS shall mean approved mylar drawings that correctly show the completed onsite facilities and/or offsite facilities as constructed or modified. These drawings shall show all potable water, recycled water and sewer lines, and other utility lines.

RECYCLED WATER FACILITIES shall mean systems, structures, appurtenances, etc., used in the treatment, storage, pumping, transmission and distribution of recycled water.

RECYCLED WATER SERVICE CONNECTION shall mean the connection of the Customer's recycled water line to the District recycled water service line.

RECYCLED WATER SERVICE LINE shall mean the District's pipeline between its recycled water distribution system and the point of connection.

RECYCLED WATER SITE SUPERVISOR shall mean a person designated and authorized by the Owner or Customer and who shall operate the onsite facilities and irrigation systems and be responsible for the application of the guidelines, criteria, and standards of these Rules. The designated supervisor shall be trained to operate and maintain the onsite facilities and irrigation system, and to assume the responsibilities outlined in Section 5.2.2 of these rules. The recycled water site supervisor must be certified by a District recognized recycled water site supervisor training program.

RECYCLED WATER DISTRIBUTION LINES shall mean recycled water distribution pipelines and appurtenances acquired or constructed and owned by the District, and used for the conveyance of recycled water between the recycled water transmission mains and/or reservoirs, and the recycled water service connections and/or appurtenances.

Section 2 - Definitions

RECYCLED WATER shall have the definition set forth in Division 4, Chapter 3 of Title 22 and shall mean water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that otherwise would not occur. "Gray water" is specifically excluded from this definition.

RECYCLED WATER PERMIT ("PERMIT") shall mean a permit issued by the District to a recycled water service Applicant after the satisfactory completion of the service application procedures set fourth in these Rules. The Permit constitutes a service agreement, which legally binds the Customer to all conditions of the Permit and these Rules.

RECYCLED WATER TRANSMISSION MAINS shall mean major recycled water pipelines and appurtenances acquired or constructed and owned by the District, used to convey recycled water between the water reclamation plant and pump station or other source, to a reservoir and/or the recycled water distribution mains.

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY (RPP) shall mean a backflow prevention device incorporating not less than two check valves, an automatically operated differential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing as approved by the DHS and the Foundation for Cross-Connection Control and Hydraulic Research, School of Engineering.

REGULATORY AGENCIES shall mean those public entities legally constituted by federal, state, and local statutes to protect public health and water quality.

RESTRICTED RECREATIONAL IMPOUNDMENT shall mean a body of recycled water in which recreation is limited to fishing, boating, and other non-body-contact water recreation activities.

RUN-OFF shall mean the movement of recycled water beyond the boundaries of the designated use area along the surface of the ground or other natural or man-made surfaces including, but not limited to, pedestrian walkways, streets, playground surfaces, grassy slopes and drainage courses.

RWQCB shall mean the Regional Water Quality Control Board of the State of California, Santa Ana Region.

SCHEDULE OF RATES shall mean a schedule containing fees, charges, and deposits determined and issued by the District for the uses and services of recycled water.

SEPARATION shall mean the horizontal and/or vertical distance between a recycled water pipeline and a parallel potable water pipeline, sewer pipeline, or a sludge force main. The separation shall be the clear distance between the outside faces of the pipelines in question.

Section 2 - Definitions

SPRAY IRRIGATION shall mean application of recycled water to land to maintain vegetation or support growth of vegetation by spraying it from sprinklers or orifices in piping.

SSPWC shall mean the latest edition of the Standard Specifications for Public Works Construction, including the Regional Supplement Amendments of the County of Riverside, commonly known as the "Green Book".

SURFACE IRRIGATION shall mean application of recycled water by means other than spraying.

UNAUTHORIZED DISCHARGE shall mean any release of recycled water that violates these Rules or any applicable federal, state, or local statutes, regulations, ordinances, contracts or other requirements.

USE AREA: An area where recycled water is used.

WASTEWATER shall mean water or a combination of water and water-carried wastes discharged into or permitted to enter a public sewer.

WINDBLOWN SPRAY shall mean dispersed, airborne liquid particles of recycled water resulting from the use or discharge of recycled water and capable of being transmitted through the air to locations other than those for which the direct application of recycled water was intended.

SECTION 3

RECYCLED WATER SERVICE REQUIREMENTS

3.1 SERVICE CONDITIONS

The District shall control and schedule recycled water distribution to Customers. The provision of recycled water service and the use of recycled water by any Customer shall be subject to all the terms and conditions of these Rules.

3.2 APPLICATION PROCEDURE

3.2.1 Filing Application For Recycled Water Service

The Applicant shall meet with the District at the earliest possible date to determine whether the design area is within the District's service area. At this time, the availability of recycled water and the proximity of the site to the District's recycled water system will be reviewed.

An Applicant meeting the requirements for recycled water service seeking a Permit shall file an application for recycled water with EVMWD.

The application form shall contain detailed information concerning the Applicant as follows:

- a. The Applicant's relationship to the property for which recycled water service is requested. In cases where the Applicant is not the legal owner of the property, the legal owner shall consent to the application on a supplemental notarized form.
- b. The address and legal description of the property.
- c. The purpose for which the property will be used.
- d. The proposed use of recycled water.
- e. The proposed use area on the property.
- f. The Customer's estimated service requirements (flow, pressure, water quality, etc.) for recycled water.
- g. A designated contact that will become the Recycled Water Site Supervisor.
- h. Any special condition for service pursuant to these Rules.

The *Application Form for Recycled Water Service* is attached as Appendix A; the *Checklist/Action Request Form for Obtaining Recycled Water Service* is attached as

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Appendix B; the Status of Application for Recycled Water Service is attached as Appendix C; Recycled Water Service is Appendix D.

The application form shall be accompanied by plans and specifications per Section 4.5, delineating the proposed recycled water use area, the proposed location, size, and type of all recycled water service connections and onsite facilities, and any areas from which recycled water must be specifically excluded.

3.2.2 Applicant Compliance with Regulatory Requirements

The Applicant for recycled water shall agree to comply with the requirements of these Rules and any and all applicable federal, state and local statutes, ordinances, regulations and any other requirements.

3.2.3 Application Fees and Other Charges

Application fees, deposits, and capacity charges shall be paid in accordance with the District schedule of rates and shall be subject to all terms and conditions of these Rules.

3.3 PERMITS

3.3.1 Permit Issuance

The District shall review the application and conduct any necessary investigation to determine whether the District will provide recycled water service. The District may prescribe written requirements including but not limited to facility design, construction, operation and conditions of service. The District shall review plans of the onsite recycled and non-recycled water systems and conduct a field inspection before the Permit is granted. (See also Section 4.5 below).

The Permit shall be issued upon approval by the District and DHS. The Permit shall incorporate all the provisions of these Rules by express reference, and any additional requirements prescribed by the District. The Permit shall not be effective until construction of all required facilities is completed, tested, and inspected, and the District determines the Applicant is in compliance with all Permit conditions.

The Permit shall specify all allowable uses of recycled water and all restrictions thereon.

The Permit shall state the quantity of recycled water available to the Customer under the Permit. Delivery of the full quantity is subject to the District's supply capabilities. The District shall make a good faith effort to supply full permitted quantity, but shall be held harmless in the event that such a volume is not available for any reason, including, but not limited to, reduced plant production, increased demand, repairs to facilities, or regulatory compliance.

A copy of the Customer's current Permit must be available for review at all times, clearly posted at the use site, and/or on file at the Customer's office.

Section 3 – Recycled Water Service Requirements

3.3.2 Permit Renewal

The term of a Permit shall extend indefinitely and shall not require renewal, except that the District reserves the right to suspend or terminate the Permit, or to modify its terms and conditions, if any of the following occurs:

- a. A change of the owner, tenant, Customer or occupant of the property covered by the Permit.
- b. A change in the use of the property covered by the Permit.
- c. A change in the water quality characteristics of recycled water.
- d. A violation of these Rules and/or other applicable regulations.
- e. A change in federal or state regulations rendering performance by the District to be impractical or impossible.

3.4 ESTABLISHING SERVICE

3.4.1 Request for Service Connection

Following the completion of construction and/or installation of the recycled water facilities as applicable, the Customer shall request the District to install the service connection.

The request for service connection shall be accompanied by all required fees for installation and connection as indicated in the current schedule of rates and as appropriate for the size and type of service.

3.4.2 Request for Service Start-up

Following final District acceptance of the onsite facilities by the District, the Customer shall request service start-up. The request for start-up shall be accompanied by any outstanding cash payments as per the current schedule of rates in addition to those indicated in Section 3.2.3.

3.4.3 Temporary Use of Potable Water

At the discretion of the District, potable water may be made available to a Customer on a temporary basis, until recycled water is made available. In such an event, the Customer will be charged the potable water rate by the District. Before the Customer receives temporary potable water service, a Permit must be obtained. Prior to commencement of temporary potable service, an inspection of the onsite facilities shall be conducted by the District to verify that the facilities comply with the Permit. Upon verification of compliance, the Customer shall request service start-up of temporary potable water service. A customer supplied Reduced Pressure Principle Backflow Prevention Assembly (RPP) must be used in any connection for temporary potable water.

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3.4.4 Suspension of Service

The recycled water service is subject to suspension or termination any time the recycled water does not meet regulatory requirements at the terminal point of the District's reclamation plant.

3.5 CONDITIONS FOR RECYCLED WATER SERVICE

Permits for recycled water service and any connections for service made, as provided in the Permit issued under these Rules, shall be subject to the following conditions:

3.5.1 Adherence to Permit Conditions

Except as otherwise provided herein, all recycled water will be provided to the Customer in the condition and quantity specified in the Permit.

3.5.2 Control of Facilities (Liability)

- a. The District shall have control of and maintain and repair offsite recycled water service lines and meters. The Customer shall repair and maintain the recycled water service connections, in good working condition at or beyond the point of connection, and all onsite facilities. The District shall be entitled to inspect and test all connections and onsite facilities in the manner specified in Section 6.
- b. The Customer shall implement a preventative maintenance program designed to ensure the continued operation of all system elements complies with these Rules. The Customer shall be responsible for furnishing all operations and maintenance personnel with the system operating and maintenance instructions and record drawings to ensure proper system operation in accordance with system design and these regulations. At least one complete set of this information shall be kept onsite or in the nearest field office or maintenance building established by the Customer. The Customer is responsible for properly disseminating this information to all appropriate operations personnel.
- c. The Customer shall indemnify and hold harmless the District, its employees, and its agents from and against all claims, damages, losses or expenses arising from the use of recycled water under the Permit, from the use of facilities by which recycled water is conveyed, or from the inability or failure of the District to provide recycled water.

3.5.3 Extension of Distribution Mains

Unless otherwise provided by written agreement between the Customer and the District, the Customer shall pay for all onsite facilities, including their installation, as well as for recycled water service lines and extension of recycled water transmission and distribution mains in order to provide recycled water service to the Customer, in accordance with the provisions of these Rules and Regulations.

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3.5.3.1 Reimbursement Agreement

Where an Applicant requests recycled water service in areas where the District does not have existing recycled water transmission and distribution mains, the Applicant's request for recycled water service shall be addressed as follows.

If the District determines it is necessary to extend transmission and distribution mains to areas not included within a subdivision or area proposed by the Applicant in a Permit application, or where the District determines that oversized or additional facilities may be needed to accommodate future development, the District may grant the Permit contingent upon the Applicant financing and developing, at its sole cost and expense, such oversized service lines and facilities. In this event, the District and Applicant may enter into a reimbursement agreement whereby District will require subsequent Customers benefiting from such improvements to pay to the District an amount, to be determined by the District in accordance with the common practice, which represents the subsequent Customers' proportionate share of the costs of the improvements. The District will then pay to Applicant the amounts collected from the subsequent Customers. A reimbursement agreement may, however, contain a provision stating that the District's obligation to either directly reimburse the Applicant or collect such amounts from subsequent Customers pursuant to Section 3.5.3.1 shall expire in a given number of years from the date of execution of such reimbursement agreement.

3.5.3.2 Participation Agreement

Where the District intends to construct and develop a planned capital improvement project according to a planned timetable, and where the Customer desires to undertake to complete such planned capital improvement project prior to the District's completion date, the Customer and the District may enter into a participation agreement whereby the Customer shall agree to complete the planned capital improvement project in accordance with such design requirements and specifications of the District. The participation agreement shall provide for the equitable sharing of the costs of the capital improvement project between the Customer and the District in accordance with such mutually agreed upon terms.

3.5.4 Prohibition of Changes

The Customer shall not make any changes in, or additions to, the recycled water system without prior notification to, and permission from, the District. Any changes or alterations to existing onsite facilities, whether intentional or unintentional, shall be reported immediately to the District.

3.5.5 Services to Common Areas

The District reserves the right to supply recycled water to contiguous areas under single ownership through a single recycled water service connection.

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Common areas owned or operated by homeowners' associations or similar cooperatives should have only one service connection whenever it is practical, and will be operated as a single ownership.

3.5.6 Subdividing an Approved Use Area

- a. When a property provided with a recycled water service connection and water meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land on which the meter is located. Additional recycled water distribution mains and/or service lines will be required for all subdivided areas in accordance with these Rules, unless the subdivider provides covenants, conditions, and restrictions (“CC&R”) properly recorded with the County Recorder for the operation of onsite recycled water facilities serving more than one lot, and also provides easements for recycled water distribution mains and/or service lines or shows easement locations in the CC&Rs.
- b. All recycled water used on any premise where a meter is installed must pass through the meter. Customers shall be charged for all recycled water passing through the meters.
- c. Every recycled water service connection and meter assembly shall include a curb cock or wheel valve, as approved by the District (Valve Box detail provided in Appendix E), on the inlet side of the meter, which shall be used exclusively by the District for controlling the recycled water supply through the recycled water service line. If the curb cock or wheel valve is damaged by the Customer or the Customer’s use, repair and/or replacement by the District shall be at the Customer’s expense.
- d. Each Customer shall restrict the use of recycled water to those uses set forth in the Permit for recycled water services approved by the District.

3.5.7 Temporary Discontinuation of Recycled Water Service

By reason of circumstances beyond the control of the District, or in order to protect the facilities of the District, or for the protection of public health, safety and welfare of the residents or property owners of the District, recycled water service may be terminated under the conditions set forth below:

- a. On a temporary or permanent basis in the manner provided for in Sections 11.2 and 11.3, respectively.
- b. On a temporary basis, at any time the recycled water at the terminal point of the District’s water reclamation plant takeoff, does not meet the requirements of the regulatory agencies, including but not limited to those prescribed in Title 22 and any permit issued by the RWQCB. Recycled water service would in such cases, be renewed at such time that recycled water at the terminal point of the water reclamation plant would again meet the requirements of the regulatory agencies or at

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such time that the District would supplement the recycled water system from the potable water system in the manner provided by Section 3.4.3.

- c. When the District determines that a water shortage exists or is threatened, which prevents further recycled water service.
- d. Whenever such action is warranted pursuant to one of the proceedings or actions taken by the District pursuant to Section 11 of these Rules.

3.5.8 Conditions of Pressure and Service

Pressure and service shall be provided on an “as available” basis, at the Customer’s meter. The District shall state the available pressure of the system in its design guide. For dual plumbed sites, optimally, the on-site recycled water supply pressure should be operated at least 10 psig lower than the potable water system pressure. All Customers shall hold the District harmless from any and all damages and liabilities caused in whole or in part by pressure conditions, water quality variations, or interruptions in service. It shall be the Customer’s responsibility to install booster pumps or pressure regulating valves to increase pressure if necessary.

3.6 SIZE AND LOCATION OF SERVICE CONNECTIONS

The District reserves the right to determine the size and location of recycled water service lines, service connections and meters, and shall also have the right to determine the kind and size of backflow prevention devices and any and all other appurtenances to the service.

The recycled water service lines shall be extended to a curb line, or property line of the Customer’s property, abutting upon a public street, highway, road, or District easement in which recycled water distribution mains are installed.

3.7 ILLEGAL CONNECTIONS

No person shall make any connection to recycled water facilities of the District without a Permit from the District. Penalties for violations may be assessed according to Section 11 of these Rules.

3.8 METER TESTING

Any Customer may request the District to test the accuracy of its recycled water meter. In such an event, the Customer shall make a request to the billing section of the District for a Meter Accuracy Test. The meter testing shall be performed in conformance with the District’s Administrative Code.

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3.9 CROSS-CONNECTION PREVENTION

3.9.1 Purpose

The primary purpose of this Section is to protect the District's potable water supply from possible contamination by prohibiting and preventing cross-connections between the potable water distribution system and the recycled water distribution system, in accordance with Chapter 5, Title 17 of the California Code of Regulations ("Title 17"), and between the recycle water distribution system and on-site plumbing, in accordance to Title 22 of the California Code of Regulations ("Title 22"). The secondary purpose is to protect the recycled water system from other contaminants.

These provisions are in addition to, and not in lieu of, the controls and requirements of other regulatory agencies, such as DHS.

3.9.2 Backflow Prevention

Regulations governing backflow prevention devices are intended to protect the District's potable water supplies and are not intended to protect Customers from potential hazards of cross-connections in the Customer's onsite facilities.

- a. District approved backflow prevention for the District's potable water supply shall be provided by the Customer in accordance with the specifications of and as required by the District (See Appendix F).
- b. Provision, installation, maintenance and inspection of backflow prevention devices shall be the sole responsibility and duty of the Customer, and shall be performed at Customer expense. Inspection of backflow prevention devices shall be performed at least once a year, or more often in those instances where successive inspections indicate repeated failures. These devices shall be inspected, repaired, overhauled or replaced at the expense of the Customer whenever they are found to be defective. Records of such tests, repairs and overhauls shall be kept by the District, and such records shall be made available to any concerned regulatory agency upon request.

Installation and inspection of backflow prevention devices shall be performed by a certified tester at the Customer's expense. The certified tester shall submit to the District the original inspection reports as proof of compliance. All inspection and testing shall be performed to the District's satisfaction.

3.9.3 Type of Protection

The level of protection required is relative to the degree of hazard that the District determines exists on the premises served. Listed in increasing levels of protection, the following protective devices may be required: Reduced Pressure Principle Backflow Prevention Device (RPP) and air-gap separation. The Customer may choose a higher level of protection than required by the District. Minimum types required, relative to various situations, are listed below. The majority of situations require a RPP be installed on the potable water supply,

Section 3 – Recycled Water Service Requirements

immediately downstream of the supply meter. Situations not listed shall be evaluated on a case-by-case basis and the appropriate level of protection required shall be determined by the District in consultation with DHS.

3.9.3.1 Degree of Hazard

- a. On premises where the District's potable water system is used to supplement the recycled water supply, an air-gap separation shall be provided.
- b. On premises where recycled water is used and there is no interconnection with the potable water system, a RPP separation may be used instead of an air-gap separation if approved by the District and DHS.
- c. On premises where hazardous materials and toxic substances are stored, handled, or produced in any manner in which the substances may enter either the potable water and/or the recycled water systems, an air-gap separation shall be provided for the affected system. A RPP may be provided in lieu of an air-gap separation, if approved by the District and DHS.
- d. On premises where entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist, an air-gap separation shall be used.
- e. On premises where there is a repeated history of cross-connections being established or re-established, an air-gap separation shall be used.

3.9.3.2 Color-Coding on Dual or Multiple Water Systems:

Where any property subject to recycled water service is served by or contains dual or multiple water systems and piping, the exposed portion of recycled water pipelines, valves, and other fittings shall be colored purple, banded or marked to distinguish clearly which is used for potable water and which is used for recycled water (see also Section 4). In addition, all new unexposed recycled water pipes installed on any such property shall be similarly colored purple and marked: "RECYCLED WATER – DO NOT DRINK" with wording facing up. All recycled water appurtenances, facilities, and valves shall be posted or tagged with the wording "RECYCLED WATER - DO NOT DRINK".

3.9.4 Customer's Designated Recycled Water Site Supervisor

The operation and surveillance of onsite systems shall be under the management of the Customer's Recycled Water Site Supervisor. The use site supervisor shall attend a District approved training program. The site supervisor or their representative shall be available during normal working hours, at an address listed with the District for the purpose of hosting inspection tours or for discussing operational aspects of the system. The designated supervisor shall be available via telephone at a number listed with the District for emergency off-hours contact.

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The customer's Recycled Water Site Supervisor, whose qualifications and responsibilities are discussed in Section 5.2.2, shall be responsible for the prevention of any cross-connections on the property. In the event of a cross-connection to the potable water system, the Customer's Recycled Water Site Supervisor shall immediately shut off the main recycled water supply valve and depressurize the recycled water system to prevent further mixing with the potable supply, and shall also immediately advise the District of the occurrence of the cross-connection. The District will advise DHS so that appropriate measures may be taken to control any contamination or pollution.

The Customer shall assume all responsibilities to prevent cross-connections between the on-site facilities and any potable water supply, and shall indemnify and hold the District harmless from and against any claim of damage or loss which is caused or is alleged to have been caused, in whole or in part, by cross-connections of on-site facilities. The Customer shall be subject to these rules, including but not limited to, those allowing the District or DHS to inspect and approve all on-site recycled water facilities as provided in Sections 5.2.1. and 6.

3.10 CONVERSION TO/FROM RECYCLED WATER SERVICE

3.10.1 Conversion to Recycled Water Service

Proposals to construct a new onsite recycled water system or to retrofit an existing potable or non-potable system to serve recycled water for irrigation purposes must satisfy the requirements of these Rules. Applicants that propose to use recycled water for industrial applications or for other special uses, may be required to supply additional information on a case-by- case basis.

When a Customer seeks to convert any existing potable water irrigation system to a recycled water irrigation system, the proposed recycled water system shall be investigated for the District at Customer expense. The District and DHS shall review the as-built drawings and investigation reports, and determine the measures necessary for the existing system to comply with these Rules. The Applicant shall cooperate with the District in its efforts to obtain information, review existing documents, and inspect the onsite facilities. The Customer will be responsible for all costs associated with the conversion to recycled water system. The District or DHS may deny issuance of a Permit if either determines that the proposed conversion cannot be safely made.

3.10.1.1 Installation of Backflow Prevention Device:

The Customer shall install approved backflow prevention devices on all potable water or other water meter connections.

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3.10.2 Conversion from Recycled Water Service

If, due to onsite failure of the recycled water system or use violations, the District determines it necessary to convert the onsite facilities from recycled water supply to a potable water system or other water supply, it shall be the responsibility of the Customer to pay all costs for such conversion, unless determined otherwise by the District. Conversion costs shall include, but may not be limited to the following:

3.10.2.1 Isolation of the recycled water supply

Service shall be removed and plugged by the District at the recycled water main, or abandoned in a manner approved by the District.

3.10.2.2 Installation of Backflow Prevention Device

The Customer shall install approved backflow devices on all potable water or other water meter connections.

3.10.2.3 Removal of Existing Fittings

The Customer shall be responsible for removal and replacement of all fittings with approved fittings for potable water.

3.10.2.4 Hydraulic Testing and Disinfection

The Customer shall be responsible for hydraulic testing and disinfection of the converted pipeline, service line, connection, etc. prior to initiating the connection and use of the potable water supply.

3.10.2.5 Notification

The Customer shall notify all personnel involved with the operation of the abandoned recycled water service.

3.10.2.6 Warning Labels/Signs

The Customer shall be responsible for the removal of all warning signs and labels and repainting.

3.10.2.7 Installation of Potable Water System

Provision and installation of all potable water lines and facilities and any capacity fees due therefor shall be the responsibility of the Customer.

3.11 AUTHORIZED USES OF RECYCLED WATER

The uses of recycled water may include, but are not limited to, agricultural irrigation, commercial use, construction use, enhancement of wildlife habitat, industrial processes,

Section 3 – Recycled Water Service Requirements

landscape irrigation, and recreational impoundment. Determinations as to specific uses to be allowed shall be in accordance with Title 22. The District may, at its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies.

The use of recycled water in swimming pools is **not permitted**.

The use of recycled water for street cleaning operations is **not permitted**.

3.12 SCHEDULING RECYCLED WATER

The District will control and schedule the delivery of recycled water as necessary to maintain acceptable working pressure in the recycled water system and to safeguard the public health.

3.13 TEMPORARY/EMERGENCY CONNECTIONS TO THE POTABLE WATER SYSTEM

In the event of a present or impending emergency whereby full recycled water service is not available, the District may approve a temporary connection to the potable water system. Such temporary connection shall be made in accordance with Sections 4 and 5 of these Rules. The decision to provide temporary service from the potable water system shall be at the sole discretion of the District, and the District shall maintain and operate all connections. Any cost associated with such temporary connections shall be incurred by the Customer.

Before such temporary connection is made, the portion of use area where potable water is to be supplied shall be isolated by an air-gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the offsite system, as determined by the District. A District-approved backflow prevention device shall be installed on the potable water lines in accordance with Section 3 of these Rules and all applicable regulations of the governing agencies. The emergency connection shall be removed before connection is re-established to the recycled water system. Re-establishment of recycled water service must be inspected and approved by a District inspector prior to resuming delivery of recycled water.

The District may approve a temporary potable water connection for a Customer's recycled water system, without an air-gap. The temporary connection shall be designed to allow only one water source to serve the Customer's system at any given time. A District-approved backflow prevention device and meter shall be installed on the potable water service and the recycled water service prior to the Customer's connection, in accordance with Section 3. At no time shall the potable water system be connected to a system simultaneously served by a non-potable source.

The District, at its own discretion, may provide potable water in lieu of recycled water.

Section 3 – Recycled Water Service Requirements

3.14 ADDITIONAL RESTRICTIONS ON THE USES OF RECYCLED WATER

3.14.1 Run-off and Ponding

- a. The onsite facilities shall be designed not to exceed the peak moisture demand of the plant materials used within the design area and to apply irrigation water in a manner compatible with the infiltration rates of the approved use area.
- b. Conditions that directly or indirectly cause a run-off of recycled water outside of the approved use area; cause ponding of recycled water; or permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation, shall be eliminated or controlled to the greatest extent possible.

3.14.2 Protection of Drinking Fountains and Public Facilities

Any and all drinking fountains located within an approved use area shall be protected from contact with recycled water, whether by windblown spray or by direct application through irrigation or other approved uses. Protection shall be by relocation or isolation with a protective structure.

Recycled water irrigation systems shall not be installed near food establishments or public facilities such as picnic tables. Design of systems near such facilities shall require DHS approval.

3.14.3 Hose Bibbs and Quick Couplers

Hose bibbs shall not be installed on the onsite recycled water system regardless of style, construction or identifications. The use of quick couplers is at the District's sole discretion and requires a separate plan review by the District. Only quick couplers with approved color and identification will be allowed.

3.14.4 Fire Hydrants

No fire hydrants or other fire services connections may be installed on any onsite system that presently operates or is designed to operate with recycled water.

3.14.5 Irrigation or Impoundment of Recycled Water near Wells

There shall be no irrigation with, or impoundment of recycled water within 100 feet of any well used for potable or irrigation water unless it is demonstrated to the satisfaction of the District and the regulatory agencies that special circumstances justify less distance. In all circumstances, the restrictions imposed by Title 22 shall apply.

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3.14.6 Irrigation with Recycled Water near Residences Certain Public Places

No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or where the public could be exposed in a manner similar to a park, playground, or schoolyard.

SECTION 4

FACILITIES DESIGN AND CONSTRUCTION

4.1 DESIGN GUIDELINES FOR OFFSITE AND ONSITE FACILITIES

Offsite recycled water facilities design, including plans and specifications, shall be supervised by an engineer registered with the State of California. The onsite recycled water facilities design, including the plans and specifications, shall be supervised by appropriate professionals registered with the State of California, including a landscape architect, civil engineer or mechanical engineer. All recycled water facilities shall comply with Title 22, the AWWA (California-Nevada Section) Guidelines for Distribution of Non-potable Water, and the DHS Guidelines for Use of Recycled Water, and shall also comply with all the requirements, conditions and standards set forth in the current edition of the Standard Specifications for Public Works Construction including the Regional Amendments of the County, Elsinore Valley Municipal Water District's Standard Specifications and Drawings, the provisions of these Rules, and other applicable design standards and construction specification guidelines.

4.2 OFFSITE RECYCLED WATER FACILITIES

The costs to extend recycled water service shall be borne by the benefited property owners or the District as provided in Section 3.5.3.1 or Section 3.5.3.2 of these Rules. Such costs shall be in addition to other fees, deposits and charges.

4.2.1 Pressure Requirements

Service pressure requirements shall be determined by the District. The Customer shall design the onsite system to accommodate available pressure.

When a reasonable service pressure would not be available to onsite facilities, the Customer shall be responsible for correcting the situation. If available service pressure is too high, the Customer shall utilize pressure regulators downstream of the meter to obtain the correct pressure. If available pressure is too low, the Customer shall provide booster pumps to increase the pressure. For dual plumbed sites, a pressure regulator should be installed on the on-site recycled water system if the recycled water distribution pressure is equal to or above the potable system pressure. The pressure regulator on the recycled water system should be set at a value approximately 10 psi lower than the potable supply after the RPP backflow prevention device.

Whenever possible, the District will operate the recycled water system at a lower pressure than the potable water system.

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4.2.1.1 *Booster Pumps*

Customers using booster pumps shall identify the pumping systems as recycled water, avoid release of recycled water in an uncontrolled manner, and provide proper drainage of the packing seal water. At least one sign in English and Spanish shall be posted on the premises of the booster pumps, which can be readily seen by all operations personnel working in the area.

4.2.1.2 *Sealing Water*

An air gap is required for potable sealing water on a recycled water pump.

4.2.2 *Depth of Pipe Cover*

The top of the pipe of transmission/distribution mains shall be a minimum of 3 feet below the finished grade unless approved otherwise. The depth of cover on service lines shall be in accordance with the District's Standards.

4.2.3 *Pipe Separations to Other Utilities*

The following separation criteria apply between recycled water pipelines and other utility pipelines.

4.2.3.1 *Horizontal*

A 10-foot separation of the recycled water pipeline shall be maintained at all times between parallel potable water pipeline and/or a sanitary sewer or sludge pipelines. Separation distance shall be measured from the outside diameter of the pipes or fittings. If a 10-foot separation is not possible, the approval for special construction requirements shall be obtained from the District and DHS prior to construction. Common trench construction is not permitted. In any situation, a horizontal separation of less than 4 feet shall not be allowed.

4.2.3.2 *Vertical*

On new systems, potable water, recycled water, and sewer lines shall be located from the ground surface in order of descending quality. Potable water shall be located above recycled water, which shall be located above sewer. Minimum vertical separation shall be one foot between top and bottom surfaces of pipes. Exceptions to this general rule are as follows:

- a. On irrigation systems where intermittently pressurized recycled water lines (laterals) serve sprinkler heads, the potable water line(s) may be placed under the recycled water laterals. No special construction requirements are necessary provided that one-foot vertical separation is maintained.
- b. On sites using pressurized irrigation laterals with valve-in-head sprinklers, the potable water line(s) may be placed under the recycled water laterals if additional protection

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is provided for the potable line. Common practices include sleeving or automatic flow control/shut off devices installed and functioning properly on each lateral that crosses a potable line.

No additional special construction requirements are necessary provided that at least one foot vertical separation is maintained.

4.2.3.3 Pipe Crossings

As per the DHS Guidance Memo No. 2003-02, at places where potable and recycled water lines cross, either there should be no connection joints in the water main within eight horizontal feet of fluid pipeline or the recycled water piping should be sleeved 10 feet each side of the potable line crossing measured from the outside of the pipe. Pipe crossings shall be consistent with the District's Design and Construction Standards.

4.2.4 Color Identification of Recycled Water Pipes

All new transmission/distribution mains in the recycled water system, including service pipelines, valves and other appurtenances shall either be colored purple and embossed or be integrally stamped/marked "RECYCLED WATER - DO NOT DRINK", or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap. (See also Section 4.5.5.)

Color-coded identification (caution) tape differentiating the recycled water piping from other utility lines shall be consistent throughout the District's service area. The purple color shall be Pantone #512 per AWWA Guidelines.

When converting an existing potable water pipeline to recycled water usage, the water pipeline shall be accurately located and tested in coordination with District and regulatory agency requirements, and the necessary actions taken for the pipeline and appurtenances to comply with these Rules. If the existing pipeline meets District and the regulatory agencies requirements, excepting pipe identification, the pipeline shall be approved for recycled water service. If verification of the existing pipeline is not possible, the pipeline shall be uncovered, inspected, and identified prior to use. All maintenance or new work to offsite recycled water systems shall be color-coded for identification in accordance these Rules.

4.2.5 Identification Tapes

Identification tapes which help to trace the pipeline shall have black printing on a purple field having the words "RECYCLED WATER - DO NOT DRINK". The overall width of the tape shall be at least three inches.

Identification tapes shall be installed centered above the pipe longitudinally. The identification shall be continuous in its coverage on the pipe and shall be fastened to each pipe length. Taping attached to sections of pipe before they are placed in the trench shall have overlaps sufficient for continuous coverage. Other satisfactory means of securing the tape during backfill of the trench may be used if suitable for the work, as determined by the

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District. Sample tape marking and the inscriptions that go with it are as shown in the following figure.



4.2.6 Recycled Water Valve Casings

Valve casings shall be the standard steel casings with a special triangular, heavy-duty cover. All valve covers on offsite recycled water transmission lines shall not be interchangeable with potable water covers and shall contain a recognizable inscription cast on the top surface.

4.2.7 Valve Box Identification

Valve boxes shall be the standard concrete or fiberglass boxes with a special triangular, heavy-duty cover. All valve covers on offsite recycled water transmission mains shall not be interchangeable with potable water covers and shall contain a recognizable inscription cast on the top surface.

4.2.8 Color-Coding Exposed Recycled Water Facilities

All above ground, exposed recycled water facilities shall be consistently color-coded (purple) and marked to differentiate recycled water facilities from potable water and/or wastewater facilities.

4.2.9 Blow-off and Air and Vacuum Assemblies

Either in-line type or end-of-line type blow-off or drain assembly shall be installed for removing water or sediment from the pipe. Blow-off assemblies must be installed in a low point of the pipeline. The discharge from blow-offs should be designed to drain into a sewer. The discharge of recycled water to storm drains is prohibited. If there is no sanitary sewer to receive the discharge, the RWQCB and the DHS must be consulted regarding acceptable alternatives. All regulations must be strictly adhered to regarding the discharge and disposal of recycled water in a non-approved use area.

Air vacuum and release valves must be provided in high points of the pipeline system and sized according to the manufacturer's recommendations. All appurtenances for blow-off and air vacuum and release valve assemblies must be consistently color-coded purple and marked to differentiate recycled water facilities from potable water and/or wastewater facilities.

The EVMWD's standard details on Blow-off and Air and Vacuum assemblies are provided in Appendix G.

4.2.10 Swivel Ell Connections

If the recycled water supply is temporarily unavailable and potable water has been approved for emergency of supply and an air-gap separation is not possible, a swivel ell connection is

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required to connect to the potable water. This is to prevent connecting both sources to the approved use area at the same time.

DHS Policy Memo 2003-03, dated May 7, 2003, describes the requirements for swivel ell connections. The design, maintenance, and operation of swivel ell connections shall be in compliance with the Policy Memo 95-004. A copy of the swivel ell connection shall be submitted to the State DHS for review and approval. The District and State DHS must approve the swivel elbow before use. Otherwise, the potable water supply line shall be protected by an air-gap configuration to physically separate the potable and recycled plumbing lines.

Connections using the swivel ell must be witnessed by a District Cross-Connection Control Specialist. Swivel ell connections are illustrated in Standard Detail RW-123, *Swivel Ell for Recycled and Potable Water Supply*. In an emergency, the swivel ell is switched from the normal recycled water connection to the potable connection. This procedure is reversed once the recycled water supply is restored. In addition, the potable water supply must be protected by an approved reduced pressure principle backflow prevention device upstream of the swivel ell.

4.3 ONSITE RECYCLED WATER FACILITIES

All onsite recycled water facilities (e.g. decorative fountains, car washes, etc.), which specifically benefit the approved use area, shall be provided by the Applicant, owner or Customer at its expense. The Customer shall make, at their expense, any modification to the potable water system on the premises which is required by the District for recycled water service, including but not limited to District-approved backflow prevention devices. Onsite recycled water facilities shall be designed for recycled water use in those areas where the District has determined that recycled water will be supplied in the future, even though recycled water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the recycled water system when it becomes available. In the interim, potable water may be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with an approved reduced pressure backflow prevention assembly installed by the Customer to the satisfaction of the District and DHS.

Plans and specifications for Customer recycled water facilities shall be submitted to the District as specified in Sections 3.5.1 and 4.5.1 of these Rules and Regulations.

4.3.1 Identification of Onsite Pipes and Fittings

New onsite pipelines shall be identified as recycled water pipes by using a purple color code differentiating them from potable water piping.

All piping must be appropriately labeled or continuously taped with appropriate identification.

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Approved use areas for recycled water service shall also be posted with precautionary notices per Section 5.3.

When converting an existing potable water line to recycled water usage, the water line shall be accurately located and tested in coordination with the District and the regulatory agencies, and the necessary actions taken to bring the water line and appurtenances in compliance with these Rules. If the existing line meets approval of the District and the regulatory agencies, except for the pipe identification, the line shall be approved for recycled water service. If verification of the existing line is not possible, the line shall be uncovered, inspected, and identified prior to use. All maintenance or new work to onsite recycled water systems shall be color-coded for identification in accordance with these Rules.

4.3.2 Warning Tapes

A warning tape with metallic backing shall be installed on all recycled water service lines. The tape shall run continuously the entire length of the pipe and shall be at least 3 inches in width (see Section 4.2.5 for tape sample and color).

4.3.3 Color-Code for Recycled Water Pipes

All recycled pressure or non-pressure pipe shall be purple with the words "RECYCLED WATER - DO NOT DRINK" embossed or integrally stamped/marked on the pipe.

The warning shall be stamped on opposite sides of the pipe, repeated every three feet.

All connections, temporary and permanent to a recycled water system shall be identified in such a manner as to differentiate them from connections to a potable water system.

4.3.4 Valve Box Identification

All new recycled water valve boxes and covers for irrigation control valves, isolation valves, quick couplers, etc., shall be color-coded purple and embossed "Recycled Water – Do Not Drink". Existing covers may be retrofitted with a purple nameplate marked: "RECYCLED WATER – DO NOT DRINK" and permanently attached to the cover.

4.3.5 Separation

Refer to Section 4.2.3 for horizontal and vertical separations.

4.3.6 One Hundred Year Flood

4.3.6.1 Runoff and Erosion

All recycled water storage facilities owned and/or operated by recycled water Customers shall be protected against erosion, overland runoff, and other impacts resulting from 100-year frequency 24-hour-duration storms to the satisfaction of the District.

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4.3.6.2 Peak Flood Levels

All recycled water storage facilities owned and/or operated by recycled water Customers shall be protected against 100-year frequency peak stream flows and flood levels, as defined by the Riverside County Flood Control District, and to the satisfaction of the District.

4.4 RECYCLED WATER FOR CONSTRUCTION USE

4.4.1 Permits

The use of recycled water for construction purposes requires approval of the District and the appropriate regulatory agencies. The Permit shall be obtained prior to beginning construction.

4.4.2 Uses

Recycled water for construction purposes may only be used for soil compaction during grading operations, dust control and consolidation and compaction of backfill in trenches for non-potable water, sanitary sewer, storm drain, gas and electric pipelines. Recycled water shall not be used for water jetting and consolidation or compaction of backfill in trenches for potable water pipelines.

4.4.3 Equipment

Vehicles used for distributing recycled water for soil compaction and dust control shall be provided with an adequate tank and plumbing system to ensure that leaks and ruptures will not occur in the course of normal use.

Control valves shall be provided such that recycled water can be applied in a controlled fashion on the approved use area, and completely retained during transit to all other areas. Spray heads or nozzles shall be provided and configured in such a way that the recycled water is uniformly applied, and runoff, ponding or windblown spray conditions are prevented.

Each tank shall be equipped with an approved air-gap separation. Above ground recycled water appurtenances shall be color-coded purple and labeled or tagged “RECYCLED WATER – DO NOT DRINK” in English. The labeling or tagging in Spanish is optional. . Water towers and trucks utilizing recycled water shall be properly identified and clearly marked with recycled water notification to the satisfaction of the District.

Equipment operators shall be instructed about the requirements contained herein and the proper use of recycled water. Water trucks, hoses, drop tanks, etc. shall be identified as containing recycled water and not suitable for drinking water. Recycled water shall not be introduced into any domestic water piping system. No unprotected connection shall be made between equipment containing recycled water and any part of a potable water system.

4.4.4 Ponds

Ponds used for storage of recycled water for construction shall be fenced and posted to limit public access. Fences shall be in accordance with Regional Standards.

4.4.5 Equipment and Facilities Cleaning

Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps which have been used with recycled water shall be cleaned and disinfected before moving to another job site. This disinfection and cleaning shall ensure the protection of public health in the event of any subsequent District-approved use. The disinfection shall be performed in the presence of the District's inspector.

Service connections, equipped with recycled water meters, for the construction use of recycled water shall be provided by the District at locations convenient to the Customer and at the discretion of the District. A secure fence or enclosure must be provided to prevent vandalism or unauthorized use of recycled water. This enclosure shall have an approved sign stating: "RECYCLED WATER – DO NOT DRINK" both in English and Spanish.

4.5 SUBMITTALS

The following information shall be submitted to and approved by the District prior to commencing any construction.

4.5.1 Customer's Plans and Specifications

Plans and specifications for the construction of onsite recycled water facilities shall be prepared by a civil engineer, a mechanical engineer or a landscape architect registered with the State of California, and submitted to the District and State DHS for review and approval per Sections 3.5.1 and 4.3. The plans shall delineate the proposed recycled water service area, the proposed location, size and type of all recycled water service connections and onsite facilities. The plans shall include the layout of existing potable water pipelines and facilities including any areas in which recycled water must be specifically excluded.

A declaration of responsible charge shall be included on the cover sheet as follows:

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Declaration of Responsible Charge

I hereby declare that I am the _____ of work for this project, and that I have exercised responsible charges over the design of this project as defined in Section 6703 of the Business and Professions Code and design is consistent with current standards.

I understand that the check of project drawings and specifications by EVMWD and DHS is confined to a review only and does not relieve me, as the _____ of work, of my responsibilities for project design.

Firm name and address:

Phone No: _____

By: _____ Date _____
Name

Registration No. _____ Expiration Date: _____

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4.5.2 Information on Customer's Plans

The following information shall be provided on the plans for every Customer applying for any recycled water service meter:

- a. Application information specified in Section 3.2.1.
- b. Meter size (inches) and the District to verify
- c. Irrigated area to be served through the recycled water meter (square feet or acres).
- d. Peak flow through the meter (gpm).
- e. Estimate of the yearly recycled water requirement (acre-feet or HCF).
- f. Service pressure at the meter as provided by the District (psi).
- g. Topographic contours of the site (1 ft interval), or if not available, sufficient information to determine elevation differences within the site.
- h. Direction of drainage.
- i. Location of wells (if applicable).
- j. Location of 100 Year Flood Plain (if applicable).
- k. Location of potable water lines and sanitary sewers.
- l. Location of storm drains.

4.5.3 Information Required for Recycled Water Irrigation Systems

If the onsite facilities include a landscape irrigation system, the following data for the materials used in the irrigation system shall be included on the plans:

- a. A pipe schedule listing pipe sizes and materials of construction.
- b. Valve types/sizes.
- c. The following information for each type of sprinkler head:
 - i. Sprinkler radius (feet).
 - ii. Operating pressure (psi).
 - iii. Flow (gpm or gph).
 - iv. Sprinkler pattern.
 - v. Manufacturer, model number and all pertinent information.
- d. Drip irrigation information and all other pertinent equipment.
- e. Estimates of application rate, acres to be irrigated, soil texture and soil infiltration rate, and information on pressure requirement, hourly delivery rate, and the wetting pattern of sprinklers.

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4.5.4 Additional Information to be Specified on Customer's Plans

Exterior drinking fountains, potable water hose bibbs, public eating and cooking facilities, playground equipment, tot lots, outdoor swimming pools and spa locations shall be shown and identified on the plans. If no exterior drinking fountains or other public facilities are present in the design area, then it shall be specifically stated on the plans that none exist. For dual-plumbed sites, if recycled and potable lines cross, a typical cross-section must be included in the detail section of the plans.

The design and proposed locations for recycled water “DO NOT DRINK” signs shall be shown on the plans. An additional, detailed signage plan may be required by the District for unusual circumstances.

4.5.5 Standard Notes for Inclusion on Customer's Plans

Provide the following notes as applicable, on the recycled water improvement and irrigation plans under the heading "Recycled Water General Notes:"

4.6 RECYCLED WATER GENERAL NOTES

1. The contractor shall notify EVMWD at (951) 674-3146, 48 hours prior to commencement of any excavation onsite improvements.
2. All work shall be performed in accordance with these Rules and DHS requirements.
3. All public facilities such as comfort stations, drinking fountains, outdoor eating areas, etc., shall be protected from spray and/or misting by recycled water.
4. No ponding, run-off, misting or over spray is permitted. Locate or adjust all irrigation heads to prevent over spraying onto sidewalks, streets, private lots, and non-approved use areas.
5. No ponding, run-off, misting or over spray is permitted. Locate or adjust all irrigation heads to prevent over spraying onto sidewalks, streets, private lots, and non-approved use areas.
6. Non-approved use areas shall be protected from contact with recycled water, whether by windblown spray or by direct application through irrigation or other use. Lack of protection, whether by design, construction practice, or system operation is strictly prohibited.
7. Hose bibbs on recycled water systems are prohibited.

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8. Cross connection between recycled water lines and potable water lines is strictly prohibited.
9. Recycled water quick coupling valves shall be designed for use on recycled water in accordance with these Rules.
10. Quick coupling valves used in recycled water systems shall conform to the following:
 - a. Quick coupling valves can be 1-inch or 3/4-inch nominal size, with brass construction and a normal working pressure of 150 psi or equal.
 - b. A purple rubber or vinyl locking cover shall be permanently attached to the quick coupling valves.
11. No substitution of pipe materials will be allowed without prior approval by the District and DHS.
12. All irrigation pipe shall be colored purple and stenciled with “Recycled Water Do Not Drink” in English and Spanish. Orient the stenciling to the top of the trench for laterals. Install purple metallic tape over the recycled water mains as described in these Rules.
13. Burial of all piping shall be in accordance with these Rules for the use of Recycled Water. Provide a minimum cover of all pipe and wire in accordance with these Rules for the use of recycled water.
14. Hours for irrigation with recycled water are from 9:00 p.m. to 6:00 am. The hours for irrigation with disinfected tertiary recycled water may be modified by the local authority and shall be under the supervision of the Customer’s Recycled Water Supervisor. Irrigation with water of a lesser quality than disinfected tertiary recycled water must be reviewed and approved by DHS.
15. When potable water lines and recycled water lines cross, the recycled water line shall be installed within a protective sleeve. The sleeve shall extend 10 feet from each side of the outside edge of the potable line.
16. Maintain separation between potable water, recycled water, and/or sewer pipelines according to the District’s Rules & Regulations and DHS Guidance Memo No. 2003-02 latest revision. Measurements shall be between facing surfaces, not pipe centerlines. Install sewer line below a recycled water line and a recycled water line below a potable water line.
17. Provide a minimum of 12 inches of vertical separation between potable water, recycled water, and sewer line according to these Rules and DHS. Maintain at least 12 inches crossing separation between other utilities.

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18. All public and private potable water mains including fire mains and any water wells and water courses within the recycled water project shall be shown on plans.
19. The site irrigation systems as shown on these documents may utilize potable water until such time as the District makes recycled water available to the site.
20. Install purple colored Pantone #512 material for all above ground irrigation facilities per AWWA Guidelines and Section 116815 of the California Health and Safety Code.
 - a. Valve and other on-grade boxes - integral color
 - b. Sprinkler heads - integral color plastic

Above ground piping to sprinklers can be UV resistant PVC material; however, all sprinkler risers and heads must be marked for recycled water use.

21. All recycled water sprinkler control valves and other below grade facilities within boxes shall be tagged with identification tags. Tags shall be weather proof plastic 3 inches x 4 inches, purple in color, with words "RECYCLED WATER – DO NOT DRINK" and "AGUA IMPURA – NO BEBER" imprinted on one side, and the recognized symbol for do not drink on the other side. Imprinting shall be permanent and black in color. One tag shall be attached either to the valve stem directly or with plastic tie wrap, or to the solenoid wire directly or with plastic tie wrap.
22. The Applicant shall conduct a cross-connection control shutdown test and coverage test (as defined in Section 4.8 of the District's Rules) when requested by the District or DHS prior to any use of recycled water. The method of this test must be approved by the District.
23. The required cross-connection control shutdown test shall be performed by an outside contractor who is a certified Cross-Connection Control Specialist as defined in the District's Rules and witnessed by the District's Cross-Connection Control Specialist. Copies of inspection reports will be forwarded to the District.
24. The design and location for recycled water "DO NOT DRINK" signs shall be in accordance with the District's Design and Construction Standards and shall be included on the plans.
25. An annual site survey shall be performed by the District subject to approval by the DHS. Copies of the inspection reports will be forwarded to the relevant parties.
26. Prior to conversion to recycled water, an on-site recycled water site supervisor shall be designated in writing as required in Section 3.9.4 of these Rules. Copies of the site supervisor's certificate of training with a 24-hour contact telephone number shall be

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provided to the District and DHS.

27. All maintenance personnel shall be educated on a continuous basis of the presence of recycled water. Personnel must be informed that recycled water is meant for irrigation and DHS-approved non-potable use only. It is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry, it is important this information be disseminated on continual basis.
28. A physical separation shall be provided between areas irrigated with recycled water and those irrigated with potable water. Separation may be provided by concrete mow strips, fence or wall, or other means as approved by the District and DHS.
29. Customers and Applicants may not create or maintain any direct (pipe-to-pipe) drainage of recycled water into the storm drains.

4.7 RECORD (“AS-BUILT”) DRAWINGS

The Applicant, Customer, or owner shall submit record drawings to the District before a request for service start-up is made.

Any proposed changes from the original design shall be accurately recorded on one set of drawings and submitted to the District for agreement and approval prior to construction. Such changes shall be approved by the District before any changes, modifications, or additions are made.

4.8 RECYCLED WATER INSPECTION PROCEDURES

4.8.1 Coverage Test

Upon completion of the construction of any irrigation system, the system shall be inspected to determine its adequacy to meet health and safety concerns. The coverage test looks at overspray, misting, ponding, runoff, color-coding, and signage. The Cross-Connection Specialist will schedule the coverage test with the Customer site supervisor and DHS. Any punchlist is finalized by the Cross-Connection Specialist. This procedure may be performed concurrently with the shutdown test as described in the following section. On LMDs, the inspection relates to the possibility of the inhalation of recycled water irrigation spray, overspray and misting into non-approved use areas, and runoff into area storm drains. The inspection must also include the possibility of cross-connecting the irrigation system and other private potable water systems. All changes from the approved design drawings shall be marked on as-built drawings.

4.8.2 Shutdown Test

The following applies to sites using recycled water for landscape irrigation. These sites may have on-site potable services to drinking fountains, restrooms, and isolated systems using

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potable water. Additionally, potable water may serve on-site buildings for domestic purposes.

The initial test of new and retrofit sites with potable water services (dual-plumbed sites) is conducted using potable water high-lined to the irrigation system point of connection. A reduced pressure principal (RPP) backflow prevention device must be used for the high-line connection, and all testing is conducted using potable water. The recycled water meter will be set, and service activated after successful completion of cross-connection testing and inspection.

This cross-connection test using pressure data loggers or recorders is designed to provide reasonable assurance that a recycled water system is not intentionally or inadvertently cross-connected to any other water system. Modifications to the following procedure may be necessary. For each site, the specific method of cross-connection testing must be approved by DHS and the District. The location and type of pressure recording equipment must be specified in the test method.

The cross-connection test begins by monitoring the recycled water system and any on-site potable water system(s) for 24 hours prior to the shutdown test. During this 24-hour period, the recycled water system is pressurized with irrigation stations running during their normal schedule. It is very important that the irrigation controller clock is set correctly, and the station schedule is noted. Usually, recycled water quick couplers are used as points of connection for pressure recording equipment. This part of the test is designed to check irrigation system operation and detect any unauthorized connections or uses of the recycled water system. Additionally, normal operating pressures for the recycled water system and potable system are recorded during this period. For the recycled water system, any spikes or dips in the pressure record that are not within the operating period of the irrigation system must be explained before proceeding.

The shutdown test starts with a shutdown of the recycled water system for at least 4 hours. During the recycled water shutdown, potable water service is left on at normal pressure while the recycled water system is shutoff at the meter service connection. After shutoff, the initial pressure of the recycled water system is lowered to approximately 30 psi at the point of connection. This pressure must hold until the first irrigation station is activated. During the recycled water system shutdown, all irrigation stations must be activated for at least two minutes per station. Additionally, any adjacent site irrigation system stations should run during the recycled water system shutdown. Any pressure spikes noted on the recycled water system pressure record must be accounted for before proceeding.

A successful recycled water system shutdown, with no pressure increases or flows noted, provides basic assurance that cross-connections do not exist.

If the site has potable water service connection(s), a minimum 4-hour potable water shutdown is conducted after the recycled water system shutdown test. During this part of the test, the recycled water system is on at normal pressure, while the potable system is off and depressurized to approximately 30 psi. On the potable system, building isolation valves

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should be closed first, and any occupants notified that the water is off. It is always preferable to conduct the potable water system shutdown at a time when buildings are unoccupied. After building isolation valves are closed, the potable system is shutoff at the RPP backflow prevention device using shutoff valve #1 and the system is depressurized to approximately 30 psi. Each irrigation station on the recycled water system must run at least once during the potable water system shutdown. Since each irrigation station is operating during the potable water system shutdown, usually, the coverage test is conducted at this time.

Any increases noted during the potable water system shutdown must be investigated for cross-connection between the onsite irrigation and domestic supply or adjacent water systems.

Test valve #4 on the RPP is usually used for monitoring the potable water system during shutdown testing. For the test, the RPP must be in excellent working order with check valve #2 holding tight. The RPP must be tested at the conclusion of cross-connection testing.

4.8.3 New and Retrofit Sites Testing

Shutdown tests and use site inspections shall be conducted for both new construction (with complete sets of planning and inspection documents) and retrofit (with minimal planning and inspection documents). Because retrofit applications can pose additional challenges from unfamiliarity with the site and plumbing layout, retrofit sites must be thoroughly inspected by the District's cross-connection specialist. All available plans must be provided to the District, either as "as-builts" or as developed by the Customer. The District Cross-Connection Specialist must survey the site before final retrofit plans are submitted for District and DHS review. The District may conduct a preliminary cross-connection test to help determine the feasibility of recycled water conversion.

4.8.4 Results

The results of the cross connection test for dual-plumbed systems shall be compiled in an engineering report for the site. Test results will be provided to all concerned parties. (Reference Section 60314 of Title 22 in a format that is acceptable to DHS)

SECTION 5

FACILITIES OPERATION

5.1 OFFSITE RECYCLED WATER FACILITIES

Operation, maintenance and monitoring of all of the District's offsite recycled water systems including, but not limited to, recycled water transmission and distribution mains, service lines, valves, connections, storage facilities, and other appurtenances and properties up to and including the District's meter, shall be under the management and control of the District. No other persons except authorized representatives of the District shall have any right to enter any portion of the foregoing. No other persons except authorized representatives of the District shall have any right to operate, adjust, repair, change, alter, move or relocate any portion of the offsite recycled water system.

5.2 ONSITE RECYCLED WATER FACILITIES

5.2.1 Customer's Responsibilities

The Customer or owner shall be responsible for preventing pollution or contamination of the on-site water system and the District's distribution system from backflow.

The Customer or owner shall be responsible for the safe and efficient operation, and maintenance of their facilities. However, the District shall also have the right to monitor and inspect the onsite operation of the Customer's facilities pursuant to Section 6 of these Rules.

The Customer shall notify the District of any and all updates or proposed changes, modifications or additions to the onsite facilities. Changes require District approval and shall be designed and constructed according to these Rules and any other District requirements.

The Customer or owner shall notify the District immediately when there is a change of either owner or Customer. The District will then reassess the level of protection required and amend the existing Permit in accordance with Section 3.3.2 as necessary. Any alterations to existing onsite facilities that may affect required protection levels must also be reported directly to the District.

The Customer shall comply with any and all applicable Federal, State, and local statutes, ordinances, regulations, contracts and requirements prescribed by the District. In the event of violation, any charges and penalties shall be applied by the District in accordance with Section 11 of these Rules.

It shall be the responsibility of the Customer to notify the District of any and all failures in a recycled water system whether or not in the Customer's opinion the failures resulted in violations. It shall also be the responsibility of the Customer to notify the District of any and all violations which occur as a result of the Customer's action or the action of their operations

personnel. The Customer shall keep a written log of all system failures and violations including corrective action taken. The log shall be available for review by the District.

5.2.2 Designation/Responsibility of the Recycled Water Site Supervisor

Each recycled water Customer shall designate a Recycled Water Site Supervisor. The Recycled Water Site Supervisor shall be a person accepted and approved by the District to operate and maintain the onsite recycled water facilities and to assume the responsibilities outlined below. The Recycled Water Site Supervisor shall obtain instruction in the use of recycled water, such instruction being approved by the District. The customer must notify the District whenever the Recycled Water Site Supervisor will change. The Recycled Water Site Supervisor shall be the contact person for the Customer in all matters between the Customer and the District concerning the operation of the onsite system and the use of recycled water (see Section 3.9.4). Subsequently, the Customer shall be responsible to obtain the District's acceptance and approval of their newly designated supervisor. The Recycled Water Site Supervisor will have the following responsibilities:

- a. To supervise recycled water service and maintain onsite facilities.
- b. To ensure that all operations personnel are trained and familiarized with the use of recycled water, including all pertinent information contained in these Rules and Regulations and those applicable portions of the California Code of Regulations. This information shall be supplied by the District upon request by the Applicant or Customer. The Applicant shall attest that training will be provided.
- c. To furnish operations personnel with operating instructions, maintenance instructions, controller changes, and record drawings to ensure proper operation in accordance with the facilities design and these Rules and all applicable permits. At least one complete set of this information shall be kept onsite or in the nearest field office or maintenance building.
- d. To operate and control the Customer recycled water system in order to prevent human consumption of recycled water, to prevent run-off, to minimize public contact, and comply with Title 22.
- e. To provide a preventative maintenance program to ensure the continued optimal operation of all system elements within the requirements of these Rules.
- f. To prevent cross-connections to other water systems, and also to protect the recycled water system from contamination from cross-connections to other sources.
- g. To ensure that maintenance and inspection of backflow prevention assemblies is performed annually per requirements of regulatory agencies, or more often in those instances where successive inspections indicate repeated failures.
- h. To report to the District any and all onsite facilities failures whether or not such failures may result in violations.

5.3 POSTING APPROVED USE AREAS

Recycled water use areas must be posted in English and Spanish to inform the public of recycled water use. All signs must meet District standards for size, wording, and installation. Signs must be located at all entrances to the site and other locations so the public and persons working at the site are adequately notified of recycled water use. For sign placement within the site, consult with the District's Cross-Connection Specialist.

For landscape irrigation systems, additional signs (4" x 8" size) and notification shown in Appendix H must be posted at each controller and booster pump.

For restricted recreational impoundments and landscape ponds or fountains, signs must be placed so the public is adequately notified that the water is unsafe to drink.

For temporary construction sites, signs must be located at all entrances to the site and any pumps, tanks, water trucks, ponds, or other equipment used for recycled water. Additional signs and recycled water tags can be required as determined by the District's Cross-Connection Specialist or DHS.

For all other authorized uses of recycled water, approval of signage must be obtained prior to using recycled water.

Required signs, labels, and tags must be installed and maintained by the customer. The customer's Recycled Water Site Supervisor shall routinely inspect signage, and ensure that missing or damaged signs are promptly replaced.

A signage plan shall be prepared and forwarded to the District and DHS for review and approval prior to using recycled water.

SECTION 6

MONITORING AND INSPECTION

The District, the DHS, the RWQCB, or authorized representatives of any of these agencies, shall have authority to monitor and inspect the entire recycled water system, including both onsite and offsite facilities. The District shall conduct monitoring programs as it deems necessary to ensure that Customer's recycled water facilities are being operated in accordance with these Rules, including the requirement that cross-connections between potable water facilities and the recycled water facilities do not exist. In carrying out these functions the District, DHS, RWQCB, or authorized representative of any of these agencies, shall have the right to enter any Customer's premises during reasonable hours upon presentation of proper credentials. Reasonable hours shall include hours when irrigation is being performed. The Customer shall indemnify and hold the District harmless for any damage, loss, or injury alleged to have been caused by District personnel while inspecting on-site facilities, except where the District's sole negligence is duly established. If such entry is refused or cannot be obtained, the District shall have authority to shutoff the recycled water supply and discontinue service.

Where potable and recycled water lines are on the same site and located in the same area, an annual site inspection will be required. This inspection shall be performed by the District, DHS, or a certified Cross-Connection Control Specialist. These inspections may occur more frequently at the discretion of the District, especially where potable irrigation systems have been converted to use recycled water. A copy of the inspection report will be forwarded to the relevant parties.

A sample Recycled Water Site Inspection Report form is presented in Appendix I.

SECTION 7

RECYCLED WATER CONNECTION, METER, AND SERVICE LINE CHARGES

The District shall assess charges for the installation and maintenance of all recycled water services, meters, and appurtenances thereto, and these shall remain the property of the District. Said charges, in addition to all other usual and regular charges of the District, must be paid before work will be performed. The amount of said charges shall be established by the District and shall be determined and computed in order to fully reimburse the District for the cost of materials, labor, equipment, and any other costs incidental to the performance of said services.

Whenever a Customer requires an installation covered by established District rates, the work charges will be based upon a statement of costs prepared by the District. If a required installation cannot be performed for the amount stated in the appropriate schedule of rates established by the District, owing to the peculiarity of the proposed service, the District reserves the right to perform that installation on the basis of a statement of cost.

Whenever a Customer requests the District to remove recycled water service lines, meters or other appurtenances, the charges shall be made on the basis of a statement of costs by the District.

The District may impose a fee to re-establish recycled water service terminated at the Customer's request or for Customer's violation District's requirements, including these Rules.

SECTION 8

CUSTOMER'S GUARANTEE DEPOSIT

All recycled water service Applicants must post a guarantee deposit, unless the Applicant has at least one other active water service account with the District and no record of delinquent water account payments. This deposit shall be equal to double the estimated monthly recycled water service bill, and shall in no event be less than the amount specified in the schedule of rates. Refer to the District's Administrative Code pertaining to customer deposits.

Guarantee deposits may be refunded upon customer application, after a satisfactory payment record has been established for the twenty-four (24) consecutive months after the date of deposit. The District may disallow or withhold the refund of any deposit after the twenty-four (24) month period if payment or settlement of service bills has not been timely. Where service has been permanently terminated for non-payment of service bills, the outstanding amount and the separation costs for all of the Customer's recycled water service accounts shall be settled against the deposit account, and any balance will be returned to the Customer. The service contract will then be closed.

Any request for re-establishment of a recycled water service subsequent to permanent revocation or termination of the Permit shall be handled per Section 11.4 of these Rules.

SECTION 9

RECYCLED WATER SERVICE

9.1 ESTABLISHMENT OF RATES

The District shall establish rates for recycled water service.

9.2 CHANGE OF RATES

The District reserves the right to change its rates for recycled water service, as authorized by the District Board from time to time.

9.3 DISTRICT CHARGE

The District Board shall establish a District Charge. The District Charge shall be paid before any Applicant or Customer obtains a new recycled water connection, or increase its recycled water use.

9.4 RECYCLED WATER METER

9.4.1 Meter Reading Period

Recycled water meters shall be read at the same time as the potable water meter in accordance with the applicable provisions of the District.

If a recycled water meter fails to register during any period or is known to register inaccurately, the Customer shall be charged for that period pursuant to an average daily consumption rate based upon a reading of the meter when in use and registering accurately during the same season or as close to the same season as is reasonably possible. Any Customer may request that the meter through which the recycled water is being furnished be examined and tested per Section 3.8 of these Rules.

9.4.2 Meter Protection

The Customer shall, at all times, keep the meter assembly and the area around the meter or other facilities free from deposits of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials or substances, objects, or obstructions. The Customer shall not allow or permit meter boxes or other facilities to become obstructed or obscured by trees, shrubs, plants or in any manner impede their use or access to them. If such substances, objects or obstructions are not cleaned and removed by the Customer, the cleaning and removal shall be performed by the District at the expense of the Customer after a reasonable time of notification.

Section 9 – Recycled Water Service Rates

9.5 BILLING

9.5.1 Permanent Service

The District will send recycled water bills separate from the potable water bills at rates established by the District Board.

9.5.2 Temporary Service

The District has one rate for recycled water, and thus recycled water sold through temporary meters shall be billed at the same rate as permanent meters per the rates established by the District Board.

9.6 PAYMENT OF RECYCLED WATER BILLS

Payment shall be made according to the applicable potable water bills provisions in the District's Administrative Code.

SECTION 10 SEVERABILITY

If any section, subsection, sentence, clause, phrase, part or portion of these Rules is for any reason held to be invalid or unconstitutional, such invalidity shall not affect any of the remaining portions of these Rules. The District declares that each section, subsection, sentence, clause, phrase or part of these Rules would have been adopted irrespective of the invalidity of any part. These Rules shall be interpreted so as to comply with applicable federal and state laws and regulations.

SECTION 11

ENFORCEMENT AND PENALTIES

11.1 GENERAL

The enforcement and penalty provisions for violations of these Rules are set herein. Any person, firm, corporation, association, or agency found to be violating any provision of these Rules; the terms and conditions of the Permit; or any applicable federal, state or local statute, regulation, resolution, ordinance or other requirement shall be subject to one or more of the following:

- a. Public Nuisance. Any violation as described above is hereby declared a public nuisance and shall be corrected or abated as directed by the District. Any person creating such a public nuisance is guilty of a misdemeanor.
- b. Administrative Enforcement Powers. Authorized District enforcement officers are authorized to issue:
 1. Cease and Desist Orders. When an authorized enforcement officer finds that an activity has taken place or is likely to take place in violation of these Rules, the officer may issue an order to cease and desist such activity causing or likely to cause such violation, and direct that those persons responsible shall:
 - a) Comply with all applicable requirements;
 - b) Comply with a time schedule; and/or
 - c) Take appropriate remedial or action to prevent the violation from occurring or recurring.
 2. Written Warning. An authorized enforcement officer may issue a written warning, including a compliance date, to persons who are found or suspected of violating these Rules.
- c. Civil Actions. In addition to any other remedies, any violation of these Rules may be enforced by civil action brought by the District. In any such action, the District may seek, and a court may grant any or all of the following remedies:
 1. A temporary and/or permanent injunction;
 2. Assessment of the violator for the costs of any investigation, or monitoring survey of a violation, and for the reasonable costs of bringing legal;
 3. Costs incurred in removing, correcting, or terminating the violation or adverse effects resulting from the violation; or
 4. Compensatory damages for impacts to water quality.

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- d. Permit Revocation. In addition to any other statute or rule authorizing termination of water service, EVMWD may revoke a Permit issued hereunder if a violation of any provision of these Rules is not corrected or if a Customer's use of recycled water causes or threatens to cause a nuisance. Permit revocation shall allow the procedures set forth in Section 11.3, below.
- e. Penalty. Any person or entity that violates these Rules shall, for each day of violation, or portion thereof, be subject to a fine not exceeding \$1,000.
- f. Appeal. Except in cases of Permit revocation (see Section 11.3), any person objecting to any enforcement action under these Rules make a request for reconsideration to the General Manager with ten (10) days of the effective date of the enforcement decision. The written request for reconsideration shall state in detail the specific facts supporting the request for reconsideration. The General Manager shall render a decision within 30 days of receiving the request for reconsideration.

Within ten (10) days of notification of the General Manager's decision, a person may file a written appeal of the General Manager's decision with the District Board of Directors. The specified filing fee must accompany any written appeal to the District Board of Directors. Upon receipt of the written appeal and the filing fee, the District shall set the matter for hearing with the District Board of Directors at the earliest available date. At that hearing, the District Board of Directors may reject, affirm or modify the General Manager's decision. The District Board of Directors decision shall be final and cannot be further appealed, and shall complete the administrative appeal process.

- g. Enforcement Action by the RWQCB. If any person uses, transports, or stores recycled water in violation of these Rules, the Recycled Water Ordinance, the District's National Pollutant Discharge Elimination System permit(s), or any other applicable federal, state or local law, or acts in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in the Water Code Section 13050, and the RWQCB, DHS, or any other federal, state or local agency takes action against the District, or revokes, suspends or terminates any District permit as a result, such person shall indemnify the District for any resulting damages, including but not limited to all reasonable attorneys' fees and costs related to defending such action or taking action against the violating Customer. This provision is in addition to any other rights the District may have against the offender.

11.2 INTERIM DISCONTINUATION OF RECYCLED WATER SERVICE

Where the emergency nature of violations requires immediate action, the District, DHS, and/or the RWQCB may immediately order the discontinuance of recycled water service, subject to timely decision on Permit revocation or suspension, pursuant to an administrative hearing. Reasons for termination include, but are not limited to:

- a. Refusal to install a required backflow prevention device.

Section 11 – Enforcement and Penalties

- b. Refusal to test a backflow prevention device.
- c. Refusal to repair or replace a faulty backflow prevention device.
- d. Direct or indirect connection between any potable water system and the recycled water system.
- e. Direct or indirect connection between the District's recycled water system and a system or equipment containing contaminants.
- f. A situation which presents an immediate health hazard to the District's potable and/or recycled water system, as determined by the District or regulatory agency.
- g. Operations contrary to restrictions resulting in overspray into non-approved use areas, excessive application rates or times, or improper grading of the soil, or improperly maintained drainage systems resulting in run-off, or ponding due to run-off on public rights-of-way or adjoining areas not approved for recycled water use.
- h. Any discharge of recycled water in violation of any applicable discharge prohibitions or requirements prescribed by the RWQCB or any other federal, state or local agency, or in a manner which creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050.

11.3 PERMANENT REVOCATION

The District may revoke any Permit. Unless the District determines an emergency, a Permit may be revoked until after the Customer has been given an opportunity for an administrative hearing as hereinafter provided.

11.3.1 Serving Notice of Revocation

Where the District determines that a Permit should be revoked, the District shall prepare a written notice of revocation, which includes concise statements of the proposed action, reasons for the proposed action, and the Customer's right to a public hearing. Such notice shall be sent by certified mail to the Customer's last billing address or be personally served on the Customer at least ten (10) days before the effective date of the proposed permanent revocation. If, within five (5) days after receipt of such notice, the Customer or authorized representative requests in writing an administrative hearing from the District, the District shall immediately set a hearing and give the Customer written notice of the time, date and place of such hearing, either by personal service or First Class mail. The hearing shall be held not more than thirty (30) days from the date of receipt of the request for hearing. The hearing shall be conducted by a hearing officer designated by the District. The hearing officer shall not have been involved in any way with the decision to revoke the subject Permit or contract. No hearing shall be continued except upon showing of a good cause.

Section 11 – Enforcement and Penalties

Within ten (10) days after notification of the hearing officer's decision, the person may file a written appeal of the decision with the District Board. The written appeal to the District Board of Directors and a requisite filing fee must be submitted to the District. Upon receipt of the written appeal and the requisite filing fee the District shall set the matter for hearing with the District Board of Directors at the earliest available date. At that hearing, the District Board of Directors may reject, affirm or modify the hearing officer's decision. The District Board of Directors decision shall be final and shall complete the administrative process.

11.3.2 RE-ESTABLISHMENT OF RECYCLED WATER SERVICE

Any request to re-establish service subsequent to revocation of the Permit and the termination of recycled water service shall be the same as for initially obtaining recycled water service. The District may, for good cause, deny re-establishment of service or require that an agreement of financial security conditioned upon compliance with these Rules be provided.

SECTION 12 INCORPORATION BY REFERENCE

Each and every of the foregoing provisions of these Rules are requirements of any application for service /or Permit, are agreed to in full by any Applicant or Customer, are hereby incorporated therein by reference; and shall survive any Permit except by mutual written agreement; and any and all Permits shall be subject to these Rules.

Appendix A

Application for Recycled Water Service

APPLICATION FOR RECYCLED WATER SERVICE

Applicant completes the following: (Please print or type)

Applicant Name: _____

Relationship to property: _____

Mailing Address: _____

Telephone number: _____ Office _____ Residence

Project/site name: _____

Project/site address: _____

Property owner(s): _____

Mailing address: _____

Telephone number: _____ Office _____ Residence

Recycled Water Supervisor:

Name: _____

Address: _____

24-hour contact telephone number: _____

Legal description of property: _____

(Check each use)

1. Type of use:

- | | |
|---|---|
| <input type="checkbox"/> Landscape irrigation | <input type="checkbox"/> Construction use |
| <input type="checkbox"/> Commercial use | <input type="checkbox"/> Wildlife habitat |
| <input type="checkbox"/> Industrial use | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Agricultural use | <input type="checkbox"/> Other |
| <input type="checkbox"/> Impoundments | |

2. Brief description of use(s): _____

3. Total irrigated area: _____ acres Types of plant material: _____

4. Estimated demand: Total quantity: _____ 100 cu. ft./yr.(HCF/yr.)
Max. at point of connection: _____ gallons per minute (Total)
Min. pressure: _____ per square inch (psi)
Hours/Day: _____
Days/Week: _____

5. Number of service connections: _____
Number of meters requested: _____ Size of meters: _____

6. This is a: _____ new _____ converted system (e.g., non-potable to recycled water;
potable to recycled water)

7. If a new system, how are pipes to be identified:
_____ Color-coded with labels _____ Tape wrap

8. Are additional special construction requirements beyond the District's for Recycled
Water Use? _____ Yes _____ No

If yes, explain: _____

9. Date requested to begin service: _____

10. Duration of service (temporary, interim, construction use, permanent):

11. Additional information: (Include special conditions affecting service):

Please include the following items:

- (a) Items to be submitted with the initial application:
 - i) Location and vicinity map showing the demarcation of the recycled water use area
 - ii) Attachment of a properly notarized affidavit
 - iii) Check or money order for required fees made out to:

Elsinore Valley Municipal Water District

Although Elsinore Valley Municipal Water District may approve the Application, the Permit shall not be granted prior to the approval of the State Department of Health Services

- (b) Items to be submitted subsequent to the approval of the application:
 - i) Drawing of the project area on one, 8½ x 11 sheet of paper which shall include and show:
 - Location and vicinity map
 - Demarcation of the recycled water use area
 - Specific potable water use areas
 - Location of service connections and sizes
 - Main line locations
 - Gate valve locations
 - Specific recycled water use areas
 - Specific potable water use areas

I, the Applicant, have read and understand the District's Rules for Recycled Water Use and agree to restrict recycled water use for the purposes described in this application. I agree to use recycled water in accordance with these Rules and all other applicable documents. I understand that recycled water may not be compatible with certain types of vegetation because of its chemical composition. I agree that the District will not be liable for damages that may occur to vegetation or for damages which may occur due to uses of recycled water for purposes not included in this application.

Applicant signature: _____ Date: _____

(The District completes the following)

STATUS OF APPLICATION:

- Approved
- Sent to State Department of Health Services for approval
- The Customer needs to submit required fees
- The Customer needs to supply additional information
- The Customer denied recycled water service
- Returned to the Applicant

Comments: _____

12. Service connection(s) size approved? Yes No
If not, why? _____

Service location approved? Yes No
If no, why? _____

13. Use(s) approved? Yes No Comments: _____

14. Can the District provide requested recycled water service with existing facilities?
 Yes No
If not, what are the constraints? _____

15. Is recycled water main extension required? Yes No
Comments: _____

16. Will this system be initially connected to the potable water system?
 Yes No

17. Describe level and method of backflow protection:

Reviewed by: _____ Date: _____

Title: _____

Appendix B

Checklist/Action Request Form for Obtaining Recycled Water Service

**CHECKLIST / ACTION REQUEST FORM
FOR OBTAINING RECYCLED WATER SERVICE**

To: _____ Date: _____

Requested by Applicant: _____

Project Name: _____

Specific Action Requested: _____

Date
Completed

- _____ 1. The Applicant and the District determine service availability in accordance with Rules and Regulations.
- _____ 2. The Applicant submits a completed application to the District.
- _____ 3. Application is approved by the District.
- _____ 4. If necessary, application is sent to Department of Health Services for review.
- _____ 5. Applicant submits:
 - _____ Completed irrigation plans
 - _____ Construction schedule
 - _____ Required review fees
- _____ 6. The District reviews plans.
- _____ 7. The District approves the plans & construction schedule prior to construction.
- _____ 8. The District sends plans to Department of Health Services.
- _____ 9. The Department of Health Services approves plans for the proposed site.
- _____ 10. Preconstruction meeting with District, Applicant/Use Site Supervisor and if necessary, Department of Health Services.

- _____ 11. The Applicant constructs facilities.
- _____ 12. The Applicant submits as-built drawings to the District and requests final inspection.
- _____ 13. The District performs final inspection and any cross-connection testing (see * below).
- _____ 14. The District issues a Recycled Water Service Permit.
- _____ 15. The District activates recycled water service and the Applicant becomes a recycled water Customer.
- _____ 16. The District confirms service to the Department of Health Services.

HOW TO USE THIS FORM:

This form is to be used by the Applicant, the District and Department of Health Services to request specific action or items needed to complete the process for obtaining recycled water service. Complete each step in the sequence shown. Make sure the form is dated and signed. This checklist keeps all entities informed of the application process progress and the steps remaining to provide recycled water service.

- * **In situations where potable water lines are on the same property and located in the same area as recycled water lines, an initial and an annual cross-connection control site inspection will be required and more frequent inspections may be required, as determined by the Department of Health Services and the Elsinore Valley Municipal Water District.**

Appendix C

Status of Application for Recycled Water Service

STATUS OF APPLICATION FOR RECYCLED WATER SERVICE

To: _____

Date: _____

We received your application for recycled water service for the project(s) listed below. The application has been reviewed by our engineers in accordance with the District's Rules and Regulations for Recycled Water Use and Distribution and the ability of our system to supply you with the quantity of recycled water you have requested. The status of the application is shown below. If you have any questions, please contact _____ (review engineer) at _____ (phone #).

Project name: _____

Application reviewed on: _____

- | | |
|-------|---|
| _____ | Your application has been approved by the District. |
| _____ | Your application has been sent to the Department of Health Services for further review. |
| _____ | Your application is incomplete, and we request additional information. (See comments) |
| _____ | We require payment of fees before review can be completed. |
| _____ | Your application has been returned. (See comments) |
| _____ | Your application for recycled water service has been denied. (See comments) |

Comments: _____

Appendix D

Elsinore Valley Municipal Water District Permit for Recycled Water Service

**ELSINORE VALLEY MUNICIPAL WATER DISTRICT
PERMIT FOR RECYCLED WATER SERVICE**

Customer Account #: _____

Customer: _____ Contact: _____

Relationship to property: _____

Mailing address: _____

Project/site name: _____

Project/site address: _____

Property owner(s): _____

Mailing address: _____

Telephone number: _____ Office) _____ (Residence)

Recycled Water Supervisor: _____

24-hour contact telephone number: _____

- Approved use(s):
- 1. _____
 - 2. _____
 - 3. _____

- Approved use area(s):
- 1. _____
 - 2. _____
 - 3. _____

Total irrigated area: _____ acres

Recycled water demand:

Meter Account	Meter Size	Minimum Pressure (PSI)	Maximum Flow (GPM)	Area Serviced (HCF/yr.)	Yearly Consumption

Totals: _____

This is a: _____ NEW _____ CONVERTED system.

Method of recycled water pipe identification:

_____ Color-coded with labels

_____ Recycled Water tape wrap

Recycled water service initiated on: _____

This is a: _____ Permanent _____ Temporary _____ Interim _____ Construction recycled water service to stop on: _____.

Rate charged for service: _____ \$/HCF plus additional base charges shown in Appendix 5.

Special requirements/conditions: _____

Final Inspection By the District:

I have inspected the recycled water system governed by this permit and attest that the construction and operation of this system are in accordance with the District's Rules for Recycled Water Use.

Inspector: _____ Date: _____

Title: _____

Customer Agreement:

I have reviewed the District's Rules for Recycled Water Use, and agree to operate this recycled water service in accordance with all provisions of this permit and all applicable documents. I agree to be responsible for training and supervising all personnel under my control who will be involved in operating the recycled water system.

I agree that no changes to the recycled water system will be made without issuance of an amended permit. I am aware of any/all fines and penalties to be assessed for any/all violations of these Rules for recycled Water Use.

Customer's signature: _____ Date: _____

Qualifications of Customer's Recycled Water Site Supervisor:

The Customer shall attach the qualifications of the designated Recycled Water Site Supervisor.

I have reviewed the application package and approve of providing recycled water service in accordance with the provisions contained in this Permit.

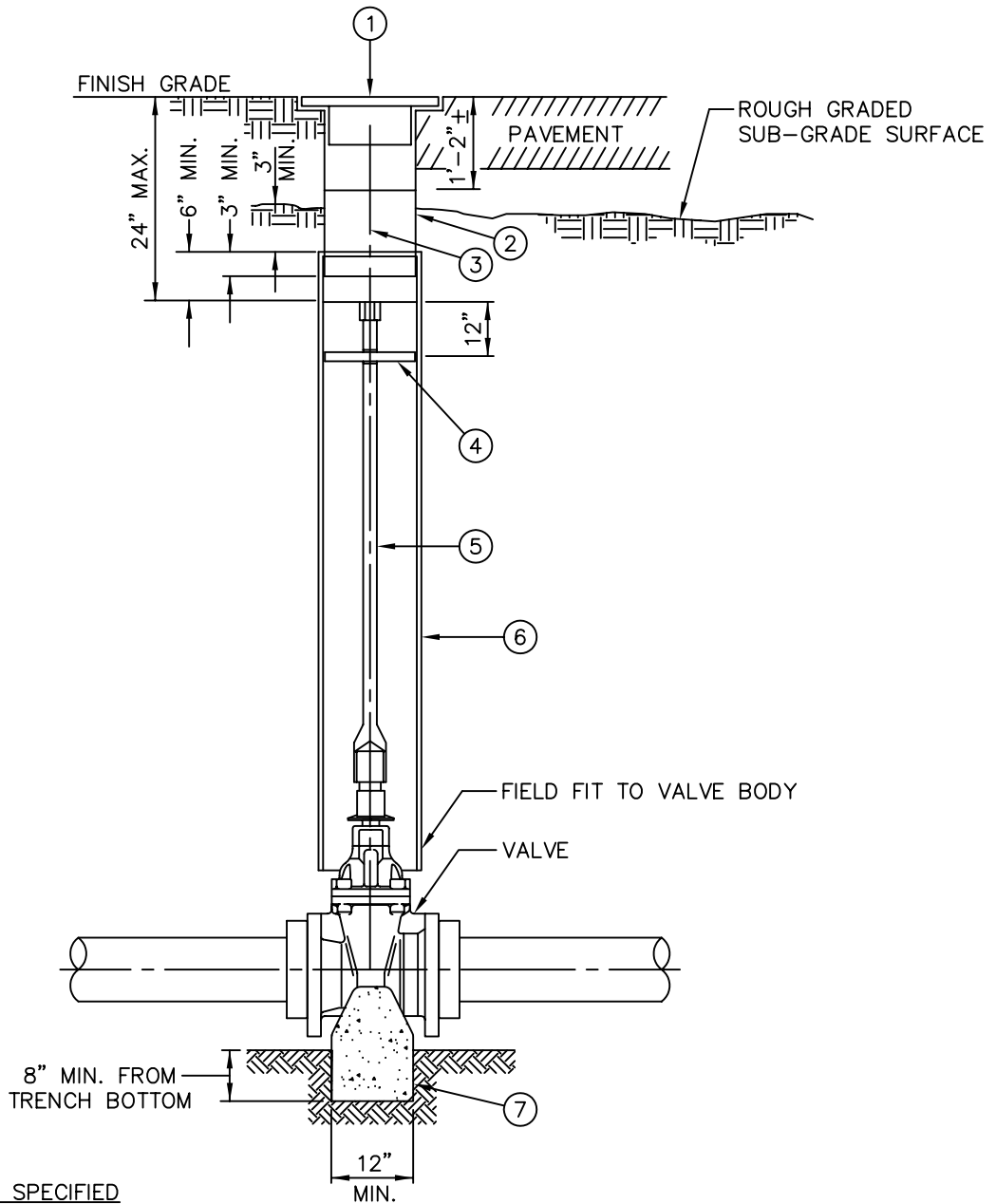
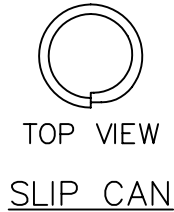
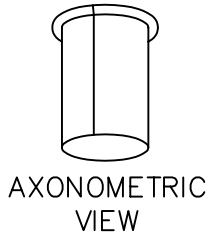
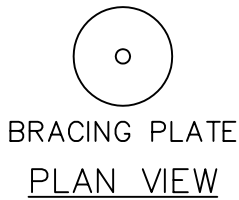
Signed: _____ Date: _____

Title: Recycle Water Coordinator

Appendix E

Elsinore Valley Municipal Water District

Valve Box Details



NOTES:
EXCEPT OTHERWISE SPECIFIED

1. CONTRACTOR SHALL RAISE SLIP CAN TO GRADE AFTER STREET IS PAVED WHERE PAVING IS PROPOSED.
2. ALL VALVE CANS SHALL BE EXPOSED AT ALL TIMES DURING CONSTRUCTION UNLESS BURIAL FOR GRADING IS AUTHORIZED BY THE INSPECTOR.
3. MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.
4. WELL CAPS FOR RECYCLED WATER SHALL BE PURPLE AND MARKED "EVMWD RECYCLED WATER".

ITEM	DESCRIPTION
①	8" VALVE WELL CAP W/ 4" SKIRT PAINTED SAFETY PRECAUTION BLUE ENAMEL & PRIMER, & MARKED "E.V.M.W.D. WATER" ON CAP
②	8" O.D.x18 GA. SPLIT VALVE CAN TOP SECTION, GALVANIZED FOR SLIP CAN, SLIP CAN LENGTH 12", 18" OR 24" AS REQ'D
③	4"x4" REDWOOD POST IF VALVE HAS BLIND FLANGE PER STD. DWG. NO. W-14
④	1/8" + 1/32" SOLID DISC 7-3/4" DIA. TACKWELD BRACING PLATE TO STEM AT 5' INTERVALS
⑤	PROVIDE VALVE STEM EXTENSION WHERE DEPTH TO OPERATOR NUT EXCEEDS 5'
⑥	8" PVC, SDR-35 OR C-900 FOR GATE VALVES 3" AND LARGER, 6" PVC FOR GATE VALVES LESS THAN 3" DIAMETER
⑦	VALVE SUPPORT BLOCK PER STD. DWG. NO. W-15

REVISION	BY	APPR	DATE

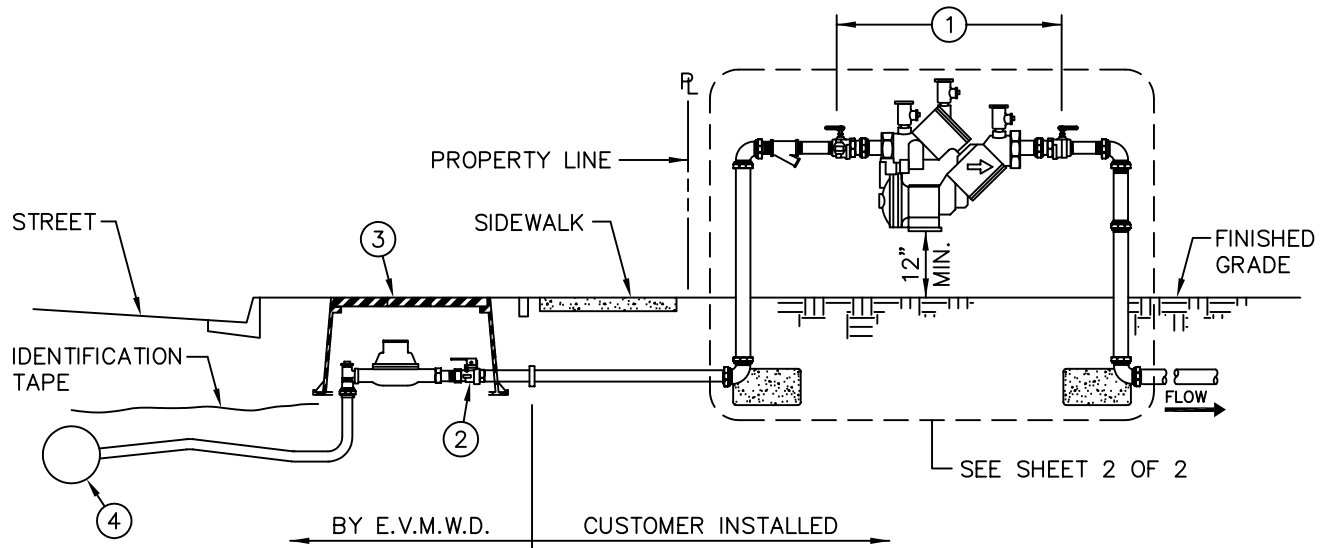
EVMWD
Elsnore Valley Municipal Water District

PHILLIP M. MILLER R.C.E. 30680 DATE

**VALVE WELL AND
RISER DETAIL**

STD. DWG. NO.
W-13

Appendix F
Elsinore Valley Municipal Water District Standard
Backflow Prevention Assembly Details



NOTES:

1. THE BACKFLOW PREVENTER ASSEMBLY SHALL CONSIST OF AN APPROVED REDUCED PRESSURE OR DOUBLE DETECTOR CHECK VALVE IN ACCORDANCE WITH SECTION 15112 OF THE SPECIFICATIONS. THE ASSEMBLIES SHALL BE SUITABLE FOR SUPPLY PRESSURES.
2. THE BACKFLOW ASSEMBLY SHALL BE OF BRONZE CONSTRUCTION WITH ALL CONNECTIONS ON THE UNIT TO BE THREADED BRASS OR SWEATED COPPER MATERIAL FOR 3/4" THROUGH 2"; 3" AND ABOVE SHALL HAVE FLANGED FITTINGS TOGETHER WITH STAINLESS STEEL NUTS AND BOLTS.
3. AN ANGLE STYLE PRESSURE REDUCING VALVE SHALL BE INSTALLED ON THE UPSTREAM LINE OF THE BACKFLOW PREVENTER WHEN EXCESS OF 100 POUNDS PER SQUARE INCH OR MORE IS AVAILABLE PER SECTION 608.2 OF THE UNIFORM PLUMBING CODE.
4. WYE STRAINERS SHALL BE INSTALLED ON THE UPSTREAM SIDE OF THE BACKFLOW PREVENTER BODY. IF REQUIRED, A PRESSURE REGULATOR WITH A SERVICEABLE SCREEN CAN BE SUBSTITUTED FOR THE WYE STRAINER.
5. LOCATION AND INSTALLATION SHALL BE PER PLAN AS SUBMITTED TO AND APPROVED BY THE DISTRICT.
6. ALL ASSEMBLIES 3" AND LARGER TO BE INSTALLED SHALL BE EQUIPPED WITH RESILIENT WEDGE GATE VALVES.
7. LOCATE THE ASSEMBLY IMMEDIATELY AFTER THE CUSTOMER SERVICE VALVE. OTHER LOCATIONS MUST BE APPROVED BY THE DISTRICT INSPECTOR PRIOR TO INSTALLATION.
8. CLEARANCES ARE SHOWN, EXCEPT THAT LATERAL CLEARANCES SHALL BE 12-INCHES MINIMUM EACH DIRECTION.
9. ASSEMBLIES SHALL NOT BE LOCATED IN AREAS SUBJECT TO FLOODING.
10. ONLY SECURITY ENCLOSURES PROVIDING ADEQUATE CLEARANCES AND FULL VIEW OF ASSEMBLY SHALL BE PERMITTED.
11. LANDSCAPING OR CONSTRUCTION AROUND ASSEMBLY SHALL PERMIT AN UNOBSTRUCTED VIEW FROM AT LEAST ONE PUBLIC VANTAGE POINT.
12. FINAL INSPECTION AND ACCEPTANCE TEST SHALL BE PROVIDED BY DISTRICT BACKFLOW INSPECTOR.
13. NO CONNECTIONS OR TEES ARE PERMITTED BETWEEN METER AND BACKFLOW PREVENTER.
14. SIZES 3" AND LARGER SHALL HAVE ADDITIONAL SUPPORT.
15. SIZES 3/4" THROUGH 2" SHALL HAVE (1) UNION PLACED ON DOWNSTREAM CUSTOMER PIPING.
16. BACKFLOW ASSEMBLY TO BE THE SAME SIZE OR ONE SIZE LARGER THAN METER.
17. MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.

ITEM	DESCRIPTION
①	APPROVED BACKFLOW PREVENTION ASSEMBLY
②	BALL VALVE (CUSTOMER SERVICE VALVE)
③	SERVICE METER
④	WATER MAIN

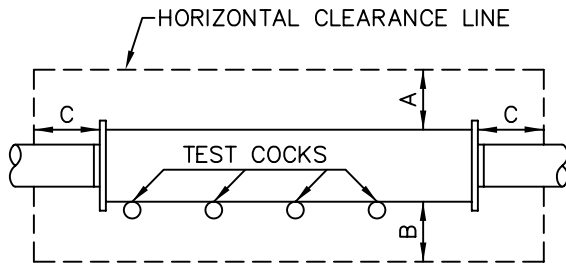
REVISION	BY	APPR	DATE

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Elsinore Valley Municipal Water District

PHILLIP M. MILLER R.C.E. 30680 DATE

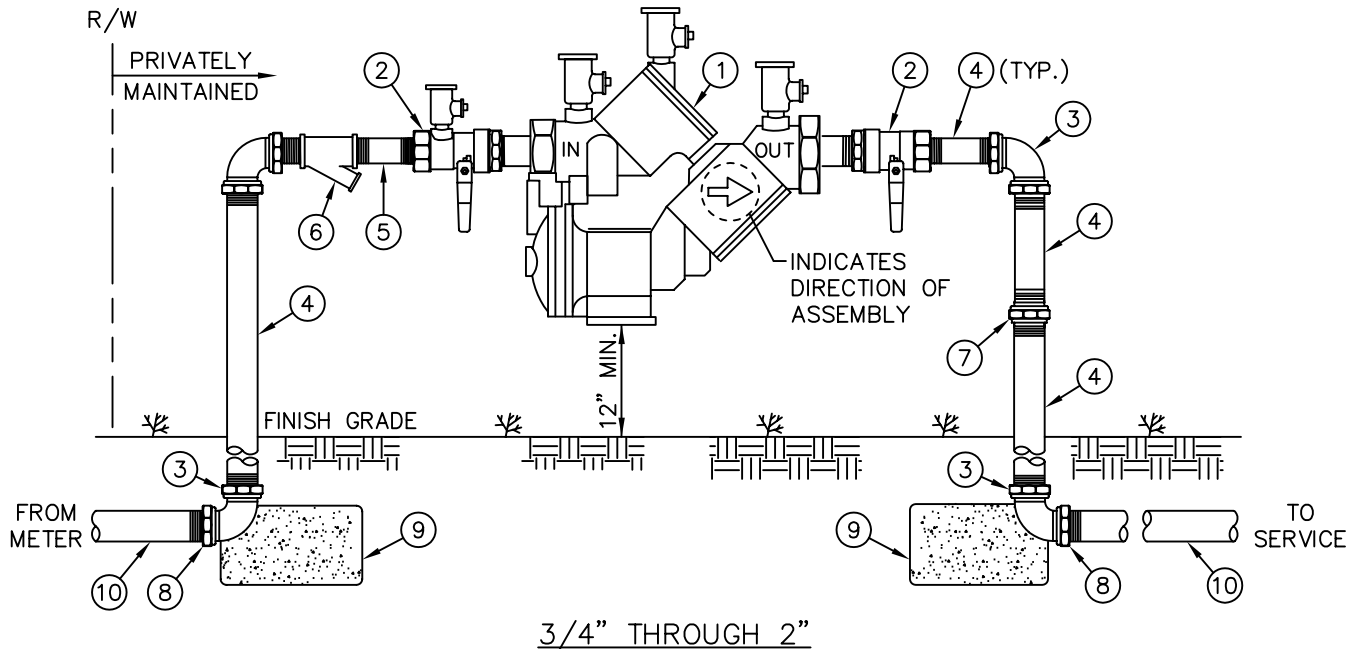
**BACKFLOW PREVENTION
ASSEMBLY
ABOVE GROUND INSTALLATION**

STD. DWG. NO.
W-21
1 OF 3



ADEQUATE CLEARANCE MUST BE PROVIDED TO PERMIT TESTING AND REPAIR WORK

MINIMUM CLEARANCE			
SIZE	A	B	C
1" - 3"	12"	18"	12"
4" & UP	24"	24"	12"



3/4" THROUGH 2"

NOTES:

1. PLACE BOTTOM OF UNIT A MINIMUM OF 12-INCHES AND NOT MORE THAN 36-INCHES ABOVE FINISH GRADE OF THE SURROUNDING GROUND.
2. THE DEVICE MUST BE INSPECTED AND TESTED IMMEDIATELY AFTER INSTALLATION. TELEPHONE NUMBER (909) 674-3146 EXT. 265
3. CONCRETE THRUST BLOCK AND/OR ABOVE GROUND SLAB REQUIRE INSPECTION BEFORE CONCRETE IS POURED.
4. MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.
5. USE ONLY TEFLON TAPE FOR PIPE THREADS.
6. PIPING UP TO BACKFLOW DEVICE SHALL BE PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECYCLED WATER.

ITEM	EACH	DESCRIPTION	SPEC.	REMARKS
①	1	REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE	SECTION 15112	MUST BE STATE & USC APPROVED TYPE
②	2	BALL VALVE	BRONZE INTERNAL	USC APPROVED (BALL VALVE)
③	4	90° ELBOW, BRASS OR COPPER	THREADED BRASS	COPPER TYPE L, HARD
④	2	RISER AND NIPPLES, BRASS OR COPPER	THREADED BRASS	WITH THREADED BRASS UNIONS
⑤	1	PRESSURE REDUCING AND/OR RELIEF VALVE	UPC APPROVED (BRONZE)	FOR PRESSURE IN EXCESS OF 80 PSI
⑥	1	WYE-STRAINER	UPC APPROVED (BRONZE)	UPSTREAM OF P.R.V. AND R.V.
⑦	1	THREADED BRASS UNION		
⑧	2	P.V.C. MALE ADAPTOR (SCHEDULE AS REQ'D)		FEMALE THREADED x MALE SLIP
⑨	2	CONCRETE THRUST BLOCK	STD. DWG. W-4	2 CUBIC FEET
⑩	1	P.V.C. PIPING		SCHEDULE AS REQUIRED

REVISION	BY	APPR	DATE



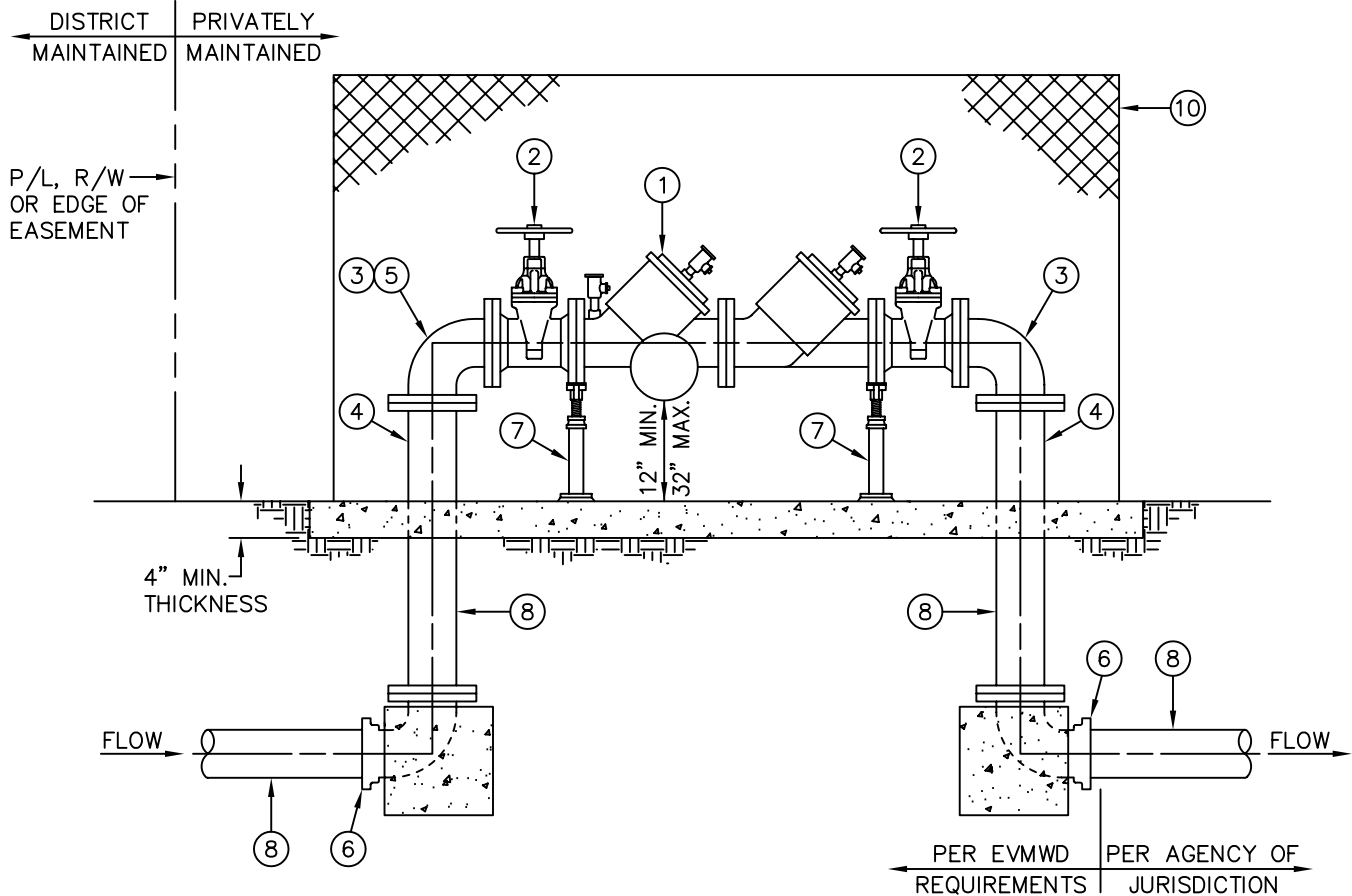
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**BACKFLOW PREVENTION
ASSEMBLY (3/4" THROUGH 2")
ABOVE GROUND INSTALLATION**

STD. DWG. NO.

W-21

2 OF 3




3" AND LARGER

NOTES:

1. PLACE BOTTOM OF UNIT A MINIMUM OF 12-INCHES AND NOT MORE THAN 36-INCHES ABOVE FINISH GRADE OF THE SURROUNDING GROUND.
2. THE DEVICE MUST BE INSPECTED AND TESTED IMMEDIATELY AFTER INSTALLATION. TELEPHONE NUMBER (909) 674-3146 EXT. 265
3. CONCRETE THRUST BLOCK AND/OR ABOVE GROUND SLAB REQUIRE INSPECTION BEFORE CONCRETE IS POURED. CONCRETE SLAB DIMENSION SHALL BE IN ACCORDANCE WITH CLEARANCE REQUIREMENTS ON W-21 SHEET 2 OF 3.
4. MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.
5. PIPING UP TO BACKFLOW DEVICE SHALL BE PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECYCLED WATER.

ITEM	EACH	DESCRIPTION	SPEC.	REMARKS
①	1	REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE	SECTION 15112	MUST BE STATE & USC APPROVED TYPE
②	2	FLANGED RESILIENT WEDGE GATE VALVE	SECTION 15100	SEE APPROVED MATERIAL LIST
③	2	90° ELBOW	SECTION 15056	DUCTILE IRON
④	2	FLANGED RISER PIPE	SECTION 15056	DUCTILE IRON
⑤	1	ANGLE PRESSURE REDUCING VALVE	SEE APPROVED MATERIAL LIST	FOR PRESSURE IN EXCESS OF 100 PSI
⑥	2	FLG x PO 90° ELBOW	SECTION 15056	DUCTILE IRON
⑦	2	ADJUSTABLE PIPE SUPPORT	SEE APPROVED MATERIAL LIST	
⑧	L.F.	P.V.C. OR DUCTILE IRON PIPING	SECTION 15064, 15056	SIZE AS REQUIRED
⑨	2	CONCRETE THRUST BLOCK	STD. DWG. W-4	SIZE AS REQUIRED
⑩	1	METAL WIRE ENCLOSURE		AS REQUIRED BY DISTRICT

REVISION	BY	APPR	DATE



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Elsnore Valley Municipal Water District

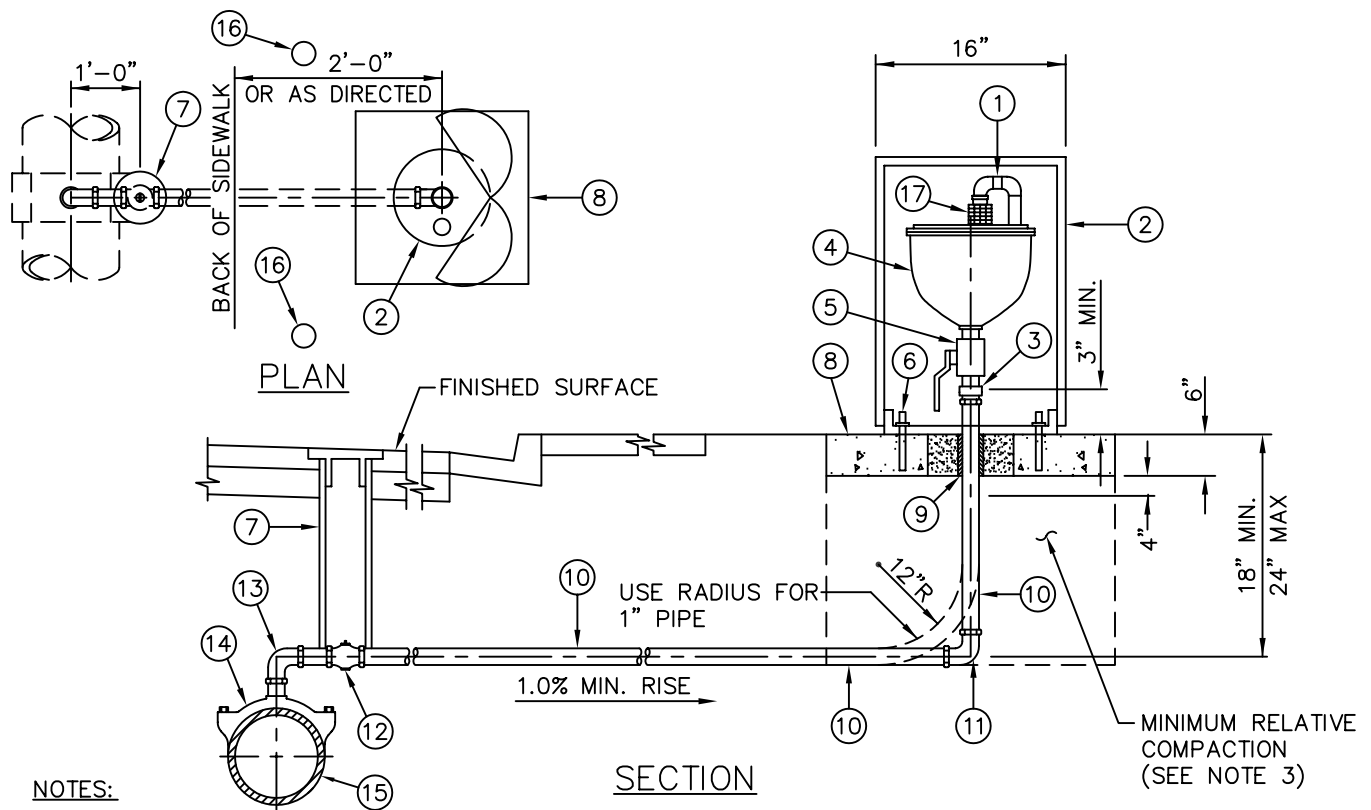
PHILLIP M. MILLER R.C.E. 30680 DATE

**BACKFLOW PREVENTION
ASSEMBLY (3" AND LARGER)
ABOVE GROUND INSTALLATION**

STD. DWG. NO.
W-21
3 OF 3

Appendix G

Elsinore Valley Municipal Water District Standard Blow-Off and Air and Vacuum Assembly Details




NOTES:

1. VALVE PLACEMENT ON RURAL ROADWAYS WHERE CURB AND GUTTER AND SIDEWALKS ARE NOT PRESENT WILL BE AT THE DISCRETION OF THE FIELD INSPECTOR.
2. AIR AND VACUUM VALVES INSTALLED FOR THE USE OF RECYCLED WATER SHALL BE IDENTIFIED AS DESCRIBED IN SECTION 15100 OF THE SPECIFICATIONS.
3. COMPACTION UNDER CONCRETE PAD SHALL BE 95% OR GREATER, FROM THE BOTTOM OF THE PAD TO THE BOTTOM OF THE SERVICE LINE TRENCH.
4. ENCLOSURE FOR POTABLE WATER MAINS SHALL BE POWDER COATED WITH "SAFETY YELLOW", FOR RECYCLED WATER COLOR SHALL BE PURPLE.
5. MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.

ITEM	DESCRIPTION
(1)	PVC SCH 80 CLOSE NIPPLE AND 2-SCH 80 STREET ELLS AND INSECT SCREEN
(2)	VALVE ENCLOSURE, POWDER COATED
(3)	BRONZE MIPT X COMPRESSION ADAPTER
(4)	AUTOMATIC COMBINATION AIR RELEASE AND VACUUM RELIEF VALVE (SEE SECTION 15100 OF SPECIFICATIONS)
(5)	BRONZE BALL VALVE WITH FIPT
(6)	1/2" X 3" STAINLESS STEEL DROP-IN ANCHORS (3 EA. @ 120° APART)
(7)	6" SDR 35 SEWER PIPE GATE WELL WITH CAP (FOR 2" ONLY)
(8)	2'-6" X 2'-6" X 6" THICK CONCRETE SLAB
(9)	1/2" THICK BLACK FOAM SLEEVE
(10)	REQUIRED LENGTH COPPER PIPE TYPE "K" (SOFT)
(11)	90° BRONZE COMPRESSION ELL (2" ONLY)
(12)	COMPRESSION BALL VALVE WITH TEE HEAD
(13)	BRONZE FIPT X MIPT STREET ELL
(14)	SERVICE SADDLE PER APPROVED MATERIALS LIST, STRAPS TO BE S.S.
(15)	WATER MAIN
(16)	GUARD POST PER EVMWD STANDARD DRAWING W-26 (WHEN NO SIDEWALK OR CURB IS PRESENT)
(17)	STAINLESS STEEL SCREEN TO VENT OUTLET

REVISION	BY	APPR	DATE

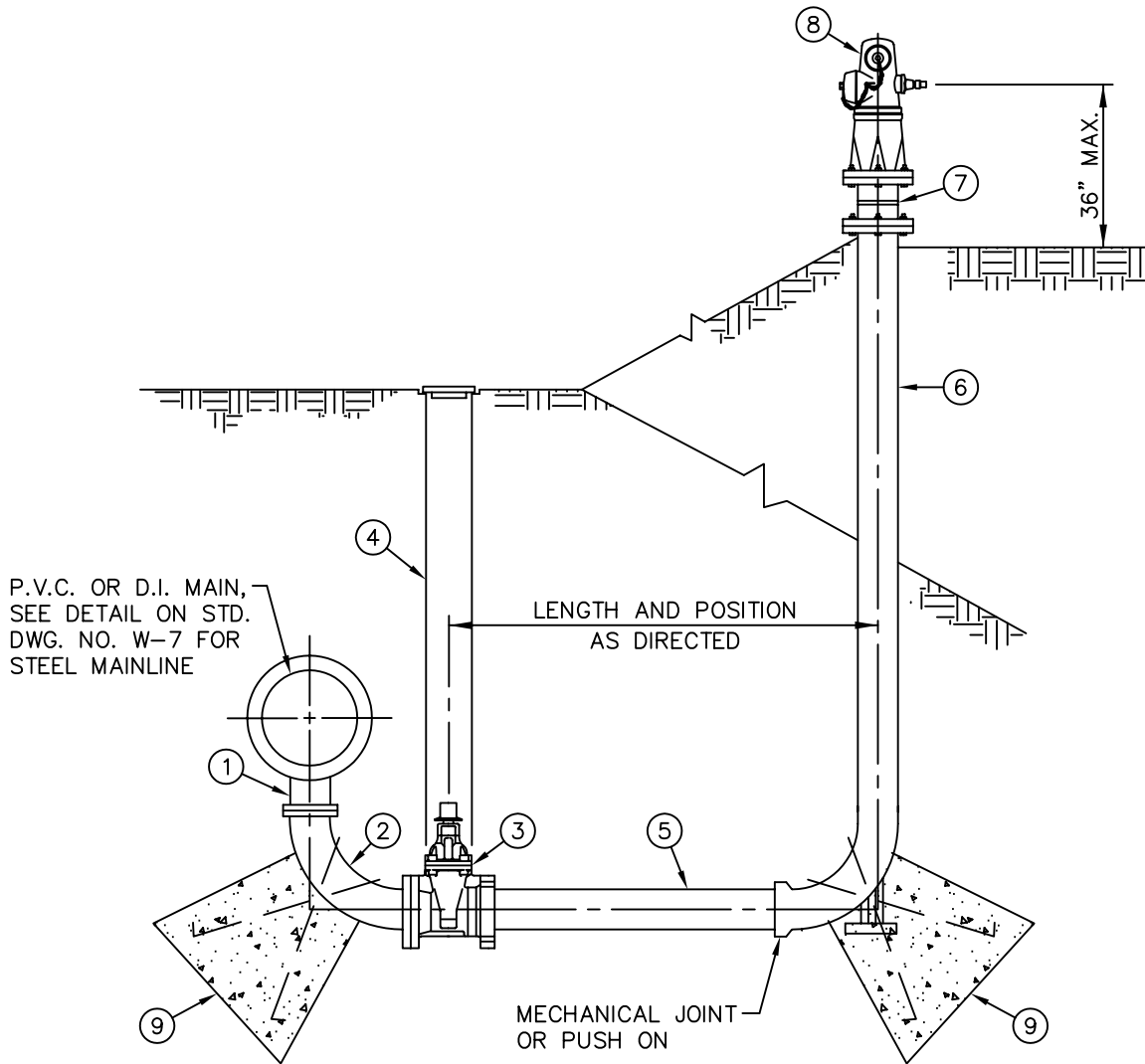


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PHILLIP M. MILLER R.C.E. 30680 DATE

**1" AND 2" AUTOMATIC COMBINATION
AIR RELEASE & VACUUM RELIEF
VALVE INSTALLATIONS**

STD. DWG. NO.
W-16



NOTES:

1. CERTAIN INSTALLATION CONDITIONS MAY REQUIRE RESTRAINED JOINTS.
2. THRUST BLOCK FOR TEE NOT SHOWN FOR CLARITY PURPOSES.
3. BLOW-OFF (HYDRANT BODY) TO BE PAINTED "SAFETY YELLOW" FOR POTABLE WATER.

ITEM	EACH	DESCRIPTION	SPEC.	REMARKS
①	1	STD. 6" TEE BRANCH	D.I. FLG ON 6" BRANCH	SET VERTICALLY DOWN
②	1	6" 90° LONG RADIUS BEND	D.I. 6" LONG RADIUS, FLxFL	WITH THRUST BLOCK
③	1	6" GATE VALVE	SEE W-8, W-14 AND W-15	RESILIENT WEDGE, FLGxMJ/PO/FLG
④	1	8" VALVE WELL AND CAP	SEE W-8 AND W-13	
⑤	1	6" PIPE BLOWOFF RUN	STD. DWG. W-8	P.E.xP.E. P.V.C. C-900 OR D.I.P.
⑥	1	6" STD. FIRE HYDRANT BURY	STD. DWG. W-8	6 HOLE FLxMJ/PO/FLG (VARIABLE HEIGHT)
⑦	1	6" GROOVED BREAK OFF SPOOL, BOLTS AND NUTS	6", 6 HOLE, SEE W-8	SPOOL ABOVE SURFACE, PAINTED, NUTS ON TOP OF FLANGE, FILL BREAK OFF HOLES WITH SILICON OR EPOXY
⑧	1	6" RESIDENTIAL FIRE HYDRANT	SECTION 15109	4"x2-1/2" JAMES JONES JJ-3700, PAINTED
⑨	1	THRUST BLOCK	STD. DWG. W-4	

REVISION	BY	APPR	DATE

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Elsinore Valley Municipal Water District

PHILLIP M. MILLER R.C.E. 30680 DATE

6" BLOW-OFF ASSEMBLY

STD. DWG. NO.
W-19

Appendix H

Recycled Water Site Notification

Recycled Water Site Notification

RECYCLED WATER IS USED AT THIS SITE



- DO NOT DRINK -

Set the controller to irrigate between the hours of _____ PM and _____ AM.

Spot watering and sprinkler testing can be done manually when personnel are on site and monitoring use. Do not leave unattended if watering outside the normal hours of operation.

CAUTION:

- Adjust spray heads so there is no overspray outside the site.
- Minimize runoff by adjusting sprinklers, and repairing leaks promptly.
- Purple is the color code for recycled water. Use recycled water pipe and parts for repairs. Replace valve box lids, sprinkler heads, quick couplers, and pipe with the correct type.
- Use hose marked for recycled water use for spot watering.
- Report missing or damaged signs to your supervisor.
- Do not use recycled water to wash hands or tools. Wash your hands with soap and potable water (drinking water) after working with the recycled water system.
- All modifications to the irrigation system must be approved. Check with your supervisor before making changes.

CONTACTS:

Landscape Contractor: _____
 Your Site Supervisor: _____
 Phone Number: _____
 Mobile Number: _____
 Alternate: _____

Water Supplier: Elsinore Valley Municipal Water District
 Specialist:
 Phone Number: (951) 674-3146
 Mobile Number:
 Alternate Number:

Notificación de Sitio de Agua Reciclada

SE UTILIZA AGUA RECICLADA EN ESTE SITIO



- NO BEBA EL AGUA -

Coloque el control para irrigar dentro de las horas de _____ PM y _____ AM.

Pruebas de agua y de rociadores se pueden hacer manualmente solamente cuando esté el personal en el sitio observando su uso. Si está regando fuera del horario normal de operación, no lo desatienda.

PRECAUCIÓN:

- Ajuste las cabezas para que no rieguen fuera del sitio.
- Minimice gasto de agua al ajustar los rociadores, y reparando goteras rápidamente.
- El color morado es el código para el agua reciclada. Use pipas y partes recicladas para reparaciones. Reemplace las tapas de las válvulas, las cabezas de los rociadores y las pipas con el tipo correcto.
- Use la manguera marcada para uso de agua reciclada cuando vaya a regar.
- Reporte si faltan o si están dañados los letreros a su supervisor.
- No use agua reciclada para lavarse las manos o herramienta. Lávese sus manos con jabón y agua potable (agua para beber) después de haber trabajado con el sistema de agua reciclada.
- Toda modificación al sistema de irrigación tiene que ser aprobado. Verifique con su supervisor antes de hacer cualquier cambio.

CONTACTOS:

Contratista: _____
Su Supervisor del Sitio: _____
Número de Tel: _____
Número Móvil: _____
Número Alterno: _____
Proveedor de Agua: Elsinore Valley Municipal Water District
Especialista: _____
Número de Tel: (951) 674-3146
Número Móvil: _____
Número Alterno: _____

Appendix I

Recycled Water Site Inspection Report



Recycled Water Site Inspection Report

Date: _____ **Site Code & Name:** _____

A. Site Information:

Reference: _____

Site Location: _____

Last Inspection: _____

Type of Inspection:

New Construction Retrofit Annual Inspection Re-Inspection Investigation

Owner Name: _____

Contact Name: _____ Title: _____

Address: _____

City: _____ State: _____ Postal Code: _____

Phone: _____ FAX: _____

Landscape Contractor: _____

Contact Name: _____ Title: _____

Office Phone: _____ Mobile Phone: _____

B. Connection Information: Provide Information for each recycled and potable water connection:

No.	User Code	EVMWD Acct.	Meter Number	Size	Pressure	Backflow Prevention Device
-----	-----------	-------------	--------------	------	----------	----------------------------

Notes:

C. Site Supervisor Information:

Name: _____ Title: _____
Company: _____
Phone: _____ Extension: _____
Pager: _____
Mobile: _____
Training/Experience: _____
Alternate Contact: _____
Comment: _____

D. Document Review:

D1. As built plans available for review: _____ Acceptable _____ Unacceptable
D2. Controller charts available: _____ Acceptable _____ Unacceptable
D3. Modifications to irrigation system: _____ Acceptable _____ Unacceptable _____ N/A
D4. Significant structural changes: _____ Acceptable _____ Unacceptable _____ N/A
D5. Major modifications shown on plans: _____ Acceptable _____ Unacceptable _____ N/A
D6. Major modifications approved: _____ Acceptable _____ Unacceptable _____ N/A
D7. EVMWD Rules and Regulations available: _____ Acceptable _____ Unacceptable

E. Survey:

Date of Survey: _____ Start Time: _____ End Time: _____
E1. Signage: Adequate number and placement: _____ Acceptable _____ Unacceptable
E2. Signage: Condition: _____ Acceptable _____ Unacceptable
E3. Signage: Signs on controllers: _____ Acceptable _____ Unacceptable
E4. Signage: Controller instructions: _____ Acceptable _____ Unacceptable
E5. Color Coding: Valve boxes: _____ Acceptable _____ Unacceptable
E6. Color Coding: Irrigation heads: _____ Acceptable _____ Unacceptable
E7. Color Coding: Valves tagged properly: _____ Acceptable _____ Unacceptable
E8. Color Coding: Lines and fittings: _____ Acceptable _____ Unacceptable _____ N/A
E9. Connections: Quick couplers: _____ Acceptable _____ Unacceptable

- E10. Connections: Irrigation hoses: Acceptable Unacceptable
- E11. Connections: Potable C/S valves: Acceptable Unacceptable
- E12. Connections: Recycled Water C/S valves: Acceptable Unacceptable
- E13. Separation Between Adjacent Properties: Acceptable Unacceptable
- E14. Operation: Normal times of operation:
 Times: Acceptable Unacceptable
- E15. Precipitation sensor operation: Acceptable Unacceptable N/A

F. Coverage Test:

- F1. Ponding: Acceptable Unacceptable
- F2. Overspray (Drinking fountains/Eating areas): Acceptable Unacceptable N/A
- F3. Spray outside site boundaries: Acceptable Unacceptable
- F4. Run off: Acceptable Unacceptable
- F5. Misting (eg: Impact of spray with trees.): Acceptable Unacceptable
- F6. Leaks: Acceptable Unacceptable
- Comment:

G. Cross-Connection Control:

- G1. Backflow prevention on potable water services: Acceptable Unacceptable N/A
 - G2. Protection of potable hose bibbs with AVB's: Acceptable Unacceptable N/A
 - G3. Separation of Recycled and Potable system: Acceptable Unacceptable N/A
- Was a cross-connection test performed at the site? Yes No

Attach records of the test, and summarize the results:

H. Results of Survey and Certification:

According to the results of this survey, is recycled water being used properly at this site?
 Yes No N/A

Remarks:

_____	_____	_____	_____
Specialist	Signature	AWWA Certif. Number	Date
_____	_____	_____	_____
On-site Supervisor	Signature	Date Received	
_____	_____	_____	_____
Owner Representative	Signature	Date Received	

Number of Attached Pages: _____

Original: Elsinore Valley Municipal Water District

Copy to: ____ SDHS, Drinking Water Field Operations
 ____ Site Supervisor
 ____ Owner or Customer