

# SECTION 2 INSTALLATION OF WATER FACILITIES

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## 2.02 PURPOSE

The procedures and requirements as set forth in this standard are to provide guidance for work done by the applicant for the installation of water facilities for the exclusive use by Truckee Meadows Water Authority (the Authority or TMWA).

## 2.03 DEFINITIONS

Applicant: The Owner(s), Developer(s), or Its designated representative.

TMWA: Truckee Meadows Water Authority

Project Coordinator (PC): TMWA's representative.

Inspector: TMWA's employee designated to inspect installation of any portion of water facilities to be owned and/or maintained by TMWA.

## 2.04 SCOPE OF WORK

### 2.04.01 Work by Applicant

Applicant shall perform all work necessary to construct or install facilities in accordance with TMWA standards and the approved drawings, as follows:

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- A. Applicant’s engineer shall provide all staking as outlined in Section 3, Staking Requirements, for water facilities.
- B. Applicant is responsible for furnishing all materials. All materials shall be new. All materials shall be transported, handled and installed in accordance with TMWA standards and manufacturers recommendations.
- C. Applicant shall be solely responsible for protecting sewer, storm drain, gas or water pipes, valves, electric cables, communications cables, ducts, and structures from superimposed loading created by construction equipment or otherwise. Applicant shall repair or replace any damaged facilities to the satisfaction of TMWA’s Inspector and/or the representative of the damaged utility.
- D. Applicant is responsible for contacting Underground Service Alert (USA) 1-800-227-2600 two days before digging.
- E. Applicant is responsible for providing enough space for proper layout of all utilities.
- F. Applicant shall not install other utilities' boxes/equipment over TMWA facilities.

2.04.02 Work by TMWA

TMWA shall perform the work necessary to complete the water systems as contracted for by Applicant.

**2.05 INSPECTION AND PERFORMANCE**

2.05.01 Pre-construction meetings shall be scheduled to coordinate the start of construction. Required attendees include TMWA’s PC, Inspector(s), and Engineer; Applicant’s General or Excavating Contractor, and Engineer.

2.05.02 Applicant shall inform the PC at least two work-days in advance before commencing any item of construction or installation of material to enable proper inspection of materials and workmanship. Materials and/or workmanship failing to meet specifications or installed without prior notice to inspector will be subject to rejection. Any work rejected shall be immediately corrected at applicant’s expense. No work shall be backfilled or otherwise covered or concealed until it has been inspected and approved by the Inspector. The Inspector shall be notified prior to any pothole work on any TMWA facilities.

2.05.03 Where interpretation or clarification of intent of any drawing is required, the Installing Contractor shall work with the TMWA Inspector, TMWA’s Engineering

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Department, and the Project Engineer to resolve the problem so that the installation is completed in accordance with NAC445A, Uniform Plumbing Code, and TMWA Design and Construction Standards.

- 2.05.04 If any portion of the completed system fails to operate satisfactorily at any time during the one year warranty period, the defective work and any related damage shall be corrected at the Applicant's expense and to the satisfaction of the TMWA Inspector.

**2.06 CHANGES**

- 2.06.01 By mutual consent, in writing, additions/deletions may be made to these requirements without voiding this standard.
- 2.06.02 Any charges for additional work for TMWA brought about by Applicant's changes will be billed directly to the Applicant with payment due prior to service(s) being made available.

**2.07 EXCAVATION**

- 2.07.01 Typical order of utility installation is: Sewer and/or Storm Drains, Electric-Telephone-Cable TV, Water and/or Gas. A Letter of Subgrade must be received by the TMWA Inspector prior to water pipe installation. A sample Letter of Subgrade is provided within Section 2.13.
- 2.07.02 All trenching shall be in accordance with OSHA requirements.

**2.08 BACKFILL**

- 2.08.01 Backfill materials and methods shall be approved by the Inspector and shall meet TMWA's Standard Section 5. In addition, backfill material and compaction requirements shall meet governmental codes and ordinances, as applicable.
- 2.08.02 Applicant shall place TMWA approved backfill in trenches in the presence of the Inspector. When joint construction is utilized, two or more backfill operations shall be required.

**2.09 CONCRETE**

- 2.09.01 Where concrete encasement is required specifics shall be addressed on the plans. See Section 7, Typical Trench Details, and *Backflow Prevention and Cross-Connection Control Program for Truckee Meadows Water Authority* for further information.

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## 2.10 COMPACTION

Refer to TMWA Section 5, Trench Bedding and Backfill for compaction requirements under, Section 5.05.04.

## 2.11 WORKMANSHIP

- 2.11.01 All vaults and meter enclosures, etc, located behind sidewalk shall be parallel to sidewalk and set two tenths (0.2) of a foot above finished grade so water does not drain into the below grade enclosure or vault. The top of the meter enclosures located within sidewalk or traffic areas shall be set flush to surrounding grade. See Section 7, Typical Trench Details.
- 2.11.02 If there are no sidewalks, another reference will be established as reflected on the approved plans or by TMWA's Inspector. Applicant is responsible for accurate staking of property lines and finish grade.
- 2.11.03 All material furnished by Applicant to be onsite prior to the start of any work by TMWA.
- 2.11.04 All work to be done in accordance with OSHA regulations.

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**2.12 INSPECTION PUNCH LIST**

**TRUCKEE MEADOWS WATER AUTHORITY  
Project Inspection Punch List**

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Contractor: \_\_\_\_\_

TMWA Inspector to Check Standard in Violation

1. Pipe Installation	6. Housekeeping
2. Box(es) Placement	7. Tracer Wire (if required)
3. Customer Complaint	8. Test Station (if required)
4. Water Meter Set/Blankets/Locked	9. Valve Boxes to Grade
5. Traffic Control	10.

Issue: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Discussed with: \_\_\_\_\_

Resolution: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

11. Final acceptance: \_\_\_\_\_  
TMWA Inspector Date

**PLEASE CALL TMWA PROJECT COORDINATOR 48 HOURS PRIOR TO INSPECTION**

This form is to be maintained by TMWA's Inspector and turned in with the "as built" drawing for a permanent record.

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## 2.13 SAMPLE LETTER OF SUBGRADE

ATTENTION: (*INSPECTOR OR TMWA REPRESENTATIVE*)

RE: (*JOB NAME*)

The above referenced project has been surveyed by (*independent certified engineering firm*) who certifies that the existing subgrade is within + 0.3 feet of design subgrade. This "subgrade" is defined as: final grade prior to roadway base and asphalt.

TMWA utilities will be staked and installed from this subgrade.

In the event that this subgrade changes and affects the final depth and/or condition of the utilities, the Developer/Applicant will be responsible, at their expense, for the relocation and/or repair of the utilities affected by the change.

Sincerely,

(*Developer/Applicant and/or Contractor*)

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