Design and Construction Standards

District Ordinance Chapter 6.020 - Design of Sewers requires that the design, construction, modification, or repair of any new or existing public and private sewers within the District be constructed in accordance with the Ordinance, most current District Design Standards, and good engineering and planning practices. The District’s 2007 Standard Specifications for Sanitary Sewer Construction is the current District Design Standards and is on file at the District office and can be accessed through the District’s website at: http://www.westvalleysan.org/documents/engineering/designstandards. Enforcement of these standards, through design review, construction inspection, and materials testing provides assurance and confidence that the District’s collection system, and the private systems connected to it, will function as designed and will effectively transport the collected wastewater stream throughout its long service life. Since the District Design Standards are over ten years old, the District is currently embarking on a multi-year effort to review and update these design standards.

Standards for Installation, Rehabilitation and Repair

The District has minimum design standards that address such issues as flow projection, design criteria for hydraulics, minimum pipe diameter, installation depth, pipe material, location, slope, manholes, and pump stations. The standards also address plan preparation requirements, standard easement requirements, requirements for dedicating facilities to the District and standard construction details. The current District Design Standards are partially based on the “Standard Specifications for Public Works Construction”, also known as the “Greenbook”, published by Public Works Standards, Inc. Prior to approval by the District Manager and Engineer, a review of all design documents submitted for any significant new or rehabilitation construction work is performed by the Senior Civil Engineer and engineering staff to ensure it meets the District Design Standards.

The current review and update effort will ensure that current design practices, new construction technology, construction methodology, and construction materials are incorporated. It will also provide an opportunity to examine whether there is a need for continued reference to the Greenbook. It is anticipated that all standard details will be updated.

Standards for Inspection and Testing of New and Rehabilitated Facilities

District engineering staff and occasionally consultant inspection services, inspect all new construction, repairs and rehabilitation work. Inspection staff insures that all construction
meets District standards and requirements. All new and rehabilitated sewers are cleaned, pressure tested and internally inspected using closed circuit television (CCTV) before acceptance. Flexible pipe is also mandrel tested to verify that it remains fully circular and is absent of any deflection defects. The District requires that all new and rehabilitated sewers be warranted for a period of one (1) year following final acceptance. Prior to the expiration of the warranty period (and release of warranty bonds), these facilities are visually inspected, CCTV inspected as required, and maintenance records are reviewed to ensure that the facilities are functioning properly.