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Executive Summary

Commonwealth Engineers, Inc. (Commonwealth) has prepared this Preliminary Engineering Report (PER) to evaluate the present conditions and future needs for the Valley Rural Utility Company's (Valley Rural) Water Utility. This PER reviews the existing conditions, the need for improvements, and discusses alternatives for improving the Utility's facilities to provide final recommendations and a course of action to help the Utility ensure the quality and reliability of the water system throughout the planning period.

ES.1 Project Planning

The Planning Area for this study is roughly equivalent to the census boundaries for Hidden Valley. Improvements recommended directly benefit the water quality for the current water utility customers. Valley Rural's water utility serves mostly residential customers. This PER is targeted at ensuring Valley Rural has adequate high-quality water both now and over the 20-year planning period.

ES.2 Existing Facilities

The Valley Rural Utility Company owns and operates a distribution system and two (2) ground storage tanks. Treated water is purchased from the nearby City of Greendale. The distribution system serves the Community of Hidden Valley as well as some properties just outside the community limits. The Existing Facilities and planning area are shown on **Figure ES-1**.

The Utility does not produce or treat their water supply. Currently, the Utility purchases water from the nearby City of Greendale. Previously, they have also purchased water from Tri-Township Water Corporation, and the connection is still in place should the Utility choose to purchase from them again in the future and as a redundant supply. The Utility's feed point for the Greendale connection is at the southern side of the community near the Valley Woods Tank. The Tri-Township connection is at the north end of the community near the Stateline Tank.

The Utility utilizes two (2) ground storage tanks: a 500,000-gallon tank at the northern end of the community (Stateline Tank) and a 100,000-gallon tank at the southern end of the community (Valley Woods Tank).

The Utility has two (2) high service pumps located at the Valley Woods Tank. The pumping facility includes two pumps as well as housing and associated piping and valves.

The distribution system consists primarily of 2-inch to 8-inch water mains of varying materials, primarily Schedule 80 PVC, Schedule 40 PVC (primarily on 2-inch water mains), with newer lines being replaced with C900 or SDR-21 PVC. The Utility does not currently provide fire flow due to the size of many of the water lines.