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Interface Practices Subcommittee

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Specifications for Underground Enclosure Integrity

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1. Introduction

1.1. Executive Summary

The purpose of this document is to establish the performance requirements for underground enclosures. The document provides Standards Engineers and Systems Designers a means of evaluating underground enclosure performance regardless of the materials used or the methods employed in the manufacture of the enclosures.

1.2. Scope

The scope of this document covers conformance tests and requirements for the integrity of grade-level enclosures containing telecommunication or other low voltage apparatus that *may* be exposed to the public.

The purpose of this document is to describe the requirements for a comprehensive integrity system for grade-level enclosures providing long installation life and minimal maintenance. This document is intended to provide guidance for the use of enclosures in non-deliberate traffic areas. Requirements for enclosures in deliberate traffic areas are covered by American Association of State Highway and Transportation Officials (AASHTO).

1.3. Benefits

Underground enclosures are designed and used for a variety of applications: slack cable, junction enclosures, and splice enclosures, etc. This document provides the specifier and end user the minimum performance criteria needed to ensure that the enclosure is designed for the outside plant application. Without this document there are no performance requirements for outside plant enclosures, and the long term integrity of the system may be compromised. This document helps specifying individuals design the outside plant and establish enclosure performance requirements throughout the system. The document will serve as a method to ensure long term enclosure integrity as more outside plant systems are installed underground.

1.4. Intended Audience

A Standard Engineer or System Designer will be able to use this document to evaluate products from a variety of manufacturers and specify the best product for the application. It is intended to be used by a large cross section of individuals not just those with engineering backgrounds. The test methods and accompanying figures are intended to guide the individual through the process in a logical manner.

1.5. Areas for Further Investigation or to be Added in Future Versions

Areas of future investigation include:

- Adding a section dedicated to installation applications
- Adding a section dedicated to installation details
- Adding a section for hybrid type installations to help others benefit from work being done across the country