Highway Design Manual (Volume I)
List of Major Revisions to Chapter 12

1. Revision to Title to reflect additional material added

2. Introduction
   a. Text revisions emphasizing importance of field review and other reconnaissances critical to design

3. Field Survey & Base Plan Preparation
   a. Minor text revisions and procedural clarifications
   b. Added ‘Developing Base Plans without Survey’ section and reference to new Appendix 12-1 Existing Data Locations
   c. Added reference to new Appendix 12-3 Sample Cogo Report
   d. Added ‘Types of Survey’ section covering Preliminary, Construction Line Layout and Post Construction Surveys

4. Computations: Traverse & Benchlines
   a. No significant changes

5. Field Books: Plotting Detail & Descriptions
   a. Added significance and importance of field survey books and scanned field book location
   b. Added new Appendix 12-4 Scanned Field Book Location & Sample

6. Other Field Information
   a. Clarification on other field information pertinent to the designer
   b. Added reference to new Appendix 12-6 Bureau of Environment Organization Chart
   c. Added reference to new Appendix 12-7 Field & Emergency Review Guidelines

7. Aerial Survey
   a. Added note regarding limitations due to vegetative cover.
   b. Added descriptions of two standard levels of required accuracy.
   c. Convert to English units.
   d. Added LIDAR reference

8. Subsurface Investigation: Geotechnical & Utilities
   a. Added information regarding Subsurface Utility Engineering (S.U.E.) process being used by the Department
   b. Added that Bureau of Environment should be consulted to determine if natural resources or hazardous materials are of concern
   c. Added new Appendix 12-5 Bureau of Materials & Research Organization Chart

9. Appendices added
   12-1 Existing Data Locations
   12-2 Survey Request Slip
   12-3 Sample COGO (Coordinate Geometry) Report
   12-4 Field Book Location & Sample
   12-5 Bureau of Materials & Research Organization Chart
   12-6 Bureau of Environment Organization Chart
   12-7 Field & Emergency Review Guidelines