

PREFACE

PURPOSE

This manual has been prepared to promote uniformity in design procedures for all designers and technicians involved in the development of Virginia's highways. It is intended to serve as an informational and procedural guide and is to be used in conjunction with specifications, standards, policy directives (State and Federal), and design policy manuals published by the American Association of State Highway and Transportation Officials. It is neither a textbook nor a substitute for engineering knowledge, experiences, or judgment. Most of the data included herein will not be found in textbooks. However, the tables and charts are intended as aids in the quick solution of office and field problems.

The manual is published in loose-leaf form to facilitate revisions and expansion, and it is expected that additions, revisions, and deletions to the text will be necessitated by advance methods and procedures.

MEANINGS OF "SHALL" OR "WILL", "SHOULD" AND "MAY"

To clarify the meaning intended in the manual by the use of these words, the following definitions apply:

- SHALL or WILL
A mandatory condition. When certain design criterion is described in a procedure or the design of a street or highway, it is mandatory that this condition be met.
- SHOULD
An advisory condition. Where the word "should" is used, it is considered to be advisable usage, recommended but not mandatory.
- MAY
A permissive condition. Design or application is optional.

DISTRIBUTION

Preparation and production costs prohibit indiscriminate distribution of this manual. Issuance is based on Departmental requirements and one copy each may be assigned at no charge to governmental agencies (including all State Highway Departments), educational institutions, and consultants under contract to the Virginia Department of Transportation. All other requests for the initial or additional costs will be honored upon receipt of the current cost-plus applicable sales tax made payable to "Commonwealth of Virginia – Department of Transportation" and as manuals are available.