

PREFACE

The *South Dakota Drainage Manual* has been developed to provide guidance to Department and consultant personnel performing drainage investigations and preparing hydraulic designs for SDDOT and local agency projects. The *Manual* is intended to comply with all State and Federal laws, statutes and regulations, and it presents SDDOT criteria, practices and procedures on the hydraulic design of drainage appurtenances. As practical, the user should follow the guidance presented in the *Manual*.

The *Manual* presents much of the information normally required for hydraulic analysis and documentation; however, it is impossible to address every situation that the user will encounter. Therefore, the user must exercise good judgment on individual projects and, frequently, must be innovative in the approach to address hydraulic issues and impacts. This may require, for example, additional research into the hydraulic literature or different approaches than those described in the *Manual*. Where questions exist regarding the appropriate approach, the user should seek guidance from the Bridge Hydraulic Engineer and other experienced and knowledgeable individuals.

It is also important to recognize that drainage policies and procedures continue to evolve with time. New laws will be passed, new regulations developed, existing regulations revised and new drainage design criteria issued. The hydraulic methods described in this *Manual* are not intended to restrict consideration or use of these new developments. However, the user must evaluate the suitability of the method for the specific application. Where questions exist regarding the use of new methods, the user should seek guidance from the Bridge Hydraulic Engineer. After appropriate review, this *Manual* may be modified to include these new methods.

The *South Dakota Drainage Manual* was developed by the Office of Bridge Design and Office of Road Design with assistance from the engineering consulting firm of Roy Jorgensen Associates, Inc., and its subconsultant, Mr. Phil Thompson. The *Manual* Review Committee consisted of:

Kevin Goeden	Chief Bridge Engineer, South Dakota Department of Transportation
Rich Philips	Bridge Hydraulic Engineer (retired), South Dakota Department of Transportation
Kevin Marton	Bridge Hydraulic Engineer, South Dakota Department of Transportation
Steve Johnson	Bridge Design Engineer, South Dakota Department of Transportation
Chad Downs	Hydraulic Engineer, South Dakota Department of Transportation
Steve Van Mullem	Hydraulic Engineer, South Dakota Department of Transportation
Kathy Rodgers	Hydraulic Engineer, South Dakota Department of Transportation
Karen Olson	Road Design Engineering Supervisor, South Dakota Department of Transportation
Brad Gall	Road Design Engineer, South Dakota Department of Transportation
Karen Harris	Road Design Engineer, South Dakota Department of Transportation
Paul Nikolas	Road Design Engineer, South Dakota Department of Transportation
Ken Shearin	Project Manager, Roy Jorgensen Associates, Inc.
Phil Thompson	Hydraulics Specialist

Several other individuals from the SDDOT Environmental Office and Legal also participated in the preparation and review of the *Manual* specific to their individual area of expertise.

SOUTH DAKOTA DRAINAGE MANUAL (Revision Process)

The *South Dakota Drainage Manual* is expected to be updated periodically as needed revisions within the *Manual* are identified and as new methods of drainage design are implemented. Before making these updates, revisions to the *South Dakota Drainage Manual* will be submitted and reviewed according to the following process.

Revision and Review

1. All proposed revisions should be submitted to the Bridge Hydraulic Engineer. The Revision Request Form (next page) should be used for the submittal.
2. The Review Committee will meet twice yearly, or as necessary, to review the proposed changes.
3. The Committee will submit its recommendations and will meet with the Bridge Hydraulic Engineer to determine if the proposed revisions should be incorporated into the *Manual*.
4. If the *Manual* will be revised as recommended, a memo describing the revision will be distributed by the Bridge Hydraulic Engineer and posted on the South Dakota Department of Transportation website.

Review Committee

In addition to the review of proposed revisions, the Review Committee will be responsible for the following:

- preparing all updates for the *South Dakota Drainage Manual*;
- maintaining a tabulated summary of all revisions to the *Manual* and the reason for the change in chronological order; and
- preparing minutes for each meeting of the Review Committee.

**SOUTH DAKOTA DRAINAGE MANUAL
(Revision Request)**

Identification

Date Submitted: _____

Section To Be Revised: _____

Section Title: _____

Page Number(s): _____

Description of Revision

List other sections of the *Manual* that would be affected by the revision:

- A.
- B.
- C.

Justification For The Revision

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