ASCE STANDARD

ANSI/ASCE/EWRI

62-16
63-16
64-16

Standard Guidelines for the Design, Installation, and Operation and Maintenance of Stormwater Impoundments

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

EWRI
ENVIRONMENTAL & WATER RESOURCES INSTITUTE

Approved American National Standard
ANSI

ASCE STANDARD

ANSI/ASCE/EWRI

62-16
63-16
64-16

Standard Guidelines for the Design, Installation, and Operation and Maintenance of Stormwater Impoundments

Three Complete Standards

Standard Guidelines for the Design of Stormwater Impoundments

ANSI/ASCE/EWRI 62-16

Standard Guidelines for the Installation of Stormwater Impoundments

ANSI/ASCE/EWRI 63-16

Standard Guidelines for the Operation and Maintenance of Stormwater Impoundments

ANSI/ASCE/EWRI 64-16

PUBLISHED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Library of Congress Cataloging-in-Publication Data

Names: American Society of Civil Engineers, author.
Title: ASCE standard, ANSI/ASCE/EWRI, 62-16, 63-16, 64-16 : standard guidelines for the design, installation, and operation and maintenance of stormwater impoundments.
Other titles: Standard guidelines for the design, installation, and operation and maintenance of stormwater impoundments
Description: Reston, Virginia : American Society of Civil Engineers, 2017. | "Three Complete Standards, Standard Guidelines for the Design of Stormwater Impoundments ANSI/ASCE/EWRI 62-16 Standard Guidelines for the Installation of Stormwater Impoundments ANSI/ASCE/EWRI 63-16 Standard Guidelines for the Operation and Maintenance of Stormwater Impoundments ANSI/ASCE/EWRI 64-16." | Includes bibliographical references and index.
Identifiers: LCCN 2017002963 | ISBN 9780784414262 (soft cover : alk. paper)
Subjects: LCSH: Storm water retention basins–Standards–United States.
Classification: LCC TD722 .A83 2017 | DDC 628/.21–dc23 LC record available at https://lccn.loc.gov/2017002963

Published by American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, Virginia, 20191-4382
www.asce.org/bookstore | ascelibrary.org

This standard was developed by a consensus standards development process that has been accredited by the American National Standards Institute (ANSI). Accreditation by ANSI, a voluntary accreditation body representing public and private sector standards development organizations in the United States and abroad, signifies that the standards development process used by ASCE has met the ANSI requirements for openness, balance, consensus, and due process.

While ASCE's process is designed to promote standards that reflect a fair and reasoned consensus among all interested participants, while preserving the public health, safety, and welfare that is paramount to its mission, it has not made an independent assessment of and does not warrant the accuracy, completeness, suitability, or utility of any information, apparatus, product, or process discussed herein. ASCE does not intend, nor should anyone interpret, ASCE's standards to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this standard.

ASCE has no authority to enforce compliance with its standards and does not undertake to certify products for compliance or to render any professional services to any person or entity.

ASCE disclaims any and all liability for any personal injury, property damage, financial loss, or other damages of any nature whatsoever, including without limitation any direct, indirect, special, exemplary, or consequential damages, resulting from any person's use of, or reliance on, this standard. Any individual who relies on this standard assumes full responsibility for such use.

ASCE and American Society of Civil Engineers—Registered in U.S. Patent and Trademark Office.

Photocopies and permissions. Permission to photocopy or reproduce material from ASCE publications can be requested by sending an e-mail to permissions@asce.org or by locating a title in ASCE's Civil Engineering Database (http://cedb.asce.org) or ASCE Library (http://ascelibrary.org) and using the "Permissions" link.

Errata: Errata, if any, can be found at https://doi.org/10.1061/9780784414262.

Copyright © 2017 by the American Society of Civil Engineers.
All Rights Reserved.
ISBN 978-0-7844-1426-2 (print)
ISBN 978-0-7844-8020-5 (PDF)
Manufactured in the United States of America.

24 23 22 21 20 19 18 17 1 2 3 4 5

ASCE STANDARDS

In 2014, the Board of Direction approved revisions to the ASCE Rules for Standards Committees to govern the writing and maintenance of standards developed by ASCE. All such standards are developed by a consensus standards process managed by the ASCE Codes and Standards Committee (CSC). The consensus process includes balloting by a balanced standards committee and reviewing during a public comment period. All standards are updated or reaffirmed by the same process every five to 10 years. Requests for formal interpretations shall be processed in accordance with Section 7 of ASCE Rules for Standards Committees, which are available at www.asce.org. Errata, addenda, supplements, and interpretations, if any, for this standard can also be found at www.asce.org.

This standard has been prepared in accordance with recognized engineering principles and should not be used without the user's competent knowledge for a given application. The publication of this standard by ASCE is not intended to warrant that the information contained therein is suitable for any general or specific use, and ASCE takes no position respecting the validity of patent rights. Users are advised that the determination of patent rights or risk of infringement is entirely their own responsibility.

A complete list of currently available standards is available in the ASCE Library (http://ascelibrary.org/page/books/s-standards).

ACKNOWLEDGMENTS

The American Society of Civil Engineers (ASCE) acknowledges the work of the Urban Drainage Standards Committee of the Environmental and Water Resources Institute of ASCE (EWRI of ASCE).

This group comprises individuals from many backgrounds, including consulting, engineering, research, the construction industry, education, and government.

Urban Drainage Standards Committee

William Curtis Archdeacon, P.E., R.L.S., L.S., *Past Chair*
William P. Bulloch Jr., P.E., D.WRE, M.ASCE
Christopher B. Burke, Ph.D., P.E., D.WRE, F.ASCE
Richard Field, P.E., D.WRE
Robert S. Giurato
Jeffrey S. Glenn, P.E., D.WRE, F.ASCE
S. David Graber, P.E., F.ASCE, *Vice Chair and Corresponding Editor*
Jay M. Herskowitz, P.E., M.ASCE
Kathlie S. Jeng-Bulloch, Ph.D., P.E., D.WRE, M.ASCE, *Chair*
Conrad G. Keyes Jr., Ph.D., P.E., L.S., D.WRE, Dist.M.ASCE
James H. Lenhart Jr., P.E., D.WRE, M.ASCE
Lawrence M. Magura, P.E., M.ASCE, *Secretary*
Garvin J. Pederson, P.E., M.ASCE
Anthony N. Tafuri, P.E., D.WRE, M.ASCE
Kenneth E. Waite, P.E., M.ASCE
Keh-Han Wang, Ph.D., M.ASCE
William J. Weaver, D.WRE, P.E., M.ASCE
Donald E. Woodward, P.E., M.ASCE

The Corresponding Editor recognizes the following current Committee members whose efforts as authors of these standards ranged from writing partial to multiple chapters: William Curtis Archdeacon, Kathlie S. Jeng-Bulloch, Christopher B. Burke, Robert S. Giurato, S. David Graber, James H. Lenhart Jr., Lawrence M. Magura, and William J. Weaver. Those authors also participated in informal commenting and formal balloting on the chapters; to those names in this category are added the following: Jeffrey S. Glenn, Jay M. Herskowitz, Conrad G. Keyes Jr., Keh-Han Wang, and Donald E. Woodward. Participation by the following is also acknowledged: William P. Bulloch Jr., Richard Field, Anthony N. Tafuri, and Kenneth E. Waite.

CONTENTS

STANDARD GUIDELINES FOR THE DESIGN OF STORMWATER IMPOUNDMENTS, ANSI/ASCE/EWRI 62-16 1

STANDARD GUIDELINES FOR THE INSTALLATION OF STORMWATER IMPOUNDMENTS, ANSI/ASCE/EWRI 63-16 63

STANDARD GUIDELINES FOR THE OPERATION AND MAINTENANCE OF STORMWATER IMPOUNDMENTS, ANSI/ASCE/EWRI 64-16 87

INDEX 101