AS 1726:2017

Geotechnical site investigations

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- Australasian Tunnelling Society
- Australian Drilling Industry Association
- Australian Geomechanics Society
- Austroads
- Cement Concrete and Aggregates Association
- Consult Australia
- CSIRO
- International Association of Hydrogeologists Australia
- New Zealand Geotechnical Society
- University of Newcastle
- University of Wollongong

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard®

Geotechnical site investigations

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PREFACE

This Standard was prepared by the members of the joint Standards Australia/Standards New Zealand Committee CE-015, Site Investigations, to supersede AS 1726—1993.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard only, at this time, rather than a joint Australian/New Zealand Standard. This document may become a joint stand in future revisions.

The objective of this Standard is to establish the requirements for the execution of effective geotechnical site investigations and to provide a standardized system for the description and classification of soils and rocks. It addresses spatial and physical characteristics of soil, rock and groundwater, but does not cover the chemical, biological or other environmental aspects of the investigation of contaminated ground.

Commentary on the changes from the 1993 edition is set out in Appendix F.

Statements expressed in mandatory terms in Notes to Tables are deemed to be requirements of this Standard. Figures provided in this Standard are informative.

The term ‘informative’ has also been used in this Standard to define the application of the appendices to which it applies. An ‘informative’ appendix is only for information and guidance.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard
Geotechnical site investigations

1 SCOPE

This Standard specifies requirements for the execution of geotechnical site investigations and provides a standardized system for the identification, description and classification of soils and rocks.

This Standard applies to geotechnical site investigation of natural or filled ground for—

(a) new construction;

(b) maintenance of existing facilities;

(c) the evaluation of post construction performance;

(d) the assessment of failure; and

(e) broad geotechnical studies.

NOTE: Commentary on the changes from the 1993 edition is set out in Appendix F.

2 EXCLUSIONS

This Standard does not cover the following:

(a) The application of geotechnical site investigation outcomes for geotechnical design.

(b) The chemical, biological or environmental aspects of the investigation of contaminated ground.

3 NORMATIVE REFERENCES

The following normative documents are referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS	
4133	Methods of testing rocks for engineering purposes
4133.4.1	Method 4.1: Rock strength tests—Determination of point load strength index
4133.4.2.1	Method 4.2.1: Rock strength tests—Determination of uniaxial compressive strength of 50 MPa and greater

4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

4.1 Acid sulfate soil

Naturally occurring soils, sediments or organic substrates (e.g. peat) that contain sulfide minerals (predominantly pyrite) or their oxidation products. In an undisturbed state where soil is saturated, acid sulfate soils are generally benign. However, if the soils are excavated or exposed to air by a lowering of the groundwater level, the sulfides react with oxygen to form sulfuric acid.

NOTE: Refer to Appendix D.

4.2 Carbonate rock

A rock containing more than 50% by weight of carbonate compounds (such as calcium carbonate).

