

# CONTENTS

1.	INTRODUCTION .....	1
	Background (1.1–1.2).....	1
	Objective (1.3) .....	1
	Scope (1.4–1.8).....	1
	Structure (1.9).....	3
2.	SITE INVESTIGATION .....	3
	Investigation programme (2.1–2.24) .....	3
	Sources of data (2.25–2.34).....	10
	Investigations for complex subsurface conditions (2.35–2.47) .....	14
3.	SITE CONSIDERATIONS .....	18
	Site categorization (3.1–3.2).....	18
	Parameters of the profiles (3.3–3.5).....	19
	Free field seismic response and site specific response spectra (3.6–3.14).....	20
	Liquefaction potential (3.15–3.25).....	22
4.	CONSIDERATIONS FOR THE FOUNDATIONS .....	27
	Foundation work (4.1–4.8) .....	27
	Soil–structure interaction (4.9–4.26) .....	29
	Stability (4.27–4.42) .....	34
	Settlements and heaves (4.43–4.49).....	37
	Effects of induced vibrations (4.50).....	38
5.	EARTH STRUCTURES .....	39
	General concept (5.1) .....	39
	Natural slopes (5.2–5.6).....	39
	Dykes and dams (5.7–5.12).....	40
	Sea walls, breakwaters and revetments (5.13–5.16).....	41

6.	BURIED STRUCTURES .....	42
	Retaining walls (6.1–6.6) .....	42
	Embedded structures (6.7–6.11) .....	43
	Buried pipes, conduits and tunnels (6.12–6.24) .....	44
7.	MONITORING OF GEOTECHNICAL PARAMETERS .....	46
	Purpose of monitoring geotechnical parameters (7.1–7.2) .....	46
	Guidelines for monitoring (7.3–7.7) .....	47
	Monitoring devices (7.8) .....	47
	REFERENCES .....	49
	CONTRIBUTORS TO DRAFTING AND REVIEW .....	50
	BODIES FOR THE ENDORSEMENT OF SAFETY STANDARDS ..	51