



DESIGNATION OF THE PROPERTY OF



ACTIVE BEAUTIFUL CLEAN WATERS

DESIGN GUIDELINES Driven by the vision of sparkling, picturesque rivers and lakes with lush landscaped banks, Singapore has undertaken the challenge of transforming itself into a City of Gardens and Water.

CONTENTS

I	 INTRODUCTION 1.1 Transforming into a City of Gardens and Water 1.2 Ensuring a Robust, Sustainable and Affordable Water Supply 1.3 ABC Waters 1.4 Benefits of Embracing the ABC Waters Concept 	4	7	ABC WATERS CERTIFICATION 7.1 Application and Assessment 7.2 About the Certification	64 64
		5 6	8	ABC WATERS PROFESSIONAL 8.1 ABC Waters Professional Programme 8.2 ABC Waters Professional Registry 8.3 Revisions to the COP	70 71 71
2	ABC WATERS: SUSTAINABLE STORMWATER MANAGEMENT			8.4 Drainage Handbook on Managing Urban Runoff	72
	2.1 Traditional Stormwater Management2.2 Holistic Stormwater Management2.3 ABC Waters Management Strategy2.4 On-Site Detention and Retention	8 9 10 11	9	APPENDICES 9.1 Glossary of Terms 9.2 References and Supporting Materials	74 77
3	GUIDELINES FOR ABC WATERS MANAGEMENT STRATEGY 3.1 Planning Considerations 3.2 Design Considerations	14 15	10	CASE STUDIES 10.1 Central Green Core @ CleanTech Park 10.2 Firefly Park 10.3 Gardens by the Bay 10.4 Goodwood Residence	80 82 84
	PLANNING, DESIGN AND PERFORMANCE OF ABC WATERS DESIGN FEATURES			10.4 Goodwood Residence 10.5 Kallang River @ Bishan- Ang Mo Kio Park	88
	4.1 Catchment Elements	18		10.6 Khoo Teck Puat Hospital	90
	4.2 Treatment Elements4.3 Conveyance and Storage	32 46		10.7 Privé	92
_		40		10.8 Rivervale Arc 10.9 Soak Away Rain Gardens in Local Schools	94 96
•	SAFETY CONSIDERATIONS, PUBLIC HEALTH AND MAINTENANCE			10.10 Sungei Ulu Pandan	98
	5.1 Design Stage	52		10.11 Telok Kurau Primary School	102
	5.2 Construction Stage	55		10.12 The Interlace	104
	5.3 Post-Completion	56		10.13 The Peak @ Toa Payoh	106
	5.4 Maintenance Considerations	57		10.14 Tree House	108
	ACTING TOGETHER FOR		_	10.15 Waterway Ridges @ Punggol East	110
,	A SUSTAINABLE ENVIRONMENT		11	ACKNOWLEDGEMENTS	112
	6.1 Valuing Our Waters	60	_	-	
	6.2 Educating the Public	60			
	6.3 Engaging the Community	61			
	6.4 A Call for Partnership	62			