



1.0 Introduction

Options for the design of River Walls, which the City of Perth endorse, include:

- A mixture of rock revetment
- Pocket Beaches
- Limestone Wall

When deciding which option is most appropriate consideration must be given to the sustainability, community interaction with the river, long term viability, aesthetics and the nature of the surrounding environment.

The design and construction of the River Wall Structure must align with the following principles:

- a) All structures must have an attractive appearance that is appropriate to their general surroundings and adjacent structures
- b) Structural Design is based on proven methods, materials and technology
- c) Fixing for retaining structures are concealed and integrated as a design factor.
- d) Unless a feature of the architectural design, all structures are to be of uniform colour and surface finish, including after repair work.
- e) River Walls must follow simple straight or smooth alignments with large radii, and interface with adjoining pathways, structures and environmental features.

2.0 Design Specification and Guidelines

All River Wall structures are to be designed in accordance with all relevant standards, including but not limited to the following:

AS 4997-2005	<i>Guidelines for the Design of Maritime Structures</i>
AS 4678-2002	<i>Earth-retaining Structures</i>
AS 5100 Set-2007	<i>Bridge Design</i>
BS 6349-1-4:2013	<i>Maritime Works</i>

Where design and construction aspects of River Walls are not considered in the above references, it is necessary to consider and conform to other international codes of practice and design guidelines.

2.1 Design Life

River Walls are to be designed to achieve the maximum life outlined in the the table below, without any major maintenance or replacement of elements whilst remaining safe and functional.

Asset	Design Life
River Wall, Embankments and Scour protection	100 years
Drainage and other structures which are accessible for maintenance	50 years