



Providing Public, Private and Livestock Access

8.5 Urban riverside access

RIVER MARDEN

LOCATION - TOWN CENTRE AT CALNE, WILTSHIRE ST998710

DATE OF CONSTRUCTION - 1999

LENGTH - 100m

COST - NOT AVAILABLE



The river and weirs before reconstruction

Description

A straight, concrete-lined, section of river channel was diverted and restored in the form of a double meander. Refer to *Technique 1.5* for a plan and full description of the project.

The inner part of each meander is configured as a gravel shoal. People enjoy being close to the river at such locations although

the opportunity to do so in a town centre location is rare. This technique is concerned with the means by which people are afforded safe access to the shoals. In addition, the Environment Agency required occasional access for maintenance plant, particularly to the twin road culverts at the downstream end where flood washed debris may accumulate.



Gravel margins and seeded soil form the shallow banks opposite 'rocky' walls

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Design

The meander configuration effectively divides the reach into two parts for access purposes. The lower part comprises the meander approaching the road culverts where access is from the south side. The upper part comprises the meander fronting new retail development where access is from the north side.

Access on the lower part

A gently sloping ramp was achieved by aligning this parallel to the course of the river channel thereby maximising the distance over which a drop of circa 1.5m could be incorporated. The ramp blends smoothly into the shoal and falls at 1 in 12.5 at its steepest. *Figure 8.5.1* indicates the profile of the inner bend and shoal. The upper part of the ramp is reinforced against wear and tear with limestone block paving. Purbeck limestone was used extensively throughout the project (see *Technique 1.5*). Grass is seeded between the paving blocks ensuring a good blend with the grassed areas around the shoal.

Access on the upper part

A gently sloping ramp was again built parallel to the river course at about 1 in 12.5. This ramp gives access to a 20m long section of waterside that is flat and is within 0.4m of normal water level. Dense marginal aquatic vegetation fronts this short reach. The reach leads into the shoal fronting the development.

The inner bend that fronts the retail development is shown as a cross-section in *Figure 8.5.2*. Three wide steps surfaced in slabs of Purbeck limestone form the riverbank. These 'stepped platforms', as they have come to be called, are up to 1.5m wide and provide informal seating areas for people at the riverside. The steps give direct access to the shoal and are integrated into the parade that fronts the new retail area.



View showing the lower part of the accessible new river course
– November 2001



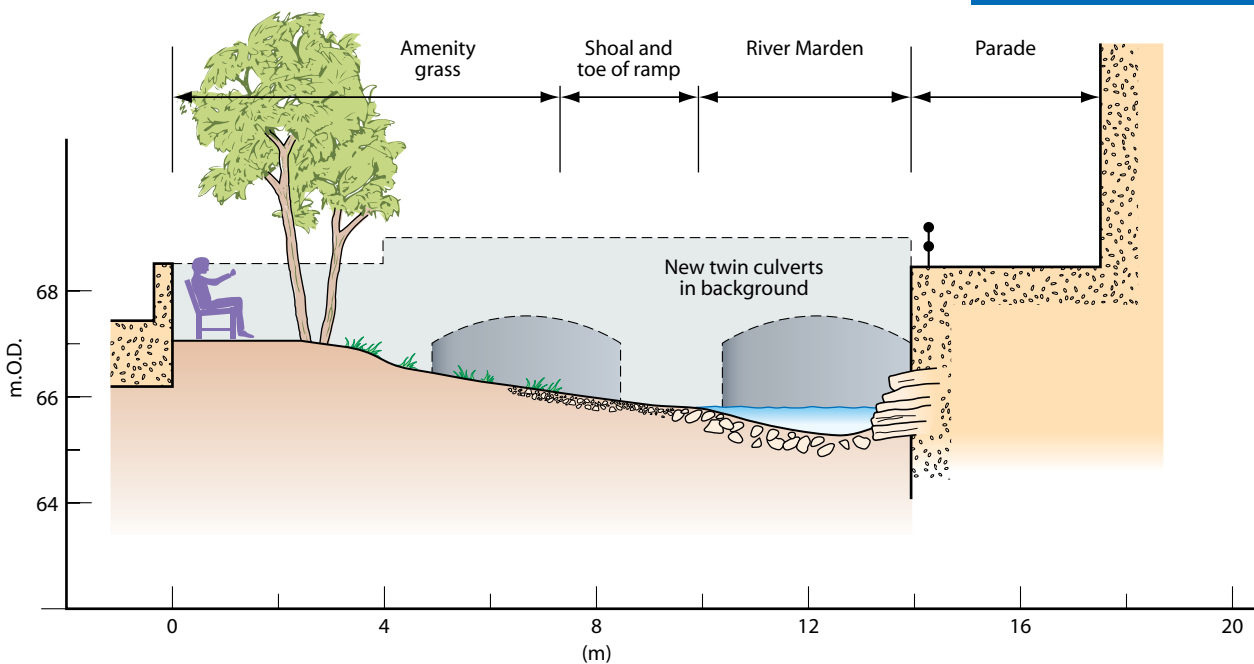


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Seating and gentle grass and gravel slope to water's edge

Figure 8.5.1
SECTION C (SEE TECHNIQUE 1.5 FOR LOCATION)



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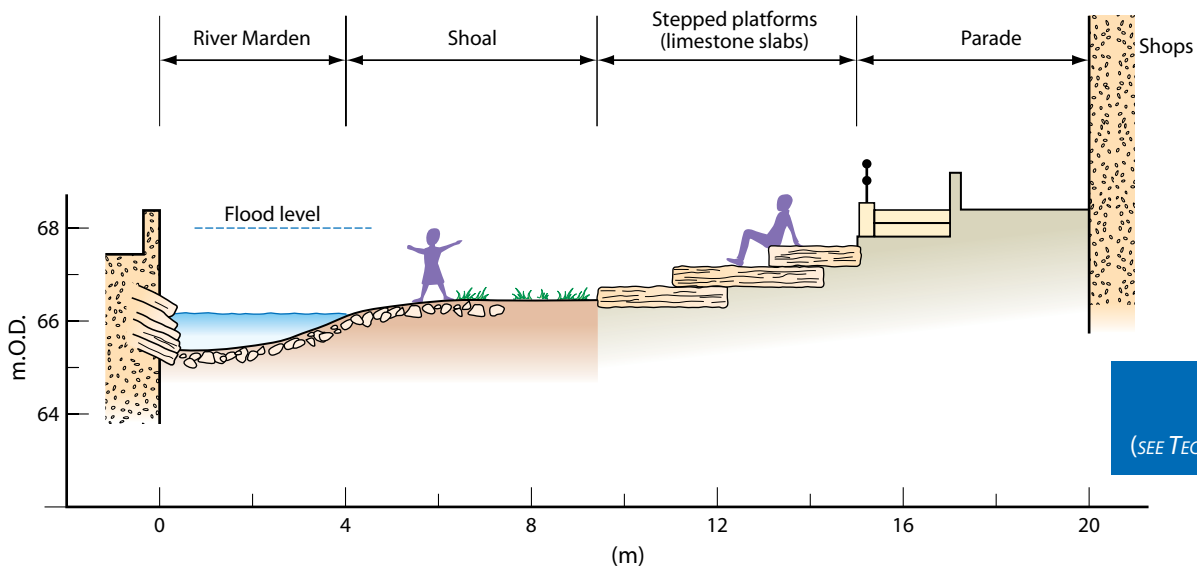


Figure 8.5.2
SECTION B
(SEE TECHNIQUE 1.5 FOR LOCATION)



Stone steps leading down to grass and gravel shoal

Subsequent performance 1995 – 2001

The public will not have full access to the river until the retail development work is completed during 2001 but the overall appearance of the access provision is inviting and safe during normal river conditions.

During times of flood all of the features described will be submerged. Some cleaning of silt and debris is anticipated but should not be onerous.

The overall concept of maximising the opportunity for access to the waterside within the whole river channel and floodway is expected to work well.

Original Information Providers:
RRC
Richard Vivash





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8.5 River Marden 2013 Update

The river access, which was a key project design, has proved popular. The reach is now an attractive and interesting feature of the town centre environment, serving as the centrepiece for the town's annual charity duck race. The restoration scheme has won several design awards including a Civic Trust Commendation in 2003. It appears to have addressed both aesthetic and biodiversity issues and is well used by the local people.

The town centre rejuvenation was welcomed following the demolition of the Harris Bacon factory in 1984. Denis Robson, chairman of Castlefields Canal & River Park Association (CARP) stated *"The Calne now has a beautiful 'natural' flowing river that is a delight to visit. By any measure this is a very successful project!"*



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The annual charity duck race – 2010



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River Marden riverside access – 2012

River Marden	Medium energy, chalk
WFD Mitigation measure	
Waterbody ID	GB109053022060
Designation	None
Project specific monitoring	None

The scheme is an excellent example of urban river restoration, providing public access and amenity to a scheme which has utilised working with natural processes to achieve flood risk management benefits. Flood gates at access points are closed during high flow events to ensure public safety.

The scheme was initially maintained by Wiltshire County Council. Since being transferred to the responsibility of Calne Town Council (circa 2009) the level and extent of maintenance of the planting has been significantly increased, although this has led to many native shrubs being replaced with ornamental species. Ideally the native species should be retained wherever possible to give a more natural marginal and riparian zone.

Contacts

Paul Jolliffe, Nicholas Pearson Associates (NPA)
 paul.jolliffe@npaconsult.co.uk, 01225 445548