

12. Sowter Road

12.1 Introduction

12.1.1 The flood defences at Sowter Road are located between St Alkmund's Way and the Silk Mill on the west bank of the River Derwent.

12.1.2 This site is split into the following sub-areas:

- Christchurch Court; and
- Silk Mill flood embankment.

12.1.3 The proposed works at Duke Street will reduce flood risk to Christchurch Court, allow flood water coming down Sowter Road to re-enter the river channel; and ensure the continued operation of the Sowter Road highway drainage pumping station.

12.1.4 The key constraints around Sowter Road are the buried leat which served the Silk Mill, high voltage power cables from the Silk Mill sub-station, and the Sowter Road highway drainage pumping station.

12.2 Christchurch Court

General Arrangement Drawing Number	19	Sections Drawing Number	65	Package	1
Type of planning application	Full				
Proposed use	Flood defence	Works carried out by:	Applicant		

Key constraints

12.2.1 Christchurch Court is within the Derwent Valley Mills World Heritage Site buffer zone; however, it is known that Sowter Road was constructed over the Silk Mill leat with a protective concrete slab to preserve it in-situ. The exact location of the leat is unclear at this stage.

12.2.2 Sowter Road highway drainage pumping station pumps surface water from St Alkmund's Way and the surrounding area into the river.

12.2.3 Christchurch Court is owned by Derwent Living and provides managed accommodation for the over 60's and over 40's with a disability.

Scale

12.2.4 Construction of a new 65m long flood wall, up to 2.35m high and 0.55m wide with piled foundations. The wall will include the provision of a 3m wide flood gate in the wall. (The wall height directly in front of Christchurch Court building ranges from 0.95m to 1.65m.)

Layout

12.2.5 It is proposed to construct the new wall along the boundary of Christchurch Court and the footway along Sowter Road, tying in to St Alkmund's Way (Causey Bridge) to the

north and high ground along St Michaels Way to the south. (Refer to Figures 12.1 – 12.3.)

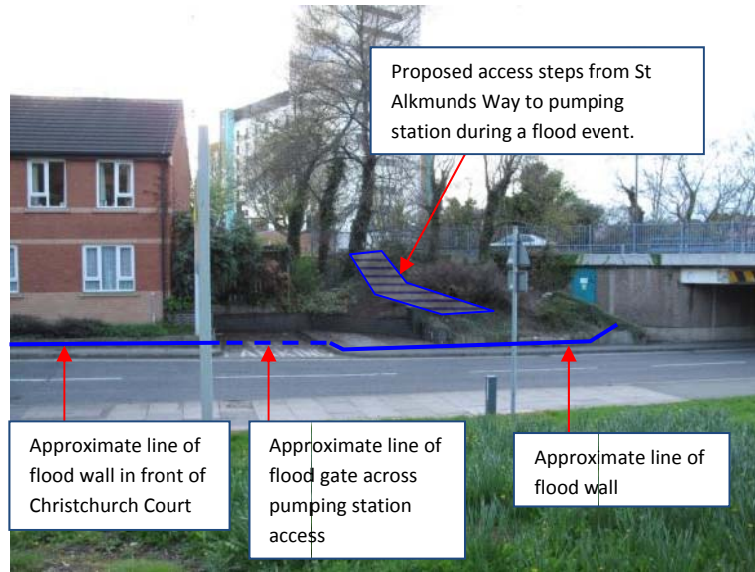


Figure 12.1: View of Sowter Road pumping station



Figure 12.2: View of Christchurch Court



Figure 12.3: View of entrance to Christchurch Court on St Michael's Lane

Access

Construction access

- 12.2.6 A temporary road closure will be required during construction. Closures will be applied for and advertised in advance, diversions put in place and times kept to a minimum. All efforts will be made to implement partial road closures to maintain 1-way access controlled with traffic management, where possible.

Temporary transport network closures during a flood event

- 12.2.7 A flood event with a 3.3% (1 in 30) chance of occurrence each year will result in the closure of Sowter Road.
- 12.2.8 Alternative vehicular access to Duke Street residential properties and Alfreton Road will be retained via the A6, with signed diversions put in place.
- 12.2.9 Vehicular access to the pumping station will not be possible during a flood event; however, pedestrian access will be provided via a proposed set of steps down from St Alkmund's Way.

Landscaping/external appearance

- 12.2.10 The top section of the flood wall will be formed from 0.45m high structural glass panels, with brick piers. The wall below will be clad with brick, and will incorporate mock piers.
- 12.2.11 The flood gate will normally be locked closed and will only be open when access to the pumping station is required.
- 12.2.12 A visualisation of the proposed defence in front of Christchurch Court is provided in Figure 12.4.



Figure 12.4: Visualisation of proposed flood wall at Christchurch Court.

Basis of design

- 12.2.13 The foundation design of the flood wall will be detailed following investigations into the exact location of the Silk Mill leat and high voltage electric cables. The foundation design will avoid direct impacts to the leat walls which are considered an important aspect of the Derwent Valley Mills World Heritage Site.

Consultation

- 12.2.14 A meeting was held with Derwent Living in July 2013. Two options were discussed with them regards to the alignment of the flood wall: either the wall could be built up against the property; or adjacent to the footpath. Derwent Living representatives had a preference for the wall alongside the footpath as it would clearly segregate the path from the property; this proposal is therefore included within this hybrid planning application.

12.3 Silk Mill flood embankment

General Arrangement Drawing Number	19	Sections Drawing Number	66	Package	1
Type of planning application	Full				
Proposed use	Flood conveyance	Works carried out by:	Applicant		

Key constraints

- 12.3.1 This part of the Sowter Road site is within the Derwent Valley Mills World Heritage Site. The Silk Mill leat connecting the river with the north-east corner of the Silk Mill is located under the existing flood bank and capped with a concrete slab.
- 12.3.2 The riverside path is part of the Derwent Valley Heritage Way and National Cycle Network Route 54.

Scale

- 12.3.3 Lowering the existing embankment on the riverward side of Sowter Road by up to 1.6m.

Layout

- 12.3.4 It is proposed to lower the bank between St Alkmund's Way and the cobbled path adjacent to the north side of the Silk Mill. (Refer to Figure 12.5.)



Figure 12.5: Proposed lowering of the Silk Mill flood embankment

Access

- 12.3.5 A temporary footpath and cycleway closure will be required along the riverside through construction. Closures will be applied for and advertised in advance, diversions put in place and times kept to a minimum.
- 12.3.6 Footpaths across this area will be reinstated.

Landscaping/external appearance

- 12.3.7 14no trees will require removal for the works. Reinstatement tree planting is proposed and will be undertaken on a 1:1 ratio, as close to their original positions as possible. Proposed landscaping works will be developed during detailed design to include new benches and wildflower seeding.

Potential environmental enhancement

- 12.3.8 There is the opportunity for wetland habitat creation works within this area.

Basis of design

- 12.3.9 The flood bank will be lowered to allow flood water from Sowter Road to flow back into the River Derwent.