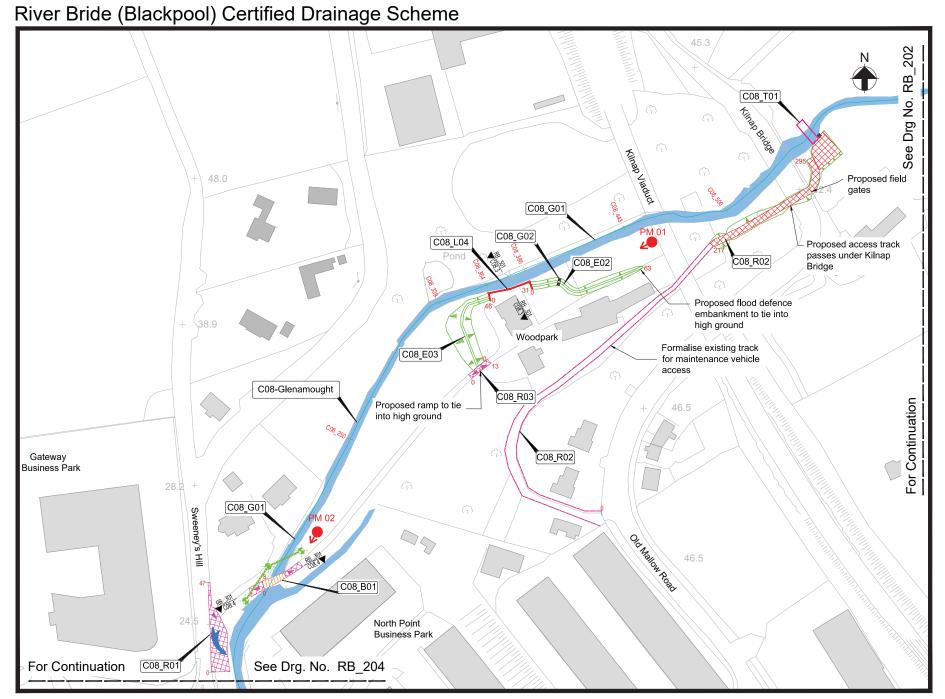
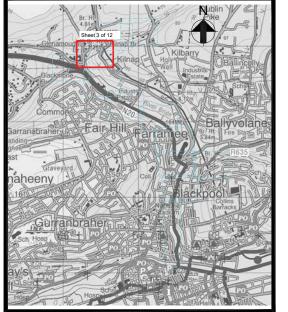


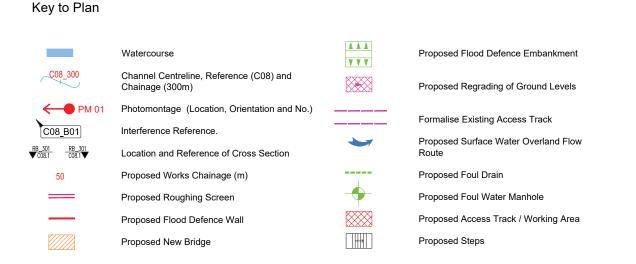
- Do not scale from drawing.
- This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation



Location Plan Scale 1:1,000 at A1 Scale 1:2,000 at A3



Key Plan Scale 1:25.000 at A1 Scale 1:50,000 at A3



Drg. No. RB 203 Proposed Flood Defences - Plan Layout (Sheet 3 of 12)

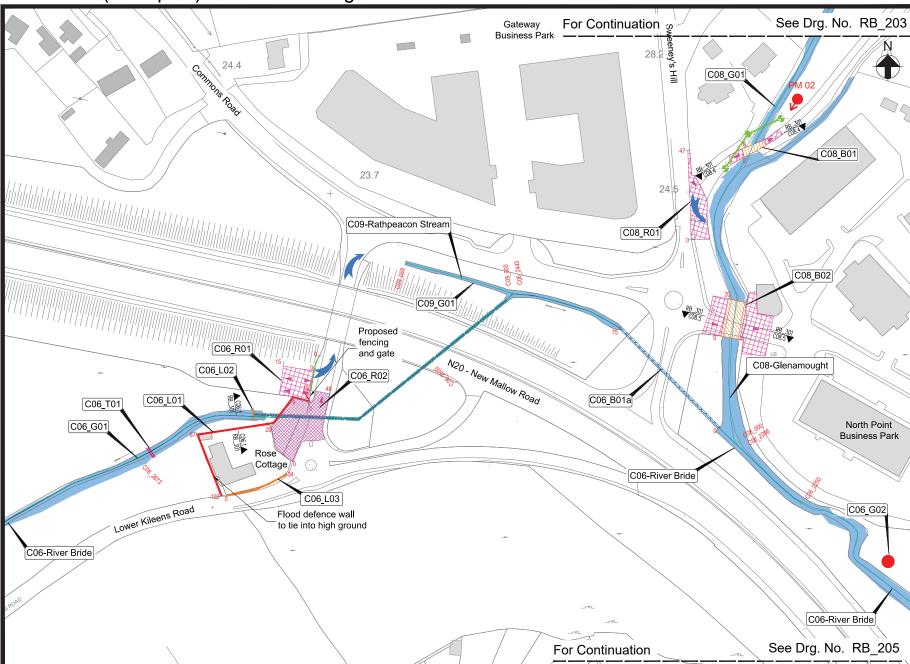


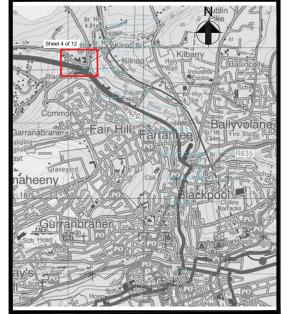




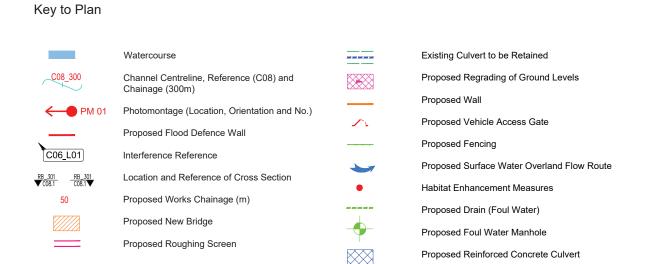








Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3



Issued July 2018

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works				
C06_B01a 0 to 75 -		-	Reconstruction of existing pipe culvert. Proposed reinforced concrete culvert of internal dimension 2.5m wide and 2.0m high. All drainage outfalls to be fitted with non-return valves.				
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).				
C06_G02	-	2187	Proposed otter habitat enhancement measures				
C06_L01	0 to 29	-	Proposed reinforced concrete wall to be constructed to a height typically 0.65m above existing ground levels to flood defence level (25.50mOD). All drainage outfalls to be fitted with non-return valves.				
C06_L01	29 to 102	-	Proposed sheet pile wall to be constructed above flood defence level (25.50mOD) to 25.80mOD on the wet side of the existing boundary wall at Rose Cottage. Finished wall height to be typically 1.70m above existing ground levels. All drainage outfalls to be fitted with non-return valves.				
C06_L02	0 to 6	-	Proposed reinforced concrete headwall and wing wall structure to be constructed around the existing concrete culvert inlet.				
C06_L03	0 to 34	-	Existing open wall south of Rose Cottage to be reconstructed in solid blockwork to 1.1m above path level.				
C06_R01	0 to 15	-	Proposed vehicle access ramp crest to be at flood defence level (25.00mOD). Proposed ramp to tie into the proposed flood defence wall at Rose Cottage and high ground at the N20 road embankment.				
C06_R02	0 to 48	-	Proposed regrading of existing ground levels to divert surface water overland flow (during a design exceedance event) underneath the existing N20 road bridge to the Rathpeacon Stream.				
C06_T01	-	2666	Existing 2 no. trash screens to be removed and replaced with a single new roughing screen upstream of Rose Cottage.				
C08_B01	0 to 8	-	Replace existing masonry bridge with a new reinforced concrete bridge Bridge to be of 10.50m clear span and 8m wide deck. Construct new access ramps to bridge, incorporating new reinforced concrete retaining walls where necessary.				
C08_B02	0 to 20	-	Replace existing pipe culvert bridge with a new reinforced concrete bridge. Bridge to be of 9.00m clear span and 20m wide deck. Construct new access ramps to bridge, incorporating new reinforced concrete retaining walls where necessary.				
C08_G01	-	0 to 1445	Channel to be maintained over a distance of 1445m from the confluence of the River Glenamought and River Bride (C08-000) to the upstream end of the works (C08-1445).				
C08_R01	0 to 47	-	Proposed surface water drainage measures and regrading of local ground levels to divert excess surface water runoff into the River Glenamought upstream of North Point Business Park bridge.				
C09_G01	-	0 to 59	Channel to be maintained over a distance of 59m from C09_000 to C09_59.				

Notes:

- Do not scale from drawing.
- This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and Schedules.

Drg. No. RB_204 Proposed Flood Defences - Plan Layout (Sheet 4 of 12)









OPW Style of the Association of the Association of the Company of the Association of the

Cork, Co Limerick, Ireland.

Tel +353 (0)21 4277670 Tel. +353 (0) 61 345463
Fax +353 (0)21 4272345 Fax +353 (0) 61 280146

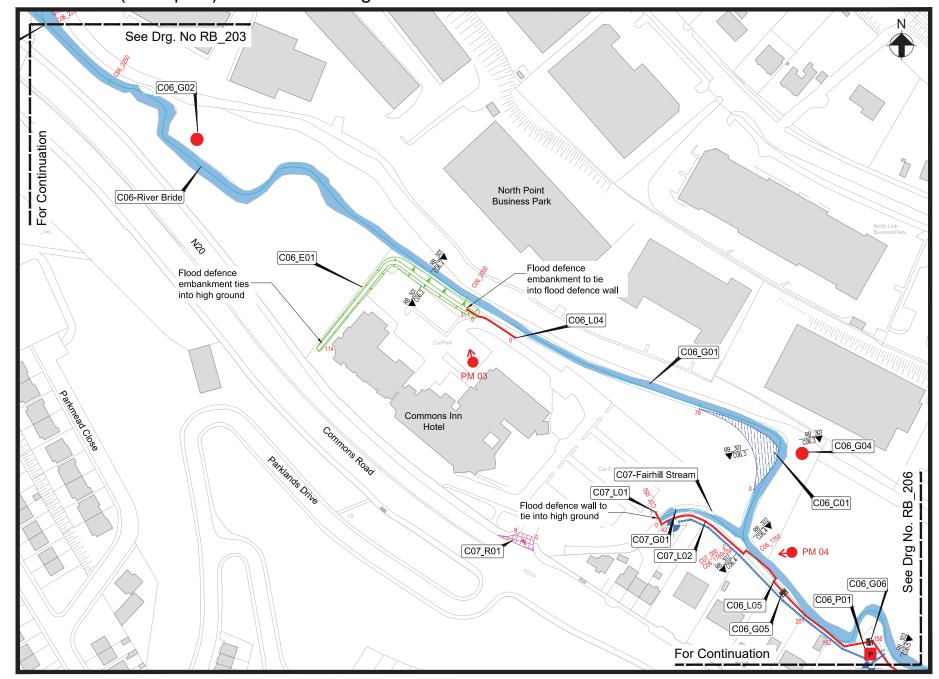
Cork, Ireland.

Tel. +353 (0) 21 4966222.

Fav. +353 (0) 21 4314238

County Hall, Carrigrohane Road, Cork, Ireland. Tel: +00 353 (0) 21 4276891

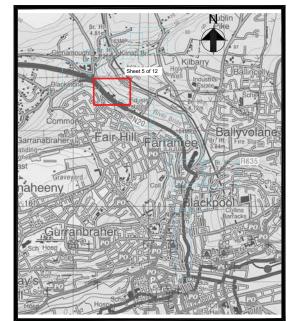
Tel +353 (0) 1 647 6000 Fax +353 (0) 1 661 0747



Location Plan

0 5 10 20 50

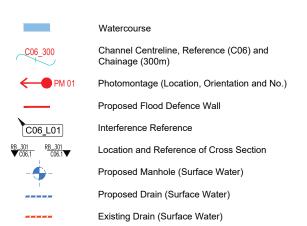
Scale 1:1,000 at A1 Scale 1:2,000 at A3



Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3

Key to Plan

50



Proposed Works Chainage (m)

Proposed Flood Defence Embankment

Proposed Winter Channel

A A A

*** * ***

Proposed Regrading of Ground Levels

Proposed Pumping Station (Surface Water)

Proposed Rising Main (Surface Water)

Habitat Enhancement Measures

Proposed Steps

Issued July 2018

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C06_C01	0 to 78	-	Proposed winter channel to be constructed downstream of the Commons Inn in order to increase conveyance during flood events. Winter channel to be a maximum width of 10m wide at mid-section.
C06_E01	0 to 114	-	Proposed flood defence embankment to be constructed 7.50m wide and to a height of typically 0.80m above existing ground levels to flood defence level (21.90mOD). Flood defence embankment to tie into high ground and a proposed flood defence wall as shown on the drawing.
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).
C06_G02	-	2187	Proposed otter habitat enhancement measures
C06_G04	-	1812	Proposed otter habitat enhancement measures
C06_G05	-	1726	Proposed access stairs to be constructed over the proposed flood defence wall.
C06_G06	-	1660	Proposed access stairs to be constructed over the proposed flood defence wall.
C06_L04	0 to 31	-	Proposed reinforced concrete flood defence wall to be constructed typically 0.45m above existing ground levels to flood defence level (21.72mOD). Proposed defence wall to tie into proposed flood defence embankment. All drainage outfalls to be fitted with non-return valves.
C06_L05	201 to 259	-	Proposed sheet pile flood defence wall to be constructed typically 0.83m above existing ground levels to flood defence level (20.01mOD). Proposed flood wall to tie into flood wall C07_L02 at the upstream end. All drainage outfalls to be fitted with non-return valves.
C06_L05	182 to 201	-	Proposed sheet pile flood defence wall to be constructed typically 1.32m above existing ground levels to flood defence level (19.80mOD). All drainage outfalls to be fitted with non-return valves.
C06_L05	123 to 182	-	Proposed sheet pile flood defence wall to be constructed typically 1.20m above existing ground levels to flood defence level (19.58mOD). All drainage outfalls to be fitted with non-return valves.
C06_P01	-	1635	Proposed overflow surface water pumping station and rising main to operate during a flood event at C06_1635. All outlets to be fitted with non-return valves.
C07_G01	-	0 to 50	Channel to be maintained over a distance of 50m from the confluence of the River Bride and the Fairhill Stream(C07_000) to the existing 450mm diameter pipe culvert (C07_50).
C07_L01	0 to 7	-	Proposed reinforced concrete flood defence wall to be constructed typically 0.99 m above existing ground levels to flood defence level (20.05mOD). Proposed flood wall to tie into high ground and into proposed flood wall C07_L02. All drainage outfalls to be fitted with non-return valves.
C07_L02	0 to 43	-	Proposed sheet pile flood defence wall to be constructed typically 1.20m above existing ground levels to flood defence level (20.01mOD). Proposed flood wall to tie into proposed flood walls C07_L01 and C06_L05. All drainage outfalls to be fitted with non-return valves, other than the outlet of the proposed 0.90m pipe.
C07_R01	0 to 9		Proposed regrading of existing ground levels at the Commons Inn entrance to divert excess surface runoff to the Fairhill Stream.

Notes:

- Do not scale from drawing
- 2. This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and Schedules.

Drg. No. RB_205 Proposed Flood Defences - Plan Layout (Sheet 5 of 12)









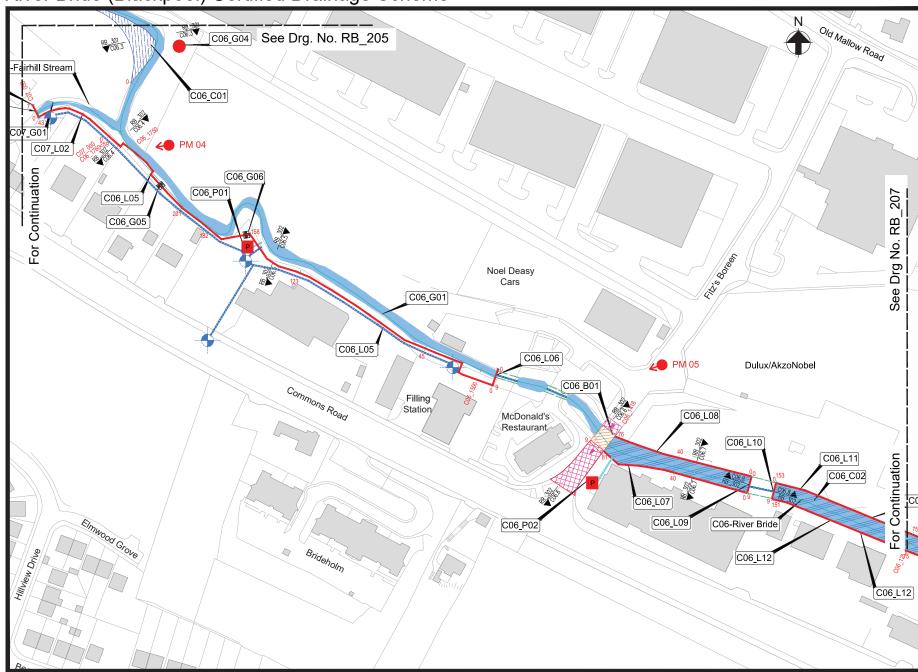
OPW

Cork, Co Limerick, Ireland.

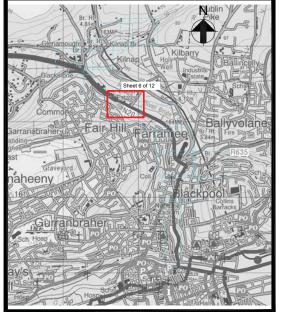
Tel +353 (0)21 4277670 Tel. +353 (0) 61 345463 T
Fax +353 (0)21 4272345 Fax +353 (0) 61 280146 F

Tel. +353 (0) 21 4966222.

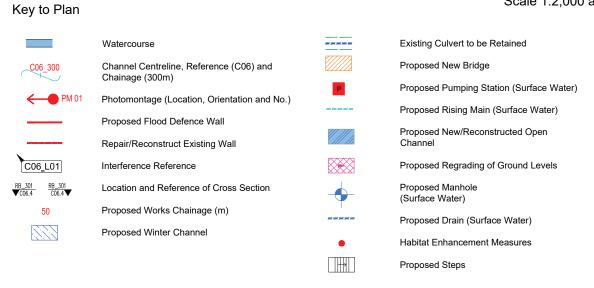
Carrigronane Road, Cork, Ireland. Tel +353 (0) 1 647 6000 Fax +353 (0) 1 661 0747 River Bride (Blackpool) Certified Drainage Scheme Issued July 2018



Location Plan Scale 1:1,000 at A1 Scale 1:2,000 at A3



Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3



Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C06_C01	0 to 78	-	Proposed winter channel to be constructed downstream of the Commons Inn in order to increase conveyance during flood events. Winter channel to be a maximum width of 10m wide at mid-section.
C06_B01	0 to 9	-	Replace existing masonry bridge with a new reinforced concrete bridge. Bridge to be of 7.40m clear span and 9.00m wide deck. Construct new access ramps to bridge, incorporating new reinforced concrete retaining walls where necessary. Service diversions associated with the bridge reconstruction will be required along Fitz's Boreen from the N20 Commons Road to the Old Mallow Road
C06_C02	-	980 to 1418	Proposed reconstructed open channel bed to incorporate natural river features including pools and riffles
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).
C06_G04	-	1812	Proposed otter habitat enhancement measures
C06_G05	-	1726	Proposed access stairs to be constructed over the proposed flood defence wall.
C06_G06	-	1660	Proposed access stairs to be constructed over the proposed flood defence wall.
C06_L05	201 to 259	-	Proposed sheet pile flood defence wall to be constructed typically 0.83m above existing ground levels to flood defence level (20.01mOD). Proposed flood wall to tie into flood wall C07_L02 at the upstream end. All drainage outfalls to be fitted with non-return valves.
C06_L05	182 to 201	-	Proposed sheet pile flood defence wall to be constructed typically 1.32m above existing ground levels to flood defence level (19.80mOD). All drainage outfalls to be fitted with non-return valves.
C06_L05	123 to 182	-	Proposed sheet pile flood defence wall to be constructed typically 1.20m above existing ground levels to flood defence level (19.58mOD). All drainage outfalls to be fitted with non-return valves.
C06_L05	45 to 123	-	Proposed sheet pile flood defence wall to be constructed typically 1.20m above existing ground levels to flood defence level (19.50mOD). All drainage outfalls to be fitted with non-return valves.
C06_L05	0 to 45	-	Proposed sheet pile flood defence wall to be constructed typically 1.00m above existing ground levels to flood defence level (19.30mOD). Flood wall to tie into existing bridge parapet. All drainage outfalls to be fitted with non-return valves.
C06_L06	0 to 9	-	Proposed new reinforced concrete bridge parapet to be constructed typically 0.55m above existing bridge deck level to flood defence level (19.30mOD). All drainage outfalls to be fitted with non-return valves.
C06_L07	0 to 81	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (17.51mOD). New wall to be typically 0.59m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L08	0 to 76	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (17.51mOD). New wall to be typically 0.56m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L09	0 to 9	-	Existing bridge parapet to be raised to a height 0.57m above existing ground levels to flood defence level (17.51mOD). All drainage outfalls to be fitted with non-return valves.
C06_L10	0 to 9	-	Formalise and repair existing bridge parapet to flood defence level (17.03mOD), where necessary.
C06_L11	75 to 153	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (17.03mOD). New wall to be typically 0.45m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L12	75 to 151	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (17.03mOD). New wall to be typically 0.35m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_P01	-	1635	Proposed overflow surface water pumping station and rising main to operate during a flood event at C06_1635. All outlets to be fitted with non-return valves.
C06_P02	-	1414	Proposed overflow surface water pumping station and rising main to be constructed on existing surface water drainage network at C06_1414. Pump to operate during a flood event. All outlets to be fitted with non-return valves.
C07_L02	0 to 43	-	Proposed sheet pile flood defence wall to be constructed typically 1.20m above existing ground levels to flood defence level (20.01mOD). Proposed flood wall to tie into proposed flood walls C07_L01 and C06_L05. All drainage outfalls to be fitted with non-return valves, other than the outlet of the proposed 0.90m pipe.

- 1. Do not scale from drawing.
- This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and

Drg. No. RB_206 Proposed Flood Defences - Plan Layout (Sheet 6 of 12)



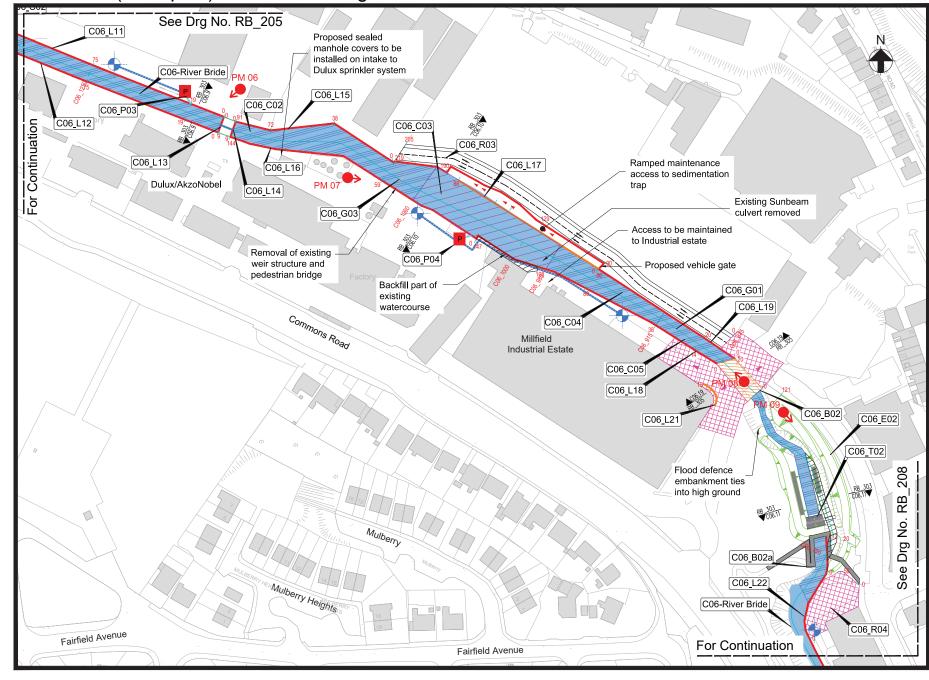






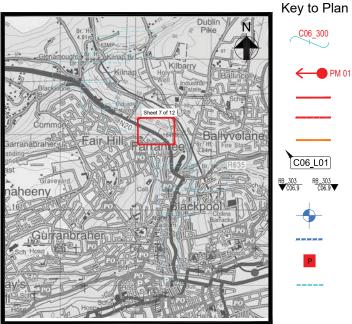
OPW

Issued July 2018



Scale 1:1,000 at A1 Scale 1:2,000 at A3

Existing Culvert to be Retained



Location Plan

Key Plan

Scale 1:25,000 at A1 Scale 1:50,000 at A3 Channel Centreline, Reference (C06) and ____ Photomontage (Location, Orientation and No.) Proposed Flood Defence Wall Reconstruct/Repair Existing Wall Proposed Retaining Wall Interference Reference **T T T** Location and Reference of Cross Section Proposed Manhole (Surface Water) Proposed Drain (Surface Water) Proposed Pumping Station (Surface Water) Proposed Rising Main (Surface Water)

Proposed Regrading of Ground Levels Proposed Sediment Trap Watercourse Proposed New/Reconstructed Open Channel Proposed Backfill of Existing Watercourse Proposed Flood Defence Embankment Proposed New Bridge Proposed Works Chainage (m) Proposed Road and Footpath Proposed Vehicle Access Gate

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C06_B02	0 to 20	-	Replace existing concrete bridge with a new reinforced concrete bridge. Bridge to be of 10.50m clear span and 20m wide deck. Soffit level of new bridge to be 14.85mOD.Construct new access ramps to bridge, incorporating new reinforced concrete retaining walls where necessary.
C06_B02a	-	741	Existing pedestrian footbridge to removed.
C06_C02	-	980 to 1418	Proposed reconstructed open channel bed to incorporate natural river features including pools and riffles
C06_C03	-	980 to 1060	Proposed sediment trap to be 80m long and typically 20m wide with maintenance access platform and access ramp. Rock weirs to be constructed at 20m centres.
C06_C04	-	915 to 980	Removal of the existing culvert and replace with new re-aligned walled open channel 65m long x average 12m wide from C06_915 to C06_980. New open channel to incorporate natural river features including pools and riffles.
C06_C05	-	875 to 915	Proposed reconstructed open channel bed to incorporate natural river features including pools and riffles
C06_E02	0 to 121	741 to 844	Proposed flood defence embankment to be constructed typically 12m wide and to a height of 1.15m above existing ground levels to flood defence level (14.65mOD). Flood defence embankment to tie into high ground downstream of Sunbeam Industrial Estate bridge and into the proposed flood defence wall at Blackpool Retail Park.
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).
C06_G03	-	1074	Remove existing pedestrian bridge and weir structure at C06_1074.
C06_L11	0 to 19	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (16.58mOD). New wall to be typically 0.94m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L11	19 to 75	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (16.80mOD). New wall to be typically 0.65m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L12	0 to 19	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (16.58mOD). New wall to be typically 0.68m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L12	19 to 75	-	Proposed reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (16.80mOD). New wall to be typically 0.45m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L13	0 to 9	-	Existing bridge parapet wall to be raised to a height typically 0.73m above existing ground levels to flood defence level (16.58mOD). All drainage outfalls to be fitted with non-return valves.
C06_L14	0 to 9	-	Formalise and repair existing bridge parapet wall to flood defence level (16.03mOD), where necessary.
C06_L15	0 to 91	-	Proposed reinforced concrete reinforced concrete reinforced concrete flood defence wall to be constructed behind the existing river wall to flood defence level (16.03mOD). New wall to be typically 1.27m above existing ground levels. All drainage outfalls to be fitted with non-return valves.
C06_L16	0 to 59	-	Formalise and repair existing wall to flood defence level (15.65mOD), where necessary. All drainage outfalls to be fitted with non-return valves.
C06_L16	59 to 144	-	Formalise and repair existing wall to flood defence level (16.03mOD), where necessary. All drainage outfalls to be fitted with non-return valves.
C06_L17	0 to 88	-	Proposed reinforced concrete retaining wall to form access ramp to proposed sediment trap
C06_L18	0 to 14	-	Proposed reinforced concrete flood defence wall to be constructed to 15.63mOD. (Wall to be constructed above flood defence level of 15.12mOD to retain the proposed road). All drainage outfalls to be fitted with non-return valves.
C06_L18	14 to 80	-	Proposed reinforced concrete flood defence wall to be constructed to 15.31mOD. (Wall to be constructed above flood defence level of 15.12mOD for constructability reasons). All drainage outfalls to be fitted with non-return valves.
C06_L18	80 to 108	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (15.31mOD). All drainage outfalls to be fitted with non-return valves.
C06_L18	108 to 147	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (15.65mOD). All drainage outfalls to be fitted with non-return valves.
C06_L19	0 to 20	-	Proposed reinforced concrete flood defence wall to be constructed to 15.63mOD. (Wall to be constructed above flood defence level of 15.12mOD to retain the proposed road). All drainage outfalls to be fitted with non-return valves.
C06_L19	20 to 86	-	Proposed reinforced concrete flood defence wall to be constructed to 15.43mOD. (Wall to be constructed above flood defence level of 15.12mOD to retain the proposed road). All drainage outfalls to be fitted with non-return valves.
C06_L19	86 to 90	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (15.31mOD). All drainage outfalls to be fitted with non-return valves.
C06_L19	90 to 129	-	Proposed reinforced concrete flood defence wall to be constructed to 15.43mOD. (Wall to be constructed above flood defence level of 15.31mOD to retain the proposed road). All drainage outfalls to be fitted with non-return valves.
C06_L19	129 to 190	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (15.65mOD). All drainage outfalls to be fitted with non-return valves.
C06_L19	190 to 219	-	Proposed reinforced concrete flood defence wall to be constructed to 15.76mOD. (Wall to be constructed above flood defence level of 15.65mOD to retain the proposed road). All drainage outfalls to be fitted with non-return valves.
C06_L21	0 to 15	-	Proposed reinforced concrete retaining wall to be constructed to a height typically 0.42m above proposed road levels.
C06_L22	0 to 212	-	Proposed mini-piled reinforced concrete flood defence wall to be constructed to a height maximum 1.53m above existing ground levels to flood defence level (14.65mOD). All drainage outfalls to be fitted with non-return valves.
C06_P03	-	1200	Proposed surface water overflow pump station, collector drain, overflow manhole and rising main to operate during a flood event at C06_1200. All outlets to be fitted with non-return valves.
C06_P04	-	1031	Proposed surface water overflow pump station, collector drain, overflow manhole and rising main to operate during a flood event at C06_1031. All outlets to be fitted with non-return valves.
C06_R03	0 to 202	-	Proposed new access road and footpath 202m long x 7m wide, with 1.5m wide footpath on the northern side. Locally raise road to flood defence level (15.31mOD) at chainage 75m.
C06_R04	0 to 58	-	Existing ground to be regraded to provide pedestrian access over the proposed flood embankment into the park to flood defence level (14.65mOD). Ramp to be graded at a maximum slope of 1:20.
C06_T02	-	785	Proposed trash screen to be constructed adjacent to Blackpool Retail Park. A mammal passage is to be incorporated into the western arm of the structure to facilitate bypass of the trash screen

- Do not scale from drawing.
 This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and

Drg. No. RB_207 Proposed Flood Defences - Plan Layout (Sheet 7 of 12)



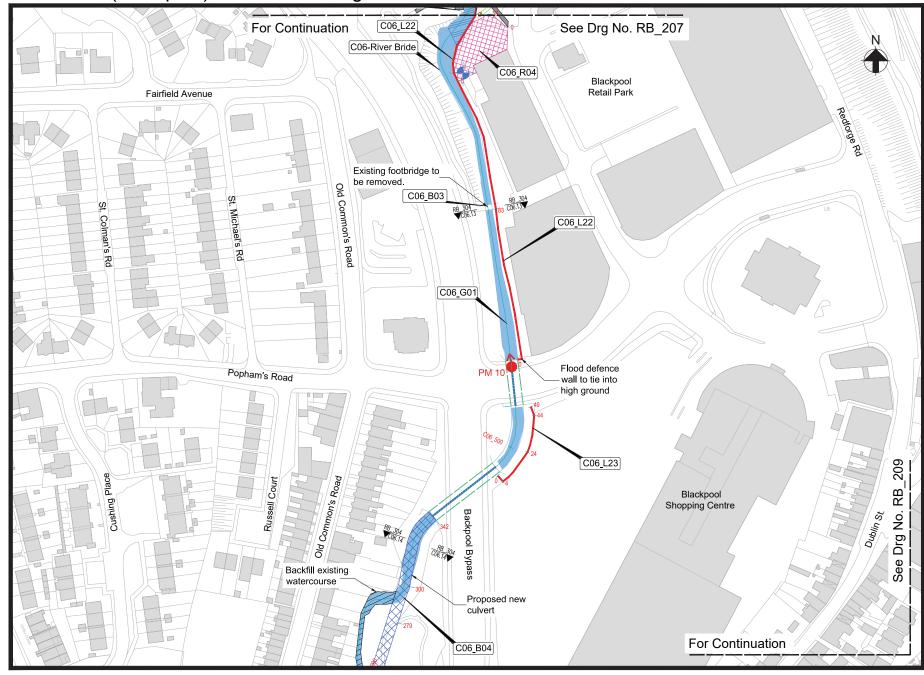




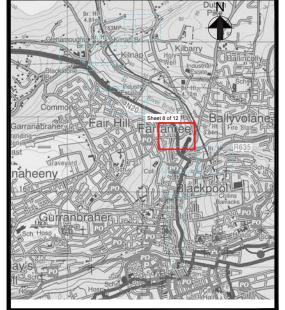


OPW

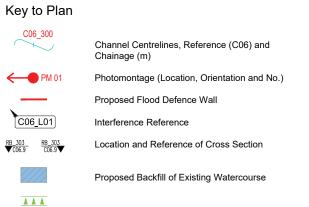
Issued July 2018



Location Plan Scale 1:1,000 at A1 Scale 1:2,000 at A3



Keyplan Scale 1:25,000 at A1 Scale 1:50,000 at A3



Proposed Flood Defence Embankment

₹ ₹ ₹

Existing Culvert to be Retained Proposed Regrading of Ground Levels Watercourse Proposed Open channel Proposed Reinforced Concrete Culvert Proposed Works Chainage (m) 50

Proposed Sump Manhole (Surface Water)

			issued July 2010
Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C06_B03	-	629	Existing pedestrian footbridge to be removed.
C06_B04	0 to 342	-	Replace existing channel with a proposed reinforced concrete culvert to be constructed downstream of Blackpool Bypass through Orchard Court. Proposed culvert to be of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).
C06_L22	0 to 212	-	Proposed mini-piled reinforced concrete flood defence wall to be constructed to a height maximum 1.53m above existing ground levels to flood defence level (14.65mOD). All drainage outfalls to be fitted with non-return valves.
C06_L23	0 to 49	-	Proposed reinforced concrete flood defence wall to be constructed to a height maximum 1.53m above existing ground levels to flood defence level (13.80mOD). All drainage outfalls to be fitted with non-return valves. Works to include construction of a new surface water sump manhole with associated local collector drain adjacent to the new flood defence wall.
C06_R04	0 to 58	-	Existing ground to be regraded to provide pedestrian access over the proposed flood embankment into the park to flood defence level (14.65mOD). Ramp to be graded at a maximum slope of 1:20.

- Do not scale from drawing.

 This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Conformation Drawings and Schedules.

Drg. No. RB_208 Proposed Flood Defences - Plan Layout (Sheet 8 of 12)



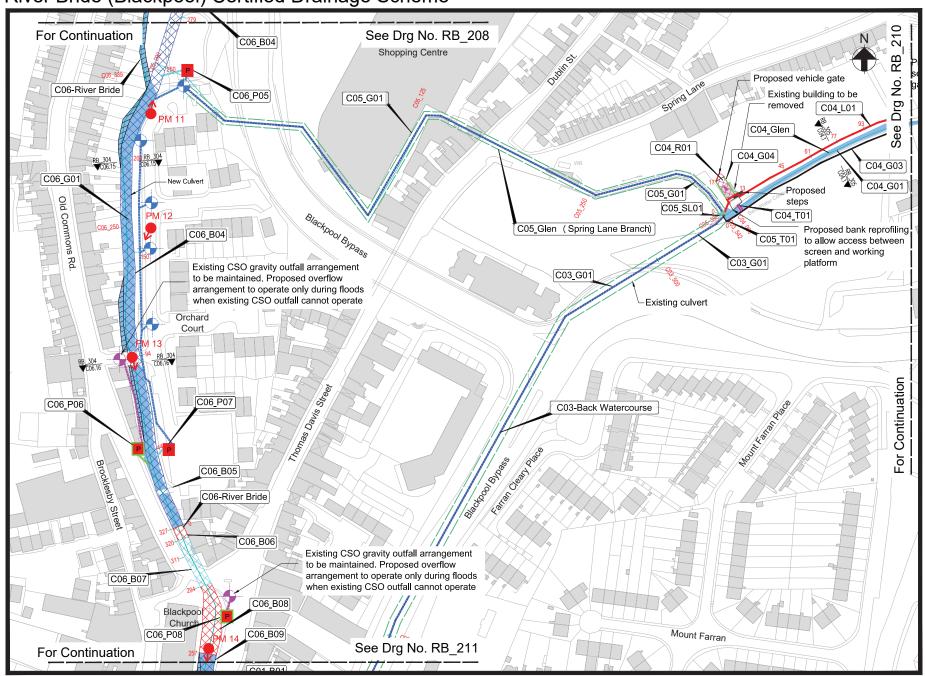






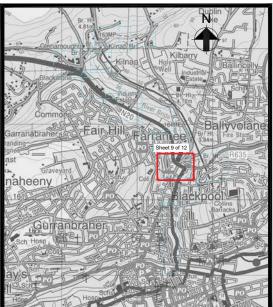


River Bride (Blackpool) Certified Drainage Scheme Issued July 2018



Location Plan Scale 1:1,000 at A1 Scale 1:2,000 at A3 Key to Plan

Proposed Fencing



Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3

C06_300	Channel Centrelines, Reference (C06) and Chainage (m)		Proposed Flood Defence Wall
			Watercourse
PM 01	Photomontage (Location, Orientation and No.)		Proposed Reinforced Concrete Culvert
C06_L01	Interference Reference		·
	Location and Reference of Cross Section		Proposed Replacement Reinforced Concrete Culv
RB_303 C06.4 RB_303 C06.4	Location and Reference of Cross Section		Pressurised Existing Culvert
	Proposed Backfill Existing Watercourse		
1	Proposed Manhole	P	Proposed Pumping Station (Surface Water)
	(Surface Water)	and and and and and	Proposed Rising Main (Surface Water)
	Proposed Manhole (CSO - secondary overflow to pumping station)	P	Proposed Pumping Station (CSO)
	(C3O - secondary overflow to pumping station)		Proposed Rising Main (CSO)
	Proposed Drain		
	(Surface Water)	M M M M M M	Proposed Drain (CSO)
	Proposed Drain (CSO)	50	Proposed Works Chainage (m)
	Existing Culvert to be Retained	~	Proposed Vehicle Gate
	Existing Curvert to be rectained		Troposed verifice date
	Proposed Roughing Screen		Proposed Sluice
On On On On B	Existing Fencing		Proposed Regrading of Ground Levels
		BAAA	

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works	
C03_G01	-	0 to 542	Channel to be maintained over a distance of 542m from the confluence of the Back Watercourse and the Kiln Watercourses (C03_000) to the existing trash screen on the Glen (Spring Lane Branch at C05_333).	
C04_G01	-	0 to 230	Channel to be maintained over a distance of 230m from the existing trashscreen at Spring Lane (C04_00) to the entrance of the culvert east of the railway line at (C04_230)	
C04_G03	0 to 99	-	Existing fencing to be maintained	
C04_G04	0 to 17	-	Proposed fencing to be constructed around the proposed access ramp (C04_R01) and tie in with proposed wall (C04_L01) at both ends.	
C04_L01	0 to 17	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.27mOD).	
C04_L01	17 to 45	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.45mOD).	
C04_L01	45 to 61	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.66mOD).	
C04_L01	61 to 77	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.92mOD).	
C04_L01	77 to 93	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (17.2mOD).	
C04_L01	93 to 109	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (17.48mOD).	
C04_R01	0 to 17	-	Proposed vehicle ramp to facilitate maintenance access to the channel and roughing screen.	
C04_T01	-	10	Proposed roughing screen to be installed upstream of the existing Spring Lane trashscreen.	
C05_G01	-	0 to 398	Channel to be maintained over a distance of 398m from the existing trashscreen at Spring Lane (C05_398) to the confluence to the proposed culvert at the River Bride (C05_000)	
C05_SL01	-	398	Proposed vortex flow control manhole to limit flow on the Glen (Spring Lane Branch). A penstock is proposed to act as a backup control measure.	
C05_T01	-	398	Existing trash screen on Spring Lane to be removed at C05_398.	
C06_B04	0 to 342	-	Replace existing channel with a proposed reinforced concrete culvert to be constructed downstream of Blackpool Bypass through Orchard Court. Proposed culvert to be of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.	
C06_B05	-	111	Removal of existing pedestrian access bridge. Access to be reinstated over the proposed culvert following construction works.	
C06_B06	320 to 327	-	Replace existing culvert with a proposed reinforced concrete culvert of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.	
C06_B07	294 to 320	-	Existing culvert to be pressurised during a flood event. Repairs to the existing culvert and work to internal joints to be carried out where necessary. All drainage outfalls to be fitted with non-return valves.	
C06_B08	257 to 294	-	Replace existing culvert with a proposed reinforced concrete culvert of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.	
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).	
C06_P05	-	339	Proposed local surface water pumping station, collector drain, manhole and rising main to operate during a flood event at C06_339. All outlets to be fitted with non-return valves.	
C06_P06	-	134	Proposed combined sewer overflow (CSO) pumping station, collector drain and rising main to operate during a flood event at C06_134. All outlets to be fitted with non-return valves.	
C06_P07	-	134	Proposed local surface water pumping station, collector drain, manhole and rising main to operate during a flood event at C06_134. All outlets to be fitted with non-return valves.	
C06_P08	-	37	Proposed combined sewer overflow (CSO) pumping station, collector drain, manhole and rising main to operate during a flood event at C06_37. All outlets to be fitted with non-return valves.	

- Do not scale from drawing.

 This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Conformation Drawings and Schedules.

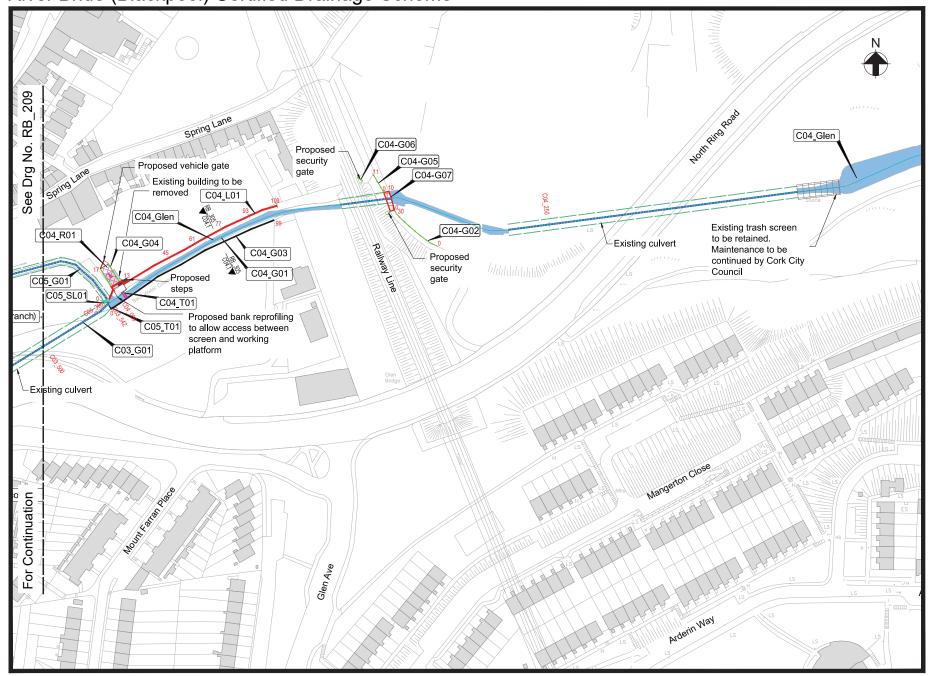
Drg. No. RB_209 Proposed Flood Defences - Plan Layout (Sheet 9 of 12)



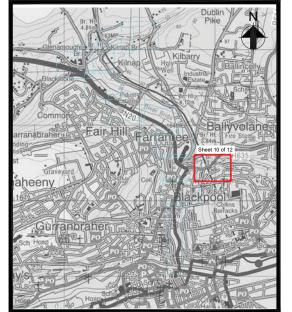


OPW

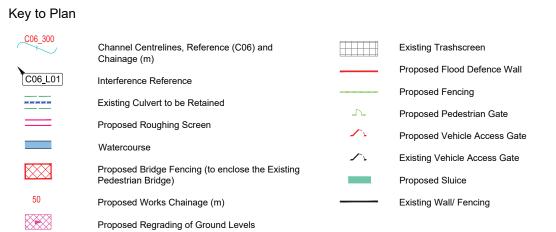
Issued July 2018



Location Plan Scale 1:1,000 at A1 Scale 1:2,000 at A3



Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3



Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C03_G01	-	0 to 542	Channel to be maintained over a distance of 542m from the confluence of the Back Watercourse and the Kiln Watercourses (C03_000) to the existing trash screen on the Glen (Spring Lane Branch at C05_333).
C04_G01	-	0 to 230	Channel to be maintained over a distance of 230m from the existing trashscreen at Spring Lane (C04_00) to the entrance of the culvert east of the railway line at (C04_230)
C04_G02	0 to 30	-	Proposed fencing to be constructed to the east of the rail line and to tie into the existing pedestrian footbridge. A proposed pedestrian gate south of the existing footbridge will provide access to the channel.
C04_G03	0 to 99	-	Existing fencing to be maintained
C04_G04	0 to 17	-	Proposed fencing to be constructed around the proposed access ramp (C04_R01) and tie in with proposed wall (C04_L01) at both ends.
C04_G05	0 to 11	-	Proposed fencing to be constructed to the east of the rail line and to tie into the existing pedestrian footbridge.
C04_G06	-	155	Proposed security gate on existing railway underpass
C04_G07	0 to 10	-	Proposed railing/fencing to enclose existing footbridge
C04_L01	0 to 17	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.27mOD).
C04_L01	17 to 45	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.45mOD).
C04_L01	45 to 61	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.66mOD).
C04_L01	61 to 77	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (16.92mOD).
C04_L01	77 to 93	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (17.2mOD).
C04_L01	93 to 109	-	Proposed reinforced concrete flood defence wall to be constructed to flood defence level (17.48mOD).
C04_R01	0 to 17	-	Proposed vehicle ramp to facilitate maintenance access to the channel and roughing screen.
C04_T01	-	10	Proposed roughing screen to be installed upstream of the existing Spring Lane trashscreen.
C05_G01	-	0 to 398	Channel to be maintained over a distance of 398m from the existing trashscreen at Spring Lane (C05_398) to the confluence to the proposed culvert at the River Bride (C05_000)
C05_SL01	-	398	Proposed vortex flow control manhole to limit flow on the Glen (Spring Lane Branch). A penstock is proposed to act as a backup control measure.
C05_T01	-	398	Existing trash screen on Spring Lane to be removed at C05_398.

- Do not scale from drawing.
- This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation

Drg. No. RB_210 Proposed Flood Defences - Plan Layout (Sheet 10 of 12)

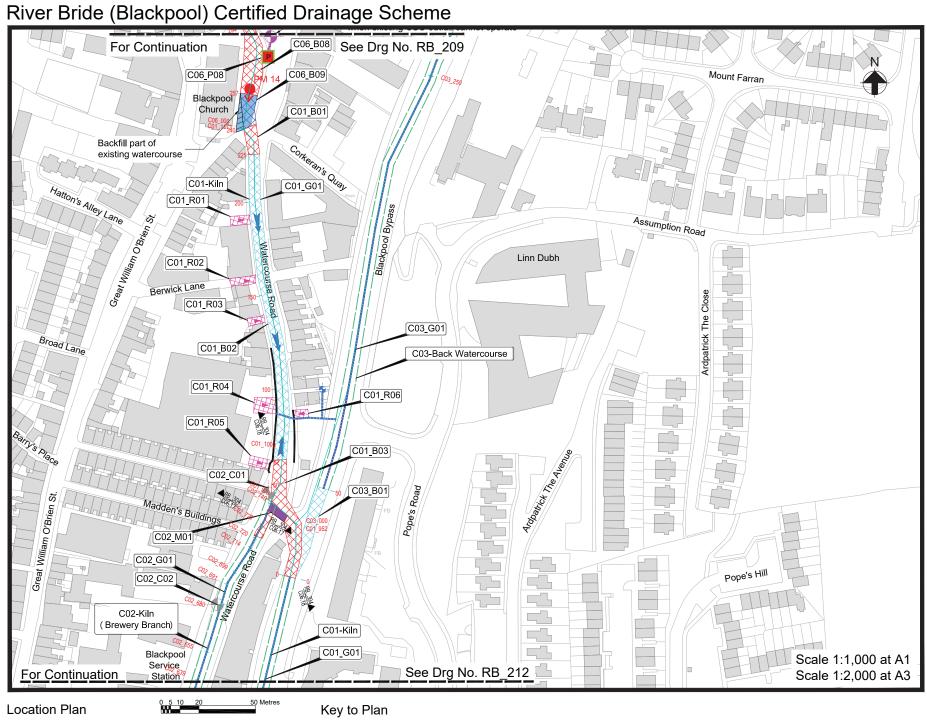












ocation Plan	0 5 10 20	50 Metres	Key to Plan			
Br. Ht. 4.84m	Dublin Pike	N	C06_300	Channel Centrelines, Reference (C06) and Chainage (m)		Proposed Replacement Reinforced Concrete Culvert
Glenamought ar Hi Kinas s	Kilbarry (7)		C06_L01	Interference Reference		Proposed Reinforced Concrete Culvert
Blackstine B	Well Industrial Batter Control of State	incolly one	RB_301 RB_301 C06.1 ▼	Location and Reference of Cross Section		Pressurised Existing Culvert
Commons	104Med Bally	rolanes	← PM 01	Photomontage (Location, Orientation and No.)		Proposed Backfill of Existing Watercourse
arranabraherung Fair Hill	Farrance (87/H) Fire	635 31		Existing Culvert to be Retained	P	Proposed Pumping Station (CSO)
Graveyard	Sheet 11 of 12	and the second		Proposed Flow Control Feature		Proposed Rising Main (CSO)
Gurranbraher,s	North te Collins Barracks	Po	50	Proposed Works Chainage (m)		Proposed Drain (CSO)
Sch Hosp	PO NE	sps Sch		Watercourse		Proposed Drain (Surface Water)
VIS CONTROL OF STREET	C.	POLICE		Proposed Regrading of Ground Levels		Proposed Drainage Kerb (Surface Water)
Hosp Hosp		TOUR	>>	Proposed Residual Surface Water Overland Flow	-	Existing Manhole

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C01_B01	225 to 240	-	Replace existing culvert with a proposed tapered reinforced concrete culvert section from 5.5m and 2.1m high to 4.8m wide and 1.6m high. New culvert to be tied into existing culvert on Watercourse Road. All drainage outfalls to be fitted with non-return valves.
C01_B02	62 to 225	-	Existing culvert to be pressurised during a flood event. Repairs to the existing culvert and work to internal joints to be carried out where necessary. All drainage outfalls to be fitted with non-return valves.
C01_B03	0 to 62	-	Reconstruction of existing culvert section to optimise flow distribution between the Kiln culvert (C01) and the Brewery Branch culvert (C02). All drainage outfalls to be fitted with non-return valves.
C01_G01	-	227 to 1173	Channel to be maintained over a distance of 946m from the confluence of the Kiln and the Kiln Brewery Branch (C01_227) to Blackpool Church (C01_1173).
C01_R01	-	1119 to 1124	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to the Madden's Buildings junction.
C01_R02	-	1088 to 1093	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to Maddens Building's junction.
C01_R03	-	1066 to 1071	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to Madden's Buildings junction.
C01_R04	-	1017 to 1026	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to Madden's Buildings junction.
C01_R05	-	987 to 992	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to Madden's Buildings junction.
C01_R06	-	1017 to 1026	Proposed localised regrading of ground levels to divert surface water overland flow during a flood event southwards along Watercourse Road to the existing low point adjacent to Madden's Buildings junction.
C02_C01	-	691 to 699	Local masonry repairs to be carried out within the existing culvert at C02_695. Access for these works to be gained from the existing manhole at C02_740.
C02_C02	-	625 to 691	Local masonry repairs to be carried out within the existing culvert at C02_639 and C02_655. Access for these works to be gained from the existing manhole at C02_680.
C02_G01	-	0 to 740	Channel to be maintained over a distance of 740m from the confluence of the Kiln (Brewery Branch) and the Kiln (C02_000) to Madden's Buildings (C02_740).
C02_M01	-	740	Proposed flow control feature to be constructed on the confluence of the Kiln and the Brewery Branch at C02_740 to limit flow in the Brewery Branch to existing capacity.
C03_B01	0 to 50	-	Existing culvert to be pressurised during a flood event. Repairs to the existing culvert and work to internal joints to be carried out where necessary. All drainage outfalls to be fitted with non-return valves.
C03_G01	-	0 to 542	Channel to be maintained over a distance of 542m from the confluence of the Back Watercourse and the Kiln Watercourses (C03_000) to the existing trash screen on the Glen (Spring Lane Branch at C05_333).
C06_B08	257 to 294	-	Replace existing culvert with a proposed reinforced concrete culvert of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.
C06_B09	240 to 257	-	Replace existing open channel with a proposed reinforced concrete culvert at Blackpool Church. Proposed culvert to be of internal dimension 5.5m wide and 2.1m high. All drainage outfalls to be fitted with non-return valves.
C06_G01	-	0 to 2673	Channel to be maintained over a distance of 2673m from Blackpool Church (C06_000) to upstream of Rose Cottage (C06_2673).
C06_P08	-	37	Proposed combined sewer overflow (CSO) pumping station, collector drain, manhole and rising main to operate during a flood event at C06_37. All outlets to be fitted with non-return valves.

Do not scale from drawing.

This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and Schedules.

Drg. No. RB_211 Proposed Flood Defences - Plan Layout (Sheet 11 of 12)



Tel +353 (0)21 4277670 Fax +353 (0)21 4272345







Scale 1:50,000 at A3

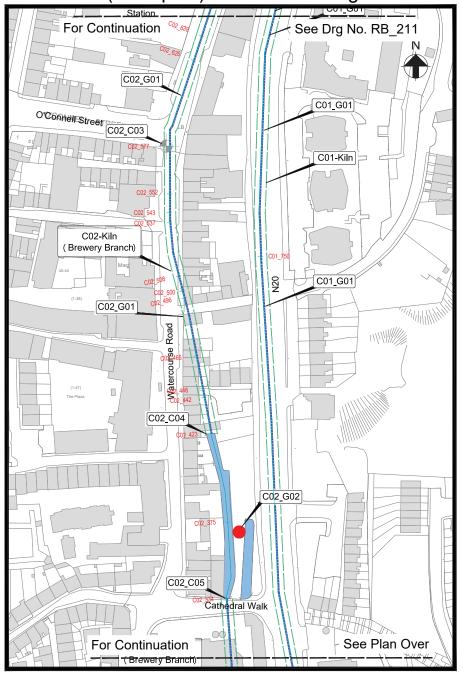
Key Plan

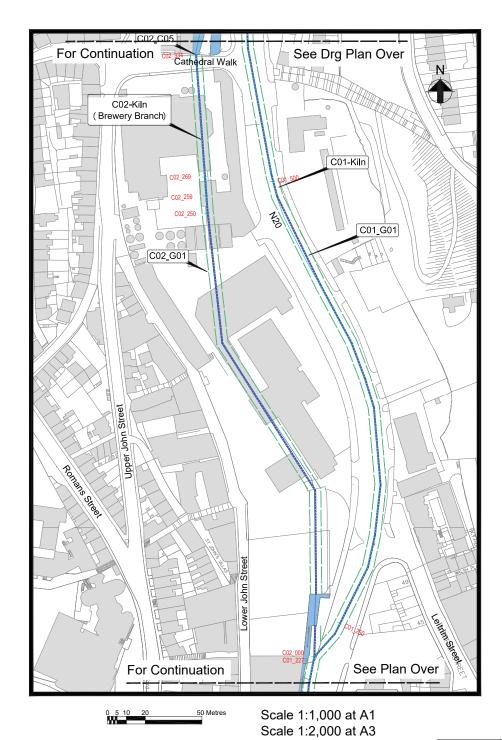
Scale 1:25,000 at A1

Proposed Residual Surface Water Overland Flow

Proposed Manhole (CSO - secondary overflow to pumping station)

Proposed Manhole (Surface Water)

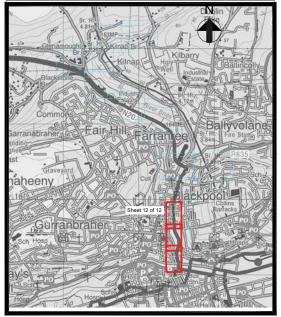




See Drg Plan Over For Continuation C01_G01 C01-Kiln Devonshire Street Camden Quay Camden Plac Christy Ring Lavitt's Quay LAVITT'S QUAY Lavitt's Quay

Issued July 2018

Location Plans



Key Plan Scale 1:25,000 at A1 Scale 1:50,000 at A3

Key to Plan

Channel Centrelines, Reference (C06) and Chainage (m)

Existing Culvert to be Retained

Watercourse

Interference Reference

Existing Manhole

Habitat Enhancement Measures

Notes:

1. Do not scale from drawing.

This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and Schedules.

Interference Reference	Proposed Works Chainage (m)	Channel Chainage (m)	General Description of Proposed Works
C01_G01	-	227 to 1173	Channel to be maintained over a distance of 946m from the confluence of the Kiln and the Kiln Brewery Branch (C01_227) to Blackpool Church (C01_1173).
C02_C03	-	500 to 552	Local masonry repairs to be carried out within the existing culvert at C02_508, C02_510 and C02_543. Access for these works to be gained from the existing manhole at C02_577.
C02_C04	-	423 to 465	Local masonry repairs to be carried out within the existing culvert at C02_442 to C02_446. Access for these works to be gained from the existing culvert outfall at C02_423.
C02_C05	-	250 to 269	Local masonry repairs to be carried out within the existing culvert at C02_250 to C02_269. Access for these works to be gained from the existing culvert inlet at C02_334.
C02_G01	-	0 to 740	Channel to be maintained over a distance of 740m from the confluence of the Kiln (Brewery Branch) and the Kiln (C02_000) to Madden's Buildings (C02_740).
C02_G02	-	370	Proposed otter habitat enhancement measures

Drg. No. RB_212 Proposed Flood Defences - Plan Layout (Sheet 12 of 12)











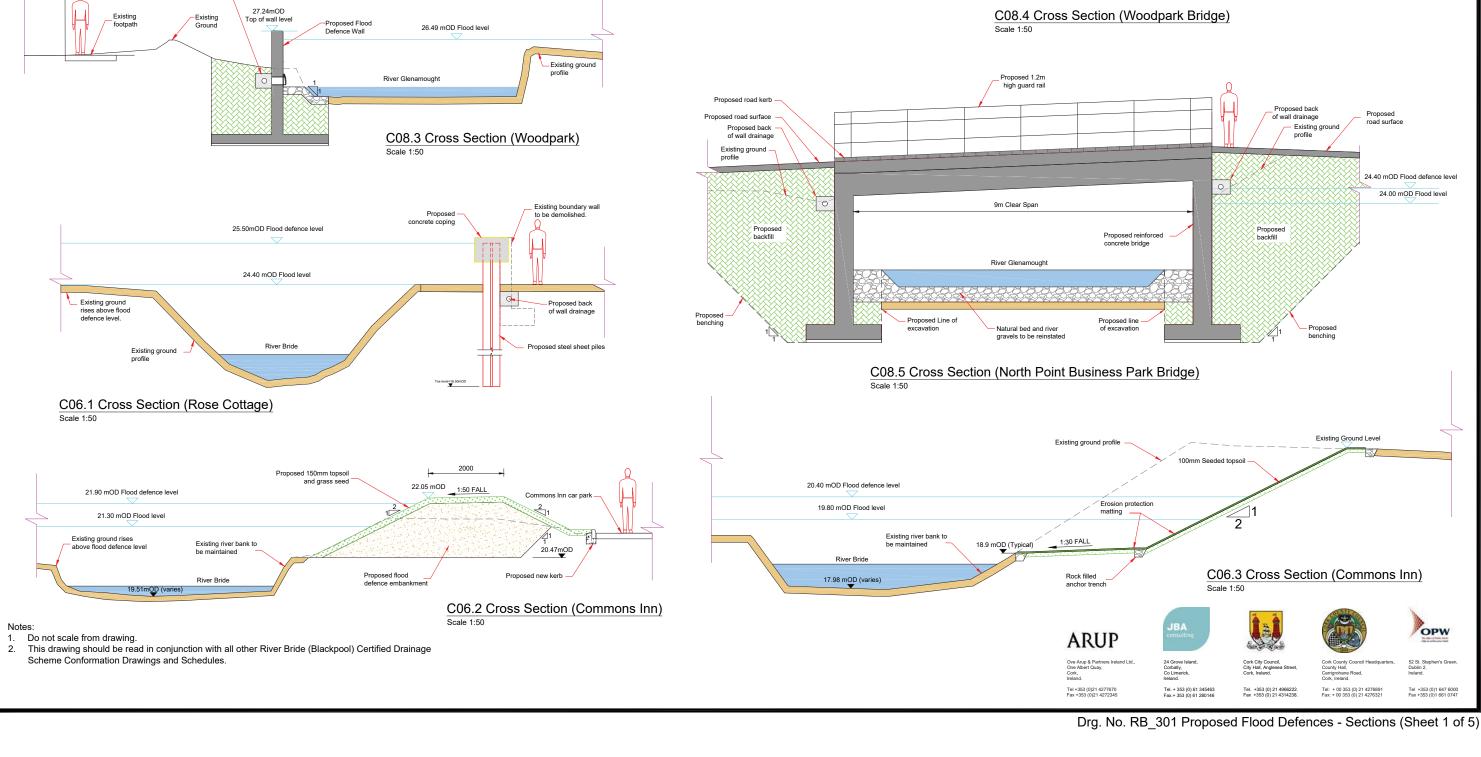
tt, County Ha
Carrigroha
Cork, Irela

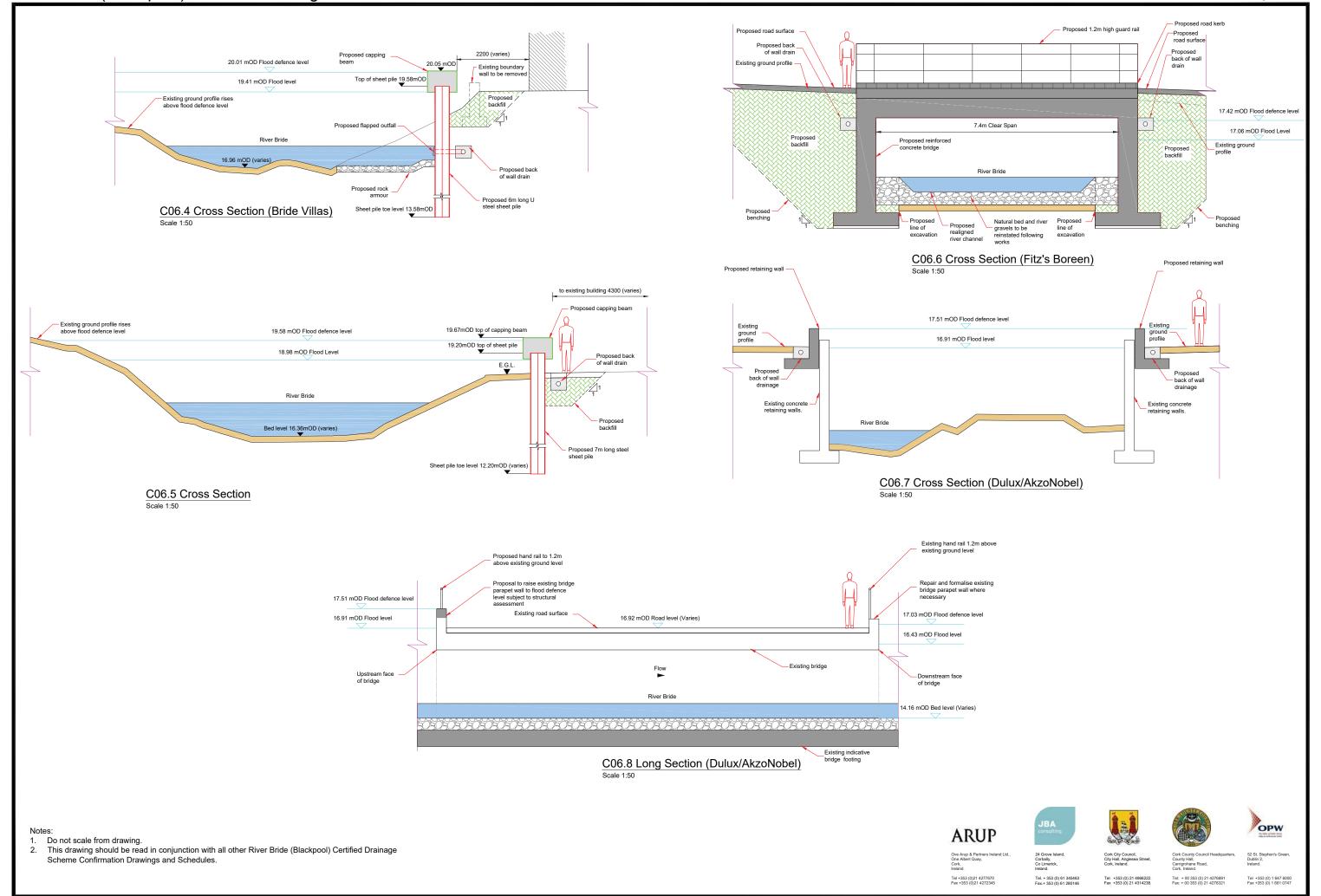
2. Tel: +00
8 Fax: +00

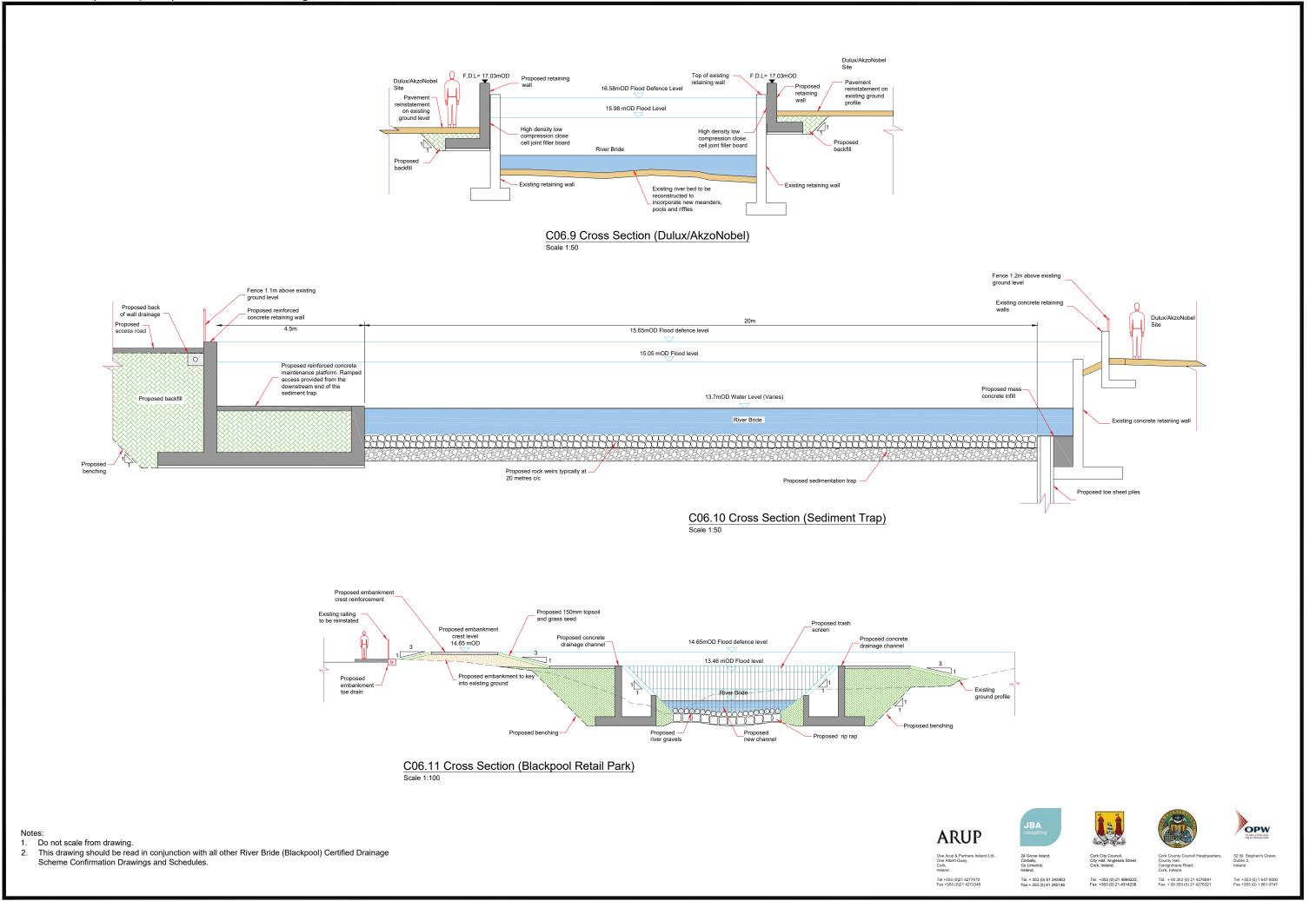
County Council Headquarters, by Hall, grohane Road, Ireland.

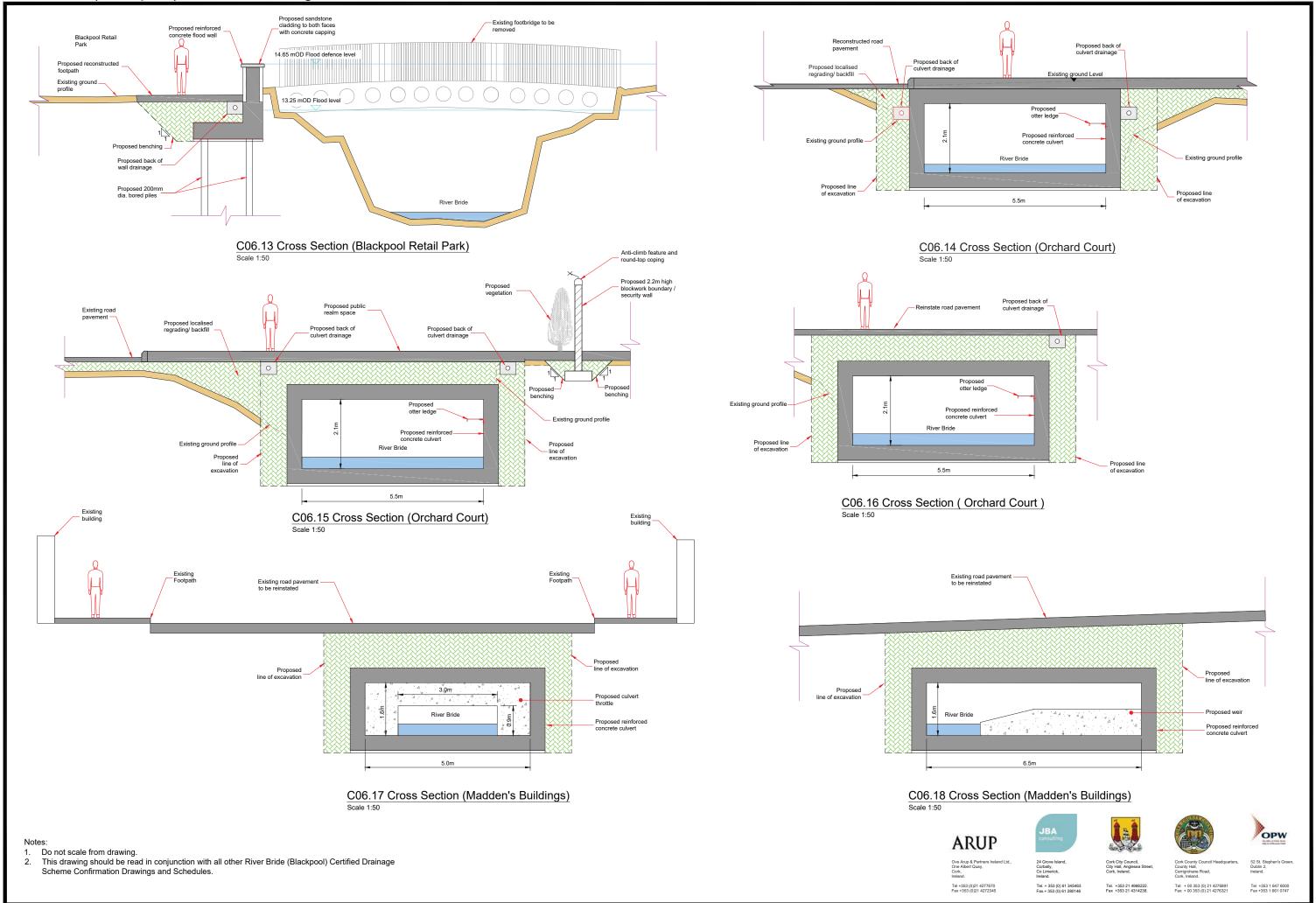
52 St. Stephen's Green, Dublin 2, Ireland.

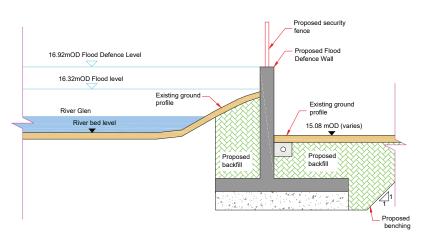
1 Tel +353 (0) 1 647 6000 1 Fax +353 (0) 1 661 0747



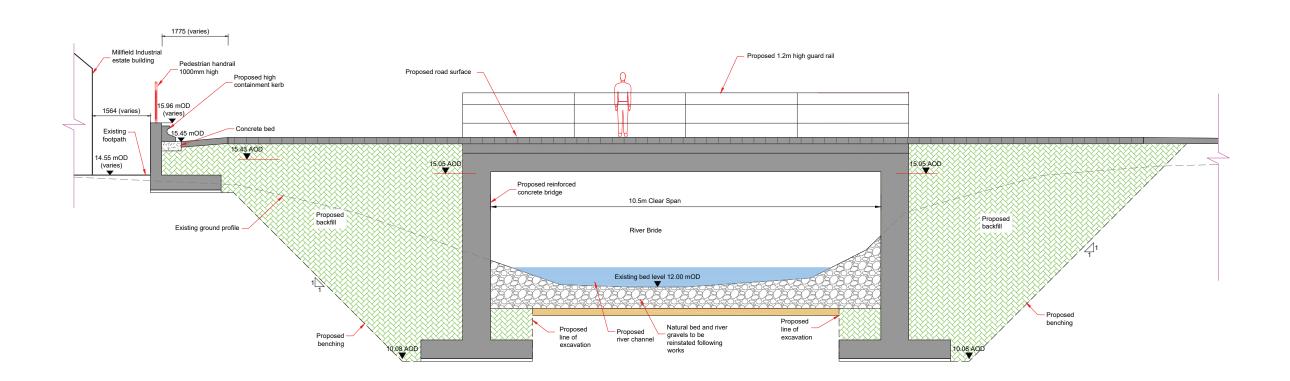








C04.1 Cross Section (Spring Lane)



C06.19 Cross Section (Millfield Industrial Estate)

Notes:

1. Do not scale from drawing.

This drawing should be read in conjunction with all other River Bride (Blackpool) Certified Drainage Scheme Confirmation Drawings and Schedules.









tuarters, 52 St. Stephen's Gre Dublin 2, Ireland.

Carrigrohane Roa Cork, Ireland. 222. Tel: + 00 353 (0) 238. Fax: + 00 353 (0)