

Urban River Enhancement Scheme – Burnley, UK



European River Restoration Conference – October 2014

Jack Spees, Ribble Rivers Trust

Presenter - Seb Bentley, JBA

George Heritage, AECOM

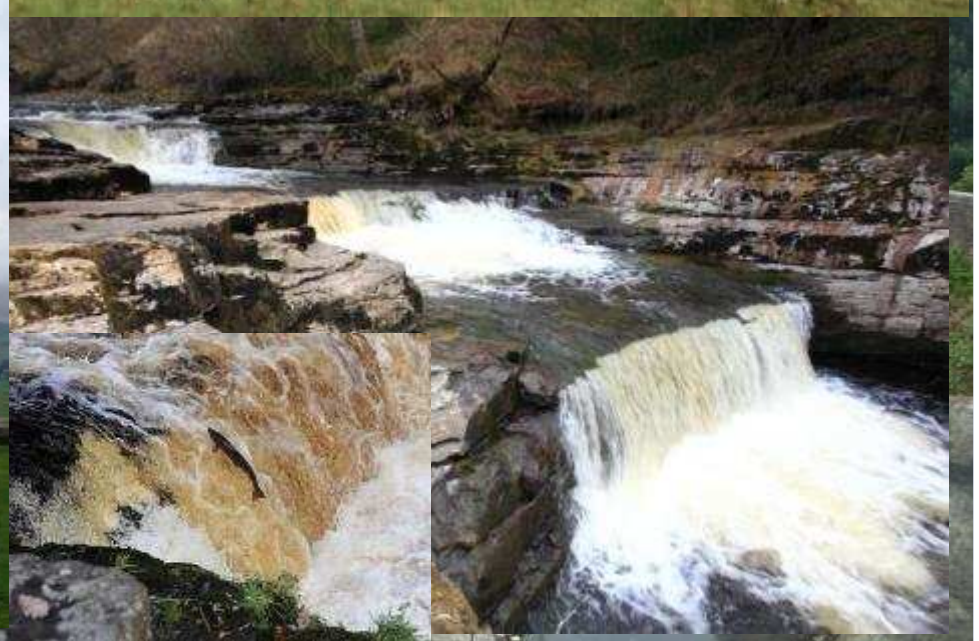
Matt Hemsworth, JBA



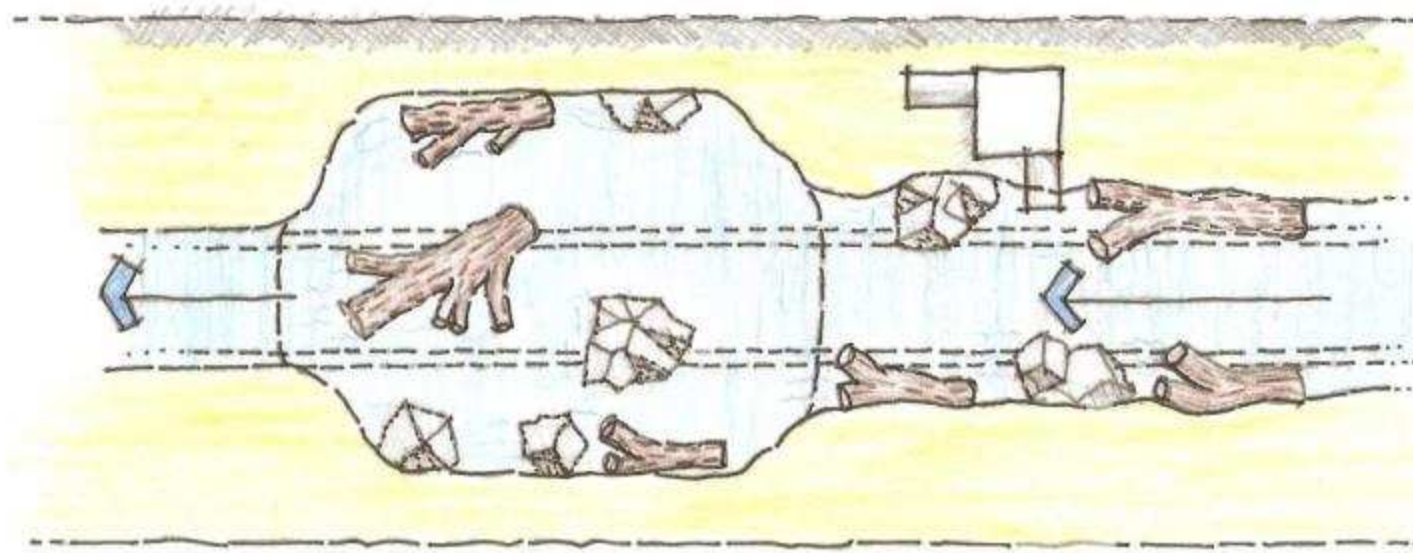
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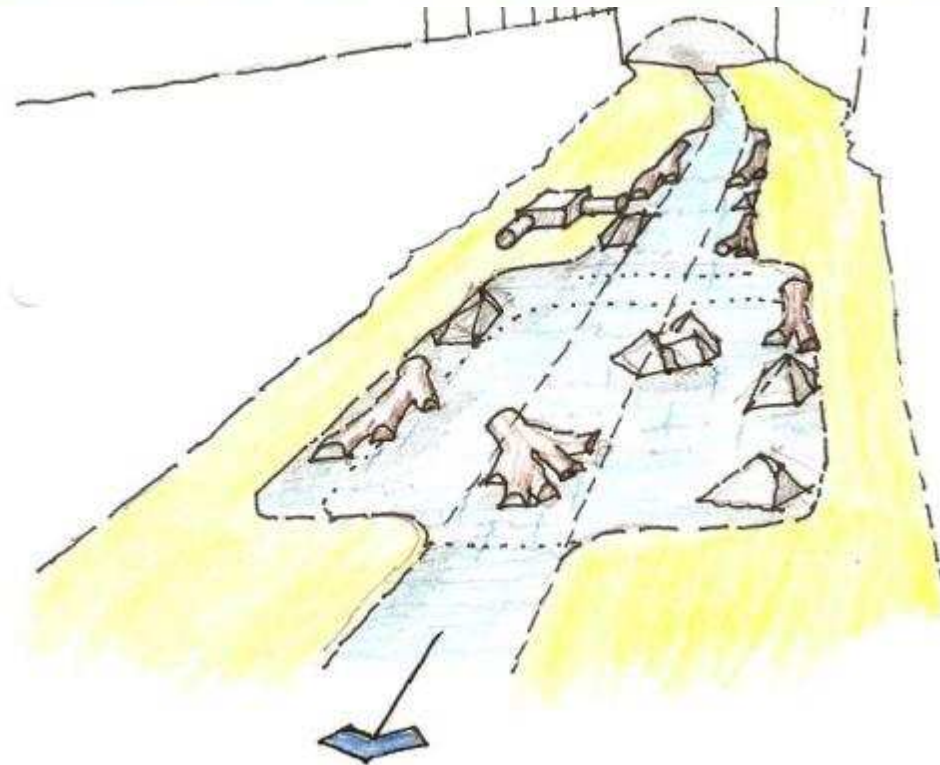
- Contents:
 - The Ribble, and it's hidden secret
 - Developing solutions
 - From Concept to reality
 - Conclusions







3. Do
4. Ma
5. Rec
6. Pro
7. Enc





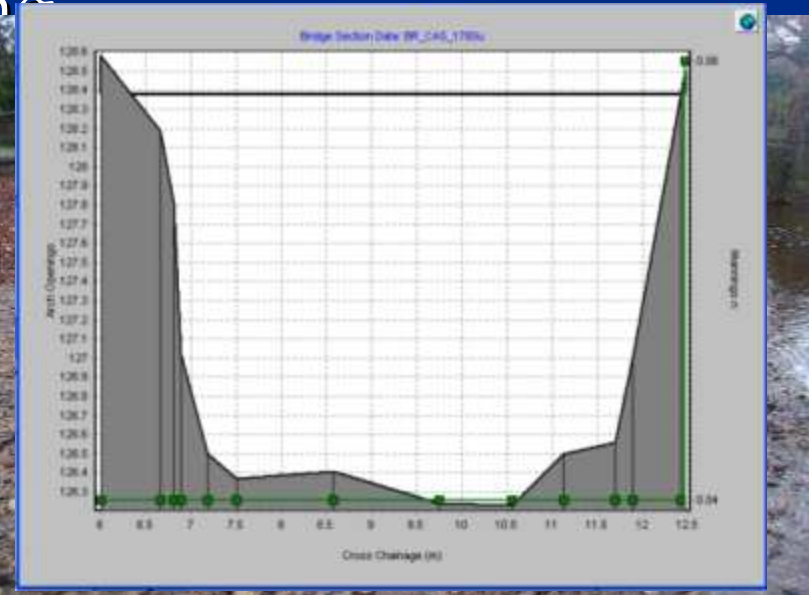
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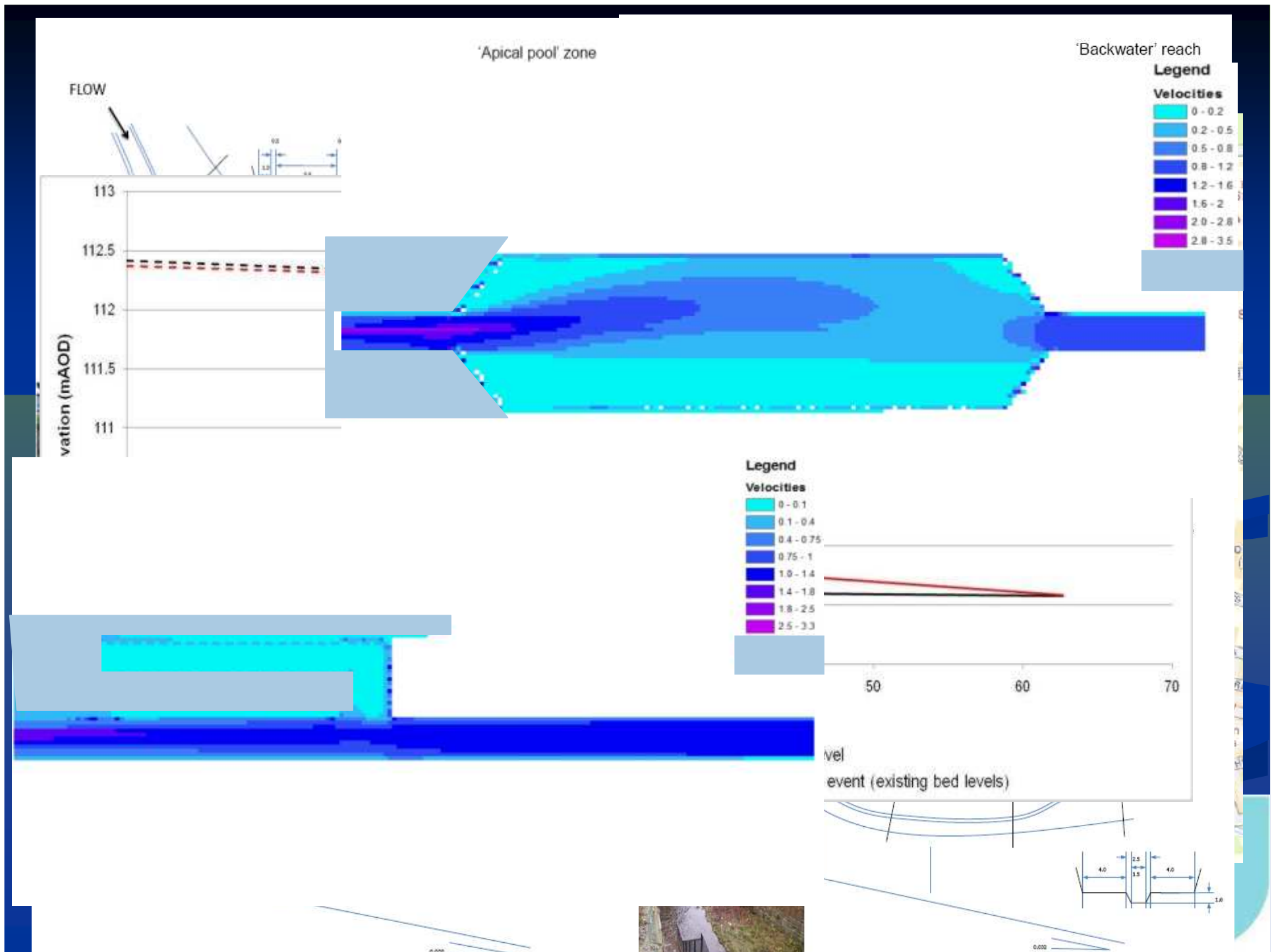
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CAS_2181_05	RIVER	SECTION			
CAS_2181_06	RIVER	SECTION			
	COMMENT				
RCAL05_2083u	RIVER	SECTION			
RCAL05_2083u	SPELL		RCAL05_2083d		
RCAL05_2083d	RIVER	SECTION			
CAS_2082_01i	INTERPOLATE				
RCAL05_1982u	RIVER	SECTION			
CAS_1982_01i	RIVER	SECTION			
	COMMENT				
RCAL05_1982u	RIVER	SECTION			
CAS_1982_01i	RIVER	SECTION			
CAS_1982_02i	RIVER	SECTION			
CAS_1982_03i	RIVER	SECTION			
	COMMENT				
RCAL05_1780u	RIVER	SECTION			
RCAL05_1780u	JUNCTION	OPEN	SW_CAS_1780u	BR_CAS_1780u	
BR_CAS_1780u	BRIDGE	USBR11378	BR_CAS_1780d	RCAL05_1780u	RCAL05_1780d
SW_CAS_1780u	SPELL		SW_CAS_1780d		
BR_CAS_1780d	JUNCTION	OPEN	SW_CAS_1780d	RCAL05_1780d	
RCAL05_1780d	RIVER	SECTION			
CAS_1780_01i	INTERPOLATE				
RCAL05_1682u	RIVER	SECTION			
	COMMENT				
CAS_1682_01i	INTERPOLATE				
CAS_1682_02i	INTERPOLATE				
CAS_1682_03i	INTERPOLATE				
RCAL05_1581u	RIVER	SECTION			
	COMMENT				
CAS_1581_01i	RIVER	SECTION			
CAS_1581_02i	RIVER	SECTION			
CAS_1581_03i	RIVER	SECTION			
RCAL05_1480	RIVER	SECTION			Full_bat_01
	COMMENT				

Label	y	flow	stage	froude no	velocity	unode	utrate	z
RCAL05_0579	y	6.374	117.741	0.335	0.974	733.848	1.311	0.000
RCAL05_0480	y	0.122	117.437	0.382	1.163	0.000	0.000	0.000
RCAL05_0427u	y	0.041	117.206	0.494	1.406	0.000	0.000	0.000
BR_CAS_0427u	y	0.041	117.206	0.307	0.862	1.000	0.000	0.000
BR_CAS_0427d	y	0.041	117.188	0.307	0.862	0.000	0.000	0.000
SW_CAS_0427u	y	0.000	117.206	0.000	0.000	0.000	0.000	0.000
SW_CAS_0427d	y	0.000	117.188	0.000	0.000	0.000	0.000	0.000

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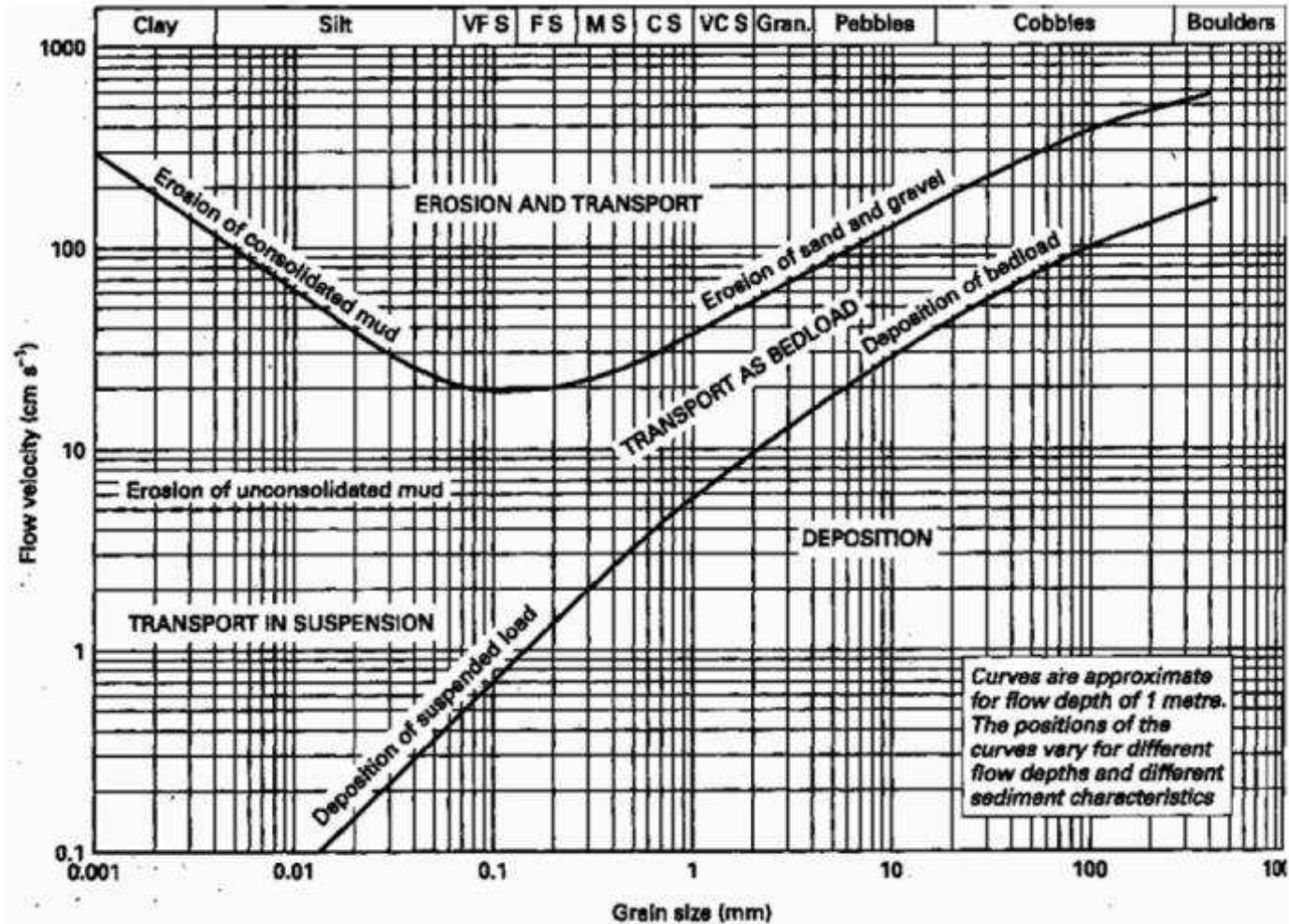


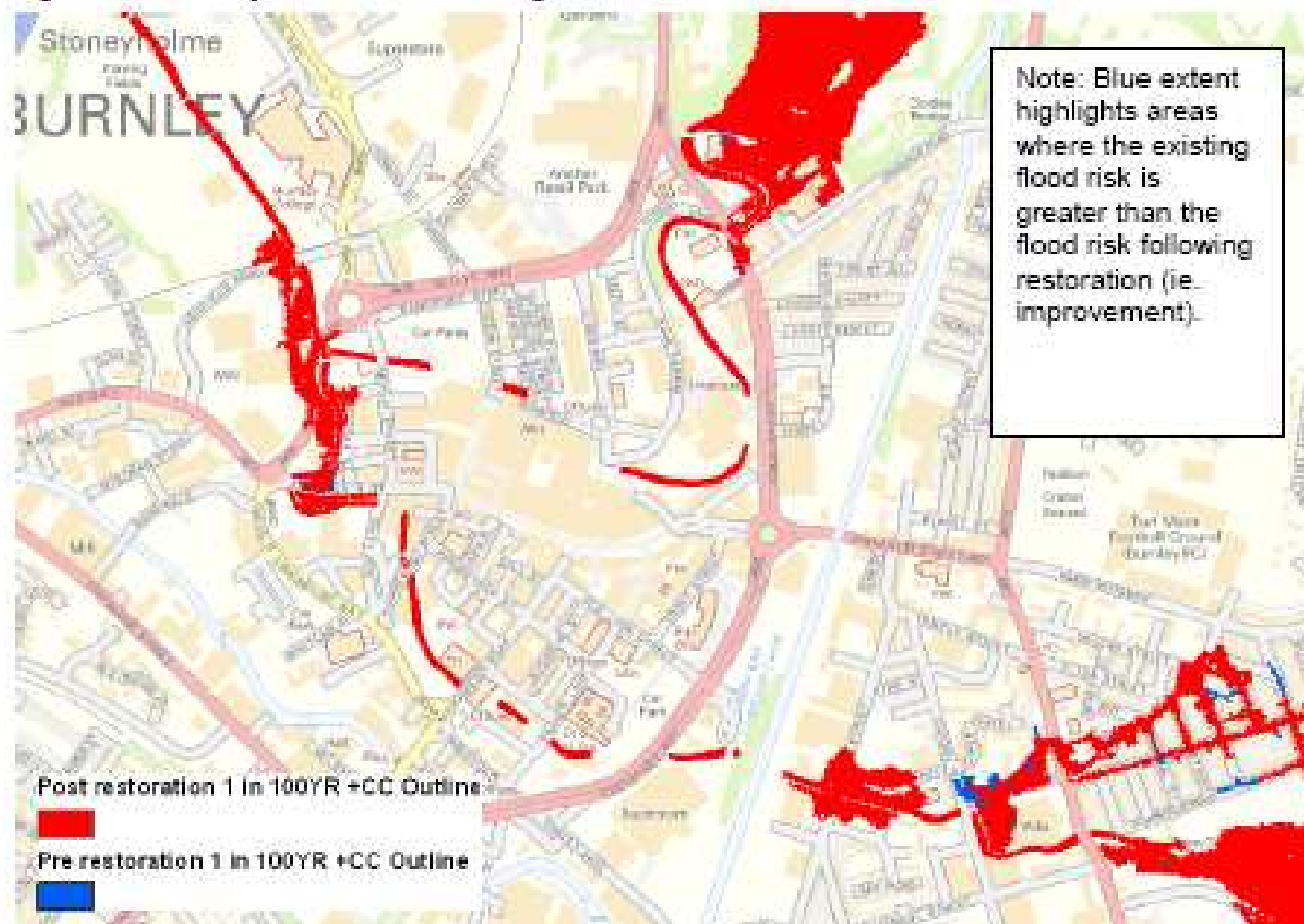
es and shear stress





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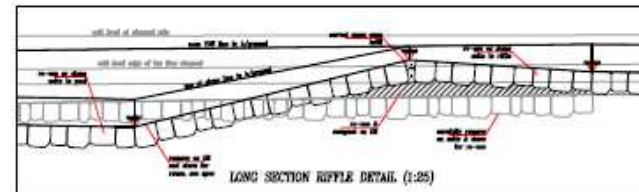
Note: Blue extent highlights areas where the existing flood risk is greater than the flood risk following restoration (ie. improvement).

Post restoration 1 in 100YR +CC Outline

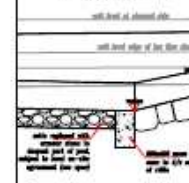


Pre restoration 1 in 100YR +CC Outline



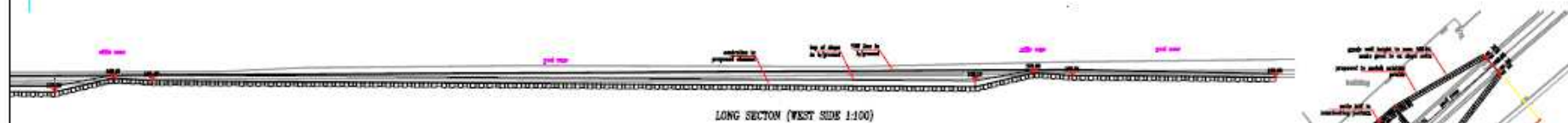


ALTERNATIVE LONG SECTION
RIPPLE DETAIL (1:26)

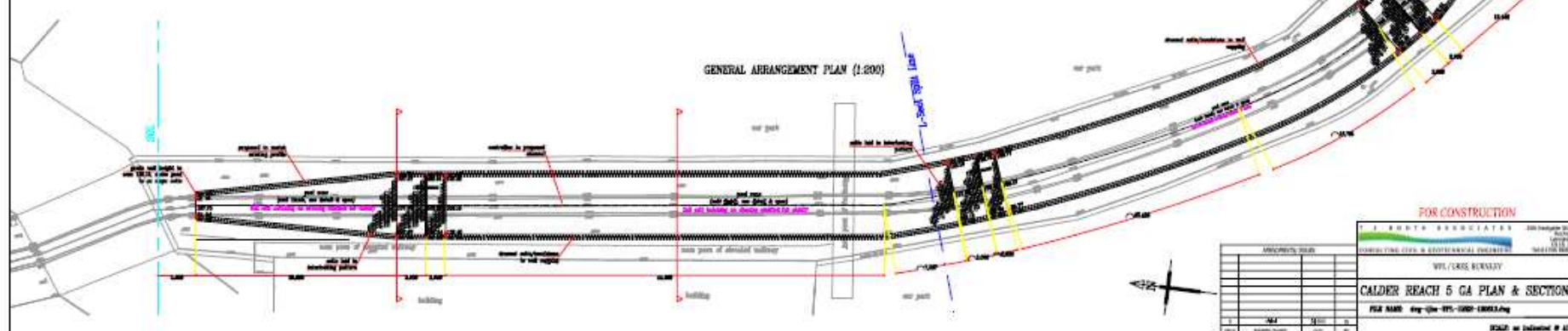


TYPICAL POOL CROSS SECTION (1:25)

18. **CPM Working in watercourses. Tarp river works. Lifting heavy loads.**
19. **CPM Working in watercourses. Tarp river works. Lifting heavy loads.**

[illegible]

GENERAL ARRANGEMENT PLAN (1:200)



FOR CONSTRUCTION

		200 Interstate Green Austin, Texas 78701 (512) 463-1000 www.txdot.gov	
WFL/CRS BURNLEY			
CALDER REACH 5 GA PLAN & SECTIONS			
FILE NAME: dsg-qfm-075-002-10013.dwg			
SCALE: as indicated on sheet			



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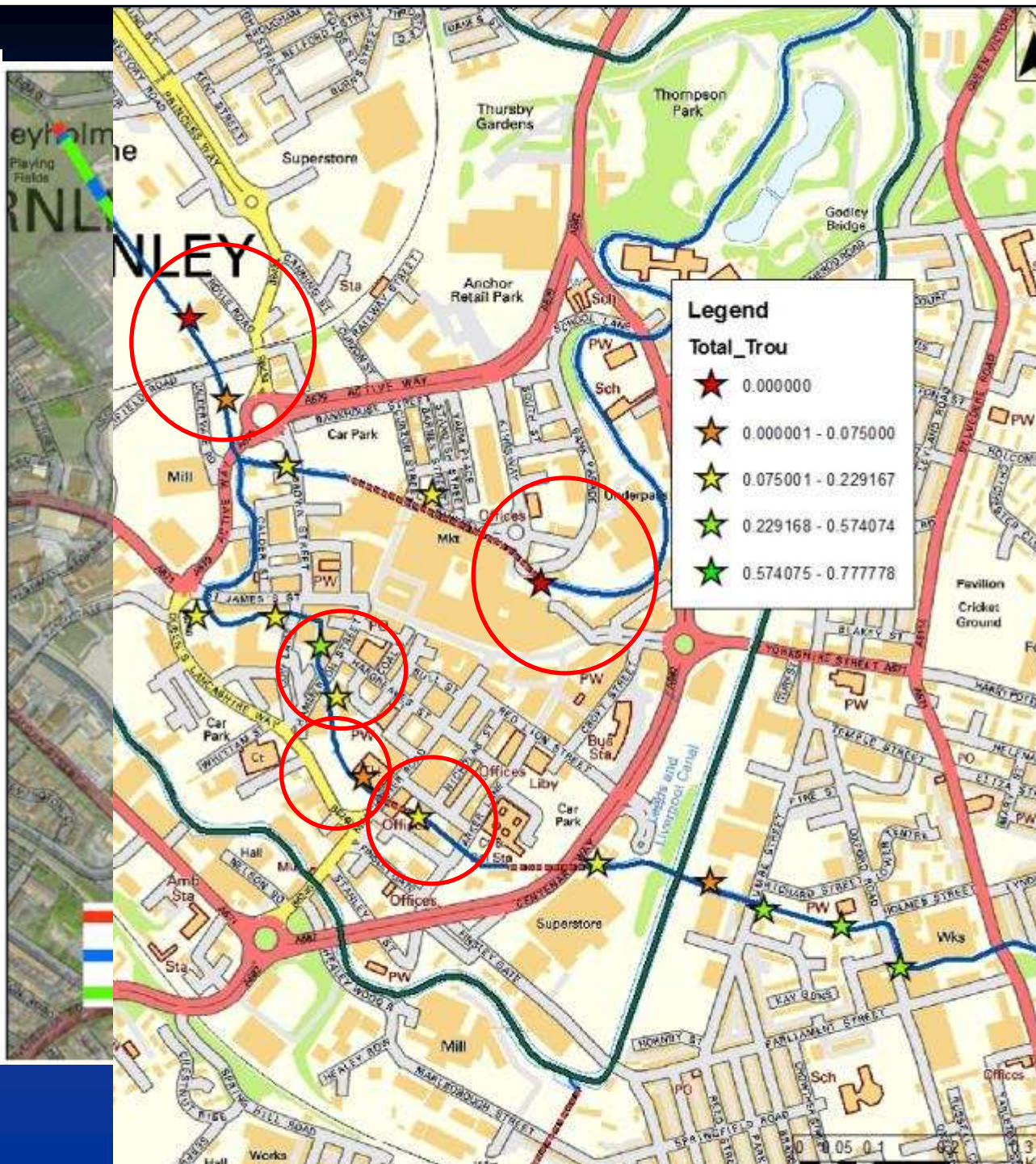


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More Details on:

www.ures-burnley.org.uk

Or

www.ribbletrust.org.uk

