



# Whitchurch Waterway Trust: Comparison of Options

## Options List

- A. Do nothing
- B. Extend through two bridges and create new basin
- C. Extend Through two Bridges and Create new Basin but allowing for the extension in the Future to carry on towards the town using a lock or inclined plane.
- D. Create water park but leaving possibility of connecting to the canal network
- E. Create water park and connect to the main canal network

### **Option A: Do nothing**

#### Considerations:

- No cost but does not provide additional income needed to ensure long term maintenance of the canal arm.
- Leaves possibility of other options when economic climate improves.
- Shropshire Council to be encouraged to create an informal nature park on the donated land, and then to maintain it properly.

### **Option B: Extend through two bridges and create new basin**

#### Considerations:

- Capital cost about **£297K**, of which about **£22K** would be spent before planning permission obtained. (Costs are estimated based on same figures in Peter Brown report. These are based on rough estimate of soil volumes to be moved.)
- Small extra annual cost covered by rent from extra permanent moorings.
- Relatively straightforward engineering — bridges already exist.
- Accords with Trust's objectives.
- Brings visitor mooring closer to town centre and nearer bus stop.
- Over half the cost is wasted if the decision is ever taken to adopt Option E.
- Shropshire Council to be encouraged to create an informal nature park on the donated land, and then to maintain it properly. The Local community and the council are free to manage the valley without the constraints of having to allow for the canal in the future.

### **Option C: Extend Through two Bridges and Create new Basin but allowing for the extension in the Future to carry on towards the town using a lock or inclined plane.**

#### Considerations:

- Capital cost may be slightly higher than B.
- Small extra annual cost covered by rent from extra permanent moorings.
- Relatively straightforward engineering — bridges already exist.
- Accords with Trust's objectives.
- Brings visitor mooring closer to town centre and nearer bus stop.
- Less of the cost is wasted if the decision is ever taken to adopt Option E as the design would allow for the moorings to still be used and reworking would be minimised.
- Shropshire Council and the local community would be constrained in any changes to the donated land in the valley by the possibility of the canal extension in the future. This would make it much less likely that any improvements would be made.

## **Option D: Create Water Park but leaving possibility of connecting to the canal network**

### Considerations:

- Capital cost about **£1,400K**, of which about **£130K** would be spent before planning permission obtained.
- Annual cost about **£35K**; negligible annual income.
- Agreement needed with Shropshire and/or Whitchurch Councils to meet the annual costs. Relatively straightforward engineering.
- Significant local environmental asset created: wide variety of aquatic wildlife encouraged, making the water park an attractive and interesting place to visit, a suitable location for schools' nature studies, and a good body of water for fishing.
- Leaves the possibility of Option D pending further funding.
- Consistent with the decision of the Extraordinary General Meeting in March 2006.
- Creating and managing a water park is not within the Trust's current formal objectives as set out in its Memorandum of Association.

## **Option E: Create Water Park and connect to the main canal network**

### Considerations:

- Capital cost about **£4,100K** (assuming inclined plane), of which about **£270K<sup>1</sup>** would be spent before planning permission obtained.
- Annual cost about **£220K<sup>2</sup>**; partially offset by net income from catering, room hire & other sources, say **£20K**.
- Agreement needed with Shropshire and/or Whitchurch Councils, with perhaps a contribution from British Waterways, to meet the annual costs.
- Complex engineering not undertaken before in Britain, so cost more uncertain.
- Inclined plane would be a unique operational feature on a British canal but may not be such as regional tourist attraction as had previously been thought.
- Substitution of locks for inclined plane would save considerable capital and running costs but take away much of the special interest.
- Visiting boats would moor in a quieter and more attractive location than Option B. This is about ½km closer to the town centre which would reduce the walking distance to about ¾km (about ten minutes), but is further from a bus stop.
- The lake to the west of Greenfield Rise would be an environmental asset, with boating restricted to a channel to& from the inclined plane. Wide variety of aquatic wildlife encouraged, making the water park an attractive and interesting place to visit, a suitable location for schools' nature studies, and a good body of water for fishing. However, much smaller area than Option C, and slightly more disturbed because of the boating access. The lake to the east of Greenfield Rise would be mainly for boating though it would also have environmental benefits.
- If Option D were done first and Option E proposed at a later date, there could be objections from people who had become accustomed to the whole of the water space being used solely for environmental purposes.
- Option E fulfils the Trust's objectives.

## Notes

1. As Option D (£127,100) plus site investigations (£12,300), feasibility studies & test modelling (£61,500), statutory fees (£24,600) and a quarter of general & M&E design (£43,075).
2. As Option C (£35,000) plus staffing of inclined plane (£50,000), staffing for building cleaning, grounds maintenance & general caretaking (£25,000), and power, maintenance & other costs of inclined plane & buildings (10% of capital cost of £1,096,000 = £109,600). This does not take account of long-term replacement costs.
3. All costs are at 2009 prices and exclude VAT. Contingency of only 10% for unforeseen costs allowed.

Based on PJB\projects\WWT\Options 21 December 2009

**This draft compiled by D Torrens January 10<sup>th</sup> 2010.**



Preliminary Draft Drawing for Option "B"



# Appendix A

## Whitchurch Water Park : Costings showing relative costs of Small Extension

Platt White's reference	Dimensions	Platt White	PW+%	Planning	Stage 1	Stage 2	Notes	Unit Cost	Relative Factor	Length or Area	Small Extension Relative Costs		
											Planning	Build Cost	Comment
											1000		Initial Design Studies and Surveys
10.02			5,000	6,200		6,200		N/A	0.2	N/A		£1,240	
			7,500	9,200	9,200				0.5		£4,600		
	21,042cm@£21		442,000	543,700		543,700		21		5,300 cu m		£111,300	
			10,000	12,300		12,300			1			£12,300	
			35,000	43,100		43,100		N/A	0	N/A			
	240m		30,000	36,900		36,900		153.8		338m		£51,968	
								300		30m		£9,000	Additional Cost Longer edging on Moorings see Eastern Lake item 8
												£8,600	
	7 Towpaths	520sm	7,000	8,600		8,600				1			
	8 Fishing area		2,250	2,800		2,800		N/A	0	N/A			
	9 Disabled access ramps		1,500	1,800		1,800			1			£1,800	
	10 Weir		[not costed]	[not costed]		60,000	Estimate inserted	N/A	0	N/A			
	11 Top soil	4,000sm	12,000	14,800		14,800		N/A	0	N/A			
	12 Seeding	4,000sm	4,000	4,900		4,900		N/A	0	N/A			
	13 Tree & shrub planting		5,000	6,200		6,200		N/A	0	N/A			
	14 Bank works (Meadowcroft houses)	130m	9,750	12,000		12,000		N/A	0	N/A			
10.03			5,000	6,200	6,200				1			£6,200	
			25,000	30,800		30,800			0.5			£15,400	
10.04	Professional fees	16½%	94,250	115,900	50,300	75,500	40% for design					£16,064.5	£24,097
	TOTAL: WESTERN LAKE		695,250	855,400	65,700	816,500	43,100					£21,664	£275,104
													£296,769
													Total
													Total
11.02	1 Site investigations		10,000	12,300		12,300			0				
	2 Site clearance		2,000	2,500		2,500			0				
	– Engineering works		540,000	664,200		664,200			0				
11.03	Insurances		25,000	30,800		30,800			0				
11.04	1 Feasibility studies and test modelling		50,000	61,500		61,500			0				
	2 General design		75,000	92,300		92,300			0				
	3 M&E design		65,000	80,000		80,000			0				
	4 Testing & HSE requirements		45,000	55,400		55,400			0				
	5 Statutory fees		20,000	24,600		24,600			0				
	TOTAL: INCLINED PLANE		832,000	1,023,600	0	0	1,023,600		0				
12.02	1 Water supply		15,000	18,500		18,500			0				
	2 Telephone cabling		2,000	2,500		2,500			0				
	3 Lighting of car park & inclined plane	15 columns +	20,000	24,600		24,600			0				
	4 Car/coach park	3,100sm	140,000	172,200		172,200			0				
	5 Operations Centre & sanitary station	395sm	276,000	339,500		339,500			0				
	6 — internal fit-out		75,000	92,300		92,300			0				
	7 External seating etc		5,000	6,200		6,200			0				
	8 Landscaping	2,300sm	7,000	8,600		8,600			0				
	9 Seeding	1,000sm	1,000	1,200		1,200			0				
	10 Tree & shrub planting		20,000	24,600		24,600			0				
	12 Fencing		6,000	7,400		7,400			0				
	13 Pumping station (foul sewer)		6,000	7,400		7,400			0				
	14 Excavation & tipping		30,000	36,900		36,900			0				
12.03	1 Insurances		15,000	18,500		18,500			0				
	2 Statutory fees		5,000	6,200		6,200			0				
12.04	Fees		72,000	88,600		88,600			0				
	TOTAL: BUILDING & CAR PARK		695,000	855,200	0	0	855,200		0				

13.02	1	Site clearance		10,000	12,300		12,300			0
	2	Site investigation		75,000	92,300	9,200			Assuming PW overstated	0
	3	Excavation & disposal	16,400cm	344,400	423,600		141,200	282,400	One-third in Stage 1	0
	4	Import puddle clay etc		10,000	12,300		4,100	8,200	One-third in Stage 1	0
	5	Metal edging	370m	46,250	56,900		56,900			0
	6	Bank stabilisation & piling (Brookfield)	275m	20,650	25,400		25,400			0
	7	Towpaths	1,040sm	14,000	17,200			17,200		0
	8	Visitor mooring (2m wide timber staging)	270sm	27,000	33,200			33,200		0
	9	Disabled access ramps		35,000	43,100		4,300		Assuming PW overstated	0
	10	Safeguard foul water pipe		8,000	9,800		9,800			0
	11	Top soil	1,000sm	3,000	3,700		3,700			0
	12	Seeding	750sm	750	900		900			0
	13	Tree & shrub planting		5,000	6,200		6,200			0
	14	Replace Greenfield Rise box culvert		75,000	92,300			92,300		0
13.03	1	Statutory fees		5,000	6,200			6,200		0
	2	Insurances		12,500	15,400		15,400			0
13.04		Fees		73,500	90,400	22,600	22,600	45,200	Apportioned	0
		<b>TOTAL: EASTERN LAKE</b>		<b>765,050</b>	<b>941,200</b>	<b>31,800</b>	<b>302,800</b>	<b>484,700</b>		<b>0</b>
	-	Silt trap		[omitted]	[omitted]		40,000			0
	-	Slipway						10,000		0
	-	Lining					0	0	Assumed nil	0
	-	Planting at margins of lake					20,000	2,000		0
	-	— fees on above items	12½%				7,500	1,500		0
	-	Fish stocking					5,000			0
	-	Ecological study & habitat plan				11,000				0
	-	Tree survey & landscape plan				5,000				0
	-	Cultural heritage survey				2,000		9,000		0
		<b>TOTAL : OTHER ITEMS (not in Platt White)</b>		<b>0</b>	<b>0</b>	<b>18,000</b>	<b>72,500</b>	<b>22,500</b>		<b>0</b>
	-	CONTINGENCIES	10%	0	0	11,600	119,200	242,900	See paragraph 6.2	0
	-	STAGE 2 SET-UP COSTS		0	0	0	0	100,000	See paragraph 6.3	0
		<b>TOTAL</b>		<b>2,987,300</b>	<b>3,675,400</b>	<b>127,100</b>	<b>1,311,000</b>	<b>2,772,000</b>		<b>4,094,600</b>
		% increase to 2009 prices			23%					