

Gibbs Weir Hydroelectric Project - Financial matrix			
Capital costs	MannPower's estimate	Reviewed by:	Revised estimate
Design study fees	£7500	Parsons Brinckerhoff	£35,000
Detailed project plan fee	£8,500	CCBC Engineers	£8,500
Supervision	£5,000	CCBC Engineers	£5,000
Construction PM and CDM	£18,000	CCBC Engineers	£18,000
Licensing, planning and studies fees & statutory requirements	£9,500	CCBC Engineers	£9,500
Debris screen	£1,600	Parsons Brinckerhoff	£1,600
Intake sluice gate	£8,800	Parsons Brinckerhoff	£8,800
Archimedean screw compact version	£60,000	Parsons Brinckerhoff	£60,000
Gearbox and coupling	£9,200	Parsons Brinckerhoff	£9,200
Generator	£3,000	Parsons Brinckerhoff	£3,000
M&E equipment	£28,000	Parsons Brinckerhoff	£35000
Delivery	£3,000	Parsons Brinckerhoff	£3,000
Craneage	£1,500	Parsons Brinckerhoff	£1,500
Powerhouse	£7,500	Parsons Brinckerhoff	£15,000
Civils: mobilisation and temporary works	£19,000	CCBC/Parsons Brinckerhoff	£215,000
Civils: permanent works	£60,000		
Fish pass	£40,000		
Electrical connection and connection fees	£30,000	Parsons Brinckerhoff	£50,000
Installation supervision	£5,000	Parsons Brinckerhoff	£5,000
Commissioning	£6,000	Parsons Brinckerhoff	£6,000
TOTAL	£326,100		£489,100
Additional considerations:			
Structural survey of existing weir	Nil	CCBC Engineers	£3000
Maintenance of existing weir structure in perpetuity	Nil	CCBC Engineers	£30,000
Land (easement/acquisition)	Nil	CCBC Engineers	Nil
Advanced site clearance	Nil	CCBC Engineers	£2000
Security (fencing, entry control etc)	Nil	CCBC Engineers	£5000
CCTV/telemetry equipment	Nil	CCBC Engineers	£7500
Mains connection and control units for automatic sluice gate, CCTV/telemetry etc.	Nil	CCBC Engineers	£2500
Reduction of river bed at entry to fish pass and sluice gate	Nil	CCBC Engineers	£4,500
Safety measures (railings, life belts etc)	Nil	CCBC Engineers	£1000
Pollution control measures	Nil	CCBC Engineers	Nil
Noise model	Nil	CCBC Engineers	£1500
Noise mitigation	Nil	CCBC Engineers	£4500
Decommissioning	Nil	CCBC Engineers	Nil
Revised total	Nil		£550,600
Contingency	Nil	CCBC at 10%	£55,060
Total Capital Costs	£326,000		£605,660

OPERATIONAL COSTS			
Operational costs	£2,000	CCBC Engineers	£3,000
Insurance	£1,500	CCBC Engineers	£1,500
Rates	£1,600	CCBC Engineers	£1,600
Meter readings	£150	CCBC Engineers	£150
Equipment maintenance	£1,000	Parsons Brinckerhoff	£2500
TOTAL	£6,250		£8750
Financial Return			
Total Costs inc Development Fees	£326,100		£605,000
Annual Operating Costs	£6,250		£8,750
1 st Year Nett Profit	£29,139		£24,538
Simple Payback Period	11.2 yrs		25.1 yrs
20-Year Unlevered NPV	£237,000		- £122,990