

APPENDIX F  
INITIAL ECONOMIC ASSESSMENT

EAST REEF FEASIBILITY STUDY REPORT  
OCTOBER 2005

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G L O W A C K A R E N N I E



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## EXECUTIVE SUMMARY

In October 2003, EEDA launched Landmark East, an international design competition to find an iconic landmark for the region. East Reef – one of four winning entries – is an elevated promenade linked to the coast at Jaywick, Essex that will provide panoramic views of the area and act as a focal point for water sports and leisure facilities.

The current stage of the East Reef project is 'Initial Assessment', which precedes a full options appraisal. An Initial Assessment enables EEDA to identify and actively engage in the early development of emerging projects, such as East Reef, in a cost-effective way.

The first section of this report, 'The Strategic Case', demonstrates how East Reef supports the delivery of EEDA's strategic objectives in two areas:

1. Creating a regional brand that will raise the profile of the East of England is a principal theme of the Regional Economic Strategy 2001 'Prosperity for All' and carried forward in the Corporate Business Plan 2001-2004.
2. Creating 'high quality places (in which) to work, live and visit' is a goal of the Regional Economic Strategy 2004 'A Shared Vision' supported by two actions in EEDA's Corporate Business Plan 2005–2008: 'developing culture, heritage and leisure', and 'enabling renaissance and regenerations of the region's communities'.

Landmark East followed research commissioned by EEDA indicating that the region lacked a strong, cohesive regional identity. EEDA considers 'it is vital that a common East of England brand flows through its strategies for economic development, inward investment, tourism, culture and exports'. Landmarks can be an effective way of raising the profile of a region; they can also drive economic regeneration in deprived areas. The proposed location of East Reef suffers severe social and environmental problems - Jaywick is ranked in the bottom percentile on the Index of Multiple Deprivation 2004.

The second section, 'The Economic Case', appraises four options for delivering the project, including a reference case. The two options that are consistent with the project's stated objectives are either EEDA intervenes directly to pay for the project or indirectly (reference case) by assisting the project team to raise funds from donors and sponsors.

An accurate assessment of each option's ability to deliver value for money requires a more rigorous appraisal than is normally carried out during an Initial Assessment – a framework for developing the business case in this way is introduced and a preliminary analysis of the criteria affecting value for money at East Reef is made using this model

The third section, 'The Financial Case', compares the proposed expenditure of each option. The reference case is the most affordable option, although this option provides EEDA with least control of the eventual outcome of the project.

The fourth section, 'The Commercial Case', identifies and appraises the broad range of procurement options that exist for delivering East Reef and examines potential funding mechanisms and contract strategies. The preferred procurement routes are either a traditional route or a develop design and build route.

The final section, 'The Project Management Case', sets out the overall management issues and principal actions which must be undertaken to support the delivery of the project's intended outcomes or benefits. Risk analysis shows that the main threat to East Reef at this stage of development is uncertainty over future funding.

The principal conclusion of the study is that East Reef is consistent with EEDA's priorities but that further investigation is needed to establish whether the project represents value for money. This additional work would focus on the co-ordination of the project with the impending master plan exercise for Jaywick.

## CONCLUSIONS AND RECOMMENDATIONS

The conclusions of this study are listed below:

1. East Reef is an iconic and distinctive landmark proposal that could raise the profile of the East of England. The proposed project is consistent with EEDA's aim to create a common regional brand.
2. East Reef could play an important role in promoting the social, economic and environmental regeneration and renewal of Jaywick. Its timing coincides with the start of a master planning exercise for Jaywick, permitting the opportunity to co-ordinate the two projects and maximise the potential benefits of both proposals.
3. The present cost of procuring the promenade at East Reef through the public sector is £13,466,000, so that the project will represent value for money if it can generate a benefit of £500,600 per year. This is equivalent to 200,000 visitors per year paying £2.50 each, 0.0006 per cent increase in the region's annual production or £125 for each resident in Jaywick per year.
4. A private developer would not pay for the entire development in its current form
5. A public private partnership represents less value for money than direct investment by the public sector
6. The reference case, where EEDA pays for limited further feasibility work and assists the project team to raise funds from donors is the most affordable option.

The recommendations of this study follow:

1. It is recommended that further work is carried out to assess the project in the context of the impending master planning exercise for Jaywick so as to investigate how the project can deliver improved value for money.
2. If the reference case is selected as the preferred option, then it is recommended that a funding consultant is engaged to help with further feasibility work
3. EEDA's current Regional Economic Strategy and Corporate Plan do not refer to the need for a landmark project. It would be helpful if EEDA could prepare a high level strategy statement that positions East Reef in the context of its current priorities and commitments and addresses the issues raised in Items 2 and 3.
4. It is recommended that a value management / briefing exercise is held during the design development stage so as to obtain a common understanding of the desired outcomes or benefits of the project and to identify an agreed statement of outputs or design objectives by the project stakeholders.
5. The value management / briefing exercise should accompany a consultation exercise with all major stakeholders, particularly Jaywick residents and landowners
6. A value engineering exercise could result in cost savings and a more economical solution once the design concept has been agreed with relevant stakeholders.
7. Following further investigations into the feasibility of East Reef and prior to any investment decision, it is recommended that a full economic appraisal is carried out of the various options available to deliver the project together with the planned comprehensive redevelopment of Jaywick.

## INTRODUCTION

The structure and content of this report follow DTI's guidelines for conducting a project appraisal, 'Single Programme Appraisal Guidance (SPAG): 2004', which applies to all RDA projects. The report also complies with HM Treasury's guidelines for project appraisal, 'The Green Book' 2003 and ODPM's 3R's guidelines 'Assessing the Impacts of Spatial Interventions - Regeneration, Renewal and Regional Development':2004.

SPAG recommends that an Initial Assessment should be carried out for projects that are developed by an external body or partnership seeking RDA support, particularly where preliminary expenditure is needed to develop the concept and for large value and high risk projects. The purpose of an Initial Assessment is to gauge:

- the project's relationship with EEDA's and other relevant local strategies;
- a high level indication of cost and availability of funding; and
- to identify links that should be made with other public sector activity in the region, whether undertaken by EEDA or another organisation.

This Initial Assessment examines the economic feasibility of East Reef and suggests possible ways in which independent organisations or companies might take the scheme forward with support from EEDA.

## THE STRATEGIC CASE

This section explains the reasons for changing the existing situation to meet a desired outcome, which is defined in terms of the project's social and economic objectives

## OBJECTIVES

EEDA was launched as a Regional Development Agency in April 1999. It operates across six counties - Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk - and the unitary council areas of Luton, Peterborough, Southend-on-Sea and Thurrock. EEDA's goal is to make the region a world-class economy - one of Europe's top 20 most prosperous regions by 2010.

EEDA sets out its strategic objectives and operating plans in its Regional Economic Strategies and Corporate Business Plans. The two strategic objectives for EEDA described in these documents that are most relevant to the East Reef project are:

### 1. Creating a regional identity

EEDA's Regional Economic Strategy June 2001 'Prosperity for All' and its Corporate Plan 2003 - 2006, contained six major themes. An important theme, supporting each of the other themes, was to create 'a clear identity and international profile'. EEDA considers:

*'it is vital that a common East of England brand flows through its strategies for economic development, inward investment, tourism, culture and exports'.*

A key action described in EEDA's Corporate Plan 2003 – 2006 under the heading of 'Clear identity and international profile' is 'Creating a regional landmark'.

*'The development of a significant landmark, which will help build the profile of the region and provide a focal point that East of England residents can identify with.'*

An explanation of how the project supports this first objective is explained in the following section: Landmark East – creating a regional identity

### 2. Creating high quality places to work, live and visit

EEDA's overall vision for the Region, stated in its Regional Economic Strategy 2004, "A Shared Vision" is to be:

*'... a leading economy, founded on our world-class knowledge base and the creativity and enterprise of our people, in order to improve the quality of life of all who live and work here'.*

To realise the vision, the Regional Economic Strategy focuses on eight strategic goals - the relevant goals for this project is Goal Four: High quality places to work, live and visit.

The Corporate Plan for the period 2005 – 2008 defines high quality places as:

*'... the integration between jobs, homes, local transport, community facilities, such as schools and health services, and cultural, heritage and leisure assets which are accessible to a diverse population. It means making best use of physical sites, and ensuring development is of the highest design and environmental standards.'*

The Corporate Plan also sets out six actions to achieve the goal of achieving high quality places, which include:

- Developing culture, heritage and leisure
- Enabling renaissance and regeneration of the region's communities

An explanation of how the project supports this second objective is explained in the subsequent section: Jaywick – creating high quality places to work, live and visit.



## LANDMARK EAST - CREATING A REGIONAL IDENTITY

In a global, competitive business environment, regions can gain an economic advantage over rivals through a distinctive image and identity. However, research commissioned by EEDA has indicated that the East of England lacks a strong, cohesive regional identity – see Figure 1. Compared to other regions, the boundary of the East of England is a relatively recent creation: its population often feels more affiliation to local areas within the region, such as East Anglia, or parts of the country outside the region, such as the wider South East.

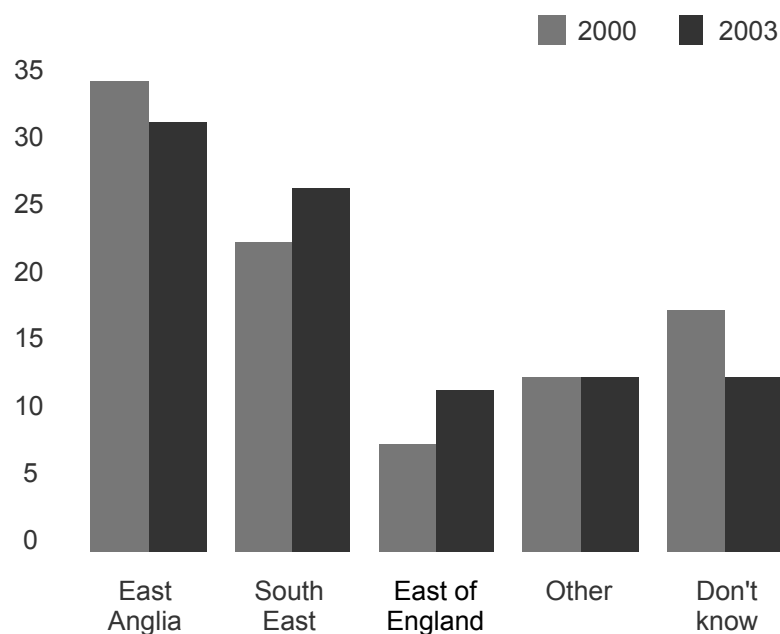


Figure 1: Regions to which East of England residents feel they belong (%)

Landmarks can be an effective means of raising the profile of a region. Evidence shows that landmarks which signal an appropriate public message, either by emphasising an existing identity or by repositioning the area in a new way, can deliver tangible social and economic benefits. In the absence of an existing landmark that could represent the entire East of England, EEDA decided to create a new flagship development.

In October 2003, EEDA launched Landmark East, an international design competition to find an iconic landmark for the region that would be promoted around the world. The competition attracted 234 entries: four entries were chosen to proceed immediately to the next stage of the project. One of these schemes is East Reef – an elevated promenade linked to the coast that will provide panoramic views of the area and act as a focal point for water sports and leisure facilities, such as the dive centre that is included in this proposal.

## JAYWICK – CREATING HIGH QUALITY PLACES TO LIVE, WORK & VISIT

Jaywick is a small seaside community to the south of Clacton-on-Sea, North Essex. It is a popular destination in summer due to its fine beach, possibly the best along the Essex Sunshine Coast, safe bathing and proximity to London.

For many years, Jaywick was a sparsely populated area of low lying marshlands that were prone to frequent flooding by seawater. This situation changed in 1928 when a developer called Frank Stedman purchased the land in order to build a seaside village. Stedman introduced basic infrastructure, including a link road to Clacton, and laid out plans for the new Jaywick Sands Estate. The attractions of Stedman's scheme were cheap land – chalets could be bought for less than £50 – and the opportunity to build one's own home without restrictions from planning authorities and building societies. Jaywick was popular with London's Eastenders as an escape from city life, and the village emerged as a 'pioneer' settlement that was regulated by its own residents association without any official sanction.

Jaywick's unautocratic approach to development brought about a strong sense of local identity and community involvement, but this freedom caused problems for the Local Authority from the outset. By 1931, although the Clacton directory listed only six permanent residences in Jaywick, many of its two thousand chalets had been adopted as homes. These homes were often self-built at lower standards, higher densities, and without the benefit of services and facilities that are all part of the requirements of more controlled development.

The legacy of this approach is a village built significantly below modern standards:

- Many roads and pavements are unmade and cannot be adopted because their design is unsuitable for vehicles.
- Surface water drainage is inadequate.
- There is little or no street lighting.
- The housing stock mostly comprises original 1930's – 40's timber frame holiday chalets which have far outlived their design life of 15 years, so that many buildings are vacant, derelict or in disrepair.
- Habitable dwellings generally fall short of current building regulations and emerging standards for adaptation, security and energy efficiency.

Today, Jaywick is a seriously deprived area. Part of the village is within an area that is ranked 102 out of 32,482 Super Output Areas in the UK – second worst in the East of England and in the bottom percentile of the Index of Multiple Deprivation 2004. Jaywick has a particularly poor score in the county's league tables for education and employment. Many residents are dependent on state assistance, and this ratio is growing due to both an ageing population of home-owners and an increasing proportion of transient, private-rented accommodation. However, research carried out by the Guinness Trust and reported by DAP Consultancy indicates that the original attractions of Jaywick still survive - low cost home ownership, a strong community spirit and a beautiful beach.

A major challenge for any intervention to improve conditions in Jaywick is to introduce beneficial change whilst retaining the factors that once earned the holiday village a reputation as 'the happiest resort on the Essex coast'. A landmark development, such as East Reef, could provide catalytic effects in the local area that support the regeneration, renewal and redevelopment of Jaywick, reversing its current spiral of decline.

## THE ECONOMIC CASE

The purpose of this section is to identify an economical, value for money solution that can be developed to meet the strategic objectives outlined in the Strategic Case.

## ECONOMIC OPTIONS

Four options for the project have been identified – these can be defined in terms of public and private sector participation.

They are:

### 1. Public sector participation

The public sector pays for the design, build and operation of the promenade and lido at East Reef.

### 2. Private sector participation

A private developer funds a commercial development in Jaywick adjacent to East Reef. The design, build and operational costs of the promenade and lido are paid from profits generated by the commercial development.

### 3. Public-Private Partnership

A special purpose vehicle is formed by the public sector and a private developer, which pays for the design, build and operation of the promenade, lido as well as a series of development products in Jaywick, which are leased back to the public sector – this option is known as a private developer scheme or sale and leaseback.

### 4. Do minimum

In this option, EEDA supports the project in a mainly non-financial way and assists the project team to raise funds in the form of grants, sponsorship or donations.

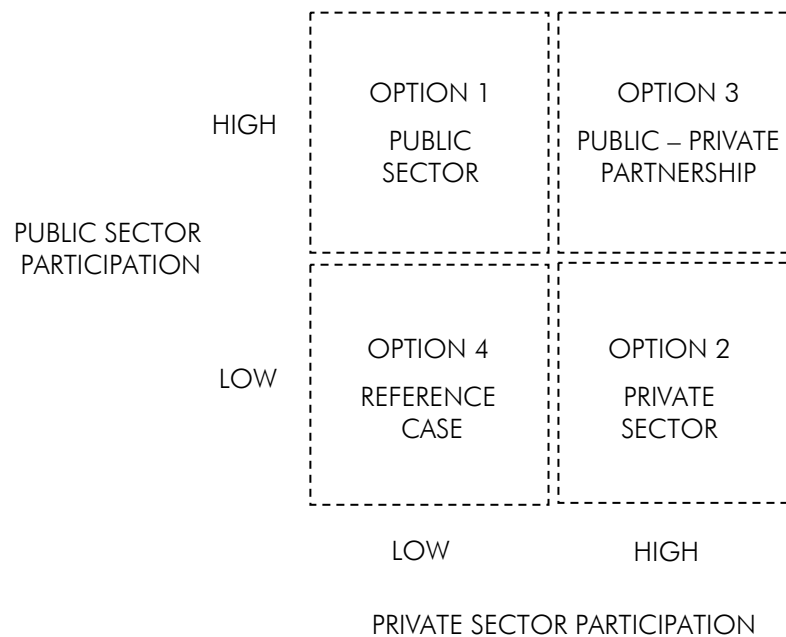


Figure 2: Economic Options

## Option 1: public sector procurement

In this option the public sector pays for the design, build and operation of the promenade at East Reef – the lido is excluded for the purpose of this exercise.

### Assumptions:

- Development finance will be provided as equity from internal funds – a discount rate of 3.5% is used as advised by HM Treasury 'The Green Book'.
- Operating costs and benefits are indexed at an inflation rate of 2.5%
- Operating period is 30 years.
- The terminal value of the project is assumed to be nil.

### Costs

- |                            |             |                     |
|----------------------------|-------------|---------------------|
| – Development cost         | £12,430,000 | Table A1 Appendix A |
| – Operating costs per year | £40,000     | Table A2 Appendix A |
| – Net present cost         | £13,466,000 | Table B1 Appendix B |

### Benefits

Whilst capital costs of East Reef can be calculated reasonably precisely, the economic, environmental and social costs of the project are more difficult to predict and measure in monetary terms. However, a crude indication of value for money can be made at this initial stage using a simple break-even analysis.

Discounting the costs and benefits of the promenade indicates that these balance when the benefits total £500,600 each year or £1,370 each day indexed at 2.5% per year – refer Table B1 Appendix B.

- Assuming that each visitor would be willing to pay £2.50 to access the promenade, the project would be worthwhile if it could attract  $1,370/2.5 = 548$  or more visitors per day, which is at least 200,000 visitors per year.

Note: a straight line projection for visitor numbers has been assumed but visitor numbers are likely to be seasonally dependent and to increase from a low base as the landmark becomes recognised over time.

The economic output of the East of England is £81b each year so that the project would be worthwhile if the improved regional brand provided by the promenade could raise regional productivity by 0.0006 per cent or more.

- Assuming 4,000 people live and work in Jaywick, the promenade would be worthwhile if its catalytic effect on the local area could produce a benefit of £125 or more per person each year. These benefits would need to be additional to the benefits derived from the proposed redevelopment and regeneration of Jaywick.

### Value for money

The promenade has the potential to provide value for money as a regional icon and as a catalyst for regeneration.

## Option 2: private sector procurement

In this option a private developer funds a commercial development in Jaywick adjacent to East Reef. The design, build and operational costs of the promenade and lido are paid from profits generated by the commercial development – which is assumed to be a dive centre for the purpose of this exercise:

### Assumptions:

- Development finance will be provided as a combination of debt and equity – a weighted average cost of capital of 15% is used to discount costs and revenues
- Operating costs and revenues are indexed at an inflation rate of 2.5%
- Operating period is 30 years.
- The terminal value of the project is assumed to be nil.

### Costs

– Development cost		
Promenade and lido	£16,332,000	Table A3 Appendix A
Dive centre	£15,185,000	Table A5 Appendix A
Total	£31,517,000	
– Operating costs per year		
Promenade and lido	£90,000	Table A4 Appendix A
Dive centre	£877,000	Table A6 Appendix A
Total	£967,000	

### Benefits

– Revenue per year		
Dive centre	£2,400,000	Aquality best case

### Value for money

– Net present value		
Promenade and lido	-£17,047,000	Table B2 Appendix B
Dive centre	-£ 3,092,000	Table B2 Appendix B
Total	-£20,139,000	

Option 2 does not represent value for money to a developer. A more profitable development component is needed to make this option viable.

### Option 3: public – private partnership

Government has in recent years adopted Public Private Partnerships, including the Private Finance Initiative and Private Developer Schemes, as its principal method of procuring capital facilities. PPP projects are normally designed to purchase a stream of services rather than capital assets. This approach can be applied in the form of a Private Developer Scheme to East Reef, and the results are shown below.

#### Assumptions:

- Development finance will be provided as a combination of debt and equity – a weighted average cost of capital of 15% is used to discount costs and benefits
- Operating costs and revenues are indexed at an inflation rate of 2.5%
- Operating period is 30 years.
- The terminal value of the project is assumed to be nil.

#### Costs

- Unitary charge or rent                      £1,425,871 per year indexed at 2.5% per year

#### Benefits

- Identical to Option 1

#### Value for money

The cost of Option 1 as an equivalent annual charge is £500,600, which compares to a unitary charge in this option of £1,425,870. If Option 1 is assumed to be the Public Sector Comparator, then Option 3 does not appear to represent value for money.

The main reason for this result is that the discount rate applied by a private developer is higher than the government's cost of capital. Less importantly, any benefits in terms of innovation or transferred risk have not been included.

## Option 4: reference case – do minimum

In this option, EEDA supports the project in a non-financial way and assists the project team to raise funds from sponsors and donors.

### Costs

A minimum outlay might include payment for:

- further feasibility
- preparation of a more detailed business case
- public consultation
- promotion / publicity

### Benefits

The outcome or benefits are uncertain because this option doesn't guarantee that the required landmark will be provided without EEDA's direct intervention or provided in the form shown in the architect's design proposal

### Value for money

An appraisal of the potential value for money that this option offers to EEDA must include an assessment of the likely chance that the project can attract sufficient funds from donors and sponsors as well as estimates or quotations for the cost of further work

This assessment has not been made at this stage but it could be easily carried out following this Initial Assessment if required.



## SWOT ANALYSIS OF ECONOMIC OPTIONS

	Public sector	Private sector	Public-private partnership	Reference Case
Strengths	EEDA has greater control of the outcomes or benefits	Permits use of debt finance	A private developer scheme distributes the cost of development between partners, which makes the project more affordable	Least cost option for EEDA
Weaknesses	Difficulty in establishing monetary value of outputs and benefits to demonstrate value for money	Cost of promenade and lido exceed might exceed profit from development components	Additional work to set up an appropriate form of local strategic partnership	Benefits / outcome are uncertain
Opportunities	Economies of scale and scope may be possible by coordinating the project with the Jaywick redevelopment master plan	Initial market research identifies a likely demand for a dive centre	Potential to link the partnership to the wider administration of Jaywick in the tradition of the Jaywick Freeholders Association	Economies of scale and scope may be possible by coordinating the project with the Jaywick redevelopment master plan
Threats	Competing priorities for internal funds	Future shape of Jaywick development masterplan is unknown at this stage	Lack of public and Local Authority support, particularly for maintaining and operation the promenade and lido	Insufficient grant aid, sponsors or donors; time needed to raise funds is excessive

Table 1: SWOT ANALYSIS OF ECONOMIC OPTIONS

## VALUE FOR MONEY

EEDA's resources are limited, and it is important to demonstrate that any planned intervention is carried out in an economical, efficient and effective manner to meet the Region's required long-term objectives. The model that will be used for this analysis is taken from HM Treasury's publication 'Choosing the right FABRIC – a framework for performance measurement': 2001 – refer Figure 3.

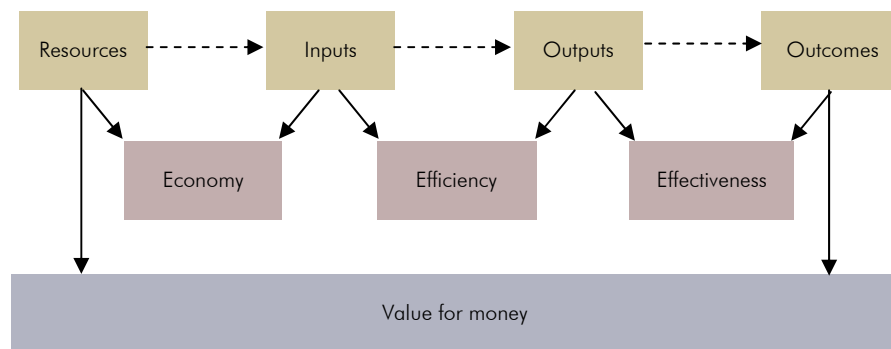


Figure 3: Components of Value for Money

The starting point of any project or intervention is a clear definition of its intended objectives. The objectives of East Reef are:

- To create a landmark that will be identified with the East of England
- The regeneration of Jaywick as a high quality place to work, live and visit

These objectives are linked to a series of planned 'outcomes' or benefits, as follows:

- Attracting residents, investors and visitors to the Region, particularly to Jaywick, which in turn will lead to;
- Improved economic performance, which in turn will lead to;
- Regeneration of the local area, greater prosperity and social equity.

Regeneration projects typically take a while to deliver planned benefits, so it is useful to specify 'outputs' as intermediate steps along the way. Outputs are the immediate things provided by the project: these are necessary but not sufficient for the delivery of desired outcomes. The outputs of landmark projects, such as East Reef, can have a catalytic effect on the regeneration of the surrounding area.

The outputs of East Reef can be expressed in terms of critical success factors, such as:

- Signal appropriate message
- Visible
- Distinctive
- Memorable
- Accessible

'Inputs' are the sum of all resources and activities involved in the intervention or project, which is to design, build and operate East Reef. 'Resources' are the financial resources required for the project over its life. 'Value for money' is a ratio of costs and benefits that indicates how worthwhile the project is to its intended beneficiaries and how effectively the project uses available resources to meet its planned objectives.

An analysis of East Reef using the model illustrated in Figure 3 follows:

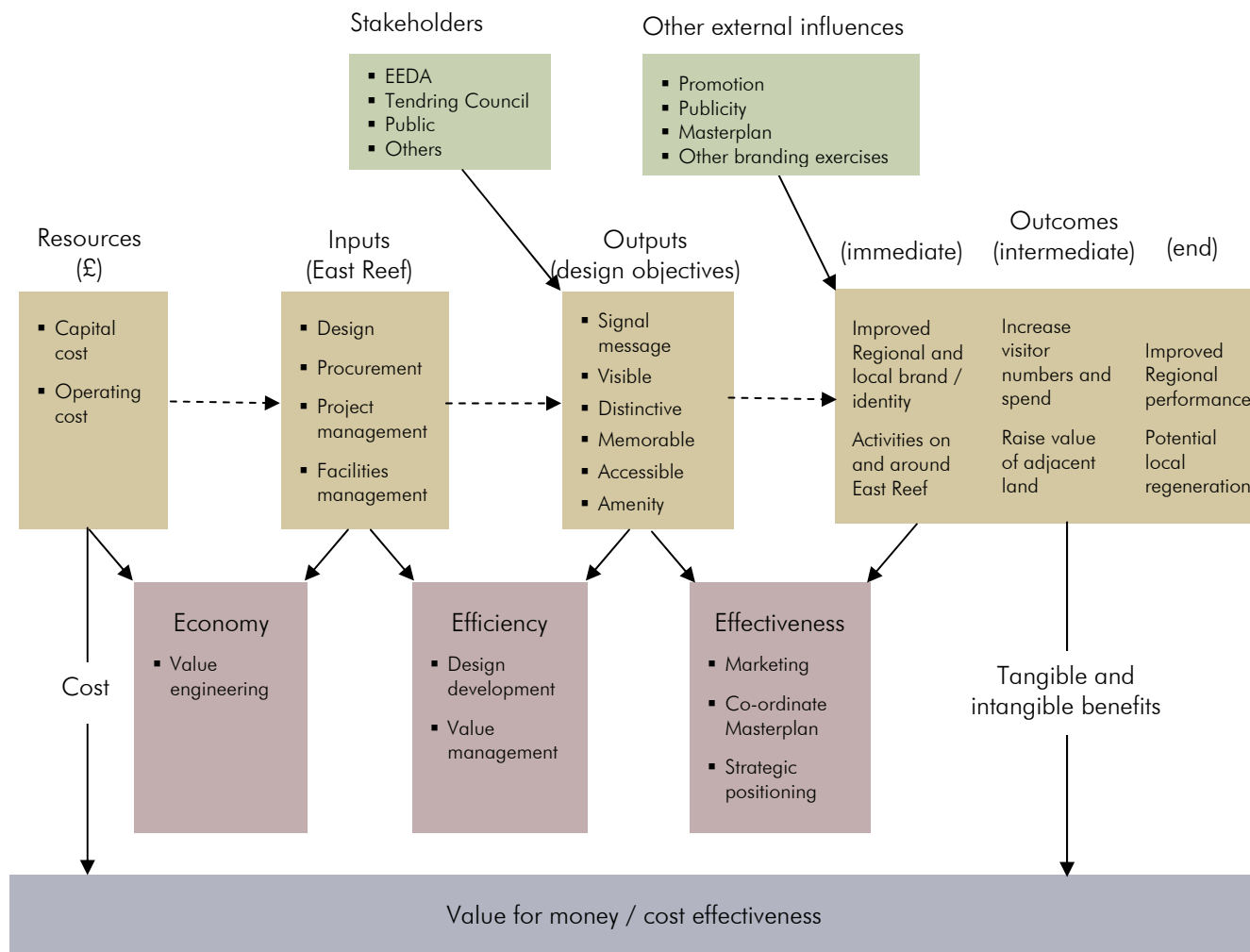


Figure 4: Economic analysis of East Reef showing components of Value for Money

## AFFORDABILITY – THE FINANCIAL CASE

This section provides a high level indication of the cost of the project and compares the proposed expenditure to the available budget and existing commitments so as to assess the project's affordability.

## FINANCIAL OPTIONS FOR EEDA

The financial options available to EEDA are:

- Option 1: the public sector pays £12,430,000 in Year 0 for the capital cost of the development and £40,000 indexed at 2.5% per year in subsequent years for 30 years, which is a present cost of £13,466,000
- Option 2: a private sector developer pays for the entire development
- Option 3: the public sector pays a private developer a unitary charge or rent of £1,425,871 each year indexed at 2.5% per year for 30 years, which is a present cost of £37,059,000
- Option 4: EEDA supports the project in a mainly non-financial way and assists the project team to raise funds in the form of grants, sponsorship or donations.

These options are summarised in Table 2 below:

ID	Option	Net present cost for EEDA
1	Option 1 – Public Sector promenade only	£13,466,000
2	Option 2 – Private Sector Promenade, lido and dive centre	Nil
3	Option 3 - PPP Promenade only	£37,059,000
4	Option 4 – grant aid, donors and sponsors Promenade only	Estimate £150,000 approximately

Table 2: FINANCIAL OPTIONS FOR EEDA

### Conclusion

Option 2 in its current form is not viable for a private developer so that Option 4 appears to be the most affordable option for EEDA.

## SOURCE OF FUNDS

If Option 4 is selected, it will be necessary to find further sources of funding to complete the project.

Additional funding might be obtained from the following sources:

- Central Government  
The Department for Culture, Media and Sport should be consulted
- EEDA  
Funds might be available for further feasibility work
- Tendring District Council  
Funds allocated for the redevelopment of Jaywick might be available. If the promenade and lido are to be used as a free public amenity it would be sensible to approach the Local Authority with a request to pay for the maintenance and operation of the facility.
- European grants  
The European Regional Development Fund provides grants for projects in areas suffering economic decline
- Lottery funds  
Heritage Lottery Funds are the important source of funding for regeneration projects involving heritage buildings and structures
- Charitable organisations  
Grant-making trusts distribute over £1 billion a year to good causes, many of which include regeneration projects.
- Section 106 Agreements  
The use of Section 106 Agreements to secure benefits to the local community is an established practice. Linking planning consents to the provision of facilities on the same site or close by can ensure that economic value from the new development is distributed and helps to promote regeneration of the local area.
- Private sponsors  
Sponsorship might be available from local businesses

There are many sources of funding for projects such as East Reef, and the situation changes rapidly. It is recommended that further feasibility work includes a more detailed appraisal of grants, awards, trusts, charities and other funding sources – this work would be best undertaken by a specialist funding consultant.

## PROCUREMENT – THE COMMERCIAL CASE

This section identifies and appraises the range of procurement strategies capable of delivering the project, including an appraisal of potential funding mechanisms and contract strategies.

## PROCUREMENT ROUTES AND CONTRACT STRATEGIES

The procurement route delivers the procurement strategy. Since April 2000, government policy has been that projects should be procured by one of three recommended procurement routes, which are:

- PFI
- Prime Contracting
- Design and Build

Government advice is that traditional procurement routes, where the design and construction are provided separately, should only be used where it can be demonstrated that this approach will provide better value for money than the preferred integrated procurement routes listed above.

The recommended procurement options are not suitable for this project for the following reasons:

- The capital cost of East Reef is less than the recommended threshold for a PFI project of £20m
- PFI projects are designed to purchase a stream of services rather than capital assets. In this case, it is not clear what services might be provided and how a rent could be applied to these services so as to attract a private developer.
- Prime contracting is based on managing supply chains through the replacement of single project relationships with long-term, multiple project relationships and the establishment of continuous improvement targets. This project is a unique landmark project that will, by definition, not be repeated.
- Design and build involves a single contractor with sole responsibility to a client for the design, management and delivery of the project on time, within budget and in accordance with a pre-defined output specification. This route is not suitable where the quality of the design is crucial, as with East Reef.

Ruling out the recommended procurement routes leaves the following options:

- A variation of the design-build route, such as develop design and build could be used provided the contractor was carefully selected. In this case it is recommended that the design team prepare production information at least to RIBA works stage D.
- A traditional route. In this case, government requirement for an integrated project team would be best achieved using a management fee type of contract, where the construction and facilities management issues could be resolved by the design team at the earliest possible stage of the design process.



## THE PROJECT MANAGEMENT CASE

This section sets out the overall management issues and principal actions which must be undertaken to support the delivery of the project's intended outcomes or benefits.

## CRITICAL SUCCESS FACTORS

Comparison of the project's status against OGC's critical success factors is a useful way to determine the achievability of the project, as indicated in the table below.

The business case for East Reef is currently at the stage of Initial Assessment, and it is clear that further development of the business case is necessary to satisfy OGC's criteria for Gateway 0.

ID	Critical success factor	Current status
1	Leadership and commitment from the project's Senior Responsible Owner	PARTIAL
2	Involvement of key stakeholders throughout the project	PARTIAL
3	Roles and responsibilities clearly understood by everyone involved in the project, with clear communication lines	YES
4	An integrated project team consisting of client, designers, contractors and specialist suppliers, with input from facilities managers / operators	PARTIAL
5	An integrated process in which design, construction, operation and maintenance are considered as a whole	PARTIAL
6	Design that takes account of functionality, appropriate build quality and impact on the environment	YES
7	Commitment to excellence in health and safety performance	YES
8	Procurement and contract strategies that ensure the provision of an integrated project team	N/A
9	Risk and value management that involves the entire project team, actively managed throughout the project	N/A
10	Award of contract on the basis of best value for money over the whole life of the facility, not lowest price	N/A
11	Commitment to best practice in environmental sustainability	YES

Table 3: OGC Critical Success Factors

## RISK ANALYSIS

ID	Risk	Impact	Probability	Recommended actions to mitigate risk
1	Political EEDA withdraws commitment to creating a common East of England brand and a landmark project	HIGH	LOW	<ul style="list-style-type: none"> <li>prepare a high level strategy statement that positions East Reef in the context of EEDA's current priorities and commitments</li> </ul>
2	Economic Failure to attract sufficient money to pay for the design, construction and operation of the project	HIGH	HIGH	<ul style="list-style-type: none"> <li>carry out value engineering to reduce the cost of the project</li> <li>engage a funding consultant</li> <li>conduct a marketing campaign / series of road shows</li> </ul>
3	Social Project does not deliver desired social objectives	HIGH	LOW	<ul style="list-style-type: none"> <li>carry out a public consultation exercise</li> <li>ensure local interest are represented at a high level in any future type of local strategic partnership</li> </ul>
4	Technical Failure to find an appropriate design solution within the budget	HIGH	LOW	<ul style="list-style-type: none"> <li>carry out detailed design development</li> </ul>
5	Environmental Adverse impact on maritime environment	HIGH	LOW	<ul style="list-style-type: none"> <li>carry out BREEAM assessment</li> </ul>
6	Legal Failure to reach agreement with relevant landowners	HIGH	MEDIUM	<ul style="list-style-type: none"> <li>co-ordinate East Reef project with the impending Jaywick development master plan</li> </ul>

Table 4: Risk Analysis

## OGC GATEWAY 0: STRATEGIC ASSESSMENT

OGC Gateway 0 is applied at the start up stage of a project and is repeated at critical points. The project's Business Case is assessed during Gateway 0 using the criteria shown in the table below. Below each criterion in this table is a summarised assessment of the status of East Reef and recommend actions that would enable the project to meet the requirements of Gateway 0.

Note that East Reef currently does not have a developed Business Case. For this reason, it would be premature to apply the Gateway process to East Reef. However, the purpose of the table below is to indicate what actions are needed to develop the Initial Assessment into a more detailed Business Case – Strategic Outline Case - that could be used to inform a future decision whether to invest in the project.

### ID Project Business Case - areas to probe

- 1 Is there a clear understanding of the outcomes needed from the project and are they soundly based?  
*PARTIAL - The objectives of the Landmark East project should be restated by EEDA in terms of its current Regional Economic Strategy and Corporate Plans*
- 2 Does the project demonstrate a clear link with wider government objectives?  
*PARTIAL - East Reef should be considered in the context of the impending masterplan exercise for Jaywick*
- 3 Is there an understanding of the scope of the project?  
*PARTIAL - The design for East Reef has evolved since it was selected as a winning entry - its current scope should be verified by EEDA*
- 4 What will constitute success?  
*Refer item 1*
- 5 Who are the stakeholders and are they supportive?  
*UNCERTAIN - A public consultation exercise for East Reef should be take place to gauge public support for the project*
- 6 Is the project affordable?  
*NO - There are no funds currently allocated for implementing the project*
- 7 What are the additional factors that could affect success?  
*East Reef should be included as part of a wider programme for putting the East of England on the map, taking into account a marketing campaign for the project and other branding exercises.*
- 8 Have project controls been determined, especially where constituent projects will be 'joined up' with other organisations?  
*NO - It will be necessary to establish an organisational body to take the project forward and to maintain East Reef during its economic life.*

Table 5: OGC Gateway 0 Strategic Assessment – Project Business Case

## APPENDIX A - DEVELOPMENT COSTS

## COSTS – PROMENADE

The estimated capital cost of the promenade is set out in Table A1:

ID	Item	Cost (£,000)
PROMENADE		
1	Construction costs (including contingency)	10,200
2	Professional fees – 15%	1,530
3	Legal fees – 1%	102
4	Surveys	75
5	Finance – 3.5% x 50% x 2 years x total	417
6	Development contingency - 5%	106
TOTAL		12,430

Table A1: Promenade capital costs

Table 1 excludes the following items:

- VAT
- Sunk costs
- Land and acquisition costs
- Car parking
- Further feasibility studies / business case development
- Any government taxes, charges or fees
- Any insurance policies
- Public consultation / marketing
- EEDA project management
- Decommissioning costs

Estimated annual operating costs of the promenade and lido are set out in Table A2:

ID	Item	Cost p.a. (£,000)
PROMENADE AND LIDO		
1	Inspection / maintenance	3
2	Payroll	15
3	Insurance	15
4	Contingency – 20%	7
TOTAL		40

Table A2: Operating costs

## COSTS – PROMENADE AND LIDO

The estimated capital cost of the promenade and lido is set out in Table A3:

ID	Item	Cost (£,000)
PROMENADE AND LIDO		
1	Construction costs (including contingency)	13,400
2	Professional fees – 15%	2,010
3	Legal fees – 1%	134
4	Surveys	100
5	Finance – 3.5% x 50% x 2 years x total	548
6	Development contingency - 5%	140
	TOTAL	16,332

Table A3: Promenade and lido capital costs

Table A3 excludes the following items:

- VAT
- Sunk costs
- Land and acquisition costs
- Car parking
- Further feasibility studies / business case development
- Any government taxes, charges or fees
- Any insurance policies
- Public consultation / marketing
- EEDA project management
- Decommissioning costs

Estimated annual operating costs of the promenade and lido are set out in Table A4:

ID	Item	Cost p.a. (£,000)
PROMENADE AND LIDO		
1	Inspection / maintenance	5
2	Payroll	45
3	Insurance	25
4	Contingency – 20%	15
	TOTAL	90

Table A4: Operating costs

## COSTS – DIVE CENTRE

The estimated capital cost of the dive centre is set out in Table A5:

ID	Item	Cost (£,000)
DIVE CENTRE		
1	Construction costs (including contingency)	10,400
2	Professional fees – 15%	1,560
3	Legal and project management fees – 2.5%	260
4	Planning / building control fees – 1%	104
5	Surveys	25
6	Land / acquisition fees / stamp duty - estimate	1,500
7	Finance – 8% x 50% x 2 years x total	1,108
8	Development contingency – 5%	228
TOTAL		15,185

Table A5: Dive centre capital costs

Table A5 excludes the following items:

- Further feasibility studies / business case development
- VAT
- Any insurance policies
- Diversion of any existing services
- Marketing / letting / promotion

The estimated annual operating costs of the dive centre are set out in Table A6 below:

ID	Item	Cost p.a. (£,000)
DIVE CENTRE		
1	Specialist operating costs – best case estimate by Aquality	450
2	Plant / building maintenance	150
3	Energy	60
4	Staff catering	50
5	Cleaning	12
6	Insurance	25
7	Security	50
8	Contingency – 10%	80
TOTAL		877

Table A6: Operating costs



## APPENDIX B - DCF STATEMENTS

# EAST REEF - DISCOUNTED CASH FLOW PROJECTION

## PROMENADE

Inflation rate	2.50%																														
Discount rate	3.50%																														
OPEX	-40,000 p.a.																														
Revenue	0.00 p.a.																														
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Index for inflation	1.0000	1.0250	1.0506	1.0769	1.1038	1.1314	1.1597	1.1887	1.2184	1.2489	1.2801	1.3121	1.3449	1.3785	1.4130	1.4483	1.4845	1.5216	1.5597	1.5987	1.6386	1.6796	1.7216	1.7646	1.8087	1.8539	1.9003	1.9478	1.9965	2.0464	2.0976
CAPEX	-12,430,000																														
OPEX	0	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000
Indexed OPEX	0	-41,000	-42,025	-43,076	-44,153	-45,256	-46,388	-47,547	-48,736	-49,955	-51,203	-52,483	-53,796	-55,140	-56,519	-57,932	-59,380	-60,865	-62,386	-63,946	-65,545	-67,183	-68,863	-70,584	-72,349	-74,158	-76,012	-77,912	-79,860	-81,856	-83,903
Total indexed OPEX + CAPEX	-12,430,000	-41,000	-42,025	-43,076	-44,153	-45,256	-46,388	-47,547	-48,736	-49,955	-51,203	-52,483	-53,796	-55,140	-56,519	-57,932	-59,380	-60,865	-62,386	-63,946	-65,545	-67,183	-68,863	-70,584	-72,349	-74,158	-76,012	-77,912	-79,860	-81,856	-83,903
Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indexed revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OPEX + CAPEX + revenue	-12,430,000	-41,000	-42,025	-43,076	-44,153	-45,256	-46,388	-47,547	-48,736	-49,955	-51,203	-52,483	-53,796	-55,140	-56,519	-57,932	-59,380	-60,865	-62,386	-63,946	-65,545	-67,183	-68,863	-70,584	-72,349	-74,158	-76,012	-77,912	-79,860	-81,856	-83,903
Discount rate	1.0000	0.9662	0.9335	0.9019	0.8714	0.8420	0.8135	0.7860	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969	0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.4380	0.4231	0.4088	0.3950	0.3817	0.3687	0.3563
Discounted total	-12,430,000	-39,614	-39,231	-38,852	-38,476	-38,105	-37,736	-37,372	-37,011	-36,653	-36,299	-35,948	-35,601	-35,257	-34,916	-34,579	-34,245	-33,914	-33,586	-33,262	-32,941	-32,622	-32,307	-31,995	-31,686	-31,380	-31,076	-30,776	-30,479	-30,184	-29,893
NPV	-13,465,996																														

## PROMENADE

Inflation rate	2.50%																														
Discount rate	3.50%																														
OPEX	-40,000 p.a.																														
Revenue	500,596.50 p.a.																														
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Index for inflation	1.0000	1.0250	1.0506	1.0769	1.1038	1.1314	1.1597	1.1887	1.2184	1.2489	1.2801	1.3121	1.3449	1.3785	1.4130	1.4483	1.4845	1.5216	1.5597	1.5987	1.6386	1.6796	1.7216	1.7646	1.8087	1.8539	1.9003	1.9478	1.9965	2.0464	2.0976
CAPEX	-12,430,000																														
OPEX	0	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000	-40,000
Indexed OPEX	0	-41,000	-42,025	-43,076	-44,153	-45,256	-46,388	-47,547	-48,736	-49,955	-51,203	-52,483	-53,796	-55,140	-56,519	-57,932	-59,380	-60,865	-62,386	-63,946	-65,545	-67,183	-68,863	-70,584	-72,349	-74,158	-76,012	-77,912	-79,860	-81,856	-83,903
Total indexed OPEX + CAPEX	-12,430,000	-41,000	-42,025	-43,076	-44,153	-45,256	-46,388	-47,547	-48,736	-49,955	-51,203	-52,483	-53,796	-55,140	-56,519	-57,932	-59,380	-60,865	-62,386	-63,946	-65,545	-67,183	-68,863	-70,584	-72,349	-74,158	-76,012	-77,912	-79,860	-81,856	-83,903
Revenue	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597	500,597
Indexed revenue	500,597	513,111	525,939	539,088	552,565	566,379	580,538	595,052	609,928	625,176	640,806	656,826	673,247	690,078	707,330	725,013	743,138	761,717	780,760	800,279	820,286	840,793	861,813	883,358	905,442	928,078	951,280	975,062	999,438	1,024,424	1,050,035
Total OPEX + CAPEX + revenue	-11,929,404	472,111	483,914	496,012	508,412	521,123	534,151	547,504	561,192	575,222	589,602	604,343	619,451	634,937	650,811	667,081	683,758	700,852	718,373	736,333	754,741	773,610	792,950	812,774	833,093	853,920	875,268	897,150	919,579	942,568	966,132
Discount rate	1.0000	0.9662	0.9335	0.9019	0.8714	0.8420	0.8135	0.7860	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969	0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.4380	0.4231	0.4088	0.3950	0.3817	0.3687	0.3563
Discounted total	-11,929,404	456,146	451,739	447,374	443,052	438,771	434,532	430,334	426,176	422,058	417,980	413,942	409,942	405,982	402,059	398,174	394,327	390,517	386,744	383,008	379,307	375,642	372,013	368,419	364,859	361,334	357,843	354,385	350,961	347,570	344,212
NPV	0																														

Table B1: Promenade

# EAST REEF - DISCOUNTED CASH FLOW PROJECTION

## DIVE CENTRE

Inflation rate	2.50%																														
Discount rate	15.00%																														
OPEX	-£877,000 p.a.																														
Revenue	£2,400,000 p.a.																														
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Index for inflation	1.0000	1.0250	1.0506	1.0769	1.1038	1.1314	1.1597	1.1887	1.2184	1.2489	1.2801	1.3121	1.3449	1.3785	1.4130	1.4483	1.4845	1.5216	1.5597	1.5987	1.6386	1.6796	1.7216	1.7646	1.8087	1.8539	1.9003	1.9478	1.9965	2.0464	2.0976
CAPEX	-15,185,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPEX	0	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000	-877,000
Indexed OPEX	0	-898,925	-921,398	-944,433	-968,044	-992,245	-1,017,051	-1,042,477	-1,068,539	-1,095,253	-1,122,634	-1,150,700	-1,179,467	-1,208,954	-1,239,178	-1,270,157	-1,301,911	-1,334,459	-1,367,821	-1,402,016	-1,437,067	-1,472,993	-1,509,818	-1,547,564	-1,586,253	-1,625,909	-1,666,557	-1,708,221	-1,750,926	-1,794,699	-1,839,567
Total indexed OPEX + CAPEX	-15,185,000	-898,925	-921,398	-944,433	-968,044	-992,245	-1,017,051	-1,042,477	-1,068,539	-1,095,253	-1,122,634	-1,150,700	-1,179,467	-1,208,954	-1,239,178	-1,270,157	-1,301,911	-1,334,459	-1,367,821	-1,402,016	-1,437,067	-1,472,993	-1,509,818	-1,547,564	-1,586,253	-1,625,909	-1,666,557	-1,708,221	-1,750,926	-1,794,699	-1,839,567
Revenue	0	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Indexed revenue	0	2,460,000	2,521,500	2,584,538	2,649,151	2,715,380	2,783,264	2,852,846	2,924,167	2,997,271	3,072,203	3,149,008	3,227,733	3,308,427	3,391,137	3,475,916	3,562,813	3,651,884	3,743,181	3,836,760	3,932,679	4,030,996	4,131,771	4,235,066	4,340,942	4,449,466	4,560,702	4,674,720	4,791,588	4,911,378	5,034,162
Total OPEX + CAPEX + revenue	-15,185,000	1,561,075	1,600,102	1,640,104	1,681,107	1,723,135	1,766,213	1,810,368	1,855,628	1,902,018	1,949,569	1,998,308	2,048,266	2,099,472	2,151,959	2,205,758	2,260,902	2,317,425	2,375,360	2,434,744	2,495,613	2,558,003	2,621,953	2,687,502	2,754,690	2,823,557	2,894,146	2,966,499	3,040,662	3,116,678	3,194,595
Discount rate	1.0000	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229	0.1069	0.0929	0.0808	0.0703	0.0611	0.0531	0.0462	0.0402	0.0349	0.0304	0.0264	0.0230	0.0200	0.0174	0.0151
Discounted total	-15,185,000	1,357,457	1,209,907	1,078,395	961,178	856,702	763,583	680,585	606,608	540,672	481,904	429,523	382,836	341,223	304,133	271,076	241,611	215,349	191,941	171,078	152,483	135,908	121,136	107,969	96,233	85,773	76,450	68,140	60,734	54,132	48,248
NPV	-3,092,035																														

## PROMENADE AND LIDO

Inflation rate	2.50%																														
Discount rate	15.00%																														
OPEX	-90,000 p.a.																														
Revenue	0.00 p.a.																														
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Index for inflation	1.0000	1.0250	1.0506	1.0769	1.1038	1.1314	1.1597	1.1887	1.2184	1.2489	1.2801	1.3121	1.3449	1.3785	1.4130	1.4483	1.4845	1.5216	1.5597	1.5987	1.6386	1.6796	1.7216	1.7646	1.8087	1.8539	1.9003	1.9478	1.9965	2.0464	2.0976
CAPEX	-16,332,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPEX	0	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000	-90,000
Indexed OPEX	0	-92,250	-94,556	-96,920	-99,343	-101,827	-104,372	-106,982	-109,656	-112,398	-115,208	-118,088	-121,040	-124,066	-127,168	-130,347	-133,606	-136,946	-140,369	-143,879	-147,475	-151,162	-154,941	-158,815	-162,785	-166,855	-171,026	-175,302	-179,685	-184,177	-188,781
Total indexed OPEX + CAPEX	-16,332,000	-92,250	-94,556	-96,920	-99,343	-101,827	-104,372	-106,982	-109,656	-112,398	-115,208	-118,088	-121,040	-124,066	-127,168	-130,347	-133,606	-136,946	-140,369	-143,879	-147,475	-151,162	-154,941	-158,815	-162,785	-166,855	-171,026	-175,302	-179,685	-184,177	-188,781
Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indexed revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OPEX + CAPEX + revenue	-16,332,000	-92,250	-94,556	-96,920	-99,343	-101,827	-104,372	-106,982	-109,656	-112,398	-115,208	-118,088	-121,040	-124,066	-127,168	-130,347	-133,606	-136,946	-140,369	-143,879	-147,475	-151,162	-154,941	-158,815	-162,785	-166,855	-171,026	-175,302	-179,685	-184,177	-188,781
Discount rate	1.0000	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229	0.1069	0.0929	0.0808	0.0703	0.0611	0.0531	0.0462	0.0402	0.0349	0.0304	0.0264	0.0230	0.0200	0.0174	0.0151
Discounted total	-16,332,000	-80,217	-71,498	-63,727	-56,800	-50,626	-45,123	-40,218	-35,847	-31,950	-28,478	-25,382	-22,623	-20,164	-17,972	-16,019	-14,278	-12,726	-11,343	-10,110	-9,011	-8,031	-7,158	-6,380	-5,687	-5,069	-4,518	-4,027	-3,589	-3,199	-2,851
NPV	-17,046,620																														

Table B2: Dive Centre, Promenade and Lido