1 Introduction

1.1 Overview

Plymouth City Council have commissioned consultation Llewelyn-Davies, in association with transport firms SIAS and Scott Wilson, and property advisors King Sturge, to carry out a Framework Study for one of the key gateways to the City of Plymouth.

The Eastern Gateway area is a key element of the regeneration initiatives in the city. The Planning and Transport department has identified the need for a framework plan to illustrate how the area could be developed. The study area stretches form Marsh Mills, along Embankment Road to Heles Terrace/Laira Bridge. A key issue is that a complex road and rail network passes through the area, severing access to some residential communities and potential development sites.

The overriding aim of the Study is:

“To identify and evaluate integrated solutions to transport, development and environmental issues within the Study area, having regard to the impacts of development and other proposals planned to take place outside of the Study area; and from this to identify deliverable short, medium and long -term proposals.” (PCC Brief)

In line with this aim, the Council have set out a number of key objectives for the Development Framework:

- To gain the fullest understanding of the existing and future issues affecting the Study area.

- To identify potential transport solutions or combinations of solutions to enable future travel demand from developments within and impacting the Study area to be met, within the context of the need for a high quality built and natural environment.

- To identify a strategic framework which accommodates the transport solutions and sets a framework for new development and environmental improvements throughout the Study area.

- To identify short, medium and long-term proposals which are deliverable, viable and sustainable.
• To produce a robust appraisal system by which the framework options and short, medium and long-term options are tested, and from this to make recommendations on preferred proposals.

This study is being carried out alongside the Plymouth SRB Gateway Project (see following chapter for more details). The SRB Scoping Report is contained in Appendix 3 and is referred to throughout this document.

This paper represents the Stage 1 Issues Report for the Plymouth Eastern Gateway Project, effectively the first task set out above. It looks at the current baseline positions in terms of transport, urban design, planning, regeneration initiatives, development opportunities and market analysis. This is followed a short outline of Initial Concepts, which will be developed further in Stage 2 Options.
2 Area appreciation and audit

2.1 Introduction
This chapter looks at the study area in terms of current background policy framework, area context, character, current uses, development opportunities and movement framework. It sets out the current issues and looks in detail at the study area, drawing out key strengths, opportunities and threats to future redevelopment.

2.2 Planning Background

Regional Planning Guidance 10 (RPG) provides the framework for local authority land use plans and local transport plans up to 2016. It contains policies on housing, transport, economic development, environment, minerals and waste. Key objectives of the RPG include:

- Safeguarding and enhancing the quality and diversity of the natural, cultural and built environment, while giving the highest level of protection to designated areas and feature of national and international importance;
- Providing integrated, efficient and environmentally appropriate transport and communications systems to meet local, regional and international priorities;
- Ensuring that development makes the most prudent use of resources and that it contributes to new infrastructure provision in partnership with public investment;
- Ensuring at all levels of planning integrated relationships between economic activity and housing; and
- Improving accessibility to jobs and services and ensuring that patterns of future development reduce the need to travel and encourages access by walking, cycling and public transport.

The Devon Structure Plan provides policies to guide and encourage future development in Devon. The Deposit Draft of the Structure Plan was published on 4th July 2002. Changes to the Deposit Draft policies and proposals were published 30 January 2003.

There are a number of policies which are relevant to the Gateway study area:
Policy ST6 sets out policies for the Plymouth Area of Economic Activity (AEA) where priority should be given to:

- Developing and diversifying the economic by offering a range of investment opportunities (including a choice of large scale development sites)
- Providing for additional housing necessary to meet area's own needs and support its regional economic role
- Improving road, rail and public transport networks

In doing so, the Plymouth Principal Urban Area should:

- Act as the primary focus for economic investment and regeneration
- Enhance its role as the main commercial centre within the Western Sub-region
- Provide a wide range of regional serves and specialist facilities necessary to meet the needs of its extensive hinterland
- Enhance its role as a major focus for strategic transport routes

Ivybridge should meet its own needs, enhancing self-sufficiency and maintain its separate identity, while contributing towards meeting the wide needs of the AEA.

Proposal ST8 states that in the period 2001-2016, the new community within South Hams District should include provision for at least 3,500 dwellings together with a range of community and other associated facilities. In particular the new community should be linked to Plymouth, in the first phases of its development, by an effective high capacity public transport system. The Plan gives further detailed guidance on the concepts and characteristics of new community development.

Proposal ST19 sets out Strategic Development Sites which should be of a sufficient scale to accommodate major economic development proposals. In the period 2001-2016 Strategic development sites at Plymouth International Business Park and Langage, South Hams should be identified.

Plymouth also provides a strategic location for a freight/transport multi-modal terminal as part of a European-wide combined transport network.

The City of Plymouth Local Plan 1995-2011 First Deposit version December 2001 identifies policies and proposals for the use, development and protection of land in Plymouth. All of the objectives within the plan need to be considered in this study. However, of particular relevance is Objective 2 which sets out the Plan's commitment to optimise the economic benefits Plymouth derives from its location, environmental quality and heritage, and support the provision of facilities for visitors to the city at gateway locations and along major transport routes.
The plan includes guidance on development in Area Visions and Strategies for Strategic Opportunity Areas - where the City Council and partners aim to focus urban regeneration and management strategies, because of the opportunity the areas provide. The East End is one such area of focus, and includes some parts of the study area. The Local Plan seeks to promote residential and commercial led regeneration in the East End. It is hoped that Site 17 in the East End Strategic Opportunity Area, the Former Bus depot at Laira Bridge Road, will be developed for mixed use or commercial development - there is currently an outstanding permission for non-food retail, but other uses will be accepted in principle. This area is also shown to be at risk from flooding.

Other Local Plan designations in the study area include:

- The area to the north of the former bus depot, currently Blagdon’s boat yard, for marine employment. The site is also shown to be at risk from floods;
- Tavistock Junction Freight Yard, Marsh Mills (ref 93) where the Plan proposes a road to rail freight interchange;
- A number of scattered Designated Greenscape Areas are located within the study area, one of the most important being the Prince Rock Playing Field (ref 329), which is of District-wide importance for sport and recreation and a local informal amenity;
- The River Plym is designated as a Greenscape area incorporating a water body. It is of city-wide importance in terms of visual amenity and separation buffer, and national importance recreation (formal and informal) habitat and species, and as an access corridor.

On the eastern bank of the River Plym:

- Wakeham’s Quarry and Breakwater Works, Oreston, Sites (101 and 102) are proposed for employment including marine-related employment;
- Plymstock Quarry (site 103) is designated for Mixed Use development where uses including community, cultural, health, education, leisure, transport and employment will be permitted subject to criteria including neighbouring land uses. Potentially up to 1,500 dwellings;
- Chelston Meadow (109) is a designated waste management site and receives inert construction and demolition waste;
- The Saltram Estate (193) of national importance in terms of its historical and cultural heritage and countryside/food growing. It is of regional importance as an informal recreation space, city-wide importance in terms of visual amenity and acts as a separation buffer.

In terms of transport, specific policies which relate to the study area include:

- A Park and Ride site in the Plymstock area along the A379 corridor to help promote more sustainable travel patterns;
• The development of a Light Rapid Transit system linking strategic locations within Plymouth and South Hams, linking the new community with Plymouth.

The East End Regeneration Strategy and Masterplan, Consultation Draft was prepared in September 2002 by Urban Practitioners for the South West England regional Development Agency (SWERDA), Plymouth City Council (PCC) and the East End Partnership.

The East End study area is a mixed use area in close proximity to the city centre, on the edge of Sutton Harbour and includes the residential communities of Cattedown, Coxside and Prince Rock (including Lower St Judes) with a residential population in excess of 5,000.

In terms of traffic management, further investigation and evaluation of options including the East End Traffic model, Heles terrace, Embankment Road serving residential and public transport use and the potential for Light Rapid Transit.

With regard to community developing and encouraging vibrant communities, initiatives include the development a state-of-the-art community facility, a community garden, capacity building in community groups, introduce integrated estate management and street improvements.

This Eastern Gateway study is committed to incorporating some of the ideas and recommendations within the East End Study, which impinge upon the Gateway Area.

One specific recommendation is the Community Village planned for Cattedown Road. (Local Plan proposal 23). This development is consists of four elements:
1. The relocation of the Nomany Family Centre – a National Children’s Home for vulnerable children
2. The relocation of a GP surgery
3. A new community and youth centre
4. 30 sheltered housing units

The development is to be funded by SRB6, Centre Of Excellence Funds and NCH finance and outline planning permission for the first phase (Nomany Family Centre) has been submitted.

Other relevant proposals include:
• Tothill sidings (Local Plan proposal 24) allocation for coach parking and Safeguarded for potential LRT, and cycleway
• Land at Barbican Approach, Gdynia Way, St Johns Road (Local Plan proposal 21) for mixed use
• Penrose Yard (Local Plan proposal 22) for mixed use development including residential (16 dwellings)
• Brentor Road (Local Plan proposal 25) for residential development (60 dwellings)
• Stenlake Terrace (Local Plan proposal 26) for residential development (12 dwellings)
• Cattedown Road (Local Plan proposal 27) for residential development (45 dwellings)
• Western Power, Eliot Road (Local Plan proposal 28) for residential development (110 dwellings)

The Plymouth SRB Gateway Project is being carried out concurrently with this study, with a comparable study area. Key objectives for the project are:

• To provide a unique opportunity to raise the profile of Plymouth as an important international city of culture;
• To remove unsightly features along the route and replace, through innovative design, good quality landscaping, public art and other associated features;
• To create a sense of pride for local people;
• To enhance the awareness of the beauty of the natural environment thorough the enhancement of the vistas across the Plym, including the Saltram Estate;
• To provide a gateway that is cost effective and sustainable both in financial and resources procurement;
• To ensure that the project engages all sectors of the community, including public, private and voluntary sectors;
• To improve job opportunities in the area through construction jobs and inward investment opportunities.

The initial Scoping Study for the SRB project is reproduced in full in Appendix 3. Much of the text and accompanying diagrams is relevant to this Eastern Gateway project. Where applicable, reference to the SRB Scoping Report has been made, and in some instances text is reproduced in the main part of this document.

The Plymouth 2020 Partnership is the Local Strategic Partnership (LSP) for Plymouth City and brings together four different sectors - public, private, voluntary and community. Its mission is to:

1. Lead the City in proposing a distinctive long-term vision and strategy that the public and other stakeholders can help shape and commit towards achieving.

2. Validate newly proposed initiatives, programmes and investments that support the achievement of the vision and initiate others where there are gaps in the provision.

3. Monitor performance against the vision and strategy recommending more effective solutions and structures where they become evident.
4. Support the effective delivery of publicly funded services.

5. Establish and maintain lines of accountability and systems of governance.

6. Communicate directly with the public and indirectly through other channels such as those made available through partner organisations.

The Partnership's Draft strategy sets out a Vision for the City and suggests ways in which the quality of life in the City can be improved in a number of key areas. It acts as a framework to enable services and investment to be delivered in a more responsive, better co-ordinated and sustainable way.

The aspirations and visions of the Draft Strategy need to be incorporated into the Gateway Vision Study.

2.3 Study area appreciation

2.3.1 Context
The study area is to the east of the city centre abutting the River Plym. It focuses on the key routes into the city from the east from the A38 expressway which links Plymouth to the motorway network at Exeter. It specifically looks at the A38 at Marsh Mills and the A374 from Marsh Mills and the A379 from the east into the city as far as Heles Terrace/Laira Bridge.

The study area includes a number of rail lines including the London Paddington to Penzance line, Virgin Trains cross country route to major cities in the Midlands, the North of England and Scotland. In addition, freight lines to Laira Goods Yard and south into Cattedown run through the study area.

It incorporates potential development sites such as the former Western National bus depot, Blagdon's boatyard, Laira Embankment public open space, Heywoods Concrete Works Playing Fields and other public open space.

The area can easily be identified as a gateway to Plymouth – both the Exeter/London railway line and the approach road from the A38 lead through the gateway site. The visitor to the city centre from the east via these methods of transport will see Brunel's Railway and the Plym Estuary, both important parts of Plymouth's heritage. They will also see the unutilised development capacity of the area and it's strong ecological potential. The visitor by car journeys through sections of culverted one way routes before arriving at the city centre. The current gateway point is rather uninspiring and very close to the city centre.
The majority of the study area is within the wards of Sutton, Efford and Mount Gould. Sutton and Mount Gould in particular suffer from deprivation, compared with other wards in the city, with high levels of unemployment, crime and low car ownership. More details of the socio-economics of the area are set out in detail in Appendix 3.

The following analysis sketches show the issues germane to this study highlighting problems and opportunities extant in the gateway area.
2.3.2 Key views

The diagram shows that at first glance the area is very well connected visually – particularly with the eastern bank of the estuary and further east to Dartmoor. However, on further examination, it can be seem that there are areas of poor visual connectedness which need to be addressed. In particular, the area to the south of the peninsular feels disconnected with the city centre due to the surrounding topography and the level of permeability of this area.
2.3.3 Character Areas and Boundaries

The areas defined on the accompanying sketch analysis shows the character areas that make up this part of Plymouth. The gateway area is divided into many distinct areas - some have more in common with locations away from the study area than those within (see Cattedown and Oreston). The diagram also shows the predominant barriers and areas of severance.

The character areas have been defined by:

1. Movement barriers - as shown,
2. Topography – changes in gradient can separate areas
3. Style of buildings or building form – buildings of similar style provide linkages
4. Land use – e.g. the city centre is defined by the retail in the area

Areas are also defined by other methods. For example, the 'East End' area, and the SRB area transcend and include many character areas in this study. One of the aims of regeneration projects is to link segregated character areas.
2.3.4 Green space

This diagram highlights the relative lack of significant areas of open space in the study area, particularly towards the south in the East End. This means that the areas which do exist are more significant and should be enhanced. At present, many are isolated and difficult to reach due to the issues of severance created by road and rail lines.

More detail regarding landscape and green space issues can be found in Appendix 3.
2.3.5 Movement

This diagram shows the major high volume movement patterns through and around the gateway area, and major origins and destinations. The diagram shows a concentration of routes through the southern end of the gateway area from a variety of sources.

It is important to recognise how the routes percolate through or around the gateway area and impinge on the character areas. The concentration of routes through the area does not necessarily imply that the area is permeable, and those that know the area may feel that an alternative route into the city is more appropriate.

Much of the traffic within the study area is passing through rather than stopping and at times, on some routes, is fast flowing, which is detrimental to the area. This is exacerbated by the impact of heavy goods vehicles, which are noisy, slow-moving and polluting, and pass though the study area to get to the port.

Pedestrian routes through the area are numerous but in many cases restricted by severance created by road and rail lines. Facilities for cyclists are also limited, with the study area largely being a threatening area for cyclists.

There are recreational routes through the area for instance the South West Coast Path and the Devon Way. These are detailed in the SRB Scoping Study in Appendix 3.
2.3.6 Permeability

This diagram looks at a small area of the study area to highlight general principles of permeability by all modes, that apply area wide.

The area chosen is the Victorian housing in Cattedown and St Judes. It shows neighbouring, but isolated areas of housing cut off from surrounding communities due to the railway line, busy roads with heavy traffic (including noisy and polluting HGVs), or topography. Prince Rock school lies between these two housing areas, effectively an island in between major traffic routes. Poor permeability reduces the number of people casually passing through and using shops/services, increasing susceptibility to crime.

These areas also suffer from lack of permeability due to road closures, presumably to prevent ‘rat running’, and road building programmes, and they consequently feel isolated or ‘ghettoised’.

2.3.7 This principle applies area wide but can only be shown well at the scale shown here. Further more detailed assessment of the different character areas within the study area can be found in Chapters 10 and 12 of the SRB report (Appendix 3 of this report).
2.3.8 **Routes and Gateways**

This diagram shows various routes into and through the gateway site. Whilst it may not be a high quality gateway, the roundabout at Marsh Mills marks a primary entrance to Plymouth marked (a). The bifurcated vehicular route from the east suggests a second gateway point at the split (at (b)), and a third gateway is suggested at the point at the convergence of the routes from Plymstock and the north/A38 (at (c)).

Other gateway points and entrances are evident, such as the direct route from the north and the airport along the A386, and the route from the west along the A38. The current gateway point or the point at which one feels *in Plymouth* is St Andrew’s Cross Roundabout, where emerging from a lowered road, the city centre can be seen.
2.3.9 Area Comparison

This section compares the Gateway into Plymouth with other comparable city entrances, where positive aspects may perhaps be applied to Plymouth.

For example, the gateway to London through Chelsea can reveal a number of similarities and opportunities and in many ways, the road running passed Blagdons resembles the Chelsea Embankment as can be seen in the below sketches.

The Chelsea approach gives the visitor to London a strong feeling of arrival. The street trees along the embankment mark the route and clear views across the river allows the driver to orientate him or herself by reference to Battersea Park and PowerStation or bridges crossing the river. The impressive architectural frontage to the road brings activity to the street despite the heavy traffic.

The embankment road into Plymouth provides many but not all of the above qualities. There are clear views across the estuary to green space, although missing elements include quality frontage to Embankment Road consistently, clear views across the river and strong landmarks.
Chelsea Embankment caters for a similarly large volume of traffic to Embankment Road, but the road is engineered in such a way that does not inhibit or frighten pedestrians. The Plymouth Embankment Road could be treated to emulate this character.

Clearly whilst land values in London often prohibit direct comparisons with other cities, the most important element to note is that the Chelsea embankment is a place. One would not feel out of place promenading/sitting/picnicking on the embankment at this point. The footfall is not as high as the embankment near Westminster and the buildings fronting the river have a residential appearance, yet the place has a distinct character. It is anticipated that this can be imported to Plymouth irrespective of land values.
Birmingham has a similar approach to the city centre. Although many of the elements of the Aston Expressway should not be replicated (including the elevated roads and dominant vehicular routes), the visitor gets a great sense of arrival when driving in from the north, with views of Birmingham on top of the hill.

The route is fast (again, not necessarily an element to emulate) but (similar to Plymouth’s) short - the distance from the A38 to the centre of Plymouth is roughly 3.5-4 km whilst the similar stretch from the M6 to the centre of Birmingham is 4.5km.

The Birmingham gateway takes the driver into and through clusters of tall buildings so that the visitor is left in no doubt that they have entered the centre, and can see the city approaching from a distance. Conversely, the route into Plymouth at present is gradual and the visitor arrives in the city without being ‘prepared’ for it.

This northern area of Birmingham is largely industrial and the land values are relatively low. Whilst it the views from the vehicular route to the left or right are not inspirational, one’s eye is drawn to the city in such strong fashion that it is less noticeable. Indeed, it should be unequivocally stated that the elevated road is the cause of this blighted area not being able to improve itself. The character that Plymouth would however benefit from it the immediate impact provided in the Birmingham route.
Two entranceways over a longer distance that can inform the Plymouth gateway are those along Speke Avenue in Liverpool and the A13 route through the east of London.

Liverpool has a lovely Victorian avenue approach from the south-east – Aigburth Road. In the 1960’s this was extended outwards by a new high capacity traffic route out to Speke, then a major expansion area, now a major regeneration initiative. A key element of ‘repositioning’ Speke has been to change the character of the trunk road to a visually attractive avenue amenable to public transport use, walking, cycling and crossing. The route has quality frontage along much of its length in various styles and (since the it is 9-10km in length) comprises a number of ‘places’ and spaces between ‘places’.
The A13 corridor is similarly a route with a series of events along its path. The route is a fast-flowing carriageway from Grays in Essex into the centre of London, and until recently was channelled along over-engineered roads comprising many flyovers. Selected flyovers are being dropped to create ground level route, and a series of projects encouraging the development of “places” are planned along its length. Unlike Embankment Road in Plymouth, the road does not have the benefit of frontage of any description and so promenading or any social activity is not likely now or in the future.

The diagram below is taken from the A13 website http://www.a13artscape.org.uk
2.4 Conclusions

2.4.1 Strengths and Weaknesses

The accompanying diagrams draw from the previous analyses and attempt to highlight the main strengths and weaknesses of the gateway area and its surroundings.

The main strengths of the study area are good access and the excellent potential for capitalising on views and vistas. The topography and the relatively underdeveloped nature of the gateway provides potential for new landmarks and entrance features and allows for guided development to drastically improve the area. Projects in underused areas can become catalysts and bring additional benefits. The existing good views within the estuary provide an excellent arena for high quality development.
The current weaknesses in the gateway area are the poor connections through study area, lack of quality open space, few landmarks, lack of visual connectivity with other areas of the city and high levels of severance throughout area.

Transport-led solutions will have an important role to play in combating poor visual connectivity and regeneration.
3 Archaeological and Historic Building Review

3.1 Introduction

This report examines the archaeology and historic buildings within the corridor along the principal approach to Plymouth from the east, along Embankment Road. The area of interest extends from Laira Green to The Prince Rock area and also includes a short section of the approach from the South Hams over the Laira Bridge, along Billacombe Road where it runs beside Pomphlett Creek.

Much of the area is reclaimed land, mostly achieved during the first decade of the 19th century, although reclamation has continued at intervals into the 1970s. The southern extremity of the area rests on limestone, extensively quarried during the 19th century. The worked-out quarry floors became sites for various industries requiring waterside location and this led to the area being crossed by a dense network of railway lines, worked by three different companies.

3.2 Archaeological Summary

An Archaeological Review was carried out by Exeter Archaeology for this study, to also be included in the SRB study. This is included in full in Appendix 1. It outlines the process of reclamation which has been undertaken over the last 200 years to produce the landscape as it appears today. An outline chronological history is presented, although very little is known about the earlier archaeological periods and a list of identified sites and features has been compiled, including an overview of the Saltram Estate. The Appendix also includes a number of historical maps.

The sites identified in the initial assessment mainly reflect the industrial use of the area in the modern period, particularly quarrying and associated activities such as lime burning. The power of the tides was indeed harnessed from a relatively early period (from the 14th century at least) for the Pomphlett tide mill. Transport plays an important part in the history of the area with the development of a network of roads, bridges and railway lines bringing goods and people into Plymouth. Water transport was also very important, and the physical remains of vessels have been identified as being potentially significant. However, the only visible hulls of vessels in the River Plym lie outside the study area. Check whether this is still the case where the study area has been extended.

The inter-tidal zone, whether still present today or previously reclaimed by embanking, has the potential to preserve archaeological information; in particular waterlogged deposits can contain pollen and other plant material which can
yield information on vegetation cover and climate in past times. Although none have been recorded so far it is likely that more elements of the material culture of early man could be present in buried deposits within the area.

Limestone rocks typically contain fissures and caves that were attractive to early man. The discovery during late 19th-century quarrying of a shell pit, attributed to the Mesolithic period, is an indication of the potential, and the possibility exists that the remaining unquarried area at Prince Rock could still yield information.

3.3 Historic Buildings

In terms of historic buildings, the table below sets out all buildings of interest which have been identified in the study area, with an appraisal of their architectural, historic and urban design merits. Figure 3.1 shows the location of these buildings.

The following architectural field survey was conducted with the benefit of the listed building schedule. The buildings highlighted include all possible buildings of note in terms of urban design, and it is not intended that all buildings should be recommended for retention or are thought to be of general merit to the area. For instance it may be the case that an individual building has great historic value but if, in urban design terms it is not viewed as a positive building it is given a low grade. The Urban Design Column therefore has been highlighted as the more important column in relation to the gateway study.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Listed?</th>
<th>Era</th>
<th>Architectural merit [1-3]/reason</th>
<th>Historic Merit [1-3]/reason</th>
<th>Urban Design merit [1-3]/reason</th>
<th>Other comments</th>
<th>Strengths/Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hotel</td>
<td>N</td>
<td>Not known</td>
<td>1. The building is not particularly attractive and looks to be in a poor state of repair.</td>
<td>? This building is only considered on the basis that it may provide historic interest. This is not known and any further work in this area should investigate its historic merit.</td>
<td>2/Provides regional context and acts as a landmark.</td>
<td>Largely of note on the basis that there is little else in the vicinity. Not particularly attractive building which makes no reference to the estuary should not be allowed to dictate future development.</td>
<td>= low</td>
</tr>
<tr>
<td>2</td>
<td>Theatre Royal Building TR2</td>
<td>N</td>
<td>Contemporary</td>
<td>3/High quality contemporary materials and design</td>
<td>1/Modern building</td>
<td>1/ Makes no reference to estuary or surroundings and man blank walls do not aid surveillance</td>
<td>Of solid modern feel reflects riparian feel in solid architecture but in orientation and shape does not refer to or benefit its surroundings</td>
<td>Orientation sets precedent for future development although with radically revised infrastructure effects could be reversed.</td>
</tr>
<tr>
<td>3</td>
<td>Group of Sheds, Maxwell Road</td>
<td>N</td>
<td>Victorian/industrial</td>
<td>2/?Historic example of industrial sheds</td>
<td>3</td>
<td></td>
<td>Provides historical reference point but may be of too poor quality to retain in long term</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Historic City wall</td>
<td>N</td>
<td>Pre 1800</td>
<td>2/In poor state of repair</td>
<td>3</td>
<td>3/Provides landmark and reference point due to its position and elevation</td>
<td>Provides enclosure and topographical context.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Stone Tower, Maxwell Road</td>
<td>N</td>
<td>Not known</td>
<td>2?</td>
<td>3?</td>
<td>2-3/Provides landmark and reference point</td>
<td>Hansom but fairly insignificant structure (in scale) which should not be retained at cost of other larger scale benefits.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Network of residential terraced streets (Group)</td>
<td>N</td>
<td>Victorian</td>
<td>2/Varied quality of condition and original features</td>
<td>2/Surrounding areas have little else of merit</td>
<td>3/Good permeability and connectivity. All houses provide frontage to streets.</td>
<td>Area retains historically good permeability and gives human scale to area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Listed?</td>
<td>Era</td>
<td>Architectural merit [1-3]/reason</td>
<td>Historic Merit [1-3]/reason</td>
<td>Urban Design merit [1-3]/reason</td>
<td>Other comments</td>
<td>Strengths/Weaknesses</td>
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<td>7</td>
<td>Network of residential terraced streets</td>
<td>N</td>
<td>Victorian</td>
<td>2/Varied quality of condition and original features</td>
<td>2/Surrounding areas have little else of merit</td>
<td>3/Good permeability and connectivity. All houses provide frontage to streets and shops provide activity on Embankment Road.</td>
<td>Dominated by busy road. Area retains historically good permeability and gives human scale to area.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Network of residential terraced streets</td>
<td>N</td>
<td>Victorian</td>
<td>2/Varied quality of condition and original features</td>
<td>2/Surrounding areas have little else of merit</td>
<td>3/Good permeability and connectivity. All houses provide frontage to streets and shops provide activity on Embankment Road.</td>
<td>Surrounding by busy roads. Area retains historically good permeability and gives human scale to area. Proximity of busy roads breaks legibility</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Network of residential terraced streets</td>
<td>N</td>
<td>Victorian</td>
<td>2/Varied quality of condition and original features</td>
<td>2/Surrounding areas have little else of merit</td>
<td>3/Good permeability and connectivity. All houses provide frontage to streets.</td>
<td>Surrounding by busy roads. Area retains historically good permeability and gives human scale to area. Proximity to roads breaks legibility</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Plymouth Christian Centre/Church</td>
<td>N</td>
<td>Victorian</td>
<td>1</td>
<td>?</td>
<td>2/Distinctive landmark in prominent location</td>
<td>Massive building which has the appearance of being disused. Whilst building is prominent, it is not particularly attractive and its lack of context should not allow building to dictate future development</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>St Jude’s Church, Tothill Road</td>
<td>N</td>
<td>Late 19th Century</td>
<td>3</td>
<td>3?</td>
<td>3/Distinctive landmark in prominent location</td>
<td>High quality building but a long way from Gateway site. High quality building acting as high quality landmark</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Church/warehouse, Alvington Street</td>
<td>N</td>
<td>Late 19th Century with additions</td>
<td>2/May be in poor state or repair- Change of use may have reduced architectural value</td>
<td>2?</td>
<td>2/Discreet building providing variety to area</td>
<td>Within area 6. Its enclosure within housing area adds to its merits but quality of the building may foreshorten its long term usefulness</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Wall, Cattewater Road</td>
<td>N</td>
<td>Not known</td>
<td>2/Stone wall that has been repaired</td>
<td>?</td>
<td>2/Discreet landmark in area with no historical or urban design context</td>
<td>Included mainly by virtue of the fact that surroundings are of such poor quality Not of great importance but may provide historic context in area devoid of such things.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Listed?</td>
<td>Era</td>
<td>Architectural merit [1-3]/reason</td>
<td>Historic Merit [1-3]/reason</td>
<td>Urban Design merit [1-3]/reason</td>
<td>Other comments</td>
<td>Strengths/Weaknesses</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------</td>
<td>---------</td>
<td>----------------------</td>
<td>---------------------------------</td>
<td>-----------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>14</td>
<td>Salisbury Road School</td>
<td>N</td>
<td>Victorian</td>
<td>2/Well maintained building</td>
<td>?</td>
<td>3/Prominent building visible from many viewpoints</td>
<td>Long distance from gateway site</td>
<td>Building that provides architectural context to area.</td>
</tr>
<tr>
<td>15</td>
<td>Church/Warehouse Grenville Road</td>
<td>N</td>
<td>Not known</td>
<td>1/Poor state of repair</td>
<td>?</td>
<td>2/Discreet building providing variety to area.</td>
<td>Current condition means that the building has a negative effect on surroundings</td>
<td>Derelict status means that its long term usefulness may be utilized through large expenditure</td>
</tr>
<tr>
<td>16</td>
<td>St. Simon’s Church, Faringdon Road</td>
<td>N</td>
<td>Pre 1800</td>
<td>3/High quality building</td>
<td>3</td>
<td>3/Discreet building providing variety to area.</td>
<td>Strong high quality landmark</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Prince Rock School</td>
<td>N</td>
<td>Early 20th Century</td>
<td>2/Well maintained building</td>
<td>?</td>
<td>3/Prominent building visible from many viewpoints</td>
<td>Building is currently surrounded by housing and busy roads that strangle its influence.</td>
<td>Strong building that is currently strangled by the roads around it. For this building to survive, the roads must be reduced and access to it increased.</td>
</tr>
<tr>
<td>18</td>
<td>Morley Arms Pub</td>
<td>Y</td>
<td>Early 19th Century</td>
<td>1</td>
<td>1</td>
<td>3/Building listed due to its architectural character</td>
<td>Brings historical context to area and acts as landmark across estuary</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>House</td>
<td>Y</td>
<td>Early 19th Century</td>
<td>1</td>
<td>1</td>
<td>2/Building listed due to its architectural character</td>
<td>Brings historical context to area</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Quay Walls – Saltram Point</td>
<td>Y</td>
<td>18th – 19th Century</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Gasometers, Cattedown</td>
<td>N</td>
<td>20th Century</td>
<td>1/Too young for historic merit.</td>
<td>2/Striking Industrial buildings</td>
<td>3/Provide landmarks and context</td>
<td>Gasometers have large footprint and are dominant</td>
<td>If area is to be extensively redeveloped, their large footprints may prove restrictive.</td>
</tr>
<tr>
<td>22</td>
<td>Efford Fort</td>
<td>N</td>
<td>3</td>
<td>2/3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>23</td>
<td>Efford Cemetery, Efford Road</td>
<td>N</td>
<td>Various!</td>
<td>3</td>
<td>Provides historic basis for area.</td>
<td>2/Walling and cemetery buildings typify cemetery architecture</td>
<td>3/For above reasons and the cemetery's open nature the graveyard and buildings provide evidence of a longstanding civilisation</td>
<td>Since the cemetery is not close to the gateway it is unlikely to impact upon proposals</td>
</tr>
<tr>
<td>24</td>
<td>Sainsbury's Superstore, Marsh Mills roundabout</td>
<td>N</td>
<td>20th Century</td>
<td>1</td>
<td>New building provides striking landmark at Marsh Mills junction.</td>
<td>2/Although it provides striking landmark at Marsh Mills roundabout the only context it responds to is the junction itself.</td>
<td>The building and its associated infrastructure (parking etc) have a large footprint and occupies a prominent site without giving much to its surroundings.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Housing Group Woodford</td>
<td>N</td>
<td>20th Century</td>
<td>1</td>
<td>1</td>
<td>2/Group of houses of reasonable quality</td>
<td>Not visible from gateway area</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Borrington Hall</td>
<td>Y</td>
<td>?</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>Not visible from gateway area</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Saltram House, Amphitheatre, Garden House, Orangery, Garden Temple (Fanny's Bower), Park Chapel, Brewhouse &amp; Laundry, Railings, Stable Block, Walls and Gate</td>
<td>Y</td>
<td>16th-19th Century</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>House and grounds overlook estuary although house is shielded by vegetation and topography from all of the estuary</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Cleve Villa</td>
<td>Y</td>
<td>Mid 19th Century</td>
<td>1/Has architectural merit</td>
<td>?</td>
<td>3/Quality building providing historic basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Church of St. Mary</td>
<td>Y</td>
<td>Mid 20th Century</td>
<td>1/Has architectural merit</td>
<td>?</td>
<td>3/Quality building providing historic basis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.4 Conclusions

None of the sites identified in the archaeological survey area formally designated as being of national importance by virtue of statutory protection as a Scheduled Ancient Monument. Whilst this is not always a true reflection of the archaeological significance of an area in this case it probably reflects the general character of the known archaeological resource. It should also be noted that the building survey is subjective and comments on building quality and maintenance were done visually. To further establish more detailed information on individual buildings, condition surveys should be commissioned.

The majority of the post-medieval and modern sites are seen as being of local importance and should not represent a constraint on development. These are generally sites where the buildings or other structures (usually of recent date) have already been removed. They do not fulfil the criteria for defining scheduled monuments and represent types of sites which are adequately replicated elsewhere. The Pomphlett tide mill is the exception to this and important buried remains could survive on this site.

The locally important sites should be recorded prior to development, wherever appropriate. Where possible they could perhaps be incorporated in some way into new developments or some interpretation of them included.

The most significant archaeological resources should be seen as the maritime or inter-tidal ones. Areas which have not yet been reclaimed may contain evidence of prehistoric and later exploitation of the estuary and may contain organic remains as well as wrecks. Such remains could potentially be of regional importance. Any potential development sites involving new reclamation would require detailed prior assessment and field evaluation. It is also possible that buried deposits could survive beneath those areas which have already been reclaimed although these areas are of lesser potential.

Any areas of limestone caves should also be seen as significant, as these too could contain remains of very early date and are generally rare, being limited by specific geological conditions. The Cattedown and Oreston cave systems lie just outside the study area, but, as noted above, previously undiscovered systems could occur within the same geological formation, for example around Prince Rock.

In terms of existing historical buildings, there are few or no existing buildings that prove a constraint to development. The largest areas of housing have suffered from the busy roads dividing the areas and it appears that many of the churches and other historic buildings have had little or no maintenance for many years. This may mean that they are beyond repair and obsolete. All other major buildings provide welcome landmarks in an area devoid of variety and serves to provide interest that should be built upon.
4 Natural Assets

4.1 Introduction
This chapter is from the SRB Scoping Document, which is reproduced in full in Appendix 3. It is included in the main body of this report as the natural environment and the opportunities and constraints that it provides are of crucial importance to the Gateway Study.

4.2 Geology
The majority of the rocks within Plymouth and its surroundings originate from the Devonian period. A band of Mid Devonian Limestone extends across the southern part of the City from Mount Wise to Elburton, with The Hoe forming the central ridge. The band of limestone is breached by the River Plym and by three inlets, Sutton Pool, Millbay and Stonehouse Creek. Upper Devonian Slates, known locally as Shillets, extend northwards to the edge of Dartmoor, a predominately granite mass. Bands of igneous rock, including Spilitic lavas, also interrupt these slates, creating prominent outcrops. An area of 'Weard Efford Grit' extends along the south-east facing slopes of the Plym Valley from Crabtree to Compton.

The vernacular architecture of the city reflects the local building materials of limestone, granite, shales and slates. Limestone in varying colours because of iron impurities is used as building stone, burned as lime and used as an ornamental stone, known as Plymouth marble. The slates and shales, which tended to be friable, were used in gardens and outer walling, and to produce poor quality bricks. The limestone belt within the southern edge of China clay is worked at Lee Moor and some of the extracted clay is piped to Marsh Mills for drying. Other deposits found locally include tin, near Plympton and Hemerdon, and tungsten, also at Hemerdon.

Five Sites of Special Scientific Interest (SSSI's) designated for their geological importance highlight the significance of the city's geology. They are all associated with the limestone belt.

4.3 Climate
The climate of Plymouth is mainly comprised of mild winters, moderately warm summers and relatively high rainfall with marked seasonality. Temperatures are strongly influenced by the sea; in coastal and low lying areas the annual mean temperature is around 11 degrees centigrade. Winds are predominately south-westerlies.
There are microclimatic variations influenced by aspect, topography, altitude, distance away from the sea, and the type and variation in the scale of urban development. In terms of the Plym estuary in particular, the western side is more sheltered than the eastern side, which is more directly affected by the prevailing winds. This has a direct impact on the viability of different water-sports over different areas of the estuary. More elevated parts of the study area, are also very exposed to the prevailing winds, particularly Lipson and parts of Plymstock.

Salt treatment of highways and general road silt has created a difficult environment in which to establish planting.

Localised wind patterns on the estuary influence the surface water conditions, e.g. rowing takes place on the more sheltered western bank and water/jet skiing on the eastern bank.

4.4 Nature Conservation and ecological interest

The Plym estuary is the overriding feature of the area followed very closely by its associated panoramas, particularly Saltram Estate and Chelson Meadow on the way into the City and Laira Emplacement, Laira Battery and Efford Fort on the way out. Less visible, but of very considerable ecological importance, are the infill areas on the Western flank of the estuary at Crabtree and Laira (opposite Lanhydrock Road).

4.4.1 Environmentally sensitive sites

The Plym Estuary. The estuary was not included in the adjacent Special Area of Conservation is that the conjoining part of the Plym at Cattedown was excluded on the grounds of its commercial importance to the City. It has been argued that the Plym estuary should be treated as a natural extension to the SAC, however, since its environmental and ecological features are both difficult to dissociate and, indeed, are comparable in many ways to those of the Tamar estuary.

At an ecological level, the Plym estuary is an important wader feeding and over-wintering station. At the present time, the winter wader populations are comparatively low when compared to the levels of the 1970s and 1980s but this fall in numbers reflects general trends that have occurred throughout Western Europe during recent years. There is no evidence that the holding potential of the Plym has dropped in recent years. The Royal Society for the Protection of Birds has stated that its priority in the area is the Plym Estuary, and its relationship with the larger estuarine complex (recent correspondence is appended).

Apart from the development of saltmarsh at Crabtree, there is little vegetation of note in the Plym estuary, with sparse populations of halophytes such as Beta vulgaris maritima (Sea Beet), Aster tripolium (Sea Aster) and Crithmum maritimum (Samphire) growing on the stone sea defences adjacent to Embankment Road. The only plant of note
along these stone sea defences is an important population of Scrophularia scorodonia (Barstard Balm). This Red Data Book (listings of endangered flora and fauna) species is nationally very rare, and the Plym Population could be the largest left in Plymouth with the possible demise of the premier population at Wakeham Quarry through a combination of development and unauthorised parking of vehicles.

1 Crabtree Reclaim.

This feature, behind Sainsburys, was artificially created with dredgings from the River Plym and is of very high ecological importance to the City. It contains a mixture of habitats, including young deciduous woodlands, brackish water toe ditches and ponds and lichen/bryophyte heathland which are unique in Plymouth. Not surprisingly there are a range of flora and fauna here that are similarly important. It holds the City’s only population of Myrmeleotettix maculata (Mottled Grasshopper) and sympatric populations of Conocephalus discolor and C. dorsalis (Long-winged and Short-winged Cone-heads, respectively). Both Conocephalus species are nationally notable (Na). Vegetationally, there are a number of locally important species such as Ruppia maritima (Beaked Tasselweed) and Filago minima (Small Cudweed) as well as the nationally scarce Lotus angustissima (Slender Bird’s-foot-trefoil). The site has a resident population of Capreolus capreolus (Roe Deer) and Neomys fodiens (Water Shrew).

2 Laira Reclaim.

Once again this feature is entirely artificial and was created by dredgings from the River Plym. It ranges from unimproved mesotrophic grassland at its northern end to marshy grasslands at its southern end. Ecologically, its southern end is of the greater ecological interest and importance containing, as it does, perennially waterlogged areas. There are no nationally or regionally important flora or fauna known from the site although it includes locally important flora. These include good populations of Ophrys apifera (Bee Orchid) and Spiranthes spiralis (Autumn Lady’s-tresses). The latter is the only population of this species on the City that is accessible to members of the public.

3 Laira Emplacement.

This site is dominated by coarse mesotrophic south facing grasslands which are becoming encroached by scrub bounded by broadleaved tree along its northern boundary. It is not particularly floristically diverse but its south-facing aspect encourages good populations of invertebrates, particularly grasshoppers (Chorthippus sp) and Butterflies including a good breeding population of Melanargia galathea (Marbled White). Despite applications in the past, development on this site should be resisted on nature conservation grounds. With proper management, this site has great wildlife potential.
4 **Efford Fort.**

The woodlands on the slope of this site form a very important and prominent feature from the approaches to the City along the A38. The slopes are contained within Efford Marsh Local Nature Reserve and are of considerable ecological importance. It is unlikely that any future developments would occur on the site because of its designation and the very steep gradients.

5 **Laira Fort.**

This fort is perched up above Embankment Road. From Embankment road it is manifest by the concrete re-enforced underlying rock outcrop which abuts the road. No ecological data is held on this outcrop but it is suspected that it could be home to some interesting invertebrates.

6 **Laira Railway Sidings**

This site has not been surveyed since 1987 when the usual assemblage of annual and short-lived perennials were recorded from the tracks including the Red Data Book Species, Linaria supina (Prostrate Toadflax) – see below. The east-facing rock outcrop to the west of the sidings would require a comprehensive ecological survey should any future developments involve this site.

7 **Laira (Embankment Road) Allotments.**

These allotments were recently refurbished with the old heavy metal contaminated soil being removed and clean soil introduced. To date it has hardly had a chance to develop typical allotment flora but there is no reason to doubt that, in the future, it will develop, like other allotments in the City, a flora reminiscent of old cornfields before intensive agricultural practices became the norm.

8 **Embankment Road Amenity Grassland Verges.**

The verges are typical of those found adjacent to other major road routes in the city. They are typified by their low floristic diversity with the inclusion of species such as Plantago coronopus (Buck’s-horn Plantain) and Cochlearia danica (Danish Scurvy-grass) that favour the salt-enriched soils resulting from winter gritting operations.
9 Old Railway Tracks.

The old, but not abandoned, railway tracks around Blagdons Boatyard and extending westward along Lanhydrock Park are rich in annual and short-lived perennial species and of considerable nature conservation importance. These populations seem to survive periodic treatment with herbicides to keep the tracks clear but this practice does threaten their long-term survival. The most important species is Linaria supina (Prostrate Toadflax), an annual Red Data Book Species whose survival in this country is severely threatened. Up until the late 1980s, populations were on the increase as it spread along the railway network. However, in recent years, it distribution has become more and more restricted until today when the only remaining flourishing populations are found in Plymouth. Elsewhere in the City small populations have become extinct over the least 20 years – The Cann Quarry viaduct population by the construction of the Plym Valley Cycle Track, the Crabtree population by vegetational succession and the Priory Railway Station population by a housing development. Every endeavour must be made not to jeopardise the future of this species in Plymouth further.

10 Embankment Lane Playing Fields.

These playing fields, like the allotments above, have been reconstructed recently with old contaminated soils being replaced by imported soils. It is too early for the vegetation to have settled down yet but it almost certain that the mowing regimes used on this site will result in a species-poor amenity grassland community developing.

11 Blagdons Yard and the old Western National Bus Depot.

Neither of these sites are important in terms of nature conservation with, perhaps, the exception of the immediate waterfront of the boatyard which has a low interest. For the most part these sites are vegetated with annuals and short-term perennial plants.

12 MFI and surrounding area.

This area offers little opportunities for wildlife other than those to be found in the surprisingly rich amenity grass areas. Of note are the very large populations of Erophila verna (Common Whitaow Grass) and Erodium moschatum (Musky Storksbill). The later must be considered as very rare locally. The exposed limestone immediately adjacent to this area includes Spion Kopje and the Faraday Road SSSI. These, and other, limestone features in the neighbourhood are of high nature conservation value and would require major mitigation works were they to be threatened by any future developments (see below).
4.4.2 Other sites which could be potentially affected by development.

1 Approaches to Laira Bridge from the East.

This feature, and its associated south-facing rock cuttings, is of prime ecological importance to the city, particularly in respect of its invertebrate fauna. Nationally critical species include:

- *Epsinus maculipes* – Red Data Book spider
- *Nothophantes horridus* – a spider found nowhere else in the world other than in Plymouth
- *Centetestoma bacelliferum* – a harvestman found nowhere else in the U.K. other than in Plymouth. Elsewhere, it is only known from a few isolated sites in the northern Iberian peninsular
- *Buddelundiella cataractae* – A woodlouse which, in the U.K., is only known from Plymouth, two sites in South Wales and one site in Norfolk

2 Tavistock Junction.

This site, which contains extensive almost abandoned areas, has a very interesting and rich flora of annual and short-lived perennial plants that are able to exploit the skeletal soils and ballast which cover the site. Any proposed development of the site must take into account its population of the nationally very rare Red Data Book Species, *Geranium purpureum* (Little Robin) and the nationally rare *Crassula tillaea* (Mossy Stonecrop).
5 Transport

5.1 Study Context

5.1.1 Study Area
The study area in terms of transport and accessibility is focussed around the two major routes into the city centre from the East, the A379 and the A374, and the area in which these two routes join to become Exeter Street. The port area of Cattedown, rail and primary pedestrian and cycle routes, and the residential areas immediately surrounding the major routes are also included in the study area. Chapter 8 in the SRB Scoping Study (Appendix 3) provides further information on the movement structure of the area.

5.1.2 Setting a Benchmark

In order to take some decisions in relation to possible future options (transportation and development) it is necessary to set some benchmarks against which potential improvements might be evaluated. In the case of the transportation considerations this could be done in a number of ways which take on board the following issues:

- Traffic flows; congestion in the study area is a serious problem and it would seem essential that some means is found to assess future options in terms of how it might relieve existing congestion. This could be done by considering overall delays encountered by public and private transport as it passes through the study area, for example.

- Person flows through the study area. It seems highly likely that increasing vehicular traffic through the study area might be regarded as unacceptable. However, with better use of public transport coupled with some constraints on car traffic it may be possible to increase person throughput without incurring additional vehicular congestion.

- Severance and conflict of pedestrian/cyclists and motor vehicles. The existing transportation infrastructure causes considerable severance problems within the study area. It would be possible to derive some measures of conflict that could be compared between options.
- Spatial opportunity. Pedestrians are hindered in many parts of the study area by limited footpath widths and proximity to large volumes of motor traffic. As a link between urban design considerations and transport provision it may be possible to derive a measure of “use of streetscape” areas across all modes for each option to be considered.

5.2 Existing Operational Conditions

5.2.1 Pedestrians and Cyclists
At present vehicular traffic dominates the area leading to poor pedestrian provision. Few junctions have pedestrian crossings or phases, and the area has several pedestrian bridges that are not ideal and totally unusable for the disabled.

Attempts have been made to provide cycle routes through the area, both on the most direct routes, such as Gdynia Way, and on quieter roads and off road, such as the railway line. The cycle routes however are patchy and have significant scope for improvement into a proper network.

5.2.2 Public Transport
The gateway area is well served by buses operated by both Plymouth Citybus and First Western National. Bus services in the area use three main routes. Firstly, those travelling to Plymstock and the West use the Laira Bridge. Secondly, those travelling to Marsh Mills and beyond use Embankment Road, and thirdly, several circular routes serve the Cattedown area. A table of these routes with frequencies is shown on the next page.

Although the table seems to indicate that buses generally serve the area very well, there are some underlying shortcomings in service provision. It is considered that public transport to the City Centre could only be described as adequate, and the routes to and from the new and growing employment areas to the east are poorly served.

It is also worth noting that public transport penetration of the housing areas is poor and that routes are focussed on passing through the study area rather than serving the activities which lie within it.

Bus stops are most frequently located on the main routes of Embankment Road and Laira Bridge Road where, in the main, shelters are provided. Few of the stops in the Cattedown area have shelters. Bus stop locations on the busy main routes mean that the waiting area is not pleasant. Difficulties can also be found when crossing these roads to access the bus stops.
Table 4.1 – Bus Service Frequency in the Gateway Area

<table>
<thead>
<tr>
<th>Route No.</th>
<th>Operator</th>
<th>Route</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Plymouth Citybus</td>
<td>Devonport &amp; Stoke-Cattedown</td>
<td>30 mins</td>
</tr>
<tr>
<td>33D/33E/133/134/</td>
<td>Plymouth Citybus</td>
<td>City Centre-Devonport-Cattedown</td>
<td>Peak AM only</td>
</tr>
<tr>
<td>PR2</td>
<td>Plymouth Citybus</td>
<td>Coypool-Barbican Leisure Village-City Centre</td>
<td>12 mins</td>
</tr>
<tr>
<td>21</td>
<td>Plymouth Citybus</td>
<td>City Centre-Plympton &amp; Chaddlewood</td>
<td>20 mins</td>
</tr>
<tr>
<td>50</td>
<td>Plymouth Citybus</td>
<td>City Centre - Derriford Hospital</td>
<td>15 mins</td>
</tr>
<tr>
<td>X80</td>
<td>First Western National</td>
<td>Plymouth-Torquay</td>
<td>Hourly</td>
</tr>
<tr>
<td>88</td>
<td>First Western National</td>
<td>Plymouth-Ivybridge</td>
<td>Hourly</td>
</tr>
<tr>
<td>5/6</td>
<td>First Western National</td>
<td>City-Elburton-City</td>
<td>20 mins</td>
</tr>
<tr>
<td>7</td>
<td>First Western National</td>
<td>Woolwell/Widewell/Glenholt Park - Mount Batten via city</td>
<td>20 mins</td>
</tr>
<tr>
<td>7a</td>
<td>First Western National</td>
<td>Barne Barton – Turnchapel via City</td>
<td>20 mins</td>
</tr>
<tr>
<td>7d</td>
<td>First Western National</td>
<td>City – Radford Park - City</td>
<td>Hourly</td>
</tr>
<tr>
<td>48</td>
<td>First Western National</td>
<td>Wembury – Burrator via City</td>
<td>Every 3 hrs</td>
</tr>
<tr>
<td>49</td>
<td>First Western National</td>
<td>Plymouth – Heybrook Bay</td>
<td>Every 2 hrs</td>
</tr>
<tr>
<td>58/59</td>
<td>First Western National</td>
<td>Plymouth – Cornwood, Circular</td>
<td>Every 2 hrs</td>
</tr>
<tr>
<td>91</td>
<td>First Western National</td>
<td>Plymouth – Totnes - Dartmouth</td>
<td>3 per day</td>
</tr>
<tr>
<td>92</td>
<td>First Western National</td>
<td>Plymouth – Salcombe</td>
<td>7 per day</td>
</tr>
<tr>
<td>93</td>
<td>First Western National</td>
<td>Dartmouth - Plymouth</td>
<td>Approx. Hourly</td>
</tr>
<tr>
<td>94</td>
<td>First Western National</td>
<td>Plymouth – Newton Ferrers &amp; Noss Mayo</td>
<td>7 per day</td>
</tr>
<tr>
<td>94a</td>
<td>First Western National</td>
<td>City - Elburton</td>
<td>5 per day</td>
</tr>
</tbody>
</table>

5.2.3 Rail Infrastructure

The gateway area is presently neglected in terms of direct rail access. The London to Penzance main line crosses Embankment Road at Laira. Working infrastructure exists along the old London & South Western Railway line, but this is only infrequently used for freight transport. The former rail link to the port itself has now become a cycle route and would need substantial investment in order to reinstate.

Whilst this is a statement in respect of the current situation this should not undermine the future potential for additional freight traffic to be moved by rail. This is particularly the case for port traffic where increasing movement of goods by road is of concern. If a transfer of freight from road to rail could be achieved on any significant scale this would go some way towards achieving the study objectives for the gateway area.
5.2.4 **Vehicle Traffic Flows and Congestion**

Traffic flows from the A374 and A379 converge at Gdynia Way and Heles Terrace where in the AM peak the majority of traffic heads for the Cattedown roundabout. Traffic is effectively pinched by Exeter Street and the capacity of the road is governed by the green time given to westbound traffic in the AM period. In the PM period the majority of traffic heads away from the city centre along the A374 and A379. Travelling in the eastbound direction capacity is dictated by the signal timings at the junctions with Heles Terrace. The table below shows the maximum capacity of Exeter Street, Embankment Road and Laira Bridge Road.

<table>
<thead>
<tr>
<th>Junction Location</th>
<th>Capacity (Vehicles per Hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exeter Street/Bretonside (Westbound traffic)</td>
<td>1964</td>
</tr>
<tr>
<td>Embankment Road/Heles Terrace (Northbound traffic)</td>
<td>1740</td>
</tr>
<tr>
<td>Laira Bridge Road/Heles Terrace (Eastbound traffic)</td>
<td>1470</td>
</tr>
</tbody>
</table>

The AM peak period for traffic flows into the city centre from the A374 is from 07:45 and 08:15, giving flow rates of roughly 1600 vehicles per hour. The reverse movement in the PM peak period is seen to be heaviest during the 16:00 to 18:00 period, with hourly flow rates of approximately 1250 vehicles.

The peak period for traffic flows into the city centre from the A379 is seen during 08:00 to 08:45, with traffic flows of approximately 1400 vehicles per hour. The reverse flow in the evening is seen to be worst in the 16:00 to 18:15 period which experiences flows of around 1300 vehicles per hour. The peak period for traffic flows from the A379 to the A374 is seen to be 07:45 to 08:30 with hourly flows of 660 vehicles. The reverse movement sees peak activity between 16:45 to 17:30 with slightly higher flows in the region of 750 vehicles.

Due to the nature of the roads in the area inbound traffic from the A374 is routed via either Gdynia Way or Heles Terrace, however outbound traffic is only allowed to follow Embankment Road. Traffic approaching the city centre from the Laira Bridge also uses Gdynia Way, but must use Embankment Road in the reverse direction. Traffic therefore uses roads with much less capacity in the evening producing PM peak traffic conditions lasting much longer than the corresponding locations in the AM peak.
5.2.5 **Journey Time Information**

One way of considering the impact of increasing traffic growth is to examine the observed and predicted journey times along transport corridors. At this stage the issue is to provide some benchmarking data against which the impact of future changes can be considered.

Measurements have been undertaken on an eastern corridor running from Charles Cross roundabout to Elburton Roundabout via the A379, an overall distance of approximately 5.5km. AM, Off-Peak and PM measurements were taken for both eastbound and westbound directions using a number of observations for each scenario. Westbound journey times were found to be generally slower than eastbound, with peak period times about 20%-25% higher than off-peak for the peak direction. Journey times varied between 8 minutes and 11.5 minutes for the overall corridor.

A similar examination has been undertaken for the route from Marsh Mills. Data currently being awaited from Plymouth City Council.

The detailed data will be used in traffic model test runs when future options are considered and compared against existing operational conditions.

5.2.6 **Road Safety**

Accident data for the study area has been split into four road categories, with category A reflecting the highest level of service for traffic movement. Table 2.3 below shows that there was only one fatal accident in the area for the three-year period from 2000 to 2002. From the 362 accidents causing injuries, 44 accidents involved pedestrians and 26 involved cyclists. The single fatal accident involved a pedestrian.

The data below does not seem to indicate any particular road safety problem in the wider area. This should not seek to undermine the importance of road safety issues in looking at future transport infrastructure provision.
Table 2.3 Accident Numbers and Severity (2000-2002)

<table>
<thead>
<tr>
<th>Road Category</th>
<th>Slight Injuries</th>
<th>Serious Injuries</th>
<th>Fatal Injuries</th>
<th>Pedestrian accidents</th>
<th>Cyclist accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>133</td>
<td>13</td>
<td>1</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Unclassified</td>
<td>76</td>
<td>4</td>
<td>0</td>
<td>26</td>
<td>3</td>
</tr>
</tbody>
</table>

5.2.7 Environmental Issues

The sub-division of the residential areas by heavily trafficked roads such as Heles Terrace, Embankment Road and Laira Bridge Road is of major concern. The physical danger of the roads is accompanied by health concerns arising from air pollution and visual intrusion caused by vehicles.

There are further concerns in respect of the impact of heavy goods vehicles passing through residential areas as recorded in the studies associated with the East End Renewal Area. This presents both environmental and safety concerns.

The severance issues that arise as a consequence of major routes carrying large volumes of traffic all day through the study area are a serious problem. A particular example of the severance that exists is the isolation of Prince Rock School.

Key natural assets which need to be considered are the Plym Estuary, reclaimed land at Laira (the Blagdon’s site) and the old railway track around Blagdon’s site. For more information please refer to Chapter 4, particularly section 4.4.1.

5.3 Local Plan And Policy Issues

5.3.1 Devon Structure Plan

The Devon Structure plan includes the following transport-related policies of significance for this site:
• In terms of the rail network, the plan sets out a commitment to encouraging rail use, and retailing and existing and disused railways, track, railheads and association land for transport use (T7). In addition, the Plan sets out plans to reopen the station at Plympton (T8).

• Freight should be encouraged and policies include making provision for the development of central distribution points and making provision for an inter-modal facility at Plymouth for the transfer of freight (T16).

5.3.2 Local Transport Plan
The residential area of Cattedown, Coxside and Prince Rock has been declared a Housing Renewal Area. The residents of the area have raised concerns over the movements of HGV’s in the area. The LTP process is contributing to Transport/Environmental improvements for the residential area.

A new community of 3,500 homes is proposed for the South Hams area. This could have significant impacts upon the A379 corridor and the associated transport provisions will influence any future impact arising out of additional vehicular traffic in this corridor. In a similar context, the impact of the Blue Circle site and the adjoining proposed Plymstock housing area is of concern and the management of its transport impacts could have wide-ranging implications for the Gateway area.

The cycle route on 'The Ride' which adjoins Laira Bridge has been upgraded to above the minimum standard, therefore providing a cycle link for the area to the North.

The port of Plymouth has seen an increase in freight tonnage, increasing to 1,850,000 tonnes in 2001/02. The City Council has outlined a Sustainable Distribution Strategy for Plymouth and this will need to be implemented in the Cattewater area.

5.3.3 Local Plan (Transport Considerations)
Objective 8 in the Local Plan outlines the following methods to manage the demand to travel and reduce traffic congestion:
• providing for development in locations, which reduces the need to travel
• promoting transport choice
Objective 9 aims to create a network of walking and cycling routes across the city which are attractive, efficient and safe. All development and highway proposals should design their layout to take into account the needs of pedestrians and cyclists.

The Local Plan also states that major developments and highway schemes should provide facilities giving priority to, and allowing for service by buses.

The use of operational and former railway land for development will only be permitted if the use or potential use of the land for rail, public transport, cycling or walking is not lost.

The Local Plan also mentions the possibility of a park & ride site on the A379 corridor in the Plymstock area, which could potentially have a major effect on traffic levels through the Gateway area (Policy 43). The provision of a Light Rapid Transit (LRT) System linking strategic locations within Plymouth and South Hams, including stations and stops, will be permitted and development that would prejudice the implementation of the LRT system will not be permitted (Policy 49).

It is also of relevance to refer to the Dynamic Traffic Management Section of the East End Regeneration Strategy many elements of which are reflected in the various issues identified in this report.

5.4 Engineering Infrastructure Constraints

5.4.1 Roads and Related Infrastructure Provision

The existing roads infrastructure represents a series of constraints in that it addresses a series of complex access and through traffic issues. The following paragraphs explain some of these complexities in further detail.

Approaching the gateway area along the A374 Embankment Road from Marsh Mills Roundabout the left hand lane of the dual carriageway is signed for traffic towards the City Centre etc and is generally free flowing under the Heles Terrace junction into Gdynia Way. Congestion back from Cattedown Roundabout regulates the speed and flow on this lane. The right hand lane is signed to Kingsbridge etc and whilst this might at first sight be confusing to those knowing
they wish to turn left ahead, it works well. Traffic in this lane, in heavy flow conditions, may get held up by a queue extending beyond the reservoir for vehicles intending to turn right into Lanhydrock Road. Beyond this queuing takes place due to lack of capacity at the Heles Terrace junction.

At the point at which the two lanes diverge is a junction on the left with Embankment Lane, an industrial area. This is a priority junction at which vehicles wishing to exit have difficulty, as do vehicles wishing to turn right into the Lane. These latter vehicles waiting in the outbound right hand lane of Embankment Road cause difficulties to and rapid evasive movements by following vehicles.

Vehicles can also travel via the Heles Terrace junction to access Cattedown Roundabout and queuing on the Gdynia Way route may attract diversion. To attempt to control this, traffic signals were introduced on the Embankment Road exit onto Cattedown Roundabout with a very short green time given to Embankment Road. A bus lane enables buses to bypass any queue built up.

The Heles Terrace junction consists of separate traffic signal junctions at either end of Heles Terrace both operating with 3 stages and subjects to queuing at peak times. These queues generally form due to lack of capacity on the right turn exits at both ends of the Terrace. On either side of Heles Terrace lies sheltered housing.

Approaching the gateway area over Laira Bridge on the A379, the left hand lane continues into Gydnia Way and the right hand lane becomes the right turn lane into Heles Terrace to take vehicles to Marsh Mills Roundabout. A bus lane enables buses and taxis to continue from the right hand lane straight on to serve the residential area towards Cattedown Roundabout.

Gydnia Way generally follows the course of the old railway line within a cutting and is crossed by two local roads on original bridges.

At Cattedown Roundabout the left hand lane continues unimpeded into Exeter Street towards the City Centre. The centre and right hand lanes operate on the give way principle.

Gydnia Way was designated as ‘Embankment Road Relief Stage 1’. Stage 2 was to be a two-lane road in the outbound direction but this has since been rescinded. Consequently, outbound vehicles use Embankment Road which acts as a significant barrier through the residential/shopping area. A number of pelican crossings along the route have been linked to minimise vehicular delay. The left hand lane is signed to Marsh Mills etc and the right hand lane is signed to Kingsbridge etc. At the diverge between the A374 and the A379, the latter becomes 2 lanes whilst the
former which was originally 2 lanes has been reduced to one lane to enhance safety outside the Prince Rock Primary School. The A374 widens to 2 lanes beyond the school to provide capacity at the Heles Terrace junction, however the right turning traffic into Embankment Lane mentioned earlier introduces a degree of reticence in making full use of the right hand lane. The A374 continues with two lanes beyond the junction with Lanhydrock Road.

The A379 over Laira Bridge also continues in two lanes, the left lane eventually continuing towards Kingsbridge whilst the right lane is used by vehicles turning towards Plymstock etc and Pophlett Roundabout. Between Heles Terrace and Pophlett Roundabout are two multiphase Traffic Signal junctions. Finnegan Way, to the east of Laira Bridge, can be used as an alternative route to exit the City towards the east and time given to this movement delays eastbound vehicles on Laira Bridge Road.

The westbound length of Embankment Road between Laira Bridge Road and Cattedown Road, i.e. the length superseded by Gydnia Way, is relatively quiet and effectively acts as a parking area for the adjacent shops, the westbound bus route and a route for local traffic.

5.5 Structures

Within the area the following structures exist:

- Rail Bridge over A374 Embankment Road north of Embankment Lane
- Road Bridge carrying Elliott Road over Gdynia Way
- Road Bridge carrying Cattedown Road over Gdynia Way
- Road Bridge carrying Laira Bridge Road over Gdynia Way
- Road Bridge carrying Laira Bridge Road over railway line
- Road Bridge carrying Laira Bridge Road over River Plym
- Footbridge over Gdynia Way at northern end of Heles Terrace
- Footbridge over northern end of Heles Terrace
- Footbridge over Laira Bridge Road slip into Gdynia Way
- Footbridge over Gdynia Way at Cattedown Roundabout
- Pedestrian subway under railway on eastside of Embankment Road north of Embankment Lane
- Footbridge/cycle bridge over railway at eastern end of Laira Bridge
- Cycle Bridge over A374 Embankment Road north of Embankment Lane

The structures listed above clearly impose physical constraints on potential future infrastructure solutions and need to be carefully considered in that context.
5.5.1 Rail
A railway line between the main line and Cattedown Wharves crosses Embankment Road and then passes under Laira Bridge Road.

5.6 Conclusions - Looking Ahead

5.6.1 Traffic Growth and Demand Management
Traffic growth and demand management is probably the biggest single issue since the major development proposals in the Local Plan and Draft Structure Plan could place significant additional traffic demands on the study area. Most of the related issues are being considered in a wider context and we need to ensure that the approach being taken at the wider strategic level fits with the detailed approach to be taken on the Gateway study. Given current policy in relation to constraining future growth, it is fairly apparent that any solution aimed at addressing the development pressures will require a significant public transport component. In the longer term, charging may become relevant, although it should be noted that the LTP discounts it as a current option for consideration.

5.6.2 Key Policy Issues
The key policy is the one relating to the constraining traffic growth. This will set the scene for the option development stage of the study. Conditions through the study area at present are regarded as unacceptable. There is a need to find a way of improving matters locally whilst addressing wider strategic requirements.

5.6.3 Key Engineering Constraints
The existing engineering infrastructure is complex and a wholesale change to this would undoubtedly prove costly and disruptive. It may be that a re-shaping of the use of current infrastructure coupled with some new infrastructure could provide a deliverable solution.
6 Development Opportunities and Stakeholder Consultation

6.1 Land use Appraisal

This chapter identifies the major landowners in the area - their ownerships are situated in those locations where there is the greatest opportunity for change. (Further information on land use and ownership can be found in Chapter 2, 3, and 4 in Appendix 3). Each of these landowners has been consulted and their views detailed in the attached appendices.

In parallel the views of a number of leading business organisations have been taken including:

- East End Renewal Team
- Plymouth Chamber of Commerce
- Devon & Cornwall Business Council
- Sutton Harbour Holdings
- South West Regional Development Agency

The observations of these organisations are also detailed in the attached appendices.

The study area encompasses a wide range of different land uses each affected by the physical character of the corridor that is the Plymouth Gateway. In essence this comprises two major arterial roads namely the A38(T) and the A379 linked by the A374 Embankment Road. The existence of the railway line and river contribute little and presently represent physical barriers to future development.

These physical characteristics have resulted in the commercial uses being polarised at each end of the corridor in a dumbbell configuration. The order of these uses has been influenced by the prominence and accessibility of the individual location with food and non food uses prevailing at the major intersections.

Food and non food retail are the premium uses in terms of land value. This is a consequence of the limited number of locations where the trading potential can be maximised with the benefit of a planning consent. Rarely therefore are these kind of uses revoked moreover their use is intensified or extended. The factor of land value will therefore weigh heavily in bringing about change within the Gateway.
Appreciation of the workings of the property market will be a fundamental component in delivering change. A historical appraisal of the land uses within the Gateway shows that the amalgam of uses has evolved piecemeal. This amalgam is a consequence of the market forces and planning policies prevailing at that time. To change the composition of these uses through the development process will require added value to be created.

The benchmark for property and land use appraisal is one of value. Inherent in the development process is the concept of change by adding value. The private sector will measure value by the level of commercial return either through capital gain or enhanced revenue. The following matrix provides an indicative guide to the likely level of market value prevailing within the Gateway. This is land use value which is different to market value or capital value of existing buildings which may be higher or lower than land value.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Value Per Acre</th>
<th>Value Per Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Retail</td>
<td>Circa £2,000,000</td>
<td>£4,940,000</td>
</tr>
<tr>
<td>Non-food Retail</td>
<td>Circa £1,250,000</td>
<td>£3,000,000</td>
</tr>
<tr>
<td>*Residential</td>
<td>Up to £600,000</td>
<td>£1,480,000</td>
</tr>
<tr>
<td>Leisure</td>
<td>Up to £500,000</td>
<td>£1,235,000</td>
</tr>
<tr>
<td>Office</td>
<td>Up to £300,000</td>
<td>£740,000</td>
</tr>
<tr>
<td>Industrial</td>
<td>Up to £200,000</td>
<td>£490,000</td>
</tr>
</tbody>
</table>

*No allowance made for level of affordable housing or water frontage sites.

Added value has to be created or subsidized. Each ownership within the Gateway will have a book value and betterment will need to occur to deliver change. Betterment can be defined in several different ways depending on the issues prevailing at the current time. Our consultations have identified several key issues which are set out in the following pages (a report of each consultation, and further plans, are set out in Appendix 2). Figure 6.1 shows the location of major landowners in the study area.
Figure 6.1: Landownership in Plymouth Gateway

Key

1. St. Boniface Playing Fields
2. Saltash
3. Plymouth City Council
4. Plymouth City Council (Kew-Brockplump Field)
5. Plymouth City Council (former Basset Street)
6. Glebelands Land Holdings (Pynwoth Field)
7. Kent Holdings
8. Saltram Heaviton Developments (former Waterfoot National Trust site)
9. Model Properties (MHT and Copyright)
10. Leach's Stone Country Estates
11. Leach's Lime Country Estates (including Wilcanns Quarry)
6.1.1  **Sainsbury**  
The viability of relocating the store is unlikely in the extreme due to the very high book value of the store.  The store represents Sainsbury’s major out of town foodstore within Plymouth and is also logistically the nearest store to their only Cornish outlet in Truro. Consequently the importance of holding goods at Plymouth for the Truro store makes the favourable determination of their warehouse application important to them.  
The added value created to Sainsbury should not be undervalued being the only user of the proposed warehouse space. The potential for increased retail floor space should be investigated as an alternative to warehousing given the established presence of the store.

6.1.2  **St Boniface College Playing Fields**  
The governors of St Boniface continue to investigate how the latent potential of their playing fields can be explored. Remote and disjointed from the College’s main activity the potential to be radical with mutual benefit is a challenge the City should take up. A key gateway site where the added value potential is exceptional given its current use and planning status.

6.1.3  **Westbury Homes**  
As landowners of the former Blue Circle Cement works Westbury’s involvement in the Gateway study will be fundamental in order for this strategic site to be delivered. Generating a mixed-use development comprising 50 acres of residential and 20 acres of employment the majority of the residents and migrant workforce will travel through the Gateway. The mutual benefits that both stand to benefit from should not be underestimated. The added value received through positive allocation of land uses within the development is clearly one mechanisms, which can be used to benefit the Gateway.

6.1.4  **Heywoods Paving**  
Owned by Glendinning of Ashburton the general industrial process carried out by the company is an obvious non-conforming use within the City’s gateway. The nature of the business makes it a low value land use albeit occupying a high profile and valuable location. Constrained by the City Council and Network Rail’s ownership the company have indicated a willingness to move in order to meet their expansion needs. This needs to be positively followed up.
6.1.5  **Kent Holdings**  
Held as an industrial investment Kent Holdings have actively been exploring the re-development and marriage value potential. The marriage value would logically be with the development of the Salmon Harvester site but also potentially including the City Council playing fields.

Driven purely by entrepreneurial motives the potential availability of the ownership for redevelopment has to be viewed as a positive albeit the existing tenants would need to be relocated. No current detail of the tenancy schedule has been obtained which will be essential in delivering vacant possession.

6.1.6  **Salmon Harvester Properties**  
The inactivity of development on this site has resulted in much market conjecture over the future development of this site. Salmon Development's letter dated 28 April 2003 clearly suggests a commitment to implement development, albeit the objective of taking a trading profit is inherent whether developed out or traded. The opportunity for the Gateway Study lies in the fact that development has not taken place and value is an assessment of site value rather than investment value. A development implemented for non-food retail with tenants secured at market rents suggest a value of £7 million could be secured. The study should consider whether the development is implemented at this location and whether added value can be obtained by relocating the consent.

6.1.7  **London & Westcountry Estates**  
A major landowner sitting between the East End Regeneration initiative and the Gateway Study. Lack of consultation by other studies have perhaps underestimated the contribution this ownership can make towards the Gateways objectives. A wide mix of industrial/retail uses have been established over the last 25 years within buildings that date back to the 1950’s. Handicapped by poor local access the success of the "Mill" concept has been in marketing. An opportunity exists to restructure the ownership which given the size and mixture of the estate should result in positive mutual benefits. It is understood the City Council own certain freeholds.

6.1.8  **Morley Properties**  
Morley Properties have identified that the investment comprising MFI and CarpetRight has been under performing. Consequently a consultancy team has been appointed to address the relevant issues. The conclusions reached are:
- The poor configuration of the existing buildings
- Poor local access/egress
- The specification of the existing buildings
These factors have all contributed to the under performance of the investment resulting in the submission of various planning applications aimed at resolving these issues. The active asset management Morley are undertaking will inevitably result in some form of redevelopment. Working with Morley may well unlock mutual benefit to all parties.

6.1.9 Midas Construction Development
The latent potential in the Blagdons property has been recognised by Midas resulting in the submission to their mixed use planning application. A key high profile Gateway site, the application has been designed to meet market demand and capitalise on the prominent location. The strength of this demand confirms the quality of the location and the desire to be in the Gateway corridor. The lack of alternative locations has driven this deal forward and in the absence of a replacement site market pressure will remain for the site to be delivered.

6.2 Conclusions
Consultation with the major landowners has identified a clear aspiration to maximise commercial gain from any outputs of the Gateway study. In many cases this has already been instigated through the planning process. The outcome of this process will clearly have a fundamental impact on how the added value is used to benefit the outputs of the Gateway Study. Presently market forces are dictating that each of these proposals is being promoted in isolation. For the study to benefit from these negotiations a join up strategy needs to be formulated.

The ability of the study to address these issues within a timeframe that is capable of delivering a joined up strategy will clearly have a major influence on the successful outcome of the study. The land use, which is subject to numerous immediate discussions, is non-food retail, which will clearly have an affect both within and beyond the study area. With the exception of food retail this is the highest land value generator and capable of contributing significantly through planning gain. The aggregation of retailers at Marsh Mills and Coypool contrasts with the dispersed nature of the consents at Laira and Exeter Street. Furthermore a qualitative comparison reveals shortcomings in the provision at Laira and Exeter Street. The opportunity to consolidate these consents into one composite location which benefits everyone should be investigated.

The feasibility of a further major foodstore has not been ruled out particularly if a focus to the draw traffic away from or into an area was seen as desirable. Planning policy is however more likely to support intensification of use rather than a new destination. Consequently if Sainsbury were to grow would additional retail rather than warehousing be of greater benefit to the Gateway Study?
What is clear from our consultations is the need for some radical change to occur in order to achieve some dynamic shift in the way that real estate works within the Gateway. Realistic relocations of Sainsbury or Laira Depot are unlikely, however re-routing vehicular movement around Prince Rock/Laira is. Accessibility and conflicts of priority movements are working against each other with the diverse and unplanned range of land uses that exist. A re-ordering of these uses would alleviate and resolve many of the existing logistical problems but new roads will need to be built. The inescapable driver of property values remains “location, location, location”, which in today's market means “access, access, access”.

The reality of our investigations is that the key sites capable of facilitating substantive change are all in different ownerships. Each of these owners is seeking to maximise their return from their ownership whether through operational or development profit. The greatest prospect for partnering will be where the development process has yet to commence or where obsolescence/operational constraints exist. It is encouraging that Westbury, Heywoods, Midas, Sainsbury, Salmon Harvester and London & Westcountry all have development opportunities which if embraced positively could bring about real change in the study area.

These principal landowners should therefore be immediately engaged in the delivery process before they commit to implementing their own plans, which are unlikely to unilaterally accord with the Gateway outputs.
7 Initial Concepts

This chapter briefly discusses initial development concepts for the study area. The study team began by trying to ascertain key principles from which any framework should begin. These are discussed briefly below, with accompanying sketches which aim to encapsulate ‘In a Nutshell’ aspirations in terms of transport, development and the environment and community benefits.

7.1 Views

The study area is the key entrance to the city of Plymouth, and as such is currently under-exploited, subject to ad hoc development. The topography of the area, along the banks of the River Plym, gives tremendous views, and one of the fundamental principles of this is to capitalise on and enhance the views both onto the site from other locations, such as the eastern River Bank, and the views of the city from the site. There is the opportunity to create a sense of place through innovative architecture and high buildings.
7.2 Environmental Quality
The environmental quality of the area is currently poor. Each option should aim to improve the environmental quality both for the visitors entering the city, but also for those living in the communities within the study area, for instance along Embankment Road.
7.3 Transport and Movement
A key issue for the study is to address the current movement through and within the study area and address the issue of traffic blight. The weight of traffic entering the city from the eastern Gateway has seriously degraded the area, and needs to be managed and controlled, particularly given the future increase in traffic generated by new development to the east of the study area. Development options will all aim to reduce traffic blight and calm the area.
7.4 Initial Concepts

In developing initial concepts, the study team began by setting up four broad development categories, relating to levels of intervention in development –

1. Do minimum
2. Do something
3. Do something more
4. Do everything

Do Minimum and Do Something describe a more reactive approach, with development occurring more or less in an ad hoc way, guided by current policy. Do Something More and Do Everything require a far more proactive approach, demanding more detailed planning guidance, local authority and regional authority intervention, and raise issues of funding streams, compulsory purchase and developer contributions.

Under each of these headings, the study team looked at different transport initiatives, development outcomes and environment and community improvements.

The table below, and accompanying concept drawings, set out initial development concepts based upon public sector intervention. It is meant as a discussion piece only, from which different options can be developed, and different potential solutions can be explored.
The following conceptual diagrams intend to show how each level of intervention may impact positively on the surroundings. In each diagram, the area of positive influence is shown graded around each element. These diagrams and in particular the areas of influence shown do not relate specifically to site boundaries or to various physical interventions. The diagrams are aim to show how larger scale interventions can have wider positive effects, and also how larger scale interventions can be amalgamated to produce a outcome 'larger than the sum of its parts'.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
<td>Existing transport system - management Public transport priority initiatives</td>
<td>As 1. but to include charging (at bridge)</td>
<td>As 4. but no new bridge and no bypass Gdynia Way to be dropped and area created redeveloped</td>
<td>2 dedicated public transport routes Park and Ride New local bypass Use of railway/road use</td>
</tr>
<tr>
<td><strong>Development</strong></td>
<td>Development of infill sites Development of current planning permissions Market driven redevelopment “sheds”</td>
<td>As 1. and select from a few quality sites for development, guided by development brief</td>
<td>As 2. plus land reclamation on discreet sites Major land reclamation New corniche to Sutton Harbour Development of hill Development of other available sites e.g. Laira Barrage?</td>
<td></td>
</tr>
<tr>
<td><strong>Environment/community</strong></td>
<td>Environment does not get worse Development sites are not vacant but used and made safe Loss of open space</td>
<td>As 1. but some environmental improvements as a result of traffic reduction. As 2. but increased improvements to community as a result of dropping Gdynia Way Creation of new waterfront area</td>
<td>Residential community without severance New waterfront environment</td>
<td></td>
</tr>
<tr>
<td><strong>Tests</strong></td>
<td>Deliverability – land assembly (CPO), environmental impact e.g. reclamation, funding, Viability Sustainability Timing/Phasing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                          | Reactive                                                                      | Proactive                                                                       |

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8 Next Steps

In Stage 2 a number of different development “solutions” or “options” for the site will be created, and then placed within a set of “integrated options”.

Each of the options will be subject to a testing/appraisal criteria in terms of fit with wider transport, regeneration initiatives, social issues and environmental constraints. The appraisal criteria, based upon the Government’s New Approach to Transport Assessment (NATA) and used for the Multi-Modal Studies, will form the basis, supplemented by local objectives.

Once tested, options can be refined with Stage 3 setting out the final Preferred Option.