chapter 12
Minerals

Developing a prosperous economy - to develop a more enterprising, vibrant and diverse local economy that strengthens local businesses and enterprises, which will attract investment, share prosperity and create better employment opportunities for locals.

Maintaining a clean and sustainable environment - to create a more attractive environment that is safe, clean and tidy as well as being a more healthy and diverse natural environment.
Minerals

Introduction

12.1 The city contains the farthest south western exposure of workable limestone in England. It provides an important resource for the local economy, particularly the construction industry. While there are other areas in Devon where limestone is quarried, their value as an alternative is limited because of constrained expansion opportunities and increased transport costs. Plymouth's limestone, with its potential for significant expansion, will be important to the sub-regional economy for a long time to come.

Context

12.2 Limestone is a key feature of the city's physical geography. A band of Middle Devonian Limestone forming a long exposure up to a kilometre wide runs across the southern side of the city from The Hoe, through Cattedown to Sherford. The rocks are well-bedded medium to pale grey limestone – reserves of which have been proved to a considerable depth. This limestone belt creates the distinctive features that contributes to the character of the city's waterfront, such as The Hoe and Mount Batten.

12.3 Limestone quarrying has been a significant feature of the city since its early development. The stone has been used for a variety of notable projects such as: the Plymouth Breakwater; the Eddystone lighthouses; Royal William Victualling Yard; Devonport Dockyard and many other important buildings throughout the 17th, 18th and 19th centuries.

12.4 The limestone from Plymstock Quarry has been used to manufacture cement on-site. The quarry was closed in 1999 as the case for the continued extraction of the limestone as an aggregate was considered marginal. This former quarry is now proposed for re-development as a new sustainable residential neighbourhood with a mix of supporting uses.

12.5 Limestone has been extracted and processed at Moorcroft Quarry from the 1800's, but will cease (at pit 4) during 2006. The new quarry, at Hazeldene, was granted consent in 1994. It is accessed through a tunnel that passes under Haye Road, allowing the limestone extracted from Hazeldene to be processed at the existing plant in Moorcroft Quarry. The current extraction rates at Hazeldene Quarry suggest that it has about 50 years of permitted reserves at present output levels.

12.6 Additional limestone reserves have been proven to the east and north of Hazeldene. While the location of the proposed new community at Sherford, in South Hams, will result in the loss of the reserves to the east, the limestone resource to the north has the potential capacity, subject to planning permission, to supply the local economy well into the next century. Proposals for extraction of limestone from former and abandoned quarries to the south and west of Plymstock are not likely to come forward in the foreseeable future. There are no other known mineral deposits within Plymouth for which it is necessary to provide a minerals planning framework.

Approach

12.7 Minerals are a finite, but vital resource. Draft RSS Policies provide for the supply of aggregates and other minerals to contribute to national requirements and to maintain land banks for at least seven years. Policy RE12 also provides for the identification of sites for the recycling of secondary aggregates (which will addressed in Plymouth's Waste Development Plan Document).

12.8 It is the LDF’s role to ensure that adequate supplies of minerals are provided to meet foreseeable needs, and that known mineral reserves are safeguarded from unnecessary development. Provision of supplies to meet current needs is achieved in the form of ‘land banks’ (sites with permission) and future supplies are protected in ‘minerals safeguarding areas’ (areas of potential future mineral extraction, but which do not yet have planning permission for their extraction). The LDF must also consider the development needs of the city as a whole and seek a sustainable balance between planning for mineral supply and the city's growth.

12.9 This approach will be amplified in the North Plymstock (and Minerals) AAP, reflected in South Hams District Council’s Sherford AAP and the emerging Devon Minerals Development Framework.
Strategic Objective and Policies

Strategic Objective 12
Delivering Future Mineral Resources

To deliver an appropriate balance between the need to safeguard the long term supply of minerals and delivery of strategically important development in the eastern corridor, helping to make Plymouth a place where people, business and an outstanding natural environment converge to bring about sustainable prosperity and well-being for all. This will be achieved through:

1. Safeguarding the continued extraction and processing of mineral resources from existing permitted quarries.
2. Safeguarding mineral reserves for future extraction in a manner which supports the sustainable development objectives of the city and sub-region, notably the development of the new community at Sherford and its longer term potential extension back towards the city.
3. Balancing the impacts of mineral extraction with environmental protection and amenity of adjoining occupiers of land and buildings.
4. Reducing the consumption of non-renewable mineral resources by encouraging reuse and recycling of construction and demolition waste.

Targets

Progress towards achieving this objective will be measured against the following targets:

1. Identification of land consented for mineral extraction and processing and an appropriate buffer zone in the North Plymstock (including Minerals) Area Action Plan.
12.10 Mineral resources can only be worked where they exist. A function of the planning system is to ensure the long-term future supply of the limestone, because it is important to the local economy and construction industry. This policy seeks to safeguard the potential future extraction of the proven limestone resource under land to the north of the existing Hazeldene Quarry. This is required to ensure a long-term limestone supply as an alternative to the loss of the limestone beneath the new community proposed at Sherford. In order to implement Sherford there will be a need for the owner of the mineral resource to agree to give up their consented land banks and potential reserve in favour of this alternative extraction area.

12.11 This policy also identifies safeguards for the future operation of quarries, and in relation to public safety and amenities, given that the limestone extraction process, which incorporates blasting, can have a significant impact well beyond the extent of the actual quarry edge. Some of this impact can be mitigated by the environmental bund, constructed around the perimeter of the quarry. However, there is still a need for a buffer zone to ensure that development is not subject to unacceptable impacts from quarrying, but also to safeguard the quarry operation, which might otherwise be sterilised by the imposition of environmental controls arising from nuisance complaints. The buffer zone also limits the extent of quarrying activity, so that the local community can be confident of the protection of their amenity and local environmental quality.

12.12 The policy will be implemented by the Council by the detailed definition of the safeguarding area and future buffer in the North Plymstock Area Action Plan and then through the consideration and control of development proposals submitted within the defined area.
Policy CS24
Mineral Development

Applications for mineral extraction in the Mineral Safeguarding Area will be permitted, provided that:

1. The extent of the proposal is satisfactory in relation to the mineral buffer zone and need to protect the amenity of existing occupiers adjoining land and buildings and the future development and use of adjoining land.

2. The development demonstrates that, through its design and operation, it integrates with the planned development of the new community at Sherford.

3. The development provides an environmental bund to protect the occupiers of adjoining land from the physical and visual impact arising from mineral extraction. The environmental bund should also provide for a recreation cycle and footpath to link public open space at the new community with recreational land and routes in the vicinity of Saltram.

4. The method, monitoring and phases of the development are acceptable in relation to its environmental impact.

5. There are no unacceptable adverse impacts arising from the development upon interests of acknowledged importance, which can’t otherwise reasonably be compensated for or mitigated against.

6. There are demonstrable benefits of the development for the local economy and to the sustainable development and growth of the city.

7. There are satisfactory after care and restoration proposals.

8. The transport impacts are satisfactorily managed.

9. Assessment demonstrates that there will not be an unacceptable impact upon the water environment, with particular regard to protection of ground water resources and flood risk.

10. The development provides for submission of an Environmental Statement at review periods and a methodology to respond to any unforeseen and significantly detrimental environmental impacts arising from mineral extraction.

12.13 Planning applications are likely to be submitted for the extension of Hazeldene Quarry early in this plan period. This policy is required to provide a framework of the relevant planning considerations that such a proposal will raise, and to guide and control such a development in a way which balances the future supply of limestone with environmental and amenity concerns and future sustainable growth of the city.

12.14 Given the proximity of the limestone resource to existing and planned future development there is a particular need to carefully balance the control, extent and potential impact of future extraction on neighbouring uses, whilst also making best use of the limestone reserve. Aspects of the new community infrastructure, namely recreational routes, can be facilitated by the extension of the mineral extraction area. The potential duration of quarrying activity, due to the capacity of the reserve, could be as long as 250 years. It is difficult to predicted the environmental impact of mineral extraction beyond a reasonable period of time. Therefore there is a need to agree a phased approach to any consent with either a series of consents and/or, by agreement with the developer, the inclusion of review stages - to enable the proper long term environmental impact of the mineral extraction to be monitored and account taken of unforeseen adverse environmental impacts.

12.15 The policy will be implemented by the Council through the exercise of its statutory planning powers when considering and determining planning applications.

Key Sources:
- British Geological Survey – Geology Map
- Aggregate Industries – Map showing Greater Hazeldene known extent of Limestone reserve July 2006.
Safeguarding and providing for long-term limestone extraction, in a manner that facilitates Sherford new community, underpins the city’s aspirations for making best use of natural resources and sustainable growth.

The Core Strategy provides for the delivery of:

- Safeguarding existing mineral and secondary aggregate processing at Moorcroft Quarry.
- Safeguarding of limestone extraction from permitted reserves at Hazeldene Quarry.
- Safeguarding limestone reserves at 'Greater Hazeldene', in a way that facilitates future long-term limestone extraction and helps deliver the Sherford new community.
- Sustainable mineral extraction with a limited impact that facilitates a high quality living environment around quarrying activity.