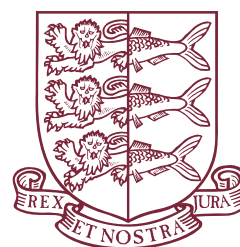


7 Infrastructure Provision & Public Utility Services

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7 *Infrastructure Provision & Public Utility Services*

7.1 INTRODUCTION

7.1.1 This chapter of the Plan deals with infrastructure provision and public utility services. It also deals with other environmental protection issues which are not dealt with elsewhere in the document. 'Sustainable Development' is a guiding principle of the Plan and is particularly relevant to this chapter, ie. that development permitted within the timescale of the Plan should not harm or compromise the needs of future generations.

7.2 ELECTRICITY GENERATION AND SUPPLY

Renewable Energy

7.2.1 Planning Policy Guidance Note 22 defines renewable energy as energy flows which occur naturally and repeatedly in the environment, such as solar, wind, water and geothermal energy. Plant materials, combustible and digestible material, agricultural and waste materials are also regarded as renewable sources of energy.

7.2.2 The Government's policy is to stimulate the development of new and renewable energy sources wherever they have prospects of being economically attractive and environmentally acceptable in order to contribute to:

- diverse, secure and sustainable energy supplies
- reduction in the emission of pollutions
- encouragement of internationally competitive industries.

7.2.3 In the interests of sustainability the Borough Council endorses the Government's views and supports the development of new and renewable energy sources which are economically attractive and environmentally acceptable. The Council also acknowledges that proposals to harness renewable energy can display a variety of factors peculiar to the technology involved and such schemes can have particular locational constraints so that the resource can only be harnessed where the opportunity occurs. However, it is also important that the landscape, the character and appearance of settlements and wildlife interests are protected from the immediate and wider impact of proposed development, particularly in the Norfolk Coast AONB, the Broads and national and internationally designated sites of nature conservation value. Any decision on proposals for developing renewable energy sources must also weigh carefully the likely impact of the scheme on local land use and residential amenity.

7.2.4 At present the production of power from renewable energy sources is financially assisted by Central Government through the Non-Fossil Fuel Obligation (NFFO). The prime purpose of NFFO is the creation of an initial market for those renewables - based generation technologies which have the prospect of competing against conventional

technologies in the open market for electricity. This will ultimately reduce the nation's production of greenhouse-effect gases created by the burning of fossil fuels which contribute to global warming.

- 7.2.5 A renewable energy study of the eastern region, including Norfolk, which is being funded by the Department of Trade and Industry and the European Union. When complete the study will reveal if there is any renewable energy resource potential in the Great Yarmouth Area.

7.2.6 POLICY INF1 THE COUNCIL WILL PERMIT THE DEVELOPMENT OF RENEWABLE ENERGY SCHEMES WHERE THE RESOURCES OPPORTUNITY OCCURS PROVIDED THAT IT CAN BE SHOWN THAT SUCH DEVELOPMENT WOULD NOT CAUSE SIGNIFICANT HARM TO THE ENVIRONMENT OR TO WILDLIFE INTERESTS. IN ASSESSING PROPOSALS THE COUNCIL WILL HAVE REGARD TO THE FOLLOWING:

- (A) THE IMMEDIATE AND WIDER IMPACT OF THE PROPOSED DEVELOPMENT ON THE SETTING OF SETTLEMENTS, LISTED BUILDINGS, OR AN ANCIENT MONUMENT AND ON THE NORFOLK COAST AREA OF OUTSTANDING NATURAL BEAUTY, THE BROADS, AND ON AREAS OF WILDLIFE INTEREST, ESPECIALLY THOSE AREAS DESIGNATED AS NATIONAL OR INTERNATIONAL NATURE CONSERVATION SITES;
- (B) THE MEASURES THAT WOULD BE TAKEN, BOTH DURING AND AFTER CONSTRUCTION, TO MINIMISE THE IMPACT OF THE DEVELOPMENT ON LOCAL LAND USES OR RESIDENTIAL AMENITY; AND
- (C) THE LOCATIONAL CONSTRAINTS OF RENEWABLE ENERGY SOURCES.

(Objective: To allow alternative energy sources whilst safeguarding environmental and visual amenities.)

Wind Turbines

- 7.2.7 Wind energy is one of the naturally occurring "renewable" energy resources. The harnessing of electricity from the wind through forms of wind turbines is presently one of the more developed sources of renewable energy in the United Kingdom. A scheme of ten 225kw and one 2.25mw electricity generating wind turbines is already operational in the north of the Borough at West Somerton.

- 7.2.8 Despite the global advantages of exploiting wind energy, wind farm developments can have repercussions in terms of a high visual impact in the landscape as well as a more local effect on the amenities of nearby residents mainly through noise and electromagnetic disturbance, although the latter can be generally resolved to existing transmitting or receiving systems such as television sets. Planning conditions will be imposed to ensure that the site will be returned to its original condition once operations have ceased.

7.2.9 POLICY INF2 CONSTRUCTION OF INDIVIDUAL WIND TURBINES WILL BE PERMITTED WHERE:

- (A) THE STYLE AND HEIGHT OF THE TURBINE TOWER AND ITS FOUNDATION WHICH COULD HAVE A SIGNIFICANT VISUAL IMPACT ON THE LANDSCAPE, THE NORFOLK COAST AREA OF OUTSTANDING NATURAL BEAUTY, THE SETTINGS OF LISTED BUILDINGS, SETTLEMENTS OR ANCIENT MONUMENTS;

- (B) THE DEVELOPMENT WOULD NOT HAVE A SIGNIFICANT ADVERSE EFFECT ON LAND DESIGNATED AS POSSESSING NATURE CONSERVATION INTEREST AND AREAS OF WILDLIFE INTEREST OR WOULD NOT RESULT IN DAMAGE TO WILDLIFE;
- (C) THE DEVELOPMENT WOULD NOT HAVE SIGNIFICANT ADVERSE EFFECTS ON THE OPERATION AND USE OF POWER TRANSMISSION LINES, RAILWAYS, ROADS, THE PORT OF GREAT YARMOUTH, GREAT YARMOUTH HELIPORT OR AVIATION GENERALLY;
- (D) THE DEVELOPMENT WOULD NOT SIGNIFICANTLY ADVERSELY AFFECT LOCAL AMENITIES OR THE AMENITIES OF THE OCCUPIERS OR USERS OF NEARBY PROPERTIES OR LANDS;
- (E) IF REQUIRED, PARKING AND SERVICING ARRANGEMENTS CAN BE PROVIDED TOGETHER WITH ADEQUATE ACCESS BOTH BEFORE AND AFTER THE CONSTRUCTION PERIOD.

Deleted

7.2.10 POLICY INF3 CONSTRUCTION OF WINDFARMS WILL BE PERMITTED WHERE:

- (A) THERE WOULD BE NO SIGNIFICANT ADVERSE IMPACT ON THE LOCAL ENVIRONMENT AND LANDSCAPE, PARTICULARLY THE BROADS LANDSCAPE, THE NORFOLK COAST AREA OF OUTSTANDING NATURAL BEAUTY, THE SETTINGS OF LISTED BUILDINGS, SETTLEMENTS OR ANCIENT MONUMENTS;
- (B) THE DEVELOPMENT WOULD NOT HAVE A SIGNIFICANT ADVERSE EFFECT ON LAND DESIGNATED AS POSSESSING NATURE CONSERVATION INTEREST AND AREAS OF WILDLIFE INTEREST OR WOULD NOT RESULT IN DAMAGE TO WILDLIFE;
- (C) THE DEVELOPMENT WOULD NOT HAVE SIGNIFICANT ADVERSE EFFECTS ON THE OPERATION AND USE OF POWER TRANSMISSION LINES, RAILWAYS, ROADS, THE PORT OF GREAT YARMOUTH, GREAT YARMOUTH HELIPORT OR AVIATION GENERALLY;
- (D) THE DEVELOPMENT WOULD NOT SIGNIFICANTLY ADVERSELY AFFECT LOCAL AMENITIES OR THE AMENITIES OF THE OCCUPIERS OR USERS OF NEARBY PROPERTIES OR LANDS; AND,
- (E) PARKING AND SERVICING ARRANGEMENTS TOGETHER WITH ADEQUATE ACCESS BOTH BEFORE AND AFTER THE CONSTRUCTION PERIOD.

Deleted

(Objective: To allow alternative energy sources whilst safeguarding environmental and visual amenities.)

Conventional Power Stations

7.2.11 Until its closure several years ago, Great Yarmouth was served by a conventional oil-fired power station which met the supply needs of the area as well as the national grid. The station and its surrounding site is in private ownership and was demolished. Planning permission was granted for a new thermal power station on the station's former coal stockyard but this expired in April, 1994. However, a new gas-fired power station received consent on the former oil-fired station site and is expected to become operational by April 2001.

7.2.12 Current legislation gives the Secretary of State for Energy power to require regional electricity companies to secure a proportion of their supply from renewable sources (the "Non- fossil Fuel Obligation"). The impact of this policy is unclear and this may partly explain why the planning permission for the new thermal power station has not been renewed. There may well be a strategic need for a station at South Denes (as opposed to a purely commercial need). However, the site is ideally placed for future

port related or general industry and is zoned as such on the Proposals Map. The latter includes most types of power generation.

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- 7.2.13 POLICY INF4 THE CONSTRUCTION OF POWER STATIONS (INCLUDING COMBINED HEAT AND POWER SCHEMES) EITHER FREE STANDING OR LINKED TO AN INDUSTRIAL OR WASTE TREATMENT PROCESS WILL BE PERMITTED WHERE:**
- (A) THE SCALE, DESIGN AND EXTERNAL APPEARANCE OF THE PROPOSAL WOULD NOT HAVE A SIGNIFICANT IMPACT ON THE LOCAL ENVIRONMENT INCLUDING THE LANDSCAPE;**
 - (B) THERE WOULD BE NO SIGNIFICANT ADVERSE EFFECT ON RAILWAYS, ROADS THE PORT AND OTHER TRANSPORT OPERATIONS, TAKING INTO ACCOUNT THE SOURCES OF THE WASTES POSSIBLY INVOLVED AND THE MEANS OF DISPOSAL OF ANY RESIDUE MATERIALS.**
 - (C) THERE WOULD BE NO SIGNIFICANT ADVERSE EFFECT ON OR TO THE ENVIRONMENT, LOCAL AMENITIES, THE OCCUPIERS OF NEARBY PROPERTIES OR USERS OF LAND;**
 - (D) PARKING AND SERVICING ARRANGEMENTS IN ACCORDANCE WITH THE STANDARDS SET OUT IN APPENDIX (A) TO CHAPTER 3 OF THE PLAN, TOGETHER WITH ADEQUATE ACCESS CAN BE PROVIDED BEFORE, DURING AND AFTER CONSTRUCTION.**

(Objective: To allow the construction of power stations whilst safeguarding environmental and visual amenities.)

High-Voltage and Low-Voltage (132kv) Electricity Lines

- 7.2.14 In connection with the need to link the former South Denes Power Station with the National Grid, three high-voltage 132kv electricity circuits were constructed on two separate but parallel overhead transmission routes that originated on the South Denes Peninsula and crossed Bradwell, Belton and St. Olaves to Thurlton, south-east of Norwich. Closure of the station and the construction of a new gas-fired power station has allowed the rationalise the 132KV overhead line routes. The lines through Burgh Castle and Belton have been decommissioned and a new route from Fritton to South Corleston and Great Yarmouth has been constructed using overhead circuits and, in the urban area, underground cables.
- 7.2.15 The Borough Council recognises the substantial environmental improvements that the dismantling of the former overhead power circuits have provided.

nb. Paragraphs 7.2.14 and 7.2.15 have been updated to reflect the current position at January, 2001.

Low-voltage Electricity Lines

- 7.2.16 Overhead electricity supply lines can have a visual impact on both rural and urban areas. Many overhead lines in the countryside have existed from the 1940s/50s and any visual intrusion is mainly ignored by those that benefit from them. Attitudes towards overhead lines have changed in recent years and when an overhead line is now proposed its route is carefully considered to minimise the environmental impact. On all new developments the Borough Council will object to proposals which do not seek to minimise the visual impact of overhead low-voltage electricity lines through diversion or underpinning or are contrary to the NNV policies of the Plan. Eastern Electricity does have an "Amenity Fund" for undergrounding lines in AONBs, National Parks, Conservation Areas and other specially designated environmentally sensitive

areas. The promoter of an undergrounding scheme under these circumstances is required to contribute 50% of the total cost.

7.2.17 POLICY INF5 THE COUNCIL WILL NOT OBJECT TO PROPOSALS TO DIVERT OR PLACE UNDER GROUND ANY EXISTING OVERHEAD POWER TRANSMISSION LINES WHICH ARE SIGNIFICANTLY VISUALLY INTRUSIVE WHEN SEEN FROM THE BROADS OR OTHER OPEN LANDSCAPE OR WHERE THEY ARE SIGNIFICANTLY HARMFUL TO THE VISUAL AMENITY OF OR WHERE THEY CROSS SIGNIFICANTLY HARMFUL TO THE VISUAL AMENITY OF OR WHERE THEY CROSS EXISTING OR PROPOSED RESIDENTIAL AREAS.

Deleted

(Objective: To secure improvements to the visual environment and areas of landscape value.)

7.3 GAS DISTRIBUTION AND SUPPLY

7.3.1 British Gas plc - Eastern (BG) is responsible for gas supply and distribution in the Great Yarmouth area. The Borough is served by a strategic mains network and the company has issued guidance outlining its general conditions affecting the design and construction of services and/or structures in the vicinity of distribution mains, pipelines and associated installations. Details of BG's requirements are given in the BG document 'General Conditions Affecting the Design, Construction or Maintenance of Services and/or Structures or other works in the vicinity of the British Gas plc High Pressure System and Associated Installations.' (Note: British Gas wishes developers to be made aware of British Gas Document NAD/2 "Tree Planting Restrictions in the Vicinity of Pipelines" and insists that the distances between new tree planting and pipelines must be strictly enforced). The document 'Health and Safety Executive Advice to Planning Authority' should also be consulted.

7.4 TELECOMMUNICATIONS MASTS AND AERIALS

- 7.4.1 Both British Telecommunications and Mercury Telecommunications have strategic telecommunication routes throughout the Plan Area. In addition, the advent of microwave technology and the need for masts and antennae (excluding satellite dish antennae) to support equipment and fixtures has led to pressure to construct new masts and aerials. The construction of the Gorleston Relief Road has, for example, resulted in the need for the Department of Transport to construct a television service re-transmission tower.
- 7.4.2 A proliferation of large masts will have a visual impact on a largely open landscape. The structures are usually of steel or similar construction and are, therefore, difficult to "hide" even in an urban townscape.
- 7.4.3 While respecting operational efficiency, every possible measure is taken to minimise any adverse impact on local character and amenity. Where necessary, landscaping conditions will be imposed to ensure adequate landscaping provision and structures/apparatus that become obsolete are removed.
- 7.4.4 The ever increasing demand for efficient, cost effective telecommunications has considerable implications for both operators and planners. The Borough Council recognises the benefits of facilitating the growth of new and existing systems in the interests of both businesses and households. However, it is essential that development proposals comply with established Plan policy in relation to protection of the built and

natural environment, whilst enabling operators to meet their operational requirements and satisfy the statutory obligations of the Telecommunications Act 1984.

- 7.4.5 POLICY INF6** **EXCEPT IN THE CASE OF SATELLITE DISHES IN THOSE INSTANCES WHERE PLANNING PERMISSION IS REQUIRED TELECOMMUNICATIONS DEVELOPMENTS THAT REQUIRE THE ERECTION OF FIXED MASTS, TELESCOPIC MASTS, ANTENNAE OR MICROWAVE DISHES WILL ONLY BE PERMITTED WHERE:**
- (A) THERE IS NO ALTERNATIVE SITE AVAILABLE THAT BETTER MEETS ANY STATUTORY OBLIGATIONS AND OPERATIONAL REQUIREMENTS TO WHICH THE OPERATOR MAY BE BOUND;**
 - (B) THE DEVELOPMENT CANNOT BE COMBINED WITH AN EXISTING TELECOMMUNICATIONS FACILITY OR THE SITE SHARED DUE TO TECHNICAL REQUIREMENTS OR CONSTRAINTS, AND IN THE CASE OF LICENSED OPERATORS, LEGAL OBLIGATIONS;**
 - (C) THE PLANNING BENEFITS RESULTING FROM THE DEVELOPMENT OUTWEIGH ANY ADVERSE IMPACT ON THE BROADS, NORFOLK COAST AREA OF OUTSTANDING NATURAL BEAUTY, THE OPEN COAST OR OTHER LANDSCAPES OR URBAN SETTINGS;**
 - (D) IT CAN BE DEMONSTRATED THAT MEASURES ARE POSSIBLE TO MINIMISE ANY SIGNIFICANT ADVERSE IMPACT ON LOCAL CHARACTER AND AMENITY WITHOUT IMPAIRMENT TO OPERATIONAL EFFICIENCY.**
 - (E) THE DEVELOPMENT WILL NOT HAVE ANY ADVERSE EFFECT ON THE HISTORIC ENVIRONMENT.**

(Objective: To provide guidance to telecommunications operators on the siting of new facilities.)

- 7.4.6 Satellite dishes on both commercial and domestic properties can be visually intrusive in both the rural and urban environment. Domestic satellite dishes can often be put up without planning consent but there are exceptions. Where consent is required, the Borough Council will normally resist the installation of satellite dishes unless the reception dish is sited in an inconspicuous location. Listed building consent would be required before an antenna could be lawfully erected on a listed building if it would affect the character of the building.

- 7.4.7 POLICY INF7** **IN THOSE INSTANCES WHERE PLANNING PERMISSION IS REQUIRED, THE COUNCIL WILL ONLY APPROVE PROPOSALS FOR THE INSTALLATION OF A SATELLITE DISH ANTENNA (EITHER COMMERCIAL OR DOMESTIC) ON OR AROUND A BUILDING EITHER WHERE THEY ARE NOT SIGNIFICANTLY VISUALLY INTRUSIVE OR WHERE THE ANTENNA COULD NOT BE POSITIONED ELSEWHERE WITHOUT DETRIMENT TO ITS PERFORMANCE.**

(Objective: To safeguard visual amenities.)

7.5 WATER RESOURCES AND SUPPLY

- 7.5.1 Protection and enhancement of the quality of surface water entering the soil and sub-strata is essential to ensure that groundwater when abstracted is of the highest quality. Good quality surface water is essential for nature conservation and the well-being of local drainage dykes, streams and rivers. Developments (which are not always under the control of Local Planning Authorities) can affect water quality, as can drainage from domestic, industrial and agricultural sites. Water contamination is also possible from current and former land-fill sites.

7.5.2 The views of the Environment Agency will be taken into account in assessing proposals that may affect water quality. It should be noted that decisions on matters affecting water resources may have consequences for existing and proposed developments both within and outside the Borough.

- 7.5.3 POLICY INF8 IN CONSIDERING PROPOSALS FOR DEVELOPMENT WHICH COULD HAVE A SIGNIFICANT ADVERSE EFFECT ON SURFACE WATER OR GROUNDWATER QUALITY, THE COUNCIL WILL REQUIRE THE APPLICANT TO DEMONSTRATE THAT:**
- (A) THE PROPOSAL WOULD NOT PRESENT A SIGNIFICANT RISK TO THE QUALITY OR AVAILABILITY OF GROUND OR SURFACE WATER RESOURCES;**
 - (B) THE DEVELOPMENT WOULD NOT HAVE A SIGNIFICANT ADVERSE EFFECT ON THE NATURAL ENVIRONMENT OF THE BROADS; AND,**
 - (C) NECESSARY WATER SUPPLY SERVICES CAN BE PROVIDED IN ADVANCE OF THE DEVELOPMENT.**

(Objective: To safeguard ground water resources.)

7.5.4 No major new infrastructure is understood to be envisaged by Anglian Water Services Limited or Essex and Suffolk Water plc over the plan period. Limited ground water resources are available to support demands. Therefore, the proposed developments within the plan may require additional infrastructure to supply demand. The infrastructure costs would be borne by the developer.

7.6 SURFACE AND FOUL WATER DISPOSAL

7.6.1 Surface Water from roads and hardstandings is normally discharged to either a surface water sewer or to a combined sewer (ie. foul and surface water combined). No new strategic facilities are envisaged in the plan period apart from the possible need to construct a new surface water sewer from the South Gorleston Development Area to a sea outfall on the coast, the location of which has yet to be determined. The NRA has indicated that any such sea outfall will require a "Schedule 12" consent under the Water Act, 1989.

7.6.2 Where any sewers discharge to upland watercourses, designated main rivers, and rivers with tidal defences where there is a risk of flooding from water entering the sewer behind flood defences all the Environment Agency's requirements will need to be met. This may include the need to design appropriate methods of flood attenuation into any scheme to prevent the possibility of downstream flooding.

- 7.6.3 POLICY INF9 THE BOROUGH COUNCIL, IN CONJUNCTION WITH OTHER STATUTORY AUTHORITIES, WILL IDENTIFY AND SAFEGUARD, A ROUTE FOR NEW SURFACE WATER SEWER AND OUTFALL FROM THE SOUTH CORLESTON DEVELOPMENT AREA TO THE COAST, IF NECESSARY.**

Deleted

(Objective: To ensure adequate surface water disposal.)

7.6.4 Both Anglian Water Services Limited (AW) and the Environment Agency consider that, in assessing new development proposals, they will expect applicants to provide or indicate the provision of a comprehensive drainage strategy for all new development areas. This is to ensure that the surface water drainage system is both adequate in terms of capacity and that effluent and possible pollutants are not discharged to watercourses. Detailed feasibility studies may be required to determine the optimum location and

route (both in terms of practicality and cost) for both foul and surface water drainage systems. Improvements may also be required to receiving watercourses.

- 7.6.5 Approval of the location and design of any drainage scheme will be subject to consultation, by the Council, with the relevant statutory authorities.

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- 7.6.6 POLICY INF10 SURFACE AND FOUL WATER FROM ALL PUBLIC HIGHWAYS, INDUSTRIAL AND EMPLOYMENT AREAS WILL BE DISCHARGED TO A FOUL SEWER OR SURFACE WATER OUTFALL, THE LOCATION AND DESIGN OF WHICH WILL BE AGREED WITH THE COUNCIL BEFORE ANY DEVELOPMENT COMMENCES; OR IN THE CASE OF SURFACE WATER, CONSIDERATION WILL BE GIVEN TO DISPOSAL BY MEANS OF SOAKAWAYS IN THE ABSENCE OF A SUITABLE SEWER.**

(Objective: To ensure adequate surface and foul water disposal.)

- 7.6.7 The NRA also states that, to be effective, anti-pollution measures should be maintained and that bunding is required around oil and chemical storage tanks. In relation to Policy INF10, the NRA requires the provision of trapped type road gullies to be included in any overall drainage system design, particularly on industrial estates and prefers that interceptors are provided where there is a danger of spillage of oils, chemicals or similar pollutants.

7.7 SEWAGE TREATMENT AND DISPOSAL

- 7.7.1 In compliance with both national and European directives, Anglian Water Services Limited (AW), as the company responsible for sewerage and sewage disposal in the Great Yarmouth area, has established a programme of investment in new infrastructure facilities.

- 7.7.2 Anglian Water has recently completed construction of the necessary trunk pipeline and principal pumping stations to link all existing sewage systems which discharge directly into the Rivers Bure and Yare to the Caister headworks and sea-outfall.

- 7.7.3 In order to safeguard existing and future waste water disposal facilities from adjacent or nearby development which may prejudice their continuing use the Borough Council will liaise with Norfolk County Council on planning applications that may prejudice the future use of existing or proposed waste facilities.

-
- 7.7.4 POLICY INF11 THE COUNCIL WILL PROTECT FROM INCOMPATIBLE DEVELOPMENT, AS FAR AS PRACTICABLE, EXISTING WASTE WATER SEWAGE AND SEWAGE SLUDGE TREATMENT PLANTS AND ANY SITES WHERE PLANNING PERMISSION IS SUBSEQUENTLY OBTAINED.**

(Objective: To safeguard such sites from incompatible development)

- 7.7.5 The Borough Council is likely to pursue the designation of "Sensitive Areas status" for Great Yarmouth's Maritime Waters under the EEC Urban Waste Water Directive.

7.8 GENERAL REQUIREMENTS INCUMBENT ON DEVELOPERS

- 7.8.1 Except for the major infrastructure projects highlighted in this Chapter of the Plan, the general range of proposals and policies presented should not involve significant public and private investment in providing new or enhanced services. However, special provisions are, made for infrastructure and service provision in respect of the South Gorleston Development Area as detailed in Chapter 12.

- 7.8.2 POLICY INF12 PROPOSALS FOR NEW DEVELOPMENT WILL ONLY BE PERMITTED IF THEY CAN BE PROPERLY SERVICED OR AGREEMENT CAN BE REACHED TO ENSURE DEVELOPMENT DOES NOT PROCEED IN ADVANCE OF SERVICES BEING PROVIDED.**

(Objective: To ensure adequate services are provided for new development.)

- 7.8.3 In order to satisfy Policy INF12, applicants may be expected to enter into a legally binding planning obligation under Section 106 of the Town and Country Planning Act, 1990. For the avoidance of doubt, the provision of services includes, besides access, the provision of all relevant public utility services as well as on and off site foul and surface water drainage.

7.9 FLUVIAL AND SEA FLOOD PROTECTION

The Bure and Yare Barrier Options

- 7.9.1 During late 1991/early 1992 the Environment Agency commissioned consultants to report on a flood alleviation strategy for Broadland. This strategy represents an update and revision of a similar examination of options which was undertaken between 1976 and 1979 by the (then) Anglian Water Authority.
- 7.9.2 The 1992 Environment Agency document identified 15 possible options and summarised the impacts of each of these. Two alternative schemes received general support:-
- (a) The Bure barrier option gained the backing of the Borough Council, environmental groups, the Port Authority and conservationists.
 - (b) The Yare barrier option was supported by the Broads boat hire industry and families on Haddiscoe Island who would be affected by the former scheme.

In April 1993 the Land Drainage Committee of the Environment Agency decided to pursue the Bure Barrier option with associated bank strengthening. However, in October 1994 the NRA decided that a barrier on the Bure cannot be justified at this time from a purely flood defence point of view and the option now adopted for Broadland is a ten year programme of bank strengthening and erosion protection works.

- 7.9.3 The Great Yarmouth Borough Council, the Chambers of Commerce, Port Authority and the Port Users' Association are all in complete and unqualified agreement that they are totally opposed to the adoption of any option that would require the provision of a barrier in any of the following locations in the Yare:-
- (a) Mouth of the River Yare.
 - (b) Ferry Crossing.
 - (c) Upstream of the Haven Bridge.
 - (d) East end of Breydon Water.

The Borough Council is of the opinion that further work on the Washlands options as the most likely solution to the problem of flooding in the Great Yarmouth and Broadland areas needs to be undertaken.

- 7.9.4 The Borough Council is opposed to the construction of a flood barrier across the River Yare (as originally promoted by the National Rivers Authority) because of the increased

risk of flooding downstream of the barrier, the difficulties in navigation in the harbour and restrictions on possible port and port-related developments up-stream of it. The construction of a Bure Barrier is supported provided it has no adverse effects on (a) flood alleviation; (b) the urban landscape and conservation areas; (c) surrounding land uses and (d) the commercial use of the river and the port and provided that a pedestrian access from the railway station to the town centre is maintained.

Development in Flood Risk Areas

7.9.5 Section 105 (2) of the Water Resources Act, 1991 requires the Environment Agency to carry out surveys of its flood defence function. These surveys are regarded by the Government as being helpful to local authorities in identifying land which is at risk from major events of low probability such as storm surges etc. Clearly until such time as further flood protection work is carried out in Broadland the broads area there is going to be a risk of occasional inundation of low-lying areas. Therefore, in line with Government guidance and the approved structure plan, development in general, particularly built development, will be guided away from areas at risk from flooding. Where development is allowed within areas which could be subject to flooding should existing flood defences fail, the Borough Council in consultation with the Environment Agency, will decide the minimum floor levels of buildings. The developer will need to meet the cost of any flood protection works that may be required by the Borough Council following consultation with the Environment Agency, including the provision of compensatory flood storage measures.

7.9.6 The extent of areas identified as being within tidal or fluvial flood plains and hence a risk of inundation flooding caused by overtopping or breaching of existing flood defences during a severe tidal surge event is identified on maps which may be viewed at the offices of the Borough Planning and Development Department. In all cases where development is proposed within any area identified in this manner by the Environment Agency, the provision of Policy INF13 will apply.

Note: The basis for the preparation of the flood plain maps is set out in the Technical Appendix.

7.9.7 Where proposals involve the use of land adjacent to flood defences a 9 metre wide access strip will be required to be kept free of obstruction and development, to facilitate the repair and maintenance of the defences.

7.9.8 POLICY INF13 WHEN CONSIDERING APPLICATIONS FOR DEVELOPMENT IN AREAS WHICH COULD BE SUSCEPTIBLE TO FLOODING, THE COUNCIL WILL REQUIRE THE APPLICANT TO DEMONSTRATE CONCLUSIVELY THAT:

- (A) THE PROPOSED DEVELOPMENT WOULD BE CAPABLE OF WITHSTANDING THE EFFECTS OF FLOODING AND COULD BE SATISFACTORILY PROTECTED FROM ITS EFFECTS; AND,**
- (B) THE PROPOSED DEVELOPMENT WOULD NOT BE AT RISK FROM LAND INSTABILITY CAUSED AS A RESULT OF FLOODING OR COULD BE SATISFACTORILY PROTECTED FROM ITS EFFECTS; AND,**
- (C) DEVELOPMENT ELSEWHERE WOULD NOT BE SIGNIFICANTLY AFFECTED.**

7.9.9 POLICY INF14 DEVELOPMENT IT WILL BE REQUIRED TO BE A MINIMUM OF 9M

7.9.10 POLICY INF15 THE COUNCIL WILL SPECIFY MINIMUM FLOOR LEVELS FOR BUILDINGS WHICH COULD BE SUBJECT TO FLOODING SHOULD

Deleted

(Councils to which this policy does not apply is not subject to flood inundation and to safeguard flood defences.)

7.10 DEVELOPMENT IN AREAS SUSCEPTIBLE TO COASTAL EROSION OR LAND INSTABILITY

- 7.10.1 The Government's advice given in Planning Policy Guidance Note 20 - The Coastal Zone and Development Plans (PPG 20) states that development should not be allowed to take place in areas susceptible to coastal erosion and where the development is likely to be adversely affected by the erosion during its lifetime. PPG20 refers to the need for local authorities to define "those parts of the coast where physical constraints and risks either make development inappropriate or require the imposition of special conditions on planning consents." It also sets out that "information which may be needed on the current environment and the nature scale and pace of change due to natural processes and human intervention" and includes the following list of physical processes:-
- (a) recent and current rates of erosion and deposition of material within sedimentary cells along the coastline;
 - (b) recent and current rates of erosion of sea cliffs and rates of erosion or accretion of sand dune systems and saline marshes;
 - (c) areas which have been or could be subject to flooding or land instability; and
 - (d) the effects of sea defence and coast protection works on these matters.
- 7.10.2 From 1st June 1992 the Borough Council has operated a policy for dealing with applications under Part A of the Building Regulations whereby the Building Control Officers were, inter alia, to have a due regard to the average rate of coast erosion which is known for the part of the coast in question together with the expected life of the building for which the application is being made. From October, 1992, the Council adopted the following policy concerning development in areas susceptible to coastal erosion or land instability:
- 7.10.3 Appropriate short term or temporary uses may be acceptable where there will be no threat to that development during the life of the proposal. Such proposals would be dependent on appropriate information (including, where necessary, a comprehensive site report, geotechnical analysis, and details of any stabilisation works for which the developer would be responsible) to demonstrate that erosion would not affect the lifetime of the buildings, and the buildings would not transfer risks elsewhere. Such developments would be subject to conditions and/or obligation to restrict the life of the buildings to a specific period and/or the progress of erosion. Within this context, favourable consideration may be given to the redevelopment or upgrading of existing holiday facilities in the coastal erosion zone, where the proposed buildings have a life expectancy considerably below the expected norm for a brick built building.
- 7.10.4 Favourable consideration may also be given in exceptional circumstances to relatively small scale development associated with existing buildings within the zone, e.g. extensions to existing dwellings. Proposals for "infill" development, i.e. the infilling of a small gap by one or two dwellings in an otherwise built-up frontage, which may be appropriate in other locations, would normally be resisted on the grounds of putting additional development at risk.

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- 7.10.5 POLICY INF16 WHEN CONSIDERING APPLICATIONS FOR NEW DEVELOPMENT WITHIN COASTAL AREAS WHERE THERE ARE NO SIGNIFICANT ENVIRONMENTAL OR LANDSCAPE CONSERVATION CONSIDERATIONS, BUT WHICH MAY BE IN AN AREA SUSCEPTIBLE TO MARINE EROSION AND ASSOCIATED LAND INSTABILITY AS SHOWN ON THE PROPOSALS MAP, THE COUNCIL WILL REQUIRE THE APPLICANT TO DEMONSTRATE CONCLUSIVELY THAT:**
- (A) THERE WOULD BE NO SIGNIFICANT RISK THAT THE PROPOSAL WOULD BE ADVERSELY AFFECTED BY MARINE EROSION OR LAND INSTABILITY WITHIN ITS LIFETIME; OR,**
- (B) THE PROPOSED DEVELOPMENT WOULD BE CAPABLE OF WITHSTANDING THE EFFECTS OF ANY ANTICIPATED EROSION/INSTABILITY OR WOULD BE PROTECTED FROM IT.**

(Objective: To prevent development in areas at risk from coastal erosion.)

7.10.6 In May, 1994, the Borough Council received a consultant's report entitled - Great Yarmouth Borough Council Shoreline Management Strategy Study (SMSS). Being mindful of the advice given in PPG20 the SMSS identified areas where erosion would be expected to occur up to the year 2068 and considered the following strategy options for each of the affected areas:-

- (a) Do nothing.
- (b) Remove existing defences.
- (c) Maintain existing defences.
- (d) Upgrade existing defences.
- (e) Construction of new defences.

7.10.7 In the SMSS two alternative 'development lines' were identified, seaward of which development has been adversely affected by coastal erosion during its lifetime and, therefore further development should not be allowed in this area. One of the development lines assumes that existing defence structures will be maintained, improvements will be carried out at Caister and the Scratby/California Cliffs will be defended by new works. The defence works at Caister were completed in May 1995 and at Scratby and California Cliffs in April 1996, and any proposals for development will be considered accordingly. The other development line reflects the coastline in 2068 should no maintenance or protection works be undertaken. The development lines are as shown on the Proposals Map.

7.11 MISCELLANEOUS ENVIRONMENTAL POLICIES

Development on Unstable Land

7.11.1 The Department of the Environment's Planning Policy Guidance Note 14 : Development on Unstable Land, states that "where major areas of unstable ground are known to a planning authority, their general location should be made clear, together with any policies that the authorities intend to apply to these areas" In addition, the Council's Land Reclamation Strategy sets out the Council's policy towards derelict and contaminated land.

7.11.2 One of the potential causes of instability is ground compression which can arise as a result of landfill or through natural causes such as the existence of very weak sediments (eg. peat, soft silts and clays). The locations of landfill sites within the Plan Area have

been notified to the Borough Council by the Norfolk County Council's Waste Disposal Officer. In addition, the lower lying marsh land to the north of the Plan Area consists of very weak sediments, where natural methane has been recorded.

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- 7.11.3 POLICY INF17 WHERE DEVELOPMENT IS PROPOSED ON LAND KNOWN TO BE UNSTABLE OR POTENTIALLY UNSTABLE AN APPLICANT WILL BE REQUIRED TO DEMONSTRATE THAT:**
- (A) THE LAND IS PHYSICALLY CAPABLE OF BEING DEVELOPED;
 - (B) THE INSTABILITY WOULD NOT HAVE ANY ADVERSE EFFECTS ON THE DEVELOPMENT;
 - (C) THE DEVELOPMENT WOULD NOT HAVE ANY ADVERSE EFFECTS ON THE STABILITY OF ADJOINING LAND;
 - (D) THERE WOULD BE NO SIGNIFICANT ADVERSE EFFECT ON LOCAL AMENITIES OR CONSERVATION INTERESTS; AND,
 - (E) WHERE APPLICABLE, SATISFACTORY REMEDIAL OR PRECAUTIONARY MEASURES WOULD BE TAKEN AGAINST THE MIGRATION AND/OR PERCOLATION OF LAND-FILL AND NATURALLY OCCURRING METHANE GAS.

(Objective: To provide safeguards where development is proposed on unstable land.)

Hazardous Developments

- 7.11.4 The Plan provides planning policy guidance to deal with proposals involving hazardous development, development in the vicinity of hazardous installations or development on contaminated land. The Borough Council holds a register of sites where hazardous substances are stored, under the Planning (Hazardous Substances) Act 1990. Planning applications within the prescribed distances of such sites must be referred to the Health and Safety Executive.

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- 7.11.5 POLICY INF18 IN CONSIDERING PROPOSALS INVOLVING HAZARDOUS DEVELOPMENT, IN THE VICINITY OF HAZARDOUS INSTALLATIONS, OR THE DEVELOPMENT OF CONTAMINATED SITES, AS SHOWN ON THE PROPOSALS MAP, ACCOUNT WILL BE TAKEN OF THE AMOUNT, TYPE AND LOCATION OF HAZARDOUS SUBSTANCES PRESENT, AND THE NEED FOR SPECIAL PRECAUTIONS OR RESTRICTIONS TO PROTECT FUTURE USERS OF THE SITE AND ANY OTHER PROTECTED LAND.**

(Objective: To control developments in the interests of public health and safety.)

Notifiable Installations, Sites and Pipelines

- 7.11.6 The Health and Safety Executive (HSE) has advised the Local Planning Authority of Notifiable Sites and Pipelines in the Plan Area. These are designated by the HSE as "notifiable installations" by virtue of the quantities of hazardous substances being stored or used.
- 7.11.7 A related issue, concerning the HSE on which the Borough Council will seek advice, is the use of cargo handling areas within the port for the import/export of explosives. Proposals for certain developments within specified distances of explosives handling berths will be referred to the Great Yarmouth Port Authority and the HSE before formal determination.
- 7.11.8 Details of all notifiable installations, where known, are held in the Borough Planning and Development Office and may be referred to during normal office hours.

Policy for the handling of specific materials

- 7.11.9 It is the function of Norfolk County Council to prepare a Waste Disposal Local Plan which will deal with waste disposal issues. However, planning applications for the handling and transfer of waste and specific materials on local industrial estates have been a cause of concern. The following policy will provide a sustainable basis on which applicants or companies in the business of handling and/or processing such materials can be guided as to the Borough Council's likely determination of a planning application or the Borough Council's response when consulted on an application to the County Council.

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- 7.11.10 **POLICY INF19 PLANNING PERMISSION WILL BE GRANTED FOR DEVELOPMENT, INCLUDING A CHANGE OF USE, INVOLVING THE HANDLING, STORAGE OR DISTRIBUTION OF ANY EXPLOSIVE, HIGHLY FLAMMABLE, TOXIC, CORROSIVE, CHEMICAL, RADIOACTIVE OR OTHER HARMFUL MATERIALS OR SUBSTANCES (INCLUDING THE RECYCLING OF CHEMICAL AND CLINICAL WASTE MATERIALS) ONLY IF IT DOES NOT CONSTITUTE A HAZARD TO HEALTH OR IF THERE IS NO SIGNIFICANT RISK OF ESCAPE OF ANY SUCH MATERIAL OR SUBSTANCE.**

(Objective: To give guidance to disposal/waste transfer operators or related users or occupiers of land.)

Note - Hazardous sites are shown on the Proposals Map. Each site has a specific consultation distance for planning purposes in which the HSE will be notified of proposed developments. The consultation distance in respect of each site is as follows -

- a) J and H Bunn Ltd., Bunns Lane, Southtown, 650 metres
- b) J and H Bunn Ltd., Woodfarm Lane, Gorleston, 700 metres
- c) I W Vincent, Humberstone Farm, Cobholm, 30 metres
- d) British Gas Plc., Southgates Road, 30 metres
- e) Vann Systems (UK) Ltd., Faraday Road, Capton Hall Industrial Estate, 30 metres

For detailed information including consultation distances which relate to port related installations located on the riverside contact HSE or the Great Yarmouth Port Authority.

In addition, the HSE has drawn attention to safeguard plans for the licenced explosives berths within the port, details of which are registered with the HM Explosives Inspectorate.