Ministry of Agriculture, Fisheries and Food

9

LAND DRAINAGE ACT 1976

(SECTIONS 11, 84 & 96)

ANGLIAN WATER AUTHORITY

Felixstowe
Internal Drainage District & Board

Public Local Inquiry

26th – 29th October & 2nd – 5th November 1982

Report of Inspector

April 1983

This is to confirm that this is the original signed copy of a Report by Hugh Gardner, CB, CBE appointed by the Minister of Agriculture, Fisheries and Food as his Inspector to hold a Public Local Inquiry into matters relating to the Felixstowe Internal Drainage District and Board. The signed Report by Gordon Cole, BSc (Eng) Dip. Civil Eng., FICE, FIWES appointed by the Minister as Assessor to the above Inquiry, is contained at Annex 3 of Mr Gardner's Report.

M.R.W.Highman

M.R.W.Highman 29 April 1983
Land Drainage and Water Supply
Division.

LAND DRAINAGE ACT 1976

SECTIONS 11,84 AND 96

ANGLIAN WATER AUTHORITY

FELIXSTOWE INTERNAL DRAINAGE DISTRICT AND BOARD

1. Representations regarding a Scheme prepared by the Authority and submitted for confirmation to the MINISTER OF AGRICULTURE, FISHERIES AND FOOD under Section 11 of the Act providing for the alteration of the boundaries of the District.

2. Appeals to the Minister by the Board under Section 84(6) of the Act in relation to contributions made by the Authority to the Board for the rating years 1979/80 and 1980/81 under Section 84(4) of the Act.

3. Appeals to the Minister by the Board under Section 84(6) of the Act in relation to contributions required by the Authority to be made to them by the Board for the years 1981/82 and 1982/83 under Section 84(1) of the Act

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REPORT OF PUBLIC LOCAL INQUIRY
INTO THE AFORESAID REPRESENTATIONS AND APPEALS
AND ALL QUESTIONS RELATING THERETO

AND INTO THE EXERCISE BY THE MINISTER
OF ANY OF HIS POWERS UNDER THE ACT
WHICH RELATE TO THE BOARD

HELD AT
THE WEST END COMMUNITY CENTRE
THE HERMAN DE STERN
SEA ROAD, FELIXSTOWE, SUFFOLK

ON
26,27,28 & 29 OCTOBER AND 2,3,4 & 5 NOVEMBER 1982
FOLLOWED BY AN ALL-DAY SITE INSPECTION ON 9 NOVEMBER 1982

Inspector for the Inquiry : HUGH GARDNER CB CBE
Assessor : GORDON COLE C. ENG

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ANNEXES TO THE REPORT

To: The Rt Hon Peter Walker MBE MP
Minister of Agriculture, Fisheries and Food
From: Hugh Gardner CB CBE

SECTION 1
INTRODUCTORY

1.01 I was appointed in minutes of 19 May and 23 June 1982, in pursuance of your powers under Sections 84(6) and 96(1) of the Land Drainage Act 1976, to hold a public local inquiry into the matters set out in the Cover Sheet to this Report. Mr Gordon Cole, formerly Chief Engineer to your Department, was appointed to act as my Assessor.

1.02 The Inquiry was originally advertised to start on 21 July 1982 but, following representations from local interests, the opening was postponed until a date in October. However, on 21 July, Mr Cole and I convened a pre-inquiry meeting in Ipswich with the principal parties to discuss procedural questions in consequence of which various documents and proofs of evidence were prepared and exchanged between the parties in advance of the opening of the Inquiry. This was mutually advantageous. Mr Cole and I took advantage of our presence in the area on that day to make an informal site inspection of the drainage district whose problems were to be the subject of the Inquiry.

1.03 In this report I shall refer to the Anglian Water Authority as the AWA, the Felixstowe Internal Drainage District and Board as the IDD and the IDB, and the Suffolk Coastal District Council as the CDC. (Water authorities mainly exercise their land drainage functions through Regional Land Drainage Committees who may, in turn, delegate their functions to Local Land Drainage Committees set up under Section 4 of the Act. In March 1974 the Minister of Agriculture approved a scheme submitted by the Anglian Water Authority establishing 5 local land drainage districts. Most of the matters dealt with in this Report were dealt with by the Norfolk and Suffolk Local Land Drainage Committee whose district covered the area of the former East Suffolk and Norfolk River Authority. For convenience, however, I shall refer to the Local Committee as the AWA and I do not think this is likely to give rise to misunderstanding). I shall refer to the former Felixstowe Urban District Council and the present Town Council as the UDC and the TC and to your Department as the MAFF.

1.04 In preparation for the Inquiry, I was supplied with a number of relevant papers which are listed in Annex 1 and I shall refer to them in this

Report as "Exhibits". They will generally be in the possession of your Department and I do not, therefore, attach them to this Report with the exception of Exhibits 10,11 and 12, which, following the procedural meeting on 21 July, were supplied to set out the case of the AWA for the proposed boundary changes, the grounds for the appeals of the IDB, and the reply of the AWA to those grounds. These are summarised in Section 2 of this Report (paragraph 2.27 to 2.38 below). I shall refer to the other enactments listed as Exhibit 1 by name, but shall refer to the Land Drainage Act 1976 as "The Act".

1.05 The Inquiry opened at 10.00 on Tuesday, 26 October and, as indicated on the cover sheet, the hearing of the evidence lasted 8 full days with a site inspection lasting a further full day on 9 November. I set out in Annex 2 under 7 headings, the bodies and persons who addressed me in the course of the Inquiry with a list and, where appropriate, a brief summary of the documents submitted in evidence by each witness, all of which are attached to and submitted with this Report in 7 folders. I shall do my best to make this Report self-contained; but a reference to the original documents will enable those who advise you to satisfy themselves that I have summarised their contents correctly.

1.06 I was addressed by 37 persons in all, including private individuals and 30 documents submitted in evidence are attached to this Report. I also, in advance of the Inquiry, received 46 letters from members of the general public, some of whom also came to the Inquiry and let me have their views in person. All this will be taken into account in my findings.

1.07 In relation to the Documents I would call special attention to the Appendix to Mr Danter's evidence for the IDB (Document 3E) which contains, under 28 headings, most of the basic facts and various reports relating to the matters that were the subject of the Inquiry. This Document, prepared by the IDB, was of great value for reference purposes to the proceedings. Various documents submitted to the Inquiry contained as an Annex a map of the Landguard sub-district of the IDB. Each was designed to illustrate the evidence, and will need to be referred to in that context. But, for general reference, the plan attached to Mr Marsden's proof of evidence for the AWA (Document 3A) will be found to be particularly useful. It shows the existing and proposed boundaries of the IDB and the 4.04 A.O.D.

(Newlyn) contour as surveyed by Meridian Airways Limited (Document 3C); and his plan showing the sea defences in the CDC area for which the AWA accepts responsibility, is also helpful. Mr Worth's proof of evidence shows the location of the Internal Drains and Pumping Stations for which the IDB accepts responsibility.

Scope of the Inquiry

1.08 My terms of reference were, I understand, deliberately drafted widely including the reference to "the exercise by the Minister of any of his powers under the Act which relate to the Board". The principal powers in question are, I understand, those of Section 11(1) of the Act which would include, under sub-paragraph (d), the abolition of the Drainage District and Board as requested in the Petition presented to the AWA in December 1980 under Section 14 of the Act (Exhibit 5). In opening the Inquiry I emphasised that, so far as I was concerned, all options were open. And I asked the representatives of the AWA and the CDC, in particular, to let me know what, in their view, would be the consequences as to the maintenance of the drainage systems and sea defences if this particular option were to be adopted by the Minister. Their views are given in their final addresses.

1.09 The terms of reference, of course, only refer to the Minister's "powers under the Act". Clearly, the various authorities concerned, and the Minister himself, can only take such action as is authorised under existing legislation. But the Minister is, of course, empowered to introduce proposals for new legislation. After discussion at the Inquiry I indicated that, if the evidence were to call attention to intractable problems that did not appear to be capable of a satisfactory solution under existing powers, I would be ready to hear suggestions for the amendment of the Act, and would mention them in my Report with such comments, if any, as seemed to me appropriate. This is of particular relevance to the Report of a Working Party on Internal Drainage Board Rating made in 1979 (Exhibit 9) which, because it was a document available to some parties to the Inquiry, was referred to in their evidence, and of necessity was treated as a document available to all.

1.10 Section 84(1) of the Act provides that the Water Authority shall require every internal drainage board in its area to make towards its expenses such contribution as it may "consider to be fair". The Section affords no guide to the principles by reference to which the contribution is to be fixed; but Exhibits 7(a) and (b) were supplied to me indicating the decisions made by the Minister over the past 30 years or so in 5 earlier appeals heard under

what is now Section 84(1) and (6) of the Act. In the case heard in the Crown Court in May 1981 (Exhibit 8) which is referred to in greater detail in Section 2 below, His Honour Judge Bertrand Richards referred to the principle set out by the Master of the Rolls in the Wednesbury case of 1948 that "A Court may interfere with an administrative decision if satisfied that the Administrative Authority took into account matters they were not entitled to take into account, or failed to take into account matters which it was their duty to take into account" (Document 3E, pages 75 to 76). Later, in the same judgement, the words of Lord Goddard CJ, in a case heard in 1971 in the Queens Bench Division was quoted to the effect that the function of the Appeal Court was to exercise its powers "when it is satisfied that the judgement below..... was wrong, not merely because it is not satisfied the judgement was right" (Document 3E, pages 77–78). These two dicta were largely the basis on which the Court found that the Resolution of the AWA could not be regarded as illegal nor its requisition on the IDB as "unfair". In the course of the Inquiry I called attention to the above and asked for guidance from the principal parties as to whether I should regard myself as subject to similar restrictions in considering the appeals of the IDB. Both Mr Straker, for the IDB, and Mr Heygate, for the AWA, advised that the scope of my inquiry was much more far-ranging than that of the Crown Court in hearing an appeal under Section 77 of the Act and that, if I were to find wholly or partly in favour of the IDB, I would be entitled, if I thought fit, to place a figure on my finding. The same view would hold for the somewhat different considerations applying to contributions from the AWA to the IDB under Section 84 (4) of the Act. In this regard, therefore, I propose to interpret my terms of reference accordingly.

1.11 In certain respects, however, I felt it necessary to interpret my terms of reference strictly in relation to the specific issues listed in the Cover Sheet to this report that were the subject of appeals and representations. In relation, in particular, to the evidence submitted by Mr Forward (document 7B), but also by certain other witnesses, I did not regard it as part of my function, nor was it within my competence, to examine critically wider issues such as the nature, design and necessity of works done by the AWA and the IDB, including capital works approved for grant by your Department. This applies in particular to Mr Forward's evidence relating to an Inquiry conducted by him in February 1966 for the then Minister of Housing and Local Government, as to an application for loan sanction by the UDC in respect of coast protection works to the north of the town in the Felixstowe Ferry area. As I understand it, the purport of the evidence was that criticisms

then made by him of the design of the proposed works which he claimed to have been justified by experience since they were done, were equally applicable to certain works done or proposed more recently by the AWA for the protection of low-lying land in the IDD. Both the AWA and the IDB asked that no regard should be paid to this part of Mr Forward's evidence, on which they did not propose to comment, and that I should not visit the works in question in the course of my site inspection. After consultation with Mr Cole, I accepted their view as to the relevance of this part of Mr Forward's evidence.

1.12 The Minister has power, under paragraph 1 of Schedule 3 to make regulations governing the procedure at Inquiries under the Act; but I am advised that he has not done so. In the circumstances, procedure at the Inquiry was a matter for me, as the Inspector, to determine; and the proposals I made when opening the Inquiry, following the lines discussed at the pre-Inquiry meeting on 21 July (paragraph 1.02 above) appeared to be generally acceptable to the parties. In particular, I indicated that I did not intend to close the Inquiry until I was satisfied that everyone who wished to address me had done so and had had a full opportunity to make out his case. Having regard, in particular, to the evidence presented by individuals on day 6 of the Inquiry, as listed in Annex 2, this objective was, I feel, achieved. And, although the matters that have been the subject of the dispute have aroused strong feelings in the area, of which I was made fully aware in the course of the proceedings, the Inquiry generally proceeded on a friendly and informal basis which was helpful both to me, who was receiving the evidence, and to those who were giving it. I recognise, of course, that the Report is, in the first instance, made to you and that you will be advised by people who are fully conversant with the ramifications of land drainage legislation. In writing the Report, however, I have had it in mind that it will, when your decision is given, have a wider readership amongst people affected by my conclusions and your decision.

1.13 What follows is my account of the proceedings at the Inquiry, which ends with my findings of fact, my conclusions and my recommendations. I have agreed the greater part of the report with Mr Cole; but the conclusions and recommendations, set down after discussion with him, are made entirely on my own responsibility. They take into account his comments on the technical issues raised at the Inquiry which I attach as Annex 3.

SECTION 2

HISTORY OF EVENTS LEADING UP TO THE INQUIRY

2.01 The matters summarised in this Section of the Report are largely taken from the Exhibits described in Annex 1, the factual statement as to the origins of the IDB and IDD given by the representative of the MAFF at the outset of the Inquiry (document 1A) and the factual material contained in the Appendix to Mr Danter's evidence (document 3E).

2.02 The times and heights of ordinary tides are predicted more than a year in advance and the Admiralty's Tide Tables are published accordingly. But meteorological conditions may affect tide levels, particularly in the North Sea, causing them to be higher or lower than the predictions. On the night of 31 January/1 February, 1953, exceptionally strong winds over the North Sea and its northern approaches over a preceding period caused a 'surge' which led to a very high rise of sea levels over those predicted. As a consequence, the defences protecting coastal and estuarial land from tidal inundation were extensively overtopped, and subsequently breached, along a length of the East Coast from Spurn Point in Yorkshire to North Foreland in Kent, with the loss of 300 lives and extensive damage to property. I understand some 39 persons lost their lives in Felixstowe alone. A similar disaster on an even larger scale took place in the Netherlands

Summary of the conclusions of the Waverley Report (Exhibit 2)

2.03 In the aftermath of the 1953 Floods, the Waverley Committee was appointed and, in an Interim Report of July 1953, made recommendations for a Flood Warning System that would, in their judgement, if it had been in force in January 1953, have reduced the loss of life to a minimum if it had not averted it altogether. Arrangements on those lines have, since then, been in force designed to enable those at risk from exceptional flooding to be warned and to make their way to higher ground before the flood takes place.

2.04 In its final report, the Committee considered the protection of property, and what margin of safety for sea defences would be reasonable and practicable having regard, on the one hand, to the estimated risks involved and, on the other, to the cost of protective measures. Their broad conclusion was that, although there was little precedent for a flood level as high as that of 1953, the possibility of considerably higher levels could not be ruled out. The cost of affording protection against the worst possibilities would be colossal. Even the cost of protecting the whole coast against

conditions like those of January 1953 would be prohibitive. The standard of defence should therefore be related to the character and amount of the property to be protected.

2.05 The Committee drew a distinction between Coast Protection Authorities which were concerned mainly with the protection of towns and villages situated on land which was above the highest sea level, and with the prevention of erosion, and River Boards, who were concerned with the defence of low lying land against flooding.*

2.06 The concern of the Committee was with the responsibilities of River Boards and it concluded that the water level reached in 1953 should be taken, in general, as the maximum against which protection could reasonably be afforded. According to the value of property protected a higher standard of protection would be justified in some areas than in others. The highest measure of protection should be given where flooding would lead to serious damage to property of high value such as valuable industrial premises or compact residential areas or where it would affect any large area of valuable agricultural land.

2.07 The Committee endorsed the system under which the cost of sea defences was distributed between the Exchequer, the local rates, and the individual owners of property benefiting from sea defence. It therefore rejected any suggestion that total responsibility for coast defence should be placed upon the Central Government. It also rejected the suggestion that the responsibilities of River Boards and Coast Protection Authorities should be placed in the hands of one type of local authority, responsible to a single Minister, because this would ignore the differences in the purposes which the two types of authority had been constituted to serve. That was reflected by differences in the local incidence of financial liability.

* The history and present functions of the two types of Authority are set out in paragraphs 48–51 of the Report. It may be noted here that River Boards and River Board Areas, covering the whole of England and Wales, were set up under the River Boards Act 1948, to replace Catchment Boards under the Land Drainage Act 1930, whose sole function was land drainage. ("Land drainage" has always been interpreted as including "defence against sea water"). River Boards had wider powers but their main function was still land drainage. They were superseded, under the Water Resources Act 1963, by River Authorities having a wider range of functions; and later, under the Water Act 1973, by Water Authorities for whom land drainage is a relatively minor function.

2.08 The Committee did not recommend further legislation to give greater definition to the respective functions of river boards and coast protection authorities but suggested that agreement should be reached between them on different lengths of the coastline as to their respective responsibilities within their statutory powers.

2.09 Paragraphs 65–69 of the Waverley Report form attachment 1 to document 1A. It is said to be the first duty of the River Board, in raising its funds, to demand from the IDBs such a contribution as it considers to be "fair". It should consider the benefit conferred within the district by the River Boards works and the ability of people within the district to pay. The Committee did not think a River Board would be justified in increasing the precept upon local authorities until it was satisfied that it had secured a proper contribution from Internal Drainage Districts benefiting from the sea defences.

2.10 The Committee noted that there was not an Internal Drainage District at every point along the coast which was liable to tidal inundation. It suggested, therefore, that River Boards should consider areas which were at risk and were not making any contribution in the form of drainage rates with a view to constituting new IDDs or extending the boundaries of existing IDDs. It was noted that, in urban areas, the local authority might prefer to make a contribution under the Land Drainage Act as an alternative to the constitution of a Drainage District.

2.11 It had been suggested that, in the light of the events of January 1953, the interpretation of the area that "derives benefit or avoids danger" in the Medway Letter (Exhibit 3) was unduly restrictive at least in relation to developed land where built-up areas were only to be included up to the level of ordinary spring tides. Each case should be decided on its merits but the Committee suggested that, if a River Board could show that any particular area, excluded under the Medway definition, was flooded in 1953, or would have been flooded but for the River Board's works, then it might be argued with justification that the area derived benefit or avoided danger (NB. This argument is pursued in Exhibit 4).

2.12 The maximum Exchequer contribution at the time towards the cost of new works and the improvement of existing works was, in respect of sea defences, 85%; and the Committee recommended that it should not be increased. But it did recommend that legislation should be introduced

enabling grants to be made at rates not exceeding 50% in respect of the maintenance of sea defence works. No action has been taken on this recommendation.

2.13 I have summarised above in some detail the findings of the Waverley Committee that are relevant to the matters that were the subject of the Inquiry because they have no doubt influenced the Department's policy and obviously carry considerable weight. Certain options that it may be necessary to consider could run counter to certain of the findings of the Report. I would only comment, at this stage, that regard must also be had to the experiences of the past 30 years, since the 1953 coastal floods, and political and other developments in the period since the Committee reported.

Ministry of Agriculture response to the above recommendations

2.14 On the day the Waverley Report was published, the Ministry issued a memorandum to River Boards in relation to its findings (Attachment 2 to document 1A). Special attention was drawn to the recommendations as to the standard of protection to be given (paragraphs 2.04 and 2.06 above) which the Department generally endorsed. The recommendations as to the division of responsibility between River Boards and Coast Protection Authorities (paragraphs 2.05, 2.07 and 2.08 above) were also endorsed and those bodies were asked to enter into discussions with a view to agreeing their respective spheres of responsibility.

2.15 Whilst endorsing the responsibilities of River Boards in relation to protection against tidal flooding, the Committee had noted that, under the Land Drainage Act 1930, they were limited to the doing of work which was "in relation to the main river", as marked on the Statutory Map of the River Board area. A considerable number of quite small streams flowing into the sea had been so marked in different River Board Areas so that the Board could have authority to maintain the sea defences on either side in order to secure a proper outfall (paragraph 55 of Exhibit 2). The Ministry endorsed the responsibility of River Boards for the protection of all low-lying areas along the coast from flooding by the sea and asked them to consider whether further channels might be defined as main river where this was necessary to give effective coverage to such land.

2.16 Bringing this matter up-to-date, a wider definition of the sea defence responsibilities of River Boards was provided by the Land Drainage Act 1976, which provides in Section 17(2) that "the power of a water authority to maintain, improve or construct drainage works for the purpose of defence against sea water or tidal water shall be exercisable anywhere in the Water Authority area, irrespective of whether they are works in connection with the main river; and for the purposes of this subsection the water authority area shall be deemed to extend beyond the "low-water mark". As in earlier legislation "drainage" is defined in Section 116 as including defence against water (including sea water).

2.17 In relation to the recommendation summarised in paragraph 2.10 above, River Boards were asked to consider coastal areas where no authority was empowered to carry out and maintain works and to report to the Minister their views as to the proper remedy.

Setting up of the Felixstowe IDD

2.18 Document 1A presumes that action initiated in mid-July 1954 by the East Suffolk and Norfolk River Board to create a new IDD on the north bank of the River Orwell, to include a small built-up area of Felixstowe which was below the level of flood defences then under construction, stemmed from the recommendations summarised in paragraphs 2.10 and 2.17 above. It was the River Board's intention, if an IDD were set up, to suggest to the UDC that they should make a contribition to the Board, in lieu of the levy of drainage rates on properties in the IDD that lay within the urban district under what is now Section 81 of the Act. This possibility had been noted in its report by the Waverley Committee (paragraph 2.10).

2.19 In correspondence with the Ministry the River Board maintained that the boundaries of the proposed IDD had generally been determined in accordance with the terms of the Medway Letter (Exhibit 3). There was initially some debate on the inclusion of the whole of the built-up area of Felixstowe at or below the level of protection afforded by a new bank that was under construction. A draft scheme including this built-up area was submitted in March 1955 and, after passing through the necessary statutory procedures (Attachment 4 to document 1A), the East Suffolk and Norfolk

River Board (Felixstowe Internal Drainage District) Order 1956 was confirmed and came into effect on 1 July 1956.*

2.20 When the River Board's draft scheme was on deposit the only objection received was from the UDC asking that sea defence maintenance costs should be borne nationally. This was overruled on the grounds that it would need legislation; and attention was drawn to the view of the Waverley Committee that those benefiting from sea walls should contribute to the cost (paragraphs 2.09 and 2.12 above).

Responsibilities as to sea defence

2.21 In relation to paragraphs 2.15 and 2.16 above, it may be mentioned that the only channel affecting the Felixstowe IDD that was defined as "main river" was the River Orwell to its point of confluence with the Stour. The River Board and, subsequently, the River Authority only accepted responsibility for sea defences on the river frontage and not the sea frontage of Felixstowe, except that a modest contribution was made in 1964 to the cost of works by the War Department on its sea frontage. There is no explanation of which I am aware for this. The matter was reviewed in 1974 on the Constitution of the AWA, which has accepted wider responsibilities in accordance with the recommendations in paragraphs 2.08 and 2.14 above, as described in document 3A and Section 3 of this Report below.

Levying of drainage rates

2.22 In relation to paragraph 2.18 above, an agreement was reached on 15 October 1958 between the UDC and the IDB under which no drainage rates were to be levied on those parts of the IDD which lay within the urban

*Reference is made in document 1A to the initiation, at the same time and the setting up in 1957 of a Wherstead and Shotley IDD on the south bank of the River Orwell which was subsequently abolished by an order of the Anglian Water Authority in 1980. It was suggested at the Inquiry that this might be a precedent for the abolition of the Felistowe IDB. I was supplied at the Inquiry with an extract from the minutes of the Norfolk and Suffolk Drainage Committee of the AWA dated 8 June 1978 leading up to the proposal to abolish the district. Its area was only 360 acres and the annual value only £355; no work had ever been carried out in the district, nor had any drainage rate been levied. Watercourses in the area were currently maintained by the owner/occupiers. In the circumstances it is clear that the affairs of this particular district have no relevance to the problems raised at the Inquiry in connection with the Felixstowe IDB.

district as from 1 April 1958 in consideration of the payment by the Council to the Board of an equivalent amount to be met from the proceeds of the general rates of the Urban District. The agreement was terminable by either party, on any first day of April, with at least six calendar months previous notice in writing (pages 1 to 3 of document 3E).

2.23 On 1 April 1974, in accordance with the Local Government Act 1972, the Suffolk Coastal District Council was established superseding the UDC and other local authorities in its district. On 2 October 1975, the CDC gave notice to the IDB of its decision to terminate the above agreement on 1 April 1977 (page 47, Doc 3E).

2.24 Thenceforward it again became necessary for the IDB to levy drainage rates in that part of the IDB which lay within the former urban district to cover its own expenses and to meet the precepts of the AWA. Since individual drainage rates were formerly levied in the first two years of the IDB, there has been extensive commercial and residential development in the IDD. Between 1958/59, when the agreement with the UDC came into force and 1982/83 the number of properties liable to pay drainage rates has increased from 504 to 973; the rateable value has increased from £28,229 to £1,347,593; and the amount required in respect of drainage rates has increased from £1,560 to £122,288 (page 8 Document 3E). Further particulars illustrating the change in the character of the district since it was formed are given in later sections of this Report.

Appeal to the Crown Court

2.25 Resistance to the levying of drainage rates on commercial and residential properties grew, as described in later sections of this Report; and a Notice of Appeal dated 20 March 1979 was presented to the Ipswich Crown Court against the IDB under Section 77 of the Act asking, on various grounds, for the rate for the year 1979/80 to be annulled or modified (pages 70 to 71, Document 3E). The main grounds were that the contribution required by the AWA from the IDB was excessive and the contribution made to the IDB was inadequate, that the IDB should have exercised its rights of appeal in these matters, and had failed to apportion its expenditure properly between owner's and occupier's rates.

2.26 In its judgement of 6 May 1981 (pages 72 to 91 Document 3E) the Court rejected the Appeal. Its views as to the limits of its authority have been noted in paragraph 1.10 above. The method by which the AWA determined the contribution to be required from IDBs in its area was described; and the Court took the view that the Authority had given full and fair consideration to the problem. The Court found it quite impossible to regard the resolution of the AWA and the consequential resolution of the IDB as illegal. The cost and potential benefit of the works done, being done or in preparation appeared to the Court to justify the charges imposed. The individual grounds of appeal were considered in detail and rejected with a minor exception that a sum of £3,505, charged to the occupiers drainage rate, should properly have been charged to the owners rate.

Petition to the AWA and Proposal for New Boundaries to the IDD

2.27 On 19 December 1980, between the presentation of the above Notice of Appeal and the judgement of the Crown Court, MAFF was notified by Messrs Birkett's, Solicitors of Ipswich, of the presentation of a petition to the AWA under Section 14 of the Act on behalf of a substantial body of ratepayers requesting that:–

(a) Landguard should be abolished as an internal drainage sub-area.

(b) The ratepayers in Landguard should be relieved of any further payment of rates following abolition.

(c) The drainage rates should be recalculated and the overpayments that have been made in rates, particularly in respect of precept and loan charge assessments, and repayment made accordingly.

The petition was supported by a Third Report from Mr G E Forward dated October 1980 (pages 92 and 98 to 141, Document 3E).

2.28 On receipt of the above petition the AWA reviewed the boundaries of the IDD and, under Section 11(1) of the Act, prepared a scheme for altering the boundaries of the Landguard Sub-District, dated November 1981, which was submitted to MAFF for confirmation under Section 11(4) of the Act. The scheme was duly advertised in the local press on 27 November 1981, and the consequential representations form part of the

subject matter of the Inquiry. They were received from the CDC and the TC and from various commercial interests and private individuals. I do not summarise them here because the points of objection emerged fully at the Inquiry as set out in subsequent sections of this Report.

2.29 The proposed additions to and deletions from the boundaries of the present IDD are shown in the Plan annexed to Document 3A and are described more fully in Section 3 of this Report below. The formal statement of the AWA in relation to the scheme (Exhibit 10) is summarised in paragraphs 2.30 to 2.32 below.

2.30 The IDD was constituted in 1956 and the AWA had no records showing how its boundary was established. The IDD is sub-divided into 3 districts of which Trimley and Levington were, and still are, agricultural. Landguard was partly built-up in 1956 and is now completely built-up.

2.31 The petition referred to in paragraph 2.27 above was properly made. The AWA in February 1981, decided to treat it as a petition for a boundary review, and Meridian Airways Limited was appointed to survey the district. It was found that no change was needed in the boundaries of the Trimley and Levington sub-districts, which broadly accorded with the requirements of paragraph 6 of the Medway Letter. But for built-up areas such as Landguard, the Medway Letter indicated that land should be included only up to tidal levels. The question was what those levels were; and whether the appropriate level was the mean high water of spring tides or the level reached in the 1953 floods, when there was a surge tide.

2.32 The authority's records showed that the still water level of the surge tide which caused the floods in 1953 was 4.04 metres (13.25 feet) above OD Newlyn. The surveyors were, therefore, asked to establish this level for the whole IDD including the Landguard sub-district. As described in more detail in Section 3 below certain lands were proposed to be excluded from the existing IDD, primarily because of changes in the ground level. A new boundary, generally following the line of the newly constructed defences on the sea frontage of the IDD is proposed in the Manor Terrace and Sea Road area, bringing in land which was below 4.04 metres ODN, although some properties had floor levels slightly higher than this. The area reclaimed by the Felixstowe Dock and Railway Company was included in accordance with paragraph 5 of the Medway Letter because, although much of it was above 4.04 metres ODN, the roads giving access to it were below that level.

Financial Matters

2.33 In relation to 1979–80 the AWA resolved, on 12 October 1979, to make a contribution under Section 84(4) of the Act to the IDB of £203 in respect of the Trimley Pump and £254 in respect of the Landguard Pump. The IDB appealed against the inadequacy of this contribution in December 1979. In the case of Felixstowe there had been extensive urban development of the upland area in the past few years. A detailed analysis of the run-off to the pumps based on the impermeability of the catchment, had been made; and it was calculated by the AWA that the costs of pumping and maintenance which might be considered as attributable to upland water were £1,081. At a meeting of the AWA on 28 March 1980 it was determined to increase the 1979-80 contribution to the IDB to this amount.

2.34 On 10 October 1980, on the same basis, the contribution to the Landguard sub-district for 1980–81 in respect of upland water was determined at £1,500. Following representations from the IDB, the AWA determined at a meeting on 5 December 1980, that "the cost attributable to both maintenance of drains and administration, in respect of the upland discharge, was either non-existent or too small to be included in the calculations of the contribution".

2.35 The IDB appealed in respect of both years in letters of 5 January and 27 May 1982.

2.36 The method by which the AWA calculates the total precept to be made on all 37 IDBs in the Norfolk and Suffolk area, and its sub-division between those districts is described more fully in Section 3 below. At a meeting on 5 December 1980 the AWA resolved to levy precepts on all IDBs for the year 1981–82 to a total of £261,343*, the amount to be collected from the Felixstore IDB being £69,576. At a meeting of the Anglian Drainage Committee on 20 January 1982, the precept on all IDBs in the Norfolk and Suffolk area for the year 1982–83 was to be £302,383*, the amount to be collected from the Felixstowe IDB being £86,133. Formal appeals against the amount of these precepts were lodged by the IDB on 7 May 1981 and 15 April 1982 respectively.

*In its comments on the IDB's grounds of appeal, the AWA noted that these figures included pumping charges and interest for late payment as well as the basic precept. The figures for the basic precept for the 2 years were, in fact, £256,334 and £296,743 respectively. The figure £69,576 includes £469 in respect of late payment in the previous year (see paragraph 3.18 below)

2.37 The grounds of appeal of the IDB (Exhibit 11) may be summarised as follows:–

A.1 In relation to 2.33 and 2.34 above, having regard to the quantity of water which Landguard received from land at a higher level, the contribution from the AWA did not include any sum for the increase in the cost of:

(a) maintaining the pumping station together with a sum towards renewal;

(b) maintaining the drains;

(c) administration

A.2 In relation to 1980/81 no sum had been included in respect of the capital cost of the Dock Road Culvert scheme necessitated by enlargement by the AWA of the Garrison Lane/Langer Park Storm Relief Sewer (Document 3B) (NB These schemes and their purpose and effect are described in later sections of this Report).

A.3 Guidance would be sought as to whether, having regard to the use of the IDB drains to carry water from outside the district, a contribution from the AWA should be sought towards the capital cost of any future works in the IDB, irrespective of whether it could be related to an increase in the flow or volume of upland water from without the district.

B. In relation to paragraph 2.36 above, the Minister was asked to consider whether the total contribution required from IDBs in the Norfolk and Suffolk area was reasonable. The amount apportioned to the Landguard sub-district was 26% of the total in 1981–82 and 28.24% of the total in 1982/3. (N.B. It was, in round figures, 27% and 29% of the basic precept given in the footnote to paragraph 2.36. See also paragraph 3.20 below). Whilst it was generally reasonable to apportion the precept by annual value, this should not be the only criterion because it did not sufficiently take into account ability to pay; and a demand based solely on the high values of Landguard, without adjustment, was unfair.

1. The amount was quite out of proportion to the benefits

received by the ratepayers of the sub-district.

2. The occupiers of the hereditaments in Landguard, which were nearly all residential, commercial or industrial properties, already made substantial contributions to the AWA's drainage expenses through the precept on the general rate, which was not the case with occupiers of land in the other IDBs, which were largely agricultural.

3. A fair contribution from Landguard should not exceed 15% of the total precept for the Norfolk and Suffolk division of the Authority.

2.38 The AWA, replying to the above grounds, (Exhibit 12) contended

A.1 In relation to renewal of the pumps, they would still be needed by the Board if there were no "upland water" and a major factor in the need for renewing them was the depositing of corrosive material in the drains from within the district.

A.2 The same work would need to be done on maintenance of the drains, even if there were no upland water.

A.3 The same amount of administration would be needed even if there were no upland water.

A.4 As to the Dock Road Culvert Scheme, the enlargement of the Garrison Lane/Langer Park Sewer in 1979 had caused no increase in the volume of water entering the district and a contribution in respect of the culvert would be inappropriate.

A.5 The improvements to the Board's pumping system were primarily for the benefit of the IDD and there were no grounds for a contribution from the AWA.

B.1 The total contribution required from IDBs was 14% of net relevant land drainage expenditure in the Norfolk and Suffolk drainage area. IDBs constituted only 11% of this total area; but some 87% of land drainage expenditure was in respect of works carried out in or adjacent to them. It was contended that the total precept was fair.

B.2 The apportionment of the total based on annual values of each of the 37 IDBs for drainage rate was also fair because

(a) it prevented large fluctuations such as would inevitably occur if the precept were to be based on the work actually done in the district each year;

(b) it reflected the value of the property protected which was, in Landguard, very substantial;

(c) it was not unfair on non-agricultural properties because their annual values for drainage rates were only one third of those on agricultural properties.

SECTION 3
EVIDENCE PRESENTED BY THE ANGLIAN WATER AUTHORITY (DOCUMENTS 1B & C AND 3A, B & C)

Mr Lane's Evidence

3.01 Mr Lane (document 1B) referred to the recommendations in Exhibit 2 which are summarised in paragraphs 2.10 and 2.11 above. There was no IDD in the Felixstowe area at the time of the 1953 surge tide flood; and the River Board no doubt took action to set one up on the grounds that the area derived benefit or avoided danger as a result of the embankment works that had been carried out after the floods.

3.02 When the December 1980 petition calling for the abolition of the Landguard sub-district had been received (paragraph 2.27 above) he had advised the AWA that this would not be appropriate because the sub-district did derive benefit and avoid danger as the result of land drainage operations that had been and were being carried out. It was accordingly resolved that a boundary review should be undertaken and the scheme for altering the boundaries of the IDD had been prepared and submitted to the Minister.

3.03 Soon after the AWA was set up in 1974 it had been decided to carry out a detailed survey to establish the physical extent of the appropriate sea defence responsibilities in the Norfolk and Suffolk area, the principle being that sea defences should be maintained (and improved where necessary) to provide adequate protection against inundation by the sea of low-lying coastal lands. The consequent review of 1976–77 determined the exact lengths of coastline where the AWA would exercise sea defence responsibilities in liaison with the five District Councils with maritime frontages. The exact division of responsibility between the Water Authority and the Coast Protection Authorities was a matter for engineering judgement. Neither the Waverley Committee nor the Ministry (paragraphs 2.08 and 2.14 above) had suggested that discussions between these bodies should be widened to include County Councils and IDBs.

3.04 In the Norfolk and Suffolk area the AWA now accepted sea defence responsibilities over a total length of frontal defences of 54 miles between Hunstanton and Felixstowe. Within that total, 20 miles lay within the maritime frontage of the Suffolk CDC. Mr Lane accepted Mr Forward's view that a review of all the IDDs in the Norfolk and Suffolk area would be desirable; but lack of staff time since 1974 had prevented the AWA from undertaking this exercise.

3.05 Over the 12 year period 1976–1988, the total capital expenditure on frontal sea defences would be approximately £16M, which excluded possible expenditure on a Yare barrier. Of this, it was expected that £5.1M would be spent in the CDC area of which £2.6M would be accounted for by the Landguard frontage.

3.06 Mr Lane did not agree that the channels maintained by the IDB were sewers that could be dealt with under the Public Health Act 1936. They were natural watercourses from which riparian owners had rights to take and into which they had rights to discharge water. The appropriate provisions for maintaining and improving them were those of the Land Drainage Act 1976.

Mr Bolongaro's Evidence

3.07 Document 1C opens with a general description of the functions under the Act of Water Authorities, local land drainage committees and Internal Drainage Boards and the definition of their districts in relation to the Medway Letter (Exhibit 3,) modified to take into account the 1953 flood level in urban areas. Appendix TB1 is a short note on drainage rates.

3.08 It had been his function each year to present to the Norfolk and Suffolk Committee of the AWA a report giving estimates of land drainage expenditure and income for the year beginning 1 April under the following headings:

a. maintaining existing main river and drainage works;

b. improving existing main river and drainage works;

c. constructing new works required to facilitate drainage for the purpose of agriculture and for housing and/or industrial development;

d. maintaining existing sea defence works;

e. improving existing sea defence works;

f. constructing new sea defence works;

g. exercising overall regulatory land drainage control, including the control of new development, in terms of flood plain management and areas at risk to tidal inundation;

h. contribution to internal drainage boards under Section 84(4) of the Act;

i. administration costs arising from the foregoing.

3.09 Most of this expenditure related to low-lying areas with land drainage problems such as were found in the 37 IDBs whose area was 147,000 acres compared with some 1,308,000 acres in the Norfolk and Suffolk area as a whole. There were no clear records of expenditure related to each IDD, and some works might be for the benefit of more than one IDD; but, as a whole, 87% of land drainage expenditure was, on average, carried out in or near IDDs although they only covered 11% of the total area.

3.10 Decisions on the above financial report gave rise to a precept to be levied on the Norfolk and Suffolk County Councils and, collectively and individually, the amount to be paid by the constituent IDBs. The County Councils were required to pay a net sum after allowing for other contributions; so the amount to be recovered from IDBs must first be calculated. This must be such amount as the water authority "may consider to be fair". No other guidance was given.

3.11 Apart from Norfolk and Suffolk, there were three other Local Land Drainage Districts in the AWA area that had constituent IDBs; and each had adopted a different method of calculating precepts. Lincolnshire allocated one-third of its expenditure to IDBs and apportioned precept on an adjusted annual value* basis. He accepted that a higher proportion of the land in the Lincolnshire area was in IDBs; and that those districts were of a fairly uniform character. IDBs in the Great Ouse area were divided into six groups for which separate expenditure records were kept; and expenditure within each group, after various adjustments, was recovered in proportion to adjusted annual values. In the Welland and Nene area, certain direct benefits are chargeable directly to individual IDBs; and the balance was shared on an adjusted rateable value basis between the County Councils and the IDBs. IDBs in the Essex area, for reasons he did not know, had been abolished before 1974 by the Essex River Authority; so the question of levying contributions did not arise.

* The phrase "adjusted annual value" used in this paragraph is explained in Appendix TB1 to document 1C and is discussed fully in a later section of this report dealing with the "relative fraction".

3.12 The AWA, in 1974, inherited from its predecessors in Norfolk and Suffolk a system under which, after minor adjustments, about 14% of relevant land drainage expenditure was recovered by precept on IDBs as a whole, divided between them on the basis of their respective total annual values for drainage rate purposes.

3.13 All methods described above used rateable values as the basis for apportioning precepts to individual boards and this, although rough and ready, was, it was suggested, fair because such values reflected the value of the assets in each IDD which derive benefit as a result of the AWA's work. In this context, the decision of the Minister in a 1969 Appeal in Lincolnshire (Exhibit 7 and Appendix TB2 to document 1C) was noted. Appeals against precepts that had been based purely on rateable values had been rejected. Although the Minister had not been satisfied that the method of apportionment was the fairest possible, he had not suggested an alternative and none had been adopted.

3.14 He had, in 1975, studied the alternative of charging IDBs with the actual expenditure incurred associated with their respective districts. But there might be heavy expenditure in one year, leading to a high precept, and relatively low expenditure in the following year, with a reduction in precept. It was always preferable to keep taxes at a stable level. And historical rather than actual costs would need to be used, which would pose serious technical difficulties.

3.15 He therefore preferred the method the AWA had inherited, which provided a constant ratio of increase as between local authorities and IDBs. The benefit conferred on ratepayers in a particular IDB by specific works was, in his view, impossible to assess, in relation to the benefit to the immediate community in the vicinity and the general public at large. One could only apply a broad judgement. Unfortunately the records taken over by the AWA threw no light as to the basis on which the precise figure of 14% had been arrived at. But it appeared to have been accepted since the early 1950s as a reasonable and fair proportion. He had therefore concluded that it should remain the basis of apportionment; and it had continued to be used up to and including 1982/83.

3.16 In connection with the submission of drainage ratepayers to the Crown Court (paragraph 2.25 above), he had prepared a full and detailed

report to his Committee as to the method of calculating IDB precepts (Appendix TB3 document 1C); and it was resolved, at meetings on 25 July and 3 October 1980, that the existing method should be continued. The judgement of the Crown Court (paragraph 2.26 above) was considered at a meeting on 29 May 1981 (Appendix TB4 to document 1C) and was noted.

3.17 Based on the items of expenditure listed in paragraph 3.08 and allowing for income from Government grants and other sources, the amount to be recovered from precepts was determined each year. From 14% of this amount deductions were made in respect of:–

a. a sum resulting from an adjustment relating to the AWA's HQ running costs;

b. an amount to compensate for the relative increases in the County Council's respective pennyrate products for the previous year;

c. an amount following a critical examination of the overall effect of the deficits and/or the use of balances and reserves.

The sum so determined was allocated between the 37 IDBs in proportion to their respective annual values used for drainage rate purposes. For certain Boards adjustments might fall to be made in respect of interest foregone by the AWA for late payment of precepts. He acknowledged that IDBs would be paying a sum that included a proportion of sums received by them as contributions under Section 84(4) of the Act (see item (h) in paragraph 3.08 above). This was all part of the AWA's land drainage expenditure.

3.18 Paragraphs 11 and 12 of document 1C give details as to how the above calculations were worked out for the past 2 years giving a figure for total basic precepts increasing from £210,760 in 1980/81 to £256,224* in 1981/82 and to £296,743 in 1982/83 (see footnote to paragraph 2.36 above). The basic amounts that had been apportioned to the Felixstowe IDB in 1981/82 and 1982/83 were £69,107 and £86,133 respectively. To the former figure was added £469 in respect of late payment in the previous year. (Reports and precept notices relating to the above are attached to document 1C as Appendices TB5, 6, 7 and 8).

*This figure differs by £110 from that given in the footnote referred to.

3.19 In the two years, allowing for adjustments, some 12.9% of the total sum to be recovered by precept in the Norfolk and Suffolk area was obtained from the 37 IDBs. The corresponding figure for Lincolnshire was 33.33%; the average figure for Welland and Nene was 10.7%; and for the Great Ouse 29.5%. So the basic "14% formula" was not unreasonable, and no other IDB in the area had complained about its use. Having been considered "fair" initially, the AWA had continued to use it. But if it were to be reviewed, the County Councils could well take the view that the balance of 86% charged to the general ratepayer was too high.

3.20 The proportions of 26.97% and 29.03% of the total basic precept that was levied in Felixstowe (paragraph 3.18 above) was due to the large concentration of rateable value for general rate purposes within the Landguard area of the IDD. However the Landguard drainage ratepayer paid no more per pound of annual value than any other drainage ratepayer in Norfolk and Suffolk.

3.21 Whilst land in IDDs was mainly agricultural, the legislation recognised that districts would include other classes of property. But the greater benefit derived by agricultural land was recognised by the provision that "other hereditaments" would only be assessed at one-third of their annual value for drainage rate purposes. Moreover, the provision for sub-districts in Section 68(1) of the Act enabled different parts of an IDD to be treated differently, as was shown by the three sub-districts in the Felixstowe IDD. Trimley and Levington were quite different from Landguard for whose protection a considerable amount of sea defence works had been carried out or was programmed, to which an Exchequer grant with a maximum of 85% of the cost was payable.

3.22 He would contend that owners of property within Landguard derived considerable benefit from the AWA works because:

a. IDBs in Norfolk and Suffolk were only asked to contribute 14% of the total relevant land drainage expenditure;

b. non-agricultural hereditaments only paid on one-third of their value (Tables comparing values of agricultural and non-agricultural hereditaments are in Appendix TB 9 and 10 of document 1C);

c. the total value of protected property in Landguard was very high.

3.23 Paragraph 21 of document 1C describes the arrangements made under what is now Section 81(1) of the Act as summarised in paragraphs 2.22 and 2.23 above; and it is commented that the arrangements were terminated because, in the view of the CDC, it would be unfair to defray rates over the whole area because ratepayers in other IDDs were also bearing part of the cost. He, personally, would support the conclusion of the Working Party (Exhibit 9) that Section 81 agreements should be mandatory.

3.24 It was for the IDB to apply for a contribution under Section 84(4) of the Act and it was the duty of the Water Authority to consider it. But the Act did not define how such contributions were to be calculated. And there was no automatic requirement to contribute where, for example, it was established that there were discharges of upland water into the IDD.

3.25 The former River Authority had made contributions in respect of:

a. excessive discharge into a drainage district from an exceptionally large catchment immediately outside that district;

b. discharge from spillways installed to avoid "over topping" of landsprings;

c. excessive seepage through main river walls.

Contributions had been reviewed annually; and the AWA had followed the same practice. In 1973/74 a total contribution of £1,360 had been made by the River Authority to IDBs, including £500 to the Felixstowe IDB for the Landguard and Trimley Marshes.

3.26 The AWA, in 1974/75, reviewed the previous practice but found there was no basic formula for assessing contributions; and the amount appeared to have been determined on a rather arbitrary basis. It was therefore decided, in fairness, to seek a common basis, so long as that did not call for protracted investigations and monitoring in individual cases, as the amounts at issue were small. Most contributions related to additional pumping expenses incurred by IDBs as a result of upland water discharged into their area.

3.27 In the re-appraisal, three categories where highland water needed to be pumped were identified. Two related to diverted landsprings, which is

not a factor affecting Landguard. The third was IDDs receiving the whole or partial discharge from relatively large highland catchments comprising rural or urban development. These would vary according to circumstances; but those identified fell into 20%, 50% or 100% of highland run-off.

3.28 To avoid the expense of monitoring individual catchments, the ratio of highland/marsh run-off was obtained for the Acle area in Norfolk and was used to determine the proportion in other areas.

The running costs used were:–

(a) Electricity – current Eastern Electricity Board maximum demand off-peak tariff was used in the first instance but actual payments were now the basis used.

(b) Average number of pumping hours.

(c) Allowance for attendances, clearing weedscreens, servicing and insurance.

There was no allowance for capital expenditure by the IDB or associated loan charges. Also, no contribution was made for maintenance of drains and administration, which were expenses that were too small to identify in relation to the upland discharge.

3.29 The above method of calculating contributions had been set out in a report to the AWA and approved at its meeting on 14 February 1975. Certain contributions were then approved and, with contributions approved at earlier and later meetings, the total contributions paid to IDBs for 1974/75 had been £1,622. In that year, a payment of £304 was paid to the Felixstowe IDB, representing £135 for Trimley and £169 for Landguard. (Reports and minutes are at appendices TB 11–14 of document 1C).

3.30 The above policy had been continued in successive years and the total contribution towards pumping expenses initially approved for 1979/80 was £4,820 in respect of 14 IDBs. This included £457 to the Felixstowe IDB – £254 in respect of Landguard and £203 in respect of Trimley.

3.31 In view, however, of the pending Appeal to the Ipswich Crown Court (paragraph 2.25 above), the Felixstowe IDB made a formal appeal

to the Minister in relation to the 1979/80 contribution and, at their request, the Appeal was held in abeyance pending discussions with the AWA whose outcome was a report to the AWA and its decision of 25 March 1980, the contents of which are summarised in the following two paragraphs (Appendices TB 15 and 16 to document 1C).

3.32 Felixstowe differed from the other 36 IDBs in the Norfolk and Suffolk area because of the extensive urban development that had taken place in the upland catchment immediately adjoining the IDD. The consequence was a large impermeable area, the rapid run-off from which discharged into the District. It was accepted that the experience of the Acle area (paragraph 3.28 above) which was purely rural, was not applicable to Felixstowe.

3.33 Instead, therefore, a detailed analysis had been made of the run-off to the pumps, based on the impermeability of the upland catchment, and it was resolved that the contribution to Landguard for 1979/80 should be increased from £254 to £1,081, this being the estimated cost of pumping and maintenance which could be attributed to upland water (see also paragraph 3.41 below). No contribution was made in respect of drain maintenance costs, the need for such maintenance being regarded as due to the highly industrial nature of the Lowland catchment. On the new basis, the contributions to Landguard were assessed at £1,500 for 1980/81 and £1,911 for 1981/82.

3.34 The IDB had formally appealed on 9 December 1980 against the 1980/81 contribution and, as with the previous appeal, this was held in abeyance until the outcome of the case before the Crown Court, which was finally heard in May 1981.

Evidence of Mr Marsden and Mr Dale

3.35 I have taken these items of evidence together because Mr Dale's evidence was not challenged. It set out the methods adopted to determine the 4.04 metres above ODN contour for the Landguard district which is shown on drawing 7282:6 accompanying Mr Marsden's proof of evidence (document 3A). The matter for debate was the choice of the contour and its use in determining new boundaries for the Landguard sub-area of the IDB.

3.36 Following the formation of the AWA, sea defence responsibilities in the Norfolk and Suffolk area had been reviewed in consultation with the five District Councils having coastal frontages (see paragraphs 3.03–3.05 above). A schedule had been agreed with the CDC in February 1976 as shown in the table and explanatory map attached to document 3A (appendices AEM 1 and 2). In contrast to the previous authorities, the AWA accepted responsibility for sea defences protecting Landguard on the sea frontage of Felixstowe as well as the frontage to the River Orwell, (paragraph 2.21 above). The works at Fagbury Cliff (Item 19 of appendix AEM 1) had now been superseded by the reclamation works of the Dock Company.

3.37 In Landguard, some 500 houses, 100 commercial or recreational properties, and the installations and warehouses of the port of Felixstowe were potentially at risk from tidal flooding. 39 people were recorded as having been drowned in the 1953 floods. Some 40 properties had been affected in 1978 by water coming over the frontal sea defences during a tidal surge, which had also seriously affected other parts of the coastline.

3.38 Emergency works had been carried out, at Government expense, here and elsewhere immediately following the 1953 floods. In the ten years after 1955 the River Board had done works costing some £168,000 on the River Orwell frontage; and they contributed £15,059 in 1964 to the War Department for groyne works carried out on that Department's sea frontage. Between 1965 and 1974, when the AWA was set up, it had to be acknowledged that relatively little work on the sea defences had been done.

3.39 With the wider responsibilities they had accepted in relation to Landguard, the AWA had recently substantially completed the following works:–

(i) A new sea wall and groynes at the Manor House – £916,805

(ii) A new flood wall, with a metre of freeboard over the 1953 flood level, from the southern end of the promenade to a point close to the Town Hall – £806,000

(The level of the existing promenade was not such as to guard against the risk of tidal inundation.)

It was hoped to start work in 1984, at a cost of some £1.3 million, to replace the old derelict War Department Walls with a new sea wall and groynes. He was satisfied that these were all genuine sea defence works.

3.40 Within the CDC area as a whole, since 1976, the AWA had completed, or had in progress, work valued at £2.3 million and works were programmed in the period up to 1988, valued at a further £3 million.

3.41 The method by which the contribution to the IDB under Section 84(4) of the Act is now calculated is described in Mr Bolongaro's evidence (paragraphs 3.32 and 3.33 above). Allowing for the impermeable area which drained to the IDD system, a factor of 53.2% was now applied to certain charges incurred by the IDB; and the Board had suggested that other costs should be covered as well, such as administration and drain maintenance. But administration appeared to relate to matters arising within the IDD; and the problems and costs of maintenance were primarily due to land use within the IDD and particularly the dock area, where access was restricted by development, banks were surcharged by heavy loads and debris accumulated in the drains. It had been necessary to replace the impellor at No. 2 pumping station because of corrosion. It was felt that there would be no significant saving to the Board under these heads even if there were no upland water reaching the District. Even if upland water had some effect, it would be difficult to measure.

3.42 The basic criterion for the boundary review of Landguard had been the still water level of the surge tide experienced in 1953 which was, according to the AWA's records, 13.25 feet or 4.04 metres AOD Newlyn. It was not known who had recorded this level or how it was obtained. The AWA did not know how the present boundary was fixed and had none of the original survey information (see paragraph 2.32 above). The proposed new boundary is shown in plan 7282:6 (Doc. 3A); and the deletions and additions are described in paragraph 3.43 below.

3.43 *Area A* – Manor Terrace and Sea Road Area. The new boundary would generally follow the line of the newly constructed sea defences. The new area proposed to be included was below the surveyed level, although the floor level of certain properties was slightly higher than this.

Area B – The ground level of an area between Peewit Hill and Caravan Park, at present within the IDD, had been raised to above 4.04 metres ODN and it was proposed to exclude it. There was a very narrow strip of land on the north side of this area which was below 4.04 metres, but any flooding of that strip would not stop reasonable access to the area.

Area C – In the vicinity of the A45 Southern Relief Road, road construction and industrial development had led to changes in ground level. In consequence, some small new areas were proposed to be included within the District and others were to be excluded.

Area D – In the vicinity of Fagbury Cliff the surveyed level went a short way into an open field; but the proposed boundary followed the edge of the industrial development.

Area E – Much of the area reclaimed by the Felixstowe Dock and Railway Company was above the surveyed level, but the roads giving access to it were below that level. Access to the docks was very important; and the inclusion of this area would be in accordance with paragraph 5 of the Medway Letter (exhibit 3). (Landguard Fort was owned by the Ministry of Defence; and he understood that they accepted responsibility for the protection of their properties. But he agreed that in the Landguard Point area the questions of access in the event of a flood arose in exactly the same way as for the dock area. The work to be done in replacing the old Ministry of Defence wall would undoubtedly be of benefit to Landguard).

Evidence of Mr Davis

3.44 Public sewers in Felixstowe were vested in the AWA; and responsibility for them was exercised by the CDC which approached the authority in 1977 regarding frequent surface water flooding in the Langer Road area. The need for works was accepted and improvements were carried out during 1979/80 at a total capital cost of £137,000. A preliminary circular to residents before the work was put in hand had revealed that at least 74 properties in the area had been flooded of which 69 were in the IDD.

3.45 A plan attached to Doc. 3B shows the surface water system which ultimately outfalls to the drains of the IDB. The extent of the improvements, and also the surface water catchment draining Langer Park is shown with the improvements to the IDB system currently in hand. The 74 properties referred to in the above paragraph are identified on the plan. The channel in Langer Park would originally have been a natural water course finding its way to what was now No. 1 drain of the IDB. He could not say when it had been adopted as a public sewer.

3.46 Before the works were done, the sewerage system had been restricted at the Langer Road/Garrison Lane junction and also between the head of IDB Drain No. 1 and the end of the Langer Park ditch, adjacent to Beach Station. These constrictions had been removed by the laying of pipes of appropriate dimensions at the northern end of Langer Road, and the installation of 1.5 m diameter sewers between Langer Park and IDB Drain No. 1.

3.47 The works had not changed the catchment area of this sewerage system; so the volume of surface water reaching IDB drain No. 1 was unaltered; but the rate at which the water reached it was necessarily increased. It was calculated that, before the works were done, the maximum flow that could be accommodated at the first point of constriction mentioned above was 650 litres per second (lps). At the second point it was only 130 lps. Under the new system, flows of 1918 lps could be accommodated where the sewer entered the IDD, near the Garrison Lane/Langer Road junction. 1828 lps could be passed into IDB Drain No. 1. This assumed an impermeability factor of 30%. This was undoubtedly conservative, and more optimistic designers might well have allowed for only half these discharges.

3.48 The above dealt with the catchment discharging to the drains of the IDB; but my attention was drawn to the ejector station and its associated sewers in the south-east corner of the plan at the Carr Road/Langer Road junction. The station and the sewers were vested in and maintained by the AWA; but the surface water that was pumped into the sea in this area came entirely from within the IDB. It could be said, in this case, that the AWA was helping the IDB.

SECTION 4
EVIDENCE PRESENTED BY THE FELIXSTOWE INTERNAL DRAINAGE BOARD (DOCS. 3D AND E, 5A AND B, AND 6A AND B)

General Introductory Comments:

4.01 The following nine paragraphs, for the benefit of those who may not be familiar with the intricacies of land drainage legislation, and for the better understanding of what follows, give a general history and description of the constitution and functions of IDBs and IDDs and their predecessors; and the provisions in the Act as to drainage rating and finance.

4.02 In the fourth volume of their History of English Local Government, published in 1922, Sidney and Beatrice Webb deal with Statutory Authorities for Special Purposes and chapter 1 deals with the Court of Sewers* as one of the earliest forms of local self government which, over extensive areas of England, administered the sluices, the embankments and the drainage that alone made the land habitable. Various earlier enactments culminated in the Statute of Sewers, 1532, under which Commissioners were established to govern the sewers of particular districts.

4.03 Special provisions applied to the East Anglian Fens, extending from Lincoln in the north to Newmarket in the South and from Stamford in the west to Kings Lynn in the east. The Corporation of the Bedford Level is a matter for study on its own; as is the history of the Lords of the Levels of Romney Marsh, the records of which date back to the 13th century. Under the 1532 Act, commissions were established for various low-lying areas in England including Somerset, East Kent and Lincolnshire. For the embankments on both sides of the Thames, there were formerly eight separate Courts of Sewers, the leading types of which were those for Greenwich, which, into the 19th century, remained essentially rural, and Westminster which became increasingly urban in character. At the conclusion of their chapter, the Webbs recognise, as the ancestors of the directly elected London County Council, established in 1889, both the little knot of Court Officials who, after the Restoration, met in Westminster Hall, and the groups of peasant farmers who, in the grey morning mists, had, time out of mind, walked the marshes of Wandsworth and Greenwich.

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* The Webbs note that it was only with the general adoption in the Metropolis between 1800 and 1840 of water closets that the word "sewer" acquired what they described as "its present malodorous meaning". The old authorities described a sewer as "a fresh water trench or little River encompass'd with Banks on both sides".

4.04 The above is the historical origin of present day land drainage authorities; and I shall refer to it in my conclusions. But modern legislation begins with the Land Drainage Act 1930, based on the report of a Royal Commission under the chairmanship of Lord Bledisloe (Cmnd 2993 of 1927), which repealed the Statute of Sewers, 1532, and replaced the former bodies with modern appointed or elected bodies of two kinds, administering areas with natural boundaries. The catchment boards, with boundaries based on the watershed of rivers or groups of rivers, are ancestors of the regional and local land drainage committees of Water Authorities, established under what is now Sections 2 to 5 of the 1976 Act.

4.05 Internal drainage boards, with which this Section of the Report is concerned, exercise authority, as set out in Section 6(2) of the Act, over "such areas as will derive benefit or avoid danger as a result of drainage operations". Under Section 7, IDBs are to consist of elected members, the provisions as to members and proceedings, and persons entitled to vote, being contained in Schedule 2 to the Act. Powers of Water Authorities in relation to IDBs and IDDs are contained in Sections 11 to 16 of the Act, which include a power to submit a scheme to alter the boundary of any IDD or to abolish any IDD and its IDB and to review the boundaries of a district in response to a petition from "a sufficient number of qualified persons".

4.06 The powers of IDBs to raise drainage rates are comprised in the Sections 63 to 70 of the Act with supplementary provisions in Sections 71 to 83. The accounts of an IDB include the contributions to and from the Water Authorities under Section 84 of the Act that were the subject of four appeals in the present case. Together with its own expenses, they are recoverable by drainage rates levied on owners and occupiers of hereditaments in the drainage district. The owners' rate is to cover new works or the improvement of existing works and the contributions required to be made to the Water Authority under Section 84(1) of the Act. Any other expenses are charged to the occupiers' drainage rate. The demands for the total rate are served on the occupier, who is entitled to recover the amount of the owners rate from his landlord.

4.07 Drainage rates were to be, under the 1930 Act, levied on annual values, as determined for the purpose of Schedule A Income Tax, at a uniform amount per pound, except in cases where there is provision for differential rating. A distinction was made between agricultural land and

buildings, where the full annual value was to be the basis of rating, and other land, which was to be assessed on one-third of the annual value.

4.08 The abolition of Schedule A Tax made it impossible for this method of assessment to be applied universally. It is still applicable in the case of hereditaments with no rateable value but with a Schedule A assessment for the year 1962–63, which is used as the basis for drainage rating. For other hereditaments the current rateable value is used, adjusted by application of the "relative fraction" with a view to arriving at an adjusted value comparable with that of hereditaments with 1962–63 Schedule A assessments (Sections 64–66 of the Act). There was much discussion at the Inquiry of the "relative fraction" (Docs. 5C, D and E refer); and I have felt it convenient to cover this in a separate section 6 below.

4.09 The earlier parts of Mr Danter's evidence (Doc. 3B) covered the provisions of current legislation, which I have summarised in paragraphs 4.04–4.08 above; and the history of events leading up to the appeals and representations that were the subject of the Inquiry, which I have summarised in paragraphs 2.18–2.37 of section 2.

4.10 To conclude the opening part of section 4 I would only mention that many IDBs are, no doubt, direct decendants of the earlier bodies described in paragraphs 4.02 and 4.03 above and have a long historical background; but others are more recent creations under the Land Drainage Act 1930 and subsequent legislation, which have no such background and tradition. This would include IDBs set up after World War II to ensure the maintenance of drainage works carried out during the war; and such bodies as may have been set up following the 1953 floods, as described in paragraphs 2.10–2.17 above, including it would seem, the Felixstowe IDB.

Mr Straker – Opening Statement

4.11 It was contended that:

(a) whilst it might be reasonable to look at possible future legislation, the Minister's decision on the matters at issue must be taken against the background of existing legislation;

(b) one should never underrate the damage that could be done by natural forces, such as had been experienced in 1953, and the great benefit that the provision of defences against the worst that the elements could do would confer;

(c) in our everyday affairs, it was all too easy to lose sight of the benefits conferred by effective defences against the elements, and to take them for granted.

4.12 The Act referred to "areas that derived benefit or avoided danger"; and it was a simple exercise to show the great benefit that Felixstowe got from effective drainge and the very great danger that it avoided. There was nothing in the Act to indicate, as had been suggested, that IDDs should be purely agricultural, and the Medway Letter (exhibit 3) specifically made provision for developed and urban areas as well as agricultural areas.

4.13 The appeals by the IDB had no relevance to the failure by certain drainage rate payers to pay the rates that had been demanded. The four appeals related to the use by the AWA of its power to demand from the IDB such contributions as it considered to be fair; and its power to make contributions to the IDB. Under Section 84(1), the contribution was to be required from "every IDB". It was an individual requirement from each individual board, no particular system being laid down. By the dictionary, "fair" could be interpreted as meaning just, unbiassed, equitable, legitimate, in accordance with rules, etc. "Fair play" which was what the IDB was seeking implied equal treatment for all. It should have some relationship to the benefit the IDD derived or the dangers it avoided as a consequence of the works of the AWA; the IDB would contend that a system under which the proportion of the contributions required by the IDBs as a whole which was paid by Landguard had risen from 5.96% in 1967 to 28.76% in 1982–83 was demonstrably unfair. It derived in part from the use by the AWA to apportion precepts of a system devised to assess annual values for the purpose of collecting drainage rates. (This system involving the use of the "relative fraction", is dealt with in a separate section 6 below as indicated in paragraph 4.08 above).

4.14 As to boundaries, the IDB would not challenge the AWA proposals if it could be shown that the new area would derive benefit or avoid danger as a result of drainage operations. This was a matter for the Minister to determine.

Mr Danter's Evidence

4.15 There were two issues, the first being to ensure that the expenditure of the IDB, including contributions paid and received, was spread fairly between the drainage rate payers, other rate payers and the tax payer. Secondly, it was necessary to examine the objections of certain residential occupiers to the payment of any drainage rate whatsoever.

4.16 During 1982–83, the average drainage rate such occupiers had been asked to pay was £13.87 per property. It was appreciated that the payment of such a sum could be objectionable in principle to some and a real hardship to others. But the IDB saw no objection to the principle that all who benefited from land drainage works should bear a part of the cost.

4.17 The members of the IDB were elected for a term of three years; and there were at present five members, being persons who qualified to be elected under Schedule 2 of the Act. As, since 1971, the number of persons nominated had never been greater than the number of vacancies on the board, a poll had never been necessary. He accepted that no-one in the residential area had yet been approached with a view to membership.

4.18 The IDD was divided into three separate sub-districts, Landguard, Trimley, and Levington, which had been created in 1967. This recognised the effect on the work of the Board of the urbanisation of Landguard and the beginning of the development of Felixstowe Docks. Levington covered 34 hectares and Trimley which is in two parts, covered 233 hectares. Both sub-areas bordered and drained into, the River Orwell. Landguard covered about 154 hectares.*

4.19 Levington and Trimley were, and still are low-lying marshland and farmland areas. But Landguard was intersected by the railway from the Town Station to the Docks, to the south-east of which lay part of urban Felixstowe. To the south of the railway there was also an area used by the Army and to the north was an area of marshland adjoining Felixstowe Dock. The original Dock area had been excluded from the IDD; but there had been a dramatic expansion of Felixstowe Dock, especially in the area north of the railway, where urban development had also taken place. (For the changes in the number and value of properties assessed to drainage rates in Landguard between 1958/59 and 1982/83 see paragraph 2.24 above).

*154 hectares is the figure given in Mr Danter's evidence and in the Annual Return the IDB is required to make. But the figure of 235 hectares given in Mr Worth's evidence (paragraph 4.43 below) seems to me likely to be more reliable.

4.20 After the termination by the CDC of the agreement referred to in paragraphs 2.22–2.24 above, the IDB discussed with the Town Council whether they could operate a similar arrangement; but, as the TC is not a rating authority, it emerged that this could not be done. The decision of the CDC was not changed by various meetings with their representatives and two working parties they had set up. The grounds of the CDC decision are described in paragraph 4.11 of Doc. 3D and are set out in the Evidence of the CDC (Section 5 below). The IDB had suggested that the residential part of Landguard might be constituted as an entirely separate Board, in which case it might be possible for an agreement to be made. Such an approach would, however, only be acceptable if there were first to be a commitment from the CDC to make an agreement; and such an agreement could, of course, only be reached on the initiative of the new Board when it had been constituted.

4.21 In short, many discussions had taken place but none held out hope of a return to the original arrangements, terminated from 1 April 1977; and it was not clear that such arrangements would be acceptable now as they had been from 1958-1977. It must be accepted that, under present legislation, the Minister had no power to give directions to the CDC.

4.22 Document 3D (paragraph 4.12) gives particulars of the amounts of drainage rate with-held by individual rate payers and the summonses that had been issued for distress warrants over the period April 1978 to March 1982. Reference is also made to the decision of the Crown Court on an appeal against the drainage rate (paragraphs 2.25 and 2.26 above). Mr Danter accepted that the IDB might have handled the issuing of demands for drainage rates, when the UDC/CDC agreement terminated, with more understanding of the likely reaction. Explanatory notes were issued with the demand for general rates; and he had it in mind that similar notes might be issued with future demands for drainage rates, though there was no statutory requirement to this effect. The petition calling for the abolition of Landguard (paragraph 2.27 above) is also described. This led to the proposal from the AWA for new boundaries, which the IDB generally supported on the assumption that they correctly delineated the area of benefit.

4.23 Inside the present boundaries of Landguard there are 519 residential properties which were, in 1982–83, required to pay £7,201 in drainage rates, an average of £13.87 per property (see paragraph 4.16 above). In the same year £103,019 was required to be paid by 443 commercial, public

authority, and other hereditaments. Full particulars are in document 3E (page 8) and document 5A.

4.24 Paragraph 5.5 of document 3D shows that the proposed boundary changes illustrated on plan 7282:6 attached to document 3A would bring in a further 101 commercial and 278 residential properties. The total value for drainage rates for the added residential properties would be £2,622, compared with £4,908 for such properties already within the IDD. But it did not seem to me that the suggested additional value of commercial properties, calculated, at my request, in more detail in document 6B, adequately reflected the likely value of those additional properties, including a substantial part of the Port of Felixstowe. It only involved an increase of 8½ per cent in the value of commercial and other non-residential properties for drainage rates. Subsequent questioning elicited that five properties in the added area, two of which were substantial, did not, at present, have a rateable value, and were not included in document 6B; but their proposed rateable value was £123,307 giving, on the basis of the calculations in document 6B, an added value for drainage rates of £6,494.17, which more than doubled the figure given in paragraph 5.5 of document 3D. The reclaimed area of Felixstowe Docks is not included in the foregoing but is an important part of the proposed added area. The company, is, I understand, assessed for rates on an entirely different basis from other classes of property, in accordance with the provisions of the Harbours Acts. Before 1970, assessment had been based on profits; and accounts were presented to the DV each year. Assessment for rates since then has been based on a formula relating to receipts; and, in consequence, the rateable value changes each year. An allowance for the parts of Felixstowe Dock proposed to be included in the enlarged IDD must, therefore, also be made.

4.25 The addition to the value for drainage rates deriving from the proposed added non-residential areas must, therefore, be considerable; and the addition to the value for drainage rates as a whole would have a significant effect on the calculation of the precept to be demanded from Landguard under Section 84(1) of the Act if it should continue to be assessed on the methods described in Section 3 above.

4.26 The analysis in document 6A shows that in 1982/83 77.5 per cent of the amount charged to drainage ratepayers went to the AWA, the balance

of 22.5 per cent relating to the Boards own works. The corresponding figures for Landguard were 78.7 per cent and 21.3 per cent. 93.5 per cent of the amount charged to Landguard was in respect of non-residential properties. The owners rate in Landguard accounted for 72.4 per cent and the occupiers rate for 27.6 per cent.

4.27 In support of the petition to abolish the Landguard sub-district it had been claimed in Mr Forward's Third Report that any drainage works needed for the urban residential area could be carried out by the District Council, who could also do the work needed to protect the area from flooding. The method of calculating the precept resulted, it was said, in payment for capital works which had not been done and overpayment on coastal defence work. Surface water drainage works should have been paid for by the sewerage authority and/or the developer. The AWA had not contributed to the IDB's maintenance and running costs; and costs of administration had been unduly high.

4.28 In response to the above, the IDB asserted that, if Landguard derived benefit or avoided danger as a result of land drainage operations, which included defence against sea water, it should remain part of the IDD. Mr Forward's report underestimated the importance of land drainage; and his assumptions as to the origins of the IDB were incorrect. A low-lying urban area was more vulnerable than an agricultural area to the consequences of inadequate land drainage. In Felixstowe, land drainage sought to protect hundreds of lives and millions of pounds worth of property. Admittedly there had been some delay in embarking on sea defence; but necessary works were now proceeding.

4.29 Comments as to the AWA precept and contribution are in paragraphs 4.34 to 4.40 below. The comments in Mr Forward's Third Report as to charges that should have been met by the sewerage authority and/or the developer apparently related to highways built in 1968–70 and in the early 1970s. Whatever the merits of these comments, any claim to contribution would now be statute barred. He knew of no power to require a contribution from frontagers.

4.30 Mr Forward's Third Report also suggested that the cost of clearing drains of unnatural debris, the provision of screens to protect pumping

equipment, and the cost of repairing such equipment when it was damaged by corrosive or other liquids present in the system should be a charge against the responsible riparian occupiers. The IDB took the view that the difficulties of establishing a case against a particular riparian owner and of bringing him to Court ruled out this approach. The IDB had not considered the possibility of making byelaws. In his view, any byelaws would be difficult to police and to enforce; but a personal contact when matters affecting the drainage system came to light often produced results. In any case, the Board could only take action within its powers; and it had no pollution control powers.

4.31 This was illustrated by events following the dredging of drain No 2 in 1972–73 partly to improve the flow of water, but mainly to provide storage for water that would ultimately be discharged by No 2 pump. The frontager was Taylor Barnard Ltd and, when the bank started slipping in 1976, work had to be done to put matters right. The slippage was, in the IDB's view, the result of work done on their behalf and no claim was, therefore, made against the frontager. Remedial works had been done; but disputes with the frontager continued to this day. Instead of seeking to charge the cost of works to riparian owners and occupiers, it was better to spread the burden by way of drainage rates.

4.32 As for administration, the IDB believed the employment of the AWA to administer its affairs had justified itself in terms of cost. The new arrangement whereby the Board had resumed direct administration would be expensive because of the large amount of work necessary to collect the drainage rates. Direct administration might no longer be necessary if there was a satisfactory solution to the question of drainage rates. The administrative cost of maintaining the drains and pumps was small.

4.33 He understood that rateable values of residential properties in Landguard had been reduced to take into account the fact that hereditaments in the sub-district paid drainage rates. Assessments had been reduced by 10 per cent in the case of premises having ground floor accommodation and 5 per cent in the case of premises situated entirely above ground level. The consequent reduction in the general and water rates, taken together, largely offset the amount payable by an average residential property in respect of drainage rates. (NB Further evidence in relation to the reduction of assessments for the general rate in the Landguard District, and the reason for the reductions, was given by Mr Harlow for the CDC (document 6D) as described in Section 5 below.)

4.34 The contributions paid by the AWA to the IDB under Section 84(4) of the Act are described in paragraphs 3.24 to 3.33 and 3.41 above and are summarised in Section 8 of Mr Danter's evidence (document 3D). The contribution is normally paid in December of each year and is based on expenditure for the year up to the end of August. It is still related solely to the cost of running the IDB pumps. The IDB maintains that it should also relate to the cost of maintaining the Board's drains, which stored the upland water and carried it to the pumps. The same argument applied to the cost of maintaining and renewing the pumping stations, which was part of the system needed to move water for which the IDB was not responsible. When the water reached the pumps, it was impossible to say which came from the upland area and which from the IDD. There had been urban and other development in the uplands as well as in the IDD area. Before the IDB was formed, drainage had been by gravity. The first pump had been installed in February 1959. There should also be some contribution to the cost of administration, though this should not necessarily be the same proportion as was appropriate for the costs of running the pumps and their maintenance.

4.35 In relation to the foregoing items, for the years under appeal, a contribution of £4,270 was suggested as appropriate for 1979/80 and £10,560 for the year 1980/81. In addition there should be a contribution towards the capital cost of the Dock Road Culvert, described in Mr Danter's evidence but set out more fully in paragraphs 4.46 and 4.47 below. There should also be an increase in the percentage of 53.2 per cent (paragraph 3.41 above) to allow for any increase in the rate of flow of the water coming from the Langer Park Main Drain (paragraphs 3.44 to 3.48 above). The Dock Road Culvert Scheme had been carried out in June/August 1982; and 53.2 per cent of its cost would amount to £37,000. The agreed figure of 53.2 per cent should, it was suggested, apply to any works done by the Board; and, if it continued to be used for the time being, it should be reviewed every time there was a development of any sort outside the Drainage District that increased the volume of upland water or the rate of flow. A major planning application for development in the uplands might, for example, be the occasion for a review.

4.36 The precepts for 1981/82 and 1982/83 under Section 81(1) of the Act against which the IDB had appealed were £69,576 and £86,133 respectively. (Note by Inspector: Paragraph 10 of document 3D wrongly quotes the years under appeal.) The method by which they had been calculated is

described in paragraphs 3.08 to 3.18 above and is summarised in paragraph 10.02 of Mr Danter's evidence. The precept paid by Landguard had increased from 5.96 per cent in 1967 to 28.7 per cent in 1982/83 of the total sums demanded from IDBs in the Norfolk and Suffolk area. Unlike other Boards, Landguard was almost entirely urban; and residents contributed to the land drainage expenditure of the AWA through the general rate as well as the precept.

4.37 In the AWA area, where the 37 IDBs in the Norfolk and Suffolk area were required to pay 14 per cent of relevant land drainage expenditure, nothing was collected from Essex, where the Drainage Boards had been abolished, and only 11 per cent from the Welland and Nene District. Figures for other Water Authority areas (page 213 of document 3E) showed that relatively small sums were collected from most IDBs. The Southern Water Authority, for example, collected 8.3 per cent from Boards in Kent and 1.9 per cent from those in Sussex.

4.38 As an alternative to the present method of calculation, a charge could, as in Kent, be based on direct benefit (paragraph 10.6 of document 3D). The calculation could also take into account ability to pay. Alternatively, the total sum required from all Boards could be provided according to the area of the IDD rather than its rateable value. Or, having made the present calculation, an adjustment could be made in individual cases and the excess over a fair figure in such cases could be re-divided amongst the remaining IDBs.

4.39 Previous decisions of the Minister made it clear that regard must be had to the ability of the individual IDB to pay the precept; and the IDB, in turn, must have regard to the ability of drainage ratepayers to pay their drainage rates. This was not conclusively demonstrated by their occupation of premises with a particular rateable value. Nor was the ability of the IDB to pay conclusively demonstrated by the total rateable value of the properties in the district.

4.40 The present method of apportionment based on rateable value could still be regarded as the best if it were modified to allow for hardship. In his decision the Minister could determine the use of a lesser proportion than 14 per cent; and the contribution of each Board could be limited to a fixed proportion of the total sum demanded from IDBs. He would suggest a figure not exceeding 14 per cent of the total sum to be recovered from

IDBs, for Landguard. The amount of the rebate could be re-divided partly between the County Councils and partly amongst the remaining IDBs. It was wrong that Landguard, occupying only 0.265 per cent of the area of IDBs in Norfolk and Suffolk should contribute 28.7 per cent of the precept income.

4.41 Accordingly action should be taken on the lines indicated in paragraph 2.37 above. If possible, the CDC should be requested to make an agreement under Section 81 of the Act, or any other enabling statute, so that the burden of the drainage rate, now levied on residential occupiers in Landguard, could be divided between all residential occupiers in Felixstowe.

Mr Worth's Evidence

4.42 He had been concerned with the IDB's activities since 1980, when they first approached Posford Pavry for advice. That firm had much local knowledge having, for the past 27 years, acted as Consulting Engineers to the Felixstowe Dock and Railway Company and other local businesses.

4.43 Drawing 3702/1 attached to document 5B showed the three sub-districts of the IDD and also the IDB's main drains. There were 4,300 metres of main drain in Landguard whose area was 235 hectares and which had a catchment area of 557 hectares. The lengths of channel that had been adopted as Main Drain had progressively increased since 1956; Drain 2A had only been adopted in 1982. Drawing 3702/2, showing the catchment area of Landguard as it was in 1956 and as it is to-day showed the considerable urban and industrial growth that had taken place. Within Landguard, most of the marsh lands which existed in 1956 had disappeared. But in 1956 most of the land west of the railway had been undeveloped.

4.44 The two pumping stations could not handle the inflow to the drain system at times of heavy storm; and it would be uneconomic to provide pumps that were capable of doing so. The ditch network was, therefore, designed to act as a storage reservoir, holding the storm water until it could be pumped out over a period of time. At present, the drainage system was divided into two parts by a barrier across drain 1B. Drain 1 leads to pumping station No 1; and drains 2 and 3 to pumping station No 2. But improvements in progress described below would remove the barrier and enlarge the culvert under Dock Road. The system would then function more efficiently; and the

main drains would be capable of dealing adequately with the inflow of storms up to a 5-year return period intensity.

4.45 The development of Landguard had increased the flood risk and the financial consequences for occupiers if flooding were to occur. A succession of improvements to the drainage system had, over the years, been undertaken to deal with the increased run-off. Pump No 1 had been constructed in 1961 and was maintained by the Dock Company. Pumping station No 2 was constructed as part of a capital improvement scheme in 1972/74 and was maintained for the Board by the AWA. Both had automatic electric pumps and trash screens to protect the intakes. The AWA could call on standby generators (from their Sewage Division) in the event of a power failure at Station No. 2 and the Dock Company had a separate standby supply for Station No 1. Both stations had been constructed at the site of former tidal sluices. Inspection and maintenance of pumping station No 2 and the drainage system generally was carried out by employees of the AWA on a repayment basis.

4.46 Work to enlarge the culvert under Dock Road and to remove the barrier in Drain 1 B was in progress with a 50 per cent grant from MAFF. This work had been made necessary by the construction in 1978 of the Langer Park sewer (paragraphs 3.44 to 3.48 above) which ran from the southern end of Langer Park to discharge into Drain 1. He did not agree with Mr Heygate's suggestion that this improvement in the drainage system would have been necessary in any event.

4.47 The new sewer installed by the AWA had replaced a combination of open ditch and pipe. It had a catchment area of 126 hectares and received run-off from the nearby residential area and also from a part of urban Felixstowe to the north. The former connection to drain 1 could not pass peak inflows and premises in the vicinity of Langer Park had been flooded in consequence. This should not now happen. But the length of drain east of Dock Road would not have the capacity to store the more concentrated volumes of water that might now reach it. The culvert under Dock Road was therefore to be enlarged enabling it to pass the storm water to storage throughout the drain network. And the removal of the barrier across Drain 1B would enable the storage capacity of the whole system to be used. There was, he would emphasize, a basic difference between the sewer, whose purposes was to get storm water away from the area where it fell as quickly as possible, and the IDBs drains, which had a storage function.

4.48 Section 8 of document 5B describes works done over a period of time to Drain 2 and particularly the length fronting the David Charles Warehouses and the problems that had arisen along Taylor-Barnard's frontage (see paragraph 4.31 above). In consequence of the works that had been done, it was concluded that there were now no significant problems with Drain No 2 and it continued to function satisfactorily.

4.49 Sections 9 and 10 of document 5B described the Landguard area drainage pattern, which is illustrated in Fig. 1 and the catchment area draining to the IDB drains as presented on drawing 3702/3, which shows the different land use zones, which vary from grassland to paved container parks and buildings. Fig. 4 briefly describes each zone with its impermeability coefficient. An analysis of the figures between upland and lowland zones in Section 11 leads to results that are not inconsistent with the compromise figure of 53.2 per cent on which the contribution of the AWA under Section 84(4) of the Act is now based (paragraph 3.41 above).

4.50 Sections 12 to 14 of document 5B refer to tide levels at Felixstowe Town Pier and Harwich Harbour, the experience of the 1953 flood and the sea defences protecting Landguard. The listed tide levels did not take into account variations in sea levels that might be caused by meteorological conditions; but it was noted that Harwich Harbour, in an estuary, showed a greater range of levels than the open sea location of Felixstowe Pier. Tidal flooding of Landguard was more likely to occur from the South-West than from the South-East over Sea Road. The tide levels for Harwich should, therefore, be considered more relevant than those for the town pier and were used by him as the standard.

4.51 The 1953 flooding of Landguard began with a breach in the sea wall facing Harwich Harbour, just north of the Dock Area; and there were later breaches at other points in the wall. For a time the railway embankment had acted as a dam to the flood water; but it had eventually failed a few hundred metres south of Beach Station Road. Later there had been over topping of the promenade and Sea Road.

4.52 The 1953 flood had been caused by an exceptionally high surge tide reaching a maximum still water level of + 4.04m OD (+13.25' OD). The Felixstowe sea defences were designed to prevent a repetition of the 1953 tidal surge flooding. The quay level throughout the Port of Felixstowe was +4.27m OD (+14' OD) and ground levels south of the Port

to Landguard point were appreciably higher than in the Port Area. So Landguard now had reasonable protection against tidal flooding over the South-Western Coast. Along the sea front, it was necessary to reduce wave over topping; and the AWA's works had a top level of +5.0m OD. Sea defences might also be required to protect the coast from erosion; but coast protection was a peripheral matter so far as the present Inquiry was concerned.

4.53 For some 1,500 metres South from Felixstowe Pier, the promenade was at a level varying from + 3.8 to + 4.3m OD. This was enough to prevent overtopping, except in 1953. But waves could break over the promenade; and premises in the lower part of Orford Road had been flooded in January and February 1978 for this reason. (See also paragraph 3.37 above). For much of its length behind the promenade ran Sea Road, inland from which the ground fell to Langer Road. For the rest of its length, the ground fell to Carr Road. The completion by the AWA of a parapet wall at the rear of the promenade, with a top level of +5.0m OD would provide reasonable protection to the areas that had hitherto been at risk. The new wall ran out into higher ground opposite Felixstowe Town Hall; and there would be accesses through it that would be closed by flood doors at times of potential danger.

4.54 South of the promenade, for 350m in front of Manor Terrace, the AWA's Manor House Scheme, completed in 1980, had the same top level as the parapet wall described above. From here to Landguard Point, the sea defences were not in good repair; and the AWA was investigating the need to construct new defences. But the sea did not enter Landguard from this direction in 1953; and Mr Worth concluded that, at the present time, reasonable flood protection was still provided.

4.55 The basis on which the IDD boundary had been determined in 1956 was not certain. Both for the agricultural areas west of the Railway and across Landguard Common the boundary appeared to be a contour set at "5 feet above ordinary Spring tides", as provided for such areas by the Medway Letter. The embankment north of Felixstowe Dock and facing Harwich Harbour was included but Felixstowe Dock itself had been excluded. Throughout the residential area around Carr Road/Langer Road, the boundary appeared to lie along the +3.5m OD contour, which appeared to be contrary to the provision in the Medway Letter that, in urban tidal areas, only "land up to tide levels" should be included. This was taken as referring to MHWS.

4.56 The AWA's boundary review, taking into account progressive development at and around the Port of Felixstowe, sought to include all areas in Landguard that were below the 1953 flood level and also all areas behind the quays at the Port of Felixstowe that would be isolated if such a flood were to occur. The proposed boundary appeared sensibly to fulfil this aim. On the isolation principle, it might be thought that the land towards Landguard Point should also be included. And, although the land at the foot of Peewit Hill, that it was proposed to exclude, had been raised to above the 1953 flood level, the path on its northern side was below that level (see, however, also, the reference to Area B in paragraph 3.43 above).

4.57 Drawing No. 3702/4 showed the proposed boundary and also what that boundary would be if set at the 1.98m contour, which was MHWS at Harwich Harbour. This was shown for illustrative purposes but could be justified, in terms of the Medway Letter, because the whole of the Landguard sub district might be considered to be "urban". An accurate ground survey would be required to establish the exact contour; but the railway embankment would be above this contour level; and its exclusion would split the sub district into two parts.

4.58 In conclusion, Mr Worth suggested that, if the AWA proposal were accepted, the IDB might wish to take over responsibility for those sea defences on their boundary which were only of benefit to properties within the sub-district. He could not speak generally as to whether any IDB in the country had accepted sea defence responsibilities; but to his knowledge, in Kent, sea defence had always been regarded as a matter for the River Board and its successors.

SECTION 5

EVIDENCE PRESENTED BY THE SUFFOLK COASTAL DISTRICT COUNCIL (DOCUMENTS 6C AND 7A)

Evidence of Mr D W Smith and Mr G H Harlow, Objecting to the Boundary Review

5.01 The proposed boundary was generally at a contour level of 4.04m above OD Newlyn, whereas the existing boundary, which had its basis in the Medway Letter (Exhibit 3), was at a contour of about 3.275m.

5.02 The Medway Letter provided, in tidal areas, for the inclusion of agricultural land up to 5 feet above ordinary Spring tides; and that would, beyond doubt, appear to have been the level adopted in 1956 for the whole IDD.

5.03 The AWA boundary was, he was told, related to the 1953 flood level which had been established after examining local knowledge and history and having note of the flood level at Harwich. Regard had also been paid to Exhibit 4, a letter of 28 September 1954, from the Ministry of Agriculture suggesting that the 1953 flood level should in future be taken in determining the boundaries of a new drainage district.

5.04 Whilst the AWA investigations might have been generally correct, the proposed new boundary would appear to include properties that were not, according to his information, flooded in 1953 and whose access road was not covered by flood waters (see paragraph 5.10 below). The Pier Pavilion, and the Cavendish and Marlborough Hotels, for example, were said to have been used as refuges for local people displaced from flooded properties during the emergency. (Mr Heygate intervened to claim that the Pier Pavilion was, in fact, below 4.04m AOD. The plan attached to document 3B showed a level of 12 feet in its vicinity).

5.05 The existing boundary excluded the eastern sections of the various roads that joined Sea Road; but the new boundary would include them and also Sea Road itself. A detailed examination of the threshold and floor levels of properties in the areas to be included and those adjoining Undercliff Road showed that they were above the 4.04m level, some of them by as much as 1.5m. These properties were shown on Drawing DWS1. But he accepted, as shown on Drawing DWS2, that a number of these properties had basements, most of which were in use. In a street where some houses had

thresholds above flood level but others had thresholds below it, or had basements, it would be necessary, he accepted, for the whole street to be included.

5.06 Whilst the factors quoted in paragraph 5.03 above might be relevant if the boundary were being considered for the first time, the boundary fixed in 1956, immediately after the 1953 floods, was presumably considered suitable at the time and it was conceivable that it adhered more closely to what had actually happened. It was, he contended, inappropriate and unnecessary to revise the 1956 boundary, bringing in additional properties to the Eastern District, in the Undercliff and Sea Road areas, on the basis of a flood level of which no one could now be certain, 29 years after the event. He noted the difference in the Tide Tables between Harwich and Felixstowe Pier (see paragraph 4.50 above).

5.07 The AWA proposals were also inconsistent in that they had not held rigidly to the 4.04m contour. As shown on Drawing DWS1, much of the Dock area that it was proposed to include was above this contour. But Landguard Fort and the surrounding land, much of which was below that contour, was to be excluded. Moreover, the latter area was currently within a sea wall bund, which was becoming derelict and was to be replaced with a new sea wall and groynes at a cost of some £1.3m (paragraph 3.39 above). The exclusion of this area appeared to be an incorrect and arbitrary decision by the AWA. If the dock area was to be included because access would be severed by a major flood, exactly the same argument would apply to Landguard Fort and the surrounding area.

5.08 To the West, near Fagbury Cliff, certain small agricultural areas behind existing industrial development, at present within the district, were to be excluded. This seemed curious when it was proposed to bring in residential properties in the Eastern part of the District. If the contour was to be the basis for the new boundary there was, in his view, a case for keeping the larger area within the District.

5.09 Asked whether, in his view, IDBs form a useful function, Mr Smith said that there was a wide variation as between one Board and another. It was time for the matter to be tidied up.

5.10 The information in paragraph 5.04 above was supplied by Mr Harlow, whose evidence on financial matters, contained in document 6D and 7A, is summarised in paragraphs 5.11 to 5.16 below. At the time of the 1953 floods, Mr Harlow was living in a first floor flat at 11a Buregate Road, the ground floor of which had been flooded to a depth of, perhaps, 2 feet. He was at that time employed by the UDC and, on the Monday morning after the floods, had experienced no difficulty in cycling from his home to and along Sea Road, past the Pier Pavilion, and along Undercliff Road to the Town Hall, which was situated on higher ground just to the North of the Pier. To his recollection, indeed, the eastern part of Buregate Road had not been under flood waters on the Sunday morning.

Evidence of Mr Harlow as to Financial Matters

5.11 It should first be mentioned that the evidence as to rateable values and the amounts paid in drainage rates, set out in Part G of Annex 2, and the evidence as to rateable values in the areas proposed to be added to the IDD (paragraph 4.24 above) was supplied by Mr Harlow, who had been employed as Chief Assistant on rating matters, first by the UDC and later by the CDC since May 1952.

5.12 He described how drainage rates had, from April 1958, ceased to be payable by individual occupiers in the IDD, an equivalent amount being collected, as part of the general rate, from all ratepayers in the Felixstowe Urban District (paragraph 2.2 above). The agreement, under Section 81 of the Act, had been terminable at six months notice; and the UDC had considered each year whether it should be continued. But it had, for 16 years, been decided to carry on. In 1974, when the CDC took over the agreement, the amount paid to the IDB was £17,401, representing 0.17 of a 1p rate over the whole Coastal District. The agreement had been terminated from 1 April 1977; but, if it had continued, the sum required by the IDB in 1982/83 would have been £103,000, representing a rate of 0.75 of a 1p rate over the whole Coastal District.

5.13 Seven authorities levying widely differing rates, had been taken over by the CDC in 1974. It was the Council's policy to levy a uniform rate throughout the district; and this had been achieved by 31 March 1978. If a Section 81 Agreement were now entered into, charging the drainage rate on

all ratepayers in Felixstowe and Trimley St Mary, where a 1p rate produced £44,000, an additional rate of 2.34p in the £ would need to be levied, representing an increase of 23% on what was now the district rate. He doubted whether such an increase would be popular with Felixstowe ratepayers who lived outside the drainage district though this was of course purely a personal opinion. Indeed, in his view, the increase in drainage expenditure since 1974 made it doubtful if the UDC would have felt able to continue with the Section 81 Agreement, if it had continued to be the rating authority.

5.14 On 27 June 1979, appeals against the rating assessments of 46 properties within the IDD were considered by a local Valuation Court at Felixstowe. A copy of the Court's decision is attached to document 6D, and it was commented by the Court that "the greatness of the flood risk was not fully appreciated when the properties were valued in 1973". It was that factor, rather than the liability to pay drainage rates, that appeared to have governed the decision which was that reductions of 10% and 5% for first and second floor properties were regarded as appropriate because of this risk (see also paragraph 4.33 above). As a result of this decision, the District Valuer had reviewed the assessments of other properties in the IDD and had reduced them by similar amounts. Mr Harlow commented that each individual property would be considered separately. There had been no assessment for general rates since 1973; and, if improvements to a property had been carried out since then the actual reduction in the assessment would have been less than the amounts of 10% and 5% decided by the Valuation Court.

5.15 Taking account of the aggregate rate levied on a typical property by the CDC, the AWA and the IDB, Mr Harlow calculated that an owner-occupier was £2.73 better off, and a tenant £16.16 better off than he would have been if the Section 81 Agreement had been in force, and the assessments had not been reduced. If, however, a fresh Section 81 Agreement were to be made, relieving the occupiers concerned of the liability for drainage rates, it could not be assumed that rateable values would be increased, having regard to the reason given by the Vali
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5.16 The table in document 7A was prepared to show, for properties of different rateable values, the present amount of the drainage rate for owners and occupiers and the addition to the general rate that would be needed if there were to be an agreement under Section 81 of the Act spreading the amount either over Felixstowe only or over the whole Suffolk Coastal District. A tenant paying the occupier's rate only would actually be worse off if there were a Section 81 Agreement for Felixstowe alone. But he would be better off if the agreement were to apply to the Coastal District as a whole. In the Suffolk Coastal District, the average rateable value of a residential property was £206; and such a property would pay an additional £1.57 if there were a Section 81 Agreement for the whole Coastal District.

SECTION 6

EVIDENCE IN RELATION TO THE "RELATIVE FRACTION" (DOCUMENTS 5C, D AND E)

General Introduction

6.01 There was much discussion of the use of this fraction (which I shall refer to hereafter as the RF) at the inquiry (see, for example, paragraphs 4.08 and 4.13 above and the footnotes to paragraphs 3.11 and 4.13). But as the matters raised appeared to me at the time to be somewhat peripheral to the main theme of the inquiry, I thought it would be helpful to summarize them in a separate Section of this report; though they did, in fact, bulk large in the IDB claim for a reduction of the precept of the AWA under Section 84(1) of the Act.

6.02 As explained in Exhibit 9, drainage rates were, until 1 April 1963, levied on the annual values of all properties in an IDD, as assessed for the purposes of the former Schedule A Tax under Section 35 of the Income Tax Act 1952. This is still the basis of assessment for agricultural land and buildings which have, since 1929, been exempt from general rating. Most Schedule A assessments had, in 1963, remained unchanged since 1935. For non-agricultural properties, drainage rates since 1963 have initially been based, wherever possible, on the most recent value for general rates, the last general revaluation having been made in 1973 (see Section 65 of the Act, which reproduces a corresponding provision in the Land Drainage Act 1961).

6.03 For a start, one-third of the general rateable value of non-agricultural properties is the basis of assessment for drainage rates. But it is also necessary to ensure that the use of up-to-date general rateable values as compared with unchanging Schedule A annual values does not increase the proportion of the total drainage rates borne by urban property. So a further adjustment is made to the general rateable value by applying to it the RF, defined in Section 66 of the Act, representing the relationship between the former Schedule A values and the current general rateable values of such properties in the IDD as have both assessments.

6.04 Certain witnesses contended at the inquiry that:

(a) However helpful the above arrangements might have been in securing comparability in the period immediately following the ending of Schedule A taxation and assessments, they were now, 20 years later, seriously inadequate and out-of-date. As indicated in Exhibit 9, it was becoming increasingly difficult to identify properties that were relatively

unchanged since being valued for Schedule A purposes. And it was likely that such properties would form an increasingly unrepresentative sample of all general rated property in an IDD.

(b) Even if the arrangements were, or had been, reasonably satisfactory as a means of securing equity in the levying of drainage rates as between different classes of property within an IDD, the IDB contended that they did not provide an equitable basis for dividing the amount to be secured by the AWA precept under Section 84(1) of the Act between the different IDBs in the Norfolk and Suffolk area.

Evidence of the AWA

6.05 The purpose of calculating the RF is, in the view of the AWA (document 5C, paragraph 4) to produce a factor which, when applied to one-third of the current value for general rates reduces that figure to the equivalent of one-third of the gross Schedule A value. It describes as mistaken the view that the purpose of the calculation is to maintain a constant balance between agricultural land and other hereditaments.

6.06 The AWA note that, when the rateable value of a property is increased as a result of extension, the former Schedule A value would no longer be comparable with the rateable value of the extended property. And that property should, therefore, strictly speaking, be dropped out of the calculation. However, over a period of time, this could, in the extreme case, result in there being no properties from which the relative fraction could be calculated. So, in some districts, pro rata apportionments had been made, thus maintaining figures for the purpose of the calculation.

6.07 Mr Guttery illustrated the above by a series of calculations showing the effect on total Annual Values for drainage rate purposes of the demolition of properties, the building of new properties and revaluation for general rates. Taking properties out of the calculation, either because they had been demolished or because they had been significantly altered or improved, made relatively little difference to the RF. But it was significantly affected by a major re-valuation for rates, such as occurred in 1973.

Evidence of the IDB

6.08 In July 1963 the IDB had declared the RF to be 0.475 for the year 1963/64. Although there had been a general revaluation for rating purposes in 1973, no further determination had been made until March 1977. In the year 1977/78, after the agreement with the CDC had been terminated, the IDB had to collect its own rates; and the RF for that year had been

determined at 0.158. The Minutes did not show how the figure had been calculated; but the same figure had been used since then. Data now provided by the CDC did, however, confirm the accuracy of the figure.

6.09 The CDC figures for 1971/72 and 1976/77 showed that, between those years, the rateable value of property within the IDB which had also a Schedule A value had increased by 187.8 per cent in consequence of the 1973 revaluation. The increase in the rateable value of property having no Schedule A value was 597.8 per cent. The calculated annual value for drainage rate purposes increased by 99.1 per cent, from £24,389 to £48,569. It was on this figure that the AWA precept under Section 84(1) of the Act was calculated.

6.10 The rateable values of properties which had no Schedule A values clearly played no part in the determination of the RF; and the IDB did not believe that the RF could fairly adjust those values if they played no part in its determination. The difference in the percentage growth of these two classes of property in Felixstowe demonstrated the unfairness of the system, so far as concerned a rapidly growing urban area.

6.11 For properties with no Schedule A value, the product of their total rateable value and the RF would give what might be termed "a notional Schedule A value". Calculations showed that this notional value had increased by 135 per cent over the period 1971/72 to 1976/77, having regard to the change in the value of the RF between those dates. It was plainly unfair that the areas which had most increased in rateable value were not taken into account in determining the RF as used by the AWA in setting the precept.

6.12 If the notional Schedule A value for 1971/72 was, in fact, used together with actual Schedule A values in determining the RF one arrived at a figure of 0.115 for 1974/75 and a figure of 0.079 for 1976/77, as compared with 0.158. Using these RFs, the annual values for drainage rates would have remained roughly stable between 1971/72 and 1976/77, instead of doubling.

6.13 In relation to the above, the AWA commented that, at the revaluation which took place with effect from 1 April 1973, the rateable values of all properties should have been increased on the same basis, irrespective of whether or not they formerly had a Schedule A value. If, since that date,

someone built a new warehouse, its valuation should, strictly speaking, be on the 1 April, 1973, basis. Any property built after 1963, since when there had been extensive development in Felixstowe, would clearly have no annual value. It was, therefore, inevitable, in an area that was expanding, that the number and total rateable values of post-1963 properties would grow at a faster rate than the total rateable values of properties that also had an annual value which could not, in the nature of things, increase in number. That was all that the above calculations meant.

Evidence of the CDC

6.14 The figures used in document 5D, as summarised in paragraph 6.09, are derived from the CDC evidence, document 5E, the Annex to which listed the roads containing the properties that formed the basis of the RF calculation. As an indication of the changes that had taken place in the neighbourhood, the value of the commercial property in the Dock area had been £12,750 in 1963, only part of the Dock area being in the IDD. It had increased, at the time of the 1973 valuation, to £535,000; and its valuation today was £1,462,000 (see also paragraph 4.24 above).

6.15 Mr Harlow accepted that the working of the RF might be unfair if it could be shown that the rateable value of pre-1963 properties, which had Schedule A values, increased at a slower rate than the values of developments that took place after 1963. It would clearly be difficult to show that this had happened. But commercial development in a particular part of the district could stimulate activity leading to a general increase in rateable values in the vicinity, whereas there would not be a similar increase in values in an area that was already fully developed in 1963.

Note By Inspector

6.16 I have summarised in paragraphs 6.11 and 6.12 above the purport of the calculations made by Mr Danter on pages 4 to 6 of document 5D as they may have some validity that escapes me. It appears to me, however, that they are based on a fallacy. He comments, correctly, that "Schedule A values cannot change". And it is, of course, the case that the number of properties having both a rateable value and a Schedule A value will not increase; it can only decline.

6.17 For properties with a rateable value and no Schedule A value, he then calculates a "notional Schedule A value" by application of the RF. He goes on to say that notional Schedule A values could not have increased over the period 1971/72 to 1976/77 by 135 per cent. But if, as seems not unlikely, there was an increase of this order in the number of properties in this class, over the period of 5 years in question, there seems no reason why such an increase in the total "notional Schedule A value" should not have taken place.

6.18 Calculations of the RF in the last paragraph of document 5D which, for subsequent years, use the "notional Schedule A value" for 1971/72 as the numerator but the greater number of properties covered by the rateable value totals as the denominator would, therefore, seem to be meaningless. Both the numerator and the denominator of the RF must cover the same group of properties.

SECTION 7

EVIDENCE OF THE FELIXSTOWE TOWN COUNCIL AND OTHER EVIDENCE FROM LOCAL RESIDENTS (DOCUMENTS 6E to L, 7C AND 8A to C)

Evidence for the Felixstowe Town Council

7.01 Mr Savage, as Town Mayor (document 8B), objected in the strongest possible terms to the scheme of the AWA and, in particular, to the proposed additions to the present IDD. It was totally anomalous that a drainage rate, designed for and only appropriate to agricultural land, should be levied on urban domestic properties. The proposed scheme would extend an already anomalous position. The Council suggested that there should be a change in the law that would lead to the abolition of the present unsatisfactory system.

7.02 The Minister should be made aware of the hardship caused by the levying of the rate on some occupiers of domestic properties, which would be increased if the area of the IDD were extended. The extended area would also include hotels, commercial and industrial properties whose well-being was important to the life of the town. Local feeling on this issue was intense. In the history of the town, no other issue had led to protests on this scale. Residents had been willing to risk prosecution and/or imprisonment to avoid paying a rate that they considered to be inequitable.

7.03 The Council asked that the Minister should reject the AWA proposals and should institute action to change the law to resolve the anomalies caused by this extra tax on urban property. The Landguard area was entirely urban; there were no agricultural holdings within half a mile from the proposed extended area. At the least, the Council would ask the Minister to instruct the AWA to take over the costs of protecting it and spread them over the community at large.

Evidence from Local Authority Representatives

7.04 Mr Savage also addressed me as one of the Councillors representing the South Ward of Felixstowe on the TC and the CDC (document 8C). The Landguard Sub-District of the IDD was situated entirely in the South Ward. In 1976, residents had been advised by the IDB of the termination by the CDC of the agreement made in 1958 with the Felixstowe UDC under which the drainage rate had been collected as part of the general rate, and not from individuals. Both the wording of the notification and its timing had been unfortunate; and residents in the affected area had formed an action group

of which he had been a member, until his election to the Town and District Councils in 1979. He had also been a member of the IDB from 1977 until April 1982, when he had resigned.

7.05 In his view pressure, through the local MP, to change the position, meanwhile meeting the rate demands under protest, was preferable to continual litigation through the Courts, with all that this involved in legal costs.

7.06 It was unfortunate that the AWA had rejected the petition calling for the abolition of the Landguard Sub-District and had, instead, brought forward the proposed extension of boundaries. That would not answer the case of the drainage ratepayers and would exacerbate an already explosive situation by bringing in still more domestic and commercial ratepayers, who would feel very seriously aggrieved. By its action, the AWA had missed an opportunity to reconsider the unique case of Landguard, which was almost totally an urban and industrial area.

7.07 Whilst the rate reliefs in areas "likely to be flooded" would help (paragraph 5.14 above) it would be far better if the drainage rate, especially for the domestic ratepayer, could either be absorbed in the general rate of the CDC or in the Water Rate of the AWA. The IDB could then become a Committee of one or other of those bodies.

7.08 It was hoped the Minister would be prepared to initiate action to change the law to resolve the anomalies that had been revealed and provide for absorbing the drainage rate within either the general rate or the water rate of the Community at large. The appropriate authority should be instructed to enter into a "Section 81" agreement with the Drainage Board. He did not think action would be taken without an instruction from the Minister. The proposed boundary extension should be rejected and the Landguard Sub-District should be abolished.

7.09 Councillor A E Loveday (document 6F) had, since 1979, like Mr Savage, represented the South Ward of Felixstowe on the TC and the CDC. He was a founder member and had been Chairman of the West End Action Group Committee; and was currently Chairman of the West End Community Association.

7.10 In 1976 occupiers of some 600 properties had received drainage rate demands and had thus learnt, for the first time, that the CDC had terminated the agreement with the former UDC. The roads into and out of IDD were used by residents of Felixstowe and adjoining areas; and for transport of goods to and from the Docks. Those who had bought property in the area had been told nothing of this potential liability when they did so. The case of the ratepayers had been taken up vigorously by the Community Association; and no other issue in the history of the town and district had led to such active and prolonged protest. Residents had risked prosecution rather than pay the rate; and, in some cases, Bailiffs had been sent in to enforce collection. The Association had brought a case to the High Court.

7.11 The system whereby urban domestic properties were subjected to a drainage rate that was intended for agricultural land was totally wrong. The unfairness and anomalies of the drainage rating system had been recognised by MAFF when a Government Working Party was set up in 1976; and Dr Gavin Strang, on 20 March 1979, had sent him a copy of their report (exhibit 9). But the recommendations had not been implemented by the present Government because it was assessed that it would cost over £11m to do so; and wider proposals as to rating generally, when introduced, might cover the question of drainage rates. Nothing had, in fact, happened in relation to the wider issue and, in his view, pressure from the agricultural/farming lobby could well have led to the shelving of the drainage rating proposals.

7.12 In his view, the drainage rate should either be absorbed in the CDC general rate or the AWA Water Rate. It was very unfair indeed that it should have to be met by 600 domestic properties.

7.13 Councillor D V Donnelly, Chairman of the Trimley St Mary Parish Council, who also wrote to me before the inquiry, supported the view that the drainage rate should be abolished. The responsibility of individuals for the cost of drainage and coastal defence was sufficiently discharged by their payment of the water, sewerage and general rates. If it was decided that the work done by the AWA and the IDB was essential, the cost should be spread over the whole County.

Evidence From Local Residents

7.14 *Note by Inspector.* The following evidence of local residents was mainly given between 12.30 and 18.00 on day six of the inquiry, which was specially set aside for that purpose. There is given in Annex 2 Section G,

the amount due in respect of drainage rates from each witness who lived within the IDD. This may be compared with the average figure of £13.87 given in Mr Danter's evidence (paragraph 4.23 above).

7.15 Mr I W Jones (Document 6E) questioned the decision that the drainage rate, formerly shared by all the residents of the town, now fell to be met by a small minority. It seemed particularly unfair that those who were required to pay this rate were those who stood to suffer the most inconvenience and loss from any serious breakdown of the sea defences.

7.16 Mr W Little said that, if the River Board had done what was necessary, Felixstowe would not have been flooded in 1953. The flood water had affected his property in Arwela Road to a depth of some 4'; and the property was still affected by the damage that had been done to the structure at that time. The Pier Pavilion, where a dance was taking place at the time, was also flooded; and there was flood water right across the road. (Note by Inspector – as to this, see paragraphs 5.05 and 5.10 above.) As to the new sea wall, Mr Little commented: "When Davy Jones wants to come, he will come".

7.17 Mrs Lake, who was living at 33 Orford Road in 1953, gave an account of the experiences of herself and her husband, who died 5 years later, at the time of the floods. He had been employed at the Docks by the Admiralty; and had gone down to the Dock at about 10.30 pm because he knew the tide was up. To reach the Docks he had to cross the railway line; and he found the boats riding above the top of the quayside. He had returned home and knocked up some of his neighbours. He took up some carpets and went to get some bricks to prop up the bookcases. When he opened the door, the flood water had come in.

7.18 They had gone up to the first floor, with some other people; and the flood water at its highest point had nearly come up to the bedroom. Some of their neighbours lost the ceilings of their ground floor rooms. There were a number of single-story pre-fabricated houses in this part of Felixstowe; and 19 of their immediate neighbours, living in them, had lost their lives. Their calls for help could be heard, but there was nothing that could be done. The tide had turned at about 3.30 am, and the level of the flood water had fallen. Her husband had been out for about an hour, doing what he could to help.

7.19 Mrs Paddick (document 6G) described how she had to pay drainage rates in respect of her shop and a flat over it and her house in Cavendish Road. When she moved into the area from the Midlands, no one had warned her of this liability. The first demand for drainage rates was received early in 1977; and, in the autumn of that year, there had been severe flooding, mainly in the lower part of the West End*' With many others she had to appear at the Magistrates Courts for non-payment of drainage rates and had been given 14 days to pay. She presented her cheque to the Town Hall written on the side of a broken down 6-foot freezer; and it had ultimately been accepted.

7.20 Mrs Paddick described the various protests which she had organised or in which she had taken part over the past 5 years including a personal visit to No 10 Downing Street. This was illustrated by copies of correspondence and extracts from the local press. Early in 1982 she declined to pay her drainage rate but offered 15 Goofy Baileaf's (cuddly toys) from her shop in lieu. When the bailiff came on 23 February he declined to accept the cuddly toys but took money out of the till.

7.21 Mr Westren had formerly been a ratepayer in the Trimley St Mary Sub-District but now lived outside the IDD in Sea Road. His residence would, however, come within the IDD if the AWA's Scheme was confirmed. In his view, the proper course would be for the drainage rate to be spread over the whole coastal district.

7.22 Mrs Fisher (document 6H) was the only individual witness from within the IDD who was not an owner/occupier. She now lived in Beach Station Road; but was in Langer Road at the time of the 1953 floods. Residents had not been told why this extra rate was levied. She understood the AWA was responsible for the whole East Anglian coastline from Norfolk to Essex; and she did not see why Felixstowe should have to pay whereas other towns were presumably not asked to do so.

7.23 For her, and her neighbours in Langer Road, 31 January 1953, had been a night of terror; and they had, thereafter, to deal with the consequences of having more than 7' of salt water sweeping through their houses and taking everything with it. Salt water ruined everything that it touched; and some houses had suffered for years from its intrusion. Plaster had been taken from the walls and the floorboards had rotted.

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*It emerged that this flooding, in the Langer Road area, was not due to the failure of the drains for which the IDB was responsible, but to the inadequacy of the local provision for the disposal of storm water and sewage that the Scheme described in paragraphs 3.44 to 3.48 above was designed to remedy.

7.24 In addition to the Water Rate demand from the AWA she received this drainage rate demand, although she had lived 15′ up in an upstairs flat, and no drainage rate was demanded from neighbours who lived near to her in Beach Station Road.

7.25 Mr Bothwell (document 6J) asserted that the drainage rate should be spread over the whole area. Visitors to Felixstowe, and people from other parts of the town, used the sea front and the amusements in the West End area. He remembered the time when the drain through Langer Park, which was cleared out by the Local Council, was full of clean water, fed by springs from Garrison Lane. It joined other streams and ultimately entered the Orwell Estuary near Marriages Mill.

7.26 There was occasional slight flooding of the RAF camp near the Orwell Estuary when there was a spring tide with 13′ lift and a northerly wind. But flooding to a depth of some 12″, which then occurred, did not cause any inconvenience; and it receded within an hour when the tide turned. The 1953 flood had been altogether exceptional and had been accentuated by the bursting of the river wall at Fagbury, which was in a poor state of repair.

7.27 The works done for the protection of the Manor Club and the proposed new works at Landguard Common, had been, or were, an expensive proposition and the only beneficiaries would be the Manor Club, the Caravan Park and houses in Manor Terrace that did not pay the drainage rate.

7.28 Mr Frost bought his house 6 years ago and had never been told of the potential liability for drainage rates. He was still paying, as a householder, for the damage that had been done to the property in 1953. He felt bitter about the drainage rate demand. One was, so to speak, called upon to pay for the privilege of being flooded. The charge ought to be carried by the CDC as it had formerly been carried by the UDC. Much traffic used Langer Road. Surely everyone in Felixstowe would benefit from works that freed it from the risk of flooding. Although he was 64 years old, he paid for the education of other people's children through the general rate; and there seemed no reason why the cost of flood prevention should not also be carried on the general rate.

7.29 Mrs Farrant described how her house in Langer Road had, in 1953, been invaded by some 5′ or 6′ of flood water. The damage to her ground floor had been such that she and her family had had to live upstairs for some 3 months.

7.30 Mrs Berg (document 6K), commenting on the suggestion that upland water had little effect on the lowland area, said that, until the Langer Park Scheme had been carried out flooding in the Langer Road area was a regular feature after heavy rainfall. The storm water would flow like rivers down Garrison Lane, South Hill and Convalescent Hill. A map attached to document 6K purports to show the extent of flooding in 1953. The railway embankment appeared to be a natural barrier to flood waters; and its weak part appeared to be below Beach Station Road.

7.31 Mrs Andersen said she had only paid the drainage rate because she could not afford to meet the legal costs that would be involved in challenging it. The cost of drainage should be met out of the general rate.

7.32 Mr Porter (document 6L) had lived in Felixstowe in 1929 and continued to visit the area when his work took him to London. He had served for 28 years with the Metropolitan Police. He was now again living in the area and, like other residents, had been summonsed for failure to pay his drainage rates. If he and other residents had to contribute towards the cost of amenities in other parts of the coastal district, such as the Woodbridge Swimming Pool, there was no reason why the cost of defending Landguard against tidal flooding should not be met out of the general rate.

7.33 The greater part of the drainage rate in Landguard was paid by business premises in the Dock area. If the Landguard Sub-Area could be subdivided, it was possible that the CDC might more readily accept responsibility for meeting the charge on the residential part of the IDD alone. In a letter written to me before the inquiry Mr Porter said he had yet to meet anyone living outside the drainage area who did not think it an unfair burden on this section of Felixstowe.

7.34 In a letter of 8 May 1978, appended to document 6L, the Valuation Office explained that, if a reduction in the valuation for general rates were sought because of the liability for drainage rates, it would only relate to the occupier's portion of the drainage rate and that was by far the smaller amount. A reduction in the rateable value of his property had since been

given; but this had related to the risk from flooding and not to the drainage rate liability.

7.35 Mrs Cushing said she understood the local drainage system was very efficient; but it would be helpful if people who were expected to pay the drainage rate could be told what was being done and why, as was done with the general rate. (It was in response to this that the undertaking referred to in paragraph 4.22 above was given.)

7.36 Mr Ratcliffe, a resident in the River Deben (Lower) IDB, said the inquiry had concentrated on the West End of Felixstowe; but there was a similar problem at the East End, where he lived. No definition of the area that derived benefit or avoided danger made any sense. The boundary of the Lower Deben IDD meandered without apparent rhyme or reason.

7.37 Mrs Parker had occupied a first floor flat at 1, Granville Road in 1953 and had lost two cycles and fuel from the ground floor at that time. The ground floor of the premises had been three inches thick with black slime; and supplies of gas and electricity had been cut off. No one who had not seen or experienced it could appreciate the devastation the flood had caused, and the sheer hopelessness of the situation. Those who had approved the siting of one-story prefabs on land that had been relaimed from the sea, and that was flooded in 1953, had much to answer for.

7.38 Her house was near the North Sea Hotel and she dismissed suggestions that there had not been serious flooding in this part of Sea Road (see paragraphs 5.04 and 5.10 above). The whole of Granville Road and the adjoining length of Sea Road, together with the Yacht Pond, had been like a river, with flood water between 3 and 4' deep.

7.39 She had chained herself to the Town Hall railings in protest against the levying of the drainage rate. She could afford to pay it; but that was not the point. Why should she? If the former UDC could spread the charge over the whole town, why could not the CDC do the same?

7.40 Miss Ledgerwood supplied a "Flood Special" copy of the Felixstowe Times dated 7 February 1953, and also seven photographs taken by her at the time of the areas affected by the flood (document 7C). She was, at the time, living at No 9 Holland Road, which is the higher part of the road outside the present IDD area and near to its junction with Sea Road. The

photograph on page 5 of the Felixstowe Times was taken at 1.45 am on the morning of the flood; and shows flood water at the front of No 10 Russell Road. The second of her seven photographs, shows the damage which had been done by the flood water at the back of this house, and was taken in daylight from her house in Holland Road. The purpose of her evidence was to confirm the personal experience of other witnesses as to the extent of the flooding in 1953.

7.41 *Note By Inspector.* In the course of our site inspection, Mr Cole and I visited all the locations referred to in the above evidence. I have mentioned in paragraph 1.06 above, the letters I received in advance of the inquiry. The points they made are largely covered in the oral evidence summarised above.

Evidence of Mr Ryles for the West End (Felixstowe) Community Association

7.42 Mr Ryles presented preliminary evidence and more detailed supplementary evidence (document 8A). He claimed that the IDB was not a representative body; it had no single representative of the residents. It had failed in its duty towards the residents of the Landguard Sub-District, as shown by its failure, until recently, to challenge the AWA on the contribution and precept under Section 84 of the Act.

7.43 The AWA had not treated the petition submitted to it in December 1980 (paragraph 2.27 above) in a logical and sensible manner. They could have accepted or rejected it; but there was no need for them to make it the occasion for a boundary review. Mr Forward's Third Report, on which the petition was based, supported the view of the residents that the payment of an agricultural drainage rate in a developed area like Landguard was unfair. It put a case for abolition that stood in its own right. And the Inquiry had made it clear that the Landguard sub-district was unique in that it contained no agricultural land.

7.44 He asked me to advise the Minister that the contribution from the AWA to the IDB under Section 84(4) of the Act had for many years been too small. He should be requested to order the AWA to make repayments to the ratepayers who had been overcharged.

7.45 The deep sense of grievance felt by a majority of the residents in the area could only be removed by speedy action in abolishing the Landguard sub-district of the IDD.

7.46 Financially, the rate demanded was, for most, a secondary matter. The issue was one of principle. And it would be difficult to find a more unlikely group of people, willing to risk prosecution for non-payment, than those who had given evidence on the sixth day of the Inquiry (paragraphs 7.14 to 7.39 above).

7.47 He asked me to consider Landguard as such, and not to be concerned with the possible repercussions on other parts of the AWA area or the country if it were to be abolished. If the Association and those who supported it had made out their case, the verdict should be in their favour.

7.48 The present Government recognised that all was not well and was committed to legislation to put it right. Lord Ferrers who was Minister of State with the MAFF had said in the House of Lords on 17 November 1981, "We accept that the way in which urban property is rated is not satisfactory. There are some aspects of the law relating to drainage boards which need to be reviewed. The question is, therefore, not so much whether we should review the legislation but when .....".

7.49 The present Inquiry might be the touchstone that would bring this legislation to fruition. As to other options, the Working Party Report of February 1979 (Exhibit 9) had been shelved and it appeared unlikely that it would see the light of day in the foreseeable future. The CDC had torn up the Section 81 Agreement; and their evidence at the Inquiry had made it clear that they were unlikely to sign a new one except under duress.

7.50 In those circumstances the speedy action that was needed to resolve the problems which had been brought before the Inquiry was the abolition of the Landguard Sub-district as a drainage area.

SECTION 8

EVIDENCE ON BEHALF OF COMMERCIAL INTERESTS IN THE DOCK AREA AND FOR THE FELIXSTOWE DOCK AND RAILWAY COMPANY (DOCUMENTS 7B and 8D)

Note by Inspector as to Mr Forward's evidence

8.01 The three firms on whose behalf Mr Forward gave evidence are listed in Part F(1) of Annex 2; but he formerly also represented the West End (Felixstowe) Community Association whose evidence is summarised in paragraphs 7.42 to 7.50 above. He has played an active part in affairs as they have developed, as evidenced by his three reports set out in full as pages 98 to 141and 149 to 199 of document 3E. Mr Forward's Third Report was the basis of the petition to the AWA calling for the abolition of the Landguard Sub-district (paragraph 2.27 above). And he played a leading part in the negotiations with the AWA that led them to alter the basis on which their contribution to the IDB under Section 84(4) of the Act is calculated (paragraphs 3.24 to 3.33 and 3.41 above).

8.02 In paragraphs 8.04 to 8.36 below I summarise Mr Forward's evidence as it was presented at the Inquiry in Document 7B; and I shall, of course, discuss and analyse it fully in my conclusions in Section 11 of the Report. But I ought, at this stage to call attention to:–

i. His view that the IDB is the "primary sea defence authority".

ii. His assertion that the primary function of the Land Drainage Act 1976 is "to ensure the drainage of and the avoidance of the flooding of agricultural land".

This has obviously influenced the thinking both of the IDB and the rate-payers, as is clear from the evidence summarised in Sections 4 and 7 above (see, for example, paragraph 4.58 and the various references in Section 7 to a drainage rate "designed for and only appropriate to agricultural land".) But, when questioned by Mr Heygate and Mr Straker, Mr Forward was unable to point to any provision of the Act that justified these claims, except that, in relation to the 1976 Act, the responsible Minister was the Minister of Agriculture. He was unable to cite any IDB, in any part of the country, that regularly exercised sea defence responsibilities.

8.03 As indicated in paragraph 1.11 above, Mr Heygate and Mr Straker also supported my view that it was outside the scope of the Inquiry, which I have interpreted fairly widely, to consider Mr Forward's evidence as to works done under the Coast Protection Act, 1949, some 15 years ago in the Felixstowe Ferry Area and his comparison with the design of works done or proposed by the AWA in the Felixstowe IDB. All such works have, presumably, been approved by your Department for grant.

Evidence of Mr Forward

8.04 As to the IDB's grounds of appeal (Exhibit 11) he noted under E that the Board would be ready to accept as "fair" a contribution of 15% of the total precept for the Norfolk and Suffolk Division. This would not be acceptable to the ratepayers for whom he now spoke or to those for whom he had spoken in the past. In any event, precepts on an IDB should be related to the cost of works done for its benefit, and not calculated as a percentage of expenditure over the whole Norfolk and Suffolk area.

8.05 As to the AWA's replies (Exhibit 12), he challenged the contention that it would be fair to contribute towards the running of the pumps but not towards their renewal. Pumps became worn and had to be replaced in time. The fact that they might depreciate more rapidly because of conditions within the IDD was no reason to disclaim all responsibility. It was customary, when a pumping station carried flows with different origins, for the cost of maintenance to be shared on an agreed basis. The argument that a pumping station would be needed even if the drains did not need to carry upland water was thinking out of touch with accepted practice.

8.06 The same comments arose on the AWA refusal to meet part of the cost of maintenance of the drains and administration. One factor causing maintenance problems was the grit carried into the system by surface water from roads outside the IDD. It was argued that the IDB's costs of administration would not be reduced if the drains carried no upland water. But the AWA could hardly argue that its administrative costs in dealing with precepts would be reduced by over 25% if the Felixstowe IDB were to be abolished.

8.07 As to the Langer Park Sewage Scheme of the AWA, and its effect on making the Dock Road Culvert scheme necessary, more water could enter the district in consequence of the sewage scheme; and there was no doubt that the rate of flow would be increased.

8.08 In relation to ground A3 of the IDB appeal (paragraph 2.37 above), one was dealing with a single catchment; and the carriage and disposal of water, whatever its origin, should be treated as a common responsibility to be shared.

8.09 As to the contribution required from the IDB, the AWA divided a total sum between the IDDs in the Norfolk and Suffolk area. But Section 84(1) of the Act did not require a total sum to be "fair". It was the sum required from each Board that had to be justified as fair for that Board. The collective system took no account of the benefit or lack of it that might be derived by an individual district. The provision was based solely on rateable values. If, in a particular year, no expenditure was incurred by the AWA for the benefit of a particular district, that district would still contribute towards the cost of works done for the benefit of other districts.

8.10 The AWA claimed that a division based on annual values was "fair", because it prevented large fluctuations in the precept. But they had not shown that there would be large fluctuations under a different system such as that adopted in Kent. Appendix B to Document 7B showed what would have been paid by ratepayers in Landguard if the cost of works done had been met by 15 year loans; and what had actually been demanded. Loan charges on works done after the 1953 floods by the River Board would, by now, have been paid off; and loan charges on works recently done by the AWA would only just have begun. Little sea defence work had been done by the River Authority. The argument that the system of distributing the cost reflected the value of the property protected was also strange. Clearly there was a threshold to be reached before sea defence works could be justified at all. But, beyond that, there was no connection between the cost of sea defence and the value of property protected.

8.11 The assertion of the AWA that the Petition calling for the abolition of Landguard was not in accordance with Section 14 of the Act was not understood. A review of the boundary of an IDD could lead to a decision to abolish it, which was what the petitioners had asked for. If the AWA had not looked at the boundaries of the IDD in 1974, when they surveyed their sea defence responsibilities and put in hand a programme of works (paragraphs 3.36 to 3.39 above), it was difficult to see why the presentation of the Petition had been made the occasion for a Review. When the Minister approved the current works for grant he did not, presumably, know that there was going to be a request for boundary changes. These changes would appear to follow the line of the approved works on the South Eastern seaboard.

8.12 The proposed boundary extension mainly affected Sea Road and Manor Terrace, which would benefit from the current works, and the new dock area, which would only benefit from works done by the Dock Company itself. The dock area was only to be included because its land access was at a lower level. But Point 5 in the Medway Letter (Exhibit 3) only mentioned access in non-tidal areas, where floods could remain for a considerable time. Apart from the area of new quays and docks, ground levels in Landguard had not fundamentally changed since 1956, when the IDBs were set up. The area at risk was the same then as it is now. The Order had been made 23 years after the Medway Letter and three years after the North Sea surge. It was difficult to see what new factors justified the inclusion in the IDD now of areas that had been excluded from it in 1956. Whilst each case had to be considered on its merits he would not, however, take exception in principle to the 1954 "Wear and Tees" Letter (Exhibit 4) which suggested an area of benefit in tidal areas related to the 1953 flood levels. As an engineer, he also had to admit that the proposed new boundary was logical.

8.13 In paragraph 26 of his Third Report he had lumped together sea defences and coast protection under the hybrid term "coastal defence". In practical terms there was little difference between sea defence and coast protection. The works needed were similar; and the use of the two terms created a "grey area".

8.14 The River Board had done certain works following the 1953 floods on the frontage to the Orwell Esturary; but little more had been done until after 1974, when the AWA was set up (paragraph 3.38 above). The works since 1977 had been on the South-Eastern Sea Board as the works done by the Dock Company now took care of the South–Western Sea Board. There was nothing to show that the IDB had been the instigators of any sea defence works or, indeed, that they concerned themselves in any way with works of this nature.

8.15 As to the arrangement on coastal defence between the AWA and the CDC (paragraph 3.36 above) he had commented, in paragraph 46 of his Second Report, that neither the IDB nor the County Council had been involved. The IDB should have been consulted by the AWA as to the work that had been done, and its formal approval obtained as being "the primary sea defence authority". He agreed that there was no statutory requirement to consult; and, if they had been consulted, the IDB would have had no

technical expertise. There seemed no provision either in the Coast Protection Act or in the Land Drainage Act for such an arrangement as had been made; and there must be some doubt as to its validity. The arrangements for financing works under the two Acts differed.

8.16 Acceptance by the AWA of responsibility for coastline works to the east of Landguard could place on the IDB and the County Council costs that were, at least in part, in respect of coast protection works, the cost of which would fall to be met by the CDCand the frontagers. Combined coast protection and sea defence works were clearly sensible. But the agreement between the AWA and the CDC made no provision for joint action in particular cases. Questioned by Mr Heygate, he acknowledged that he knew of no part of the country where there were joint contracts between sea defence and coast protection authorities.

8.17 *Note by Inspector.* It may be helpful to read the two foregoing paragraphs in conjunction with paragraphs 2.05 to 2.08 above. It is in this part of his report that Mr Forward questions not only the financial aspects of work carried out or proposed by the AWA, but also the need for the works, their form of construction and position, their cost, and whether they are properly to be regarded as sea defence and/or coast protection. For the reasons mentioned in paragraph 8.03 above, I have not felt it necessary to set out in detail this part of his evidence.

8.18 In engineering terms, the drainage systems in Landguard carried and disposed of not only surface water arising within Landguard, and, more importantly, from new and full developments, but also surface waters arising from areas outside. In relation to Mr Danter's comments as to the importance of land drainage works to an area such as Landguard (paragraph 4.28 above) he would reply that, in a development area, the system of drainage was a surface water system and not a land drainage system although land might be drained via a system of surface water sewers serving an urban area. A system that began as a land drainage system would become a surface water system as development took place.

8.19 A distinction must be drawn between works for the drainage and disposal of surface water within a wholly or near wholly urban area, whether low lying or not, and works that were necessary to keep agricultural land in good heart. The former should be dealt with under the Public Health Act 1936, and legislation such as the Highways Act 1959, where the object

was to remove surface water and prevent flooding in urban areas. The latter should be dealt with under the Land Drainage Act 1976 "whose primary function is still to ensure the drainage of and the avoidance of flooding of agricultural land". Because of levels, that Act might still cover some urban areas. And there were certain "grey areas" between the several Acts. But the "grey areas" did not, in his view, enter into the present problem of the Landguard adopted drains.

8.20 If there was a system for the drainage of land within a drainage district, the system should not be improved to carry additional waters or run-off flows consequent upon development, either within or without the district, without full payment of the cost being made either by those directly responsible for the development or by the sewerage authority. If work was done under the Land Drainage Act, the cost should be recovered through differential rating of those properties that gained by the works.

8.21 Applying the above to Landguard, he would ask who would have done the work now being done by the IDB if no IDB had been set up in 1956. He had no doubt that necessary improvements in the area to the west of the railway, including No. 1 drain and the pumping station, would have been done by the sewerage authority, as an extension of the existing surface water sewerage system*. The riparian owner could not reasonably have been held responsible for such works. But, so far as works were needed as a consequence of development carried out by him, he could well have been asked to contribute. As for the other drains, they would, in every way, have continued to be the responsibility of the riparian owners.

8.22 It had been logical for the IDB to adopt the drains in 1956 when they were channels draining the land. But it would have been equally logical for the IDB to abandon them when they had to be improved solely as surface water carriers consequent upon development. In an urban area, an IDB had not the prerogative in the removal of surface water and works for the avoidance of flooding. There were no good reasons, in Landguard, for the IDB to retain control when development was imminent. Even if they retained control, there was no reason to charge the cost of improvements to the ratepayers at large.

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*Mr Heygate, for the AWA as the sewerage authority, challenged this. In 1956 the area served by drain No. 1 had been purely rural and even today, the AWA would not accept it as a public sewer.

8.23 If the Board retained its present role, it would be logical for it also to take over other carriers in its district such as that from the northern end of Langer Park to No. 1 drain. Conversely, since the sewerage authority had always accepted responsibility for the surface water systems east of the railway, it would be logical for them also to take over the systems west of the railway, now that the whole area they served was developed.

8.24 The above analysis raised the problem that the taking over of any drainage system was optional. If the IDB abandoned the drains to the west of the railway, which mainly served private development, or if Landguard were abolished, the responsibility would revert to the riparian owners. That would be logical. And they would be no worse off than in the past if the IDB had formally required them to contribute to the cost of improvements necessitated by their development, including satisfactory arrangements as to maintenance. In so far as this was not done, the riparian owners had been subsidised by the ratepayers. In his view the IDB should give notice that it proposed to abandon the system. But he could not say what the consequence would be if it did so and the riparian owners did nothing.

8.25 The position as to riparian responsibilities was, today, very different from what it was in 1956. If the drainage systems in the western half of Landguard were in good order, there was no reason why the sewerage authority should not take them over. No. 1 drain was the surface water carrier for run-off from the eastern areas of Landguard and land to the north. Assuming it was in good condition, it could be argued that the sewerage authority had a duty to take it over and should, indeed, have done so many years ago.

8.26 In the earlier years, the IDB had received no contribution from any sewerage authority for works they did for the disposal of surface water. They had recently carried out and were, he believed, contemplating further capital drainage works. There was no point in giving details because, for the above reasons, he considered this action by the IDB to be unnecessary.

8.27 He believed it was important for an IDB to have knowledge of planning proposals for land that was near to its adopted watercourses. If such information had been available, the trouble which had arisen between the David Charles and Taylor-Barnard warehouses might have been avoided. But he acknowledged that, in this case, the IDB had sufficient access to do all that it needed to do. Alternatively, byelaws could have been helpful in this case. He did not share Mr Danter's views as to byelaws. Nor did he agree

that the source of the trade waste that had led to the corrosion of No. 2 pump could not have been traced, since one was dealing with an open sewer, to which there was almost continuous access. In matters such as this the IDB appeared to have adopted a laissez faire attitude (see Mr Danter's evidence summarised in paragraphs 4.29 to 4.31 above).

8.28 Appendix A to document 7B sets out the precepts that have been levied by the AWA against the IDB. The IDB now met 28.8% of the global demand on all drainage boards in the Norfolk and Suffolk area; and this would rise to 31.2% if the Landguard area were extended. The extension of the sub-area, and the consequent increase in rateable value would provide the AWA with a further £6,974, for which the Landguard rate payers would receive nothing in return. (*Note by Inspector* – the questions as to additional rateable value that I put to Mr Danter (paragraph 4.24 above) suggest to me that this may be an under estimate).

8.29 The above demonstrated the injustice of the method adopted by the AWA for calculating precepts. And Appendix B to document 7B showed in graphical form what the Landguard ratepayers had paid to the AWA and the value of the works carried out for their benefit. Over a period of 20 years there had, he calculated, been a gross overpayment of £135,598. Appendices C, D and E were designed to illustrate how things might have worked out in the Norfolk and Suffolk area if the method of precepting adopted in Kent had been used, taking account of "chargeable expenditure" and ability to pay.

8.30 If there had been overpayment in Landguard, it was likely that there had also been overpayment by the Suffolk County Council, who could well have been subscribing to land drainage works in Norfolk. He agreed, however, that the system of precepting on county councils was bound to be rough and ready. Mid-Suffolk, as an upland area, would be contributing to works in the rest of Suffolk and, indeed, Norfolk, from which it derived little or no direct benefit.

8.31 *Note by Inspector.* Further calculations were made by Mr Forward as to what the overall position would be if the work on coastal defence were to be carried out either by the IDB or by the County Council. I have not felt it necessary to summarise these calculations because, in my view, neither body is empowered to do such work, or would normally be in receipt of Government grant if it did so.

8.32 Mr Forward noted that Mr Bolongaro had opposed the Kent method of calculating precepts, in relation to chargeable expenditure for each Board, on the grounds of the administrative costs it would entail. That might arise as a consequence of the large number of IDBs in the Norfolk and Suffolk area. But water authorities had been asked, some time ago, to review the position of drainage boards in their areas with a view to rationalisation. This had not been done in Norfolk and Suffolk (paragraph 3.04 above). But a review could well find that the existence of many Boards was historical rather than practical; and that there was scope for a reduction in numbers and hence in administrative costs.

8.33 In conclusion, there had to be a solution to past and present problems that was fair to all ratepayers in Landguard, even though it could only mean that others, elsewhere, would have to pay more. The case before the Crown Court had, he believed, been lost because of an error in the drafting of Section 84(1) of the Act. The law only required the contribution to be such as the authority "considered to be fair". In brief, if the authority considered black to be white, it was white.

8.34 His enquiries had failed to disclose any other land drainage sub-area or district that had, like Landguard, no agricultural land as such and was, in practical terms, fully developed. Landguard appeared, in every sense of the word, to be unique. It should, without a shadow of doubt, be abolished as there was no merit whatsoever in its continued existence.

8.35 If Landguard were abolished, responsibility for sea defence should, he suggested, be taken over by the County Council using, possibly, the AWA as its agents. This would be an alternative to the recommendation in paragraph 65 of his Third Report for drainage functions to be exercised by the AWA and coast protection on the southern and south eastern coasts by the CDC (page 124 of document 3E). With the County Council, control of the works and their costs would be in the hands of those who had to pay the bill.

8.36 The refusal of the CDC to continue the Section 81 Agreement had, in his view, pointed the way to a fair and proper solution of Felixstowe's problems and the ending of practices that he believed to be wrong.

Mr Savage – Evidence for the Felixstowe Dock and Railway Company

8.37 Mr Savage's evidence as Town Mayor and as Councillor for the South Ward of Felixstowe on the TC and the CDC is summarised in paragraphs 7.01 to 7.08 above. His evidence as Secretary to the Dock Company, summarised in paragraph 8.38 to 8.42 below, is contained in document 8D. To it is attached a table showing, for 1977 to 1983, the rateable value of the Dock Company, its assessable value for drainage rates, and the amount paid. There are also attached plans TLS2 and TLS3 showing the port of Felixstowe as it was in 1953 and as it is today.

8.38 The basis on which the Company is now assessed for local rates is summarised at the end of paragraph 4.24 above and, being based on receipts, it varies from year to year. For the time being it was on the increase and, if the Company's predictions for the future were realised, it would go on increasing. In contrast, since the last valuation in 1973, the rateable value of other properties had not altered. He acknowledged that the total sum paid by the Dock Company, as shown in TLS1, was less than, for example, bodies such as International Marine Management, for whom Mr Forward was speaking.

8.39 In 1953, much of the damage at Felixstowe had been caused by the sea breaking through in the area now covered by the Roll-on-Roll-off Terminal at Berths 3 and 4. This met with the sea water that had flooded on the Manor Beach side of the district.

8.40 The Company's Berths were now all constructed at a height above the 1953 flood level; and some 140 acres of land had been reclaimed from the sea. This had been done at the Company's own expense, with no contribution from the AWA and its predecessors.

8.41 This anomaly should, he suggested, be investigated and the law changed in calculating the rate payable by the Company. Increases in the Company's rate had no effect on the rate paid by domestic ratepayers. Five-eighths of the dock area was in the present IDD; and this fraction was first applied to the Company's rateable value as a start to the calculation of its value for drainage rates. The AWA scheme would bring the whole of the dock estate into the IDD, which would add to this unfair additional rate burden on the Company, which already contributed a substantial sum through the local Water and General Rate. If it was decided that the IDD should be extended, the Company would ask that the Dock area should be differentially rated.

8.42 The Company asked that the proposed extension of the IDD boundaries should be rejected. Instead, the Minister should initiate action to amend the law to resolve the anomalies that had been revealed at the Inquiry and direct that the drainage rate should be absorbed within the General Rates or Water Rates of the Community at large.

SECTION 9
FINAL ADDRESSES

Note by Inspector

9.01 Under Section 96 of the Act, subsection (5) provides for the recovery by the Minister of the costs incurred by him in relation to an Inquiry from such authority or party as he may direct. Under subsection (6) the Minister may make orders as to the costs of the parties at the Inquiry and as to the parties by whom the costs are to be paid.

9.02 In the final addresses summarised below, or at the conclusion of their evidence, certain individuals or parties to the Inquiry made comments as to the question of costs. I summarise these comments in Annex 4 to this Report with such observations as seem to me to be appropriate.

9.03 Mr Forward gave a final address on the morning of the 8th day of the Inquiry, after questions on his own evidence, given on the previous day, were completed, but before the giving of evidence as a whole was concluded. I have thought it appropriate, however, to summarise what he said below, rather than in Section 8 above.

Final Address by Mr Forward

9.04 He had spoken as an engineer, not an advocate. He had looked at matters as he saw them and put down what he found. Whatever might be said as to the precise terms of the Act, IDDs were almost entirely agricultural in character; and the inclusion of urban land was incidental, resulting from levels. But urban areas could be taken care of by urban authorities, just as the GLC was constructing the Thames Barrier for the protection of London.

9.05 Landguard had long since ceased to contain agricultural land; and its well-being had ceased to be something of purely local interest. The value of this part of Felixstowe was not only to Suffolk, but extended further afield, as an international port. The value of goods stored in the Dock Area ran into millions. The freedom of an area such as this from flooding was a matter of importance to the United Kingdom as a whole. The cost of its protection should be taken on the shoulders of the Community generally.

9.06 If, however, the present system were to continue, the AWA precept on Landguard under Section 84(1) of the Act should not exceed the figures

given in Appendix D to his evidence based on the approach adopted in Kent and allowing for loan charges for 15 years on the cost of capital works. For the years under appeal, instead of precepts of £69,576 and £86,133, the precepts on the basis he suggested would be £16,700 and £18,500 respectively. His method would take account both of the benefit to Landguard from the works of the AWA and its ability to pay.

9.07 The method he advocated would call for the introduction of a detailed system of accounting and the allocation of expenditure between different IDBs. But, whatever agreement might have been reached between the AWA and the CDC, the ratepayers of Landguard should not, in the past, nor should they in the future be called upon to contribute to works that were, in whole or in part, the proper responsibility of the Coast Protection Authority.

9.08 He had brought forward evidence as to works done in the Felixstowe Ferry area because of his fear that similar mistakes in engineering design might be made with works planned for the protection of Landguard.

Final Address by Mr Archer for the Suffolk Coastal District Council

9.09 The terms of reference related to the exercise by the Minister of "any of his powers under the Act". He had no power to require a District Council to enter into an agreement with an IDB under Section 81. It was not, therefore, open to me to recommend action on the lines suggested by Mr Danter for the IDB and by Mr Savage (paragraphs 4.41 and 7.08 above).

9.10 It had been suggested that a new IDB, covering the residential area of Landguard only, might be set up and that the CDC might be prepared to enter into an agreement with such an IDB (para 4.20 and 7.33 above). He would doubt if the CDC had power to fetter the future in this way; and no one could commit a non-existent IDB as to the action it would take if it were to be set up. This proposal, therefore, seemed to be a non-starter.

9.11 The main difficulty in considering a new Section 81 agreement was one of cost. The cost had been £17,401 in 1974, when the CDC was set up; but it would cost £103,000 today of which only some £7,000 related to residential properties. In order to help them one would, at the same time, benefit commercial interests by nearly £100,000. And, since those interests

could, at present, offset their liability for drainage rates against tax, only part of the benefit from a Section 81 agreement would go to them. The balance would go to the Inland Revenue. They would benefit because ratepayers would be meeting land drainage costs as part of the general rate out of their taxed income. And it would be particularly unfair on those general ratepayers who were also paying drainage rates in IDDs for which there were no Section 81 agreements.

9.12 Evidence had been given of the Minister's wish to change the law in response to the report of a working party (Exhibit 9). If the law were, in fact, changed, in relation to Section 81 agreements, it might not be inappropriate to consider giving powers to Water Authorities or to Parish and Town Councils.

9.13 As to the proposed new boundary, the present IDD had been set up with full knowledge of what happened in 1953; but no records had been inherited by the AWA. The boundary crossed the various roads joining Langer Road and Sea Road, and it must be assumed that it had been drawn for a good reason on that line. Levels had not changed since then. It was wrong to seek to change the boundary now on the basis of what was alleged to have happened in 1953.

9.14 The evidence as to what had happened was, in any case, conflicting. Mr Harlow said the Pier Pavilion was not flooded (paragraph 5.10 above). Against this, Mr Little said there was water across the Sea Road between the Pier Pavilion and Millers Cafe (paragraph 7.16); and a lady who came out of the Pier Pavilion had said she got her feet wet. All this showed was that people's memories of what happened 30 years ago were fallible. It was difficult to rely on them.

9.15 Mr Marsden had agreed that arbitrary decisions had to be taken in regard, for instance, to Landguard Fort (end of paragraph 3.43 above). He agreed that the question whether this southern area should have been included was a difficult decision. But Mr Marsden had not commented on the evidence that the Cavendish Hotel and the Pier Pavilion, which were to be included in the extended IDD, had been used as rest areas in 1953 (paragraph 5.04 above).

9.16 One certain effect of extending the boundary would be to increase the number of people who were dissatisfied at having to pay a drainage rate.

And an increase in the rateable value of the district would mean an increase in the precept on the IDB under the formula used by the AWA. The extension of the area, and this addition to its rateable value, would bring no relief to people already in the district who were now called upon to pay drainage rates. If Mr Worth's suggestion that the IDB should take over the sea defences on the boundary were followed (paragraph 4.58 above), the position would be worse still. The drainage ratepayers would be paying 100% and not 14% of the cost of sea defences.

9.17 If Landguard were to be abolished, the CDC would not lose such powers as it had under the 1976 Act, for what they were worth; but it was not a drainage authority. It would have to look at the situation that arose, bearing in mind what action might be taken by the AWA.

Final Address by Mr Straker for the Felixstowe Internal Drainage Board

9.18 He would stress again the points he had made in his opening address (paragraph 4.11 above). He would add that, however much one might learn from past history, the matters at issue had to be dealt with as things were today.

9.19 As to the issues raised in paragraph 1.10, he repeated that my function, and the powers of the Minister, were wider than those of the judge, who had heard the ratepayers' case in the Crown Court. An inquiry of the present kind was a more satisfactory forum for hearing and considering the points at issue. On the financial appeals, the function of the Minister under Section 84(6) of the Act was "to make such an order in the matter as he thinks just".

9.20 He accepted Mr Archer's comment that the Minister had no power to require the CDC to enter into an agreement with the IDB under Section 81 of the Act (paragraph 9.09 above). But the inquiry had been wide-ranging. And he would hope, if the Minister felt able to speak favourably of a possible Section 81 agreement, as a way out of the present problems, the CDC might feel able to re-consider their position.

9.21 As to boundaries, including the petition for the abolition of Landguard, the starting point was whether Landguard "derived benefit or avoided danger" as a result of the works of the AWA and the IDB that had been described.

The benefit derived and the danger avoided were, he suggested, clear. And it was inconsistent for those who asked for abolition to express, at the same time, concern as to the level of protection afforded.

9.22 As to what would happen if Landguard were to be abolished, one could, he suggested, hardly rely on the exercise by the CDC of its powers under Section 98 of the Act. The Council was not, as Mr Archer had said, a drainage authority (paragraph 9.17 above). As to the use by the AWA of its powers for defence against sea water under Section 17(2) of the Act, they were permissive and not mandatory. He would not suggest that either body would behave in an irresponsible way. But one would be moving from the known to the unknown. When Mr Forward was asked what would happen if the IDB was wound up and the riparian owners did nothing, he replied, quite simply, that he did not know (end of paragraph 8.24 above).

9.23 He would stress the significance of paragraph 67 of the Waverley Report (paragraph 2.10 above) as to the setting up of new drainage boards in areas that had been flooded in 1953. There was no suggestion that this was only appropriate for areas where agricultural land was at risk. It was suggested for any area that would derive benefit or avoid danger from the improvement of the sea defences that had been breached in 1953. The Medway Letter made provision as to the criteria to be adopted in fixing boundaries in urban as well as in agricultural areas. It referred also to access; and it was surely crucial to those concerned that access to the Dock area should remain open at all times.

9.24 As to whether Landguard Fort and the surrounding area should be included, on grounds of access, the Minister could approve a scheme submitted to him "with modifications"; and those modifications could, he suggested, include additions to as well as deletions from the proposed area.

9.25 The present contributions under Section 84(4) all related to pumping – the cost of getting water away (paragraph 3.28 above). The suggestions that, because land in the IDD that was now developed formerly consisted of sheep marshes that drained through sluices, and that the need for pumps could not, therefore, be attributed to upland water was absurd. Mr Worth's evidence had made it clear that one could not distinguish the origin of the water that was stored in the IDB's drains and discharged by its pumps. Since the IDD was formed in 1956 development had taken place outside as well as inside the district. It had been agreed that the greater part

of the water with which the IDB system had to cope came from outside.

9.26. Section 84(4) related to the "quantity of water" that an IDD received from land at a higher level; and it had to be admitted that there was no reference to the time span over which the water was received. But the provision only made sense if it was, in fact, considered in relation to time. It was not rainfall over the year as a whole but heavy rainfall over a short period that gave rise to drainage problems and the risk of flooding. Mr Davis said that the Langer Park Scheme would not alter the volume of surface water reaching Drain No. 1, because the Scheme still served the same catchment area. But he accepted that the rate at which the water reached Drain No. 1 was necessarily increased (paragraph 3.47 above). Otherwise the scheme would fail to achieve its purpose. If one increased the rate of flow, one increased the quantity of water reaching the district in a given time, which could well be the time when the system was already under pressure.

9.27 So the AWA should contribute to the cost of works by the IDB that had been made necessary by works that increased the rate of flow into the IDD of storm water from outside the district and, in particular to the cost of the Dock Road Culvert Scheme.

9.28 At the moment, the AWA contribution took no account of the IDB's costs of administration; but some part at least of those costs must relate to the running of the pumps. If the AWA contributed to the cost of running the pumps, they should also contribute to the cost of their maintenance and repair; and to the maintenance and repair of the drains that stored the water and carried it to the pumps. The AWA should also, when the need arose, contribute to the cost of the work done by the IDB to improve its system, each item of capital expenditure being looked at on its merits (see paragraph 4.34 and 4.35 above).

9.29 In relation to the years under appeal, the IDB claimed an additional sum of £3,189 for 1979/80 and £9,060 for 1980/81, giving total contributions of £4,270 and £10,560 respectively. It also suggested an allowance of such proportion as was thought to be appropriate of the cost, after grant, of the Dock Road Culvert Scheme.

9.30 In relation to the contribution required by the AWA under Section 84(1), he would stress the importance of Felixstowe and the development

that had taken place there, both to the county and the region in which it was situated. The contribution must have some regard to the reasons for the IDB's existence and to its "ability to pay". The IDB was only seeking fair play, which was the only guideline in the Act.

9.31 Sections 63–67 of the Act set out a way of determining values of property in an IDD that would secure a fair distribution of the burden of drainage rates, whether assessments were based on annual values or rateable values. The calculations devised for this specific purpose had been adopted by the AWA for the purpose of distributing a total sum between the numerous IDBs in the Norfolk and Suffolk area. It had not been demonstrated that this was "fair". It led to an approach to the matter of contributions that was neither open minded nor flexible.

9.32 The AWA had inherited its system from the former East Suffolk and Norfolk River Board, which had operated at a time when Schedule A was the universal basis for assessment of drainage rates. That Board had decided not to adopt the basis favoured by Mr Forward of taking individual records of work done for the benefit of each IDB. Instead, it determined how much should be required from all IDBs; and how that total amount should be spread. It clearly could not divide the total amount by the number of IDBs; or distribute it in proportion to their respective areas. The only possible basis of distribution then available was in proportion to the value for drainage rates of each district.

9.33 Although no records existed as to the basis on which the River Board reached its decision some 30 years ago, there was no reasonable doubt that this was how it had been arrived at. The IDB did not seek to claim that the whole system should be changed. But they did say that, if it were not adjusted, it produced a result that was unfair to a developed area such as Landguard. A system that might, initially, have been "fair" had, in course of time, become unfair.

9.34 As to the total expenditure of the AWA, to which the 14% was applied, he noted that it included the contributions made by the AWA to IDBs (paragraph 3.08 above). It was manifestly wrong that IDBs should be asked to pay back part of the sums they had received under Section 84(4) of the Act. He questioned whether the IDBs should be charged with works of maintenance on the main river or the cost of operational depots. The IDB did, in fact, use the services of the local operational depots on a repayment basis.

9.35 The proportion of 14% was purely arbitrary and could not be defended as "fair". But he necessarily had to accept its historical background; and there was no way of judging whether it had been right when it was first adopted. But it was questionable whether it was right today. He would not suggest any specific alternative figure; so much depended on the items that were included in the total as "relevant land drainage expenditure".

9.36 As to the method of distribution, he would exclude from the total the contributions made to IDBs and would adopt the method of calculation set out in document 5D (paragraphs 6.08 to 6.13 above). There had been some criticism of the calculations in document 5D on the basis that the rateable values of properties without a Schedule A value might rise at a greater rate than the older properties that had such a value. (Paragraphs 6.13 above). But this criticism was not inconsistent with the purposes of the relevant fraction, which were to reduce rateable values to the equivalent of annual values (paragraph 6.15). One was not looking at individual properties but at areas.

9.37 There might be criticism of the use the IDB had made of "notional Schedule A values", because the term was not used in the Act. But it was not necessary to use it for the purposes for which the relative fraction had been devised. The phrase had to be used because of the improper use to which the relative fraction had been put by the AWA to distribute a total sum between 37 IDBs.

9.38 Using the values in document 5D, he calculated that the basic precept paid by the Felixstowe IDB ought not to be more than 12% of the total precepted on IDBs as a whole in 1981/82 and not more than 12.2% in 1982/83. He was prepared to leave it open as to what proportion of the relevant land drainage expenditure should be charged to IDBs; but on

different assumptions, the amount payable by the Felixstowe IDB would be:–

Proportion of total Land Drainage expenditure	1981/82*	1982/83*
%	£	£
14	30,595	35,988
12	26,091	30,656
10	21,586	25,384
8	17,081	20,082

9.39 On the above basis, the IDB would pay about 12% of the total precept on IDBs as compared with the current demand of 29%, which was rapidly rising. And even 12% would be generous to the AWA, as demonstrated by Appendix B to Mr Forward's evidence (document 7B as summarised in paragraph 8.29 above). The effect of this, and the increase suggested in the Section 84(4) contribution, would be a very substantial reduction in the burden of rates on the IDD.

Final Address by Mr Heygate for the Anglian Water Authority

9.40 Mr Heygate echoed what Mr Straker had said in inviting me to interpret my terms of reference very widely. He would hope not only for decisions on the matters that were the immediate subject of the appeals but the widest possible guidance as to action in the future and the principles on which that action should be taken. Such guidance might, indeed be of value to the AWA not only in relation to Felixstowe but also in its dealings with the 36 other IDBs in the Norfolk and Suffolk area.

9.41 As to contributions from the AWA to the IDB under Section 84(4) of the Act, the present arrangement, resulting from discussions between Mr Forward and Mr Marsden was obviously something of a horse deal. The evidence at the inquiry made it necessary to review the whole matter from scratch, starting from first principles.

* *Note by Inspector.* I have faithfully reproduced in Columns 2 and 3 of the table in paragraph 9.38 above the figures given to me by Mr Straker at the time of his final address , but I am quite unable to trace the "total land drainage expenditure" to which the percentages are applied. It might be thought that the figures in the second, third and fourth lines would be six, five and four sevenths of the figures in the first line; but this is not the case.

9.42 The basic principle would be that any contribution must be based on the problems caused to the IDD by the fact that it had to accept upland water from outside its district. In relation to the Langer Park Sewage Scheme, he would accept the IDB contention that the problems were created by the increased rate of flow into No. 1 drain that would result from the Scheme (paragraphs 9.26 and 9.27 above).

9.43 Mr Marsden had argued that the IDB's cost of maintenance and administration arose mainly from development within the district and would be much the same if it was self-contained, carrying no upland water (paragraph 3.41 above). It could be argued that, if Landguard had still consisted of grazing marshes, the former gravity sluices could still have coped with the water from the uplands. Historically, pump No. 1 had been installed in 1961 and pump No. 2 in 1974 as a consequence of commercial development in the IDD. It was agreed, however, that one could not distinguish within the district between upland and lowland water; and that, statistically, 53.2% of the water reaching the pumps had its origin in the uplands.

9.44 One came back to the criterion of Section 84(4) which related to the "quantity of water" entering the district. If works were undertaken by the IDB for purely internal reasons, having nothing to do with upland water, he would reject Mr Danter's suggestion that the AWA should contribute. For other classes of work it was a more open question. He would accept, in principle, the case for some contribution to drain maintenance. Assuming "quantity of water" could be interpreted as covering the rate of flow, he had already agreed that there was a prima facie case for an AWA contribution to the cost of the Dock Road Culvert Scheme. But it should be borne in mind that the AWA had already spent £137,000 on the sewage scheme; and this included the ejector station at the Carr Road/Langer Road junction, that might well have been regarded as a responsibility of the IDB (paragraph 3.48 above).

9.45 The principles on which a contribution should be determined in a complex district such as Landguard were difficult to determine. But if one was going to establish generally applicable and useful guidelines, one should forget the horse deals of the past and look at the matter logically and historically. In all land drainage matters, the historical approach was of the greatest value.

9.46 As for the calculation of the total precept on IDBs in Norfolk and Suffolk (paragraphs 11 and 12 of document 1C) he accepted that the aggregate of the contributions to IDBs should be taken out of the total sum to which 14% was applied (paragraph 9.34 above). In 1981/82 the sum in question had been just under £9,000. But he noted that the proceeds of the general drainage charge, amounting £120,000 was amongst the items deducted from the total estimated expenditure to arrive at the net figure on which the precept was calculated. The logic of this might be questionable.

9.47 Mr Danter thought the percentage of 14% was too high; and Mr Straker had suggested alternative figures (paragraph 9.38 above). On this, he would only call attention to the fact that 87% of the land drainage work of the AWA was carried out for the benefit of IDDs (paragraph 3.09 above). Taking into account all that had been said as to the benefits derived by the wider community from a thriving Felixstowe, it did not seem to him that the figure of 14% could be regarded as "unfair".

9.48 The method by which the total sum was spread amongst the 37 IDBs had been in existence as long as could be remembered; and this was the first time there had been any appeal against it. Mr Forward had spoken of the system adopted in Kent; but it appeared to be very elaborate and, although it had been in existence for a long time, it had not been adopted in any other part of England. It contained arbitrary elements and figures used often appeared to be "plucked out of the air". To apply such a system to an area containing 37 IDBs would inevitably involve a great amount of administrative work.

9.49 Mr Forward appeared to wish to breakdown the Norfolk and Suffolk area and the IDBs according to the benefit derived from the AWA works. But this was not the basis on which land drainage was financed. Mr Forward had no answer when it was pointed out that mid-Suffolk contributed equally with the rest of the county to works that were primarily for the benefit of coastal Suffolk (paragraph 8.30 above). So far as benefit from sea defence works was concerned, Felixstowe admittedly appeared to be self-contained. But there were areas in Norfolk where particular defences protected a number of areas; and it would be difficult to apportion the benefit. It would, he suggested, be difficult to precept Felixstowe on the basis of benefit if it were not to be done elsewhere.

9.50 Mr Forward had also mentioned "ability to pay" as a factor that was taken into account in Kent; but had agreed that any attempt to assess it must be completely arbitrary. It was a feature of any revenue-raising system that the richer areas would subsidise the poorer ones. Landguard obviously paid more than other areas; but it had more to lose if its protection from tidal inundation was inadequate.

9.51 Mr Forward's graph (Appendix B document 7B) showed the precepts on Felixstowe shooting up, reflecting the increase in its rateable value, far ahead of the value of works done, based on 15 year loans. But there was no longer much of Felixstowe in the IDD that was left to develop; but the value of work done for its benefit would continue to grow.

9.52 In short, there was a basic difficulty in agreeing what was "fair". It was optimistic to suggest that agreement would result if the two parties came together. They would merely emerge with their honestly held, but differing, opinions. In the end someone had to pay. If one party paid less, others would have to pay more.

9.53 As to the "relative fraction" (Section 6 above) it would appear that the AWA and the IDB had been talking about different things. The relative fraction was a mechanism for bringing down the rateable value of a property broadly to the Schedule A level of similar properties. There was no evidence before the inquiry to suggest that it did not work reasonably well for this limited purpose.

9.54 As to the proposed new boundaries, there had been graphic evidence from local residents that the level of the 1953 flood went far beyond the boundaries of the existing IDD. The evidence presented by Mr Smith for the CDC simply did not stand up to cross-examination; and it was difficult to see why the CDC had decided to oppose the AWA's proposals.

9.55 As to Landguard Fort, it should, perhaps, be included in the district. It was clear to him that the Minister had power to add as well as to delete properties from a scheme proposing an extension of the IDD.

9.56 He would not comment on the criticisms that had been made of the works done or proposed to be done by the AWA, partly in supplementary

material brought forward during the inquiry, because this would appear to be outside the scope of the inquiry, as he and Mr Straker had agreed (see paragraph 1.11 above).

9.57 There had been some mention of differential rating; and, in this context, he would only say that the proposed IDD would contain areas of three kinds.

(1) Land to the east and south of the railway that was protected from tidal flooding, but did not depend on pumps for its drainage.

(2) The land to the west and north of the railway, most of which drained to the IDB pumping stations.

(3) Land that was proposed to be included because, although it was above flood level, access to it would be cut-off if flooding were to occur.

9.58 In relation to a possible Section 81 agreement between the CDC and the IDB, there appeared to him to be three alternatives. The charge could be recovered from the whole of the coastal district or on the "parish" of Felixstowe as a whole or on that part of the "parish" that lay within the IDD.

9.59 Lord Ferrers had been quoted in support of the view that the system of drainage rating was unfair in its application to urban properties (paragraph 7.48 above); and support for the abolition of the Landguard sub-district had been largely based on the assertion that the Land Drainage Acts of 1930 and 1976 related basically to the problems of agricultural land. It was the view of the AWA that, on present guidelines and practice, Landguard should continue to be part of the Felixstowe IDD. It was not for the AWA to depart from established procedures.

9.60 It must be accepted that the Landguard sub-district was highly unusual and, perhaps unique. It was completely built up and was geographically isolated from any agricultural area. Part of its surface water drainage system was already in the hands of the sewerage authority. Local opinion – apart of course from the IDB – (Sections 7 and 8 above) was unanimous in asking that the sub-district should be abolished.

However, one had to ask what would happen if Landguard were to be abolished. The AWA would still have powers to maintain the sea defences and it would presumably continue to do so. The AWA could also maintain the drainage system and the pumps if it was prepared to classify the drainage channels as "main river". Or it could take over the IDB drains as public sewers. That might be more logical, because it would be an extension of the storm water and sewage disposal system for which the AWA was already responsible.

9.62 In relation to the above, it might be argued that none of this would happen, because the AWA's powers were only permissive. But that, of course, was also true of the powers of the IDB. The local people might, it could be argued, be in a better position if the AWA was responsible in one capacity or another. Formal procedures would be needed to change the classification of any channel as "main river". And, under the Public Health Act, once a drain had been adopted as a public sewer it would, forever, remain a public sewer.

THIS CONCLUDES MY SUMMARY OF THE EVIDENCE GIVEN AT THE INQUIRY.

SECTION 10
FINDINGS OF FACT

Evidence as to boundaries and land drainage works and responsibilities

10.01 Although records are scanty, there can be little doubt that the Felixstowe IDB and IDD were set up in 1956, following the 1953 Coastal floods, in accordance with the recommendation of the Waverley Committee as endorsed by your Department (paragraphs 2.10, 2.17 and 2.18 above).

10.02 The IDD consists of 3 physically separate and self-contained areas, Levington, Trimley and Landguard which have, since 1967, been constituted as separate sub-districts (paragraph 4.18 above). The Inquiry, and this Report, relate solely to the Landguard sub-district, which has an area of some 235 hectares with a catchment area of 557 hectares (paragraph 4.43 above).

10.03 When IDDs are constituted their areas should be such as will "derive benefit or avoid danger as a result of drainage operations" (Section 6(2) of the Act). That is the sole criterion.

10.04 In the twenty years up to the 1953 Coastal Floods, the above provision was interpreted in accordance with the "Medway Letter", which still generally governs the position in non-tidal areas. In tidal areas, the normal practice was to include agricultural land up to 5 ft above ordinary Spring tides and urban areas only to tidal levels (Exhibit 3).

10.05 The Waverley Committee suggested that, at least for built-up areas, the boundaries of IDDs could reasonably cover land that was flooded in 1953 or that would have been flooded but for the River Board's works and not only, as hitherto, land up to the level of ordinary Spring tides. Although this approach does not seem to have been formally endorsed by your Department, an informal letter, the contents of which became generally known, indicated that such an approach was likely to be acceptable (paragraph 2.11 and Exhibit 4).

10.06 As to tide levels affecting Landguard, it was noted that there was a greater range at Harwich Harbour, in an estuary, than at the open sea location of Felixstowe Pier. I endorse the conclusion that the Harwich levels should be taken as the standard which gives a level of + 1.98 m OD as MHWS (paragraphs 4.50 and 4.57). (Since the Inquiry, I have learnt that there was no tide-gauge on Felixstowe Town Pier in 1953).

10.07 As to the level reached in the 1953 Flood, the AWA adopted a maximum still water level of + 4.04 m OD and I see no grounds for questioning this. The survey delineating this level was not challenged (Document 3C). The sea defences constructed or proposed by the AWA are designed to protect the area against a tidal surge of this order, with provision to reduce wave overtopping along the sea front.

10.08 As to the boundary of the existing Landguard sub-district, this would appear, for urban and agricultural areas alike, to have been set in 1956 broadly at 5 ft above ordinary Spring tides (paragraphs 4.55 and 5.02 above). For urban areas this was consistent neither with the Medway Letter nor with the 1953 Flood levels. There is no evidence as to why the boundary of the IDD was drawn in this way; but there was no objection to the chosen line when the draft order was on deposit (paragraphs 2.19 and 2.20 above).

10.09 There was some dispute at the Inquiry as to whether certain land now proposed to be included in the IDD under the Scheme submitted by the AWA (Exhibit 10 and Document 3A) was, in fact flooded in 1953 (paragraph 9.14 above). Sea Road is at a higher level than Langer Road, which runs parallel to it, and the present IDD boundary crosses the roads that join them. From the evidence of local residents, summarised in paragraphs 7.14 to 7.41 above, including the contemporary photographs (Document 7C), I have no doubt that this land was, in fact, flooded in 1953. Mr Harlow's recollection as to the position on the morning after the floods, and on the Monday morning (paragraph 5.10 above) would, I suggest, merely reflect the fact that the flood waters would recede through the breaches as the level of the tide fell from its peak.

10.10 I am advised (Annex 3, Part IV), subject to points of detail, that the whole of the area delineated by the AWA's proposed boundary would either be flooded or be isolated by a flood of 1953 proportions, but for the Authority's existing and proposed sea defence works; and that there are two excluded areas that might require inclusion. I therefore find that the proposals of the AWA are generally in conformity with Section 6(2) of the Act (paragraph 10.03 above).

10.11 I consider the implications of this finding, including the position of lands in the Dock Area and elsewhere that are above the 4.04 m contour, but to which access would be severed in a major flood, (paragraph 2.32 above) in Section 11 below. I also consider in Section 11 the Petition under Section 14

of the Act calling for the abolition of Landguard (paragraph 2.27 above) which gave rise to the review of the boundaries by the AWA.

10.12 Having myself been responsible for land drainage in your Department in January 1953, I can testify that there was, at that time, no question as to the responsibility of the Department and River Boards for dealing with sea defences at the time of the coastal floods. There was an instant response to what took place on the night of 31 January. Natural forces pay no regard to man-made boundaries. And it never occurred to us that our responsibilities ended, and that some other Department or Authority took over when urban areas such as Felixstowe or Canvey Island were affected.

10.13 The Waverley Committee, likewise, was quite clear as to where the responsibility lay and as to the distinction between the functions of River Boards and Coast Protection Authorities (paragraphs 2.05, 2.07 and 2.08 above).

10.14 At the time, however, River Boards were limited to the construction and maintenance of sea defences in so far as they could be regarded as "works in relation to the main river" (See paragraphs 2.15 and 2.16 above), although there is some evidence that your Department was disposed to interpret this liberally (Document 1A, Attachment 2, paragraph 7). In relation to Felixstowe, the only channel so defined was the estuary of the River Orwell itself, so far as its confluence with the River Stour (paragraph 2.21 above). The River Board did not propose the definition of any further channels as "main river". And the only sea defence works it did were on the River Orwell frontage, where the first breaches occurred on the night of 31 January, 1953 (paragraphs 3.38 and 4.51 above). There is no record of sea defence work being done on any frontage by the River Authority set up under the Water Resourses Act, 1963.

10.15 In distinction to its predecessors, the AWA has accepted responsibility for the sea frontage of Felixstowe as well as its frontage to the River Orwell. And, indeed, the Dock Company, as part of its reclamation works, has now largely assumed responsibility for the River Orwell frontage (paragraphs 3.36, 4.52, 8.14 and 8.40). A division of responsibility has been agreed between the AWA and the CDC, which has responsibilities as Coast Protection Authority (paragraphs 3.03, 3.04 and 3.36 above).

10.16 Mr Forward questioned the validity of the arrangements agreed between the AWA and the CDC (paragraphs 8.15 and 8.16 above). In this context, it need only be said that the arrangements belatedly follow a recommendation of the Waverley Committee that was endorsed by your Department (paragraphs 2.08 and 2.14 above).

10.17 The fairly extensive sea defence works recently done or proposed by the AWA for the protection of Landguard are set out in Paragraph 3.39 above. They are part of a general programme for the protection against tidal inundation of low-lying land in Norfolk and Suffolk under which the AWA has accepted responsibility for sea defences with a length of 54 miles between Hunstanton and Felixstowe (paragraphs 3.03 and 3.04 above).

10.18 I would reject Mr Forward's contention that the IDB should be regarded as the "primary sea defence authority" for which I can find no justification either in practice or in land drainage legislation (paragraph 8.02 above). The IDB has, however, accepted responsibility for two pumping stations and a system of internal drains with a length of 4,300 metres in all leading to them (paragraph 4.43 above). The drainage system and the works done by the IDB, including the Dock Road Culvert Scheme, are described in paragraphs 4.44 to 4.48 above.

10.19 The sewage and storm water disposal arrangements operated in Felixstowe by the CDC as agents for the AWA, including the recent Langer Park Scheme, are described in paragraphs 3.44 to 3.48 above.

10.20 As part of his contention (paragraph 8.02), that the primary function of the Land Drainage Act is to ensure the drainage of and the avoidance of the flooding of agricultural land, Mr Forward maintained that the works referred to in paragraph 10.18 above should be regarded as relating to a wholly or near wholly urban area, and should, therefore, be dealt with under the Public Health Act, 1936, and not the Land Drainage Act, 1976. The system was, he contended, a surface water system and not a land drainage system (paragraphs 8.18 and 8.19 above). If it had been logical for the IDB to adopt the drains in 1956, when much of the Landguard area was agricultural, it would be equally logical to abandon them now that they had to be improved solely as surface water carriers (paragraph 8.22 above).

10.21 I would accept that, as development takes place, former land drainage channels may ultimately be adopted as public sewers. An example of this is the channel in Langer Park (paragraph 3.45 above). I consider in Section 11 below how far this process has gone in the Landguard area. I accept also that, in relation to a particular channel, it may be debatable whether responsibility for it should be assumed by the land drainage authority or the sewerage authority. As with the distinction between sea defence and coast protection, so, in relation to land drainage, on the one hand, and sewage and storm water disposal on the other, there are inevitably what were referred at the Inquiry as "grey areas".

10.22 However, I note the clear view of the AWA that the channels maintained by the IDB were natural watercourses from which riparian owners had rights to take and into which they had rights to discharge water (paragraph 3.06 above). The IDB indicated that its ditch network acted as a storage reservoir, holding the rainwater that fell during a heavy storm until such time as the pumping stations could deal with it. The character and purpose of the network was quite different from the sewers, whose purpose was to get storm water away from the area where it fell as quickly as possible (paragraphs 4.44 and 4.47 above).

10.23 I have indicated in paragraph 1.11 that I do not regard it as part of my function to assess the nature, design and necessity of the works done or planned by the AWA and the IDB. Capital works submitted for grant have, it must be assumed, been examined critically by your Department. However, my broad finding is that works of the kind referred to in paragraphs 10.17 and 10.18 above have, in general, been necessary and desirable, and that the Landguard area has derived benefit and avoided danger in consequence of them. I asked the parties to the Inquiry their views as to who would carry out such works if Landguard were abolished and would call attention to their answers in paragraphs 8.35, 9.17, 9.22, 9.61 and 9.62 above.

General background to the appeals

10.24 Two factors, in particular, form the background to the present controversies and the appeals that were the subject of the Inquiry.

(a) The complete change in the character of Landguard since the IDD was established in 1956 resulting from commercial and industrial development and, in particular, the spectacular growth in the activities of

the Felixstowe Dock and Railway Company, which is well illustrated by Plan 3702/2 attached to Document 5B and Plans TLS 2 and 3 attached to Document 8D (paragraphs 4.43 and 8.37).

(b) The termination by the CDC, with effect from 1 April 1977, of the arrangement made with the former UDC under what is now Section 81 of the Land Drainage Act, 1976, which had, for twenty years, obviated the necessity for collecting drainage rates from individual hereditaments within the IDD (paragraphs 2.22 to 2.24).

My findings in relation to these matters are contained in paragraphs 10.25 to 10.35 below.

10.25 Landguard is intersected by the railway from the Town Station, on high land, through the former Beach Station, to the Docks. A part of urban Felixstowe lies to the south east of the railway. This area was protected from tidal flooding but did not depend on pumps for its drainage. To the North, in 1956, lay Felixstowe Docks, excluded, as it was then, from the IDD, and an area that was largely marshland. It is the development of this area and the extension of the Docks that has transformed Landguard into an area that is entirely urban in character. This part of the area relies for its drainage on the channels and pumping stations for which the IDB has assumed responsibility.

10.26 The area was formerly drained through gravity sluices. Increased run-off resulting from development both within and from without the area has made it necessary for pumps to be installed, the first in 1961 and the second as part of an improvement scheme in 1972-74.

10.27 I was informed that, since the IDD was established, the number of hereditaments liable to pay drainage rates had increased from 504 to 973. The rateable value of properties in Landguard had increased from some £28,000 to £1,350,000 (paragraph 2.24 above). The proposed boundary changes would bring in a further 101 commercial and 278 residential properties, involving a significant increase in rateable values (paragraphs 4.24 and 8.28 above).

10.28 The assertion that, amongst IDDs in the Norfolk and Suffolk area, if not elsewhere, Landguard was unique in that it contained no agricultural land was not challenged.

10.29 Soon after the IDB was established, the Felixstowe UDC took over responsibility for meeting its expenses under what is now Section 81 of the Act. At that time, the amount required for the newly formed Board was £1,560. When the CDC was set up in 1974, the amount payable under the agreement was £17,400. The agreement was terminated with effect from 1 April 1977. The amount levied in drainage rates in 1982/83 was £112,288. The CDC calculated that, if the agreement had continued in force, they would, in that year, have been required to pay £103,000 (paragraphs 2.24 and 5.12 above).

10.30 The appeal to the Crown Court and the Petition calling for the abolition of Landguard (paragraphs 2.25 to 2.27) was the consequence of the levying of drainage rates which had not, apart from the first two years after the IDB was set up in 1956, ever been levied before. I was left in no doubt as to the local feeling on the matter from the evidence summarised in Section 7 of my Report. Pressures were exerted on the CDC to reactivate the Section 81 agreement. This was an important part of the background to the Inquiry, though not directly the subject of it.

10.31 The CDC, set up under the Local Government Act, 1972, covers a much wider area and is, in consequence, less "local" than the former Felixstowe UDC. The circumstances in which it decided to terminate the Section 81 agreement that it inherited from the UDC are described in paragraphs 5.12 and 5.13 above. The Working Party (Exhibit 9) recommended that Section 81 agreements should be mandatory in relation to non-agricultural hereditaments*. But it was accepted by the parties to the Inquiry that the Minister had no power under present legislation to require the CDC to enter into an agreement, and it was highly unlikely that the Council would be prepared to reverse its decision (Paragraphs 4.21, 7.08, 7.49 and 9.09 to 9.12 above).

10.32 I find, therefore, that, assuming the Landguard sub-district is not abolished, one must deal with a situation where the expenses of the IDB have to be met by drainage rates levied on hereditaments in the existing or extended sub-district.

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*In this context, reference may be made to the evidence of the CDC that the benefit of a Section 81 agreement, in an area such as Landguard would accrue mainly to commercial and industrial interests, rather than householders, and, indirectly, to the Inland Revenue since liability for drainage rates can be offset against tax (paragraph 9.11 above).

10.33 In round figures, for 1982/83, from Document 6A, for the Landguard sub-district, out of £110,000 to be levied, £7,000 related to residential and £103,000 to commercial and other properties. Between 75% and 80% was accounted for by the net contribution to the AWA and the balance was to meet the IDB's own expenditure. The owners rate accounted for 70% to 75% of the total rate (paragraphs 4.23 and 4.26 above).

10.34 Evidence was given as to recent reductions in assessments for local rates by the Local Valuation Court which resulted in reductions in the general rate liability of much the same order as the liability for drainage rates (paragraphs 4.33 and 5.14 above). It was suggested by the IDB that these reductions had been made in respect of the liability to pay drainage rates. But I accept the CDC evidence, supported by a copy of the Court's decision (Document 6D), that it reflected what the Court regarded as the greatness of the flood risk. General rates are a liability of the occupier and, if relief had been given in respect of the liability for drainage rates, it is reasonable to assume that it would only have been the occupiers portion that would have been taken into account (paragraph 7.34 above).

10.35 The average drainage rate payable on residential properties in the Landguard sub-district amounted to £13.87 per property. Evidence was given that the opposition to the demands might have been less if the matter had been handled with greater sensitivity (paragraphs 7.10 and 7.35 above). The IDB accepted this criticism and agreed that it would, in future, issue explanatory notes with its demands for drainage rates (paragraph 4.22 above). I accept, however, that the objection of individual ratepayers is to the existence of this charge rather than to its amount (paragraph 7.46 above). The reductions in the amount of the drainage rate that would result if the appeals discussed in the following paragraphs were accepted, however substantial, would not meet these representations.

10.36 Paragraphs 10.25 to 10.35 above give the general background to the financial issues that were the subject of the formal appeals under Section 84(6) of the Act, as set out in 2 and 3 of the Cover Sheet and as summarised in paragraphs 2.33 to 2.38 above.

Evidence as to contributions from the AWA to the IDB

10.37 Under Section 84(4) of the Act an IDB may, where it appears to them that "by reason of the quantity of water which their district receives from lands at a higher level ..... it is fair that a contribution towards their

expenses should be made by the Authority" make an application to the Authority which may resolve to make to the IDB "such contribution, if any, as may be specified in the resolution".

10.38 The IDB, under Section 84(6) may appeal to the Minister against the resolution of the Water Authority, and the Minister may make such an order in the matter "as he thinks just".

10.39 The history of the matter is that the AWA initially sought to establish a general formula for assessing the contributions to be made under Section 84(4) to IDBs in the Norfolk and Suffolk area (paragraphs 3.24 to 3.30 above). However, discussions relating to the IDB's appeal against the 1979/80 contribution led to acceptance by the AWA that Landguard differed from the other 36 IDDs because of the extensive urban development that had taken place in the upland catchment immediately adjoining the IDD. This led to the adoption by the AWA of a new formula that takes into account the special circumstances of the Landguard area (paragraphs 3.32 and 3.33).

10.40 The new formula takes into account the total catchment area the run–off from which discharges into the drains for which the IDB is responsible, and the impermeability of the areas discharging into those drains. This led the AWA to adopt a factor of 53.2% to be applied to certain charges incurred by the IDB (paragraph 3.41 above). The detailed analysis by Mr Worth for the IDB (Document 5B and paragraph 4.49) broadly confirms a figure of this order.

10.41 I accept that any proportion must, to some degree, be the outcome of a "horse deal" (paragraph 9.41 above). I accept, also, that the sums at issue are not such as to justify frequent reviews and adjustments of an agreed figure (paragraph 3.26 above). For the time being, I find in favour of the proportion of 53.2%, which could be reviewed, as the IDB suggested, whenever there was a major planning application for development in the uplands which could significantly increase the volume of upland water or the rate of flow (paragraph 4.35 above).

10.42 The matters at issue are, therefore, the items of expenditure by the IDB to which the agreed percentage should be applied. The AWA applied it to the costs of pumping and maintenance as set out in paragraph 3.28 above. This led to payments of £1,081 and £1,500 in respect of 1979/80 and 1980/81, the years under appeal and £1,911 in the subsequent year, 1981/82.

10.43 The AWA excluded from the calculation expenditure in relating to the drains leading to the pumping stations, contending that the relatively heavy expenditure on maintenance was a consequence of the highly industrialised nature of the lowland catchment (paragraph 3.33 above). It was also not prepared to make a contribution to administrative costs generally or, when need arose, to the cost of renewing the pumps. It was contended that there would be no significant saving to the IDB under these heads if there were no upland water reaching the district (paragraph 3.41 above).

10.44 This approach was challenged by Mr Forward. One was dealing with a single catchment; and the carriage and disposal of water, whatever its origin, should be treated as a common responsibility to be shared (paragraphs 8.05, 8.06 and 8.08 above).

10.45 The IDB contended that all items excluded by the AWA should be covered by the 53.2% formula with a lesser contribution to the IDB's administrative costs. Their claim for the years under appeal was £4,270 for 1979/80 and £10,560 for 1980/81 (paragraphs 2.37 A.1, 4.34, 4.35 and 9.29 above). (In his evidence, Mr Danter said that formal notice of appeal had been given in respect of the contribution for 1982/83 (paragraph 8.2 of Document 3D); but he acknowledged that this was not the case. No appeal was lodged against the 1981/82 contribution).

10.46 The calculation leading to the figure of £4,270 is in paragraph 8.12 of Document 3D. In addition to the items amounting to £2,031.99 to which the AWA applied the factor of 53.2%, the IDB would add £4,002.18 in respect of the maintenance and repair of drains and £716.37 in respect of the maintenance and repair of the pumping stations. It would also charge £679 representing 16% of the cost of administration. Presumably the figure of £10,560 has a similar basis, but I cannot find in the evidence the detailed calculations leading to this figure. The expenditure on which the calculations are made is for the year to the end of August, and not the ordinary financial year (paragraph 4.34 above).

10.47 I consider the foregoing in Section 11 below, having regard to the comments by Mr Heygate in his final address in which he appeared ready, in some respects, to depart from the line formerly taken by the AWA (paragraphs 9.40 to 9.45 above).

10.48 Separate consideration was given to the Langer Park Scheme carried out by the AWA in 1979/80 at a cost of £137,000 (paragraphs 3.34 to 3.38 above) and the claim of the IDB that it had necessitated the Dock Road Culvert Scheme, carried out by the IDB in June/August 1982 at a cost of some £70,000 (paragraphs 2.37 A.2 and 4.35 above). The Scheme is described more fully in paragraphs 4.46 and 4.47 above.

10.49 Section 84(4) of the Act relates to the "quantity of water" reaching the IDD from lands at a higher level; and the AWA initially contended that their scheme had caused no increase in the volume of water reaching the district (paragraph 2.38 A.4). It was, however, conceded that the rate at which water would reach the district in consequence of the scheme was necessarily increased (paragraph 3.47 above).

10.50 In his final address, Mr Heygate accepted that "quantity of water" could reasonably be interpreted as covering the rate of flow and that there was a prima facie case for an AWA contribution (paragraphs 9.26, 9.27, 9.42 and 9.44 above). I do not feel that I can carry matters further because the expenditure of the IDB in respect of which a contribution was sought appears to fall outside the years in respect of which the appeals under Section 84(4) were made (paragraph 10.45 above).

Evidence as to contributions from the IDB required by the AWA

10.51 Under Section 84(1) of the Act, a water authority shall, by resolution, require every internal drainage board to make towards its expenses "such contribution as the authority may consider to be fair". County Councils are required to pay a net sum, after allowing for other contributions; so the amount to be recovered from IDBs must be calculated before the County precept can be determined (paragraph 3.10 above).

10.52 An appeal may be made to the Minister as to the amount of the contribution either by an IDB on the grounds that it is excessive or by a County Council on the grounds that it is inadequate; and he may make such an order in the matter "as he thinks just". In relation to the following paragraphs, I would call attention to paragraph 1.10 in relation to the interpretation of my terms of reference and the scope of the Minister's functions.

10.53 The provision dates back to the Land Drainage Act, 1930 and I have mentioned in the footnote to paragraph 2.05 above the amalgamations that have taken place since then, under successive enactments, in the bodies exercising this function. If the AWA is anything to go by, these amalgamations have not resulted in the devising of uniform criteria as to what is fair throughout Water Authority areas. The AWA has, it would appear, in the different local land drainage districts in its area, continued the practices it inherited from earlier authorities (paragraph 3.11 above). Exhibit 7 shows that appeals over the past thirty years have, throughout the country, been rare, and give little guidance as to general principles. The AWA took the failure to challenge the long-standing method used in the Norfolk and Suffolk area as implying that it was generally acceptable (paragraph 3.15 above).

10.54 In the Norfolk and Suffolk area, the first step has been to estimate relevant land drainage expenditure, after deducting Government grants, for the year beginning 1 April. Deductions from the total are made in respect of the proceeds of the general drainage charge, covered by Sections 48 to 61 of the Act, and other receipts, and also 90% of Headquarters charges. 14% of this net figure is the sum to be recovered in the year in question by way of precepts on IDBs, adjustments being made to the total to allow for overcharges or undercharges in the previous year.

10.55 In the years under appeal the sums to be divided amongst the 37 IDBs were £256,334 and £296,743 respectively (Footnote to paragraph 2.36 above).

10.56 The above total sums are distributed amongst the 37 IDBs in proportion to the "adjusted annual value" of hereditaments in each district. The basis on which this value is calculated, taking account of the "relative fraction" is described in paragraphs 6.02 and 6.03 above. In the years under appeal the amounts precepted on the Landguard sub-district were £69,576 and £86,133 respectively. This represented some 27% and 29% of the total basic precept (paragraphs 3.18 and 3.20 above).

10.57 The AWA contended that the above method was fair because

(a) So far as the total sum was concerned, IDDs only covered 11% of the Norfolk and Suffolk area, but 87% of the AWA's land drainage

expenditure was carried out in or near to them. It was not, therefore, "unfair" that they should be asked to carry 14% of that expenditure (paragraph 3.09 above).

(b) Apportionment in relation to rateable values reflected the value of assets in each IDD that derived benefit from the AWA's work (paragraph 3.13 above).

(c) The high proportion of the total basic precept levied on Landguard reflected the large concentration of rateable value within the sub-district. But the Landguard drainage ratepayer paid no more per £ of annual value than any other drainage ratepayer in Norfolk and Suffolk (paragraph 3.20).

(d) An attempt to charge IDBs in proportion to the expenditure incurred in relation to their districts would give rise to practical problems; and could give rise to undesirable fluctuations in the amount of the precept from one year to another (paragraphs 3.14 and 3.15 above).

(e) It would be difficult to precept Felixstowe on the basis of benefit it were not to be done elsewhere (paragraph 9.49).

10.58 Mr Forward contended that precepts on an IDB should be related to the cost of work done for its benefit and not calculated as a percentage of expenditure over the whole Norfolk and Suffolk area. Under Section 84(1) of the Act it was the sum required from each Board that had to be justified as fair, not a total sum to be divided between all 37 IDBs (paragraphs 8.04 and 8.09). The collective system took no account of the benefit, or lack of it, that might be derived in a particular year by an individual district.

10.59 If the cost of capital works were covered by loans, there was no reason why a system based on "chargeable expenditure", as in Kent, should give rise to large and undesirable fluctuations from year to year in the amount of the precept. On his calculations, precepts on the basis adopted in Kent would have been at a considerably lower level than had actually been the case in Landguard (paragraphs 8.10 and 8.29). The contention that the rateable value of an area reflected the benefit that it derived from the AWA's works could not be sustained. The value of property protected could well be far in excess of the cost of the works necessary to defend it (paragraph 8.10 above).

10.60 The IDB, like Mr Forward, stressed that the contribution under Section 84(1) was an individual requirement from each individual board. It should have some relationship to the benefit the IDD derived or the dangers it avoided as a consequence of the works of the AWA (paragraph 4.13 above). It could, perhaps, as in Kent, be based on direct benefit and take into account ability to pay. The latter factor had been stressed by the Minister in his decisions on earlier appeals; and it was not conclusively demonstrated by the total rateable value of properties in the IDD (paragraphs 4.38 and 4.39 above).

10.61 Apportionment based on rateable value could still, in the view of the IDB be the fairest method if it were modified to allow for hardship. It was manifestly wrong that Landguard, which accounted for only 0.265%* of the area of IDBs in Norfolk and Suffolk should contribute 28.7% of the precept income. A figure not exceeding 14% of the total might be appropriate (paragraph 4.40 above).

10.62 In paragraphs 6.16 to 6.18 above, I have rejected the arguments of the IDB in relation to the "relative fraction". If the general approach of the AWA is accepted, but a lower percentage of expenditure is appropriate for Landguard, as suggested in paragraph 9.38 above, it will have to be justified on other arguments than those contained in Document 5D (paragraphs 6.10 to 6.12 above).

10.63 The IDB contention that the relevant land drainage expenditure, a proportion of which is charged to IDBs, should not include the sums paid to IDBs under Section 84(4) of the Act was, however, accepted by the AWA (paragraphs 3.17, 9.34 and 9.46 above).

10.64 Differential rating was not a point at issue at the Inquiry. For completeness, however, I should mention the contention of Mr Savage for the Felixstowe Dock and Railway Company that the Dock area should be differentially rated and the comments, in this context, of Mr Heygate (paragraph 9.57 above).

10.65 My conclusions in Section 11 below as to the appeals relating to the contributions under Section 84(1) of the Act will be based on the facts and the evidence summarised in paragraphs 10.51 to 10.64 above.

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*This figure is based on the acreage of the IDD given in Mr Danter's evidence. Based on the evidence of Mr Worth, which I prefer (footnote to paragraph 4.18 above), the figure would be about 0.4%.

SECTION 11
CONCLUSIONS AND RECOMMENDATIONS

General introduction

11.01 To clarify what follows, I deal first with certain basic misconceptions that seem to have taken deep root in the Landguard area of the Felixstowe IDD. For each, I give one or two references; but there are many that could be quoted from the body of the Report. They are that:–

(a) It is said that urban domestic properties are subjected to a drainage rate that is intended for and only appropriate to agricultural land (paragraphs 7.07 and 7.11); and that the primary function of the Act is to ensure the drainage and avoid the flooding of agricultural land (paragraph 8.02)

(b) It is said to be unfair that those who are required to pay the drainage rate are those who stand to suffer the most inconvenience and loss from any serious breakdown of the sea defences (paragraphs 7.15 and 7.28)

(c) It is contended that the sea defence and land drainage problems of Felixstowe, having regard to its development as a major international port, are national and regional; and that necessary expenditure on meeting them should be met on a national or regional basis (paragraphs 7.07, 7.13, 7.25, 7.28 and 7.32).

11.02 As to the first point, IDDs – the areas within which drainage rates are levied – are those areas which "derive benefit or avoid danger as a result of drainage operations" (paragraph 10.03 above). The Act makes no distinction whatsoever between urban and agricultural land and, as one is dealing with natural forces, which pay regard to contours but ignore man-made boundaries, it would be absurd for such a distinction to be made.

11.03 In so far as the benefit derived by developed areas differs in kind from that derived by agricultural areas, the matter can be, and is, dealt with administratively when the boundaries of drainage districts are defined (paragraphs 10.03, 10.04 and 10.12). The difference in the degree of benefit is reflected statutorily in determining the basis on which drainage rates are levied (paragraphs 4.07 and 6.03).

11.04 The fact that urban as well as agricultural land is at risk and in need of protection from tidal flooding is, it might be thought, sufficiently demonstrated by the fact that over 300 lives were lost in the 1953 Coastal Floods, including 39 in Felixstowe alone.

11.05 The benefit derived by land in coastal and estuarial areas from the works done in the past thirty years was, perhaps, illustrated by the storm that occurred on 1st February this year. The meteorological conditions may not have been fully comparable with those of 1st February, 1953; but they were sufficiently serious to justify bringing into operation the Thames Flood Barrier. Commenting on the recent storm, the Times said "For most of the inhabitants of Britain's East Coast, there is now the assurance that the sea can no longer come surging inland in the way it did on that awful night 30 years ago".

11.06 In relation to the widely and sincerely held view referred to in sub-paragraph 11.01 (b) above, it is, of course, true that those who live in a coastal drainage district are "those who suffer the most inconvenience and loss from any serious breakdown of the sea defences". But it is not true to say, as Mr Frost did, that people are being called upon to pay "for the privilege of being flooded". The purpose of the works in respect of which drainage rates are levied is to ensure, so far as is humanly possible, that a breakdown of the sea defences does not occur. Those who benefit from such works, and are called upon to meet part of the cost, are those who would suffer if flooding occurred. With the best will in the world, I can see nothing unfair in that.

11.07 As to sub-paragraph 11.01 (c), the national and regional aspects of the work done for the protection of Felixstowe from tidal inundation would seem to be fully recognised by the 85% Exchequer grant for sea defence works and the precept on the County Councils, which accounts for a similar proportion of the net cost. The Waverley Committee was, however, emphatic that a proper contribution should be secured from the persons who directly benefit (paragraph 2.09 above).

11.08 At the Inquiry I met and listened to the householders concerned and I fully recognise the strength and sincerity of their views. None the less, those who live in the area affected by the 1953 Floods, whose impact was described to me graphically, undoubtedly derive significant benefit in their homes from works designed to prevent a recurrence of such flooding

(paragraph 10.09 above). I hope I will not be accused of a lack of sympathy or understanding when I conclude that I can find no valid grounds of principle that would justify continued opposition to the levying of drainage rates on domestic premises in the Landguard sub-district.

11.09 Most land in coastal or estuarial areas which is at risk from tidal inundation is, of course, agricultural, not urban. But this is for practical reasons. For low-lying farm land it will often be necessary to maintain an outfall for the drainage of the land, and to protect it by a sea-wall or embankment. Norfolk and Suffolk are thinly populated. And land in the Counties that is subject to tidal inundation would only normally be developed for urban or industrial purposes if there was some very good reason such as development in relation to a dock or harbour area or a seaside resort, or an industrial project depending on access to sea water. Occasionally, however, the risk of flooding has been ignored, as Mrs Parker pointed out (paragraph 7.37 above).

11.10 In the early days of development, when an area is partly urban and partly agricultural, as was the case in the Landguard area in 1956, protection against tidal inundation would be provided by the works of the River Board (now the AWA), and internal drainage needs would be met by the IDB. However, as such an urban or industrial area increases in size and value, those concerned might no longer be content to leave its protection to others and could well wish to take over responsiblity themselves. This is illustrated by the defence works for the Dock area now provided by the Felixstowe Dock and Railway Company, to a standard acceptable to the AWA. It is an historical process to which I have referred in paragraph 4.03 above in relation to the taking over by the LCC of tidal river defences formerly maintained by earlier drainage authorities, culminating in the Thames Flood Barrier provided by the GLC with a grant from MAFF.

11.11 The special feature of Landguard is, of course, the speed with which the area to the North of the railway has developed, since the IDB was established in 1956, with the growth of Felixstowe Docks, from grazing marshes to an entirely urban area (paragraphs 10.25 to 10.28 above).

11.12 Two other misconceptions which I should briefly mention are that the IDB is the "primary sea defence authority"; and that there is so little difference between "sea defence" and "coast protection" that they can be

lumped together under the hybrid term "coastal defence" (paragraph 8.13 above). On this I need only refer to my findings in paragraphs 10.13, 10.16 and 10.18 above.

11.13 Following my conclusion in paragraph 11.08 above, on the issue of principle, I also find there are no general grounds of hardship to the average householder, who is only required to pay £13.87 per annum in drainage rates. It was accepted that the objection is to the fact of the demand rather than to its amount (paragraph 10.35 above).

11.14 In short, my conclusion is that, having regard to what happened to domestic properties in the 1953 Floods, the residents of Langer Road and the roads between it and Sea Road derive benefit from the sea defence works of the AWA that fully justifies the amounts they are called upon to pay in drainage rates.

11.15 In our society, however, matters are never entirely governed by logic. Gut reactions have to be taken into account. People broadly accept the necessity of general rates, covering a wide range of local services, many of which were formerly, like turnpike trusts, the subject of special local rates. The need for these services is countrywide. The bachelor might well resent a separate education rate. But he accepts that part of his general rate payment is used to educate other people's children because he benefits from the generality of services provided by the local authority (paragraph 7.28 above). Against this background, the survival of IDBs and local drainage rates may well appear, to those who are called upon to pay, to be archaic and an anachronism.

11.16 But, unlike the services covered by the general rate, land drainage is only a countrywide matter in respect of arterial drainage; and this aspect was recognised by the setting up of Catchment Boards under the Land Drainage Act, 1930, with responsibility for channels defined as "main river", and the provision for precepts on the Councils of Counties and County Boroughs. (paragraphs 2.15 and 11.07 above). The works of an IDB on its drains and pumping stations remain purely local, of concern to all owners and occupiers of property in the IDD but to no-one outside it. The drainage of low-lying areas is not a countrywide problem and, to the great majority of the population, living in large towns or cities, or on higher ground, the problems of IDBs and IDDs, unlike the matters covered by the general rate, are unknown and of no interest whatsoever.

11.17 In many urban areas, such as Felixstowe, the local authority has sought to meet this problem of credibility by carrying the costs of the IDB on the general rate. The CDC took over, on 1st April 1974, the functions of seven former local authorities. It was the cancellation by them, from 1st April, 1977, of the agreement made in 1958 by the UDC, for reasons described in paragraphs 5.12 to 5.16 above, that set off the present train of events. In retrospect, if the 1958 agreement was not to have been permanent, it could have been better if it had never been made at all.

11.18 The efforts of the IDB and others to persuade the CDC to change its mind are described in paragraphs 4.20 to 4.21 above; and it is generally accepted that there is no reason to expect or hope that the CDC will ever reverse its decision. The Minister has no power to require it to do so (paragraphs 10.29 to 10.32 above). Councillors Savage and Loveday recognised that legislation would be needed to alter the present position (paragraphs 7.03, 7.08 and 7.11 above). Here I would call attention to the comments as to my terms of reference in paragraph 1.09 above. The Working Party referred to therein recommended that agreements such as were made by the former UDC and cancelled by the CDC should be made mandatory. In this context, I would call attention to the comments made in the final address on behalf of the CDC (paragraphs 9.11 and footnote to paragraph 10.31 above).

11.19 I have dealt at length above with the position of domestic ratepayers; but they only account for some £7,000 out of the £110,000 needed to meet the expenses of the Landguard sub-district. The claim that the IDB, with seven members, is unrepresentative because no single resident serves on it (paragraph 7.42 above) may, perhaps, be considered in that context.

11.20 The case for the commercial interests and the Dock Company is set out in Section 8 of the Report. Mr Forward's case, summarised in paragraphs 9.04 to 9.08 above, is that the Landguard sub-district is entirely urban; that the sea defence works are largely a matter for the Coast Protection Authority or the County Council; and that the works of the IDB are a matter for the authority responsible for sewage and storm water disposal. The costs of sea defence should, in any event, be borne by the whole community. I have largely dealt with these contentions above. The Dock Company (paragraphs 8.37 to 8.42 above) has largely taken over the defence of the Dock area and claimed that this should, if drainage rating is to

continue, be reflected in the rates the Company is called upon to pay. But, more generally, the law should be amended; and the drainage rate should be absorbed within the general rate or the water rate of the community at large. It was not contended that, as might be the case with domestic ratepayers, there was any question of hardship.

11.21 As a final comment on these introductory paragraphs I conclude that, having regard to the significant benefit that Landguard derives from the works of the AWA and the IDB, it would be essential to ensure that such works would continue to be done and maintained if it were decided to abolish the sub-district. In that event, finances of the order indicated in paragraph 11.19 above would have to be found from some other source, either national or local.

11.22 The above are my conclusions on the important issues that formed the general background to the Inquiry. The following paragraphs set out my conclusions and recommendations on the specific issues that were the subject of my terms of reference and the Petition calling for the abolition of the Landguard sub-district. If the Minister decides to act on the petition, my recommendation on the suggested boundary changes can, of course, be ignored. But my recommendations as to the financial matters in dispute may still be relevant from the standpoint of the "residuary legatees".

Representations as to the Scheme for altering the boundaries of the Landguard sub-district.

11.23 My conclusions follow naturally from my Findings of Fact (paragraphs 10.01 to 10.10 above) that the proposals of the AWA are in conformity with Section 6(2) of the Act.

11.24 As to the lands in the Dock area and the Landguard Point area (paragraph 3.43 above, Area E) that are above the 4.04 m contour, but to which access would be denied in the event of a flood comparable with that which occurred on the night of 31st January/1st February, 1953, I find that the position of these two areas is exactly comparable. They should either both be included in the extended IDD or both should be excluded. The Dock Company has already made provision for its own defence. The former River Board made some contribution towards the costs of works done by the War Department in 1964 (paragraph 2.21 above). That was consistent with the principle to which my attention was drawn that "government departments are responsible for the protection of their properties" and also with the fact that sea defence works in an IDD are for the protection of the

district as a whole and not only for the immediate frontage. In this context, the Ministry may wish to look further at the AWA proposal to replace the old derelict War Department walls with a new sea-wall and groynes at a cost of some £1.3 million (paragraph 3.39 above). However, the issue in relation to boundaries is, in this case, one of access to property in the event of a flood of 1953 proportions; and that does not seem to be affected by what were said to be the responsiblities of a government department in relation to the protection of its own properties.

11.25 Differential rating does not form part of my terms of reference, but I note that, in the Medway Letter (Exhibit 3), reference to it is made in relation to high lands in the Isle of Sheppey whose only benefit from the works of an IDB would have been that, without such works, access to the mainland would have been cut off in times of flood. Exactly the same consideration would seem to apply to the Dock and Landguard Point areas; and I would call special attention, in this context, to the helpful comments made by Mr Heygate as to the possiblities in paragraphs 9.55 and 9.57 above.

11.26 I do not challenge the exclusion of the Peewit Hill area where, as Mr Cole suggests in Annex 3 (page 17), the problem of denial of access could be overcome; or the exclusion of the small area of agricultural land at Fagbury Cliff (paragraph 3.43, Areas B and D). Mr Cole expresses doubts as to the inclusion of a small area immediately to the North-West of the Ordnance Roundabout – the junction of Langer Road and Undercliffe Road West – having regard to what he saw on the site inspection. I suggest this should be checked with the AWA.

RECOMMENDATION I

11.27 Subject to the above, I recommend the confirmation of the Scheme submitted by the AWA under Section 11 of the Act for the alteration of the boundaries of the Landguard sub-district of the Felixstowe IDB, with the addition of the Landguard Point area.

Appeals as to the contributions made by the AWA to the IDB for the rating years 1979/80 and 1980/81 under Section 84(4) of the Act.

11.28 Initially the AWA sought to apply a general formula for calculating contributions that would be applicable to all IDBs in the Norfolk and Suffolk area; but, following the interventions of Mr Forward, it is now accepted that the special circumstances of the Landguard sub-district call for a special formula applicable to that sub-district alone. A proportion of 53.2% is applied to certain items of the IDB's expenditure within the IDD. The calculation is bound to be rough and ready and I share Mr Cole's scepticism

as to a ratio worked out to the nearest tenth of a percent. However, I am happy to adopt it as an agreed figure; and accept that it should continue in force until such time as a significant change of circumstances in the upland catchment suggests that it should be reviewed (paragraphs 10.39 to 10.41 above).

11.29 The opposing contentions as to the items of expenditure to which the agreed percentage should be applied are set out in paragraphs 10.42 to 10.46 above. I find in favour of the IDB, who contend that all items of expenditure, both on drains and pumping stations, should be covered, with a lesser contribution – say 16% – towards the IDB's administrative costs. I use the figure of 16% in relation to the two years under appeal but, in the longer term, a different percentage might be appropriate (see paragraph 4.32 above). This conclusion is entirely in accord with Mr Cole's advice (Annex 3, page 9).

11.30 I would have liked to recommend a firm figure for the two years under appeal, but I am unable, from the data in my possession, to confirm the figures given in paragraphs 10.45 and 10.46.

11.31 I have set out in paragraphs 10.48 to 10.50 the position in relation to the AWA's Langer Park Scheme and the IDB's Dock Road Culvert Scheme but, as the latter works appear to have been done outside the period covered by the appeals, I make no recommendation.

RECOMMENDATION II

11.32 I recommend that

(a) In calculating the contributions to be paid by the AWA to the IDB under Section 84(4) of the Act for the two years under appeal, the agreed percentage of 53.2% should be applied to all the costs incurred by the IDB in respect of drains and pumping, with a contribution of 16% in respect of the IDB's administrative costs

(b) The AWA and the IDB should be invited to agree the sums to be paid on the above basis for the years in question which the Minister should, in the absence of agreement, determine on the basis of submissions by both parties.

Appeals as to the contributions required by the AWA to be made to them by the IDB for the years 1981/82 and 1982/83 under Section 84(1) of the Act

11.33 I should first mention that there are 37 IDBs in the Norfolk and Suffolk area, but I was only appointed to consider the problems of a sub-district of one of them. It seemed to be assumed that, if it were decided that Felixstowe should pay less than had been demanded for the years under appeal, the corollary was that the other 36 IDBs, individually or collectively, should pay more (see, eg, paragraph 4.40 above). I make no such assumption and it would be going beyond my terms of reference for me to do so.

11.34 So far as IDBs generally are concerned, all I know that is relevant to the matters on which I have to advise is that

(a) It has been the practice of the AWA and its predecessors to determine an amount to be precepted on IDBs in Norfolk and Suffolk as a whole, and then to divide the total sum between them in proportion to their value for the purpose of drainage rates.

(b) At 1st April, 1980, the total annual value for the purpose of drainage rates in the 37 IDDs was £242,437 of which the Felixstowe IDD accounted for £65,389 or 27%. The corresponding proportion for 1981 was 29%. It was only 6% in 1967 (paragraphs 4.13 and 10.56 above). The annual value of the Felixstowe IDD has greatly increased in the past 10 or 20 years, owing to development; and it will, of course, increase still further if its boundaries are extended as proposed under the AWA's scheme (paragraph 10.27 above).

(c) In contrast, the other 36 IDDs were, I was advised, and have generally remained largely agricultural. Six have an annual value of between £10,000 and £20,000; a further six are between £5,000 and £10,000; and the remainder have an annual value of less than £5,000 (Table attached as Appendix TB 5 to Document 1C).

(d) The AWA accepted that a review of all the 37 IDDs in the Norfolk and Suffolk area would be desirable; but lack of staff time since 1974 had prevented them from undertaking this exercise (paragraphs 3.04 and 8.32). Mr Smith, for the CDC, said it was time for the matter to be tidied up (paragraph 5.09 above). (I note from Table 1/1 in Annex 1 to Exhibit 9 that, in 1976/77, the average size of the 12 IDBs in Lincolnshire was about 45,000 acres, but the average size of the Norfolk and Suffolk IDBs was only 4,000 acres).

11.35 My conclusion from the above is that, whether or not the method of determining the precept described in paragraph 11.34(a) above is fair in relation to the other 36 IDBs in the Norfolk and Suffolk area – and, for all I know, it may be – it is not fair in relation to the Landguard sub-district of the Felixstowe IDD. Just as the AWA accepted, in relation to contributions under Section 84(4) (paragraph 11.28 above), so I conclude in relation to precepts under Section 84(1) of the Act that Landguard should have a special formula tailored to its own special circumstances. I do not accept the contention in paragraph 10.57(e) above that special treatment applied to Landguard necessarily implies special treatment for all IDBs in Norfolk and Suffolk. Landguard is a special case.

11.36 My attention was called on more than one occasion to the exact terms of Section 84(1) of the Act, which would seem to require regard to be paid to each individual Board rather than to Boards collectively (paragraphs 10.58 and 10.60 above). In the Kent River Board appeals in 1951 (Exhibit 7), the relevant factors identified were the works done in relation to the interests of individual IDDs – the "chargeable expenditure" – and ability to pay. I do not think the latter factor is relevant to the Landguard sub-district (paragraphs 11.13 and 11.20 above). The Waverley Committee called for contributions in relation to "the benefit conferred within the district by the River Board's works" (paragraph 2.09 above). The Crown Court, in May, 1981, found that the cost and potential benefit of the works done, being done or in preparation justified the charges imposed (paragraph 2.26 above). Looking at the matter from a broader point of view (paragraph 1.10 above) I have reached the same conclusion in paragraph 11.14 above.

11.37 As for the merits of the AWA scheme, under which precepts rise in proportion to the value of the property protected, irrespective of the amount of work done, I would call attention to paragraph 8.10 of Mr Forward's evidence. He suggests that the value of the property protected in the Landguard sub-district may well greatly exceed the cost of protecting it. I would therefore reject the AWA's contentions, as summarised in paragraph 10.57 (b) and (c) above, which take the value of property in the IDD rather than the cost of works done for its protection as the measure of benefit.

11.38 So I conclude that precepts on the Landguard sub-district should be related to the cost of works done for its benefit (paragraphs 8.04 and 10.58 above). In contrast to Mr Bolongaro's claim that the adoption of such a method would lead to undesirable fluctuations in the amount of the

precept from year to year (paragraphs 3.14 and 10.57 (d) above), I see no reason why this should happen if the cost of capital works is met by loans, with repayments over an appropriate number of years, and precepts are based on loan charges (paragraph 8.10 above).

11.39 It should not be difficult in relation to Landguard, which is self-contained, for the AWA to work out, and agree with the IDB, the cost of works specifically done for its benefit in recent years, especially as loan charges in respect of works done by the River Board may well, by now, have expired, and little was done by the River Authority. The problems alleged to be raised on the present formula by the "relative fraction", as set out in Section 6 of this Report, would not arise on the new approach. It would be reasonable for an appropriate sum to be added in respect of administration and the general expenses of the AWA. Clearly, no charge should be made in respect of contributions made to IDBs under Section 84(4) of the Act (paragraph 10.63 above).

11.40 As with contributions under Section 84(4) of the Act (paragraph 11.30 above), I have not sufficient data to recommend specific figures for the years under appeal; but I have little doubt that the amounts will be significantly less than the precepts of £69,576 and £86,133 actually demanded. Matters to be discussed, in the first instance, between the AWA and the IDB will be the capital sums involved, the appropriate loan periods, and the proportion of the loan charges to be covered by the precept on the IDB. This might, of course, be the figure of 14% used in the present formula; but I make no recommendation to that effect as it is, in the first instance, a matter for discussion and agreement between the parties. It will also be necessary to consider the appropriate addition to be made for the administrative and general expenses of the AWA.

RECOMMENDATION III

11.41 I recommend that

(a) The precept to be demanded by the AWA from the IDB in relation to the Landguard sub-district under Section 84(1) of the Act should be recalculated in relation to loan charges on sea defence works done by the AWA for the benefit of the sub-district with an addition to cover part of the administrative and general expenses of the AWA.

(b) The AWA and the IDB should be invited to discuss and agree the exact terms of a new formula on the above basis, including the proportion of the cost of works done for the benefit of the sub-district to be charged by way of precept.

(c) In the absence of agreement, the Minister should determine the matter for the two years under appeal on the basis of submissions by both parties.

General effect if the above recommendations are adopted

11.42 At present, out of annual expenditure by the IDB of the order of £110,000, over three-quarters relates to the amount required to meet the AWA precept and the balance to the internal works of the IDB (paragraph 10.33 above). The recommendations would have no effect in reducing the gross expenditure of the IDB on its drains and pumping stations; but there should be a significant increase in the contributions paid or payable to the IDB in respect of that expenditure under Section 84(4) of the Act. There should also be a significant reduction in the precepts demanded from the IDB under Section 84(1).

11.43 The new formula as to the precept would relate it to a proportion of expenditure incurred for the benefit of the sub-district. So the amount of the precept would not increase, as it has done hitherto, with increases in rateable values. Nor will it increase, as it would have done under the current formula, if my recommendation as to the boundaries of the sub-district is accepted. The extension of boundaries will, of course, increase the number of residential properties that are subject to what would be regarded as the "nuisance of drainage rates" from 519 to 797 (paragraphs 4.23 and 4.24 above). But, by spreading the burden to include all properties that "derive benefit or avoid danger", it will further reduce the average charge from its present level. So far as residential properties south of the railway are concerned, the average charge might also be reduced if a system of differential rating were adopted, as suggested at the Inquiry (paragraph 11.25 above), to a figure well below £10.

Conclusions as to the Petition calling for the abolition of the Landguard sub-district (paragraph 2.27 above)

11.44 The matter falls to be considered under four headings which might, for convenience, be summarised as

(a) Principle
(b) Historical
(c) Practical
(d) Administrative

I consider each in turn below.

11.45 The grounds of principle are fully covered in paragraphs 11.01 to 11.21 above. I have recorded in paragraph 1.12 above the strength of the feelings of those who are opposing the levying of drainage rates; but I have also acknowledged the helpfulness they showed when they gave evidence to me on the sixth day of the Inquiry. I would echo Mr Ryles' comment that "it would be difficult to find a more unlikely group of people, willing to risk prosecution for non-payment" than those who gave evidence on that day (paragraph 7.46 above).

11.46 I have set out in paragraph 11.01, and have fully discussed in the subsequent paragraphs, certain misconceptions that have been prevalent in the area, and which underlie much of the opposition. As I have mentioned in paragraph 11.17, it might have been better if the agreement with the Felixstowe UDC had never been made. With the memories of the floods, and the havoc they caused, still fresh, and rate demands relatively small at the outset, residents might have continued to accept the existence of drainage rates, as they presumably did for the first two years of the IDB's existence. The sudden demand for drainage rates, over twenty years after the IDB was set up, could hardly have failed to appear as an imposition. And it was agreed on all hands that the IDB could and should have handled the matter with more understanding of the likely reaction (paragraphs 4.22, 7.04, 7.10 and 7.35). Newcomers to the area, like Mrs Paddick, had no cause to expect that the premises they bought would be subject to this charge. And, since the River Authority had done no sea defence works and the AWA had hardly started on its programme (paragraphs 3.38 and 3.39 above), it was difficult for those concerned to see what they would be getting for the sums demanded from them.

11.47 Against this background, the formation of an Action Group and the resistence to the rate demands was natural and inevitable. If I had been living in the area, I would undoubtedly have joined such a group myself. And it will be asking a great deal of those concerned, if the Minister should decide not to act on the Petition, to suggest that they should, after all that has happened over the past 5 or 6 years, abandon the struggle and pay up.

11.48 But I would like to think that all concerned feel that their views had a full hearing, particularly on the sixth day of the Inquiry; that those views are fairly reported in Section 7 of this Report; and that they are fully understood and discussed in the present Section. If that is so, my confidence may not be misplaced in hoping that, however reluctantly, they

will be ready to accept my conclusion in paragraph 11.08 that there are no grounds of principle that would justify their continued opposition to the payment of drainage rates; and my conclusion in paragraph 11.14 that the benefit they receive from the sea defence works that have been or are being done fully justifies the relatively modest amounts that they are called upon to pay.

11.49 They may be helped in this by the significant reduction in the average drainage rate on residential properties that would result if Recommendations I, II and III above are accepted, and even more so if the suggestions as to differential rating (paragraph 11.25 above) are followed up. The residential area to the South of the railway, which does not benefit from the IDB's drains and pumping stations, would then only be rated in relation to the sea defence works of the AWA which are of such obvious benefit to it.

11.50 The historical approach is that to which I have referred in paragraph 11.10 above, in the context of the former Commissioners of Sewers and the London County Council; and it can be seen at work in the Felixstowe IDD, both in the context of sea defence and internal drainage works. Mr Heygate referred to the importance of the historical approach (paragraph 9.45 above). Mr Cole refers to it in Part V of Annex 3.

11.51 As for sea defences, the Dock Company has now taken over full responsiblity for the River Orwell frontage; and a 5,000 foot long parapet has been constructed by the AWA along the local authority promenade. But there is still work to be done on the southern defences facing the open sea.

11.52 In paragraph 10.21 I have referred to the distinction between land drainage and storm water and sewage disposal as a "grey area". The Langer Park Drain, on which works have been done by the AWA, would once have been regarded as a drainage channel; and the works maintained by the AWA in the South-East corner of Landguard, with the ejector station, could well, if they had chosen to do so, have been adopted by the IDB. I accept the distinction between the AWA's storm water sewers and the IDB's drains, which store water until such time as the pumps can deal with it (paragraph 10.22 above). But Mr Cole, at the end of his report to me, says he would see no objection on technical grounds to the taking over of the IDB's drains and pumping stations by the AWA in its capacity as sewerage authority.

11.53 As to this, my conclusion is that the historical argument may well become stronger as the years go by; and could be unanswerable by the end of the Century. But, for the present, I would like to see more work done on the sea defences to ensure the safety of Landguard against tidal inundation.

11.54 On the practical approach, the argument would be that, whatever may be the arguments of principle, the game is not worth the candle. It is obviously sensible and economical for the IDB to employ the AWA as its agents for technical and administrative purposes (paragraph 4.32 above). In present circumstances, the cost to the IDB of collecting rates, against opposition from occupiers of many of the 519 residential properties in Landguard, cannot fall far short of the amount that is collected, which is £7,000 or £13.87 per property. Even if there is a satisfactory solution to present problems, the much smaller amount that will fall to be collected from each household in the extended sub-district, if Recommendations I, II and III are accepted, especially if differential rating is introduced, could well raise the question whether, having regard to the cost of collection from nearly 800 households, an exemption from rating order, in respect of the residential area of Landguard to the south of the railway, might be sensible. A conclusion on that would, of course, be a matter for the parties and not for me; but it seems worth mentioning.

11.55 I was advised that the Essex River Authority abolished all the IDDs and IDBs in its area before it was absorbed in the AWA in 1974. But Mr Bolongaro was unable to tell me why this was done (paragraph 3.11 above).

11.56 The arguments for and against abolition are finely balanced. If the Minister should be influenced by one or other of the above arguments in favour of using his powers under Section 11(1)(d) of the Act to abolish the Landguard sub-district (see paragraph 1.08 above), he should, I suggest, only act on the receipt of firm assurances from the appropriate authorities as to the continuance of sea defence and internal drainage works and maintenance (paragraph 11.21 above). In this context, I would call attention to the views of the parties as to what might happen, as referred to in paragraph 10.23 above.

11.57 For my part, I am influenced by:

(a) The clear conclusions of the Waverley Committee (especially those summarised in paragraphs 2.07 to 2.11 above)

(b) The over-riding importance to the Landguard sub-district of effective sea defences, having regard to what happened in 1953

(c) Fairness to those who would have to carry an extra burden if the sub-district were abolished (paragraph 11.21 above)

(d) Mr Straker's comment that one would be "moving from the known to the unknown" if the sub-district were abolished (paragraph 9.22 above)

11.58 The priority for me is that nothing should be done that might conceivably increase the risk of a recurrence, in the event of a storm surge in the North Sea, of what took place on the night of 31st January/1st February, 1953.

RECOMMENDATION IV

11.59 I recommend that the Minister should take no action under Section 11(1)(d) of the Act in response to the Petition of 19th December, 1980, referred to in paragraph 2.27 above.

Hugh Gardner

HUGH GARDNER

21st APRIL 1983

LIST OF RELEVANT LEGISLATION AND PAPERS AVAILABLE BEFORE THE INQUIRY OR REFERRED TO IN THE COURSE OF IT AND NOT INCLUDED IN ANNEX 2 BELOW.

1. **Legislation**

Land Drainage Act 1930
Coast Protection Act 1949
Land Drainage Act 1961
Water Resources Act 1963
Agriculture (Miscellaneous Provisions) Act 1968
(Sections 21 to 29)
Local Government Act 1972
Water Act 1973
Land Drainage (Amendment) Act 1976
Land Drainage Act 1976

2. Report of the Departmental Committee on Coastal Flooding (Cmd 9165 of May, 1954) commonly known, and referred to in this Report as 'The Waverley Committee'.

3. Letter of 28th June, 1933, conveying the Minister's decision in relation to Schemes for the constitution of the Upper Medway and Lower Medway Drainage Districts under Section 4(1) (b) of the Land Drainage Act 1930 (now Section 11(1) (e) of the Land Drainage Act 1976) commonly known, and referred to in this Report as 'The Medway Letter'.

4. Letter of 28th September, 1954, from the Deputy Chief Engineer to the Ministry to the Wear and Tees River Board, conveying personal and unofficial views as to possible modifications to the Medway Letter in the light of 1953 Flood Levels and the Report of the Waverley Committee.

5. Letter of 19th December, 1980, from Messrs Birkett's, Solicitors of Ipswich to the Anglian Water Authority in relation to a petition to be presented to the Authority under Section 14 of the Land Drainage Act 1976, calling, inter alia, for the abolition of Landguard as an Internal Drainage Sub Area.

6. Correspondence, formal minutes and other papers relating to the Appeals and Representations that were the subject of the Inquiry (Largely covered by the evidence submitted at the Inquiry as in the Documents listed in Annex 2 below and summarised in 10–12 below).

7. Inspector's Reports and the Minister's Decision Letters on the following earlier Appeals

(a) In relation to precepts on Internal Drainage Boards

1951 Appeals by six IDBs in the Kent River Board Area against the contributions required to be made by them to the Board for the year 1951/52.

1952–53 Similar appeals by the Upper Medway and Lower Medway IDB's and by the Kent County Council as to the amount of the contribution required for the year 1952/53.

1969 Appeals by the Witham Fourth District and the Black Sluice IDB's against precepts of the Lincolnshire River Authority for the years 1967/68 and 1968/69.

1971 Appeal by the Dun Drainage Commissioners against the precepts of the Yorkshire Ouse and Hull River Authority for the year 1970/71.

(b) In relation to contributions

1960 Appeal by the River Crossens IDB against the precept demanded and the contribution paid to them by the Lancashire River Board for the year 1959/60

LDA 2766 drainage

(c) In relation to boundaries

1964–65 Scheme submitted by the East Suffolk and Norfolk River Board for altering the boundaries of the Muckfleet and South Flegg IDD.

1969–70 Scheme submitted by the Great Ouse River Authority for altering the boundaries of the River Ivel IDD.

1971–72 Scheme submitted by the Essex River Authority for altering the boundaries of the Upper Crouch IDD.

1973–74 Scheme submitted jointly by the Trent and Lincolnshire River Authorities for altering the boundaries of the Newark Area and the Upper Witham IDD's.

8. Judgement of 6th May, 1981, in the Crown Court in an Appeal against drainage rates under Section 77 of the Land Drainage Act 1976, brought by International Marine Management (UK) Ltd and other parties against the Felixstowe IDB (N.B. The terms of this judgement are reproduced in full in pages 72 to 91 of Document 3E).

9. Report of Working Party on Internal Drainage Board Rating Arrangements (February, 1979) and letter of 18th January, 1980 to interested organisations indicating that a decision on its recommendations was to be deferred.

10. Statement by the Anglian Water Authority relating to its Scheme for the alteration of the IDD Boundary, dated 24th August, 1982.

11. Grounds of Appeal by Felixstowe IDB against contributions received or required to be paid, dated 23rd August, 1982.

12. Reply by the Anglian Water Authority to the above grounds of Appeal.

ORDER OF PROCEEDINGS, LIST OF AUTHORITIES AND PERSONS GIVING EVIDENCE AND LIST OF DOCUMENTS SUBMITTED WHICH ARE ATTACHED TO THIS REPORT

(N.B. Documents were allotted a Number and a Letter according to the day on which they were presented and the order on which they were presented on that day. No Documents were presented on Day 2, which was entirely occupied by the completion of evidence opened by Mr Bolongaro on Day 1 and his cross-examination. Similarly, no Documents were presented on Day 4, which was completely occupied by the completion of evidence opened by Mr Danter on Day 3 and his cross-examination. The evidence listed below is not entirely in the order in which it was presented, but the order of presentation can be deduced from the numbering of the various Documents).

	DOCUMENTS SUBMITTED NO.	DESCRIPTION
A. MINISTRY OF AGRICULTURE FISHERIES AND FOOD		
Mr Robert Blake, Principal Branch B Land Drainage and Water Supply Division	1A	Statement, with attachments as to actions preceding the establishment of the Felixstowe IDD
B. ANGLIAN WATER AUTHORITY Mr G.L. Heygate, Solicitor, AWA, Norwich presented the Authority's case and called the following six witnesses		
1) Mr J.J. Lane, Divisional Manager, Norfolk and Suffolk River Division	1B	General Policy Statement with supplement commenting on evidence to be presented by Mr Forward (Doc 7B below)
2) Mr T. Bolongaro, Divisional Finance and Administration Officer, Norfolk and Suffolk River Division and now Finance and Administration Officer of the new Norwich Division of the AWA	1C	Including Appendices TB 1 to 16. This was the basic evidence on the matters that were the subject of appeals under Section 84 of the Act.
3) Mr A.E. Marsden, BSc.C Eng Design and Construction Engineer, Norfolk and Suffolk Rivers Division	3A	Evidence as to Sea Defence and Coast Protection responsibilities, run-off from Upland areas and the proposed new boundaries with supporting Plans

4) Mr A.L. Davis, BSc C Eng. Principal Engineer, Norwich Sewage Division	3B	Evidence, with Plan attached as to surface water sewerage arrangements in Felixstowe with special reference to Langer Park surface water
5) Mr Keith Dale, Meridian Airways Ltd (By agreement, Mr Dale was not called for questioning on this specialist evidence)	3C	Surveying evidence in relation to boundaries
6) Mr B.E. Guttery, Senior Income Assistant, Norfolk and Suffolk River Division	5C	Evidence as to the 'relative fraction' (Section 66 of the Land Drainage Act 1976)

C. FELIXSTOWE INTERNAL DRAINAGE BOARD

Mr T.D. Straker, of Counsel, instructed by Messrs Josselyn & Sons, Solicitors of Ipswich, presented the case for the Board and called the following two witnesses

1) Mr J.T. Danter, FRICS. Chairman of the IDB	3D	Detailed submission on behalf of the IDB
	3E	248–Page Appendix to the above containing, under 28 headings, a series of basic documents and statistics that are referred to in the report
	5A	Table of properties charged with drainage rates in 1982–83
	5D	Evidence as to the 'relative fraction' (see Doc. 5C above)
	6A	Financial statistics as to drainage rates in Landguard sub-district
	6B	Division of rates as between commercial and residential properties (Paragraphs 5.4 & 5.5 of Doc. 3D)

2)	Mr D.A. Worth, C. Eng Senior Engineer, Posford, Pavry & Partners, Consulting Engineers, Peterborough	5B	Engineering evidence as to drainage works and needs in Landguard sub-district and the proposed boundary extension

D. **EAST SUFFOLK COASTAL DISTRICT COUNCIL**

Mr B.C.Y. Archer, Solicitor to the Council, presented their case and called the following two witnesses

1)	Mr G.H. Harlow, Chief Assistant (Rating) to the Council	5E	Evidence as to the 'relative fraction' (See Docs. 5C and D above)
		6D	Principal evidence as to rates and termination of former agreement between Felixstowe UDC and IDB under Section 81 of the LD Act, 1976
		7A	Effect of possible Section 81 agreement on general rates
2)	Mr D.W. Smith, C. Eng Partner in Pick, Everard, Keay & Gimson, Consulting Civil Engineers of Leicester	6C	Evidence opposing new boundary for the IDD

E. **FELIXSTOWE TOWN COUNCIL**

Mrs S.C. Robinson, Clerk to the Council, presented their case and called as her witness

	Mr T.L. Savage, Town Mayor	8B	Objecting to the proposed boundary extension and to the levying of drainage rates on urban properties

F. **COMMERCIAL INTERESTS**

1)	Mr G.E. Forward, C. Eng, consultant to Howard Humphreys and Partners of Leatherhead, instructed by Messrs Birkett's, Solicitors of Ipswich presented evidence on behalf of British Fermentation Products	7B	Evidence, with appendices, supporting the case for the abolition of Landguard. (See Item 5, Annex 1)

DRAINAGE

	WITNESS & ADDRESS	RV £	RATE £	DOCUMENTS SUBMITTED No.	DESCRIPTION
1)	Mr I.W. Jones, 35, Langer Rd.	158	11.60	6E	
2)	Mr W. Little, 20, Arwela Rd.	202	15.95		
3)	Cllr. A. Loveday				
	12, Arwella Rd.	235	17.40	6F	
4)	Mrs Lake, 51 Langer Rd. (Mrs Lake lived at 33, Orford Rd in 1953)	203	15.95		
5)	Mrs D.M. Paddick			6G	Accompanied by Press Cuttings and correspondence as to her non-payment of drainage rates
	31, Cavendish Rd. (Home)	No particulars			
	4, Langer Rd (Shop with Flat over)	655	49.30		
6)	Cllr Donnelly, 20, Brotherton Avenue, Trimley Chairman, Trimley St Mary PC		N/A		
7)	Mr Westren 4, Oakley Court, Sea Road.		N/A		
8)	Mrs Fisher 10, Beach Station Rd. At 201, Langer Rd in 1953 *Tenant due to pay occupier's rate only	171	3.60*	6H	
9)	Mr G.H. Bothwell, 34, Cavendish Rd.	187	14.50	6J	
10)	Mr Frost, 19, Buregate Rd.	274	20.30		
11)	Mrs Farrant, 74, Langer Rd.	266	20.30		
12)	Mrs Berg, 5, Langer Rd (Shop)	576	43.50		
	29, Cavendish Rd.	107	8.70	6K	
	29A, Cavendish Rd.	137	10.15		
13)	Mrs Andersen, 17, Russell Rd.	162	13.05		
14)	Mr. Porter, 6, Eaton Gardens	240	18.85	6L	Correspondence with DV and copy letter of 1.12.81 to the My. of Agriculture
15)	Mrs Cushing, 73, Langer Rd.	219	17.40		
16)	Mr Ratcliffe, Elder Cottage Felixstowe Ferry (Ratepayer in Deben (Lower) IDD)		N/A		
17)	Mrs Parker, 20, Cavendish Rd. (Occupied 1st Fl. Flat at 1, Granville Rd in 1953)	327	17.40		

International Marine Management
East Anglian Freight Terminal

Mr Forward formerly also advised the West End (Felixstowe) Community Association (See G below) and three reports made by him in that capacity form part of the Appendix to Mr Danter's evidence (Doc 3E pps 98 to 141 and 149 to 199)

2) Mr T.L. Savage, Company Secretary presented evidence on behalf of the Felixstowe Dock and Railway Company.

8D Letter of 29.9.82 with statement of Drainage rates paid (TLS 1) and maps of the Port of Felixstowe in 1953 and 1982 (TLS 2)

G. **WEST END (FELIXSTOWE) COMMUNITY ASSOCIATION AND PRIVATE INDIVIDUALS**

Mr Jack Ryles of 27, Buregate Road, Drainage Rate Officer of the Association

8A Brief statement with longer supplement calling for abolition of the Landguard sub-district

Mr Ryles also accepted responsibility, at my request, for bringing together private individuals to give evidence at the time set aside for that purpose on the sixth day of the Inquiry. On that day, the 17 witnesses listed below gave evidence from 12.30 until 18.00 hrs, when the Inquiry adjourned for the day. Some of them lived within what is now the IDD at the time of the 1953 Flood. For those living within the Landguard area of the IDD to-day who were, with one exception, owner-occupiers, particulars were, with their agreement, given of the current Rateable Value of their properties and the amount due in respect of drainage rates for the year 1982/83. These particulars are shown below.

Further Individual evidence was given on subsequent days as follows:–

Miss Ledgerwood, employed with Josselyn & Sons Sol'rs to IDB. In 1953, lived at 9, Holland Rd outside present IDD but proposed, under Scheme to be included	7C	Photographs of 1953 Floods, including photographs in local Press
Mr T.L. Savage, Evidence as Councillor for South Ward of Felixstowe on Town Council and on the Suffolk Coastal District Council	8C	

Note by Inspector. In addition to the above oral evidence, I received, before the Inquiry, 46 letters from residents in the area, of which copies were made available to Mr Heygate, in case he wished to comment.

H. FINAL ADDRESSES

The presentation of the above evidence terminated at 16.00 hrs on Friday, 5th November and I then heard Final Addresses from:–

1) Mr Archer for the Suffolk Coastal District Council
2) Mr Straker for the Felixstowe Internal Drainage Board
3) Mr Heygate for the Anglian Water Authority

The Inquiry closed at 20.00 hrs.

J. SITE INSPECTION

This followed an itinerary prepared by Mr Danter, in agreement with the parties and endorsed by Mr Cole and me. We were accompanied by Mr Heygate, Mr Danter, Mr Archer, Mrs Robinson and Mr Ryles; and met, at various points, certain persons who gave evidence, including, in particular, Mr Savage, for our tour of the Dock Area. The inspection concentrated on the Landguard Sub-District; but a short visit was also paid by car to the Trimley Sub-District.

For a start, the Tide Gauge on the Town Pier was inspected and also the Pier Pavillion and Miller's Cafe opposite. The lengths of Sea Road and Langer Road and the various roads between them, in relation to which evidence was given at the Inquiry were also visited.

The Langer Park Sewer, referred to, inter alia, in Doc. 3 B was also inspected in its length as an open sewer and to the point where it discharges into the IDB No. 1 Drain. Along Dock Road, the new culvert was inspected and also Pumping Station No. 1. Pumping Station No. 2 was also visited later.

Two areas proposed to be excluded from the IDD were visited and also the Grange Road development on higher land, the storm water from which will discharge into the drains maintained by the IDB and thence to its pumping stations.

There was a conducted tour of the Dock Area, including the drains serving it that are maintained by the IDB, and warehousing and other commercial premises alongside those drains. The new area that has recently been reclaimed by the Dock Company was also visited.

Landguard Fort and the surrounding area, and the defences protecting it were later visited and the Inspection concluded with a visit to Manor Terrace, the Manor House defences and the southerly section of the 'town wall'.

The Site Inspection, which began at 9.30, terminated at 16.15 hrs.

LAND DRAINAGE ACT 1976

ANGLIAN WATER AUTHORITY
AND
FELIXSTOWE INTERNAL DRAINAGE BOARD

PUBLIC LOCAL INQUIRY
INTO
APPEALS AGAINST CONTRIBUTIONS UNDER Ss84(1) AND (4)
REPRESENTATIONS REGARDING BOUNDARY ALTERATION UNDER S11
AND
EXERCISE OF THE MINISTER'S POWERS UNDER THE ACT
WHICH RELATE TO THE BOARD

REPORT

By G. Cole BSc (Eng) Dip. Civil Eng., FICE, FIWES
Assessor appointed by the
Minister of Agriculture

To H. Gardner, Esq CB, CBE

CONTENTS

I PHYSIOGRAPHY

The technical problems were concerned only with the Landguard peninsula. It consists of a sand and shingle spit produced by the south-westerly drift across the mouth of the river Orwell, and the salt marsh formed behind it. There are grounds for believing that the river once flowed-out much closer to the cliffs that form the northern boundary of the peninsula, and Walton creek, shown on the statutory map, may have been its last vestige. The creek followed the line of the dock branch of the railway and probably Langer Park. The top of the spit is at approximately the level of the highest storm tides, typically 13 ft OD. Close to it the marsh is some 6 or 7 ft lower at about mean high water springs, falling to the north west.

II THE WATER AUTHORITY PRECEPT

1 THE EVIDENCE

(i) *Mr Forward* (7B, para 3) said that the Water Authority had at his request sent him extracts from the minutes of the River Board which showed that two years before the formation of the IDB the River Board had embarked on what became a 6-year programme of sea defence works on the south western seaboard and that later the Board carried out further works there between 1962 and 1964. The next works to be constructed under the Land Drainage Act were the current works begun in 1977* on the south eastern seaboard. The Authority had not been concerned again with works on the south western seaboard because the new quays on that frontage were constructed by the Dock Company to a sea defence level agreed with the Water Authority. In his Third Report (3E, page 114, para 43), Mr Forward says that although the Ministry of Defence had been responsible for the southern area until 1973, seemingly responsibility for a certain length of frontage was in dispute and reports of the Divisional Engineer of the Water Authority show that in his opinion the protective works in parts of the area were in an extremely poor or useless state.

(ii) *Mr Marsden* (3A) said that the former River Authority did not accept responsibility for the sea frontage (p 1), although the River Board had made a contribution of some £15,000 in 1964 to the War Department for groyne works on the Department's sea frontage (p 2). The Water Authority accepted tidal defences on the sea frontage in 1976 (p 1).

From 1955 to 1965 the River Board were recorded as having done works on the Orwell frontage to an approximate value of £168,000 in addition to the 1953 emergency works (not costed). The Water Authority had recently substantially completed a new sea wall and groynes at the Manor House costing some £917,000 and a new flood wall between the Town Hall and the southern end of the promenade costing £806,000.

It was proposed to improve the defences by replacing the derelict War Department wall with a new sea wall and groynes. Site investigation had been carried out and design was in hand. The estimated cost was £1.3 m.

*According to Mr Bolongaro's evidence (1C, para 19), 1975/6

Cross examined by Mr Forward, Mr Marsden agreed that the existing works in front of the Manor House and the Town Wall were, before improvement by the Water Authority, at an inadequate level for sea defence.

In response to a question from me, Mr Marsden submitted a document giving the level of the Orwell embankment following reconstruction after the 1953 flood as 14 ft OD. The document also states that the level before the flood was about 13 ft OD and that it was proposed in May 1960 to raise it 2 ft above the existing (14 ft) level. The 1953 surge height is given as 13.5 ft OD. A second document, submitted at the same time, gives the recorded height at Harwich as 13.1 ft OD, on the authority of Cdr C.T. Suthons, MA, RN.

The schedule and 1-inch OS map (AEM 1 & 2) attached to 3A and the 1/5000 plan (AEM 3) accompanying them show that the flood wall south of the Town Hall and the works at the Manor House form a continuous defence. AEM 1 shows that the War Department boundary adjoins the end of these defences at the Manor House.

(iii) *Mr Worth* (5B, para 14.8) said that the Water Authority had completed the parapet wall at the rear of the promenade in 1982 along its full length. It would provide reasonable protection against tidal flooding and much reduce the incidence of whitewater flooding along that section. Whitewater flooding was unlikely at times of very high surge tide levels.

The Manor House scheme was completed in 1980 (para 14.9). Its top level was the same as that of the parapet wall to the north at 5.0 m OD. The rest of the coastline to Landguard Point (para 14.10) was fronted by a groyne system and a dwarf wall at the head of the beach, both in poor repair. The top of this wall varied about 4.0 m OD, with ground level rising inland. A high earth bank, with several discontinuities, ran much of the way from Manor Terrace to Landguard Point. The sea did not enter from this direction in 1953 and it was reasonable to conclude that reasonable flood protection was provided, allowing that the Water Authority, who were investigating the construction of new defences there, had the matter in hand. Flooding was more likely to occur from the south west side than from the south east over Sea Road (para 12.2). When the IDD was established the only sea defence in the Landguard sub-district was the earth bank facing Harwich Harbour.

The flood protection level along the section for 1500 m south of Felixstowe Pier fronted by the promenade (para 14.7) was until recently the top level of the promenade/Sea Road, as all areas inland were lower. It varied from 3.8 m to 4.3 m OD and was sufficient to prevent overtopping except in 1953, although whitewater flooding had been recorded. Minor wave overtopping across Sea Road used to occur, on average, once every few years. Premises in the lower part of Orford Road and nearby (fig 6) had been flooded by whitewater in 1978.

When the IDD was established the embankment north of Felixstowe Dock had a top level of about 5.0 m OD (16.4 ft). The top level of the new quays that had replaced it was 4.27 m OD (para 14.5). This level

had been set by the former River Authority as a minimum for hard top defences (para 14.2). The same level obtained for the quays south of the dock basin. Within the basin they were lower, but a concrete flood wall set back from the quay face ensured continuity of the minimum sea defence level. Ground levels south of the port to Landguard Point were appreciably higher than in the port area. The quay level throughout the port was 4.27 m OD (para 14.2). The higher level along the south eastern sea front was needed to reduce wave overtopping. Whitewater flooding was only a potential problem on that coast.

In 1953 the area looked much the same as in 1956 (para 13.1). Breaches occurred in the Orwell bank and water entered Landguard west of the railway (para 13.2). The railway embankment eventually failed a few hundred metres south of Beach Station Road and properties on either side of the Carr Road and Langer Road, south of the Ordnance roundabout, were flooded. Post-war pre-fabricated houses in Orford Road were destroyed and lives were lost. At this stage all the flood water had entered from the Orwell side, but the sea rose again later and entered the residential area south of Undercliff Road by over-topping the promenade and Sea Road.

(iv) According to the *Felixstowe Times* of 7 February 1953 (p 1) the first warning of the 1953 flood came at 11.30 pm on the Saturday with reports of flooding at Landguard Fort and Landguard Point. These were followed by a report that a woman had been swept away at Landguard Point but that her child had been saved. The full force of the flood waters broke loose between 12.30 and 1 am, when the river wall between Felixstowe Dock and Fagbury was breached in seven places. A solid mass of water, of tidal wave proportions, swept across the marshes towards the Langer Road area, leaving death and destruction in its wake. In a comparatively short time the whole neighbourhood was inundated, in many places to a depth of 5 to 6 ft and in some places more. The water surged up the full length of Langer Road and into all the side streets, completely flooding the ground floor rooms of hundreds of houses. It ceased on reaching the rising ground at Ordnance corner. A prefabricated bungalow at the junction of Orwell Road and Langer Road was carried 200 yards along Langer Road and others were swept a similar distance along Nacton Road. The chairman of the UDC is reported (p 15) as telling the Council that the torrent of water that rushed through the Orwell bank constituted a major part of the flooding. The Council's sea defences were not breached: the water simply flowed over.

(v) *Mr Bothwell* said that the new wall the AWA had built was the same height as the old one, the only difference being the gates and the extension that ran to the Council Offices.

(vi) *Photograph No. 2* (7C) of the 1953 flood damage shows brick walls at the rear of houses in Russell Road demolished by pressure from the north west side.

(vii) *Mr Savage* (8D) said that the sea breaking the river banks in 1953 met with sea water that flooded on the Manor Beach side of the district.

2. OPINION

(i) *Analysis*

The evidence indicated that the predecessor Board were carrying out maintenance and improvement works on the Orwell embankment before 1956 (1(i) ante). According to Mr Worth's evidence (1(iii)) its level north of the dock when the IDD was established (1956) was 16.4 ft OD; but in reply to a question from me Mr Marsden submitted a report dated May 1960 (1(ii)) which states that this length of embankment was reconstructed after 1953 to its then crest level of about 14 ft OD. Mr Marsden's reply was directed specifically to my question; it takes the form of an independent report, and Mr Marsden has been a senior employee of the Water Authority and its predecessor since 1965 (3A). I therefore prefer his evidence, and consider that the embankment was raised to a level of 16 ft OD probably between 1961 and 1964 (1(i) and (ii)).

The surge level was about 13.25 ft OD (4.04 m, the level most commonly quoted through the evidence) although also given (1(ii)) as 13.5 and as 13.1 at Harwich.

It seems that during the whole of the period covered above and until 1976 the Water Authority's predecessors did not assume responsibility for any part of the sea frontage (1(i) and (ii)), although the River Board contributed to the cost of groynes on the War Department's length. The Water Authority accepted responsibility for flood protection on the sea frontage in 1976 (1(ii)) and reconstructed the sea defences in front of the Manor House from 1977* to 1980 (1(i) and (iii)). The construction of the flood wall along the promenade does not appear to have been effectively commenced before 1978, because there is a record of flooding from this quarter in that year (1(iii)). It was said to have been completed in 1982. I accept that the new wall with its gates was designed to be an adequate flood defence against a 1953 still water level with its attendant wave action. The defences south of the Manor House are in a poor way and reconstruction is planned (1(ii)), but flooding from this quarter is likely to be limited to whitewater (1(v) and (iv)). The general level of the defences on the sea side before the RWA's works were put in hand was approximately that of the 1953 surge (4.04 m OD) (1(iii)), varying between 3.8 and 4.3 MOD. The evidence suggests that this lowest level was near Orford Road (1(iii)).

Although the precise date when the Dock Company's quays replaced the defences of the RWA and its predecessors on the Orwell is not recorded, it seems to have been after 1965 (1(i) and (ii)), because it was said that the Authority had done no works there since. The defences on this side are now at a level of 4.27 m OD, set as a minimum by the Water Authority.

Thus the predecessor authority accepted responsibility for and maintained flood protection works on the Orwell frontage but not, apart from a share in the War Department's works, on the sea side. This was accepted by the Water Authority in 1976 but works are not complete. With a still water level of about 13.25 ft OD, however, a 14 ft bank on the Orwell gave little freeboard, so that in my view it was barely acceptable until it was reconstructed to 16 ft following the report of May 1960 (1(ii)).

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* See footnote p 1.

A water authority is required, as were its predecessors, to exercise a general supervision over all matters relating to land drainage – which includes defence against sea water – in its area (1976, SS 1 and 116). Moreover, circular LD43, accompanying Mr Blake's evidence (1A) asked River Boards to consider what lengths of coast should come within their jurisdiction on the assumption that they were responsible for the protection of all low-lying areas along the coast from flooding by the sea. The Water Authority have interpreted their responsibility as requiring them to protect the seaboard to a level of 5 m OD. Their predecessors were content to leave matters to Felixstowe UDC who, as authority responsible for erosion and encroachment by the sea (Waverley Report, para 47) were satisfied with a defence level of about 4 m. I consider this inadequate. The predecessor authorities may have felt constrained by the limitation of their powers to works in connection with main river, but it does not seem from LD 43 (para 1) that the Ministry was inclined to interpret this narrowly, and the River Board and Authority had their general supervisory obligation.

(ii) *Conclusion*

In my opinion, therefore, the IDD has not obtained and will not obtain until the works on the eastern seaboard are complete, all the benefit or avoid all the danger that it could reasonably have expected from the sea defence works of the Water Authority and its predecessors. This seems to me to weaken the case for aggregating Landguard on an equal basis with other IDDs in the LDC's area for the assessment of precept.

III CONTRIBUTIONS TO THE EXPENSES OF THE IDB

1 THE EVIDENCE

(i) *In their notice of appeal (doc 11) the IDB* complained that the contribution excluded the costs of maintenance and renewal of the pumping stations, maintenance of the drains and administration, all caused by the quantity of water which the sub-district received from land at a higher level. They contended that the Water Authority should contribute to improvements and new works, whether or not they related to an increase in the flow of upland water, by reason of the use of the IDB's system by the Water Authority.

(ii) *In its reply (doc 12) the Water Authority* said that the IDB needed the pumps even if there was no upland water and that a major factor in their renewal was the deposition of corrosive matter within the district, unrelated to upland water. The same work would be needed on the drains without upland water, and the cost of administration was not increased. The Water Authority had no obligation to contribute to improvements to the Board's pumping system which were for the benefit of the IDD.

(iii) *Major Danter* (3D) said (para 8.9) that there was no logical difference between the pumps, which moved upland and lowland water to the sea, and the drains which stored it and carried it to the pumps. Although maintenance of the drains included an element for the removal of debris placed in them by the occupiers of adjoining premises, if the Water Authority was to use them it should pay a share in keeping them in working order. Maintenance and renewal of the pumping stations (para 8.10) were similarly

increased by the additional water. Alternatively they were an expense of operating the system which, if the Water Authority wished to use it should pay for.

The proportion of the total cost of administration (para 8.11) should not be the same as the proportion of the cost of pumping and maintenance, but it did reflect the time spent in maintaining and improving the system and, as users, the Water Authority should contribute. The percentage of the appropriate portion of the administrative costs could be the same as the percentage contribution to maintenance and pumping.

The IDB considered that a constant percentage (53.2%) should be used for this determination, but that it should be recalculated in future whenever development outside the district increased the volume or rate of flow of upland water.

Cross-examined by Mr Heygate, Major Danter said it was common sense that "quantity of water" in S84(4) included rate of discharge. He disagreed that there was no evidence that increased upland water required the installation of pumps. An enormous flow entered the Byle Fleet.

Cross-examined by Mr Ryles, he said that the IDB could check when industrial firms threw rubbish in drains or caused pollution. They had taken up one such case with the Water Authority's pollution officer and the pollution had ceased. It was not too difficult to identify people causing pollution by oils and chemicals, but debris was difficult. To employ someone to ascertain who was responsible for putting liquids and solids into the Board's system would be expensive and time-consuming (3D, paras 6.4.3(c)) if the Board did not have free help on the ground. The Water Authority did not charge for gathering information.

(iv) *Mr Davis* (3B) submitted a plan which he said indicated the surface water system which ultimately outfell to the IDB's system. It showed the extent of the surface water catchment draining Langer Park and thence to IDB ditch No. 1.

Mr Davis said that although the Catchment area was not changed by improvement works the rate at which surface water arrived at the ditch necessarily changed. If it did not flow more quickly property would continue to be flooded. He computed the former flow as 650 l/s and the improved flow as 1918 l/s at the point of entry into the IDD, using an impermeability factor of 0.3. Some designers would, optimistically, have used half this.

(v) *Mr Worth* (5B) said that at times of heavy storms the total inflow to the drain system was much in excess of the possible discharge to the sea through the two pumping stations and it would be uneconomic to provide pumps capable of passing peak inflows (para 4.2). The ditch network was therefore designed to function as a storage reservoir, holding the water until it could be pumped out over a period of time. On completion of current improvement works (para 4.4) the main drains would be able to deal with inflow from storms of up to a 5-year return period intensity.

With progressive development of the catchment inflows to the drains had increased, both in terms of peak flow rate and total quantity (para 11.4). He calculated the relative runoffs from upland and lowland as 50.4% and 49.6% respectively if two doubtful areas were included, and 51.6% and 48.4% if they were not (para 11.3). The Water Authority, in a letter dated 4 March 1980 to Mr Forward, had given the upland percentage as between 54.1 and 50.6, and a compromise figure of 53.2% had been agreed (para 11.4 and pages 175 and 197 of 3E) and was in use. The catchment area used to determine the latter figure differed slightly from his own. Cross-examined by Mr Heygate, Mr Worth said that if Landguard were still a sheep marsh it would be able to cope with upland water although that had increased. He agreed that 53.2% was about right. He considered that draining the upland area by separate watercourses would be impractical and expensive. Without the upland water the drains would probably not have required improving. The improvement had altered water levels so that sluices were rendered useless and the water had to be pumped.

(vi) *Mr Forward* (7B, para 37A) noted the difference between the catchment area used to determine the 53.2% figure and the area used by Mr Worth and drew attention to specific areas added and omitted, commenting that Mr Davis had also shown one identical large additional area (drawing accompanying 3B). He said that Mr Worth's percentages were clearly not comparable with the agreed figure, which seemed to be increased to the advantage of the IDB.

It was incongruous that no contribution was made towards the maintenance of drains (3E, p 179, para 14). In many IDDs the maintenance of drains was the principal, if not the only work to be done. In the cases of the Upper and Lower Medway Boards the Southern Water Authority made a contribution towards the maintenance of watercourses based on the quantity of upland water; in neither case did the Boards have a pumping station to remove it. The policy of the Anglian Water Authority of not contributing appeared to be contrary to the spirit of S 84(4). It was clearly not right that the Felixstowe Board should carry upland water in their drains without being paid for it. The wear and tear in pumping stations was normally proportional to the quantity of water pumped (para 16). The Anglian Water Authority did not contribute to this, which was not a logical or fair approach. The cost of normal maintenance, including replacements and complete renewals should be shared in the ratio of the water pumped. Deterioration from corrosive liquids was not the concern of the Water Authority, the IDB or ratepayers at large, but he was sure that the department of the Water Authority dealing with trade waste would quickly have located the source of trouble if its aid had been sought (7B, para 33A). The case had not been pressed to its logical conclusion and seemed to indicate a sense of laissez faire on the part of the Board. If there had been byelaws the Board would have been advised by its Clerk when it appeared that action should be taken.

The Southern Water Authority added 12½% to their maintenance contribution for administration and there seemed no good reason why the Anglian Water Authority should not do likewise. Administration was part of the IDBs duties and should be apportioned to its various activities (para 18).

(vii) *Mr Bolongaro* (1C, paras 31 and 32) said that measurements made of the Acle landspring and marshes had been used to provide a standard ratio of upland to marsh runoff for general use, making no allowance for capital expenditure, maintenance of drains and administration. The element of these expenses was considered too small to identify. In March 1980, however, attention was drawn to the effect of extensive urban development on the upland catchment of Felixstowe which created a large impermeable area from which there was rapid runoff to the IDD (para 36). In consequence it was accepted that the Acle formula was not appropriate to Felixstowe and a proportion of 53.2% was agreed for upland water (3E Appendix TB16 and pages 175 and 197), but capital expenditure, drain maintenance and administration were still excluded.

Cross-examined by Mr Straker, Mr Bolongaro said that for administrative purposes he would consider "quantity of water" in S 84(4) to refer to, say, a twelve month period, but he would defer to technical opinion.

Cross-examined by Mr Forward he said his committee would think the Kent payment for upland water was too generous.

(viii) *Mr Marsden* (3A) said that most of the costs relating to drain maintenance were due to land use within the district (pages 3 and 4) and in particular to the area of the docks. Access there had been restricted by development, banks were surcharged by heavy loads and debris accumulated in the drains. The Water Authority did not feel that there would be any significant savings under this head or in administrative costs to the Board even if there were no upland water reaching the district.

Cross-examined by Mr Forward, he said he considered that excess wear on the pumps was caused by dirty water from the lowlands. The 53% figure was not scientific, but was used as a way of reaching agreement. Agreement should be reached for everything that could be regarded as a common service.

Re-examined by Mr Heygate he agreed that the pumps had to be installed for lowland water, rather than water from outside the district.

(ix) *Mr Ryles* (8A, para 5) said that the contribution by the Water Authority to the IDB for the use of its facilities had been too small for many years.

(x) *Mr Bothwell* said that the water that drained from the town area was provided by springs coming out of the cliff that stretched from the golf club to the Dooley Hotel.

(xi) *Mr Straker,* in his final address, considered that S 84(4) was only meaningful in relation to time span. Receipt of water without reference to time was meaningless, and the quantity might be received at a time when the system was under pressure.

(xii) *Mr Heygate*, in his final address, said that the present system for determining contributions was the result of a compromise between Mr Forward and Mr Marsden. It should now be examined anew and there was an argument for the Water Authority contributing to the upkeep of the drains.

2. OPINION

(i) *Analysis*

In my view the method of assessing relative upland and lowland runoff using measurements from the Acle catchment can only be regarded in the present context as rough and ready, granted that it avoids the effort – perhaps superfluous in most cases – of making a separate calculation for each district, and I support the agreement between the Water Authority and the IDB to use the method proposed by Mr Forward in 1979–80. I note, however, the difference between Mr Worth's figures and the agreed figure, and Mr Forward's observation about the difficulty of comparison ((vi) ante). The basis of Mr Worth's calculation seems to me rational, and I note that Mr Forward did not pursue his criticism. Since the supporting calculations for the agreed figure were not exhibited I am unable to pronounce on the relative merit of the two figures. They are not, however, far apart, and I am sceptical about computing the ratio to the nearest tenth of a per cent: it is in my view quite beyond the degree of accuracy warranted by the assumptions. I am confirmed in this by the knowledge that the final figure was a compromise (viii) and (xii). I consider that the method adopted makes proper allowance for the time during which the discharge occurs ((iii) and (vii)).

Although it is a general principle of land drainage that upland water should not be pumped its development in Landguard was probably inevitable, and I accept that to attempt to separate them would now be unpractical and uneconomic. There is little doubt that gravity drainage would have required other works that would have put the Water Authority to comparable expense both in capital and maintenance, and the fact remains that the Water Authority does use the IDB pumps and drains to evacuate its upland water. The principle of payment does not seem to be in issue and was not effectively challenged. I note particularly Mr Worth's observation that without the uplands water the drains would probably not have required improvement but that if Landguard had remained a sheep marsh it would be able to cope with the upland water although that had increased (v). If these two statements are accepted it follows that development of both the upland and the lowland have led to the need to pump the catchment and improve the drains. This I consider to be a reasonable view.

I do not think it possible, on the evidence, to form a definitive opinion about abnormal damage to pumps by corrosive liquids and abrasion. I can only say that I consider corrosive liquids are more likely to enter in the industrial lowland area than elsewhere, given current land use; but this should be a matter for prevention and detection rather than a charge on either the Water Authority or the IDB.

(ii) *Conclusion*

I conclude that payment would be best apportioned by the method used by Mr Worth, Mr Forward and Mr Marsden, but I see no logic in restricting it as at present. Pumping capacity, drainflow, storage and inflow are interdependent and the system should be designed accordingly. I therefore consider that the Water Authority should meet the appropriate proportion of the costs associated with the Board's drains and pumping, both capital and maintenance, including the cost of administration.

IV THE BOUNDARY

1 THE EVIDENCE

(i) *Paragraph 67 of the Waverley Report* (1A, attachment 1) states: "we feel that River Boards should consider the case of those areas which are at risk from tidal inundation and which are not making any contribution in the form of a drainage rate, with a view to constituting new internal drainage districts . . . it has been suggested that the events of 1953 have shown the level (of land to be included in an IDD) is too low and in the case of developed land, at any rate, should be raised . . . The Medway Letter is not the law of the land . . . if a River Board can show that any particular area at present excluded under the Medway definition was flooded last year (1953) or would have flooded but for its works then it may be argued with justification that the area derives benefit or avoids danger". Para 66 states: "We do not think that a River Board would be justified in increasing the precept upon local authorities until, having taken all the relevant factors into account, it was satisfied that it had secured a proper contribution from internal drainage districts benefiting from the sea defences".

The Ministry's circular LD 43(1A, attachment 2) of 3 June 1954 accordingly asked River Boards "to consider what lengths of coast should come under their jurisdiction on the assumption that they are responsible for the protection of all low-lying areas along the coast from flooding by the sea".

(ii) *Mr Blake* (1A) said that in 1954 the River Board maintained that the proposed boundary had been generally determined in accordance with Medway principles, but were considering whether to include the whole of the built-up area of Felixstowe at or below 12.5ft OD, which was the level of protection afforded by the new bank on the north side of the river. They cited the Waverley Report and pointed out that all the houses it was proposed to include had been flooded in 1953. The built-up area was included in the subsequent draft scheme. The statutory map shows the boundary following the river bank and including most of the low-lying built-up areas.

(iii) *Mr Heygate*, in his opening address, said that it was not known whether the criterion in 1956, when the Board was created, had been 5ft above mean high water springs. The Water Authority now aimed to include all land in danger of a 1953-type flood, or whose access would be interrupted. The new boundary was not set by the position of the new wall, but by the 1953 flood level of 4.04m OD. It was so close to the wall that it had been drawn on that line.

(iv) *Mr Lane* (1B) said it was understood that the River Board proposed the setting-up of the IDD feeling that the area derived benefit and avoided danger as a result of embankment works which it had carried out after the 1953 flood. He had advised the Local Land Drainage Committee that abolition of the IDB was not an appropriate course of action since the area did derive benefit and avoid danger as a result of operations that had been or were being carried out.

Cross-examined by Mr Ryles, he agreed that the Waverley recommendations had no legal force, but said that to ignore the Ministry's advice in that respect would have been irresponsible.

(v) *Mr Bolongaro* (1C) said that since the 1953 floods it had been generally accepted that in reviewing a boundary the 1953 flood level should be used in tidal urban areas. This was consistent with the Waverley recommendation that protection should in general be sufficient to withstand the flood of 1953 when flooding would affect a large area of agricultural land or would lead to serious damage to property of high value such as valuable industrial premises or compact residential areas. (Paragraph 46 of the Waverley Report refers).

(vi) *Mr Marsden* (3A) said that the former River Authority had accepted responsibility on the river frontage, but not on the sea side (although it had contributed to the cost of groynes on the War Department's sea frontage). The Water Authority had agreed a new allocation of responsiblities with the local authorities in 1976, which included responsibility for sea defence on the sea side. The basic criterion for the new boundary was still water level of the 1953 surge tide, which was 13.25 feet or 4.04m OD, according to the Authority's records. The provenance of this figure was not known. It gave a reasonable measure of agreement with the existing boundary in many areas although the Authority did not know how that had been fixed.

At Manor Terrace and Sea Road the added area was below 4.04m although some properties had higher floor levels. The boundary generally followed the line of the new sea defences. The dock had been included, although above 4.04m, because the access roads were below the level.

Cross-examined by Mr Straker, Mr Marsden disagreed that the new sea wall and groynes at the Manor House were coast protection. This would be clear on visiting the site: the land behind was below 4.04m OD and the sea broke-in during construction. Landguard Fort had been omitted from the new area because the Ministry of Defence looked after their own sea defences. The clay bank between Dooley Fort and Fagbury Cliff referred to in the Schedule (AEM 1) was now redundant, having been replaced by the Dock Company's reclamation works.

Cross-examined by Mr Archer, he said that the old derelict War Department wall to be replaced by a new sea wall and groynes (page 2) ran from the Manor House for approximately 400m south. He disagreed that these works would benefit the fort itself, although they would benefit the access. Some arbitrary decisions had to be made in "grey" areas.

Cross-examined by Mr Forward, he said that the new works were at a level of 5m OD at the Manor House and along the Town Wall. He agreed that the previous works, and some existing works, were at an inadequate level for sea defence, but they were not coast protection works. Every sea defence work needed a foundation. Omission of the Manor House from the area on grounds of cost-benefit would be wrong because cost-benefit was not determined on the basis of such very small areas.

Cross-examined by Mr Ryles, he said that the Town Wall had 1m freeboard above 1953 level. He was not aware that a plate in the Customs House, formerly the Officers' Mess, showed the 1953 flood level. He had consulted colleagues in Essex who said that the nearest level there was 4.02m OD. He did not respond to Mr Ryles' proposition that Landguard Fort and its access should be included in the area on account of the valuable equipment stored there.

Questioned by you he agreed that a heavily urbanised area like London would not be included in an IDB.

(vii) *The schedule accompanying* Mr Dale's evidence (3C) showed that many properties having thresholds above 4.0m OD had basements.

(viii) *Major Danter* (3D) said (4.1) that the purpose in creating the IDB was to create satisfactory defences against flooding and to act as a channel for the grants from central government which were made available after the 1953 floods, and to pay for them by drainage on properties in the IDB.

Areas had been identified outside the present boundary which could be said to derive benefit from drainage operations. A new boundary had been drawn to embrace them and to exclude a few small areas found to be just above 1953 surge level. The dock area had been included because access roads were below flood level.

(ix) *Mr Worth* (5B) said that the basis on which the boundary was determined in 1956 was not certain (15.3). It was presumed to be in line with Medway Letter principles. In the agricultural areas west of the railway and across Landguard Common it appeared to be 5ft above ordinary spring tides, ie 3.5m OD (11.48ft –GC). In the residential area round Carr Road and Langer Road it seemed to lie along the same contour, which would be contrary to the Medway Letter for urban areas. The new proposed boundary sensibly fulfilled the aim of bringing in all areas below the 1953 flood level of 4.04m OD (15.4). Inclusion of the docks agreed with Medway on grounds of access but was contrary to it insofar as wharves were to be excluded. It might also be thought that land towards Landguard Point should be included on the isolation principle, and the filled area at Peewit Hill because the path on its north side was below flood level (15.5).

Along Sea Road and Manor Terrace the boundary was taken as the line of the new flood wall (15.6). Levels in Sea Road varied about 4.0m OD. The Water Authority's proposal agreed with the Wear and Tees letter (15.7). Now that all the sub-district could be considered urban, the boundary could also be set at tide level, which would be 1.98m OD (15.8) (6.49ft–GC) which was MHWS at Harwich (12.1). This was shown on drawing 3702/4 appended to Mr Worth's evidence. He merely proposed this as an alternative and accepted that it would not cover the area protected against a 1953-type flood.

Cross-examined by Mr Heygate, he agreed that it would be unusual to build a defence behind a house, as had been suggested for Manor House. He did not think a level of 1.98m would exclude access: one could go to where one needed, by going along Langer Road and Blofield Road.

(x) *Mr Smith* (6C) said he had inspected the IDD and had a discussion with the Engineer to the Norfolk and Suffolk River Division of the Water Authority. His investigation showed that the existing boundary was set at 3.275m OD or thereabouts (10.74ft–GC). He found that the existing boundary was based on the Medway Letter, which used ordinary spring tides as the basis. Having consulted the Hydrographic Department of the Ministry of Defence and Admiralty Tide Tables, it seemed to him beyond doubt that the existing boundary was set in accordance with a level of 5ft above ordinary spring tides. It appeared that it was considered appropriate after the 1953 flood.

He had been told that the new boundary at 4.04m was related to the 1953 flood level, which had been established from local knowledge and history and from the flood level at Harwich. He suggested that whilst this was generally correct, some properties not flooded in 1953 and whose access was not flooded had been included. He had been told by his clients that some of these places had been used as refuges. He had used Mr Dale's levels, which he did not challenge. He submitted a plan (DWS1) showing some properties within the proposed boundary with thresholds and floor levels which he said were above the 4.04m level by as much as 1.5m. The Wear and Tees Letter, suggesting the 1953 flood level as a criterion in accordance with the Waverley Report, had been issued before the IDB was formed and he thought it curious, inappropriate and unnecessary to bring in properties on the basis of a flood level of which no one could be certain some 29 years after. He also thought the dock area, being above 4.04m, should be excluded, and that Landguard Fort and surrounding land, being below 4.04m and within the present sea wall bund, and subject to a replacement scheme for a new sea wall and groynes, should be included.

Cross-examined by Mr Heygate, Mr Smith said he did not necessarily disagree with the Wear and Tees Letter. He agreed that a boundary should not change direction to include basements but exclude properties without basements: a general line should be adopted. But the boundary did not need to follow the new wall: Sea Road would have sufficed. It would, for example, exclude the Pier Pavilion. Aside from any rule about Ministry of Defence property, the Fort should be included on the access principle. *Mr Heygate* intervened to point out that there was a spot level of 12ft OD at the pierhead. Mr Smith said other levels were about 13ft, with 12ft at the side and lower.

Cross-examined by Mrs Paddick, Mr Smith said the Marlborough Hotel had been excluded because it was one of the properties between the old and new boundaries which were not flooded. His drawing DWS 1 showed the boundary too close to the beach.

Mrs Berg interposed to say that the step of her shop (5 Langer Road) was 18 inches above the pavement and the property was not flooded in 1953. Mr Smith said that the road would be flooded and access cut-off. There were probably many others similarly placed.

(xi) *Mr Little* said his house (20 Arwela Road) had salt water, slime and sewage 4ft deep in the rooms in 1953. There was water inside the Pier Pavilion. The gale was northerly.

(xii) *Cclr Loveday* (12 Arwela Road) said the water came to the first step on the stairs, about 18 inches deep.

(xiii) *Mrs Lake,* who lived at 33 Orford Road in 1953, said that the water had reached the end of Carr Road by the RAF gates at 10.30 pm. The tide was coming over the top on the sea side and the water was over her shoes. In less than half an hour it came in through the back door, having come over the railway. Then the front door burst in and the water was almost to her waist. Neighbours were shouting for their lives. They helped one family into their own house and had to dive under the front door to get in. The water reached to 2 stairs from the top by about 11.30 to 1.00 am. The prefabricated houses all floated off. The tide dropped at about 3.30 am. The top level of the water was about 6 inches off the bedroom floorboards.

(xiv) *Cclr Donnelly* (letter 14 October 1982) said that the existing area of the IDB was based on 1953 flood levels and asked what justification there was for a change. There was or had been a breach in the river wall by the disused oyster beds which would allow flood water to surge in from the rear and greatly reduce the benefit from the new sea defences.

(xv) *Mrs Fisher,* who lived at 201 Langer Road in 1953, said that more than 7ft of water swept through the houses.

(xvi) *Mr Bothwell* said that the 1953 flood was caused by a break through on the river side about 4ft deep near the RAF station. It then broke through near Fagbury Cliff. The wall had been in bad repair.

(xvii) *Mrs Farrant,* of 74 Langer Road, said she had 5½ feet of water in her home.

(xviii) *Mrs Berg,* who had a shop at 5 Langer Road and property at 29 and 29A Cavendish Road, said that the railway was a natural barrier and that the water came over Beach Station Road.

(xix) *Mrs Anderson*, of 17 Russell Road, said that the contour basis emphasised the unfairness of the rating arrangements. Other people enjoyed the facilities of the area.

(xx) *Mrs Parker*, who lived in a first floor flat at 1 Granville Road in 1953, said she lost 2 sideboards and other items on the ground floor. She saw the sea coming down the road at about 11 pm to midnight. The water was 2 to 3ft deep.

(xxi) *Mr Harlow*, who lived on the first floor at 11a Buregate Road, said that the ground floor was flooded to a depth of 1 or 2 inches. He thought that the water would have gone about as far as the site of the roundabout at the end of Undercliff Road West, but the Pier Pavillion was not flooded. Flooding elsewhere was "horrific".

(xxii) *Miss Ledgerwood* said she lived at No 9 Holland Road, which was at present outside the IDD but would be brought in by the proposed new boundary. She showed a photograph taken from the back of her house showing all the yard walls at the back of Russell Road demolished by the flood, which she said reached the top bar of the fence at the rear of her house.

(xxiii) *Mr Forward* (7B), said that neither the Water Authority nor the IDB had been able to help him discover the reasons for the creation of Landguard (para 3). He said that the Medway Letter's reference to access was concerned with non-tidal areas where floods could remain for a considerable time, so that the Water Authority were arguing out of context (para 11). The Authority had not given any reason for its new boundary other than the Medway Letter (para 12). The need for new works along the south-western seaboard could have been foreseen by the Minister and the area outside the earlier boundary was very much as it had been in 1956 (para 13). It was right to assume that all factors of whatever nature were taken into account by the Minister before he made his order and consequently it might be thought that the Water Authority was being presumptious in presenting a new scheme to include an area where there had been no fundamental changes and which the Minister excluded from his order in 1956 (para 14).

The Manor House works and those along Sea Road (para 48) were outside Landguard and would be of prime and most frequent benefit to the properties lying between Landguard and the sea. The existing boundary appeared to have been drawn along the landward edge of a narrow strip of land that at 4.0m OD was well above MHWS (1.83m OD) and was the highest ground in the area (3E, Appendix, p 102, para8). In the agricultural areas the boundary was presumably drawn at MHWS +5ft (p 103, para 10).

Cross-examined by Mr Heygate, Mr Forward said he did not take exception to the Wear and Tees Letter, but thought that each case should be considered on its merits. He was confused about redrawing the boundary on the 1953 flood line: was the Minister wrong the first time? He agreed that the new boundary was logical and the contour correct.

(xxiv) *Mr Heygate,* in his closing address, said that the evidence had shown that the 1953 flood went outside the IDB boundary, and Mr Smith's evidence did not stand up. He would not be dogmatic about Landguard Fort: perhaps it should be included.

2. OPINION

(i) *Analysis*

In my opinion Landguard flooded in 1953 to a level of about 13¼ft (4.04m) OD. There was general acceptance that this was the still water level of the storm tide ((vi) (ix) and (x) ante). That it was also the level of flooding seems to me to be abundantly confirmed by the evidence of people who were present at the time ((xi) to (xxii)). Its cause was, in my view, primarily the breakdown of the Orwell river embankment, but waves over-topped the eastern defences.

There is a conflict between the evidence of Mr Smith and Mr Worth about the level of the existing boundary ((ix) and (x)). Both think it was set in accordance with the Medway principle of 5ft above spring tides, but there is a difference of about 9 inches between their figures, and it is clear from Mr Worth's table (5B, para 12.1) that Mr Smith has based his on MHWS at Felixstowe Pier, whereas Mr Worth had used Harwich. There was no tide gauge at Felixstowe Pier until many years after the IDB was created, so that Mr Smith's figure must be rejected. No criticism is implied: it is extremely difficult if not impossible to assess the level of the boundary without making an instrumental check, in the absence of other sufficiently precise evidence, and both witnesses come to the same conclusion about the principle on which it was based.

I agree with them for the following reasons. Site inspection revealed, and the plans confirm, that levels fall-off from Sea Road to Langer Road, and the plans show that levels along Sea Road are generally at about 13.0ft OD – sometimes 14.0 and in one case 12.0. Unless the boundary undulated, which is unlikely in the extreme, its level must have been less than 13.0 and it is very unlikely that it exceeded 12.0. What seems certain is that it was not fixed at storm tide level. Sudden changes in the line seem to me to conform with changes in the conformation of the ground and with the commonly adopted principle of embracing blocks of property, sometimes referred to as the "all in or all out principle". At the bottom of Garrison Lane the boundary runs half way between spot heights of 11.0 and 12.0. I am therefore of the opinion that the level was set at about 11½ft OD – Mr Worth's 11.49 or 5ft above MHWS at Harwich (6.49ft or 1.98m).

If the level had been set at MHWS in accordance with the Medway Letter instead of 5ft above most of the urban area which had only just suffered various degrees of inundation, would have been left out. There has been no suggestion that the line was lower in the agricultural area, which would have been illogical, and it would hardly have been higher. This is in accordance with the plans and in particular with a level of 12.0ft OD at Felixstowe Dock.

The proposed boundary is set at 4.04m OD or 13.25ft – the height of the 1953 storm tide (vi). In fluvial areas the Medway Letter was concerned with flood levels, and I think it would be unreasonable to argue that it was concerned with anything else in tidal areas, where the effects of flooding can be much worse. Mean high water springs is the level to which a salt marsh regularly floods before it is reclaimed by the construction of a sea defence, which seems to justify its use as a measure of protection against flooding. But when the Medway Letter was written storm surges were less familiar, and the Waverley Committee's recommendation (para 67 and recommendation 20) that the criterion should be the 1953 flood seems to me superior. Moreover, the Wear and Tees Letter seems to be a logical and succinct interpretation consistent with Medway Letter principles. Aside from the proposition that the IDD should be abolished altogether, there was no disagreement in the evidence with 4.04m as the new Standard and I would recommend acceptance.

Criticism of the precise line came from Mr Smith (x). His drawings DWS 1 and 2 refer. All the properties shown on DWS 1 and 2 between Langer Road and the sea have either basements below 4.04m, threshold levels marginally above (3½ inches at most) or would have their access interrupted – sometimes more than one of these – so that their inclusion is acceptable. Following the site inspection, however, I am in doubt about the small area immediately north west of the Ordnance roundabout, which I recommend should be checked.

Whether Landguard Fort is to be included or not seems to me to depend largely on what plans the Water Authority have for the area and what view is finally taken about rating Ministry of Defence property. The fort itself appears to be on high ground, but its environs, according to the evidence ((vi) (ix) and (x)), are below flood level and access would be interrupted. The quays between Landguard Fort and Fagbury Cliff now form what in my view should be a structurally effective defence along the Orwell in place of the old embankment, and I note that the level was agreed with the Water Authority (I 1(i) ante). Although I think that a great deal of white water is likely to come over a defence that is only .23m (9 inches) above flood level, the main danger to Landguard nevertheless appears to have been eliminated by these works. Without the new parapet along the eastern seaboard, however, a storm like that of 1953 would, in my view, be likely to cause such overtopping that the district would flood to a depth that would interrupt access to the dock area. I therefore recommend its inclusion.

I think the Authority were right to exclude the agricultural land at Fagbury Cliff. It would seem an absurdity to rate this small part of a field, which is presumably in separate occupation. The boundary would follow no readily determinable line on the ground. The area at Peewit Hill should, I consider, be included if access is interrupted, but I would think that this could be over-come.

Mr Smith suggested ((x)) that the boundary on the east side should run along Sea Road. Now that the Water Authority have built a parapet along the promenade this is effectively the highest line in the vicinity and as such has taken over the role of the top of the shingle spit along which Sea Road runs. The high part of Sea Road (14ft OD) would form a thin 'island' within the new area and exclusion on this ground would be absurd. Moreover, the effect on properties for rating appears to be nil.

(ii) *Conclusion*

In summary, therefore, I recommend that if the IDD continues to exist, the proposed line be accepted with the inclusion of the dock area and subject to further consideration in respect of Landguard Fort, the Peewit Hill area and the property immediately north west of the Ordnance roundabout.

V OTHER MATTERS

The only remaining matter is possible abolition. There was no other strictly technical evidence on which I can comment.

OPINION

(i) *Sea Defences*

You may wish to bear in mind that originally the River Board accepted responsibility for roughly 8000ft of embankment on the Orwell – which I have already said seems to me to have been the most vulnerable side. This has now gone. On the eastern side there are roughly 5000ft of local authority defence, as there were formerly, but now topped by a Water Authority parapet. There remains a stretch in front of the Manor House and the rest of the defences along the old Ministry of Defence frontage as far as the beginning of the south quay – roughly 4000ft (Mr Marsden's evidence at II 1 (ii) ante refers). So in toto the Water Authority now has to look after only some 4000ft out of a total of about 17000, together with the parapet on top of the local authority's coast defence. Work on much of the 4000ft is likely to be heavy and expensive, but the parapet wall should not be a problem.

(ii) *Drainage*

The statement that the drains function as storage reservoirs, as well as channels for the passage of water (III 1 (iii) and (v)), whereas sewers do not usually function in quite the same manner, might be construed as implying that there is some technical objection to the taking over of the system by the sewerage authority. In my opinion there is no justification for such a view, nor am I aware of any other technical objection.

(G Cole)

REPRESENTATIONS AS TO COSTS

(Sections 96(5) and (6) of the Act and Paragraphs 9.01 and 9.02 of the Report)

1. In relation to the costs of the Minister, four of the issues that were the subject of the Inquiry related to appeals by the IDB under Section 84 of the Act against contributions demanded from or paid to them by the AWA. In this context, so far as costs are to be recovered it should, I suggest, be from one or other of those parties in accordance with the Minister's decision in relation to those appeals.

2. The position is rather less straightforward in regard to the scheme presented by the AWA under Section 11 of the Act for altering the boundaries of the IDD, which was not challenged by the IDB. The origin of this was a petition calling for the abolition of the IDD presented on behalf of the commercial interests subsequently represented by Mr Forward at the Inquiry and the West End (Felixstowe) Community Association, who appeared at the Inquiry on their own behalf. They were supported at the Inquiry by the Suffolk Coastal District Council, the Felixstowe Town Council and the Dock Company, each of which, to a lesser extent, might be regarded as a "party to the Inquiry". In this context, so far as costs are to be recovered from the parties, a decision would depend on whether the Minister's decision was to approve the scheme, or to reject it, or to take the root and branch decision to abolish the IDD and IDB.

3. If the Minister's costs are to be recovered, in whole or in part, it may, in the first instance, be necessary to allocate them between the financial and other matters that were the subject of the Inquiry. Any allocation must, of necessity, be arbitrary. The fact that there were four financial appeals and a single boundary issue might suggest a 4:1 allocation. But the arguments related to two financial topics and a single boundary issue, which might suggest a 2:1 allocation. I suggest, as a compromise, that 75% of the cost might be regarded as relating to the matters referred to in paragraph 1 above and the balance to the matters covered in paragraph 2.

4. As to the costs of the parties, Mr Forward asked that the Minister should award costs to his clients, in so far as he considered it to be justified, both in relation to the Inquiry itself and the expenses to which they had been put ever since they had first appealed against the rates levied by the IDB.

5. Mr Porter called attention to the fact that Mr Ryles had been present throughout the full two weeks of the Inquiry, representing the interests of the Felixstowe Community Association and its individual members. He did not know if his employers had continued to pay him during this period; but asked that, if necessary, inquiries should be made and costs be awarded if it were considered appropriate.

6. Mr Savage, as Town Mayor, formally asked for the costs of the part-time Town Clerk to be met, in respect of her attendance at the Inquiry.

7. Mr Straker suggested that, if the Minister accepted the appeals of the IDB, there was a strong case for asking that the costs of presenting their case at the Inquiry, which was considerable, should be met by the AWA which had the responsiblity under the Act for determining a "fair" system of levies and contributions.

8. Mr Heygate acknowledged that it was the normal practice for costs to follow the event. It might not, however, be easy to follow this practice if the findings were in favour of the AWA in respect of some but not all issues. In relation to Mr Forward's claim (Paragraph 4 above), he did not see that Section 96(6) of the Act could be held to cover expenses incurred in connection with the application to the Crown Court or the petition under Section 14 of the Act. In relation to Mr Forward's appearance at the Inquiry, the Minister would need to consider whether, strictly speaking, his clients could be regarded as "parties to the Inquiry".

9. Having reported what was said to me at the Inquiry, the question of costs is in my view, a matter for the Minister and not one on which I feel called upon to make a recommendation. But I make certain comments in the following paragraphs, based on my experience in holding Inquiries under other legislation, which will, I hope, be regarded as relevant and helpful.

10. As between one statute and another, there appears to be no general principle or uniformity on the question of costs; and, in much legislation, where appeals may be made and Inquiries held there is no provision comparable with that in Section 96(5) and (6) of the Land Drainage Act 1976.

11. Ability to pay seems to me a criterion that should not be over-looked. In comparison with certain other public authorities, the expenditure and resources of land drainage authorities are relatively modest. The contributions under Section 84(4) of the Act against whose inadequacy the IDB appealed were only £1081 and £1500 respectively. The precepts against which they appealed were £69,576 and £86,153 respectively. I am not in a position to set against this the cost of an 8-day Inquiry or the costs of the parties to it. But the need for and the value of an Inquiry must, I suggest, be measured against the principles as well as the sums at stake.

12. It might be argued that the fact that an unsuccessul appellant might face a heavy bill for costs would act as a deterrent against frivolous appeals. A far better safeguard, I would suggest, is that the Minister only arranges for a public local Inquiry, "if he thinks fit".

13. I would be far more concerned if a party, considering itself to have a legitimate grievance, felt unable to pursue it under the machinery provided by the Act because of the possible cost of doing so.

14. Finally, although a particular case can only be decided on the facts of that case, as presented at he Inquiry, the decision may well have implications going far beyond the purely local dispute. For many 'ears to come, authorities elsewhere may be guided by the decision in the administration of their affairs. The Inquiry in such a case, and the decision to which it gives rise, could well be regarded, in whole or in 'art, as one of the costs of national land drainage administration. In this context, no better example ould be cited than the Medway Letter, written half-a-century ago.