

the development, please contact Atkins Ltd, Anglo St James House, 39A Southgate Street, Winchester, SO23 9EH (Tel [REDACTED] or www.southernwater.co.uk)

The planning application form makes reference to drainage using Sustainable Urban Drainage Systems (SUDS).

Under current legislation and guidance SUDS rely upon facilities which are not adoptable by sewerage undertakers. Therefore, the applicant will need to ensure that arrangements exist for the long term maintenance of the SUDS facilities. It is critical that the effectiveness of these systems is maintained in perpetuity. Good management will avoid flooding from the proposed surface water system, which may result in the inundation of the foul sewerage system.

Thus, where a SUDS scheme is to be implemented, the drainage details submitted to the Local Planning Authority should:

- Specify the responsibilities of each party for the implementation of the SUDS scheme
- Specify a timetable for implementation
- Provide a management and maintenance plan for the lifetime of the development.

This should include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

We request that should this application receive planning approval, the following condition is attached to the consent: "Construction of the development shall not commence until details of the proposed means of foul and surface water sewerage disposal have been submitted to, and approved in writing by, the Local Planning Authority in consultation with Southern Water."

The application proposes development that may produce a trade effluent. No trade effluent can be discharged either directly or indirectly to any public sewer without the formal consent of Southern Water. The applicant is advised to discuss the matter further with Southern Water's Trade Effluent Inspectors. Please see

<https://www.southernwater.co.uk/BusinessCustomers/wasteServices/tradeEffluent/> for further information. The applicant should be advised that a wastewater grease trap should be provided on the kitchen waste pipe or drain installed and maintained by the owner or operator of the premises.

Land uses such as general hardstanding that may be subject to oil/petrol spillages should be drained by means of oil trap gullies or petrol/oil interceptors. Southern Water's current sewerage records do not show any public sewers to be crossing the above site. However, due to changes in legislation that came in to force on 1st October 2011 regarding the future ownership of sewers it is possible that a sewer now deemed to be public could be crossing the above property. Therefore, should any sewer be found during construction works, an investigation of the sewer will be required to ascertain its condition, the number of properties served, and potential means of access before any further works commence on site. The applicant is advised to discuss the matter further with Atkins Ltd, Anglo St James House, 39A Southgate Street, Winchester, SO23 9EH (Tel 01962 858688).

You [REDACTED] ly

Dev [REDACTED] vices

Sophie Eaton
Hydrock
St Baldred's Hall
239 Ashley Road
Hale, Cheshire
WA15 9NE

Our ref: SSD/3278/
Your ref:

Date: 31/03/2014

Dear Ms Eaton

Provision of Product 4 for Land off Shripney Roadm Bognor Regis

Thank you for your request to use Environment Agency data. The information is attached.

If you have requested this information to help inform a development proposal, then you should note the detail in the attached advisory text on the use of Environment Agency Information for Flood Risk Assessments / Flood Consequence Assessments.

Supporting Information

This information is provided subject to the enclosed notice, which you should read.

Flood History

Our records show that Shripney has suffered flooding in 1960 and 1974. Both of these events are listed in our records as road and property flooding as a result of overwhelmed land drainage rather than Main River. Please see the attached Historic Flood Outline map for spatial extents. I would suggest contacting Arun District Council for a more comprehensive flood history check.

Flood Defences

There are no formal raised flood defences to protect this area from river flooding. Coastal flood defences offer a standard of protection of approximately 1in200 (0.5%).

Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD



If you have any queries or would like to discuss the content of this letter further please don't hesitate to contact me.

Yours faithfully



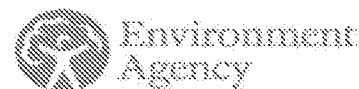
Jon Denman
FCRM Officer
Partnership and Strategic Overview Team – West Sussex

Direct dial 01903 703921

Direct e-mail jonathan.denman@environment-agency.gov.uk

Enc. Detailed FRA/FCA Map, Modelled Levels and extents, Historic Flood Outlines
[Standard Notice]

Standard Notice [not for use with Special Data, Personal Data or unlicensed 3rd party rights]



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Use of Environment Agency Information for Flood Risk / Flood Consequence Assessments

Important

If you have requested this information to help inform a development proposal, then we recommend that you undertake a formal pre-application enquiry using the form available from our website:-

<http://www.environment-agency.gov.uk/research/planning/33580.aspx>

Depending on the enquiry, we may also provide advice on other issues related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In **England**, you should refer to the Environment Agency's Flood Risk Standing Advice and PPS25 and its associated Practice Guide for information about what flood risk assessment is needed for new development in the different flood zones. These documents can be accessed via:

<http://www.environment-agency.gov.uk/research/planning/82587.aspx>

<http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk>

<http://www.communities.gov.uk/publications/planningandbuilding/pps25practiceguide>

You should also consult the Strategic Flood Risk Assessment produced by your local planning authority.

In **Wales**, you should refer to TAN15 for information about what flood consequence assessment is needed for new development in the different flood zones

<http://new.wales.gov.uk/splash;jsessionid=8yIGTfGZthmB0t2vhp6hS1GcB1LXvZzB3Ylczf20Xn7LK3zk0nMk!981825250?orig=/topics/planning/policy/tans/tan15/>

You should also consult the Strategic Flood Consequence Assessment if one has been produced by your local planning authority.

In both **England and Wales** you should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk / Consequence Assessment (FRA / FCA) where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as

groundwater or overland runoff. The information produced by the local planning authority referred to above may assist here.

3. Where a planning application requires a FRA / FCA and this is not submitted or deficient, the Environment Agency may well raise an objection.
4. For more significant proposals in higher flood risk areas, we would be pleased to discuss details with you ahead of making any planning application, and you should also discuss the matter with your local planning authority.

Modelled Outputs Centered on Land off Shripney Road, Bognor Regis - Created 31/03/2014 [Ref: SSD/3278/]



- Fluvial 1% [1in100yr]
- Fluvial 0.1% [1in1000yr]
- Tidal 0.5% [1in200yr]
- Tidal 0.1% [1in1000yr]
- Tidal 0.5% [1in200yr] +CC

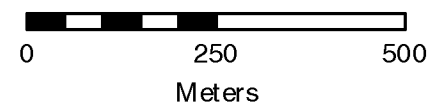


Node Point	Easting	Northing	Modelled levels in mAOD [model type below]					
			FLUVIAL			TIDAL		
			1% AEP [1in100yr]	1% AEP [1in100yr] +CC [2115]	0.1% AEP [1in1000yr]	0.5% AEP [1in200yr]	0.5% AEP [1in200yr] +CC	0.1% AEP [1in1000yr]
1	493318	101543	0.96	Not Available	1.52	2.74	4.43	3.05
2	493669	101501	Not Available	Not Available	Not Available	2.74	4.43	3.05
3	493754	101772	Not Available	Not Available	Not Available	2.74	4.43	3.05
4	493903	101494	Not Available	Not Available	Not Available	2.74	4.43	3.05
5	494371	101520	Not Available	Not Available	2.36	2.78	4.43	3.06
6	494856	101426	1.50	1.61	2.35	2.74	4.42	3.05

2009 JFLOW 2010 TUFLOW 2003 Hydro-1d (Outputs not suitable for site specific FRA)

1:10,000 *

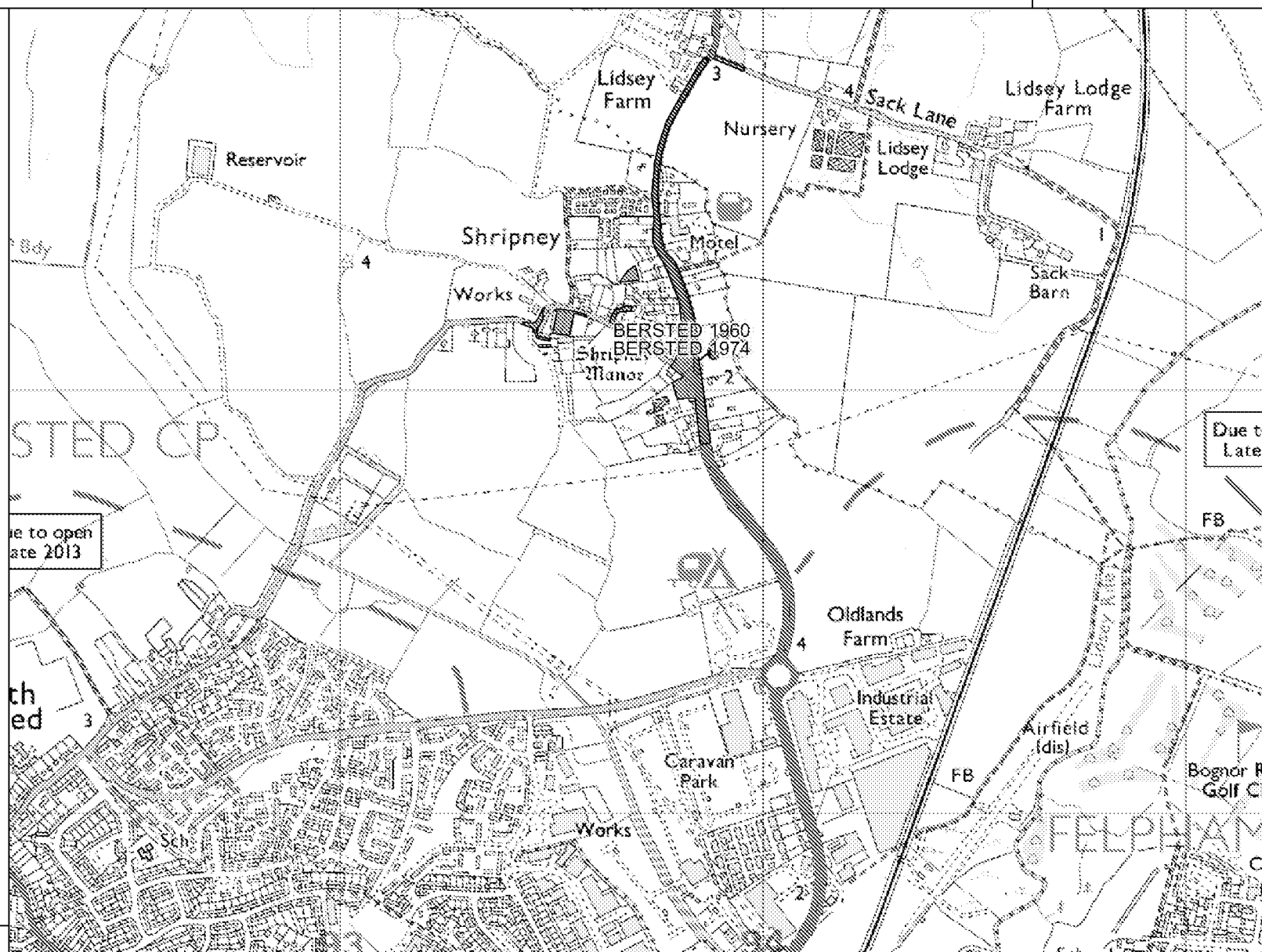
*when printed at A4.



SSD/3112/BM Flood Event Outlines

Legend

 Flood Event Outlines



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Flood Map for Planning Centered on Land off Shripney Road, Bognor Regis - Created 31/03/2014 [Ref: SSD/3278/]



- Main River
- Flood Zone 3
- Flood Zone 2

Flood Map Areas (assuming no defences)

Flood Zone 3

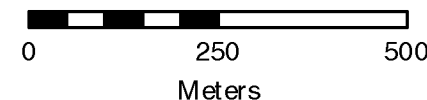
Shows the area that could be affected by flooding:
- from the sea with an 1 in 200 or greater chance of happening each year.
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2

Shows the extent of an extreme flood from rivers of the sea with up to a 1 in 1000 chance of occurring each year.

1:10,000 *

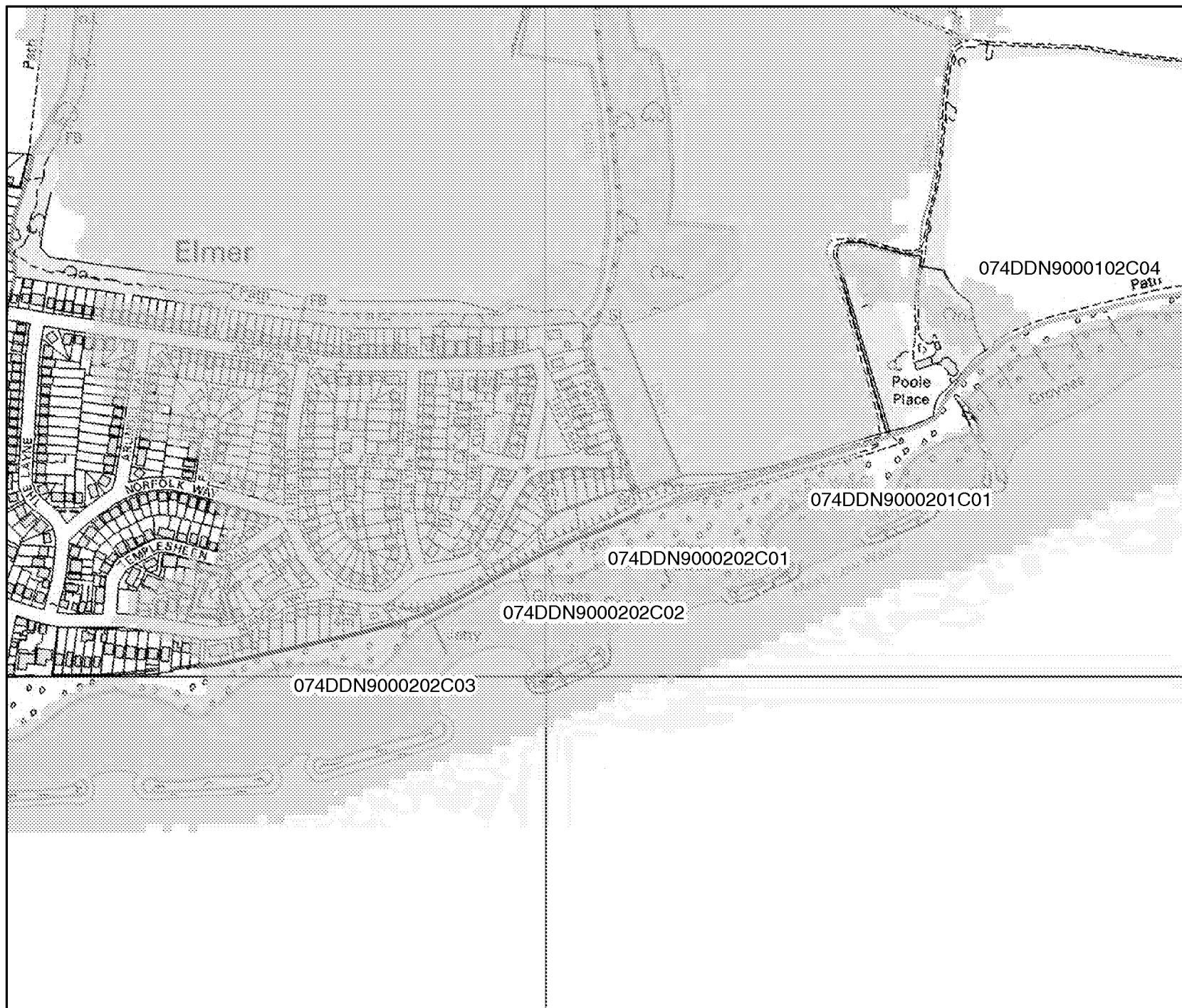
*when printed at A4.



Elmer Coastal Defences

Legend

 Extreme Flood Outline



0 50 100
Meters



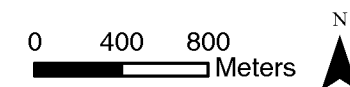
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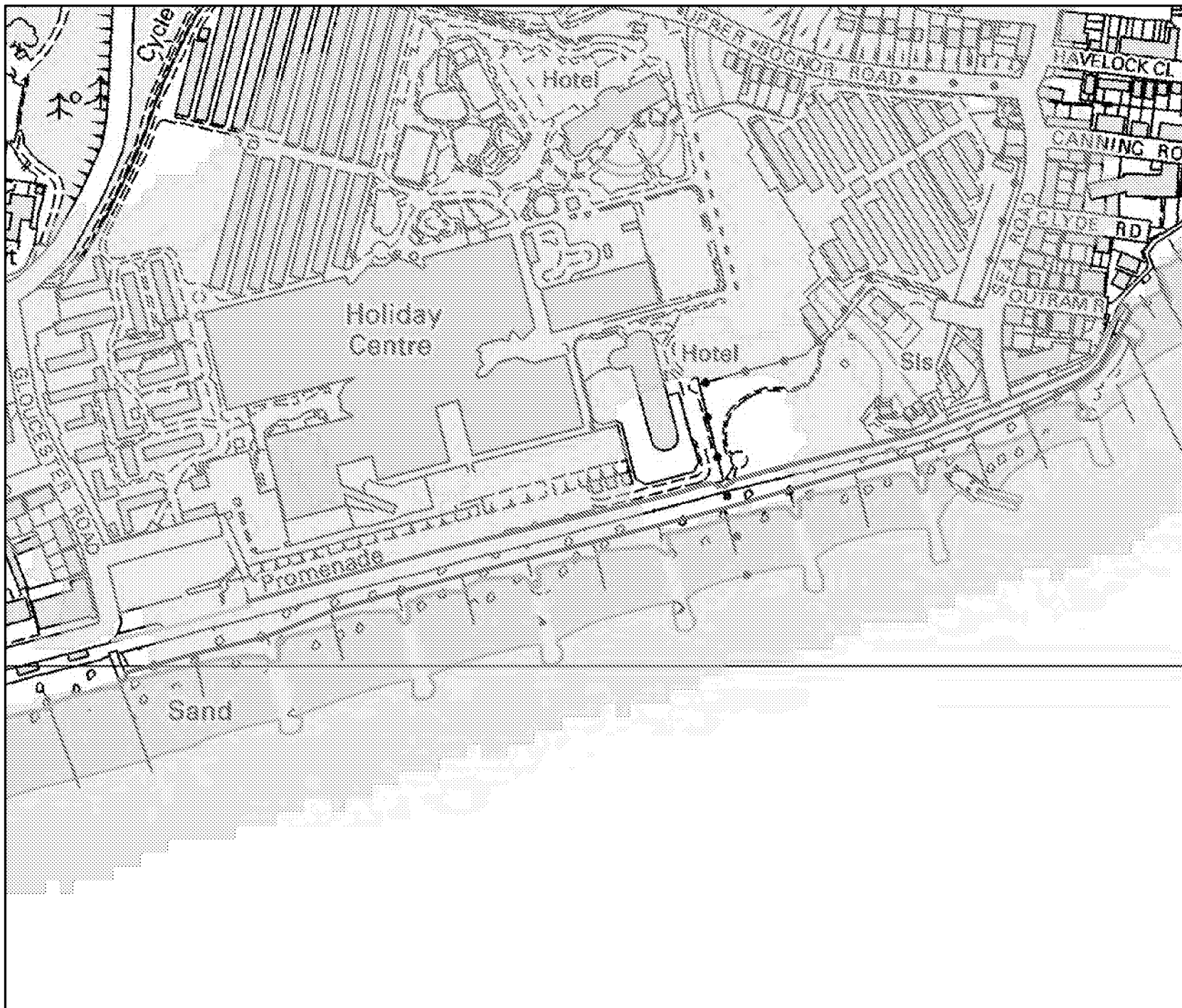


Bognor Regis & Elmer Coastal Defences

Legend

-  Selected Defences
-  Extreme Flood Outline





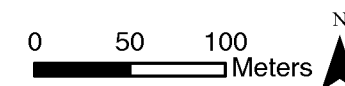
Bognor Regis Coastal Defences

Legend

Coastal Defence

Asset Reference

- 074DDN9000305C01
- 074DDN9000305C02
- 074DDN9000305C03
- 074DDN9000305C04
- 074DDN9000305C05
- Extreme Flood Outline



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APPENDIX D – SOUTHERN WATER SEWER RECORDS

CONTENTS	
Identifier	Name
Southern Water	Sewer Records

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APPENDIX E – HYDROCK DRAWINGS

CONTENTS	
Identifier	Name
Hydrock	C14443/210 Proposed Drainage Strategy
Hydrock	C14443/200 – 204 Proposed Floodplain Compensation drawings

