



Document Control Sheet

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Executive Summary

Chapter One

1.0 Executive Summary

A multidisciplinary team from Kier Business Services were engaged to carry out this Feasibility Report looking at the possible construction of a new café at Huttoft Bank.

The Surveys and Investigations section contains details of existing services records. Further reports that would be required to accompany a Planning Application would include a Flood Risk assessment and Ecological Assessment. Planners and the Environment Agency would need to be satisfied that any proposal would not impact on the existing dunes and flood defences.

It is suggested that a topographical survey, geoenvironmental site investigation, drainage condition survey and permeability testing would be required to inform any further design works. In addition it is suggested that a Refurbishment and Demolition Asbestos survey should be carried out on the existing boat house.

The report reviews existing site issues and provides details of the proposed design solution.

The building is required to sit within the confines of the existing boat shed footprint, as a result this study has been restricted to one option, it will be single storey with a roof terrace.

Steel frame and traditional methods of construction were considered but dismissed due to cost reasons and it is anticipated that the building will be of modular construction.

A new 3 phase electricity supply will be installed.

The Estimated cost for the scheme based on BCIS rates and budget price from modular building provider, excluding vat, is £462,716#

Meridian figure given - refer to Chapter 7 for percentage range





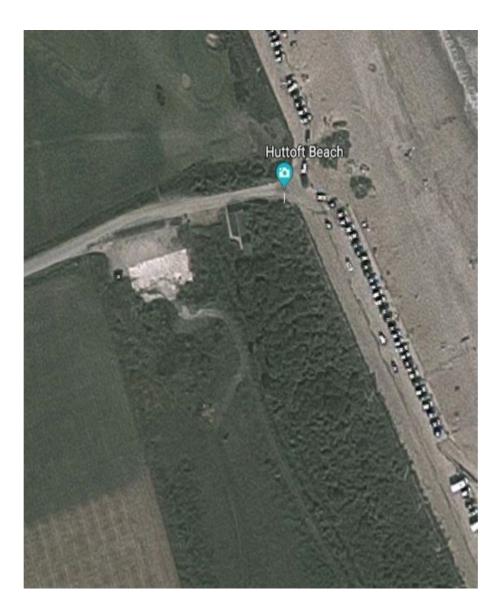
2.0 Introduction

This feasibility study for Huttoft Bank Boat Cafe has been undertaken by Kier Business Services in order to review all aspects of the potential project. An analysis of the existing site has been carried out to look at aspects such as site constraints, existing and future service provision and environmental factors.

The project brief from LCC has provided the basis for the building design with comment and input from each of the disciplines contained in their individual reports.

The proposed café is required by the Environment Agency to sit on the footprint of the existing boat house building to avoid any further impact on the existing dunes.

It is envisaged that this comprehensive assessment and feasibility study will enable the client to understand the constraints and opportunities of the existing site and the proposed new building. This report will subsequently provide a solid basis on which to move forwards with the detailed design stage of the project.



Imagery©2018 Google, Map data ©2018 Google



Introduction

Chapter Two

Surveys &Investigations

Chapter 3

3.0 Surveys and Investigations

3.1 Flood Risk.

Information from the Environment Agency suggests that the site lies in a Flood Zone 3 and is therefore at high risk of flooding. A flood risk assessment will be required to accompany the planning application.



Flood Risk Map



3.2 Utilities Records

3.2.1 Water & Sewerage.

Anglian Water show existing connections to mains water supplies, there are no sewerage provisions to the site and so it is assumed the use of a septic tank will be required.

3.2.2 Gas.

There is no gas on the site.

3.2.3 Electricity.

There is no electricity on the site but supplies are available on Sea Lane.

3.2.4 BT.

A BT line on poles runs across the site.

3.2.5 Virgin Media.

There does not currently appear to be a Virgin Media connection in the area.

3.3 Building Control & Planning.

The site falls under the administration of East Lindsey District Council

Lincolnshire County Council Planning Officers have been consulted for initial feedback relating to the scheme, preliminary feedback appears to be positive.

The Planners have recommended early consultation with ELDC, Huttoft Parish Council, Local County Councillor, Highways, Lincolnshire Wildlife Trust and Environment Agency.

Preliminary discussions with building control have raised no concerns, particularly with regard to the use of neighbouring toilet facilities.

3.4 Highways & Footpaths.

The site is accessed via Sea Lane which is an un-classified road without public footpaths.



Imagery@2018 Google, Map data @2018 Google

3.5 Topographical & Underground Services Survey

Given the high-level nature of this Feasibility Study, topographical and underground services surveys are excluded at this time. However, moving forwards, it is critical that these surveys should be undertaken at the earliest opportunity beyond feasibility. In particular it would be critical to receive survey and legal information relating to the site boundary in order to establish the exact distance between the west wall of the building and the site boundary.

3.6 Archaeology.

Lincolnshire County Council's Historic Environment Team and Heritage Lincolnshire were approached with regards to the proposals, both report that there are no archaeological implications on the site.

3.7 Ecology.

If the scheme is to progress to Planning Application Stage, the Planning team have informed us that an ecological assessment would be required as it is part of the Coastal Conservation area, a Local Wildlife site.

3.8 Arboriculture.

There are no trees within the existing site that would be affected by the proposed works.

3.9 Site Investigation.

It is suggested within the CSE report that an additional geoenvironmental site investigation may be required to inform any future design development. This will also be required to ensure the site is free from any un-exploded ordinance.

3.10 Drainage Survey.

Details of existing below ground drainage surveys, SuDS and ground water are referred to in the Civil and Structural report in Section 5. It is suggested that a drainage condition survey and permeability testing should be carried out if the design progresses beyond feasibility stage.

3.11 Condition Survey.

A condition survey is not available for the boat house building but given its age and appearance it is anticipated to be in poor condition.

3.12 Asbestos Survey.

An Asbestos Survey is not available and so a R and D asbestos survey will be required prior to commencement of any work on site.



Architectural Report

Chapter 4

4.0 Architectural Report

4.1 Site Context

The Land was acquired under Section 58 powers of the Lindsey County Council (Sand hills) Act 1932. It is part of the Coastal Conservation Area which spans the East coast. Purchase of a stretch of sand hills, beach with former Coastguard Station and Rocket House (both of which were subsequently sold) - also Pt Os 227 & Pt Os 270, being a plot adjacent to Roman Bank, together with vehicular rights of way over two roads off Roman Bank 07/04/1937. See also Huttoft Mogg's Eye/Marsh Yard Car Park (UPRN E2495), which also comprised part of this acquisition. The toilets on the Car Terrace site belong to ELDC, whose responsibility it is to maintain. This site is covered by a wider area of land which has now been selected as a Local Wildlife Site (LWS). These are areas that stand out as being of particular value for wildlife, and which are recognised within the planning system.

The site is part of the Coastal Conservation Area and falls within Lincolnshire Coastal Country Park is located between Sandilands and Chapel St Leonard's, covering approximately five miles of coastline and up to 22 square miles of coastal hinterland. The area comprises working farmland, established nature reserves (reed beds and wetlands) and coastal dunes, providing accessible natural greenspace for residents and visitors. The partnership, led by Lincolnshire County Council, is working to link together existing wildlife sites by creating new nature reserves with wetland, reed bed and grazing marsh habitats, along with creating new access routes and supporting the development of a year round tourist destination.

4.2 Site Issues

The site is bounded by the beach access to the north, dunes to the east, public toilet access to the south and a drainage dyke to the west.

Sand gathers around the north-east corner and so the wall to this corner will have to act as a retaining wall.

Any development is restricted to the footprint of existing boathouse to avoid any impact on the dunes and it may be necessary to apply for an Environmental Permit due to the proximity to the sea defence.



Aerial Location Plan Imagery@2018 Google

4.3 Building Brief

The brief for the new building was to include:

- Café Kitchen, internal fit out to be confirmed.
- Seating area internal circa 10-20 covers, subject to available area.
- Break out decking areas.
- WCs existing WC block to be refurbished.

4.4 Layout

The building will sit within the confines of the existing boat shed footprint, it will be single storey with a roof terrace. The internal layout has been developed in conjunction with the client to maximise the useable café space and hence no toilets have been included, instead, the customers and staff will use the existing adjacent toilet facilities which will be refurbished.

4.5 Construction

The building is required to be flood resistant and resilient.

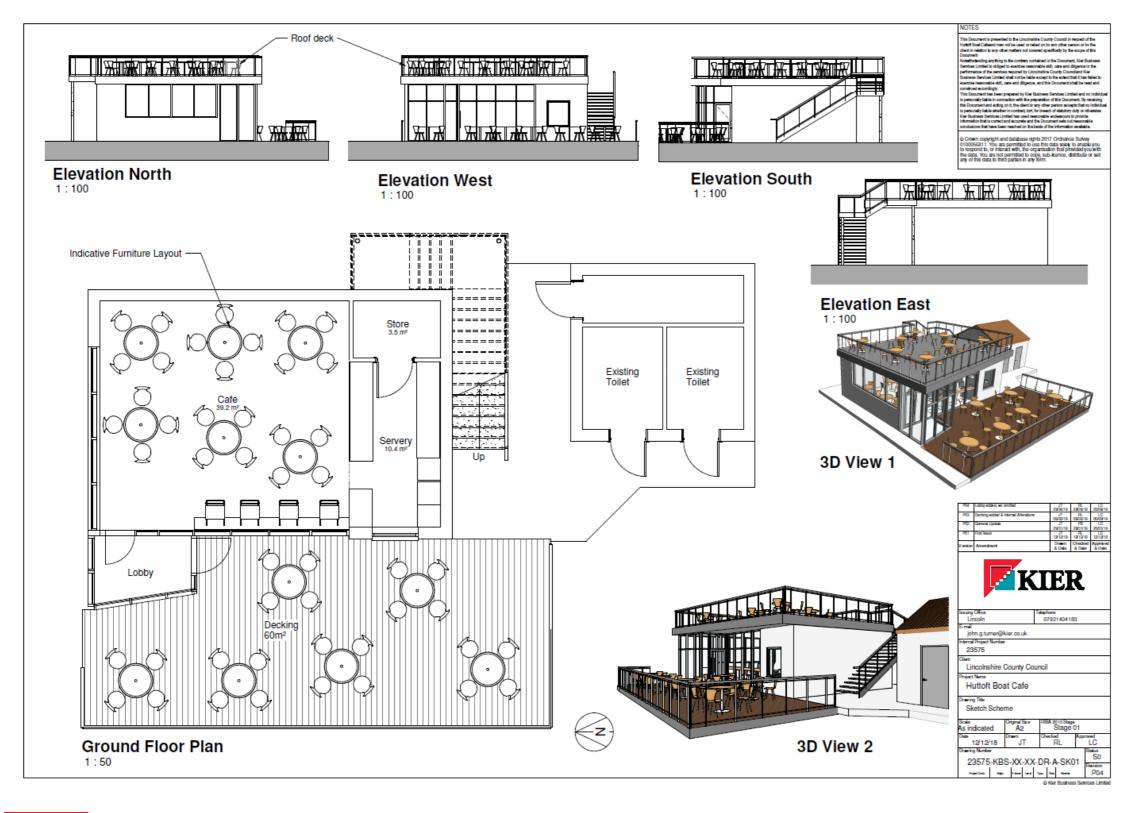
Steel frame and traditional methods of construction were considered but dismissed due to cost reasons and it is anticipated that the building will be of modular construction.

We have approached Springfield Mobile Limited of Unit 2, 12 Abbotsfield Road, St.Helens, Merseyside, WA9 4HU who have advised on the feasibility of the unit and provided a budget price for the supply and installation of a modular building which is incorporated into the breakdown in chapter 7.

4.6 External works

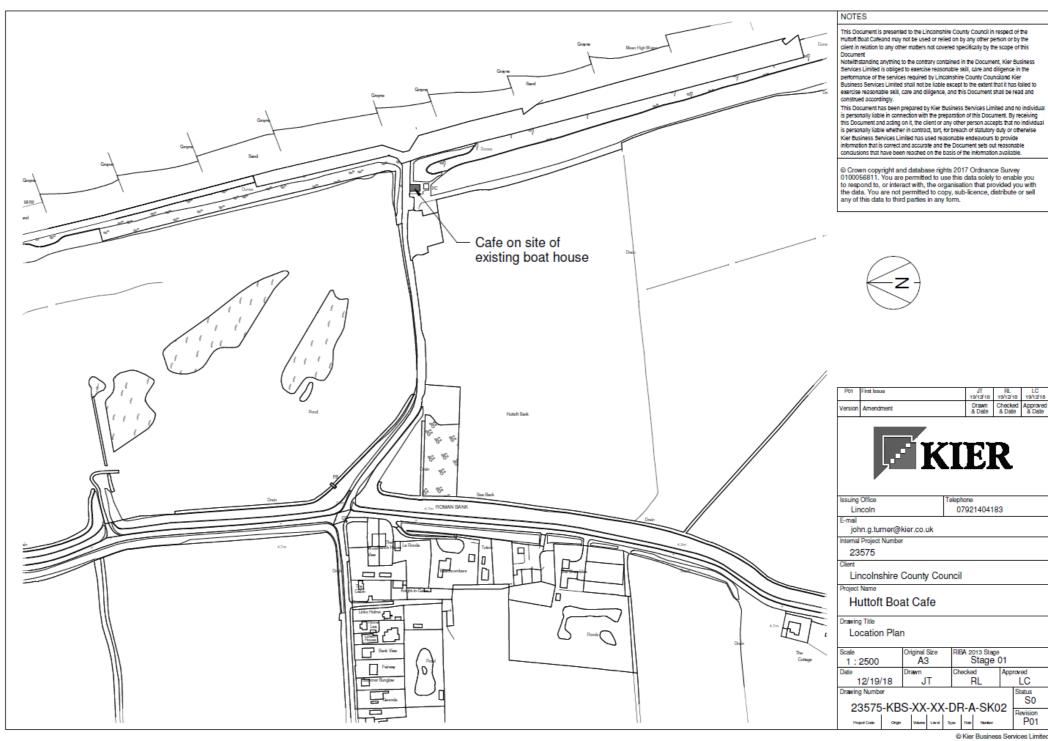
External deck has been included at this stage but further investigation is required as we are awaiting feedback from Lindsey Marsh Internal Drainage board.





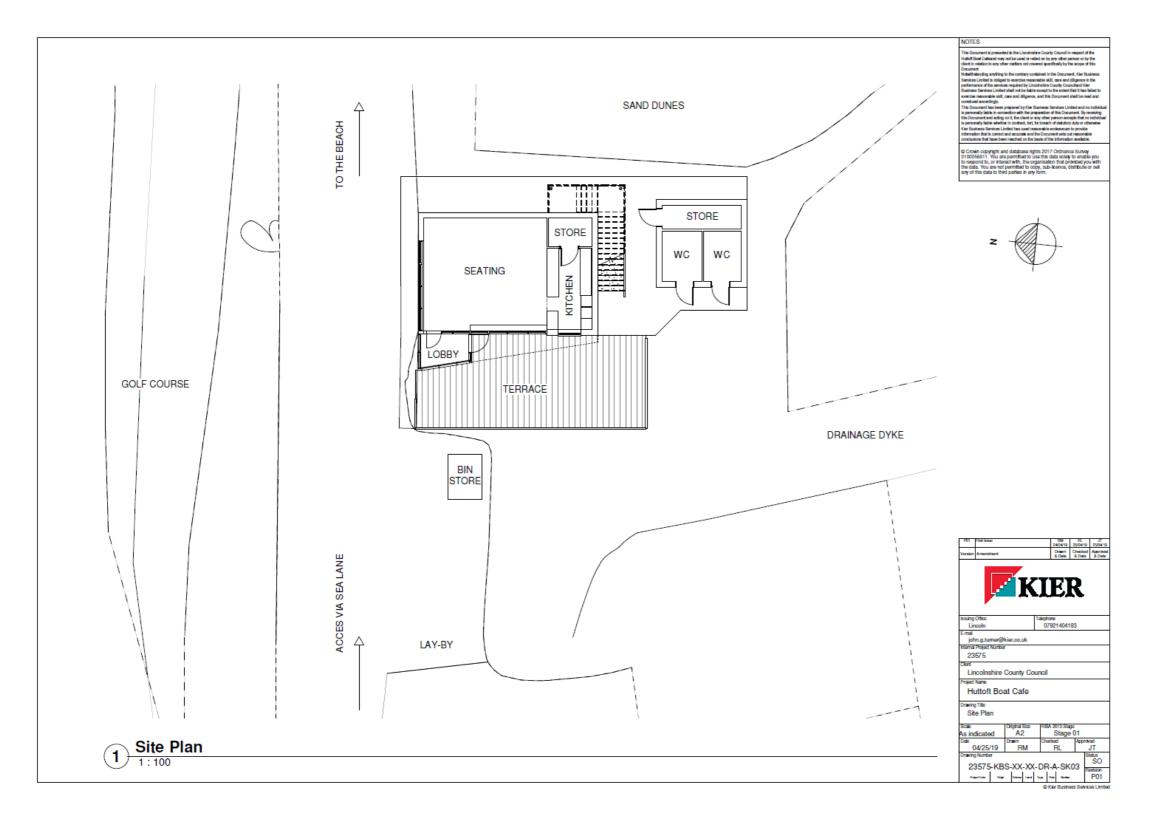


4.9 Location Plan











Civil & Structural Engineers Report

Chapter 5

5.0 Civil and Structural Engineers Report

Huttoft Bank Boat Café, Sea Lane, Huttoft, Alford, Lincolnshire LN13 9RR

Introduction

The existing structure is a precast concrete building, approx. 8m x 5m on plan, with a duopitch corrugated asbestos-cement sheet roof, large metal framed doors to the north elevation and boarded up windows to the south and west elevations. A detached, more modern, public toilet building is located within 10m to the south of the building and a small layby and car park to the west.

The existing building is located immediately behind a large sand bank and attracts a build-up of windblown sand deposits against its east elevation.

The existing building is proposed to be demolished and replaced with a modern single storey replacement on the same footprint with an accessible roof deck area for public viewing.

A refurbishment and demolition asbestos survey will be required.

Site History

Historic mapping from 1888 shows the beach access road as an extension from Sea Lane at the junction with Roman Bank Road (later renamed Sea Bank between 1907 and 1951).

The building and Public Conveniences buildings first appear on the 1968 mapping, as does the indication of land drainage ditches to the south of Sea Lane and the formation of Sealands Golf Course to the north.

The current site layout appears to represent that shown on the most recent historic mapping, dating from around 1971, however it is assumed that the public toilet building has been replaced or refurbished to a more modern construction in recent years due to its present day appearance.

Surrounding Area

The surrounding area to the building and public toilets is remote, with Sealands Golf Course to the north, Huttoft Beach to the east and open grassland to the south. To the

west, Whitehorse Farm and residential dwellings with gardens are located to the south of Sea Lane, beyond Roman Bank/Sea Bank.

A topographical survey and services trace will need to be carried out to inform proposed site levels and identify any buried services/obstructions.

An ecology/habitat survey will need to be carried out to advice of any restrictions regarding local wildlife, flora and fauna.

Geology

The British Geological Survey (BGS) online historic borehole data was unavailable at the time of writing.

Reference to the site investigation report for the recent Chapel Point North Sea Observatory, approx. 6km to the south of this site, indicates the likelihood of loose sands, silts and clays. For the North Sea Observatory project, screw piles were utilised due to the variable ground conditions.

A full geo-environmental site investigation will need to be carried out for the Café area in order to investigate the geology, hydrology, contamination and ground gases etc.

Radon

Publicly available mapping data indicates that the site is not located in a radon potential area.

Flood Risk

The site is in a Flood Zone 3, which is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year. A Flood Risk Assessment will be required as part of a planning application.

The site is high risk of flooding from the sea. The proposed drainage, building construction and floor levels will need to be carefully considered to take account of this.

Drainage

The existing public toilets are understood to be served by a septic tank. Surface water discharge from the existing Café, public toilets, Sea Lane and car parking provision is currently unknown and may simply drain to ground if there is no highway drainage provision at present.

Foul water disposal from the new Café building will need to be discharged to a septic tank.



6.0 CDM Report

6.1 General

The Construction (Design and Management) Regulations 2015 (CDM 2015) were introduced under the Health and Safety at Work Act 1974, and they apply to all construction projects carried out in Great Britain.

CDM 2015 aims to ensure that no-one is harmed during the work, and that the accommodation is safe to use and maintain whilst providing good value. CDM 2015 promotes effective planning which will also help ensure that the construction work is well managed with fewer unexpected costs and problems.

In order to achieve the above CDM 2015 places various legal duties on the key parties involved in the project namely; the client, the designers and the contractors. Further details on the specific duties can be provided on request.

The CDM 2015 will apply to the proposed project. The client must therefore ensure they comply with their duties under the Regulations including the written appointment of a Principal Designer and a Principal Contractor.

6.2 Site Location & Existing Structures

The land is part of the Coastal Conservation Area which spans the East coast .LCC Purchased of a stretch of Sandhill's, beach with former Coastguard Station and Rocket House.

The existing Huttoft Bank Boat House is a precast concrete building, approx. 8m x 5m on plan, with a duopitch corrugated asbestos-cement sheet roof, large metal framed doors to the north elevation and boarded up windows to the south and west elevations. A detached, more modern, public toilet building is located within 10m to the south of the Café and a small layby and car park to the west.

Historic mapping from 1888 shows the beach access road as an extension from Sea Lane at the junction with Roman Bank Road (later renamed Sea Bank between 1907 and 1951).

The Boat House and Public Conveniences buildings first appear on the 1968 mapping, as does the indication of land drainage ditches to the south of Sea Lane and the formation of Sealands Golf Course to the north.

The current site layout appears to represent that shown on the most recent historic mapping, dating from around 1971, however it is assumed that the public toilet building has been replaced or refurbished to a more modern construction in recent years due to its present day appearance.

6.3 Existing Site Access

Access onto the site is via a beach drive (Known as Huttoft Bank) which is a relatively narrow roadway off Roman Bank a fairly busy trunk road following the coast from Skegness. The access road gives access to the Beach Terrace Carpark & Café,, with Sealands Golf Course to the north, Huttoft Beach to the east and open grassland to the south. To the west, Whitehorse Farm and residential dwellings with gardens are located to the south of Sea Lane, beyond Roman Bank/Sea Bank.



Fig 1 showing Huttoft Bank access Road

6.4 Contractor Site Access

The proposed extension is to be on the footprint of the existing building, Contractors access will be the same as the current access down Huttoft Bank.



Fig 2 Showing Boat House & Cafe

6.5 Segregation

It is anticipated that segregation of the construction works will be by 2m high anti climb herras fencing, this will be around the perimeter of the building and site compound.

6.6 Services

A Linesearch 'before u dig' enquiry LSBUD Ref: 14422433 indicates that there are no mains electricity, gas, potable water or sewers along Sea Lane to the east of Roman Bank/ Sea Bank.

BT mapping indicates a supply along Sea Lane to the east of Roman Bank/Sea Bank.

Anglian Water records show water in Roman Bank but not in Huttoft Bank.

Anglian Water records show no drainage assets around the site; however it is understood that there is some form of sewage treatment plant on site.

Western Power service drawings show no assets around the

Cadent Gas record drawings show no assets in the area.

Virgin Media records drawings show no assets in and around the site.

It is recommended that a GPRS Survey is undertaken to ascertain any unknown services and underground obstructions within the curtilage of the site.



CDM Report

Chapter Six



6.7 Ground Conditions

The Structural section of the feasibility covers the ground conditions and a full geo-environmental site investigation will be required.

6.8 Asbestos

The whole of the boathouse roof is a duopitch corrugated asbestos-cement sheet roof an R&D Asbestos survey will be required.

6.9 Demolition / Temporary Works

The proposed works include the full demolition of the existing building a written method statement will be required prior to demolition.

Any temporary works required in association with the construction of the new structure must be designed, installed and inspected by a competent qualified person.

6.10 Fire Strategy / Emergency Access

The proposed buildings travel distance is under 18 metre's therefore a fire exit is not required however there is a pair of double doors out of cafe .

6.11 Welfare

The client must be satisfied suitable welfare provisions are provided in accordance with Schedule 2 of the CDM 2015. It is anticipated that the Principal Contractor will be required to provide adequate welfare provision as part of their site setup.

6.12 Access and Maintenance

In developing the design consideration needs to be given to future access/maintenance of the structure.

6.13 Unexploded Ordnance

Publicly available mapping data indicates that Skegness was a Luftwaffe target 15km to the south and Mablethorpe indicated as an 'Other' target 6km to the north. It must be also noted that one of the buildings was historically called the Rocket store these were primarily emergency maroons.

It would be recommended that a UXO survey be carried out at the next project phase which may be referenced within the site investigation Phase 1 desk study.

7.0 QS Report

Order of Cost Estimate Summary



Project: HUTTOFT BEACH CAFÉ Reference: BOAT CAFÉ - MODULAR OPTION Date: 29/04/2019

						_	
Building works estimate						£	355,956
Main contractor's preliminaries estimate		included				£	-
Sub-total						£	355,956
Main contractor's overheads and profits estimate		included				£	-
Works cost estimate						£	355,956
Other development/project costs estimate						£	-
Base cost estimate BCIS Tender Price Index	326	1Q 2019				£	355,956
Risk allowances estimate							
(a) Design development risks estimate (b) Construction risks estimate (c) Employer change risks estimate (d) Employer other risks estimate		not included not included	5.00% 5.00% 0.00% 0.00%	5 5 5	17,798 17,798 -		
				£	35,596	£	35,596
Construction cost estimate (excluding inflation)						£	391,552
Tender inflation estimate BCIS Tender Index	328	2Q 2019	0.61 %	£	391,552	£	2,402
Construction cost estimate (excluding construction inflat	ion)					£	393,954
Construction inflation estimate BCIS Tender Index	335	4Q 2019	2.13 %	٤	393,954	٤	8,408
Construction cost estimate (excluding inflation)						£	402,361
Project/design team fees estimate			15%			£	60,354
Total Project Estimate including Fees						2	462,716
Total Project Estimate including Fees less 10%			-10%			£	416,444
Total Project Estimate including Fees plus 10%			10%			£	508,987
VAT Assessment					<u> </u>	Exc	luded

Estimate prepared by: S.Supiya

Checked by: F. Ngulube MRICS

Assumptions & Qualifications

Project: HUTTOFT BEACH CAFÉ Reference: BOAT CAFÉ - MODULAR OPTION Date: 29/04/2019

Exclusions

- 1 VAT excluded.
- 2 No allowance for phasing
- 3 Excludes risk allowances from risk register
- 4 No allowance for ICT hardware, servers, Interactive Whiteboards and computers
- 5 No allowance for external works incl. car parking
- 6 No allowance for using roof deck as a sitting area
- 7 No allowance for installing a new drainage system
- 8 No allowance for gas supplies to the site
- 9 No Allowance have been made for external works
- 10 No inflation calculation included as no proposed works programme in place

Assumptions and Qualifications

- 1 Based on Kier sketch drawing dated 12/12/18 Proposed General Arrangement, 23575-KBS-XX-XXDR-A-SK01
- 2 Assumes work carried out during normal working hours.
- 3 Included allowance for utility services upgrade (subject to survey).
- 4 Allowance for localised drainage works included
- 5 Based on BCIS Rates, rates from Spons Price Book and in-house past projects NB Rate reflects BCIS forecast as shown on summary. It should be noted that following the triggering 6 of Article 50 (Brexit), the current situation is causing uncertainty within the marketplace generally, therefore we would advise an estimated accuracy range of plus or minus 10%.
- 7 Design development risk allowances have been included.
- 8 Construction risk allowances have been included.



Chapter Seven





County Offices Newland Lincoln LN1 1YL

Month	Spend
Apr-19	7,185.00
May	
June	5,000.00
July	5,000.00
Aug	5,000.00
Sept	5,000.00
Oct	1,844.00
Nov	1,844.00
Dec	1,843.00
Jan-20	105,000.00
Feb	105,000.00
March	105,000.00
Apr	105,000.00
May	
June	
July	
Aug	
Sept	
Oct	
Nov	
Dec	
Jan-21	
Feb	
March	
Apr	10,000.00
Total	462,716.00

8.0 Risk Register

A Risk Register has been put together by the Project Manager is this is set out on the following pages to outline the possible risks that may be encountered during the project, their probability, impact and potential related costs.

T	his Pr	oject F	tisk Log Close	ed/Mitigated Risks Risk sna	apshots for this project	Risks for all projects My Risks								
	Γick he	ere to ir	nclude completed i	risks in the table Tick here	to exclude risks with s	uppressed risk status								
Pr	obabil	ity :		✓ Impact :	Select Category :	~								
			Q CI	ick here to search										
			Date raised	Raised by	Last updated	Risk	Probability	Impact	Status	Owner	Cost	Score	Standard	Previous Snapshot
•	₽		19 Dec 2018	John Turner input on 19 Dec 2018		Project fails to get planning approval Category : Strategic & Commercial	Possible	Critical	Live Risk Status	John Turner	£0.00 £0.00	6		
•	₽		19 Dec 2018	John Turner input on 19 Dec 2018	19 Dec 2018	Project fails to get approval from the Environment Agency Category : Strategic & Commercial	Possible	Critical	Live Risk Status	John Turner	£0.00 £0.00	6		
+	₽		19 Dec 2018	John Turner input on 19 Dec 2018	29 Apr 2019	Electricity supply not available to too costly Category : Economic/Financial	Possible	Major	Live Risk Status	John Turner	£30,000.00 £18,900.00	5		
+	₽		19 Dec 2018	John Turner input on 19 Dec 2018	29 Apr 2019	In-adequate foul water drainage Category : Economic/Financial	Possible	Major	Live Risk Status	John Turner	£20,000.00 £12,600.00	5		
•	₽		19 Dec 2018	John Turner input on 19 Dec 2018	29 Apr 2019	Un- exploded ordinance on site Category : Economic/Financial	Hardly Ever	Major	Live Risk Status	John Turner	£10,000.00 £5,000.00	4		



Risk Register

Chapter Eight

Preliminary Programme

Chapter 9

9.1 Programme Commentary

9.2 Introduction

This commentary is based on the preliminary programme included in this report. The proposed dates form the basis for discussion and agreement with LCC and will define the scheduling principles / assumptions to be adopted henceforth for planning purposes.

9.3 Current Position

This report is the completion of Preparation & Brief (RIBA 1).

9.4 Funding

The project funding is yet to be confirmed.

9.5 Planning Application

The planning application is scheduled for submission in August 2019 with a decision anticipated in October 2019.

9.6 Surveys

The following surveys will need to be undertaken:

Below ground utilities desk top.

Drainage (CCTV) survey.

GPRS (utilities) and UXO survey.

Site Investigation.

Topographical Survey.

Ecological Survey.

Asbestos Refurbishment and Demolition Survey.

Surveys are scheduled to commence in February 2019. Procurement of surveys will comply with LCC Corporate Property Procurement & Tendering Policy Handbook.

9.7 Preparation and Brief (RIBA 1)

The Preparation and Brief stage, Outline Feasibility, RIBA 1, completed in April 2019.

9.8 Developed Design (RIBA 2/3)

RIBA 2/3 commences in June 2019 and is planned for completion and sign off in August 2019, following which a planning application will be submitted subject to receipt of all necessary supporting documentation.

9.9 Technical Design (RIBA 4)

RIBA 4 commences in August 2019 with expected completion September 2019 however the Technical Design will be progressing at risk as the Planning Application decision will not have been reached at this point (decision anticipated October 2019). Written acknowledgment will be required from LCC to proceed at risk

9.10 Contractor Procurement

Contractor procurement will be via a traditional tender process assuming a 4 week tender period. The Principal Contractor will be appointed once RIBA stage 4 has been completed.

It is intended that a preferred contractor will be appointed in November 2019.

9.11 Implementation

Construction works are scheduled for commencement in September 2019 following a 6 week mobilisation period and the lead-in periods for ordering materials. Works on site will extend for 16 weeks with practical completion anticipated in April 2020. The 12 month Maintenance Period will follow concluding in April 2021.

9.12 Critical path

The high level critical path is identified as follows:

Outline feasibility.

Surveys.

Stage 3 report.

Developed design.

Planning and consent.

Technical design.

Contractor procurement.

Mobilisation.

Construction.



9.12 Preliminary Programme

Huttoft Bank Boat House Café Preliminary	Programme - Modular Solution		2019												2020																																	
Task	Stakeholder	Duration/ Weeks	14 1: \$\delta \delta \d	1	1 1	18 19 No. 19		1 1		-1	25 eun 17	26 ann 24	27 28 27 28 27 28 1 8	3 29 15	30 Anr 22	31 32 And and 29 5	2 33				7 38 5 5 9 16		40 4 53 30		43 5 21				48 25					2 uer 6	٦	5 20 20 21	6 qg	7 2 3 10	9 17	9 1 2 2 24	0 11 E W 2 9	12 E W 16	13 1 W 23	Mar	Apr	Apr	17 18 \$\delta\delt	ě
Develop design	KBS	6	\top	\top	П	\top	\top	\Box							П	\top	\top	Н	\top	\top	\top	\Box	\neg	\top	\top	\Box	\top	\top	\vdash	\neg	\top	\top	\Box	\neg	\top	\top	+	\top	\vdash	\top	\top	Н	\top	\top	\top	+	+	+
Stage 3 report	KBS	2		\top	П	\neg	\top	\Box		\top	П	\neg	\top			\top	\top	П	\top	\top	\top	П	\neg	\top	\top	П	\neg	\top	П	\neg	\top	\top	П	\Box	\neg	\top	\top	\top	П	\top	\top	П		\top	\top	\top	\top	\top
Design Freeze	LCC/KBS	2			П		Т	П	\neg	\top	П	\neg						П	\neg	\top	\top	П		\top	П	П		\top	П	\neg	\top	\top	П		\neg	\top	\top	\top	П	\neg	\top	П		\top	\top	\top	\top	\Box
Planning Process		12			П		Т	П	\top	Т	П	\neg		Т	П			П				П					\neg	\top	П	\neg	\top	\top	П		\neg	\top	\top	Т	П	\neg	\top	П		\top	Т	\top	\top	\Box
Detailed Design	KBS	6			П		Т	П	\neg	\top	П			\top	П			П				П		\top	П	П		\top	П	\neg	\top	\top	П		\neg	\top	\top		П	\neg	\top	П		\top	\top	\top	\top	\Box
Pricing by Main contractor	Main Contractor	4			П		Т	П	\neg	Т	П	\neg		Т	П			П	\neg	\top	Т					П	\neg	\top	П	\neg	\top	\top	П		\neg	\top	\top	Т	П	\neg	\top	П		\top	\top	\top	\top	\Box
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Conclusions

Chapter 10

10.0 Conclusions

An analysis of the site was carried out in terms of environmental factors such as flood risk, although the site is deemed to be in high risk of flooding, damage could be mitigated by the use of flood resistant and resilient materials. An ecology survey is required as the site is part of the coastal conservation area. Archaeological teams have reported that there is to be low risk of finds on the site. A Site Investigation survey and a drainage survey are required and therefore these remain potential risk items. The main risk factors for the project are failure to obtain planning or Environment Agency approval, early consultation has taken place and will be ongoing throughout the design process.

The building would be of modular construction.

A new three phase electricity supply would be installed. It is anticipated that this will terminate in the store in the existing toilet block where a new meter would be installed.

A supply would then be taken to the modular unit to serve electric heating, lighting and small power in the cafe.

Mechanical ventilation would be required to the kitchen.

The timetable for completion of the project based on preliminary programme is anticipated as April 2020, subject to review and critical path items.

The Estimated cost for the scheme based on BCIS rates and budget price from modular building provider, excluding vat, is £462,716#

Meridian figure given - refer to Chapter 7 for percentage range



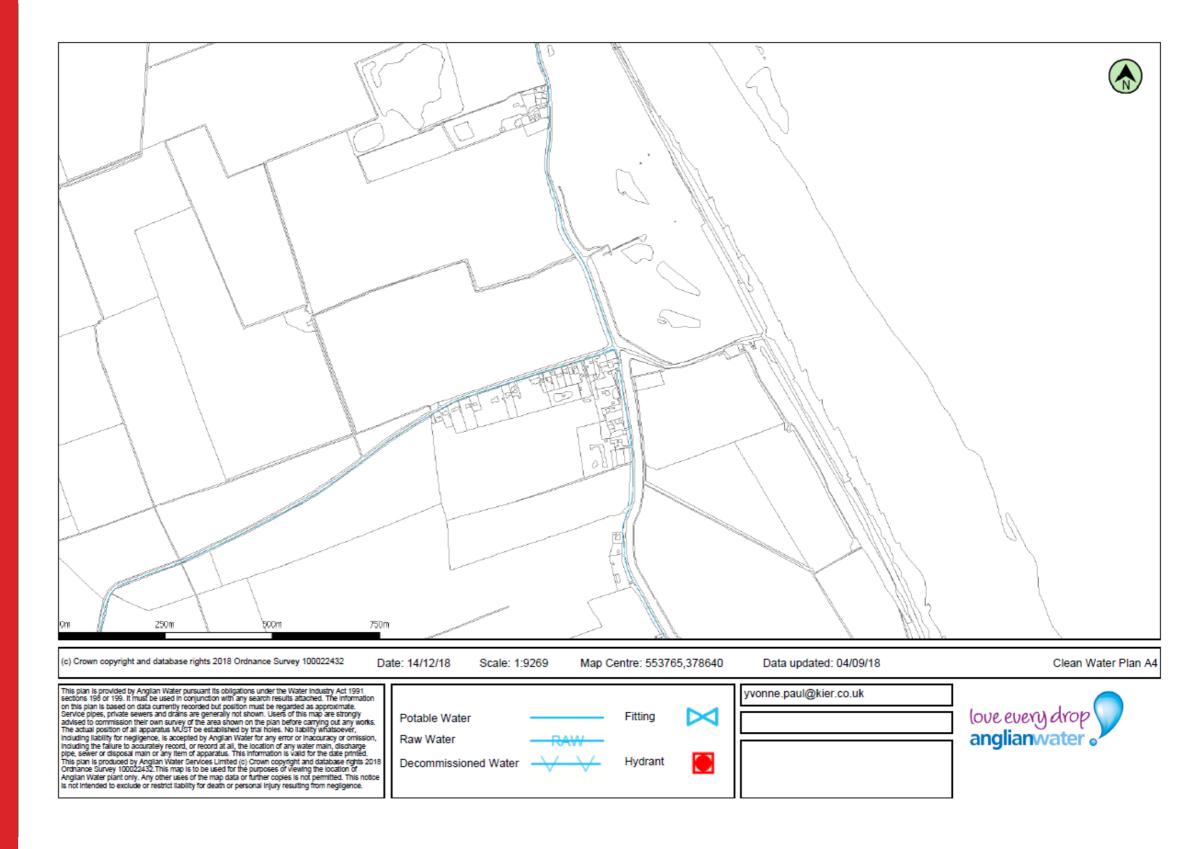
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Appendices

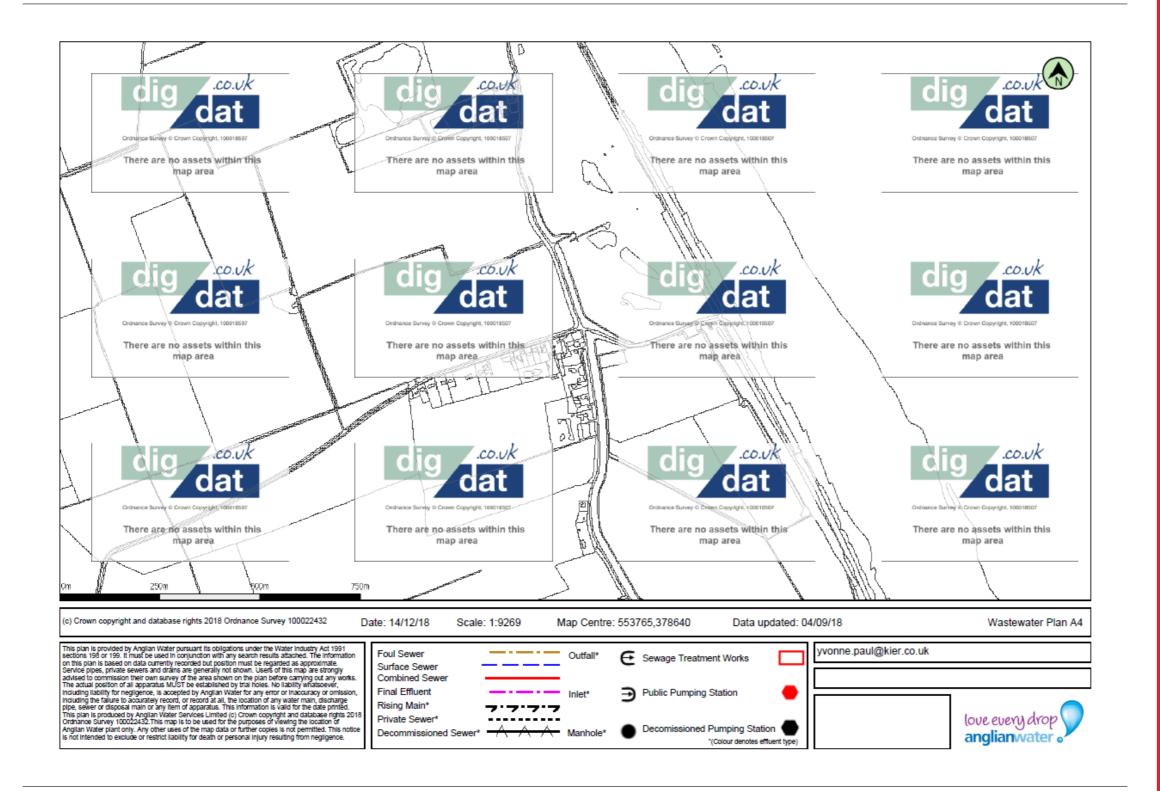
Chapter 11



Appendix A1—Anglian Water Supply Record

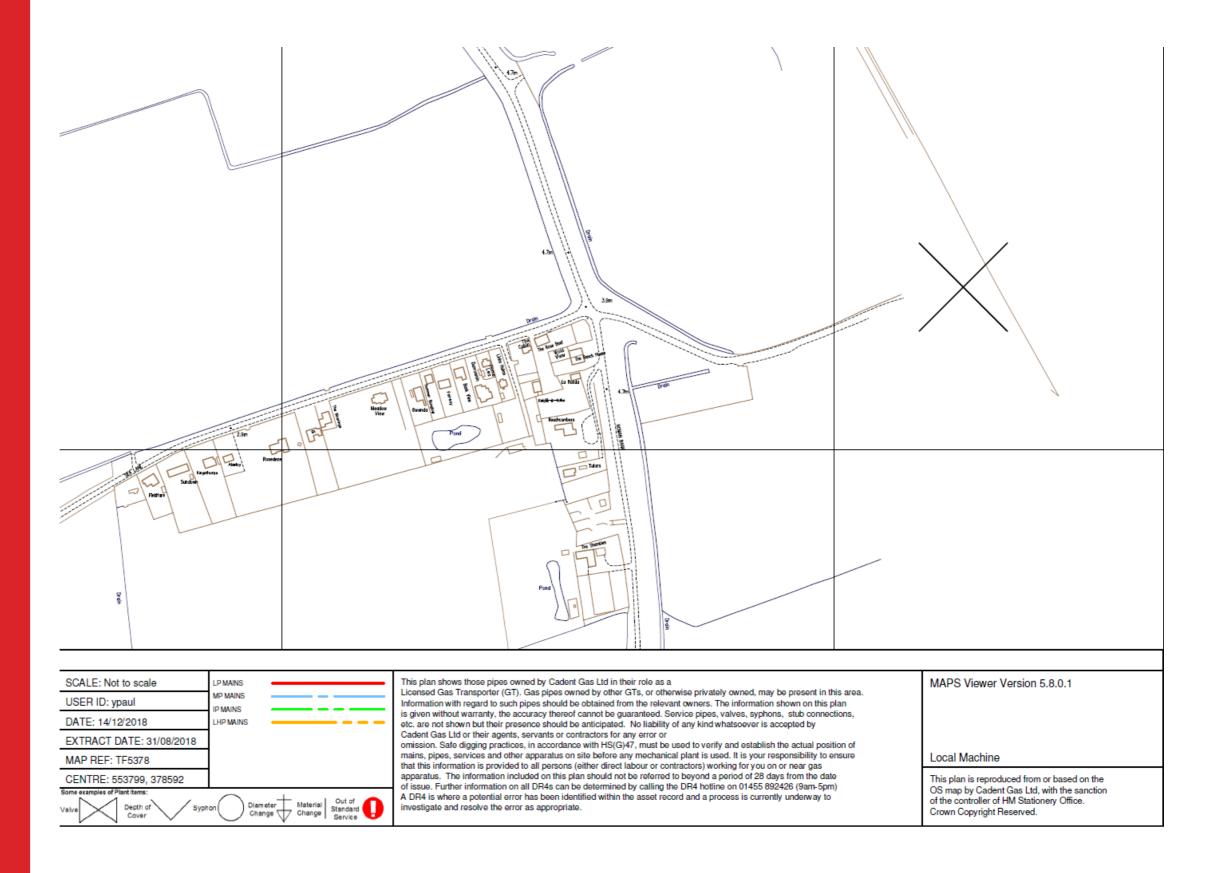


Appendix A2—Anglian Water Sewerage Record





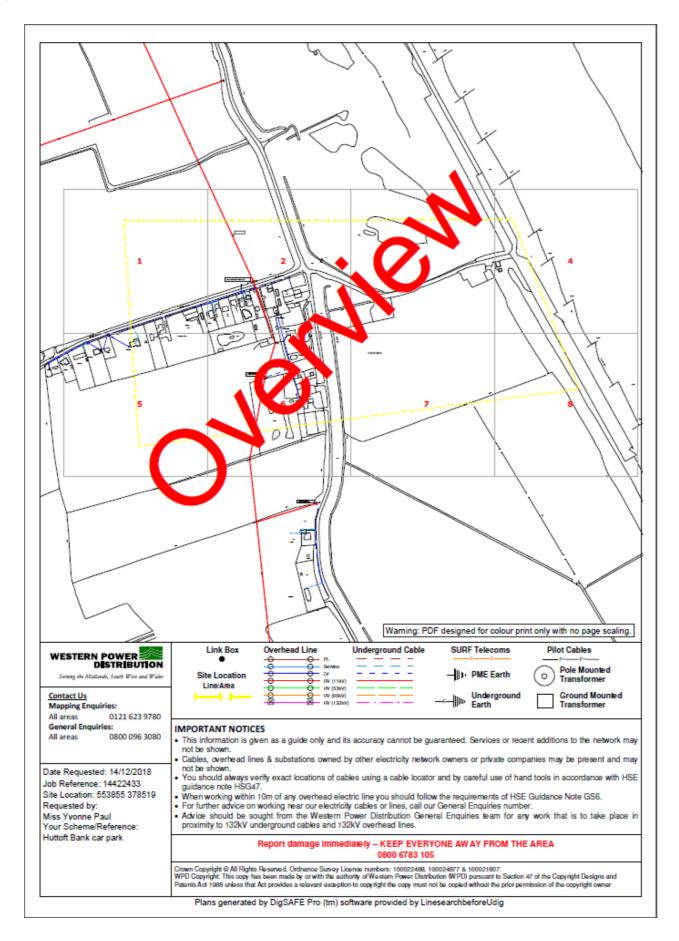
Appendix B—Cadent Supply Record





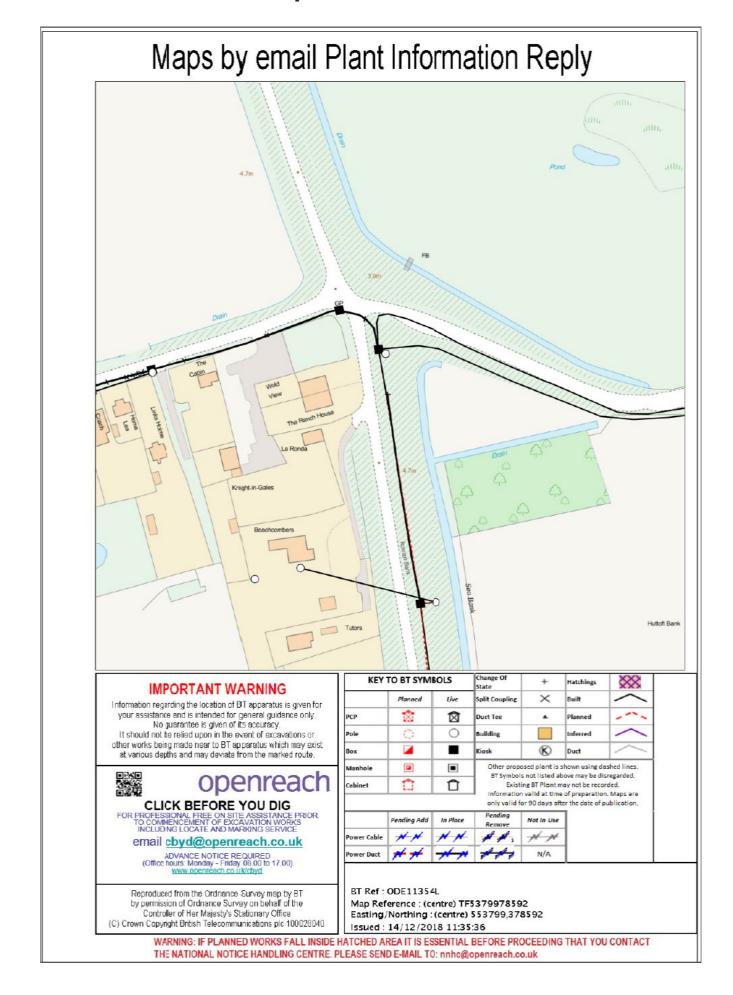
Appendix C

Western Power Supply Record





Appendix D—BT Records Map





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