

## Wignall, Peter

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**From:** [REDACTED] <[REDACTED]@betteridge-milsom.co.uk>  
**Sent:** 24 April 2017 19:19  
**To:** [REDACTED]@shepway.gov.uk  
**Cc:** [REDACTED]  
**Subject:** 3375 - Princes Parade - RIBA Stage 1 Cost Plan  
**Attachments:** Princes Parade Development (Full Scheme) - Stage 1 Cost Plan Report (24 ....pdf)

[REDACTED]

We attach a “for comment” version of our full cost report, which indicates the likely cost of the scheme. This includes the leisure centre, hotel, residential units and canoe club, along with all external works, remedial works, infrastructure works, land sales costs etc.

What is not included in our report, is a calculation for sales of finance, which would be the obvious next step. This will allow a notional profit margin to be calculated in terms of “development viability”.

I think we probably need to sit down and run through to make sure we have captured your requirements before closing out the report. If you would like to call [REDACTED] or I later this week to discuss.

Best,

[REDACTED] | BSc. MRICS  
**Director**

T. [REDACTED]  
E. [REDACTED]@betteridge-milsom.co.uk

## Betteridge & Milsom

The Old Bakehouse, 18A Ivy Lane, Canterbury, Kent, CT1 1TU



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**Princes Parade Development  
Stage 1 Cost Plan  
(Full Scheme)**

**For**

**Shepway County Council**

DRAFT (FOR REVIEW / COMMENTS)

**BETTERIDGE & MILSOM**

***24<sup>th</sup> April 2017***

T: (01227) 471186

W: [www.betteridge-milsom.co.uk](http://www.betteridge-milsom.co.uk)

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**STAGE 1 COST PLAN REPORT  
24/04/2017**

**B&M Ref. 3375**

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## **1 - Executive Summary**

The Project is to provide residential housing and leisure facilities, including 45 affordable residential units, 105 market residential units, leisure centre, boutique hotel and restaurant, canoe club, information kiosk and recreational public open spaces. Details are included within this report under **Project Description**.

We currently have not been advised on a budget for the project.

This Cost Plan report is based on a RIBA Stage 1 stage. The status of this is described within the report under **Status of Cost Plan**.

This report details the expected costs for this project as [REDACTED] (exc VAT). Cost details are included within this report under **Statement of Cost**.

Further details including information used to prepare the report, the basis of the estimate and commentary of risk allowances are contained within later sections of this document.

There are a number of decisions required for some potential extra works, and associated costs have been provided where possible. These will need to be explored and considered during the next stage of the project – details are included within the report under **Decisions on Alternative Proposals**.

We have also made some commentary on Value Engineering criteria and have provided **Conclusions & Recommendations**.

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## 2 - Project Description

The project is located on the coast between Hythe and Seabrook along Princes Parade road. The site is located between the Royal Military Canal to the north and the beach to the south, and is flanked by Hythe Golf Course to the west. As part of the project the Princes Parade road will be diverted. There shall be 45 affordable residential units including 26 flats and 19 houses, and 105 market residential units including 79 flats, 8 maisonettes and 18 houses. The leisure centre provides two indoor swimming pools, changing rooms, café and fitness suites. The hotel will consist of 10 or more rooms of 780m<sup>2</sup> on the top floors above a ground floor fish restaurant. New buildings shall also be provided for the canoe club and information kiosk. Public spaces shall include a playground and public walkways to connect the diverted Princes Parade and the promenade. 130 street on parking spaces and a further 116 off street parking spaces shall be provided for visitors to the coast and leisure facilities provided, as well as, 230 residential parking bays.

The Project Description should be read in connection with the drawings issued to us, of which extracts are included below:-

Masterplan, Illustrative Layout:



Source: Tibbalds Masterplan (Illustrative Layout)

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### 3 - Project Budget

At the time of generating this cost plan report there was no knowledge of a budget for the project.

### 4 - Status of Cost Plan

This document is a RIBA Stage 1 cost plan (also known as Formal Cost Plan 1), and is an intrinsic part of the Stage 1 Report. The level of this report is based on RIBA Works Stage 1: Preparation and Brief being the following:-

“Development of initial statement of requirements into the Design Brief by or on behalf of the Employer, confirming key requirements and constraints. Identification of procurement method, procedures, organisational structure and range of consultants and others to be engaged for the project.”

This cost plan has been produced by reviewing each Element of the project. It should be noted that elemental cost planning is an iterative process, which is performed in steps of increasing detail as more design information becomes available. Therefore, this cost plan is based on information available at this stage.

### 5 - Statement of Cost

The following costs have been estimated for this project. Further breakdown of costs are included elsewhere.

Construction Cost Estimate (A)	Project Cost Estimate exc. VAT (B)
██████████	██████████

#### Definitions:-

A: Construction Cost Estimate – the cost of the building works, including main contractor's preliminary cost, overheads & profit, and design and construction risks. Excludes inflation, project/design team/survey fees, client direct costs and employer risk allowance.

B: Project Cost Estimate – the Contract Cost Estimate, plus project/design/survey fees, client direct costs and employer risk allowance. Excludes inflation and VAT. Please note that we are not VAT specialists and advice should be sought as necessary.

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## **6 - Information on which the Cost Plan was prepared**

The following information was made available by the Design Team at time of Cost Plan preparation:-

### Tibbalds (Architect)

Information provided:

- Masterplan and Accommodation Schedule – Illustrative Layout (dated 24/01/2017)

### Cost Appraisal for Residential Scheme (dated 28/09/2016)

Information included:

- Costs for housings per square foot.
- Site costs, including site value, site stamp duty and site legal fees.
- Community Infrastructure Levy fee.
- Investment sale Agents Fee, investment sale Legal Fees and Direct Sale Marketing fees.

### Idom Merebrook (Environmental Consultants)

Information provided:

- Site preparatory works and groundwork costs (see details in cost plan – Appendix A).
- Drawings;
  - 307/001 (Rev-) – Isopachyte Analysis Between Proposed Landform Contours & Topographic Survey
  - 307/002 (Rev-) – Proposed Landform Contours
  - 307/003 (Rev-) – X-Sections Through Proposed Landform

### Previous Cost Assessments (Betteridge and Milsom)

Information provided:

- Leisure Centre cost plan, excluding external works (dated 05/10/2016).
- Diversion of Princes Parade road, including sewer works (dated 23/09/2016).

### Utilities Assessment (Peter Brett)

Information provided:

- Utilities Assessment (Rev A) (dated 30/06/2016)

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## 7 - Statement of Floor Areas

Based on current issued drawings, the following are the calculated Gross Internal Areas (GIA/GFA):-

### Residential Units

Affordable Flats	1,172m2 (12,629 ft2)
Affordable Houses	2,680m2 (28,842 ft2)
Private Flats	8,189m2 (88,148 ft2)
Private Houses	3,660m2 (40,000 ft2)
<b>Total</b>	<b>15,702m2 (169619 ft2)</b>

### Leisure

Leisure Centre	3,013 m2
Boutique Hotel	780 m2
Restaurant	300 m2
Canoe Club	Unknown m2
Information Kiosk	Unknown m2
<b>Total</b>	<b>4,093 m2</b>

The entire site area is **75,000m2** (as stated on Idom Morebrook cost assessment).

## 8 - Cost Plan

A breakdown of the Costs of this project are included in Appendix A.

## 9 - Basis of Cost Estimates

A cost estimate plan has been produced, based on the information available (see above). The following sections have been developed to allow cost review:-

### Site Clearance

Areas of various vegetation measured and estimated using those indicated on the masterplan DWG and through site maps and pictures.

### Preparatory Groundworks

Works and associated costs taken from Idom Morebrook cost assessment (Appendix B).

### Residential Units

Costs included are based on the previous Cost Appraisal for the Residential Scheme. These quantities have been verified against the most recent accommodation schedule included on the latest Tibbalds masterplan dated 24/01/2017. An extra over allowance has been made for piled foundations to the residential units to allow for the known ground conditions.

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Leisure Centre

The construction cost included has been taken from the previously issued Betteridge and Milsom cost plan (see Appendix D).

Hotel and Restaurant

A cost to build the hotel and restaurant to shell and core only has been allowed. Thus, any associated fit out costs are excluded.

Canoe Club

An allowance has been made for the construction of Canoe Club building(s).

Information / Food Kiosk

An allowance has been made for the construction of an Information / Food Kiosk

Diversion of Princes Parade (External Works)

The costs included have been taken from the previously issued Betteridge and Milsom cost plan (see Appendix E).

External Works Generally

Allowances have been made for road constructions excluding Princes Parade road, footpaths, parking bay areas, other hard surfaces (details unknown), patios and playground areas. Allowances have also been made for making good the promenade area after diversion of Princes Parade road, for a jetty to the canoe club and enhancements to the access road between the canoe club and beach and for enhanced external 'features'.

Drainage

Allowances made for surface and foul water drainage.

Services

Allowances have been made based on the Peter Brett Report (dated June 2016). As described in the report a budget estimate has been provided by UKPN for the electric, Affinity Water for water and SGN for the gas and these costs have been detailed accordingly.

Soft Landscaping

Allowances have been made for turfing to all private gardens and communal areas south of the Princes Parade road, and planting of trees shown on Masterplan.

Fencing, Railings & Walls

Allowances have been made for 1.8m high timber fencing to private gardens and access gates. Allowance for small timber fencing to front courtyards.

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Off Site Highway Works

An allowance has been made for connecting to the existing footpath to the existing bridge and altered promenade.

A full detailed cost plan is included within Appendix A.

**Construction Preliminaries and Overheads & Profit**

We have currently allowed 13% for Preliminaries and 8% for overheads and profit on the elemental costs for main contractor's costs. This cost is dependant much on programme timescale and can be effected by any phasing of logistical restrictions on site. Therefore, a review of logistics is advised.

**Inflation**

Excluded.

**Risk Allowances**

See section 10 below for further details. A total of 10% risk contingency has been included for the construction works. A risk review is advised to seek further clarity with these cost targets.

**Project/Design Team Fees and Other Fees/Surveys**

Project/Design team fees have been based on 12% of the contract cost estimate. An allowance of 2% of the contract cost estimate has been included for other fees/surveys.

**Client Direct Costs**

Allowances have been included based the cost appraisal for residential scheme and include site purchase costs, community infrastructure levy and sales fees. An Employer Risk Allowance has also been included.

**Exclusions**

The following matters are excluded from the project cost report:-

- Land compensation costs
- Structural engineering or services costs or other abnormals
- Interest on finance
- Temporary buildings
- Any works beyond the boundaries of the areas of works
- Cost inflation
- Increase in NI, taxation or other levies.
- VAT.
- Loose furniture and fittings and white goods.
- Fit out of the Boutique hotel and restaurant building.

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## **10 - Risk Allowances**

Risk allowances are allocated against a number criteria and are treated as two separate cost targets, which are used to “top up” other overspending cost targets as the project progresses. As a package of works exceeds its cost target, a transfer is made from the appropriate risk target pot. Similarly, if a cost target is likely to under run, the surplus is transferred into the appropriate risk allowance. The cost targets are:-

- Design Development risks – an allowance for use during the design process to provide for the risks associated with design development, changes in estimating data, third party risks (e.g. planning requirements, legal agreements, covenants, environmental issues and pressure groups), statutory requirements, procurement methodology and delays in tendering.
- Construction risks – an allowance for use during the construction process to provide for the risks associated with site conditions (e.g. access restrictions/limitations, existing buildings, boundaries, and existing occupants and users), ground conditions, existing services and delays by statutory undertakers.

## **11 - Changes to Previous Cost Targets**

As this is the initial Formal Cost Plan, there are no changes to previous cost targets.

## **12 - Decisions on Alternative Proposals**

There are key decisions which will need to be made as we move through **RIBA Stage 2**. The following matters are considered key to the next project stage:-

### **Item 1**

Further details of the Boutique Hotel and Restaurant.

### **Item 2**

Further details of the Canoe Club building(s).

### **Item 3**

Further details of the Information/Food kiosk.

### **Item 4**

The extent of site clearance and planting north of the Princes Parade road.

There are key decisions which will need to be made as we move through **RIBA Stage 2**. The process could be reviewed in light of:-

Quantity – review the areas being provided within the scheme.

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Quality – review of each element to consider if appropriate value has been used.

Extent – review to ensure that the project scope has not shifted.

Allowances – review of design development and construction risks as these have a bearing on project cost.

### **13 - Value Engineering Criteria**

As an overall process we would recommend considering any value engineering criteria as a set of sub-criteria; namely

Must haves – elements that are key to the brief of the project.

Should haves – elements that are good practice and of inherent value for the project

Could haves – elements that are potentially achievable within the project budget.

Won't haves – elements which need to be avoided; from lessons learned on previous schemes

As we move into the next RIBA Stage, we plan to explore the criteria with the project team and focus on those matters detailed above under alternative proposals.

### **14 - Conclusions & Recommendations**

This report is issued to assist the client in any decision making and allow budgets to be ascertained going forward. Additional budget information is required before a statement can be made about the Cost Plan and its accordance with budget. As the design process continues, strategic decisions will need to be made. We would recommend that continued cost assessments are carried out as the scheme develops into the next RIBA stages.



# Appendix A

## Cost Plan Estimate

DRAFT (FOR REVIEW / COMMENTS)

**PROJECT: Princes Parade Development (Full Scheme)**  
**PROJECT NO: 3375**  
**COST PLAN RIBA STAGE 1**  
**REVISION: -**



**COST SUMMARY**

**Base Date of Cost Plan** 24/04/2017  
**Site Area** 75000 m2  
**Construction Works Estimate** [REDACTED] Total (A) - see details below  
**Contract Cost Estimate** [REDACTED] Total (B) - see details below  
**Project Cost Estimate (Exc. VAT)** [REDACTED] Total (C) - see details below

**Elemental Cost Summary**

Ref	Description	Total (£)	Notes	£/m2
1	Construction Works			
1.1	Site Clearance & Groundworks	[REDACTED]	See Breakdown	28
1.2	Residential Units	[REDACTED]	See Breakdown	1,890
1.3	Lesiure Centre	[REDACTED]	See Breakdown	2,594
1.4	Boutique Hotel & Resturant Building	[REDACTED]	See Breakdown	1,846
1.5	Canoe Club	[REDACTED]	See Breakdown	Allowance
1.6	Information / Food Kiosk	[REDACTED]	See Breakdown	Allowance
1.7	External Works	[REDACTED]	See Breakdown	47
1.8	Drainage	[REDACTED]	See Breakdown	16
1.9	Services	[REDACTED]	See Breakdown	12
1.10	Soft Landscaping	[REDACTED]	See Breakdown	4
1.11	Fencing, Railings & Walls	[REDACTED]	See Breakdown	1
1.12	Off Site Highway Works	[REDACTED]	See Breakdown	0
	Sub-Total	[REDACTED]		<b>6,438</b>
2	Main Contractor's Preliminaries Estimate	[REDACTED]	based on 13.0%	90
	Sub-Total	[REDACTED]		6,528
3	Main Contractor's Overheads & Profit	[REDACTED]	based on 8.0%	63
<b>(A)</b>	<b>Construction Works Estimate (Total)</b>	[REDACTED]		<b>6,591</b>
4	Inflation			
4.1	Tender Inflation Estimate	-	Excluded. Cost based on base date of cost plan	0
4.2	Construction Inflation Estimate	-	Excluded. Cost based on base date of cost plan	0
5	Risk Allowances Estimate			
5.1	Design Development Risks Estimate	[REDACTED]	based on 5.0%	42
5.2	Construction Risks Estimate	[REDACTED]	based on 5.0%	42
	Sub-Total	[REDACTED]		6,675
6	Main Contractor Fees / Surveys			
6.1	Pre Construction Fees	[REDACTED]	Excluded	0
6.2	Professional / Design Fees	[REDACTED]	Excluded	0
6.3	Surveys / Reports	[REDACTED]	Excluded	0
<b>(B)</b>	<b>Contract Cost Estimate (Total)</b>	[REDACTED]		<b>6,675</b>
7	Project/Design Team Fees			
7.1	Client Direct Consultant Fees	[REDACTED]	based on 12.0%	111
7.2	Other Fees / Surveys	[REDACTED]	based on 2.0%	19
	Sub-Total	[REDACTED]		6,805
8	Other Development / Project Costs			
8.1	Client Direct Costs	[REDACTED]	See Breakdown	159
8.2	Loose Fittings and Equipment	[REDACTED]	Excluded	0
	Sub-Total	[REDACTED]		6,964
9	Employer Risk Allowance	[REDACTED]	based on 1.0%	12
<b>(C)</b>	<b>Project Cost Estimate (excl VAT)</b>	[REDACTED]		<b>6,976</b>











## Appendix B

### Idom Merebrook Cost Assessment (dated Feb 2017)

DRAFT (FOR REVIEW / COMMENTS)

**Princes Parade Seabrook**

Site Area

7.5 ha  
75000 m2

Item	Unit Cost (£)	No.	Unit	Total (£)	Comment
Vegetation Clearance On site Off Site					Under ecology budget
Earthworks 100 mm scrape		7,500	m3		100 mm scrape to remove roots and organic matter
Disposal		1,500	m3		
		3,000	m3		
		3,000	m3		
Clean Cover		13,500	m3		Assumes 40% site area.
Gas Protection		30,000	m2		Assumes 40% site area.
Groundwater Remediation					Estimate only
Unforeseen Contamination					Estimate only
Prelims					10 % of total
Contingency					10 % of total
<b>Total</b>					

Other items that should be considered:

**Groundworks**

Stabilisation for piling mat

Screen  
Stabilise  
150 mm running layer



12,000 m3  
12,000 m3  
4,500 m3  
  
1,944 m  
  
1,166 m3  
1,944 m3  
778 m3



Assumes piled solution with ground beams placed on existing level and overall levels to be made up by 450 mm.  
Placed  
  
Length of site  
  
Estimates only

Upgraded pipes

Services arisings

Haz  
Non-haz  
Inert

## Appendix C

### Cost Appraisal for Residential Units (dated 28/09/2016)

DRAFT (FOR REVIEW / COMMENTS)

<b>REVENUE</b>		File: Appraisal Rd Divert 280916
Ground Rent	73 units at [REDACTED] ea./pa	21,900
<b>Inv.Value-A</b>	Net annual income	21,900
	Capitalised at 5.25% Yield	417,143
Advance Income	for Inv.Value-A (1 months net rent)	
Affordable Flats	-E	
Affordable Houses	-E	
Private Flats	73 units at [REDACTED] ea.	
Pri 3 Bed	18 units at [REDACTED] ea.	
Pri 4 Bed	11 units at [REDACTED] ea.	
(Net Income: 21,900) (Inv.Sales: 417,143) (Dir.Sales: 58,439,320)		<b>REVENUE</b>
(Revenue Totals labelled -E do not attract Fees)		

<b>COSTS</b>		
Site Value		[REDACTED]
Site Stamp Duty	at 5.00%	[REDACTED]
Site Legal Fees		[REDACTED]
		Site Costs
C I L		1,184,553
		Initial Payments
Affordable Flats	12,629.00 sq-ft at 165.00 psf	[REDACTED]
Affordable Houses	28,841.96 sq-ft at 160.00 psf	[REDACTED]
Private Flats	88,147.50 sq-ft at 170.00 psf	[REDACTED]
Private Houses	39,399.98 sq-ft at 165.00 psf	[REDACTED]
Road Diversion X 700 M		[REDACTED]
Contingency	at 5.00%	[REDACTED]
Professional Fees	at 7.50%	[REDACTED]
Invest.sale Agents Fee	at 2.00%	[REDACTED]
Invest.sale Legal Fees	at 1.00%	[REDACTED]
Direct Sale Marketing	at 3.00%	[REDACTED]
		Disposal Fees
<b>INTEREST</b>	<b>(See CASHFLOW)</b>	
7.00% pa	on Debt charged Quarterly and compounded Quarterly	
Site Costs	Month 1 (Oct 16)	
C I L	Month 1 to 24 (Oct 16 - Sep 18)	
Affordable Flats (bld.)	Month 8 to 31 (May 17 - Apr 19)	
Affordable Houses (bld.)	Month 16 to 21 (Jan 18 - Jun 18)	
Private Flats (bld.)	Month 8 to 43 (May 17 - Apr 20)	
Private Houses (bld.)	Month 6 to 43 (Mar 17 - Apr 20)	
Road Diversion X 700 M	Month 3 to 38 (Dec 16 - Nov 19)	
Investment Sales	Month 43 (Apr 20)	
Advance Income	Month 42 to 43 (Mar 20 - Apr 20)	
Affordable Flats (sale)	Month 9 to 32 (Jun 17 - May 19)	
Affordable Houses (sale)	Month 16 to 22 (Jan 18 - Jul 18)	
Private Flats (sale)	Month 18 to 46 (Mar 18 - Jul 20)	
Pri 3 Bed (sale)	Month 12 to 46 (Sep 17 - Jul 20)	
Pri 4 Bed (sale)	Month 12 to 46 (Sep 17 - Jul 20)	
<b>PROFIT</b>	[REDACTED]	<b>COSTS</b>
<b>PROFIT/SALE</b>	16.66%	<b>PROFIT/COST</b>
<b>IRR</b>	N/A	20.00%

## Appendix D

### B&M Cost Summary for Leisure Centre – 3,013m<sup>2</sup> GIFA scheme (dated 27/02/2017)

DRAFT (FOR REVIEW / COMMENTS)



**COST SUMMARY**

<b>Base Date of Cost Plan</b>	27-Feb-2017	
<b>Gross Internal Floor Area</b>	3013 m2	
<b>Construction Works Estimate</b>	11,071,495.00	Total (A) - see details below
<b>Contract Cost Estimate</b>	12,618,772.94	Total (B) - see details below
<b>Project Cost Estimate (Exc. VAT)</b>	12,934,242.26	Total (C) - see details below

**Elemental Cost Summary**

Ref	Description	Total (£)	Notes	£/m2
<b>1</b>	<b>Construction Works</b>			
1.1	Enabling Works		Ground Remediation	
1.2	Substructure		See Breakdown	
1.3	Superstructure		See Breakdown	
1.4	Internal Finishes		See Breakdown	
1.5	Fittings, Furnishings & Equipment		See Breakdown	
1.6	Services		See Breakdown	
1.7	Site Works		See Breakdown	
	Sub-Total			
<b>2</b>	<b>Main Contractor's Preliminaries Estimate</b>		based on 70 weeks	
	Sub-Total			
3.1	Main Contractor's OHP (total 7%)		based on 7.0%	
3.2	Scape OHP (?)		not applicable	
3.3	Framework Fee (?)		based on 0.5%	
<b>(A) Construction Works Estimate (Total)</b>		<b>11,071,495</b>		<b>3,675</b>
<b>4</b>	<b>Inflation</b>			
4.1	Tender Inflation Estimate	-	above figures based	0
4.2	Construction Inflation Estimate		on commence Q3 2018	
<b>5</b>	<b>Risk Allowances Estimate</b>			
5.1	Design Development Risks Estimate		based on 2.5%	
5.2	Construction Risks Estimate		based on 2.5%	
5.3	Dayworks	-	not applicable	0
	Sub-Total			
<b>6</b>	<b>Main Contractor Fees / Surveys</b>			
6.1	Pre Construction Fees	-	included in 6.2	0
6.2	Professional / Design Fees		based on 7.0%	
6.3	Surveys / Reports		based on 0.5%	
<b>(B) Contract Cost Estimate (Total)</b>				
<b>7</b>	<b>Project/Design Team Fees</b>			
7.1	Client Direct Consultant Fees		based on 2.0%	
7.2	Other Fees / Surveys		based on 0.5%	
	Sub-Total			
<b>8</b>	<b>Other Development / Project Costs</b>			
8.1	Client Direct Costs	-	excluded - to discuss	0
8.2	Loose Fittings and Equipment	-	excluded - to discuss	0
	Sub-Total			
<b>9</b>	<b>Employer Risk Allowance ?? To discuss</b>		based on 0.0%	0
<b>(C) Project Cost Estimate (excl VAT)</b>				



**ELEMENTAL BREAKDOWN**

Description	Total	£/m2
<b>Enabling Works</b>		
Ground remediation and stabilisation		
<b>Building Works</b>		
<i>Substructure</i>		
Substructure		
<i>Superstructure</i>		
Frame		
Upper Floors		
Roof		
Stairs		
External Walls		
Windows and External Doors		
Internal Walls and Partitions		
Internal Doors		
<i>Internal Finishes</i>		
Wall Finishes		
Floor Finishes		
Ceiling Finishes		
<i>Fittings, Furnishings &amp; Equipment</i>		
Fittings, Furnishings & Equipment		
<i>Services</i>		
Sanitary Installations		
Services Equipment		
Disposal Installations		
Water Installations		
Heat Source		
Space Heating and Air Conditioning		
Ventilation		
Electrical Installations		
Fuel Installations		
Lift and Conveyor Installations		
Fire and Lightning Protection		
Communication, Security and Control Systems		
Specialist Installations		
Builders Work in Connection with Services		
<b>Site Works</b>		
External Works		
Drainage		
External Services		
<b>Total</b>		

## **Appendix E**

# **B&M Princes Parade Diversion Cost Estimate (dated 23/09/2016)**

DRAFT (FOR REVIEW AND COMMENTS)

## 1.00 Introduction

## Actions

- 1.01 Betteridge & Milsom have been appointed to prepare a review of costs for the Combined Sewer Drain diversion, for Options 1 and 2 of the Princes Parade scheme, in Hythe.
- 1.02 Options 1 & 2 refer to draft sketch plans prepared by Tibbalds and detailed on four drawings dated 12<sup>th</sup> September 2016.
- 1.03 The two scheme options are:
- 1 – Retention of road alignment as existing
  - 2 – New road alignment to the North of the site

## 2.00 Scope of Cost Assessment

- 2.01 According to Southern Water's records, the combined sewer runs underneath the footprint of the development buildings shown on the current proposed layout, and is therefore likely to require diverting.
- 2.02 This cost assessment is solely to compare the cost of diversion of the combined drainage sewer, currently running along the side of Princes Parade.
- 2.03 This report also does not include any other costs associated with the scheme, for example site wide land remediation, including contaminants, ground water and ground gas remediation; external works; hard/soft landscaping; new drainage provision (see below); or new incoming utility provision.
- 2.04 It should be noted that a Level 2 Foul Sewer Capacity Check has been carried out by Southern Water, which has identified insufficient capacity within their existing network, to accommodate the proposed flow from the development. Cost for this network upgrade has been budget estimated by Peter Brett Associates as circa £224,000; this cost is not included in our diversion cost calculations.
- 2.05 It should also be noted that there is no existing surface water network (other than the combined sewer), therefore an appropriate designed surface water system will be required for the development, which is not included in these costs.

## 3.00 Information Used

- 3.01 The following information has been provided to Betteridge & Milsom and used in our assessment of costs:-
- Tibbalds draft scheme plans and sections (Options 1 & 2) dated 12<sup>th</sup> September 2016
  - Peter Brett Associates' Utility Assessment (Rev A) dated June 2016: specifically
    - PBA drawing 37470/2501/001 Rev A: Existing Services Layout
    - Southern Water foul drainage report dated 6<sup>th</sup> June 2016
  - Idom Merebrook Geo-Environmental Assessment dated July 2015
- 3.02 We have attached a mark up of the proposed site scheme, showing the extent of the new combined sewer for both options.



**4.00 Qualifications/Exclusions**

- 4.01 The costs detailed below are budget figures based on likely costs. The costs are current, without allowance for inflation. Costs exclude fees, surveys, licences, professional fee costs, legal costs and VAT.
- 4.02 The costs also exclude the removal of the existing combined sewer pipe, as the cost will be identical for either option, and therefore not relevant in terms of option choice.

**5.00 Option Costs**

5.01 Option 1 – Retention of road alignment as existing

5.01a We have assumed for this option that the existing Princes Parade will be closed as part of the overall development, prior to any works taking place to re-align the combined pumped main.

5.01b We have calculated that there is approximately 1075m of new pipe required, from the East end of the site (Seapoint Centre end) to the West end. See attached marked up drawing for extent of pipe. We have assumed that new manhole connections are required at junction with existing runs.

5.01c The budget cost estimate is as follows:-

Item	Quant	Rate	Cost
New Rising Main pipe; comprising Machine excavation grade bottom, earthwork support, bed and surround, laying and jointing pipes; granular backfill and compact; dispose of excavated material;			
say 1200mm diameter pipe	1075 m		
Extra over for disposal of excavated material (contaminated sub-soil)	3225 m3		
Manholes and connections to existing system	2 Nr		
Base course and binder coarse to trench	1075 m2		
Forming traffic calming along existing Princes Parade road	2 Nr		
Reinstatement of road surface; including			



preparation works; line markings	6450 m2		
Total Works Cost			
Main Contractor Preliminaries and Overheads/Profit		20%	
Total Contract Estimate (Budget)		£	
		Say £	

5.01d It should be noted that these costs include the reinstatement of the existing Princes Parade.

5.02 Option 2 – New road alignment to the North of the site

5.02a We have assumed for this option that the new main will follow the line of the new road formed within the development boundary, with connections into the main route at each end. Similarly, to Option 1, we assume that road closures are required whilst works are carried out on the existing Princes Parade.

5.02b We have calculated that there is approximately 1155m of new pipe required, which includes a number of road intersections.

5.02c We have also allowed for forming the new Princes Parade road to allow like for like comparison of the options. The

5.02d The budget cost estimate is as follows:-

Item	Quant	Rate	Cost
New Rising Main pipe; comprising Machine excavation grade bottom, earthwork support, bed and surround, laying and jointing pipes; granular backfill and compact; dispose of excavated material;			
say 1200mm diameter pipe	1155 m		
Extra over for disposal of excavated material (contaminated sub-soil)	3465 m3		
Manholes and connections to existing system	2 Nr		



Manholes within line of new run; additional for orientation	4	Nr	
Formation of new Princes Parade road to the North of the site: including traffic calming, kerbing and street lighting	866	m	
Extra over for disposal of excavated material (contaminated sub-soil)	3118	m3	
Reinstatement of road surface; including preparation works; line markings (at ends)	180	m2	
<b>Total Works Cost</b>			
Main Contractor Preliminaries and Overheads/Profit			20%
<b>Total Contract Estimate (Budget)</b>			£
			<b>Say £</b>

**6.00 Conclusion**

6.01 It can be seen from above that Option 1 (Retention of Road Alignment as Existing) is more cost effective than Option 2 (New Road Alignment). In the main this is due to the additional length of the required new main, but also the fact that a new road is being formed, rather than re-using the existing.

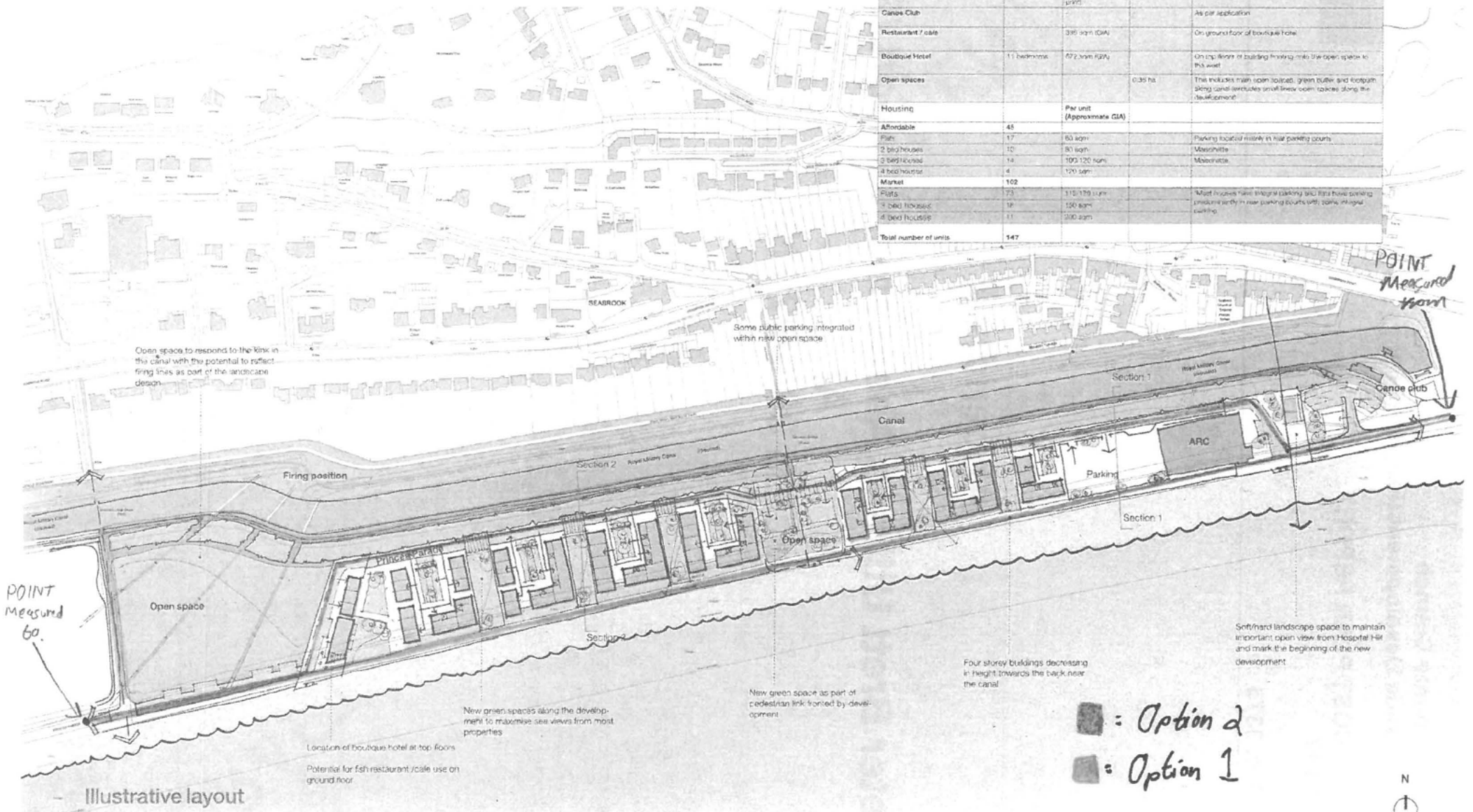
Prepared by:

[REDACTED]  
For Betteridge & Milsom  
Date: 23<sup>rd</sup> September 2016

# OPTION 2

Schedule of accommodation

Use	Units	Area (Approximate)	Site area (Approximate)	Comments
Leisure				
ARC		2,892 sqm (incl. porch)	5,885 sqm	Parking for 150 spaces
Canoe Club				As per application
Restaurant / cafe		336 sqm (GIA)		On ground floor of boutique hotel
Boutique Hotel	11 bedrooms	672 sqm (GIA)		On top floors of building fronting into the open space to the west
Open spaces			0.35 ha	This includes main open space, green buffer and footpath along canal, includes small linear open spaces along the development
Housing				
Affordable		Per unit (Approximate GIA)		
Flats	45			
1 bed houses	17	80 sqm		Parking located mainly in rear parking courts
2 bed houses	10	80 sqm		Mixed use
3 bed houses	14	100-120 sqm		
4 bed houses	4	120 sqm		
Market	102			
Flats	73	315-379 sqm		Market houses have integral parking and extra house parking provided early in rear parking courts with some integral parking
3 bed houses	18	150 sqm		
4 bed houses	11	200 sqm		
<b>Total number of units</b>	<b>147</b>			



Open space to respond to the link in the canal with the potential to reflect firing lines as part of the landscape design

Some public parking integrated within new open space

POINT Measured 100m

POINT Measured 60.

Soft/hard landscape space to maintain important open view from Hospital Hill and mark the beginning of the new development

Four storey buildings decreasing in height towards the back near the canal

New green space as part of pedestrian link fronted by development

New green spaces along the development to maximise sea views from most properties

Location of boutique hotel at top floors

Potential for fish restaurant/cafe use on ground floor

■ = Option 2  
■ = Option 1



## Princes Parade

Option 2 - New road alignment to the north of the site

Draft

scale 1: 2,000 @ A2  
date 12-09-2016



## Appendix F

### Peter Brett Utilities Assessment Report (Rev A) (dated 30/06/2016)



# Princes Parade, Hythe

## Utilities Assessment

On behalf of **Shepway District Council**

Project Ref: 37470/2501 | Rev: A | Date: June 2016

---

Office Address: Calgarth House, 39-41 Bank Street, Ashford TN23 1DQ  
T: +44 (0)123 365 1740 E: ashford@peterbrett.com



## Document Control Sheet

**Project Name:** Princes Parade, Hythe

**Project Ref:** 37470/2501

**Report Title:** Utilities Assessment

**Date:** June 2016

	Name	Position	Signature	Date
Prepared by:	[REDACTED]	Technician	[REDACTED]	30/06/16
Reviewed by:	[REDACTED]	Associate	[REDACTED]	30/06/16
Approved by:	[REDACTED]	Partner	[REDACTED]	30/06/16
<b>For and on behalf of Peter Brett Associates LLP</b>				

Revision	Date	Description	Prepared	Reviewed	Approved
-	07/06/16	Draft Issue	MW	TH	TW
A	30/06/16	Final Issue	MW	TH	TW

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

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# 1 Introduction

## 1.1 Foreword

Peter Brett Associates LLP has been commissioned by Shepway District Council to undertake a high level Utilities Assessment for land at Princes Parade in Hythe. The site covers an area of approximately 10.9 hectares and is proposed for a mixed use development comprising approximately 150 residential units, 4 restaurants/bars/cafes, 4 retail units/kiosks and a leisure centre.

The site is located along the seafront in Hythe, bounded to the south by Princes Parade and to the north by the Royal Military Canal. The site is centred at approximate National Grid Reference TR182347 and is mainly undeveloped, with a car park and a playground at the eastern end. Records also show a pumping station located within the car park.

A site boundary plan can be found within Appendix A of this report.

A copy of the proposed development layout current at the date of this assessment is attached in Appendix B.

Existing utility infrastructure within and adjacent to the proposed development is presented on PBA's drawing number 37470/2501/001 within Appendix C. This information has been taken from existing asset records provided to us by Shepway District Council.

## 1.2 Scope of Works

This assessment aims to achieve the following: -

- Liaise with all utility suppliers providing services within the proposed development zone.
- Establish the nature, extent and location of any existing utility company distribution infrastructure relating to electricity, gas, telecommunication and water supply.
- Confirm with the utility suppliers the capacity of the existing infrastructure and the requirements for such infrastructure to be diverted, extended, adapted or renewed to cater for the proposed development, and the broad cost estimates.
- Advise the client of the need for any specialist surveys (e.g. network modelling requirements).

## 1.3 Basis of Report

This report has been compiled from correspondence received from the incumbent utility providers (electricity, gas, potable water, telecommunications and foul drainage) with regard to new utility supplies.

A high level desk top study and review of existing utility services information has been completed to identify constraints to the proposed development, and to establish the need for any diversions and protections to the incumbent utility services to accommodate redevelopment.

## 1.4 Requested Loads

Capacity checks were requested from the incumbent distribution network operators in March 2016.

Anticipated loads for this high level assessment have been calculated based upon a representative development quantum as described in the Foreword above. It is expected that the exact development quantum may fluctuate, but this is unlikely to have any significant overall impact on the strategic delivery of utility services to this site.

Table 1: Calculated Utility Loads

Utility	Energy Demand
Electricity	1,052 kW (with gas heating)
Gas	2,094 kWh peak (6,565 MWh annual)
Potable Water	11.82 l/s peak flow (117.13m <sup>3</sup> /day)
Foul Drainage	6.94 l/s peak flow for the whole site

## 2 Contacts Directory

Table 2: Statutory Undertakers Contacts Directory

Title	Address	Contact Details
Electricity	UK Power Networks Bircholt Road Park Wood Maidstone Kent ME15 9XH	Tel: 01622 352160
Gas	Southern Gas Networks St Lawrence House Station Approach Horley Surrey RH6 9HJ	Tel: 01293 818143
Potable Water	Affinity Water Developer Services Tamblin Way Hatfield Hertfordshire AL10 9EZ	Tel: 0345 357 2428
Foul Drainage	Southern Water Developer Services Southern House Sparrowgrove Otterbourne Hampshire, SO21 2SW	Tel: 0330 303 0119
Telecommunications	Openreach: Repayments PP B402 Becket House 4-6 New Dover Road Canterbury Kent CT1 3BB	Email: <a href="mailto:networkalts.canterbury@openreach.co.uk">networkalts.canterbury@openreach.co.uk</a>

## 3 Utility Infrastructure

### 3.1 Electricity

The incumbent electricity provider is UK Power Networks (UKPN).

A summary of the infrastructure likely to be affected by the proposed development is outlined below.

#### 3.1.1 Existing Infrastructure

UKPN records show two existing LV supplies entering the site from the east, connecting to a kiosk and a pumping station within the car park.

The nearest low voltage (LV) and high voltage (HV) networks are located to the north of the site in Seabrook Road.

#### 3.1.2 Network Modifications

The existing supplies to the site are likely to be affected by the proposed development, and may require disconnecting or relocating.

#### 3.1.3 Network Capacity

It is estimated that the electricity demand for the proposed development would be approximately 1MVA based on gas heated units.

Off-site reinforcement is not envisaged at this stage, but this would be determined by a network assessment at formal quotation stage.

#### 3.1.4 New Infrastructure

UKPN has provided a budget estimate of £300,000 exc. VAT to supply the site from their existing 11kV network in Seabrook Road, which includes a new 11kV circuit and two new on-site substations.

A copy of this estimate is included in Appendix D of this report.

#### 3.1.5 Legal Tenure (Wayleaves / Easements)

Where electricity lines are to be installed in private land UKPN will require an easement in perpetuity for its electric lines, and in the case of electrical plant the freehold interest in the substation site, on UK Power Network terms, without charge and before any work commences.

Each GRP substation will require a footprint area of 4m x 4m (5m x 5m for a brick built enclosure), and will require provision for 24-hour access directly from the public highway.

#### 3.1.6 Financial Considerations

##### *Procurement Options*

The estimated electricity demand proposed for this development would be of sufficient scale to encourage an "out of area" licensed Distribution Network Operator (DNO) to establish an

embedded system within the incumbent's licensed area and alternative quotations could be procured.

#### *Contestable / Non Contestable Work*

All new electricity infrastructure from the point of connection to the existing network to the point of metered supply will generally fall under the "contestable" heading allowing "self lay" as an optional procurement route.

All modifications and diversions of existing apparatus generally fall under a "non-contestable" banner, which must remain under the direct control of the incumbent provider.

Generally, building and civils work in association is considered to be a contestable element in terms of both new and diversionary work.

A detailed review of the electricity scope of work offered by UK Power Networks should be undertaken once a formal connection offer and quotation has been received.

### **3.2 Gas Infrastructure**

The incumbent gas provider is Southern Gas Networks (SGN).

A summary of the infrastructure likely to be affected by the proposed development is outlined below.

#### **3.2.1 Existing Infrastructure**

SGN records show low pressure (LP) and medium pressure (MP) mains located to the north of the canal and in the carriageway of Seabrook Road to the north of the site. There are no mains or existing services shown within the site boundary.

#### **3.2.2 Network Modifications**

There are no gas mains shown within or along the site boundary and therefore no diversionary works are anticipated.

#### **3.2.3 Network Capacity**

It is estimated that a peak hourly demand of approximately 2,094 kWh and an annual demand of approximately 6,565,262 kWh will be required to serve the development.

SGN has not advised of any constraints in their existing network; however, on submission of a formal application they would run further network analysis in order to determine sufficient capacity to serve the new development or whether off-site reinforcement would be required.

#### **3.2.4 New Infrastructure**

SGN has provided a budget estimate of £192,000 exc. VAT to supply the proposed development, with a point of connection to their existing 8" cast iron (CI) LP main located in Seabrook Road to the north of the site.

A copy of this estimate is included in Appendix D.

### 3.2.5 Financial Considerations

#### *Contestable / Non Contestable Work*

All new gas infrastructure from the pressure reducing station (PRS) (if applicable) or connection point to the metered supply will generally fall under the “contestable” heading allowing self-lay as an optional procurement route.

All modifications and diversions of existing apparatus generally fall under a “non-contestable” banner, which must remain under the direct control of the incumbent provider.

Generally, builder’s work associated with the installation is considered to be a contestable element of both new and diversionary work.

### 3.3 Potable Water

The incumbent water provider is Affinity Water (AW).

A summary of the infrastructure likely to be affected by the proposed development is outlined below.

#### 3.3.1 Existing Infrastructure

Affinity Water records show an 8” water main running along the northern site boundary, adjacent to the canal.

#### 3.3.2 Network Modifications

There are no water mains shown within site boundary and the main along the northern boundary does not appear to be affected by the proposed layout. Therefore no diversionary works are anticipated at this stage.

#### 3.3.3 Network Capacity

The estimated peak flow for the proposed development is 11.82/s (117.13m<sup>3</sup>/day).

AW has advised that there is currently sufficient capacity within their existing network to serve the proposed development and that off-site reinforcement works should not be required to accommodate the estimated demand.

#### 3.3.4 New Infrastructure

AW has provided a budget estimate to install a new 125mm HPPE main through the middle of the site, connecting to their existing 8” main along the northern site boundary in order to supply the proposed development.

The estimated cost to supply the proposed development is as follows:

Off-site reinforcement	Nil
On-site mains (775m of 125mm main)	£100,750*
Standard connection charge (£400 per connection)	£ 60,000
Infrastructure charge (£354 per connection)	£ 53,100

\* AW estimate a developer contribution of 20% of this figure

A copy of this estimate is included in Appendix D.

### **3.3.5 Financial Considerations**

#### *Procurement Options*

The client (developer) will be required to submit a formal requisition to Affinity Water for potable water supply, under the terms of Section 41 of the Water Industry Act.

#### *Contestable / Non Contestable Work*

All modifications and diversion of existing apparatus generally fall under a “non-contestable” banner, which must remain under the direct control of the incumbent provider.

Generally, builder’s work in association is considered to be a contestable element of both new and diversionary work.

Provision of the offsite works is contestable as a self-lay option.

### **3.4 Telecommunications Infrastructure**

A summary of the BT Openreach infrastructure likely to be affected by the proposed development is outlined below.

#### **3.4.1 Existing Infrastructure**

BT records show existing underground and overhead lines located to the north of the canal and in the built up areas off of Seabrook Road.

#### **3.4.2 Network Modifications**

There is no BT apparatus shown within or around the site boundary, and therefore no diversionary works are anticipated.

#### **3.4.3 Network Capacity**

There are no issues with capacity; BT have an obligation to serve new developments with both telecoms and broadband services.

#### **3.4.4 New Infrastructure**

It is normal practise for BT to free issue materials for the developer to install, and a rebate of approximately £50/flat and £135/house may apply.

BT Openreach do not provide design proposals prior to planning; they require a design fee to produce a detailed design and estimate, and this can be applied for following outline planning consent and once the detailed technical drawings are prepared.

### **3.5 Cable**

#### **3.5.1 Existing Infrastructure**

Virgin Media has infrastructure located within both footways of Seabrook Road to the north of the site.

#### **3.5.2 Network Modifications**

There is no Virgin Media apparatus shown within or around the site boundary, and therefore no diversionary works are anticipated.

## 3.6 Foul Drainage

### 3.6.1 Existing Infrastructure

Southern Water (SW) sewer network records show a combined rising main running within the site, adjacent to the southern site boundary.

At the far eastern end of the site there is a small surface water sewer shown outfalling to the sea.

### 3.6.2 Network Modifications

According to Southern Water's records the combined sewer runs underneath the footprint of the development buildings shown on the current proposed layout, and is therefore likely to require diverting.

### 3.6.3 Network Capacity

A Level 2 Foul Sewer Capacity Check has been carried out by Southern Water, this has identified insufficient capacity within their existing network to accommodate the proposed foul flow from the development.

SW have identified a point of connection to their existing sewer (the Seabrook SPS rising main) to the south-west of the site in Princes Parade. They propose to install a 160m length of 1400mm main and three new manholes to reinforce the existing network; connected to the existing sewer between MH2401 and MH3501, and connecting back into the original sewer at MH4501. We estimate a budget cost of £224,000 for these works.

Capacity Check Results and a plan showing the proposed reinforcement works can be found in Appendix D of this report. It would be normal to further develop and clarify the extent of these works with Southern Water.

## 3.7 Summary of Budget Estimates

The following utility allowances have been determined via a desktop study based on early and limited information and are offered on the basis that they are broad in nature and for "guidance purposes" only. Should the site progress, PBA would be pleased to procure firm prices and provide a best value utility strategy for the development in which various market discounts may apply from competitive utility infrastructure providers.

Table 3: Summary of Budget Estimates

Electricity (UK Power Networks)	Diversions	£ -
	New infrastructure	£ 300,000
Gas (Southern Gas Networks)	Diversions	£ -
	New infrastructure	£ 192,000
Water (Affinity Water)	Diversions	£ -
	Off-site reinforcement	£ -
* Estimated developer contribution of 20% for on-site mains	New on-site mains	£ 100,750*
	New service connections	£ 60,000
	Infrastructure charges	£ 53,100
Telecoms (BT)	Diversions	£ -
	New infrastructure	£ -
Cable (Virgin Media)	Diversions	£ -
Foul Drainage (Southern Water)	Diversions	TBC
	New infrastructure	TBC

*Note: All prices exclude professional/local authority fees*

## 4 Programme

The programme timescales below are provided for guidance only.

A defined Masterplan will be required to allow detailed estimates to be prepared.

Table 4: Programme Timescales

Electricity	Produce firm price	6 weeks
	Lead in for planning / allocation of materials and labour	8 weeks
Gas	Produce firm price	4 weeks
	Lead in for planning / allocation of materials and labour	6 weeks
	Lead in for high pressure gas main	18 months
Water	Produce firm price	6 weeks
	Lead in for planning / allocation of materials and labour	8 weeks
Telecom	Produce firm price	4 weeks
	Lead in for planning / allocation of materials and labour	4 weeks
Foul Drainage	Section 98 requisition	8 months
	Section 104 / Section 106	2 months

## 5 Conclusion

This report shows that there is existing electricity, gas, water and telecom infrastructure within the vicinity of the site that could serve the proposed development. At this stage no off-site reinforcement works have been identified, but further detailed assessments would be carried out by the utilities upon submission of a formal application with an agreed site layout and accommodation schedule.

The existing foul sewer system has insufficient capacity to accommodate the proposed foul flow, and off-site reinforcement works will be required.

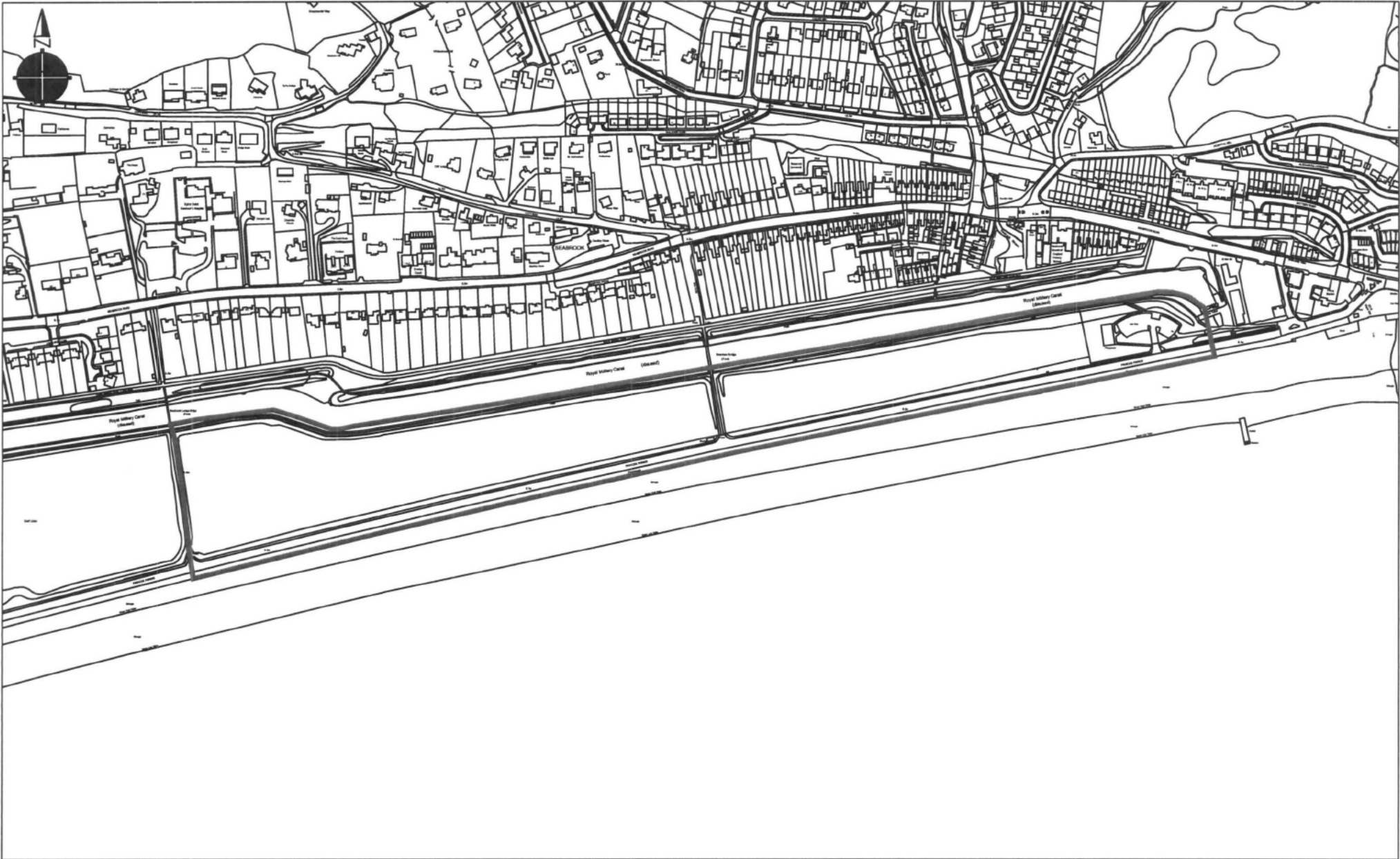
The combined sewer running within the site may require diverting to accommodate the proposed development layout; this would be determined upon submission of an application and an agreed site layout to Southern Water.


The enquiries to the incumbent utility providers to date have been based on direct connection to each unit and will be subject to formal application following planning consent.

New supplies within the site will generally be routed along proposed road corridors. The requirements for easement agreements for supplies located outside of the proposed highway will need to be agreed with the relevant statutory undertaker as part of the design process.

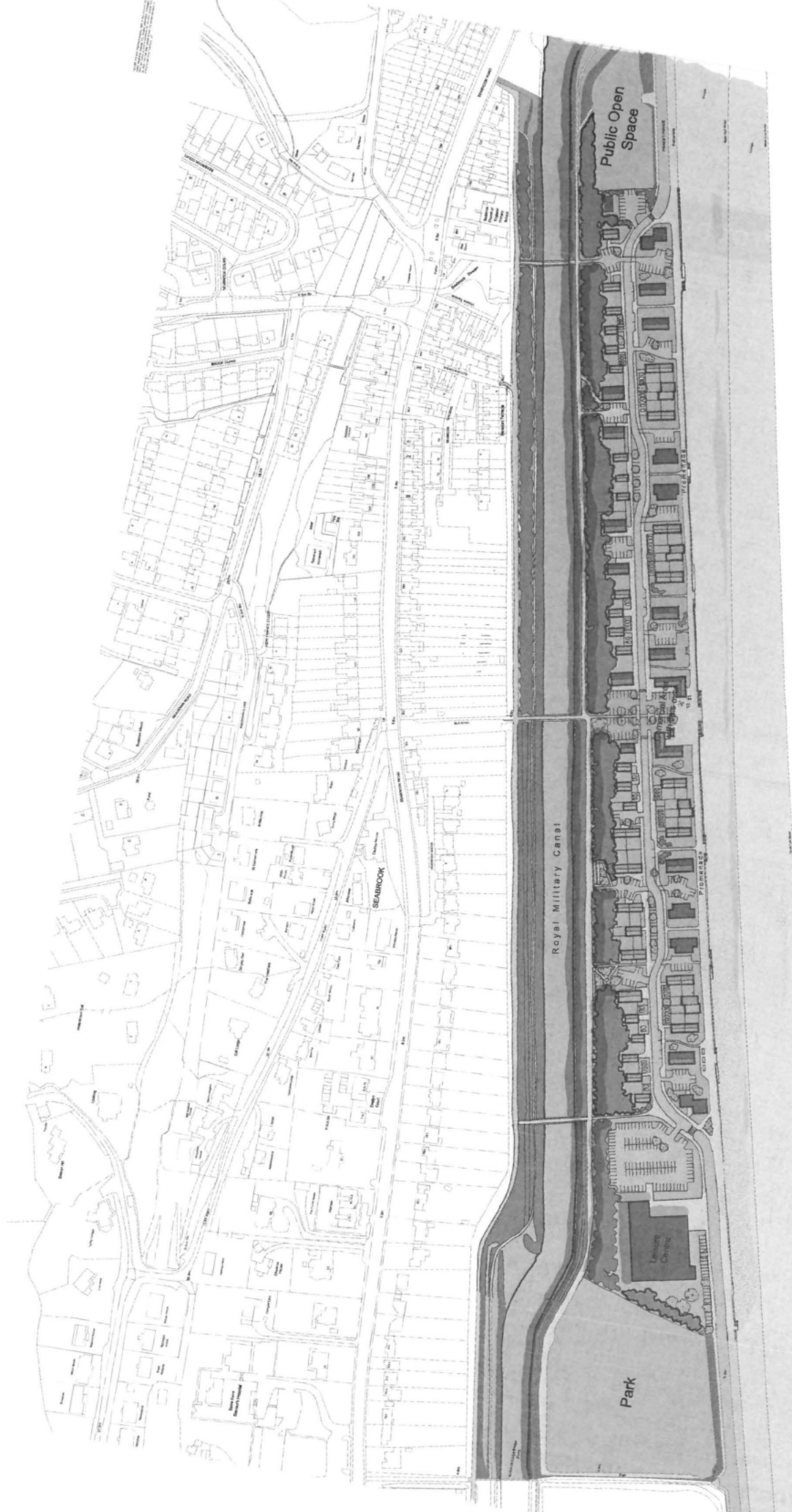
**PBA can design and procure firm prices for new utility infrastructure in which various market discounts may apply. We manage this within the context of the wider infrastructure layout to provide a coherent, coordinated and programme sensitive approach.**

## Appendix A Site Location



 <p>Folkestone Hythe &amp; Romney Marsh Shepway District Council <a href="http://www.shepway.gov.uk">www.shepway.gov.uk</a></p>	<p>Shepway District Council Strategic Development Team, Civic Centre, Castle Hill Avenue, Folkestone, Kent, CT20 2QY Tel: 01303 853000</p>	<p>Scale 1:5000</p>	<p>Drawing Number 2015/LV/001</p>	<p>Rev 00</p>	<p>ORIGINAL DRAWING SIZE A4</p>	<p>Revision 00</p>	<p>Drawn Checked Approved Date</p>	<p>LS AJ AJ 03/09/15</p>	<p>First issue</p>
	<p>Project <b>Hythe Pool Feasibility</b></p>					<p>Drawing Title <b>Site option 1 - Princes Parade</b></p>	<p>Revision</p>	<p>Drawn Checked Approved Date</p>	

## **Appendix B Proposed Development Layout**



Development shows 148 units:  
92 Flats  
56 Houses

Lee Evans Partnership



Proposed Development of Prince's Parade  
Sketch Layout of Possible Housing Scheme

## **Appendix C Existing Utilities Layout**



## **Appendix D Correspondence**

Peter Brett Associates LLP  
Calgarth House  
39-41 Bank Street  
Ashford  
TN23 1DQ

FAO  
[REDACTED]

18/3/2016

Our Ref: 8500029873

Dear [REDACTED]

**Site Address: Princes Parade, Hythe**

Thank you for your recent enquiry regarding the above premises. I am writing to you on behalf of South Eastern Power Networks PLC the licensed distributor of electricity for the above address trading as UK Power Networks.

I am pleased to be able to provide you with a budget estimate for the work. It is important to note that this budget estimate is intended as a guide only. It has been carried out without a site visit. No enquiry has been made as to the availability of consent or the existence of any ground conditions that may affect the ground works. It is not an offer to provide the connection and nor does it reserve any capacity on UK Power Networks electricity distribution system.

**1. Budget estimate:**

The budget estimation for the cost of this work is : £300,000.00 (exclusive of VAT). Please see the attached plot for details.

If you would like to proceed to a formal offer of connection then you should apply for a quotation. Please refer to our website [https://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the\\_connection\\_process.pdf](https://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the_connection_process.pdf) for "The Connection Process" which details our application process. To help our progress of any future enquiry as quickly as possible please quote the UK Power Networks Reference Number from this letter in all correspondence.

This budget estimate is based on the following assumptions:

- The most appropriate Point of Connection (POC) is as described above.
- A viable road cable route exists along the route we have assumed between the Point of Connection (POC) and the substation(s) required on your site. 100 metres of 2 x 11 kV cable laid in the road from the POC to site. 830 metres of 11 kV cable laid on site to the two substations. 13 blocks of flats. 58 houses.

Two complexes of commercial/flats above, one supply to each, 400 Amps, 285 kVA.

- In cases where the Point of Connection (POC) is to be at High Voltage, that a substation(s) can be located on your premises at or close to the position we have drawn on the attached plan.
- Where electric lines are to be installed in private land UK Power Networks will require an easement in perpetuity for its electric lines and in the case of electrical plant the freehold interest in the substation site, on UK Power Networks terms, without charge and before any work commences.
- You will carry out, at no charge to UK Power Networks, all the civil works within the site boundary, including substation bases, substation buildings where applicable and the excavation/reinstatement of cable trenches , including the supply and laying of cable ducts.
- Unless stated in your application, all loads are assumed to be of a resistive nature. Should you intend to install equipment that may cause disturbances on UK Power Networks' electricity distribution system (e.g. motors; welders; etc.) this may affect the estimate considerably.
- All UK Power Networks' work is to be carried out as a continuous programme of work that can be completed substantially within 12 months from the acceptance of the formal offer.

Please note that if any of the assumptions prove to be incorrect, this may have a significant impact on the price in any subsequent quotation. You should note also that UK Power Networks' formal connection offer may vary considerably from the budget estimate. If you place reliance upon the budget estimate for budgeting or other planning purposes, you do so at your own risk.

If you would like to proceed to a formal offer of connection then you should apply for a quotation, Please refer to our website [https://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the\\_connection\\_process.pdf](https://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the_connection_process.pdf) for '**The Connection Process**' which details our application process. To help our progress any future enquiry as quickly as possible please quote the UK Power Networks Reference Number from this letter on all correspondence.

If you have any questions about your budget estimation or need more information please do not hesitate to contact me. The best time to call is between 9am to 4pm, Wednesday to Friday.

If I am unavailable or engaged on another call when you ring, you can leave a message with another member of staff. I will call you back as soon as I am free.

Your feedback is important to us, and we would be grateful if you would complete a short questionnaire to tell us about the service that you have received in relation to this Budget Estimate. The customer relations team do contact a small number of customers by telephone as well. You can remain anonymous if you prefer when you provide this feedback. Please follow this [link](#) to complete the survey; it will take you only a few minutes. Thank you in advance for your help.

I will call you in a couple of days to ensure that you have received the Estimate and that it has met all of your requirements, however if you have any questions in the meantime please contact me.

Yours sincerely

[Redacted Signature]

[Redacted Name]

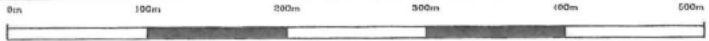
Senior Designer,

Connections

[REDACTED]@ukpowernetworks.co.uk



2 x 11kV CABLES From HYTHE 11kV CIRCUIT 09



The quality and accuracy of any print will depend on your printer, your computer and its print settings. Measurements scaled from this plan may not match measurements between the same points on the ground.

LV Cable or Line	
HV Cable or Line	
EHV Cable or Line Approx. position	
Ductline	
Pole & Street Furniture	
Substation & Link Box	

- The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
  - The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
  - It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all cables have been determined.
  - It must be assumed that each property and item of street furniture has an electricity supply. Service cables shown only where known.
  - All cables must be treated as being live unless proved otherwise by UK Power Networks.
  - The information provided must be given to all people working near UK Power Networks plant & equipment. Do not use pions more than 3 months after the issue date for excavation purposes.
  - Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
- VISITING AN OPEN POINT? Please mark on this plan all locations visited and open points as found, then return updated map to your Business Unit - Thank You.

- UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
  - UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.
  - Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
  - This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and you must return it to the sender of the letter.
  - You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.
- Contact UK Power Networks on 0800 056 6986 for details of EHV Cable routes before commencing work.

Grid Ref: TR 18326 34843

Scale: 1:5000  
(When Plotted at A4)

Plotted on: 18/03/2016  
Plotted by: Bob, Alexander

**Plan Provision**  
CHECK IT OUT BEFORE YOU DIG IT OUT  
CALL 0800 056 5866  
EMERGENCY- If you damage a cable or line  
Phone 0800 096 3766 (24hrs) URGENTLY



ALWAYS LOOK UP BEFORE YOU START WORK  
Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (In some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.



SGN  
Connections

1 April 2016

Our Ref: 1126065

Your Ref: N/A

SGN Connections  
St Lawrence House  
Station Approach  
Horley  
Surrey  
RH6 9HJ

██████████  
Calgarth House 39-41  
Bank Street  
Ashford  
Kent  
TN23 1DQ

Customer Service **0800 912 1700\***

Dear ██████████

**New connection at Princess Parade, Seabrook Grove, Hythe, Kent, CT21 5QZ**

Thank you for choosing us to give you a budget indication for a new connection at the above site, and please find our detailed quote below.

**Work to be carried out**

SGN Connections to connect to the existing 8" CI LP main in Seabrook Road and install appropriately sized gas infrastructure to the suitable locations. SGN Connections to carry out all the necessary excavation and reinstatement work up to the site boundary.  
No meter/meter housing work is included.

**Your budget indication is £192,000 (excluding VAT)**

Please note that this figure is a budget indication only, based on the information you've given us, and doesn't represent an offer to carry out the work.

We won't be able to give you a more accurate quote until a full design study has been carried out, and there's a charge for this. We'll be able to tell you how much the study will be once you ask us for a firm quote.

We're assuming no easements or third party permissions are required to carry out the work.

Please note that this budget indication doesn't allow for any diversion of our existing infrastructure if we find it's necessary. You can get further detail on this by calling SGN Diversions/Isolations on 0800 912 1722.

If you have any further questions, please feel free to contact me on the number at the top of this letter.

Yours sincerely

██████████ ██████████  
Technical Assistant

Developer Services  
Affinity Water  
Tamblin Way  
Hatfield  
Hertfordshire  
AL10 9EZ

Tel: 0345 357 2428  
E-Mail: ds@affinitywater.co.uk

14<sup>th</sup> April 2016

**Scheme No: NC48643**

██████████  
Peter Brett Associates LLP  
Calgarth House  
39-41 Bank Street  
Ashford  
TN23 1DQ

FAO: ██████████

Dear ██████████

**Re: Request for a Budget Price for Water Infrastructure at Princes Parade, Hythe CT21 5QZ**

We are pleased to enclose this information in response to your request for a budget estimate to supply your development. As there is no scaled site layout plan with the layout of the properties, this is an indicative budget.

**Your Budget**

Item	Excavation	Approx. Unit Cost	Approx. Scope	Budget Price	Estimated Contribution
Onsite (development) water mains	Not included	£130/m	775m of 125mm HPPE	<b>£100,750</b>	<b>20%</b>
Onsite (development) service connections	Not included	£400 ea	150	<b>£60,000</b>	<b>100%</b>
Onsite large diameter (>63mm) services	Not included	£3,000 ea		<b>N/A</b>	<b>100%</b>
Off Site (in public Highway) (>63mm) services	<b>Included</b>	£4000	N/A	<b>N/A</b>	<b>100%</b>
Offsite water mains laying (e.g. reinforcement)	<b>Included</b>	£270/m	N/A	<b>N/A</b>	<b>100%</b>
Offsite (in public highway) Service connections	<b>Not included</b>	£2000 ea	N/A.	<b>N/A</b>	<b>100%</b>

**Please note the cost information provided in this letter is for budgetary purposes only and is subject to change.**

The developer's contribution for onsite water mains is usually much less than the cost of installation. This is in accordance with the legislation set out by the Water Industry Act 1991 for the recovery of water company costs. The contribution varies significantly from scheme to scheme but **typically ranges from 10 – 30%**. It is not possible to give a more accurate figure without a full water mains requisition, so we would advise using a contribution figure of 30%.

In addition to the above, the following items may be required and **have not been included in the above budget estimate**:

- Infrastructure charges (refer to Affinity Water's current Charges Scheme);
- Traffic management costs (charges vary considerably between Local Authorities);
- Service connections to the existing network, e.g. show home supplies to water mains in the public highway (where Affinity Water is to excavate and reinstate);
- Disconnections of existing water mains and / or service pipes;
- Building water charges and Value Added Tax.

Please note that the cost information provided is an estimate and the actual costs may differ significantly. Detailed design (including full hydraulic analysis to size the water pipes, consultation with statutory bodies, e.g. fire brigades, and local authorities to establish traffic management requirements) and costs are supplied to the developer on correct completion of the appropriate application form(s), available on our website.

### **Summary**

We enclose a record plan which shows the approximate positions of our existing water main distribution network in the vicinity of your development. This plan will help give you an indication of the likely connection points to serve your proposed development.

Our budgetary analysis considers whether your development requires any of the following:

- Onsite works: **new water mains**
- Onsite works: **new service connections**
- Onsite works: **large diameter service connections** (greater than 63mm diameter)
- Offsite works: **diversion** of existing assets
- Offsite works: **reinforcement** (upgrade) of the existing network
- Offsite works: **new service connections**

### **Onsite works**

**New onsite water mains** laid in High Density Polyethylene (HDPE) up to 180mm outside diameter are typically **£130 per linear metre** where the following conditions are met:

- The trenches for the new water mains are fully excavated by the developer in accordance with the Affinity trench specification (enclosed);
- Other onsite utilities are laid in accordance with NJUG regulations, maintaining the necessary access to the new water mains and safe distances from other utilities.

The approximate scope of works is based on the information you supplied with your budget request. We have indicated our proposal for onsite mains on the record plan enclosed.

For developments with complex proposals, we strongly suggest you complete a full mains requisition to allow us to review in detail and schedule a meeting to discuss your needs.

**New onsite service connections** with an inline meter in Medium Density Polyethylene (MDPE) up to 32mm outside diameter are approximately **£400 each** where the following conditions are met:

- The supply pipe is laid to the correct depth in the material specified by us;
- The trench for the communication pipe is fully excavated by the developer;
- The distance between the property boundary and water main is less than 10 metres;
- The connection point to the onsite water main is exposed by the developer.

Infrastructure charges are due on new service connections. Please check our website for the current infrastructure charge (search for Affinity Water's Charges Scheme).

### **Onsite works: Large diameter service connections**

Some types of developments require larger supplies, for example blocks of flats or offices, hospitals, industrial units or a new hotel. The approximate cost of a **single large diameter connection is £3,000**.

Infrastructure charges due on large diameter service connections for commercial premises are calculated using the Relevant Multiplier method, set out in our Charges Scheme. Please note that infrastructure charges are not included in the budget costs in this letter.

### **Offsite works**

Where our assessment indicates that **diversion and / or reinforcement of the existing water mains network** is required to support your development, mains laid in High Density Polyethylene (HDPE) up to 180mm outside diameter are typically **£270 per linear metre** (including all excavation and reinstatement) where the following conditions are met:

- All works in the public highway (not A roads or motorways);
- Other utilities do not prevent access to the existing network (laid in accordance with NJUG).

The decision to undertake offsite works to support development activity is not taken lightly. The costs for the works are directly proportional to the extra demand required, i.e. we do not charge the developer for anything not related to his development. A basic hydraulic study is undertaken to assess the existing capacity of the network and is considered in our budget cost provided on Page 1 of this letter.

Where offsite reinforcement or diversions are required, it is because at least one of the following criteria applies:

- The existing network as currently sized is not capable of supporting any additional properties.
- The proposed development has a detrimental effect on the water supply to our existing customers.
- The development site proposed is on top of an existing asset and needs to be moved.
- New fittings (valves, washouts etc) are required to enable the connection to the new development to be made.

We would ask you to appreciate that the closest water main to your development may not be the most appropriate main to connect into, and at budget stage we cannot guarantee which main will be used. On receipt of a full mains requisition, we will undertake detailed analysis to identify the most cost effective option for your development; taking into account the above points as well as traffic management requirements.

**New offsite service connections** with an inline meter in Medium Density Polyethylene (MDPE) up to 32mm outside diameter are approximately **£2000 each** where the following conditions are met:

- The supply pipe is laid to the correct depth in the material specified by us to the boundary of the private land;
- The distance between the property boundary and water main is less than 10 metres;

Infrastructure charges are due on new service connections. Please check our website for the current infrastructure charge (search for Affinity Water's Charges Scheme).

### **Offsite works: Large diameter service connections**

Some types of developments require larger supplies, for example blocks of flats or offices, hospitals, industrial units or a new hotel. The approximate cost of a **single large diameter connection is £4,000 (for bulk supplies with internal meters for flats of 12 or more please allow an extra charge for installing the meter of £82.33 for each property)**.

Infrastructure charges due on large diameter service connections for commercial premises are calculated using the Relevant Multiplier method, set out in our Charges Scheme. Please note that infrastructure charges are not included in the budget costs in this letter.

### **Other useful information**

We have provided the cost information in good faith for your budgetary purposes.

Costs will increase when:

- Working in contaminated ground as a barrier pipe is required to protect water quality. Installations in barrier pipe are typically 30 – 50% more expensive than HDPE pipe.

- Larger diameter pipes (>180mm) are required (whether on and / or offsite), as the excavation is greater and the cost of the materials/fittings increases.
- Affinity Water is required to excavate and reinstate onsite works.
- Above ground asset reinforcement is required (e.g. a booster or new reservoir).

We require completion of the appropriate application form(s) and submission of supporting documentation to provide more accurate costs. Please note we cannot proceed if the application form is incomplete and you should estimate items such as loading units and build rates if the actual figures are currently unknown to you.

The start of mains and service connections works on your site is dependent upon our current programme of works, although every effort will be made to accommodate your timetable. It should be noted that construction in the public highway is governed by statutory regulation and under certain circumstances commencement of offsite works may be delayed by up to three months from the receipt of your payment to gain permission from the Local Authority.

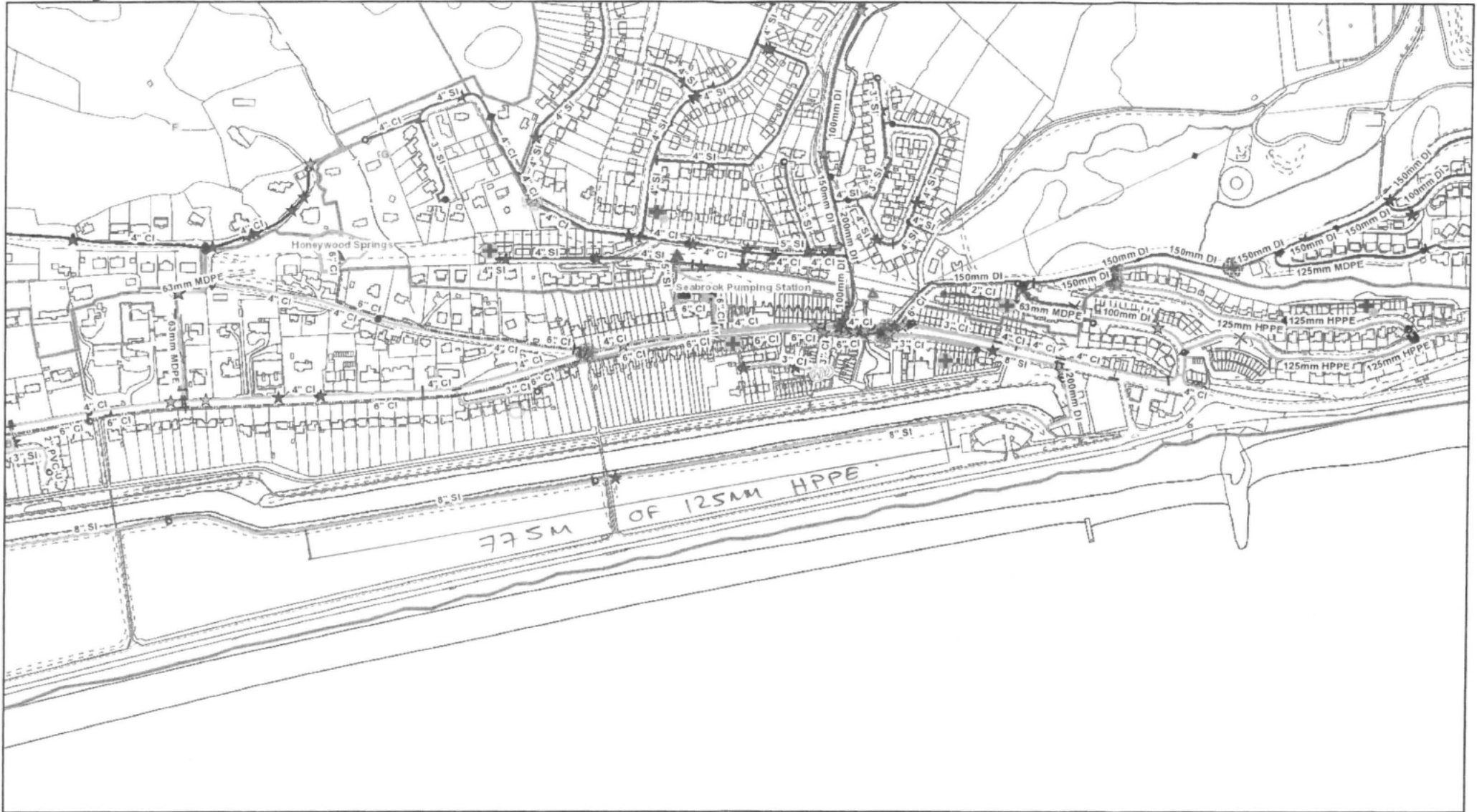
If you need any further advice please do not hesitate to contact us.

Yours Sincerely,

[Redacted Signature]

[Redacted Name]

**Project Manager, Developer Services**



© Affinity Water Limited. Based upon the Ordnance Survey map by Affinity Water Limited with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright Affinity Water licence number 100053744. Plans are the property of Affinity Water Limited and may not be reproduced or distributed in any form (or any part) without the written permission of Affinity Water Limited.  
 Plans are continuously being updated, so out of date plans should be destroyed and not relied upon. The position of apparatus shown on this plan is provided for guidance only and should not be relied upon as being precise. Therefore the Company accepts no responsibility in the event of inaccuracy. Service pipes are not necessarily shown on this plan. Cover is normally 915mm for mains and 750mm for communication pipes but this may vary. The actual position of apparatus must be determined on site by making hand dug trial holes. The Company requires a minimum of two working days notice of the intention to excavate trial holes. Except where prior written permission has been obtained, it is an offence under Section 174 of the Water Industry Act 1991 to operate or interfere with any valves, hydrants or other apparatus vested in Affinity Water.  
 Affinity Water, Tamblin Way, Hatfield, Hertfordshire, AL10 9EZ. Tel: 0845 782 3333. Web: www.affinitywater.co.uk



1:4,112  
 Map Centre  
 618,474,134,902

Legend			
●	Fire Hydrant	○	Air Valve
○	Washout	—	Main
—	Open Valve	—	Communication Pipe
▶	Pressure Reducing Valve	—	Supply Pipe
⊖	Closed Valve	□	District Meter Zone



INFRASTRUCTURE ASSESSMENT FOR  
FOUL DRAINAGE AT  
PRINCES PARADE,  
HYTHE  
KENT  
CT21 5QZ

6<sup>th</sup> June 2016

REQUESTED:  
PETER BRETT ASSOCIATES LLP

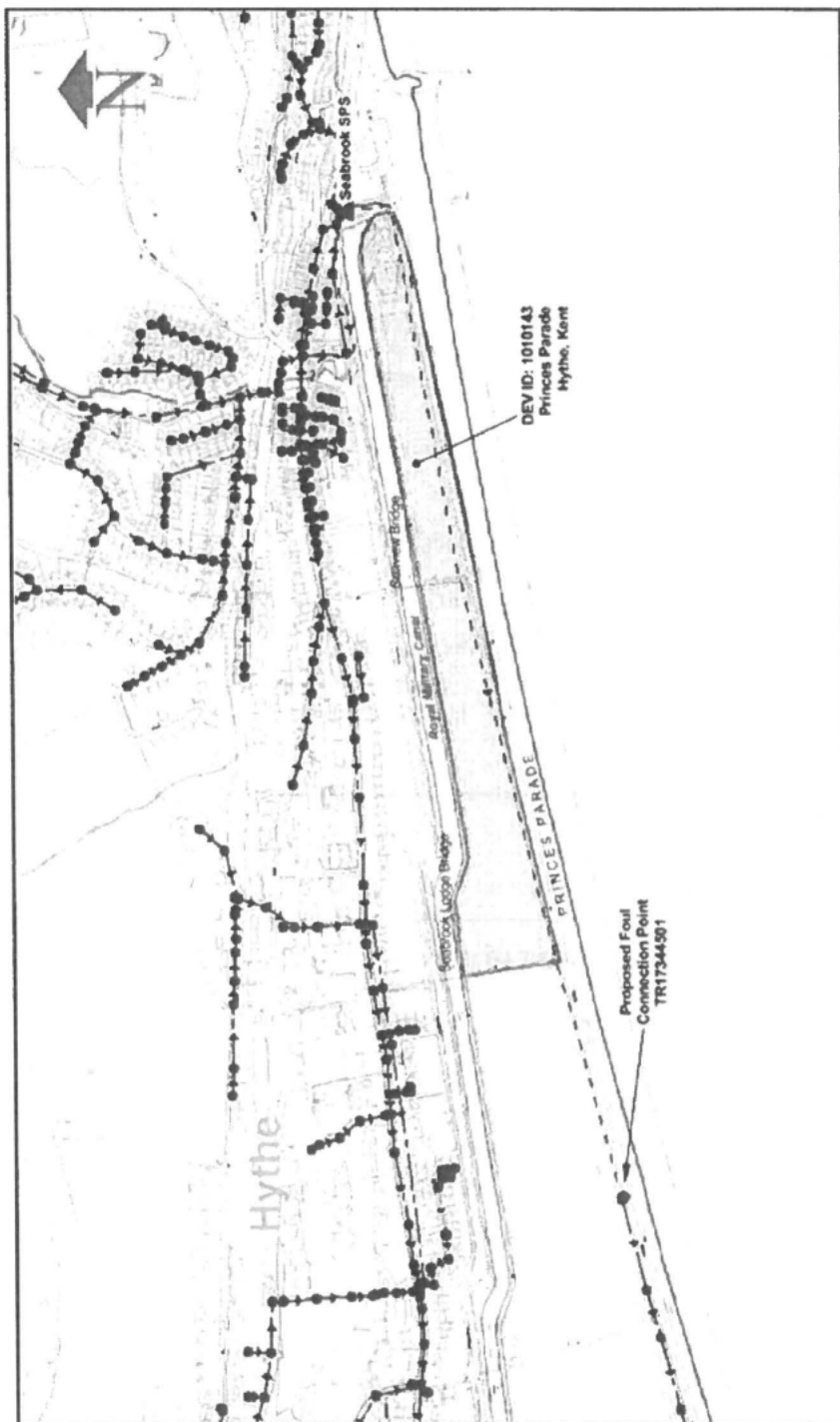
## Infrastructure Assessment for Foul Drainage at Princes Parade, Hythe, Kent

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### I. Development Details:

The proposal is to discharge foul flow from the proposed development site to the local foul sewerage system at manhole (MH) TR17344501 off Princes Parade and surface water to a new outfall(s) to the Royal Military Canal (disused) or directly to the sea.

Figure 1 - Proposed Development

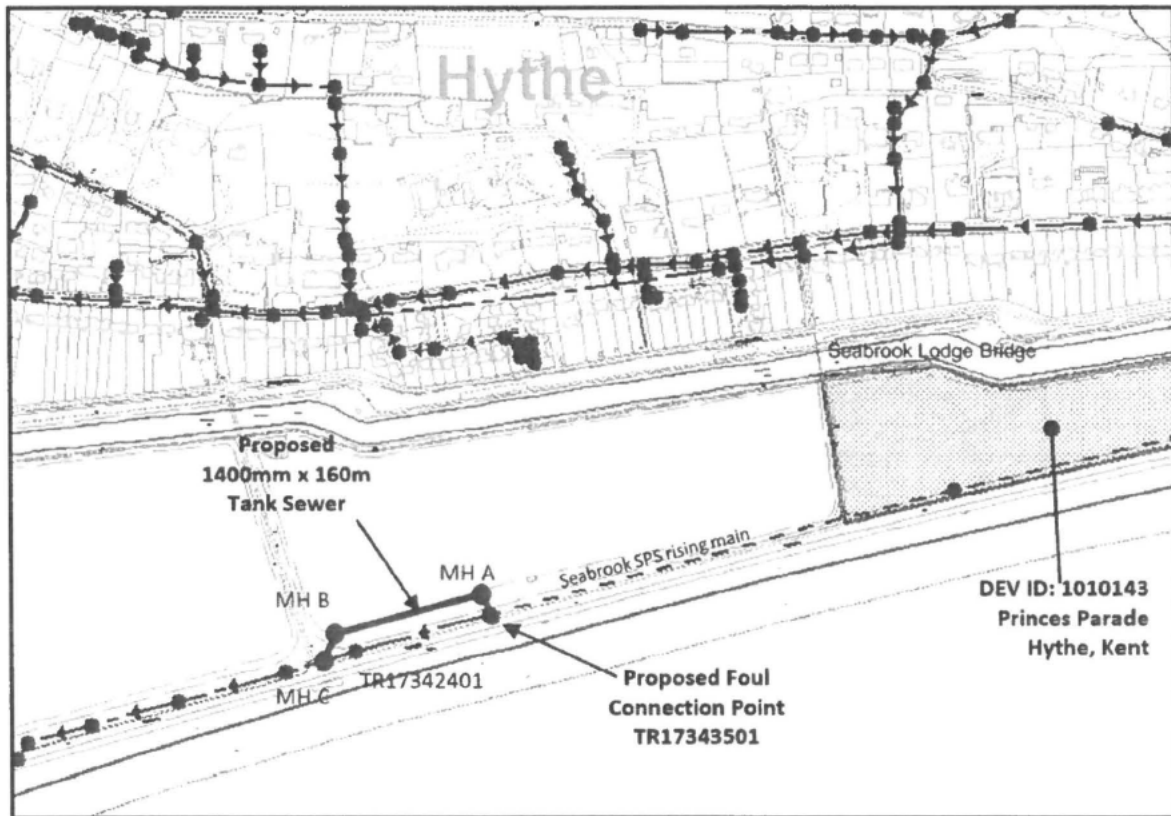


**II. Results and Conclusions:**

**Foul Water:**

There is currently inadequate capacity within the local foul sewerage network to accommodate the foul flow from the proposed development site at MH TR17344501. The proposed development would increase flows to the local network and as a result existing properties and land may be subject to a greater risk of flooding. Additional off-site sewers or improvements to existing sewers will be required to provide sufficient capacity to service the proposed development as indicated in Figure 2 and Table 2.

**Figure 2 - Proposed Improvement – Foul system**



**Table 2 Proposed Improvements Schedule**

Manhole	Manhole	Sewer Diameter (mm)		Av. Depth (m)	Length (m)
		Existing	Proposed		
MH A	MH B	-	1400	2.3	160

**Surface Water:**

There is no existing surface water network into which the proposed development can be drained.

Surface water may be discharged to the Royal Military Canal or directly to the sea via an appropriately designed surface water system through single or multiple outfalls subject to the approval of all interested parties.

Before any connections are made, an application form needs to be completed and approved by Southern Water Services.

Please note: The information provided above does not grant approval for any designs /drawings submitted for the capacity analysis. The results are an indicative hydraulic assessment and should not be used as a basis for design. The results quoted above are only valid for 12 months from the date of issue of this letter.

# PUBLIC SEWER RECORD

# SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Based upon Ordnance Survey Digital Data with the permission of the controller of H.M.S.O. Crown Copyright Reserved Licence No. WU 298530

O.S. REF: TR1734NE

Scale: 1:2500

## Sewer Plot

WARNING: BAC pipes are constructed of Bonded Asbestos Cement  
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement



Printed By: sierrob  
Southern Water MapGuide Browser  
Requested By:  
Sewer Record Extract



Date: 7-6-2016

