

Site-Specific Flood Risk Topic Paper

Submission Document

Medway Council

Regulation 22
December 2025

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1 Introduction

1.1 Definition and purpose

- 1.1.1 Topic papers set out written material produced by the local planning authority to be submitted with a local plan for examination.
- 1.1.2 The purpose of this Topic Paper is to set out the Council's response to the Environment Agency's site-specific concerns set out in Regulation 19 representations. Some site allocation boundaries, often derived from land promoters in the early plan-making process, do not reflect the site-specific areas to be developed, which reduces the area subject to high flood risk.

1.2 Background

- 1.2.1 The Council published a Strategic Flood Risk Assessment (May 2025) (SFRA), which considers the risk of flooding from all sources to inform a Sequential Test and an Exception Test, and provides guidance for the completion of site-specific flood risk assessments to support the Regulation 19 consultation.
- 1.2.2 In response to the Council's Regulation 19 consultation, the Environment Agency raised concerns about:
 - the model used as the basis for the SFRA;
 - the application of the Sequential Test and the Exception Test in the Council's site selection process; and
 - the need to identify necessary flood defences and their associated funding and delivery.
- 1.2.3 The SFRA that was published to support the Council's Regulation 19 consultation was not based on the latest flood risk information from the North Kent Coast Flood Domain 2 Model, and this would render the Sequential Test and the Exception Test outdated. However, the North Kent Coast Flood Domain 2 Model was unavailable when the Council's consultant produced the SFRA. The Council's consultant subsequently updated the SFRA (November 2025) based on the North Kent Coast Flood Domain 2 Model, along with the Sequential Test and the Exception Test, and this has been shared with the Environment Agency.
- 1.2.4 The Council recognises the Environment Agency's concerns about the need to identify necessary flood defences and their associated funding and delivery. The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012). This matter will require ongoing, long-term collaboration.
- 1.2.5 The Environment Agency's concerns about flood defences justify the need for an alternative 'stepped' housing requirement, which has been set out in the Housing Delivery Topic Paper. The Council's view is that these sites can be duly mitigated and meet the objectives of the spatial strategy, particularly where they contribute to urban regeneration.

- 1.2.6 As a coastal authority, and lead local flood authority, the Council has significant experience in managing and mitigating the risk of flooding. This has included the Council's role in delivering flood defence infrastructure to bring forward leading regeneration sites, such as Rochester Riverside. The Council as local planning authority also works closely with the Environment Agency in assessing development proposals for flood risk and securing effective and timely mitigations as conditions through the development management process. The table set out in Section 2 below includes sites where appropriate mitigations have been secured through planning consents. In the context of this experience, the Council views that the approach to considering flood risk in the plan's spatial strategy is appropriate and deliverable.

2 Environment Agency's Site-Specific Concerns

- 2.1.1 In response to the Council's Regulation 19 consultation, the Environment Agency set out comments about sites to be allocated for development. The table below has reproduced those comments where the Environment Agency expressed concern about specific sites, along with the Council's response and reference to more information in the Appendix.
- 2.1.2 Modifications to the Medway Local Plan 2041 site allocation boundaries would clarify the land proposed for development.

LAA Site ID	Environment Agency's Comments	Environment Agency's Additional Comments	Medway Council's Response	Appendix Reference
CCB25	A small section of the site lies within Flood Zone 3b. We would object in principle to any more vulnerable development proposals within the functional floodplain. All development within flood zone 3b should be limited to water compatible development. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest risk.	We would only find the proposed site allocation sound if our flood risk comments are taken into consideration.	As per the Chatham Historic Dockyard Trust's Regulation 19 representations, the Riverside Site (Interface Land) (CCB25) has been deleted from the updated housing trajectory. To be resolved through modifications to the Medway Local Plan 2041.	n/a
CHR14	Whilst part of the site of the site is flood zone 1, a significant part is flood zone 3b. We would oppose any development other than water compatible development within flood zone 3b. We would have no objection to residential development on the parts of the site within flood zone 1. Any development should include means of safe access and this may require appropriate on site flood mitigation to avoid increasing flood risk elsewhere.	We find the site allocation to be unsound, as a large section of the site lies within Flood Zone 3b. More vulnerable development in flood zone 3b is contrary to NPPF. The site will only be sound if the area within flood zone 3b is restricted to water compatible development.	Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a. The planning agent provided a Flood Risk Appraisal. The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure. To be resolved through modifications to the Medway Local Plan 2041.	Appendix A
FP11	A small section of the site lies within flood zone 3b. We would object to any more vulnerable development proposals within Flood Zone 3b. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest flood risk. If this site is to be allocated flood defences would be required to enable this development, and should demonstrate in a detailed flood risk assessment that there is no increase to flood risk elsewhere.	We would only find the proposed site allocation sound if our flood risk comments are taken into consideration.	Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a. The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure. The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012). To be resolved through modifications to the Medway Local Plan 2041.	n/a

LAA Site ID	Environment Agency's Comments	Environment Agency's Additional Comments	Medway Council's Response	Appendix Reference
GN6	<p>We would object in principle to any more vulnerable development proposals within the functional floodplain. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest risk.</p> <p>If this site is to be allocated the LPA should be satisfied that there is safe access and egress.</p>	<p>We find the site allocation to be unsound, as a small section of the site lies within Flood Zone 3b. More vulnerable development in flood zone 3b is contrary to NPPF. The site will only be sound if the area within flood zone 3b is restricted to water compatible development.</p>	<p>Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a.</p> <p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a
GN15	<p>This site lies mainly within flood zone 3b and so areas within Flood Zone 3b should be restricted for water compatible development. We would object in principle to any more vulnerable development proposals within the functional floodplain. We recognise that this is a previously developed site and so the LPA should have regard to Table 2: flood risk vulnerability and flood zone incompatibility of the flood risk planning policy guidance. Any more vulnerable development proposals should be outside of flood zone 3b.</p>	<p>We find the site allocation to be unsound, as the site mainly lies within Flood Zone 3b.</p> <p>More vulnerable development in flood zone 3b is contrary to NPPF.</p> <p>The site will only be deemed as being sound if the area in flood zone 3b is limited to water compatible development.</p>	<p>Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a.</p> <p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a
HHH12	<p>The Medway Estuary and Swale Strategy states that this is a No Active Intervention frontage. This site has the potential to be a coastal change management area.</p> <p>The southern portion of the site will be vulnerable to coastal erosion.</p> <p>Any allocation should be supported by a coastal vulnerability assessment.</p>	<p>We find the proposed site allocation unsound, because of the area that will be impacted by coastal change. The proposal could be deemed sound if a coastal vulnerability assessment identifies land that be resilient to coastal change and development is restricted to this area.</p>	<p>The planning agent provided a Framework Plan.</p> <p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	Appendix B
HHH22 & HHH31	<p>We would have no objection to residential development on this site in flood zone 1. Any development on the site should take a sequential approach, steering development to Flood Zone 1.</p>	<p>We find the site allocation to be sound provided the sequential approach is taken in any proposals going forward.</p>	<p>Figure 14 of the Medway Local Plan 2041 shows a concept plan for Hoo St Werburgh and Chattenden.</p> <p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a
HHH32	<p>The site lies within flood zone 3. The preferred option of the Medway Estuary and Swale Strategy is for No Active Intervention in this area from around 2040 onwards. This will increase the risk of failure of the defences which will make the proposal unsafe during its lifetime.</p>	<p>We find the site allocation to be unsound, as the development will not be safe for its lifetime.</p>	<p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a

LAA Site ID	Environment Agency's Comments	Environment Agency's Additional Comments	Medway Council's Response	Appendix Reference
HHH36	The area lies within flood zone 3. It is currently protected by existing flood defences maintained by the Environment Agency. However, flood defence infrastructure is likely to need replacing/improving before any works to develop the site take place due to aging flood defence infrastructure. If flood defences are not improved for the site by the developer then developer contributions would be required.	We find the site allocation to be sound, provided our flood risk comments are taken into consideration.	Outline planning consent granted (MC/21/0979). See https://medwayone.co.uk/	n/a
RWB2	We would oppose any development other than water compatible development within flood zone 3b. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest risk. Any flood risk assessment must demonstrate that there is no displacement of flood water, and that flood risk is not increased elsewhere.	We find the site allocation to be unsound, as a large section of the site lies within Flood Zone 3b. More vulnerable development in flood zone 3b is contrary to NPPF. The site will only be sound if the area within flood zone 3b is restricted to water compatible development.	Planning consent granted (MC/15/2332).	n/a
SMI6	We would object to any more vulnerable development proposals within the Flood Zone 3b and measures should be in place to ensure that the lock gates remain functional including access. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest risk. Before any works to develop the site take place, suitable flood defences must be in place to mitigate the risk of flooding to St Mary's Island including consideration of how flood risk assets around the site allocation (including the existing lock gates) will be raised, replaced or managed in the future.	We would only find the site allocation to be sound if the flood risk comments that we have made are taken into consideration in any proposals going forward.	Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a. The planning agent provided a Vision Document. The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012). To be resolved through modifications to the Medway Local Plan 2041.	Appendix C
SNF15	A considerable section of the site lies within flood zone 3b. We would object in principle to any more vulnerable development proposals within the flood zone 3b, as it is contrary to guidance in the NPPF. Strategic flood defences in this area will be required, developer contributions would be required.	We find the site allocation to be unsound, because a considerable section of the site lies within flood zone 3b.	Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a. The anticipated start of the build period would be from Year 6, i.e. the site is 'deliverable'. This would allow for the timely delivery of necessary infrastructure.	n/a

LAA Site ID	Environment Agency's Comments	Environment Agency's Additional Comments	Medway Council's Response	Appendix Reference
SNF34	Strategic flood defences in this area will be required, if these works are not undertaken for this site developer contributions would be required. Before any works to develop the site take place, suitable flood defences must be in place to keep the development safe for its lifetime. Safe access and egress should also be considered by the local planning authority before this site is considered for development.	We would only find the site allocation sound if our flood risk comments are taken into consideration.	<p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012).</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a
SNF38	The entirety of the current site sits within flood zone 3b. We recognise that this is a previously developed site and so the LPA should have regard to Table 2: flood risk vulnerability and flood zone incompatibility of the flood risk planning policy guidance. It would only be suitable for more vulnerable development once a strategy for appropriate flood protection has been confirmed and the scheme implemented.	We would only find the site allocation sound if our flood risk comments are taken into consideration.	<p>The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure.</p> <p>The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012).</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a
SNF41	<p>A small section of the site lies within flood zone 3b. We would object in principle to any more vulnerable development proposals within the functional floodplain. Any development on the proposed site should take a sequential approach, steering development to areas of the lowest risk.</p> <p>Strategic flood defences in this area will be required, if these works are not undertaken for this site developer contributions would be required.</p>	We find the site allocation unsound, because a small section of the site lies within the functional flood plain. We would only deem the site sound if the area within flood zone 3b is kept as water compatible development.	<p>Development can be guided outside of Flood Zone 3b and, where possible, Flood Zone 3a.</p> <p>The anticipated start of the build period would be from Year 6, i.e. the site is 'deliverable'. This would allow for the timely delivery of necessary infrastructure.</p> <p>The 2018 Strood Waterfront Development Brief has been adopted as a Supplementary Planning Document.</p> <p>See https://tinyurl.com/58mapf62</p>	n/a
SR48	Any development of the site should take the sequential approach, steering development towards the areas at the lowest risk.	We would only find the site allocation to be sound, if the flood risk comments that we have made are taken into consideration in any proposals going forward.	<p>Planning consent granted (MC/19/2361, MC/25/1638); however, unlikely to be delivered.</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a

LAA Site ID	Environment Agency's Comments	Environment Agency's Additional Comments	Medway Council's Response	Appendix Reference
SR49	We have no objection in principle to development on this site. However, the site will become at flood risk during the lifetime of the development and therefore the proposal should be supported by a site-specific flood risk assessment. The SFRA should be used to inform suitable development sites.	We would only find the site allocation to be sound, if the flood risk comments that we have made are taken into consideration in any proposals going forward.	The anticipated start of the build period would take longer; this is reflected in an update to the housing trajectory. This would allow for the timely delivery of necessary infrastructure. To be resolved through modifications to the Medway Local Plan 2041.	n/a
SR51	The site currently lies within Flood Zone 1. However, due to sea level rise and the potential for managed realignment in the area it is possible that the site could become surrounded by flood zones 2 and 3 in the future. The local authority should use their SFRA to inform the suitability of the site, in terms of access and egress.	We find the site allocation to be sound. However, the local planning authority should use their SFRA to inform the suitability of the site, in terms of access and egress.	Planning consent granted (MC/22/0254).	n/a
SR53	<p>The section then states that the 'northwestern and southern end are within Flood Zone 3. These areas could be designed to flood. This could avoid the need for 'hard' flood risk infrastructure to protect Chatham and Strood town centres'.</p> <p>There is no evidence to support this statement and it is very likely that 'hard' flood defence infrastructure will always be needed to protect Chatham and Strood town centres from the risk of flooding. However, there is an identified opportunity to look at setback defences and/or land raising to allow space for water which could support wider regeneration aspirations outlined in the MLP, which includes flood defence raising elsewhere i.e. flood storage compensation. It is important to consider the level of protection that these town centres will need for the lifetime of the proposed developments, including the impact of climate change.</p>	<p>Consideration should also be given to the appropriateness of this frontage to be floodable, as Figure 16: Frindsbury Peninsula Concept Plan shows areas of residential development across the peninsula, including in areas of Flood Zone 3. Development sites should take a sequential approach, placing development in areas of the lowest flood risk.</p> <p>Policy SA13: Frindsbury Peninsula Opportunity Area, states the delivery of strategic flood risk infrastructure will be part of the subsequent design principles. Strategic flood risk infrastructure needs be planned and delivered prior to the initial phase of development, especially if there is an aspiration to develop 'up to 690 new homes within the plan period as part of a large-scale, mixed-use regeneration area'.</p> <p>The Frindsbury Peninsula Planning Framework needs to include a detailed a strategic flood risk management plan or study is required in advance of developing the Frindsbury Peninsula Opportunity area.</p>	<p>Figure 16 of the Medway Local Plan 2041 shows a concept plan for the Frindsbury Peninsula.</p> <p>Policy SA13 of the Medway Local Plan 2041 requires a Frindsbury Peninsula Planning Framework by 2030/31 to manage the medium to long-term redevelopment of MCE, including a riverside strategy, an economic strategy and the delivery of strategic flood risk infrastructure.</p> <p>The anticipated start of the build period would be from Year 11. This would allow for the timely delivery of necessary infrastructure.</p> <p>The Council is collaborating with the Environment Agency to commission an update to an assessment of flood defences conducted in 2011, and to coordinate with the Medway Estuary and Swale Flood and Coastal Erosion Risk Management (2019) and the Thames Estuary 2100 Plan (2012).</p> <p>To be resolved through modifications to the Medway Local Plan 2041.</p>	n/a

Appendix A

Site-Specific Information for CHR14

Technical Note: Flood Risk Appraisal for Land at Station Road, Cuxton

Author(s): Kirsty Thomas

Checked By: Simon Maiden-Brooks

Date: 02 April 2019

email : kirsty@herringtonconsulting.co.uk

Project: 2223 – Station Road, Cuxton

Revision 1

Herrington Consulting Ltd. has been commissioned by Port Medway Marina Ltd. to prepare a technical assessment to accompany a proposal for site allocation within Medway Council's emerging Local Plan. The location of the site is shown in Figure 1 below in relation to the EA's 'Flood Maps for Planning'. The mapping shows that the majority of the site is situated within Flood Zone 1. It is only the land adjacent to the River Medway, and the lagoon to the north of the site which are shown to be located within Flood Zones 2 and 3.

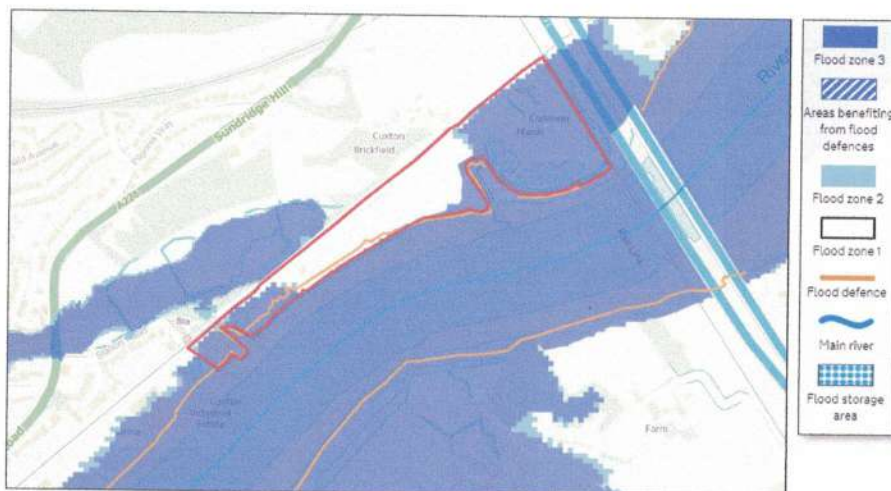


Figure 1 – Flood map for planning (© Environment Agency)

Assuming the site is successfully allocated following the selection process, it will still be necessary to demonstrate that the criteria of the Exception Test can be met. Demonstrating that the development will have sustainability benefits which outweigh the risk of flooding is outside the scope of this appraisal, however, the information contained within this appraisal focuses on the opportunities for developing the site in order to meet the criteria outlined in the second element of the Exception Test (NPPF, 2019);

"Demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall."

Herrington Consulting Limited

Canterbury Office
Unit 6 & 7
Barham Business Park
Elham Valley Road
Barham
Canterbury
Kent
CT4 6DQ

London Office
6-8
Bonhill Street
London
EC2A 4BX

Tel 01227 833855

www.herringtonconsulting.co.uk

Below is an assessment of the risk of flooding from all sources;

- The EA's 'Flood Risk from Reservoirs' mapping shows that the site is situated outside the predicted flood extent for a failure of a **reservoir**, and there are no other **artificial sources of flooding** near to the site.
- There is no information currently available regarding the **public sewer** assets in close proximity to the site. Notwithstanding this, the sloping topography of the site suggests that any flooding that could occur as a result of a blocked sewer, or caused by capacity issues, is unlikely to affect the site. Instead floodwater is likely flow away from the site, overland towards the River. There are no localised topographic depressions on the site which would encourage floodwater to pond within the development.
- Due to the proximity of the river to the site, groundwater levels are likely to be congruent with the water level in the channel, and therefore the risk of **groundwater** emergence is unlikely to exceed the maximum predicted flood level from the River Medway.
- The EA's 'Flood Risk from **Surface Water**' mapping shows a 'very low' risk of flooding following an extreme rainfall event, with the exception of the Lagoon area to the north, where the risk from surface water flooding is classified as 'low'.
- Modelled flood level data provided by the EA shows that it is only the lower parts of the site could be affected by flooding from the **River Medway** (Figure 2). The central part of the development site is elevated above the predicted flood level, even when considering an allowance for climate change over the next 100 years (6.01m AODN).

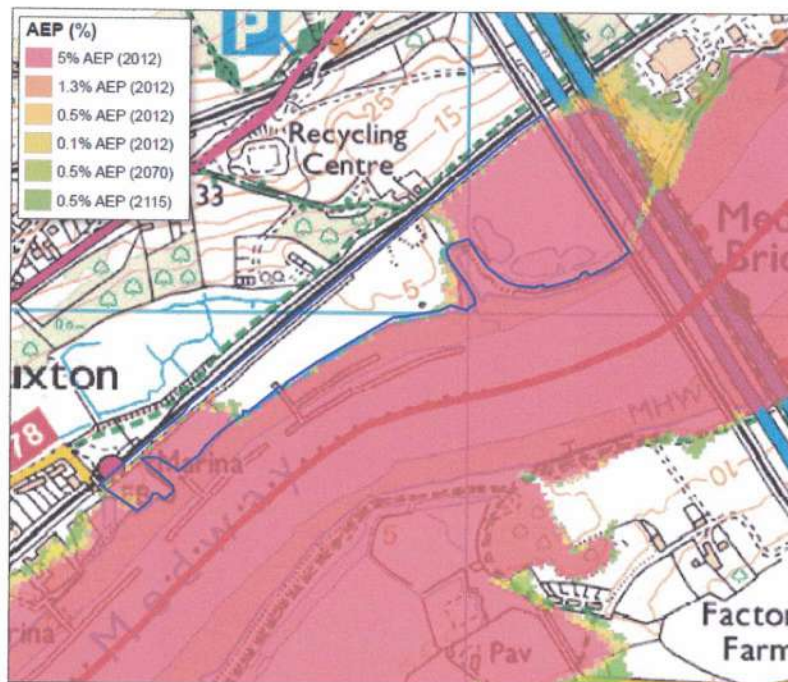


Figure 2 - Maximum extent of flooding from the River Medway under the design flood event, including an allowance for climate change over the next 100 years.

In consideration of the appraisal above, it will be necessary to mitigate the risk of flooding by managing the risk on-site. In accordance with the flood risk hierarchy outlined in *CIRIA 634 -Development and Flood Risk*, the preferred mitigation would be to implement the **Sequential Approach** to the design of the site layout.

Therefore, all development should ideally be located on the higher parts of the site, where the risk of flooding is lowest (i.e. outside the flood extent shown in Figure 2). Where other site constraints prevent development from being located outside the predicted flood extents, flood mitigation measures can be specified to ensure that occupants of the proposed development remain safe during an extreme flood event. Such measures may include, but are not limited to; **raising land** across the site, **raising finished floor levels** of the proposed buildings, and the use of **flood resistance and resilient construction techniques**.

In addition to the measures above, it will be necessary to ensure that the development does not increase the risk of flooding offsite. The current site primarily comprises undeveloped land, and as such, the introduction of impermeable surfaces (i.e. roofs, hardstanding, roads) has the potential to increase the rate and volume of runoff from the development. As such, any development will need to include a **Sustainable Drainage System (SuDS)** to provide on-site stormwater attenuation, and limit the rate at which surface water runoff is discharged from the site, in accordance with the (non-statutory) Technical Standards for SuDS.

In summary, this report identifies that the majority of the development site is located within Flood Zone1, and is at low risk of flooding from the majority of sources. The analysis identifies that part of the site could be affected by flooding from the River Medway and therefore, in order to meet the criteria of the second element of the Exception Test, it will be necessary to incorporate appropriate mitigation within any proposed development scheme. Nevertheless, the findings of the analysis confirm that there are no significant constraints or limitations at this stage which would otherwise affect the viability of development at this location. It is therefore concluded that development at this location should not be precluded on the basis of flood risk alone and the findings of this study can be used to support the allocation of the subject site within Medway Council's emerging Local Plan.

Planning Department

Medway Council
C/O Tom LaDell
LaDellWood LLP

Date: 08 June 2021
Your Ref:
Our Ref : KT/2223/13014
email : kirsty@herringtonconsulting.co.uk

By email only: tom@ladellwood.co.uk

Dear Sir or Madam,

Flood Risk Addendum for Proposed Development at Land at Station Road, Cuxton

I am writing with respect to the pre-application submission for the Proposed Development at Land at Station Road, Cuxton in respect to flood risk matters. This letter forms an addendum to the Flood Risk Appraisal Technical Note (revision 1) prepared in 2019 for development off Station Road in Cuxton.

The previous Technical Note (2019) was prepared to accompany a representation for site allocation; however, this letter assesses the changes since the Technical Note was prepared to accompany a new pre-application submission to the Local Authority. The proposals subject to the pre-application submission comprise 49no. high quality bespoke riverside apartments, chandlery and improved marina facilities.

The starting position for considering flood risk is the EA's 'Flood Map for Planning' which shows that the site remains to be located within Flood Zones 1, 2 and 3. Therefore, it would normally be necessary to apply the Sequential Test as part of any planning application for this site. However, as part of the development proposals, it is intended to raise the land in the area of proposed development to 6.1m AODN be above the 1 in 100 year flood level (that defines Flood Zone 3). As a result, the development would be located in the equivalent of Flood Zone 1.

All land raising/lowering is proposed within the boundaries of Port Medway Marina and no offsite works will be required. This approach has been discussed with the Environment Agency and they have confirmed that, subject to a suitable flood compensation scheme being submitted at the planning application stage, to ensure the land raising does not displace floodwater, land raising is an acceptable form of mitigation on this site. As a result, the development is proposed to be located in the area of lowest risk on site, in accordance with the principles of the Sequential Test.

Herrington Consulting Limited

Canterbury Office

Unit 6 & 7
Barham Business Park
Elham Valley Road
Barham
Canterbury
Kent
CT4 6DQ
Tel 01227 833855

London Office

Unit 52.11
Woolyard
52 Bermondsey Street
London
SE1 3UD

www.herringtonconsulting.co.uk

Co Reg No 5418977
VAT No 860 5179 20

Company registered in England and Wales

Whilst the proposals for development include 'more vulnerable' uses (i.e. residential), the land raising proposed is intended to locate the development in the equivalent of Flood Zone 1, and consequently it is not necessary to apply the Exception Test. Nevertheless, if the test were to be applied, it is considered to be passed. The planning documents submitted show the benefits of the scheme to the community, which are considered to outweigh the risk of flooding (discussed below), in accordance with Part A of the Exception Test. This addendum focuses on Part B of the Exception Test, to demonstrate that the occupants/users of the site will be safe, and the development will not increase the risk of flooding elsewhere (utilising mitigation where necessary).

A review of the assessment of the risk of flooding from all sources set out in the 2019 Technical Note reveals that there has been no change to the data used and therefore the conclusion remain the same; the site is at low risk of flooding from all sources with the exception of the River Medway, where the site could be flooded to 6.01m AODN during a 1 in 100 year return period event, including an allowance for climate change over the next 100 years.

Notwithstanding this, the mitigation measures set out in the 2019 Technical Note are intended to ensure that the occupants of the development will remain safe and the proposals will not increase the risk of flooding elsewhere. Based on review of the scheme proposals for the pre-application submission, there are no significant constraints or limitations which would prevent the effective use of flood mitigation measures previously recommended within the proposed scheme. It is therefore concluded that, following the effective use of flood mitigation measures (to be set out in a NPPF-compliant FRA at the planning application stage) the development would meet Part B of the Exception Test (if applied) and would be acceptable in terms of flood risk.

I trust the information is helpful at this stage and if you would like to discuss any of the above in more detail, please do not hesitate to contact me.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Kirsty Thomas', enclosed within a hand-drawn oval.

Kirsty Thomas BSc (Hons) PGDip C.WEM CSci MCIWEM
Flood Risk Consultant

Enclosed – Technical Note: Flood Risk Appraisal for Land at Station Road, Cuxton (Herrington Consulting, 2019)

Technical Note: Flood Risk Appraisal for Land at Station Road, Cuxton

Author(s): Kirsty Thomas

Checked By: Simon Maiden-Brooks

Date: 02 April 2019

email : kirsty@herringtonconsulting.co.uk

Project: 2223 – Station Road, Cuxton

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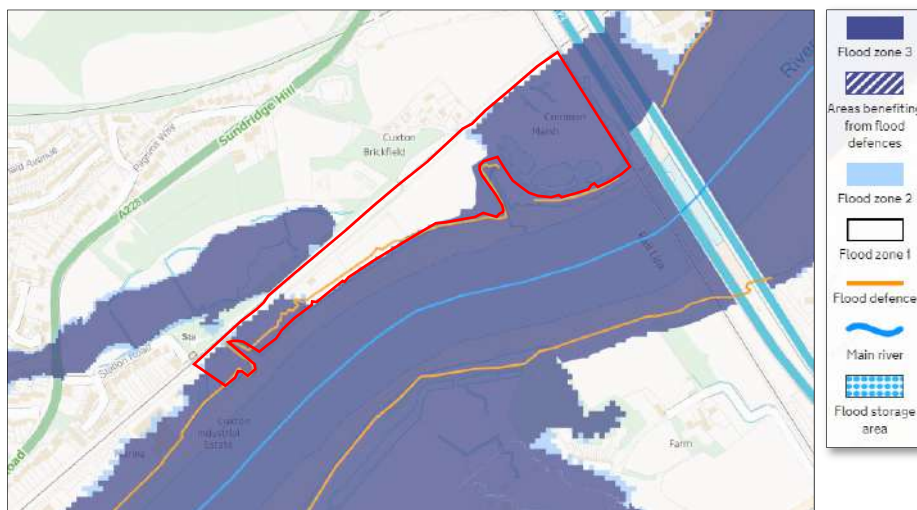


Figure 1 – Flood map for planning (© Environment Agency)

Assuming the site is successfully allocated following the selection process, it will still be necessary to demonstrate that the criteria of the Exception Test can be met. Demonstrating that the development will have sustainability benefits which outweigh the risk of flooding is outside the scope of this appraisal, however, the information contained within this appraisal focuses on the opportunities for developing the site in order to meet the criteria outlined in the second element of the Exception Test (NPPF, 2019);

“Demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.”

Herrington Consulting Limited

Canterbury Office

Unit 6 & 7
Barham Business Park
Elham Valley Road
Barham
Canterbury
Kent
CT4 6DQ

London Office

6-8
Bonhill Street
London
EC2A 4BX

Tel 01227 833855

www.herringtonconsulting.co.uk

Below is an assessment of the risk of flooding from all sources;

- The EA's 'Flood Risk from Reservoirs' mapping shows that the site is situated outside the predicted flood extent for a failure of a **reservoir**, and there are no other **artificial sources of flooding** near to the site.
- There is no information currently available regarding the **public sewer** assets in close proximity to the site. Notwithstanding this, the sloping topography of the site suggests that any flooding that could occur as a result of a blocked sewer, or caused by capacity issues, is unlikely to affect the site. Instead floodwater is likely flow away from the site, overland towards the River. There are no localised topographic depressions on the site which would encourage floodwater to pond within the development.
- Due to the proximity of the river to the site, groundwater levels are likely to be congruent with the water level in the channel, and therefore the risk of **groundwater** emergence is unlikely to exceed the maximum predicted flood level from the River Medway.
- The EA's 'Flood Risk from **Surface Water**' mapping shows a 'very low' risk of flooding following an extreme rainfall event, with the exception of the Lagoon area to the north, where the risk from surface water flooding is classified as 'low'.
- Modelled flood level data provided by the EA shows that it is only the lower parts of the site could be affected by flooding from the **River Medway** (Figure 2). The central part of the development site is elevated above the predicted flood level, even when considering an allowance for climate change over the next 100 years (6.01m AODN).

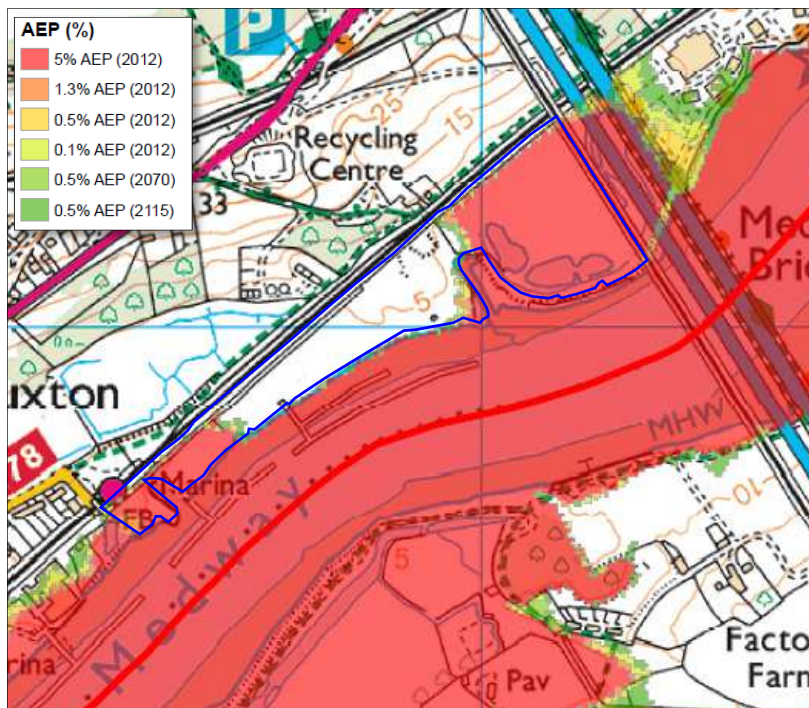


Figure 2 - Maximum extent of flooding from the River Medway under the design flood event, including an allowance for climate change over the next 100 years.

In consideration of the appraisal above, it will be necessary to mitigate the risk of flooding by managing the risk on-site. In accordance with the flood risk hierarchy outlined in *CIRIA 634 -Development and Flood Risk*, the preferred mitigation would be to implement the **Sequential Approach** to the design of the site layout.

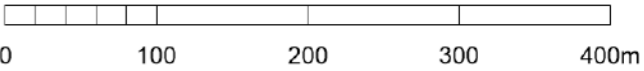
Therefore, all development should ideally be located on the higher parts of the site, where the risk of flooding is lowest (i.e. outside the flood extent shown in Figure 2). Where other site constraints prevent development from being located outside the predicted flood extents, flood mitigation measures can be specified to ensure that occupants of the proposed development remain safe during an extreme flood event. Such measures may include, but are not limited to; **raising land** across the site, **raising finished floor levels** of the proposed buildings, and the use of **flood resistance and resilient construction techniques**.

In addition to the measures above, it will be necessary to ensure that the development does not increase the risk of flooding offsite. The current site primarily comprises undeveloped land, and as such, the introduction of impermeable surfaces (i.e. roofs, hardstanding, roads) has the potential to increase the rate and volume of runoff from the development. As such, any development will need to include a **Sustainable Drainage System (SuDS)** to provide on-site stormwater attenuation, and limit the rate at which surface water runoff is discharged from the site, in accordance with the (non-statutory) Technical Standards for SuDS.

In summary, this report identifies that the majority of the development site is located within Flood Zone1, and is at low risk of flooding from the majority of sources. The analysis identifies that part of the site could be affected by flooding from the River Medway and therefore, in order to meet the criteria of the second element of the Exception Test, it will be necessary to incorporate appropriate mitigation within any proposed development scheme. Nevertheless, the findings of the analysis confirm that there are no significant constraints or limitations at this stage which would otherwise affect the viability of development at this location. It is therefore concluded that development at this location should not be precluded on the basis of flood risk alone and the findings of this study can be used to support the allocation of the subject site within Medway Council's emerging Local Plan.

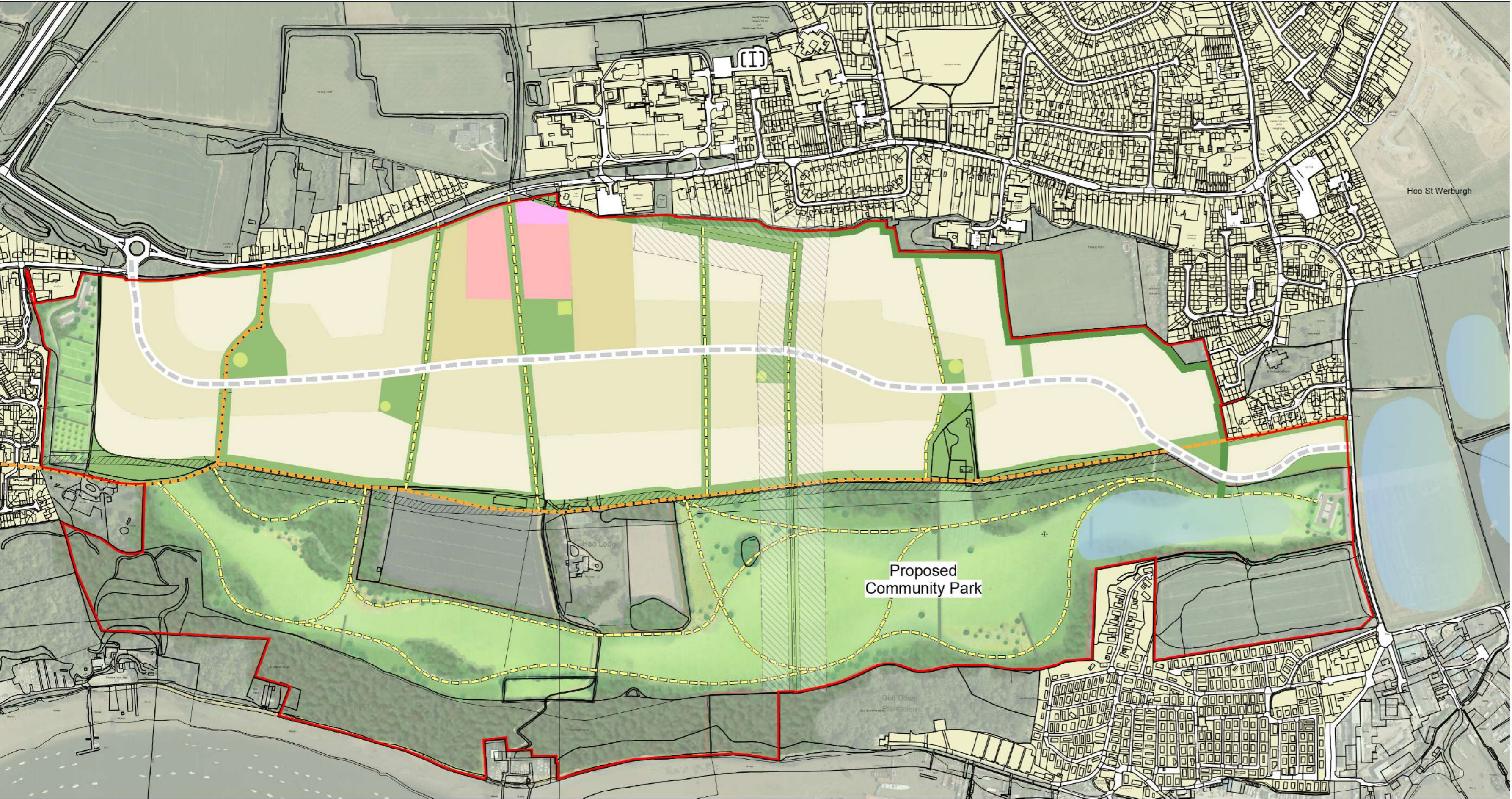
Appendix B

Site-Specific Information for HHH12



KEY

- Site Boundary: 129.75 ha
- Proposed Residential Area - Up to 1800 Dwellings - 50ha including District Centre
- Higher Density: 40-45dph
- Medium Density: 35-40dph
- Low Density: 30-35dph
- District Centre - includes retail/community and residential @ 65 dwellings per hectare
- Proposed Care Home
- Indicative Play Areas
- Proposed Green Corridors
- Existing Footpaths
- Proposed Footpaths
- Proposed Main Street/ Bus Route
- Attenuation Areas
- Potential Flood and Attenuation Channel
- High Pressure Gas Main Mid Zone (restricted to 10% development)



Appendix C

Site-Specific Information for SMI6

Peel Waters Medway Waterfront Regeneration Vision Document

Client(s)



Project Team

Jon Matthews Architects



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The purpose of this document is to help articulate the potential benefits of regenerating proposed site allocation SM16 (Chatham Docks Industrial Estate and the remaining undeveloped land at Chatham Waters). It is based on a clear technical understanding of the site constraints, including accessibility; flood risk and ground conditions.

It sets out illustrative plans that help demonstrate how the overall site can deliver approximately 3000 new homes over the plan period and beyond, along with a mix of other uses including 31,000sqm of employment space, local centre; retail and commercial spaces all set around significant new public realm that showcases the River Medway and former naval docks, opening this land up to the public for the first time ever.

The proposed development will introduce new pedestrian and cycle links that will fully integrate the development with the surrounding uses which include the existing community on St Mary's Island, the universities, Gillingham town centre and the riverfront to the east.

Peel Waters is committed to support the long-term ambitions of Medway Council in connecting and creating high-quality mixed-use neighbourhoods and believes this remaining part of the industrial estate around Basin 3 offers a unique opportunity to deliver a new residential and employment Strategic Site which will complement the successful Chatham Waters development.

Peel Waters has commissioned Jon Matthews Architects, established master planners who were involved in the original Chatham Waters Outline Planning process, to assemble this vision document for Chatham Docks Industrial Estate masterplan which focuses on the area to the north of the basin.

The principles of this vision document highlight that the industrial estate (north of the basin) can provide a deliverable, sustainable mixed-use community providing circa 2,500 new homes with associated amenity and services required to serve this new neighbourhood. This is alongside a further 500 new homes at Chatham Waters, and is in addition to the next residential phase of 300 homes at Chatham Waters, which is pursuant to the remaining residential units permitted by the existing outline consent.

We have investigated the site and local context in order to carefully develop a proposal that connects the existing neighbourhoods of St Mary's Island and Gillingham Pier, whilst building upon the success of Chatham Waters and helps to open up the River Medway via creating new pedestrian corridors and open spaces. Our proposal has also considered the enhancement and accessibility to the site's heritage assets.

- This vision document includes the following information:
- An indication of the intended vision for the site and an explanation as to how the form of the development will achieve that vision;
 - An illustrative sketch for the whole site;
 - Quantum of development, type of uses, building height parameters;
 - An indication of the location of other proposed mixed uses to be provided, which may include employment, leisure/sport facilities, small scale ancillary retail uses, bar/restaurant uses, and community facilities;
 - An indication of the location and amount of public open space/informal recreation areas to be provided within the development;
 - An indication of how development will maximise the potential of the waterfront and provide active frontages to the Medway Estuary;
 - An indication of how the proposed development will be integrated with existing communities on St. Mary's Island, Chatham Waters, with the universities and other neighbourhoods beyond;

Peel Waters is committed to delivering “long term” place making along the River Medway waterfront in partnership with Medway Council, developers, local businesses, educational establishments and employers.





Chatham Docks Industrial Estate was formed after the closure of the wider Chatham Dockyards in 1984, ending 400 years of the Royal Navy's presence in Chatham. Basin 1 was designated and redeveloped as a marina, and St Mary's Island has been repurposed as a new residential community over the last 30 years.

Chatham Docks Industrial Estate around Basin 3 retained its river access through the original Victorian naval lock gates, which are increasingly difficult to maintain and have reached the end of their operational life. In parallel, residential development has developed on both sides of the industrial estate, across the former naval docks, such that the heavy industry and recycling operations are now very close to residential and leisure uses which are not compatible and lead to regular resident complaints.

The river frontage to the east of the industrial estate also has an industrial and maritime past yet has seen redevelopment and regeneration over recent years and there remain significant further opportunities to deliver more. In isolation, the Chatham Docks Industrial Estate presents an exciting and major opportunity to unlock a fantastic new mixed-use development that builds on Chatham Waters and integrates with the community on St Mary's Island.

Collectively, however, the riverfront sites provide an even more compelling case for transformative change, introducing new links and a finer grain of development that will attract and encourage people to enjoy access to the river and Basin 3.

It will allow residents and employees, students and visitors, to move easily between the universities and the waterfront and between communities both east and west. With the proposed green link utilising the former dock line, there is also the fantastic potential to create a cycle and pedestrian way right to Gillingham Town Centre and train station.

Unlocking the riverside potential is necessary for the success of the Local Plan and Medway's strategy for growth. It is critical to help deliver the required new homes and employment areas and is therefore critical to make the Plan sound.

The map illustrates the regeneration opportunities along the River Waterfront area listed in the Medway Local Plan.

- 1. Regeneration of Chatham Docks Industrial Estate: 2,500 homes as part of mixed use scheme
- 2. Basin 3 Employment Campus: 31,000sqm
- 3. Chatham Waters: 500 homes
- 4. Pier Approach Road Depot: 176 homes
- 5. Gillingham Marina: up to 1,100 homes
- 6. Former Gas Works: up to 500 homes





1.



2.



3.



4.



Key Plan



5.



6.



7.

The site currently lacks connection to surrounding areas and limits public access to the water. The site is a barrier to positive connectivity.

The constraints are summarised as follows:

- Residential use disconnected along the river waterfront
- Site offers zero amenity to local residents and the wider community
- No connection to the built and emerging developments around the site
- No public access along the river. King Charles II route is diverted around the site
- No frontage, views to or activation of the river
- Limited positive frontage and pedestrian access around the basin.

Key

Residential

Key Open Space

King Charles III Coast Path

Green Link

Pedestrian Routes

Waterside Frontages

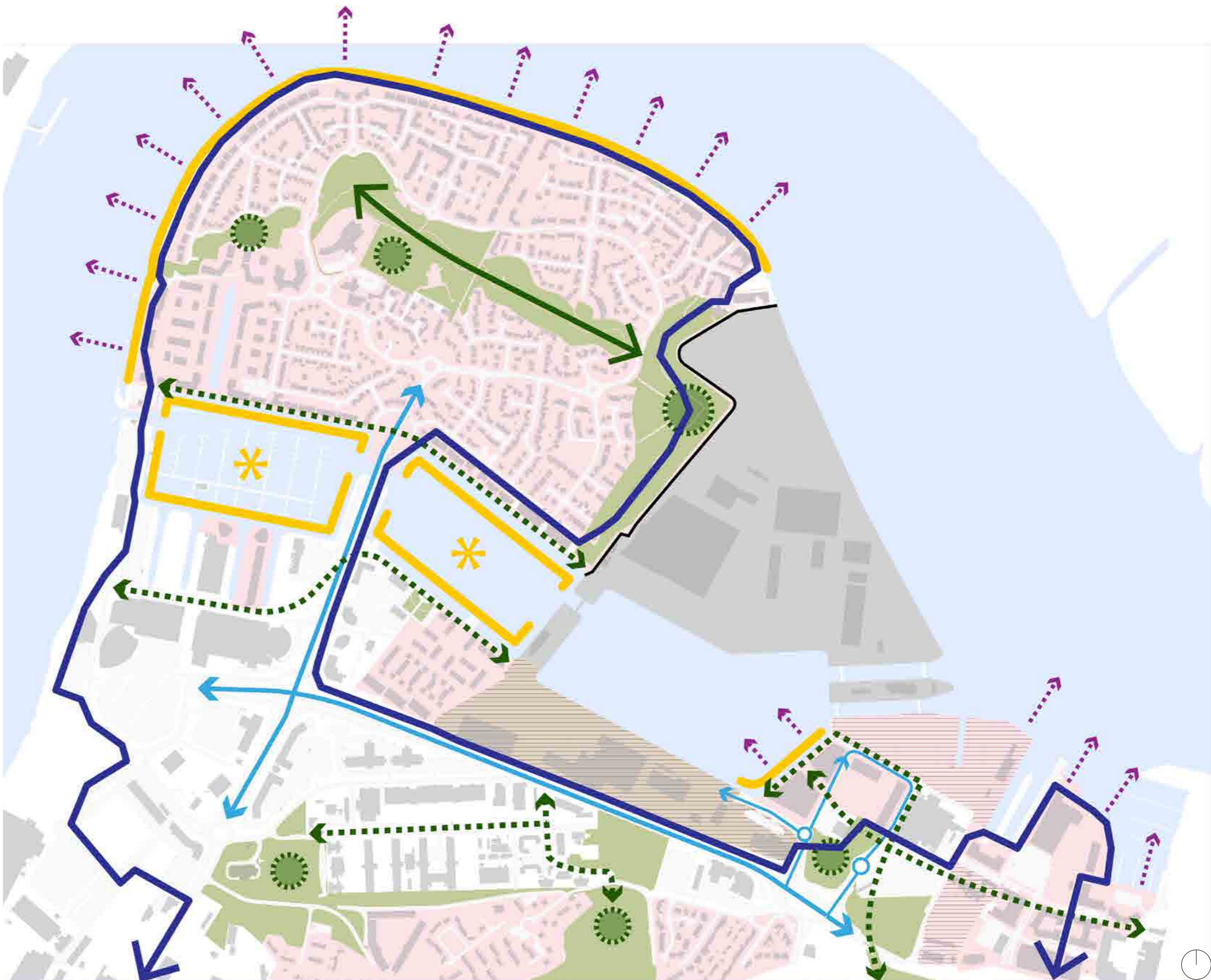
Views

Site barrier

Vehicular Routes

Parks

Water amenity



The key opportunity is to connect the surrounding Medway areas and communities via positive public permeability through the site and capitalise upon access to a unique and historic waterfront setting.

Through the positive regeneration of the site, the masterplan proposals will mend the grain and integrate the site with existing neighbourhoods along the waterfront.

The opportunities are summarised as follows:

- Create a vibrant new neighbourhood with connections to the St Mary's Island and the surrounding Medway areas
- Extend King Charles III Coast Path along the river waterfront
- Activate the river with positive residential and leisure frontage
- Activate the basin with opportunities for innovative amenity such as floating padel tennis, saunas, lidos and marinas
- Create an amazing sense of place with access to a vibrant mix of new public open space; parks, squares, & play spaces
- Maximise views of the river, basin and new green spaces.

Key

Residential

Key Open Space

King Charles III Coast Path

Green Link

Pedestrian Routes

Waterside Frontages

Views

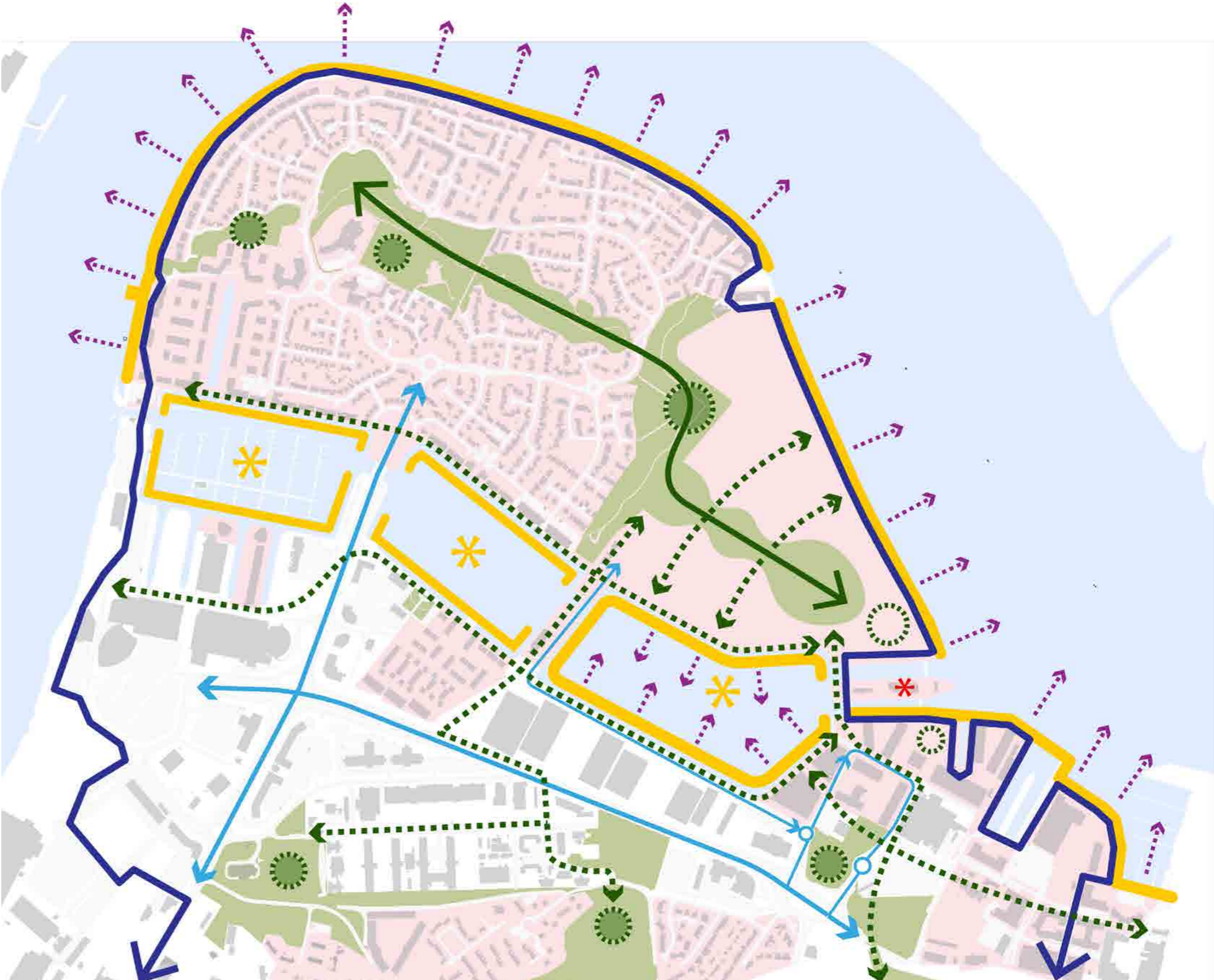
Vehicular Routes

Parks

Public Squares

Water amenity

Heritage asset re-use



1.3 The Illustrative Masterplan - Plan

10

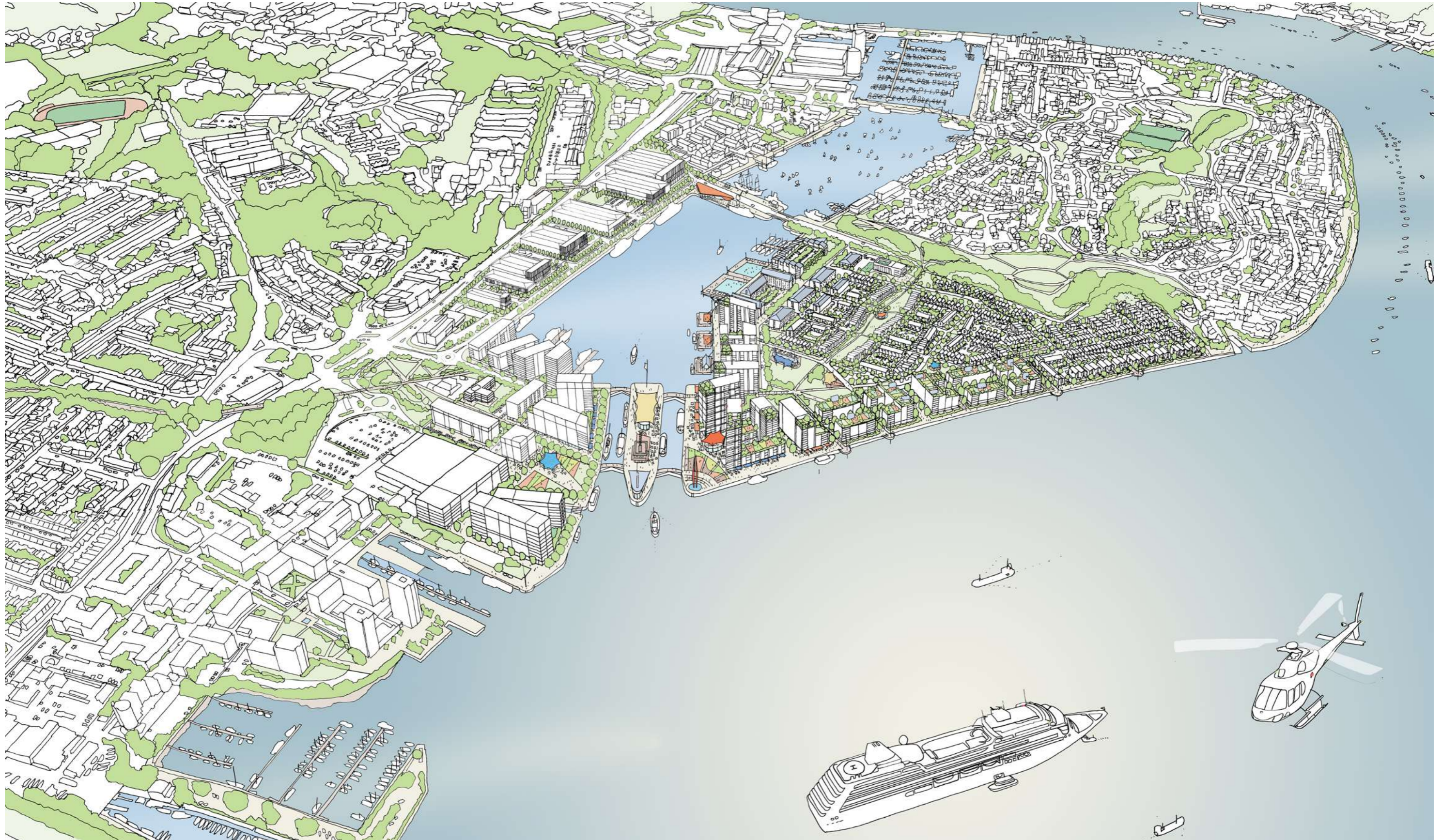
Jon Matthews Architects

The proposed development will replace the under-utilised and heavy industrial / recycling uses on the existing industrial estate with much needed homes and a wider mix of commercial, leisure and community uses and public open space. These uses will sit more suitably alongside and fully integrate with the existing residential uses to the east and west of the site, enabling and welcoming residents and visitors to easily permeate through the site and enjoy its unique features, comprising the unique waterfront setting.

The longterm vision will activate the waterfront and Basin, which will become an accessible and valuable leisure destination for Chatham and Gillingham residents.

The plan and visual opposite is illustrative and intended to show the site's development potential.





1.4 The Masterplan Key Moves

The experience gained over the last 10+ years place making and regenerating the land to the east of Basin 3 (Chatham Waters) provides a robust template for ongoing regeneration of the wider industrial land.

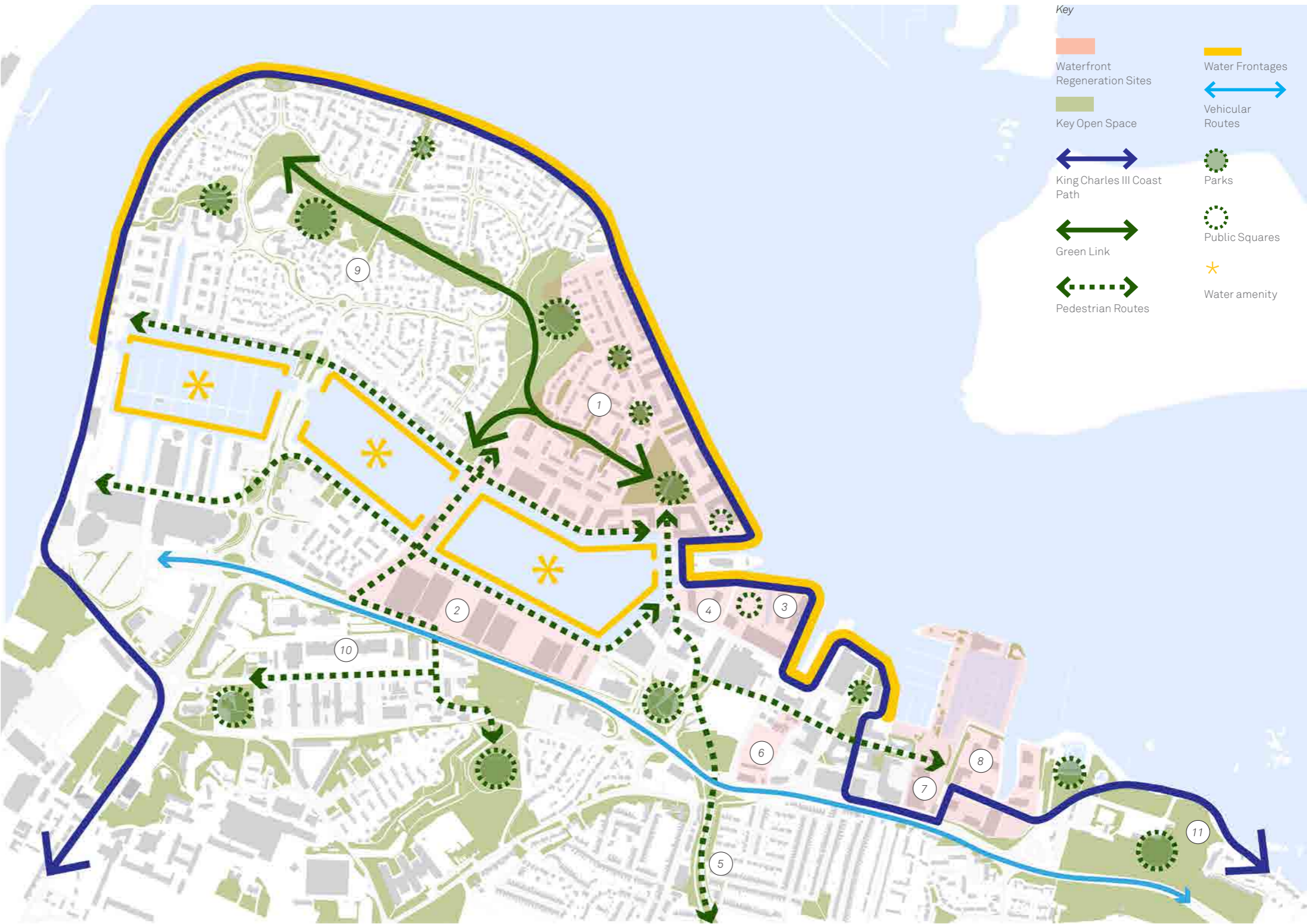
The key moves demonstrate how the scale of development proposed through the allocation can readily be accommodated on the site and the illustrative plans provide an indication of what the proposals could comprise.

1. Waterfront Regeneration & Connectivity

The proposals for the regeneration of Chatham Docks Industrial Estate form a key part of the River Waterfront Site Allocation identified by the draft Local Plan. The plan opposite shows the scale of the opportunity and identifies the key sites within the allocation. In the area around Gillingham Marina and the Former Gas Works, only existing connections and green spaces have been identified as the proposals for these sites are beyond the control of Peel Waters. However, as part of the existing working group set up by the Council, there are opportunities for further discussion and for the plan to be updated to show additional benefits that could be generated through opening up these sites.

The opportunities to be delivered by Peel Waters are set out below (Nos 1-5). Other sites within the River Waterfront Site Allocation are listed at Nos 6-8, along with the capacity for new homes identified in the Local Plan. Other key locations in the local area listed at Nos 9-11.

- 1. Regeneration of Chatham Docks Industrial Estate: 2,500 homes as part of mixed use scheme
- 2. Basin 3 Employment Campus: 31,000sq.m
- 3. Chatham Waters: 500 homes
- 4. Chatham Waters: 300 homes (pursuant to existing outline consent)
- 5. The Greenway
- 6. Pier Approach Road Depot: 176 homes
- 7. Gillingham Marina: up to 1,100 homes
- 8. Former Gas Works: up to 500 homes
- 9. St Mary Island
- 10. Universities
- 11. The Strand Leisure Park



To Gillingham Town

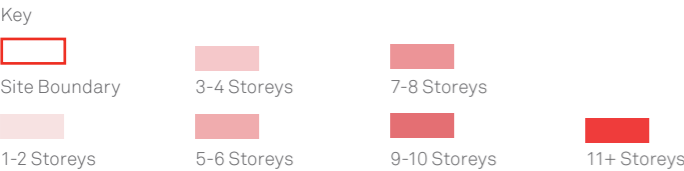


2. Appropriate scale

The proposed heights across the site are set out into zones increasing along the waters edge to a height of 23 storeys, with the potential to increase up to 40 storeys. This strategy provides an opportunity to locate a landmark building at the south east corner of the site.

The use of height along the riverside and dock edge will maximise the opportunity for waterfront living, river aspect and amenity at ground level.

Residential buildings at the core of the masterplan sit within more of a parkland setting.



3. Open Space

Areas of key open space are allocated throughout the site providing a range of high quality public amenity. This will establish an identity and help create landscape characters within the site. Key vistas will connect the parks and open spaces with new permeable links extending beyond the masterplan to the surrounding areas.



4. Activated & Accessible Waterfronts

The waterfront is brought into active use. These uses can also extend into and throughout the development. The waterfront is accessible to all linking wider reaching residential communities along river Medway.

Residential mixed use developments sit along the waterfront with commercial public amenity at ground level. Public open space along the waters edge creates a strong sense of place and identity. New pedestrian and cycle routes can be extended around the perimeter of the site to connect with a much wider and far reaching existing and emerging networks, including the proposed green link to Gillingham High Street along the line of the former dock railway. The opportunity for such an extensive link to the waters edge with well connected, permeable links to a much wider community is truly unique. The proposed green link extending through the site presents a far wider opportunity for public benefit as it will help reconnect.

Active frontages along the water creates opportunity to maximise amenity and activity to the dock edge whilst linking with an established Chatham Waters marina frontage.





1. Floating Sauna

2. Floating Lido, Sauna & Marina



3. Multi-Use Public Squares & Spaces

4. Central Park

5. Informal Landscape Corridor

6. Family Homes

Simple, elegant design.