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# Tipner East, Portsmouth

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Environmental Impact Assessment Scoping Request

# Tipner East, Portsmouth

## EIA Scoping Report

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## 1. Introduction

- 1.1. Bellway Homes Ltd (the Applicant) intends to submit a full planning application to Portsmouth City Council (the Council) seeking planning consent for the development of up to 200 dwellings.
- 1.2. This report is provided in support of a request for the Environmental Impact Assessment (EIA) scoping opinion of the Council as the local planning authority.

### Background

- 1.3. The application site falls within the PCS1 Site Allocation of The Portsmouth Plan (Portsmouth's Core Strategy) (the Core Strategy), which was adopted in 2012. PCS1 identifies the Tipner area for redevelopment including the following:
  - Approximately 1,250 new homes of mixed size and type to include affordable housing;
  - Approximately 25,000sqm of B1 Office; and
  - A Park & Ride facility of between 900 and 1,800 spaces.
- 1.4. To support this policy, various infrastructure requirements are identified:
  - A new junction on the M275 (this has since been implemented and completed and is known as junction1 of the M275.
  - Highway infrastructure to link the new development with the planned slip roads and to integrate the area with the existing communities at Stamshaw, in a way that minimises through traffic in existing communities;
  - Widening Twyford Avenue to improve access to Tipner from the A3;
  - Improvements to the Twyford Avenue / A3 Northern Parade junction;
  - Tipner loop road routing traffic around the development site from Twyford Avenue to Tipner Lane;
  - Infrastructure to enable the integration of the bridge link to Port Solent; and
  - A water supply pipe to be provided at the same time as the junction.
- 1.5. Within this overall allocation, the Applicant is currently preparing an application comprising approximately 185 dwellings, with provision of new internal access roads and footways, open space, sustainable urban drainage system and associated landscaping with access from Twyford Avenue, which is on the eastern boundary of the Site, and Tipner Lane, which is on the western boundary of the Site. As the final scheme design is not fixed at this stage, the scoping has considered the Site to accommodate up to 200 dwellings.
- 1.6. The Site is located approximately 3km to the north of Portsmouth City Centre and comprises an irregularly shaped parcel of land extending from Twyford Avenue to the east to Tipner Lane to the west. The irregular shaped land is reflective of various land parcels being individually acquired and amalgamated into one plot.



1.11. To ensure that its EIA focuses on relevant considerations, the Applicant wishes to establish the scope of the EIA. Regulation 15 of the EIA Regulations enables a person to ask the relevant planning authority to confirm in writing their opinion as to the scope, and the level of detail, of the information to be provided in the ES.

1.12. This report is a request for the Council's scoping opinion under Regulation 15 of the EIA Regulations.

### **Report structure**

1.13. Regulation 15(2) of the EIA Regulations identifies that a request seeking a scoping opinion must include:

*(i) a plan sufficient to identify the land;*

*(ii) a brief description of the nature and purpose of the development, including its location and technical capacity;*

*(iii) an explanation of the likely significant effects of the development on the environment; and*

*(iv) such other information or representations as the person making the request may wish to provide or make;'*

1.14. This information is contained in this scoping report, which is structured into Sections as follows:

2. describes the Site, its location and the surrounding context and identifies sensitive receptors;

3. provides information about the development proposed;

4. describes the controls and mitigation to be taken into account at the scoping stage including the approach that will be undertaken in preparing the EIA and the team involved;

Sections 5 to 12 provide a review of the relevant baseline, outlining the potential environmental effects and the proposed scope of the assessment, under individual topic headings, as follows:

5. Transport, Access and Movement

6. Air Quality

7. Noise and Vibration

8. Water Resources (Drainage and Flood Risk)

9. Biodiversity

10. Landscape Effects and Visual Amenity

11. Ground Conditions

12. Socio-Economics

13. Conclusions of this EIA scoping opinion request.

1.15. On receipt of this report, the Council will consult with the key statutory bodies identified in Regulation 2(1) before issuing their formal Scoping Opinion within the five-week statutory time period set out within the Regulations. The Scoping Opinion will confirm the key environmental considerations to be assessed.

### **The EIA project team**

1.16. Table 1.1 identifies the team working on EIA. These consultants, and the sub-consultants and individuals that they assign to the project, will constitute 'competent experts' for the purpose of Regulation 18(5)(a) of the EIA Regulations. The competencies will be defined within the ES.

**Table 1.1: EIA consultants**

<b>Specialism</b>	<b>Consultant</b>
EIA Co-ordination	Savills
Transport and Highways	Paul Basham Associates
Ecology	Tetra Tech
Flood Risk and Drainage	Reuby and Stagg Ltd
Noise and Vibration	Clarke Saunders Acoustics
Air Quality	Air Quality Consultants
Landscape and Visual Impact	ACD Environmental
Ground Conditions	Idom Merebrook
Socio-Economics	Savills

## 2. The Application Site

### *Site and Surrounding Context*

- 2.1. The City of Portsmouth is located on the south coast, within the county of Hampshire in the south-east region of the UK. Portsmouth covers an area of 25 square kilometres and is surrounded by sea to the east, west and south. Outside of inner London, Portsmouth is the most densely populated city within the UK.
- 2.2. The area referred to as Tipner East is located approximately 3km to the north of the city centre of Portsmouth. The Site and surrounding area falls within Portsmouth City Council's administrative area, within the ward of Nelson.
- 2.3. The Site to which this Scoping Report relates is 3.29 hectares (8.15 acres) in size gross and is part of the wider Tipner Regeneration Area, which has been identified for development for a mix of uses under policy PCS1 of the Core Strategy (see Figure 1.1).
- 2.4. The Tipner area including the Site was originally part of the inter-tidal mudflat zone, and over time has been gradually reclaimed. The Site has historically been used as a chemical works, timber yard, brick works, clay extraction, landfill, distillation of coal tars, coal/coke storage, vehicle maintenance and marine salvage / scrap yard. The central area of the Site was the southern part of a greyhound-racing stadium that was constructed in 1930 and demolished in 2012. The north-eastern part of the Site was occupied by PD Fuels.
- 2.5. Land to the east of the Site includes Alexandra Park, an area of public open space and the Mountbatten Sports Centre. The area is dominated by open green spaces that include formal recreation spaces such as sports pitches, a cycle and athletics track and courts as well as informal parkland.
- 2.6. Directly south of the Site lies Stamshaw Junior School on Tipner Road. The school playing fields extend northwards to the southern boundary of the Site with the school buildings to the south. To the south of this, lie the residential districts of Tipner and Stamshaw.

### *Summary of the Planning History*

- 2.7. As established, the Site has been assembled through the amalgamation of various plots. Due to this, the Site benefits from planning permissions on various parts of the Site for residential development and commercial floor space. These are set out below:
  - Application 10/00849/OUT. This hybrid planning application, which was supported by an Environmental Statement, was granted detailed planning permission on the 30<sup>th</sup> March 2012 for land remediation and raising including thermal desorption. Outline planning permission (access, layout and scale only) was granted for up to 518 dwellings, CHP plant, sea wall and coastal path. The reserve matters application needs to be submitted to Portsmouth City Council by 2022 or the permission will lapse. The detailed permission is understood to have been implemented.
  - Application 11/00362/OUT and 15/01854/REM. Together these applications form a detailed planning permission for the erection of up to 80 dwellings and 235sqm of commercial floor space for uses within the former uses classes A1, A2, A3 and A5. This permission has since lapsed.
  - Application 13/00202/OUT. This outline application (access and layout only) was granted planning permission on the 29<sup>th</sup> March 2018 for 23 dwellings.

- Application 13/00203/OUT. This outline application (access and layout only) was granted planning permission on the 29<sup>th</sup> March 2018 for 5 dwellings.

2.8. Together these applications have consented up to around 150 dwellings on various parcels of land within the Site.

### *Access and Movement*

2.9. Vehicular access into the Site is via Twyford Avenue directly to the east of the Site, and via Tipner Lane to the west. Twyford Avenue runs north to south, providing vehicular access to the Mountbatten Leisure Centre to the east of the Site and access to the A3 to the south.

2.10. To the west of the Site is the Tipner Park and Ride, which immediately adjoins Junction 1 of the M275. The M275 provides the key link between the M27 and Portsmouth city centre as the western artery into the city. The M27 also provides the main connection to Southampton and the M3 to the west, and the A27 and A3 (M) to the east.

2.11. There is currently an undetermined outline planning application (access only) with a supporting ES at the Park and Ride Site for the construction of a multi-storey Transport Interchange (up to 34.8 m AOD) incorporating a park and ride facility for up to 2,650 cars and 50 bicycles; taxi rank; car and bicycle rental facility; public conveniences; landscaping; ancillary offices and units within use classes A1, A2, A3, D1 and D2, with access from Junction 1 on the M275.

### *Topography*

2.12. The topography of the Site is relatively flat in line with the characteristics of the coastal plain where it lies.

### *Natural Environment*

2.13. The Site lies within 40 metres to Portsmouth Harbour most of which is designated as a Ramsar Site, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), and certain areas also designated as Special Areas of Conservation (SAC) given its ecological value and importance as a wintering site for migratory birds. Portsmouth Harbour is an important roosting and foraging area for bird species like Brent Geese, Dunlin, Lapwing and Redshank.

### *Ground Conditions*

2.14. The Site has been subject to a number of contaminative uses, including a tar works and landfill. These have resulted in the contamination of soils. As a result, a phase of remediation has been undertaken to mitigate potential risks to future site users. This includes the excavation and treatment of soil, as well as the provision of a marker layer and up to a metre of clean cover. All of the remedial works undertaken to date have been approved by the Local Authority and the Environment Agency.

2.15. To manage potential risk, the integrity of the existing remedial measures should be maintained, with development related measures, such as clean soils in areas of soft landscaping and vapour protection, necessary to render the Site suitable for residential use.

### *Heritage*

- 2.16. The Site does not contain any nationally designated (protected) heritage assets, such as scheduled monuments, listed buildings or registered parks and gardens. There are no conservation areas within or in close proximity of the Site.
- 2.17. The closest Conservation Area is Hilsea Lines (National Heritage List for England/NHLE Ref. 1001861), 1.1km to the north east which is designated for the uniform Victorian military architecture demonstrated by the bastions. Hilsea Lines is also a scheduled monument (NHL 1001861) and lies 1.2km to the north east. Portchester Castle, a scheduled monument, lies 2km to the north-west of the Site (NHL 1015698), across Portsmouth Harbour
- 2.18. The closest listed buildings to the Site are a group of four Grade II listed late 18th – mid 19th century structures on Tipner Island, ranging between 380m and 425m to the north-west. These are all associated with the former powder magazines at Tipner and include the magazines themselves (NHL 1387240), the buildings immediately to the north and south respectively (NHL 1387241, 1387242) and the south-west section of a boundary wall (NHL 1387243). These buildings are separated from the Site by the M275.

### *Air Quality*

- 2.19. The Site is located within 2km of two Air Quality Management Areas (AQMA). These are known as Portsmouth AQMA No.6, which incorporates a section of road stretching from Fratton Road to London Road and Portsmouth AQMA No.11, which incorporates a network of roads stretching from Marketway to Lake Road to the M275.

### **The Application Site**

- 2.20. Planning permission will be sought on approximately 3.29 hectares (8.15 acres) gross of land.
- 2.21. The Site is not located within any statutorily designated land or land that would meet one of the definitions of a 'sensitive area' as defined within the context of the EIA Regulations.

### **Sensitive receptors**

- 2.22. Aspects of the Site and adjacent areas to be considered in the design and assessment of the proposals can be identified as:
- Site topography, drainage and ground conditions;
  - Underground services;
  - The road network;
  - Designated and undesignated ecological receptors; and
  - Existing adjacent uses - residential and commercial.

### 3. The Proposed Development

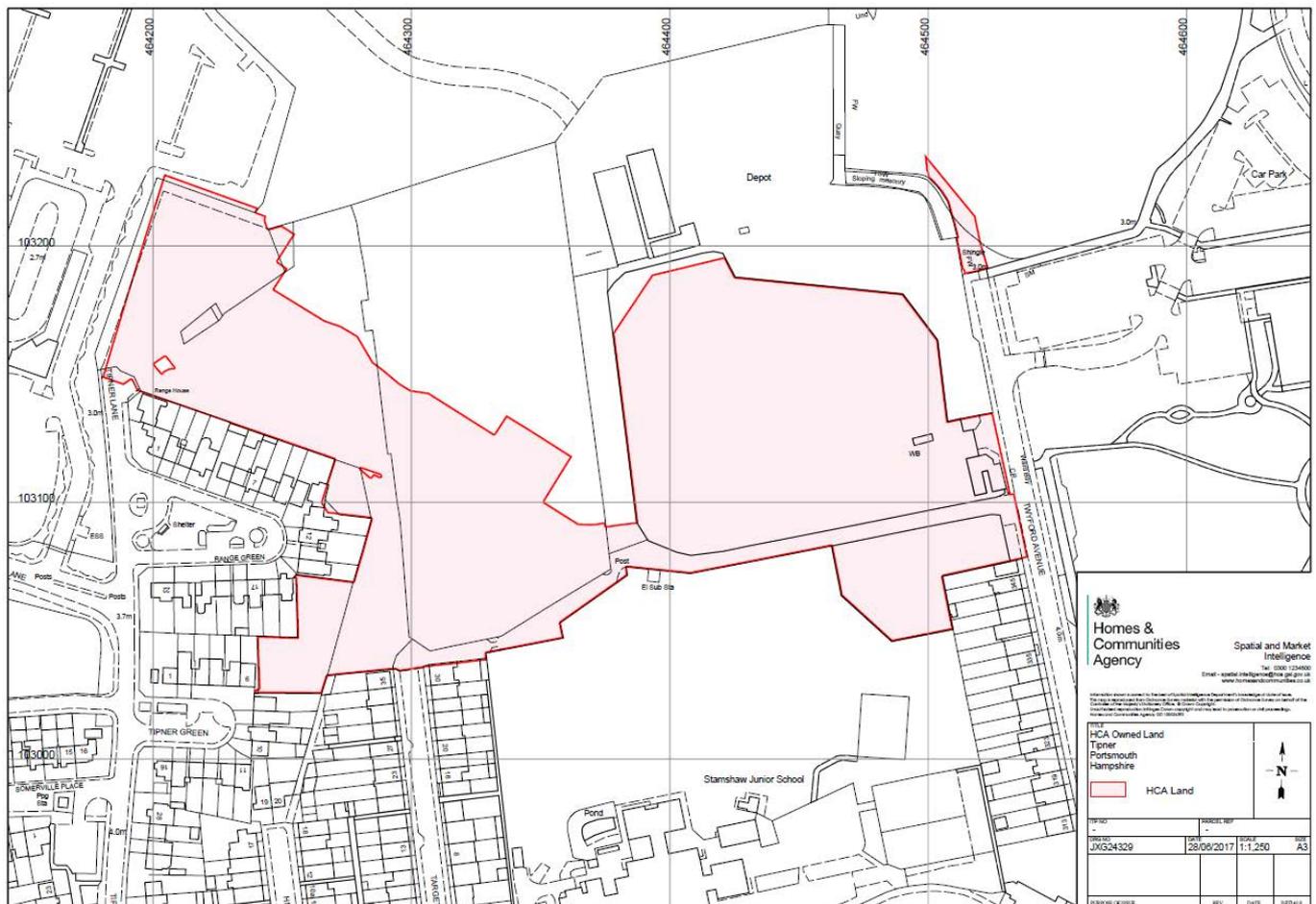
3.1. The Applicant is currently preparing a proposal comprising approximately 185 dwellings. The application will seek full planning permission.

3.2. The key elements of the Proposed Development to be assessed are:

- Up to 200 dwellings (to allow flexibility in final scheme design);
- Provision of new internal access roads and footways;
- Formal and informal public open space;
- Landscaping and sustainable drainage systems;
- Vehicular, pedestrian and cycle access from Twyford Avenue, Target Road and Tipner Lane.

3.3. Figure 3.1 provides the proposed redline for the purposes of the EIA scoping.

**Figure 3.1 ES Scoping Boundary**



- 3.4. The scheme submitted will be a detailed application. It is envisaged that the plans to be submitted will include:
- Location plan,
  - Proposed Site and Block plans;
  - Proposed Elevational drawings;
  - Proposed Floor plans;
  - Proposed Streetscenes and Cross-Section drawings;
  - Proposed Parking, Refuse Collection, Open Space and Affordable Housing layout plans;
  - Proposed Delivery and Service Vehicle Tracking drawings;
  - Proposed Hard and Soft Works Landscape plans;
  - Proposed Materials plan;
  - Proposed Technical Works Plan (Utilities connections and networks including drainage proposals)
  - Existing and Proposed Levels plan; and
  - Construction Environmental Management plan.
- 3.5. It is proposed that the built development would comprise a range of heights across the Site, between two to four storeys.
- 3.6. The Proposed Development would have traditional building forms, with gabled pitched roofs, treated in a contemporary urban architectural style combining; brick, cladding and rendered elements under plain, mainly grey, tiled roof coverings. Glazing would be expansive, horizontal in emphasis, and enclosed by grey frames. Flat roofed dormers, porches and balconies / balconettes would provide 3D modelling. Gables and materials contrasts will be used to emphasise key buildings and locations within the development.
- 3.7. Vehicular access is proposed from Twyford Avenue and Tipner Lane. Pedestrian and cycle access will be able to utilise those access points along with access from Target Road as well.
- 3.8. The Site's surface water drainage system will be based on the sustainable drainage hierarchy and will ensure that offsite flood risk is not increased and that the development remains sustainable throughout its lifetime, in line with Lead Local Flood Authority (LLFA) guidance.

### **Construction**

- 3.9. Construction will be fully considered within the assessment in accordance with the requirements set out within the EIA Regulations. A representative construction programme will be developed to inform the assessment process; this will include phasing, anticipated transport movements and associated activities.

### **Mitigation and Controls**

- 3.10. Inherent mitigation will be designed into the scheme where possible to avoid what might otherwise be significant adverse effects.

- 3.11. The assessment of effects prior to the adoption of additional mitigation measures will assume that construction will proceed in accordance with industry standard best practice techniques and that all legislative requirements will be met. Such measures can be secured through planning conditions and will therefore not be repeated as mitigation in the ES. These include: site waste management; construction and environment management; construction traffic management and travel plan.
- 3.12. Any additional mitigation measures that are required to address significant adverse effects identified through the assessment will be clearly identified in the ES and the mechanisms for securing these measures and roles and responsibilities will be defined.

## 4. Approach to Assessment

- 4.1. This section provides a description of how the EIA will assess the planning application. Its purpose is to clarify how the assessment of this planning application will comply with the requirements of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017.
- 4.2. This section of the scoping report sets out the scope of the proposed EIA and identifies the proposed structure for the chapters of the ES. The ES will consider the environmental parameters as required by Schedule 4 of the EIA Regulations.
- 4.3. The EIA Regulations require that the ES should identify those aspects of the environment likely to be 'significantly affected' both directly and indirectly by the development proposed. It is proposed to describe the nature of those significant effects taking account the magnitude of the impact and sensitivity of the receptor. These assessments will be individual to the specific environmental parameters and will identify mitigation where appropriate and evaluate residual effects with this in place.
- 4.4. The environmental effects of the Proposed Development will be considered during both the construction and operational phases. The findings of the EIA will be presented in a main written statement, the ES, supported by figures and appendices. A non-technical summary of the ES will be provided as a separate document.

### **Environmental Impact Assessment**

- 4.5. EIA is a process through which the likely significant environmental effects of a development proposal can be identified and, where possible, adverse effects avoided or mitigated.
- 4.6. Given the history of the Site and previous applications, the Applicant considers that the Proposed Development is EIA development. An ES and non-technical summary will therefore be submitted with the planning application.
- 4.7. It is proposed that the following plans will be submitted with the planning application:
  - Location plan,
  - Proposed Site and Block plans;
  - Proposed Elevational drawings;
  - Proposed Floor plans;
  - Proposed Streetscenes and Cross-Section drawings;
  - Proposed Parking, Refuse Collection, Open Space and Affordable Housing layout plans;
  - Proposed Delivery and Service Vehicle Tracking drawings;
  - Proposed Hard and Soft Works Landscape plans;
  - Proposed Materials plan;
  - Proposed Technical Works Plan (Utilities connections and networks including drainage proposals)
  - Existing and Proposed Levels plan; and
  - Construction Environmental Management plan.

### Study area and temporal scope

- 4.8. Each technical ES chapter will define its study area geographically and indicate the timescales over which the environmental effects will be considered. The temporal scope will consider the construction phase, and thereafter when the development is completed and occupied (to be referred to as the 'operational' phase). For example, the assessment of landscape and visual assessment will consider residual effects at a future time when the landscaping within the scheme has had 15 years to mature.
- 4.9. It is envisaged that the Proposed Development will be constructed over three years based on a single house builder. For the purposes of the EIA to ensure a worst case scenario, the assessments will work on the basis of a five year construction period. Construction is envisaged to commence in 2021, with residential occupation commencing in 2022. The Proposed Development is designed as a permanent provision i.e. decommissioning is not an aspect that will be considered in the EIA.

### Technical scope

- 4.10. In order to determine the likely scope of the EIA, the process has identified:
- the key characteristics of the Site and the establishment of the environmental baseline through a series of desk and field studies;
  - gaps in the baseline and the further survey work required to address this;
  - initial consideration of the potential sources and nature of environmental impacts; and
  - definition of the assessment methodologies to be used in each study area (where available).
- 4.11. A series of baseline studies have been undertaken to establish the baseline environment for this Scoping Report. Where necessary, studies are ongoing or are being undertaken and can be tailored to advice offered in response to this scoping request. The baseline and assessment work undertaken as part of preparing this Scoping Report is set out within the following Sections.
- 4.12. In Schedule 4, Paragraph 4 of the EIA Regulations require an ES to provide “*A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape*”
- 4.13. As part of the EIA scoping process, issues within the topic areas above that are identified as unlikely to give rise to significant environmental effects can be omitted ('scoped out') from the EIA and, where justified, it is reasonable to propose a reduced scope of topic areas where initial assessment clearly indicates significant effects are unlikely.
- 4.14. Topics such as human health and climate change bridge a number of the proposed topic areas. It is proposed that these specific considerations will be covered in relevant chapters, such as transport, air quality, noise, water resources, biodiversity and landscape, rather than as individual assessment chapters. This approach is explained further below.

### **Built Heritage**

- 4.15. The Site does not contain any nationally designated (protected) heritage assets, such as scheduled monuments, listed buildings or registered parks and gardens. There are no conservation areas within or in close proximity of the Site.
- 4.16. The closest Conservation Area is Hillsea Lines (National Heritage List for England/NHLE Ref. 1001861), 1.1km to the north east which is designated for the uniform Victorian military architecture demonstrated by the bastions. Hillsea Lines is also a scheduled monument (NHL 1001861) and the boundary of the scheduled monument lies 1.2km to the north east. Portchester Castle, a scheduled monument, lies 2km to the north-west of the Site (NHL 1015698), across Portsmouth Harbour
- 4.17. The closest listed buildings to the Site are a group of four Grade II listed late 18th – mid 19th century structures on Tipner Island, ranging between 380m and 425m to the north-west. These are all associated with the former powder magazines at Tipner and include the magazines themselves (NHL 1387240), the buildings immediately to the north and south respectively (NHL 1387241, 1387242) and the south-west section of a boundary wall (NHL 1387243).
- 4.18. There would be no inter-visibility between the Tipner Magazine buildings and this development. This view is blocked by the large industrial shed located between the assets and the M275 motorway and also by the M275 itself which is raised on an artificial embankment. The potential future P&R building proposed between the Site and the M275 identified no significant heritage effects and should this be consented, this will further screen the Proposed Development from these assets. Therefore, it is considered the development will have no impact upon these heritage assets.
- 4.19. Given the site conditions it is not considered that there is significant potential for below ground archaeological remains.
- 4.20. Based on the above, it is not proposed that the ES will contain a specific assessment chapter on Built Heritage or archaeology.

### **Greenhouse gas emissions and climate change**

- 4.21. EIA is a key tool for ensuring that future development is resilient to the potential effects of climate change and that proposals do not exacerbate the effects of climate change affecting humans or natural systems. Greenhouse gas (GHG) emissions from all projects will affect climate change, either positively or negatively.
- 4.22. IEMA has published an 'EIA Guide to Climate Change Resilience and Adaptation' (November 2020) which provides a framework for the effective consideration of climate change resilience and adaptation in the EIA process. This guidance states that the scoping of a project, taking into account climate change, should focus on general considerations rather than detailed, quantitative analysis. This is because EIAs consider proposals for specific sites, whereas climate change models are prepared at a regional or national-level model. The UK has legally binding GHG reduction targets which are set at a macro level, with Government having set ambitious targets to move to a low carbon economy through a range of mechanisms, including decarbonising energy generation, road transport, buildings and food production.

- 4.23. IEMA has issued a further guidance document 'Assessing Greenhouse Gas Emissions and Evaluation their Significance' (2017). Climate change is identified as one of the defining environmental policy drivers, and the greenhouse gas emissions from all projects can contribute to climate change, or potentially deliver reductions.
- 4.24. The climate change and greenhouse gas context and overall effects will be covered in the introductory chapters of the ES and it is proposed that the impact of the Proposed Development upon climate change, or in response to the predicted effects that it may have, will be dealt with in a specific section contained in each relevant technical chapter of the ES in order to ensure that the topic is considered in a more holistic manner.
- 4.25. The ES will set out how the proposal responds to the requirements of relevant local plan policy relating to development and climate change. Measures proposed to adapt to, and minimise the effects of, climate change will be highlighted.

### **Human health**

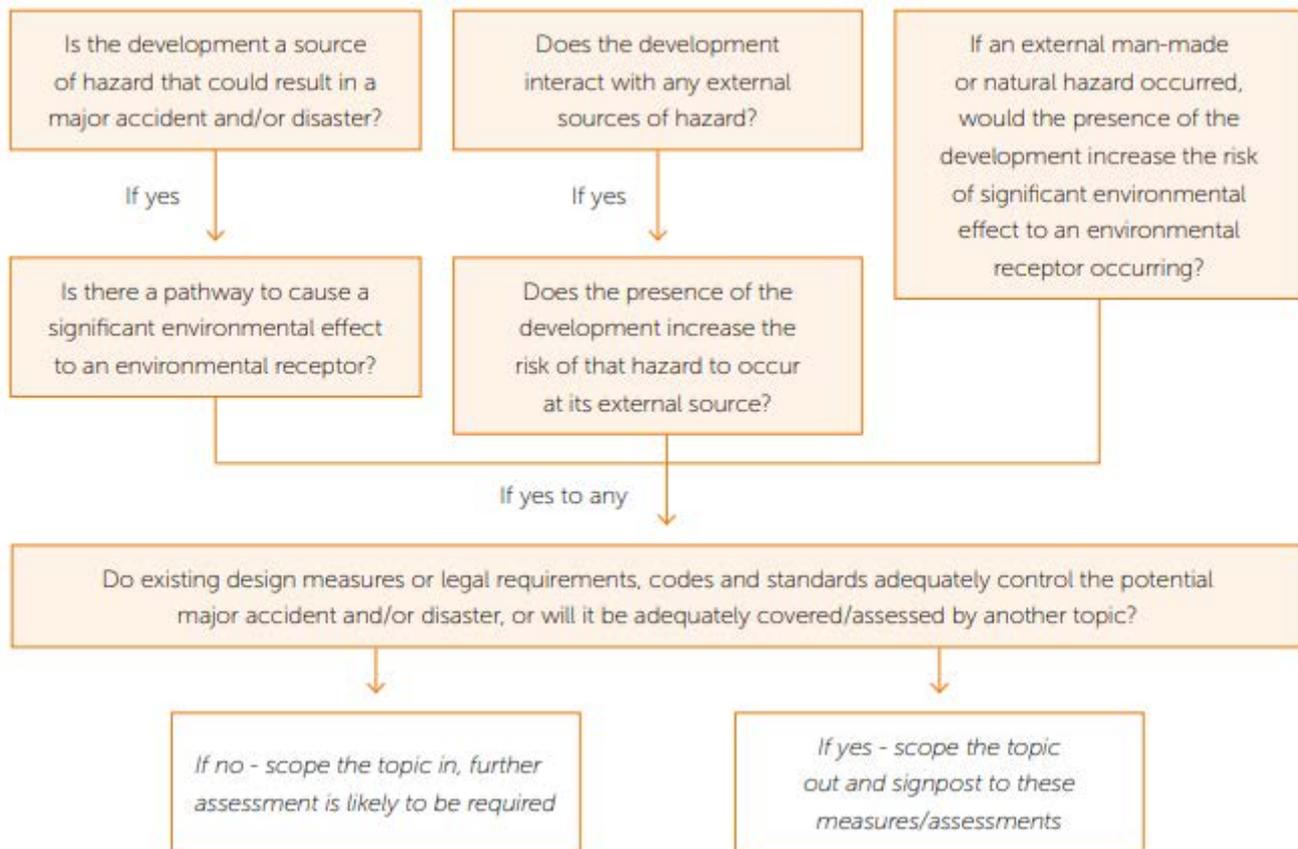
- 4.26. Protection of human health will be considered within the assessments of transport and traffic, air quality, noise and vibration and ground conditions in relation to relevant published standards and thresholds.
- 4.27. The assessment will consider the potential indirect contribution towards health improvement through access to housing, community facilities including education, recreation/physical activity, the ability to utilise sustainable transport (minimising individual car use), and securing the benefits from the economic investment. It will be alert to vulnerable receptors, the potential determinants of health, and consistency with local plan policy.
- 4.28. As the topics of human health bridges a number of the proposed topic areas and there are no potential effects likely to significantly affect human health directly, the consideration of health is covered in relevant chapters, such as transport, air quality, noise and ground conditions, rather than as a specific chapter for human health.
- 4.29. Based on this integrated approach to human health, it is not proposed that the ES will contain a specific chapter for human health.

### **Accidents and Disasters**

- 4.30. The potential for accidents or disasters resulting from the construction and occupation of the Proposed Development is considered to be negligible. The development proposed is of a standard nature and does not involve hazardous processes or activities, or is in a location defined to be hazardous.
- 4.31. The Proposed Development will be designed in accordance with best practice in terms of highway design, specification of drainage and current building regulations. There is no known potential significant risk of accident or disaster that could be significant to human health, cultural heritage or the environment.
- 4.32. IEMA has published a guidance titled 'Major Accidents and Disasters in EIA' (September 2020). On page 11 it sets out '*...for many developments it is likely to be scoped out of the assessment.*'

4.33. The below flow chart from 'Major Accidents and Disasters in EIA' is useful in establishing whether this topic should be scoped in or out.

Figure 4.1 Scoping Decision Process Flow



4.34. Based on the screening criteria set out in the flow chart above, it is not proposed that the ES will contain a specific assessment of potential accidents and disasters.

**Waste**

4.35. As the Site is a proposed allocation for housing development in the Local Plan, the needs of its future residents for waste collection, recycling and disposal have been taken into account in the provision of waste management planned. Similarly, the management of construction waste and recycling will be required during the building programme will be accommodated within the capacity provided.

4.36. The development, will not generate any unusual or complex waste requiring specialist control or management and will therefore be unlikely to result in significant adverse effects to the environment. The issue of waste disposal is not considered likely to result in significant effects.

- 4.37. An estimate of quantities and types of waste produced during the construction and operation phases will be included in the ES as required by EIA Schedule 4, 1.(d). This will be estimated using the Building Research Establishment SmartWaste Database. This provides a benchmark from which waste reduction measures can be appraised.
- 4.38. Based on the above, it is not proposed that the ES will contain a specific assessment chapter on waste.

### **Consultation**

- 4.39. The current land owner has undertaken a number of meetings along with email correspondence with Portsmouth City Council (PCC) since March 2019. Homes England and Bellway discussed general planning policy requirements with PCC at the start of 2020, which culminated in the issuing of a written response from Gary Christie (Principal Planning Officer) in March 2020. Later in the year (October 2020) Bellway and Homes England held a virtual meeting with Ian Maguire (Assistant Director of Planning and Economic Growth) and Tristan Samuel (Director of Regeneration) to discuss high level principles relating to the site layout and PCC aspirations for the site. More recently, in January 2021, a further virtual meeting was held with a number of PCC Officers to discuss next steps in relation to the Tipner scheme, this included pre-application, EIA scoping and timetable for the full application.

#### *Consultations for the purposes of EIA*

- 4.40. Further to this EIA scoping exercise, ongoing consultation with the statutory consultees and officers of the Council will continue where necessary to confirm the detailed methodology for specific assessments.
- 4.41. Each topic-based EIA chapter will reference the supporting consultations that were undertaken with expert stakeholders on the methodology employed.

#### *Pre-application consultation*

- 4.42. The Applicants will undertake effective pre-application consultation with the Council, consultees and other stakeholders, including the public. This could include the involvement of the local communities through a variety of measures in the light of the ongoing Covid-19 crisis; for instance:
- A digital based consultation, comprising a comprehensive project website and a digital / online feedback mechanism;
  - A physical brochure posted with a freepost response mechanism. The brochure would ensure widespread publicity for the consultation; and,
  - To ensure that the most vulnerable are not disenfranchised, there could be the provision of a Freephone information hotline, so that those who cannot leave the home to post a response or use the internet can provide feedback for free through a simple phone call.

### Assessment Methodology

- 4.43. Each technical chapter of the ES will include an explanation of the assessment methodology used for the specific assessment topic, adopted from relevant guidance where this is in place. Wherever possible, the methodologies will be used to predict environmental effects in a standard framework. Where there is variation from this approach, an explanation will be provided in the relevant ES chapter to provide contextual information to support the criteria used.
- 4.44. The EIA will identify environmental effects by estimating the predicted change that will take place as a result of the construction and operation of the project compared with the baseline scenario. Each chapter will begin by identifying potential receptors. A receptor might be a location, a group of locations, buildings, people, features or wildlife and each topic subject will potentially affect a different range of receptors. Each chapter will identify those receptors relevant to the topic and explain how they have been identified. Once the receptors are identified they will then be assessed to determine their sensitivity to change as a result of the project from the known baseline. The receptors will be attributed a sensitivity level ranging from high to low as set out in table 4.1 below.

**Table 4.1: Sensitivity of a generic environmental receptor to change**

Receptor sensitivity	Receptor type
High	Receptors of high importance with a high susceptibility to change and limited potential for substitution or replacement.
Medium	Receptors with some sensitivity to change and medium importance. Often have relevance at a regional scale with some opportunity for substitution or replacement.
Low	Receptors with low importance and sensitivity to change, often of relevance at a local scale.
Negligible	The receptor has very low importance / is not sensitive to change.

- 4.45. The magnitude of impact affecting each receptor will then be considered. These can be positive or negative as well as temporary or permanent. The nature of each will be analysed based on quantitative and qualitative techniques and a magnitude assigned ranging from major to no change, as set out in table 4.2 below.

**Table 4.2: Criteria for the magnitude of environmental impact**

Magnitude	Description of criteria
Negligible	Very minor changes that are not noteworthy or material.
Minor	Some measurable changes that are noteworthy and material. Minor benefit or minor loss/detrimental change to the receptors characteristics, features or elements.
Moderate	Adverse loss of resource or damage to characteristics, features or elements but limited impact on integrity; or Benefit or addition to characteristics, features and elements that improve the receptor.

Magnitude	Description of criteria
Major	Effects will be of a consistently high magnitude and frequency and cause severe damage to key characteristics, features and elements or even total loss; or Major improvement to characteristics, features and elements of receptor.

- 4.46. The environmental effect is a function of the sensitivity of receptors and the magnitude of the impact and will be dependent upon the outcomes of the assessment process. Having identified the sensitivity of the receptor and the magnitude of the impact the standard significance matrix for the project set out in table 4.3 below will indicate the level of the effect ranging from negligible to substantial. For the purposes of the ES, unless specifically defined otherwise in an ES chapter, effects of moderate and higher will be considered to be significant effects.

**Table 4.3: Framework for identifying environmental effects**

Receptor sensitivity	Magnitude of impact			
	Negligible	Minor	Moderate	Major
Negligible	Neutral	Neutral	Minor	Minor
Low	Neutral	Minor	Moderate	Moderate
Medium	Neutral	Moderate	Moderate	Major
High	Neutral	Moderate	Major	Substantial

- 4.47. Whilst the definition of levels of effect will be defined within each chapter of the ES, Table 4.4 sets out general definitions for topics where specific EIA guidance is not available.

**Table 4.4: Broad Definition of Effect**

Effect	Definition
Substantial	These effects represent key factors in the decision-making process. They are generally, but not exclusively associated with sites and features of national importance and resources/ features which are unique and which, if lost, cannot be replaced or relocated.
Major	These effects are likely to be important considerations at a regional or district scale but, if adverse, are potential concerns to the project, depending upon the relative importance attached to the issue during the decision making process.
Moderate	These effects, if adverse, while important at a local scale, are not likely to be key decision making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision making process. Nevertheless, they are of relevance in the detailed design of the project.
Neutral	Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

- 4.48. The likely effects of the Proposed Development will be described as:

- Adverse / beneficial
- Direct / indirect
- Temporary / permanent
- Reversible / irreversible

### **Baseline assessment**

- 4.49. The topic-based chapters of the ES will identify the current baseline scenario, and where relevant the future scenario, against which the environmental effects of the Proposed Development will be measured. The baseline assessment will involve describing the current state and circumstances of the identified receptors and changes that might be expected to occur as a result of the Proposed Development and other cumulative development.

### **Assessment of environmental effects**

- 4.50. The topic-based chapters will identify receptors that are likely to be affected by the Proposed Development (taking into account elements of the scheme design that are inherent in the mitigation of potential effects from the proposal). The assessments will then outline the potential impacts that could arise as a result of the development in the absence of any additional mitigation. Where adverse effects are identified, the ES will set out the measures considered to mitigate any significant adverse effects of the Proposed Development, where feasible and necessary. The residual effects will be evaluated and an assessment of their significance will be reported based upon the magnitude of impact against the sensitivity of the receptor.

### **Assumptions and limitations**

- 4.51. In the preparation of the ES, it is assumed that all legislative requirements will be met and the Proposed Development will be constructed in accordance with industry standard techniques and best practice methods implemented on-site. It is therefore not necessary to re-consider this as mitigation that will be evaluated in the assessment of residual effects. Further details are set out in the following Sections.

### **Assessment of cumulative effects**

- 4.52. The requirement for cumulative effects assessment is set out in Schedule 4 of the EIA Regulations. At Schedule 4(5), the EIA Regulations require *'A description of the likely significant effects of the development on the environment resulting from, inter alia: ... (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;*
- 4.53. The cumulative impact comprises the combined effects of the Proposed Development with other existing and/or approved development. It is proposed that the EIA will consider proposals that have been granted planning permission but are not yet constructed or operational (PPG Reference ID 4-024-20170728), along with allocated schemes where there is a reasonable degree of certainty that they will proceed within 3 years (PPG Reference ID: 42-014-20140306).
- 4.54. It is proposed that the EIA will assess the development proposed by Bellway in the detailed planning application and consider the future development of the remaining area set within PCS1, as part of the cumulative effects assessment. In simple terms, the assessment will consider the:
1. Proposed Development as shown by the submitted plans and associated ES text;
  2. Proposed Development, plus the development of the remaining phases of PCS1, and where identified as being relevant to each assessment discipline, the potential cumulative effects of other developments/projects/strategic allocations (see list below).

4.55. The potential for cumulative effects needs to be considered with regard to specific environmental receptors, the characteristics of the natural environment as well as the neighbouring communities. The ES will consider which other developments have the potential for cumulative effects when the construction and operational phases could be concurrent, and where there are sensitive receptors common to both developments within a defined geographical area known as the Zone of Influence (ZOI).

4.56. Table 4.5 identifies the proposed ZOI that will be used to identify where cumulative effects might occur.

**Table 4.5: Proposed zones of influence**

Environmental Topic	Proposed ZOI
Transport and Traffic	The scoping of the Transport Assessment will determine the ZOI for considering cumulative effects, also known as committed schemes in TAs. This will identify the change in traffic flows and therefore the extent of the area to be considered as the ZOI in assessment of the cumulative effects on the highway network.
Air quality	For the operational phase, the ZOI will be based on the links studied in the TA. As the AQ assessment will utilise the traffic flow data, it will include cumulative emissions predicted from traffic generation.
Noise and vibration	In relation to road traffic, the assessment will utilise the traffic data for the road links subject to changes in flow deemed to require assessment and, therefore, will incorporate cumulative schemes agreed in the TA scoping.
Surface water and flood risk	Assessment is based on the development Site with consideration of impacts on water courses. Flood risk and drainage will be managed onsite and as such any mitigation will ensure that there will be no cumulative effects with other development.
Biodiversity	The ZOI is proposed to be a 25km radius around the Site for European designations, a 5km radius for other statutory designations, a 2km radius for non-statutory designations and a 2km radius for protected and priority species.
Landscape and visual effects	The landscape receptors will be defined in accordance with GLVIA guidelines and an evaluation of the Site surroundings, topography and characteristics. The ZOI will be informed by the Zone of Theoretical Visibility (ZTV). Given the topography surrounding the Site, and the intended design of the buildings, it is considered likely that the ZOI on landscape will be up to 5km from the Site.
Heritage	Buried archaeology is Site specific and no cumulative effects are considered likely. The ZOI for built heritage will be informed by the ZTV (above).

### List of components that will be delivered as part of PCS1

4.57. The Local Plan allocation of PCS1 sets out the following:

- Approximately 1,250 residential properties;
- 25,000m<sup>2</sup> gross of B1 office development;
- A Park & Ride facility of between 900 and 1,800 spaces;
- Associated highway infrastructure improvements including:
  - Widening Twyford Avenue to improve access to Tipner from the A3;
  - 1,300m<sup>2</sup> private nursery

- o 2,500m<sup>2</sup> business floorspace (B1, B2, B8 land use)

### Identified cumulative development

- 4.58. A list of cumulative development has been compiled using planning register searches and a review of development plan documents.
- 4.59. Table 4.2 lists other existing/approved/proposals under consideration within 5km of the Site, as identified following a search of the planning register of Portsmouth City Council in November 2020.
- 4.60. This identifies schemes within 5km of the allocation boundary that comprise 150 or more residential units and/or 10,000m<sup>2</sup> of new employment floor space. These have been reviewed against the local circumstances and the nature of the Proposed Development to identify potential cumulative effects.
- 4.61. An update for as-yet unidentified projects will be undertaken during the preparation of the ES. Consultation with the Council will confirm those that will be included in the assessment of cumulative development.

### Table 4.6: Proposed cumulative schemes

- 4.62. The following sections outline the scope of the assessment proposed under each topic heading.

Application Reference and Description	Status	Distance from the Site
<b>Cumulative schemes – Awaiting Determination</b>		
20/00457/OUT Scheme comprises construction of building of 3004sqm (gea) for use within class B1(c) (light industrial), class C2 (general industrial) and/or class c8 (storage and distribution) to include ancillary office floorspace to first floor level with parking, servicing, landscaping and associated works. The associated works include sewer systems, landscaping, cable laying, infrastructure, enabling works and access roads.	Pending approval	0.2km west
19/00173/FUL Construction of a two storey building for light industrial use (Class B1c) with associated landscaping, parking and hardstanding	Pending approval	1.78 north west
19/01323/FUL Construction of a two-storey building for car dealership use comprising showroom, valet facilities, workshop and MOT testing, with provision of car parking, associated infrastructure and landscaping.	Pending – resolution to grant subject to legal agreement	1.78km south west
20/00435/FUL Reconfiguration and subdivision of existing units including changes of use to create A1 (retail) and A3 (cafe/restaurant) units at ground floor and B1a (office) floorspace at first and second floor together with external alterations and associated works	Pending approval	2.42km south
20/00407/OUT	Pending approval	2.83 km south

Application Reference and Description	Status	Distance from the Site
Scheme comprises outline application with all matters reserved except access and scale for construction of 2 buildings (first up to 13-storeys/43 meters and second up to 20-storey/64 meters for circa 210 residential flats comprises of market units (89 one bedroom flats, 121 two bedroom flats) and associated works, following demolition and removal of existing buildings and structures. This project has been designed using Building Information Modelling ( BIM ). This project also includes associated infrastructure works and access roads.		
17/01807/FUL Scheme comprises mixed-use development comprising the construction of 16-storey building to provide 147 market residential flats ( 89 one bedrooms, 58 two bedrooms) with 30% affordable housing units and associated facilities (class C3), 19-storey building to provide 222-bed hotel (class C1), offices (class B1a), events space (class B1a/class D2), (class A3/A4), restaurant/bar (class A3/A4), and ground floor cafe /restaurants (class A3) totalling 16,344sqm (gea) of non-residential floorspace, basement parking and plant areas with access from stanhope road, associated facilities and landscaping works to commercial road, stanhope road and entrances to victoria park including suds. Sustainable information this development has been designed to achieve BREEAM Excellent rating with 73% for hotel and 71% for office. Sustainable information this scheme has been designed to meet with level 6 of the Code for Sustainable Homes. The associated works include sewer systems, landscaping, cable laying, infrastructure, enabling works and access roads. This project has been designed using building information modelling (bim).	Pending approval	2.84 km south west
19/00014/FUL Change of use of existing stores building 1/049 to office and welfare facility and building 1/046 to gymnasium and training facility, to include external plant and associated external works (amendment to approved permission 19/00014/FUL)	Pending approval	3km south west
<b>Cumulative schemes – Consented schemes</b>		
15/01854/REM Tipner East, Homes England: RMA permission for 80 new residential properties and 235sqm commercial floorspace	Approve 2016	On site (not to be built out)
13/00203/OUT Tipner East, Homes England: conditional outline permission for 5 new residential properties (13/00203/OUT);	Grant with conditions March 2018	On site (not to be built out)
13/00202/OUT Tipner East, Homes England: conditional outline permission for 23 new residential properties (13/00202/OUT);	Grant with conditions March 2018	On site (not to be built out)
10/00849/OUT Tipner East, Tipner Regeneration Company: conditional outline permission for housing north and east of the Site on land owned by Tipner Regeneration Company (TRC) – this is in the form of a mixed housing scheme of 518 units, with 8-storey apartment blocks and some 3-storey town houses north-north-east of the P&R site, and 2-storey houses to the north east (see Chapter 3, Planning History). Outline planning permission was granted in March 2018 and remains extant until March 2023 (ref 10/00849/OUT);	Grant with conditions March 2012	On site and to the north
16/01820/FUL	Conditional permission	0.3km east

Application Reference and Description	Status	Distance from the Site
Scheme comprises Construction of new coastal flood and erosion risk management structures adjacent to Tipner Lake consisting of a concrete sea wall and associated landscaping works	Feb 2017	
16/00124/CS3 Construction of three buildings to form a total of 19 industrial/storage units and 1 cafe/take-away unit (2688 sq m) to include the installation of solar panels to the roofs and electricity substation with associated refuse bin stores, cycle storage, access road, dropped kerbs, parking and landscaping (Amended Scheme to 15/01291/FUL)	Conditional permission April 2016	Works have commenced on site 1.2km north east
19/00885/FUL Scheme comprises construction of (including part retention) of part two/part three storey school building (to the east of the Site), single storey extension to existing dance studio to form nursery, with associated landscaping, land remediation, boundary treatments, parking and cycle storage (following demolition of existing school buildings). The development has been designed to meet secured by design requirements, includes natural and mechanical ventilation with heat recovery . This project has been designed using building information modelling (BIM ). Sustainable information this development has been designed to achieve BREEAM Very Good rating(60.50%). This project also includes associated infrastructure works and access roads. Scheme also includes polycarbonate.	Conditional permission Sept 2019	1.22km south east
18/01874/FUL Change of use of building from offices (Class B1(a)) to a Student Hall of Residence (Class C1) comprising 309 study studios; external alterations to include infill of undercrofts, construction of entrance lobby and replacement windows, with associated servicing, parking and landscaping works.	Conditional permission May 2020	2.14km south
18/01874/FUL Change of use of building from offices (Class B1(a)) to a Student Hall of Residence (Class C1) comprising 309 study studios; external alterations to include infill of undercrofts, construction of entrance lobby and replacement windows, with associated servicing, parking and landscaping works.   Wingfield House 316 Commercial Road Portsmouth PO1 4TF	Conditional permission May 2020	2.13km south
Fareham N/16/0003 Construction of up to 7,479.8sqm of floorspace sited within 3 blocks housing 2 x two storey units and 1 single storey unit to form a mix of retail (class A1), restaurant/cafe with drive thru (class A3), education/training (class D1), gymnasium (class D2), and vets (sui generis), to include car parking, cycle/refuse storage and landscaping access from binnacle way	Approved Feb 2016	2.35 km north east
17/01352/FUL Construction of extension to main entrance and link corridor to 5 storey extension to south wing; external services compound and additional car parking	Conditional permission Dec 2017	2.37km south east
16/01592/FUL Installation of new pontoon and installation of replacement pontoon along quay wall	Conditional Permission Feb 2019	2.58km north west
18/01424/FUL Construction of eleven storey student halls of residence comprising of 123 studio flats (Class C1), to include ancillary facilities; hard and soft landscaping; and other associated works   Unity Hall, Social Club Coburg Street Portsmouth PO1 1JA	Conditional permission 18/01424/FUL	2.73 km south east

Application Reference and Description	Status	Distance from the Site
<p>18/01503/CS3</p> <p>Construction of two-storey extension to include associated vehicular access, landscaping scheme, and external alterations. The proposed Charter Academy expansion requirement is to enlarge the existing school to accommodate an additional 300 pupils. The proposed works include: construction of a new two storey teaching block to provide 6 No general teaching classrooms; 2 No art classrooms; 1 No food technology classroom; 1 No multi-functional practical space, additional dining space, additional assembly space circulation, storage and pupil toilets, alterations to the existing school building to provide science teaching accommodation and an extended commercial kitchen, associated landscaping and external works. This development has been designed to achieve BREEAM Excellent rating with 74.4%. This project has been designed using Building Information Modelling (BIM).</p>	<p>Conditional permission March 2019</p>	<p>2.88km south</p>
<b>Allocated schemes in the Development Plan</b>		
<p>Horsea Island Country Park: intention to develop 128ha park on former landfill site;</p>	<p>Allocation</p>	
<p>Tipner West: intentions to create 1250 new residential properties and 30,000 sq. m. business space. Concept proposals indicate tall buildings up to 40 storeys in height</p>	<p>Allocation</p>	
<p>Horsea Island East: intention to create 25,000 sq. m. business space;</p>	<p>Allocation</p>	
<p>Horsea Island Country Park: intention to develop 128ha park on former landfill site;</p>	<p>Allocation</p>	
<p>Port Solent: potential for 500 new residential properties and 2,000 sq. m. of business space; and</p>	<p>Allocation</p>	
<p>Tipner, Port Solent and Horsea Island Bridge: City Deal plan to include a bridge parallel west to M275.</p>	<p>Allocation</p>	

## 5. Transport, access and movement

### Introduction

5.1. This chapter of the EIA Scoping Report sets out the assessment criteria/methodology, the existing traffic/transport baseline conditions, the potential impacts and effects resulting from the Proposed Development as well as the potential mitigation measures.

### *Previous Assessment*

- 5.2. As identified in paragraph 2.7 of this EIA Scoping Report, land parcels within the Site have been subject to a number of planning applications, which equate to permission for approximately 150 residential units on the Site.
- 5.3. Most notably part of the Site has been subject to an outline planning application for the development of up to 518 residential dwellings under planning application 10/00849/OUT. As part of planning application 10/00849/OUT a Transport Assessment was completed which assessed the suitability of the Site with the provision of sustainable transport and the local road network, the impact on highways safety, traffic impact, junction capacity assessments, a review of site access arrangements and any off-site highway works required to mitigate the impact of the proposals.
- 5.4. In addition, an ES was prepared to support planning application 10/00849/OUT, the scope of which has been used to inform this EIA Scoping Report given that the proposals would result in a modest increase in dwellings (circa 35 units) when compared to the baseline position (150 dwellings).
- 5.5. To assess the feasibility of the Proposed Development, the following work is being completed in parallel to the EIA Scoping process under a pre-application Transport Assessment (TA) scoping exercise with Portsmouth City Council Highways:
- Review of trip rates and confirming those prepared previously remain comparable;
  - Review of distribution– in particular factoring in the increase in residential development proposed;
  - Review of any committed developments beyond those previously included and discounting any which should no longer be included due to full occupation; and
  - Review of junctions likely to be affected by the Proposed Development.
- 5.6. The TA will be provided as a separate document with relevant key findings from the assessment work to be included as an appendix to the ES.

### Baseline Conditions

- 5.7. To understand baseline traffic conditions within the local area a review of the previous applications associated with the Site has taken place. The TA and ES chapter prepared to support planning application 10/00849/OUT were informed by traffic surveys completed in May 2010, traffic data provided by Portsmouth City Council, accident records and comprehensive measurements obtained from site visits. The work completed as part of that application identified that there were sensitive junctions within the assessment area. To support the current proposals updated traffic data and accident data records would be collected with support from Portsmouth City Council due to the ongoing COVID-19 circumstances. This would be a subject of discussions during pre-application conversations with Portsmouth City Council highways.
- 5.8. It is proposed that there would be two means of access into the Site. The primary access would be provided onto Twyford Avenue via an existing access location which is currently not open for public use. In this location Twyford Avenue is subject to a 20mph speed limit and provides access to circa 20 residential dwellings and Mountbatten Centre (a leisure centre) before becoming a dead end.
- 5.9. A secondary means of access for a small quantum of the Proposed Development site would be provided onto Tipner Lane through the extension of the existing carriageway. Tipner Lane is residential in nature and subject to a 20mph speed limit.
- 5.10. In terms of the wider area to be assessed this consists of a mix of residential roads of low speed and volume, classified local distributor roads with larger volumes and higher speed vehicles, A roads and a motorway junction.

### Baseline Data Collection

- 5.11. The following information and data would be collected to assist with the TA and review traffic patterns associated with the Proposed Development:
- Census statistics relating to journey to work, mode and car ownership;
  - Traffic flow distribution diagrams (using information from previous applications where applicable);
  - Trip rates – including a review of the trip rates approved from the previous planning consents;
  - New traffic count surveys of the surrounding road network (subject to conversations with PCC on COVID-19 Pandemic); and
  - Personal Injury Accident (PIA) statistics for the local road network.

### Policy and guidance

- 5.12. The assessment of transport and highways for the Proposed Development will be undertaken against the requirements of national and local policy requirements and relevant guidance and best practice. The relevant considerations that will be referred to are set out below.
- National Planning Policy Framework, 2019
  - Hampshire County Council Local Transport Plan 3 (2011-2031)
  - Portsmouth City Council Core Strategy – The Portsmouth Plan, 2012

- Manual for Streets, 2007 (Department for Transport)
- Manual for Streets 2, 2010 (Department for Transport)

### Approach and method

- 5.13. The assessment methodology has been informed by guidelines issued by the Institute of Environmental Management and Assessment (IEMA). These guidelines suggest that the following rules should be applied when considering the scope and extent of the environmental assessment:
- Highway links where traffic flows are predicted to increase by at least 30% should be included within the assessment (or where the number of HGVs is predicted to increase by 30%); and
  - Areas that are considered to be especially sensitive to increases in traffic volumes should be included where traffic flows are predicted to increase by at least 10%.
- 5.14. These guidelines are formed on the basis that, in environmental terms, a 30% increase in traffic flow on a standard highway link is considered to be a 'significant' impact. An increase in traffic flow of less than 10% however would not be discernible to road users as background traffic flows can fluctuate by this amount on a daily basis.
- 5.15. The exception to this is where a transport link can be considered to be within a sensitive area, such as adjacent to a school, hospital, nursing home or where residential properties front onto the link and pedestrian activity is high.
- 5.16. The IEMA guidelines refer to the assessment of the Site's impact on link flows by establishing the overall 'without Site' and 'with Site' two-way flows for the links preceding the junctions' arms subject to a material increase.
- 5.17. The 'Guidelines for the Environmental Assessment of Road Traffic' suggested that assessment should be carried out for the 'scope in' areas regarding the following effects:
- **Severance:** The perceived division that can occur within a community when it becomes separated by a major traffic artery. In general terms according to the IEA Guidelines a 30% change in traffic flow is likely to produce a 'slight' change in severance, with 'moderate' and 'substantial' changes occurring at 60% and 90% respectively.
  - **Driver Delay:** The delay to drivers generally occurs at junctions where opposing vehicle manoeuvres are undertaken with vehicles having to give or receive priority depending upon the type of junction arrangement.
  - **Pedestrian Delay:** The delay incurred by pedestrians is generally a direct consequence of their ability to cross roads.
  - **Pedestrian Amenity:** The term pedestrian amenity is broadly defined as the relative pleasantness of a journey.
  - **Accidents and Safety:** This establishes the effect on the road safety record of the adjoining road network.

- 5.18. This chapter of the EIA Scoping Report sets out the assessment criteria/methodology, the existing traffic/transport baseline conditions, the potential impacts and effects resulting from the Proposed Development as well as the potential mitigation measures.
- 5.19. The above would be assessed through percentage impact assessments of increases in traffic flow as a result of the Proposed Development in the assessment area and through junction modelling assessments undertaken as part of the TA. Pre-application discussions will be undertaken with the local highway authority (Portsmouth City Council) to ensure that the scope of assessment is acceptable for these proposals. In addition to the EIA, a TA and Travel Plan will be prepared to support the planning application.
- 5.20. The magnitude of the effects must be examined in order to determine whether they are considered to be 'significant'. The IEMA guidelines imply that there are no simple rules or formulae that can be applied to determine the magnitude of such effects and thus a professional judgement must be made, based upon the information and data available.
- 5.21. The following table shows initial significance criteria for transport related effects, with significance being measured as major, moderate, minor or negligible.

**Table 5.1 Defining Transport related Impact Significance**

Magnitude of Impact	Threshold	Criteria for Assessing Impact
Major	>30%	Total Loss or major / substantial alteration of key of the pre-development conditions such that the post development character will be fundamentally changed.
Moderate	10% to 30%	Loss or alteration to one or more key elements of the baseline conditions such as that post development character of the baseline will be materially changed.
Minor	5% to 10%	A minor shift away from baseline conditions. Change arising from the loss / alteration will be noticeable but not material. The underlying character of the baseline condition will be similar to the pre-Project situation.
Negligible	<5%	Very little change from baseline conditions. Change barely distinguishable, approximating a 'no change' situation.

- 5.22. The percentage increase in traffic levels over existing levels due to the Proposed Development will be used as the criteria for magnitude of change.
- 5.23. The sensitivity of receptor will be graded according to the development type. It is reasonable to assume that this would apply to the environment around the building as well as the type building itself.

**Table 5.2 Defining Receptor Sensitivity**

Sensitivity	Examples of Receptor
High	Roads near to sensitive uses included hospitals, residential streets, shared surfaces and accident blackspots
Moderate	Residential distributor roads, congested junctions, roads with poor pedestrian facilities and unsegregated cycleways
Low	Roads fronting commercial uses such as offices, retail and leisure uses
Negligible	Road access to warehouses, factories and farm land.

5.24. The following table summarises the significance criteria by magnitude and sensitivity that will be used in the assessment.

**Table 5.3 Matrix of Impact and Significance**

Magnitude of Impact	High Sensitivity	Moderate Sensitivity	Low Sensitivity	Negligible Sensitivity
<b>Major</b>	Major	Major / Moderate	Moderate / Minor	Negligible
<b>Moderate</b>	Major / Moderate	Moderate / Minor	Minor	Negligible
<b>Minor</b>	Moderate / Minor	Minor	Minor / Negligible	Negligible
<b>Negligible</b>	Negligible	negligible	Negligible	Negligible

5.25. The outcome of evaluation against these criteria will be used to make a judgement on the magnitude of each effect at each identified location in terms of magnitude and sensitivity. For example a dwelling (on a distributor road) incurring an increase in traffic of 5% - 10% would be classified as having a long term minor adverse impact. Any impacts of moderate and above are considered to be significant in EIA terms.

5.26. In order to judge the impact of the Proposed Development against the above criteria, this is undertaken as a two stage process – one prior to the implementation of mitigation measures and one following the implementation of mitigation measures (if required).

### *Geographical Scope*

5.27. The scope of the assessment will involve the key highway junctions and links within approximately a 5km radius of the Site, although it should be noted that the scope is based on route assignment and trip generation rather than purely on proximity and will include sensitive areas where the increase in traffic volumes is at least 10%. Ultimately the geographical scope would be confirmed during pre-application discussions with Portsmouth City Council's highways officer but based on previous applications is anticipated to include:

- Portsbridge Roundabout;
- London Road/Northern Parade;
- Northern Parade/Matapan Road;
- Gladys Avenue/Northern Parade;
- Twyford Avenue/Northern Parade;
- Twyford Avenue/Walker Road;
- Stamshaw Road/Angerstein Road; and
- Rudmore Roundabout.

### *Temporal Scope*

- 5.28. The assessment work will consider the construction phase and a future year of 2030 (10 years post submission).

### **Potential Impacts**

- 5.29. The highway impacts of the Proposed Development that the above methodology will assess are highlighted below.

### *Construction Impacts and Effects*

- 5.30. The routing of construction vehicles may impact on more sensitive areas of the local highway network and the assessment will consider whether areas sensitive to traffic will be subject to increased traffic flow and/or increase in HGV movements.

### *Occupation Impacts and Effects*

- 5.31. The traffic generated by the Site may impact upon the volume of vehicles utilising the surrounding local highway in the assessment area, resulting in the potential for increased delay and queueing at these junctions.
- 5.32. Any new access onto, or changes to, the highway network have the potential to have a detrimental effect on the operational safety of the highway network. A Road Safety Audit (Stage 1) will be undertaken on any junction designs to identify and address any safety concerns to ensure any changes are safe for all highway users.

### **Summary of Scoping**

- 5.33. Within the TA prepared to support the planning application, traffic impact assessment work would be completed to confirm the Proposed Development's impact on the surrounding highway network, with regard to severance, driver delay, pedestrian delay, pedestrian amenity and accidents and safety. The geographical scope of this assessment works is suggested above and would ultimately be confirmed following pre-application discussions with Portsmouth City Council highways. This assessment would be informed by Census statistics, traffic flow distribution diagrams, trip rates, traffic count surveys and Personal Injury Accident (PIA) statistics for the local road network.

## 6. Air Quality

### Introduction

6.1. This Section of the ES will consider the key air quality impacts associated with the Proposed Development.

### Baseline conditions

- 6.2. A search of the UK Pollutant Release and Transfer Register website has not identified any significant industrial or waste management sources that are likely to affect the Proposed Development, in terms of air quality.
- 6.3. The Proposed Development Site is located within the City of Portsmouth, approximately 3 km to the north of the city centre of Portsmouth. Portsmouth City Council has investigated air quality within its area as part of its responsibilities under the LAQM regime. The Council has declared five AQMAs within the City of Portsmouth, four of which were declared in 2005 and one in 2010, all of which are a result of exceedances of the annual mean nitrogen dioxide objective. AQMAs No.6 (Fratton Road to London Road) and No.11 (Mile End Road/Commercial Road from the M275 to Lake Road) are the closest to the Proposed Development, located approximately 700 m and 820 m to the south of the Site, respectively.
- 6.4. In terms of PM<sub>10</sub>, Portsmouth City Council has concluded that there are no exceedances of the objectives within its area (Portsmouth City Council, 2020). It is, therefore, reasonable to assume that the existing PM<sub>10</sub> levels will not exceed the objectives within the study area.
- 6.5. In 2019, Portsmouth City Council operated four automatic monitoring stations and 154 diffusion tube monitoring sites within its area. The closest sites to the Proposed Development Site are located along London Road (A2047), Gladys Avenue and the M275. Thirteen of the 154 diffusion tube monitoring sites in the City of Portsmouth measured exceedances of the annual mean nitrogen dioxide objective in 2019, some of which are located in the aforementioned AQMAs. However, the measured concentrations within AQMAs no. 6 and 11 were all less than 5% above the objective. All measured concentrations were below 60 µg/m<sup>3</sup>, therefore, it is considered unlikely that any exceedances of the 1-hour mean objective occurred during this time period.
- 6.6. All four automatic monitoring stations in the City of Portsmouth also monitor PM<sub>10</sub>. In 2019, measured PM<sub>10</sub> concentrations at all sites were well below the objectives.
- 6.7. There are no Defra-run monitoring sites within the study area with which to identify exceedances of the annual mean nitrogen dioxide limit value. The national maps of roadside annual mean nitrogen dioxide concentrations (Defra, 2020) used to report exceedances of the limit value to the EU, identified exceedances in 2018, to the south of the Site in Portsmouth City Centre and alongside the A27 and M275 trunk road network.

- 6.8. Portsmouth City Council is in the process of developing a Clean Air Zone (CAZ) to address the identified exceedances of the limit value in Portsmouth City Centre, and a Full Business Case was submitted for approval in December 2020. This proposes a charging Class B CAZ plus non-charging measures, which is anticipated to go live in November 2021 and will result in compliance by the end of 2022. As a result, all buses, coaches, taxis, private hire vehicles and heavy goods vehicles which do not meet the required emissions standards will be required to pay a charge to enter the CAZ, which covers the centre of Portsmouth, to the west of Fratton/London Road and will be 1 km to the south of the Development Site.

### Policy and guidance

- 6.9. The following documents, relevant to air quality, will be taken into consideration regarding national, regional and local policy and guidance:
- The Portsmouth Plan – Portsmouth’s Core Strategy (Portsmouth City Council, 2012);
  - Portsmouth Local Transport Plan 3 (Portsmouth City Council, 2011);
  - The National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2019);
  - The Land-Use Planning & Development Control: Planning for Air Quality guidance (IAQM, 2017); and
  - The Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2016).

### Approach and method

- 6.10. Road traffic emissions will impact on existing receptor locations (both human and ecological), and upon new residential locations within the Proposed Development itself. Suitable receptor locations will be identified based upon detailed maps and photographs, and on plans of the scheme design. Consideration of the air quality impacts on existing receptor locations will be informed by the Transport Assessment (which will identify areas which have the potential for significant changes to traffic as a result of the Proposed Development).
- 6.11. There is potential for the Proposed Development to have an impact on concentrations of nitrogen oxides and nitrogen deposition as a result of road traffic at the Portsmouth Harbour SPA/SSSI/Ramsar site, either alone or in-combination with other plans and projects. The scope of the assessment of these impacts will be dependant upon the extent of changes in traffic flows on roads within 200m of the SPA/Ramsar site.
- 6.12. The air quality impacts of road traffic emissions at the sensitive receptors will be determined using the ADMS-Roads dispersion model. The model has been widely used in the UK and has been accepted by Defra for review and assessment purposes. The model requires a variety of inputs including road traffic data (flows, speeds and vehicle fleet composition) and meteorological data. Predictions will be carried out for nitrogen oxides, PM<sub>10</sub> and PM<sub>2.5</sub>. Nitrogen dioxide concentrations will be calculated from nitrogen oxides using tools provided by Defra. The extent of the air quality model area will be determined based on screening criteria set out in the IAQM Development Control Guidance (IAQM, 2017).
- 6.13. Background pollutant concentrations in future years will be determined using data derived from the “year-specific maps” published by Defra.

- 6.14. Meteorological data will be taken from the Gosport Fleetlands meteorological site.
- 6.15. An important element of the modelling study will be to verify the model output (i.e. to compare the predictions with actual measured results). This will be undertaken by identifying roadside air quality monitoring locations that are suitably representative of conditions at the Proposed Development Site.
- 6.16. For construction activities, the assessment will consider the potential for impacts within 350 m of the Site boundary and within 50 m of the routes to be used by construction vehicles up to 500 m from the Site entrance. The assessment of construction impacts will follow the methodology set out in the Institute of Air Quality Management Guidance '*Guidance on the Assessment of Dust from Demolition and Construction*' (IAQM, 2016).

### Potential Impacts

- 6.17. The following impacts may be associated with the Proposed Development, and will be considered by the assessment:
- impacts of the operation of the Proposed Development on concentrations of nitrogen dioxide, PM<sub>10</sub> and PM<sub>2.5</sub> from road traffic on existing sensitive human receptors in the proposed year of opening;
  - impacts of the operation of the Proposed Development on concentrations of nitrogen oxides and nitrogen deposition as a result of road traffic at designated ecological sites (if significant changes in traffic flow identified near to these sites);
  - impacts of existing sources on future residents of the Proposed Development itself; and
  - impacts of the construction of the Proposed Development on dust soiling and concentrations of PM<sub>10</sub> during the construction period.

### Summary of Scoping

- 6.18. The Air Quality ES Chapter will consider the impacts of the Proposed Development on local air quality in terms of dust and particulate matter emissions during construction and emissions from road traffic generated by the completed and occupied Proposed Development. Additionally, it will identify the air quality conditions that future residents will experience.

## 7. Noise and vibration

### Introduction

- 7.1. Noise and vibration from the Proposed Development has the potential to affect nearby sensitive receptors, including in combination with adjacent future developments. Noise impact on the proposed residential development from nearby existing noise sources will also be considered.

### Baseline conditions

- 7.2. The primary noise source affecting the development site is likely to be road traffic noise from the nearby M275 Motorway / Tipner Exchange. Additional possible noise sources would be the Portsmouth Park and Ride located to the west of the Site and Leisure Centre situated to the east.
- 7.3. Baseline ambient and background noise conditions across the development site and at nearby sensitive receptors will be established through survey measurement, using a combination of long-term unattended monitoring and shorter-term measurement methods.
- 7.4. Depending on the status of the Covid-19 pandemic situation, which may influence road traffic levels and other noise sources, a combination of survey work and desktop noise modelling, combined with historical noise survey data and previous studies undertaken in relation to the wider Tipner regeneration scheme may be required.
- 7.5. Recent studies for the development of the adjacent park and ride site (ref: 20/00457/OUT) will also be referred to as a potential future baseline, as the proposed building would provide significant acoustic screening of the M275, potentially reducing road traffic noise on the development site.
- 7.6. Close consultation will be carried out with Portsmouth City Council to determine the basis of baseline noise studies to suitably and robustly inform the assessment

### Policy and guidance

- 7.7. The noise and vibration assessment for the Proposed Development will be carried out in accordance with current legislation and guidance documents. The relevant documents are summarised below.
- 7.8. The National Planning Policy Framework (NPPF), Feb 2019, sets out the Government's planning policies for England and how these are expected to be applied. Reference is made in the NPPF to the Department for Environment, Food and Rural Affairs (DEFRA) 2010 Noise Policy Statement for England (NPSE).
- 7.9. The NPSE is intended to apply to all forms of noise other than that which occurs in the workplace and includes environmental noise and neighbourhood noise in all forms.
- 7.10. The NPSE advises that the effect of noise should be assessed on the basis of negative and significant negative effect but does not provide any specific guidance on assessment methods or limit sound levels.
- 7.11. This lack of numeric limit sound levels is a direct consequence of the advice also contained in the NPSE which is that it is not possible to have "a single objective noise-based measure that is applicable to all sources of noise in all situations".

- 7.12. It further advises that the sound level at which a negative effect occurs is “likely to be different for different noise sources, for different receptors and at different times”. In the absence of specific guidance within the NPPF and NPSE for the assessment of environmental noise, it is considered appropriate to base the assessment on Local Planning Authority requirements, current British Standards and national and international guidance (as described later in this chapter). However, one noteworthy advisory point in the NPSE is the need to place into context any general requirements that increases in ambient noise should be ‘minimised’. In this regard the NPSE states:

*“Of course, taken in isolation and to a literal extreme, noise minimisation would mean no noise at all. In reality, although it has not always been stated, the aim has tended to be to minimise noise as far as is reasonably practical... the application of the NPSE should enable noise to be considered alongside other relevant issues and not to be considered in isolation. In the past, the wider benefits of a particular policy, development or other activity may not have been given adequate weight when assessing the noise implications”*

### **Approach and method**

#### Construction Noise and Vibration

- 7.13. Noise and vibration levels during the construction phases of the Proposed Development will be assessed using the guidance provided in BS5228: Part 1: 2009 *Code of practice for noise and vibration control on construction and open sites - Part 1: Noise* and BS5228: Part 2: 2009 *Code of practice for noise and vibration control on construction and open sites - Part 2: Vibration*. The results of this assessment will be used to manage noise and vibration at nearby receptors, in relation to the requirements of the Control of Pollution Act.
- 7.14. This will involve the comparison of noise and vibration levels measured during the baseline measurement exercise with predicted noise and vibration levels from site activity.
- 7.15. This Proposed Development will involve the construction of a new access and internal roadways, as well as the built form of the development itself. Noise from standard construction processes such as earth moving, piling, and general building construction noise are expected.
- 7.16. BS5228:2009 provides guidance, information and procedures on the control of noise from construction sites. The Standards do not promote specific limits for construction noise and vibration. The assessment of whether changes in baseline levels due to construction causes significant effects is dependent on the absolute levels of ambient and construction noise and vibration, duration, time of occurrence and frequency of the change. BS5228 provides guidance on setting criteria, controlling, predicting, and measuring noise and vibration.
- 7.17. The construction element of the scheme will, by definition, be a temporary impact on nearby sensitive receptors. The assessment will consider methods by which this activity can be organised to mitigate noise and vibration as much as possible through the use of appropriately practical noise management techniques.

### Operational noise (road traffic noise)

- 7.18. The assessment of noise impact due to increased traffic flows generated by the Proposed Development upon completion and other development is best assessed using a change comparison of existing against predicted levels of road traffic noise, with noise levels predicted using the methodology provided in *Calculation Of Road Traffic Noise (CRTN)*: 1988.
- 7.19. Changes in road noise levels will be assessed against semantic descriptors, as suggested in the IEMA (Institute of Environmental Management and Assessment) /IOA (Institute of Acoustics) guide, based on guidance on noise level changes in the Design Manual for Roads and Bridges: *Environmental Assessment: Volume 11 Section 3 Part 7: Traffic Noise and Vibration - Chapter 3: Nuisance from traffic noise*.
- 7.20. DMRB states that the impact arising from a change in noise level depends upon whether it occurs as a result of a gradual or sudden change in road traffic flow. Generally, it is found that a sudden change gives rise to a greater impact than a gradual change. The impact of a sudden change in road traffic noise levels is defined in terms of the percentage of people "bothered very much or quite a lot" by noise. Levels of significance will be interpreted from the "estimation of traffic noise nuisance" graphs in DMRB.
- 7.21. The potential noise and vibration impacts of Proposed Development would normally be considered for the following assessment scenarios;
- Construction noise and vibration;
  - Operational noise impacts on Proposed Development and wider area – Opening year;
  - Operational noise impacts on Proposed Development and wider area – Opening year + X years; and,
  - Cumulative noise impacts (i.e. including the remainder of the potential Tipner Regeneration or other consented schemes).

### **Potential Impacts**

- 7.22. Potential noise impacts may arise during construction phases, however, these will be temporary in nature and unlikely to form a long term significant effect. Vibration impacts are likely to be negligible.
- 7.23. Increases in road traffic noise due to the development traffic on immediately local roads are likely to be modest, however when considered cumulatively with surrounding development, may have the potential to have increasing impact. These will be assessed in detail. Operational vibration impacts are not likely to occur.
- 7.24. Impact of noise on the Proposed Development site would be mitigated through building orientation, spatial layout and appropriate building façade/ventilation design. No significant impacts are anticipated.

### **Summary of Scoping**

Potential noise and vibration impacts have been scoped into the assessment, to include establishing suitable assessment baselines; assessment of construction noise and vibration; consideration of operational noise (road traffic) impacts; and noise impacts on the proposed residential development itself.

## 8. Water Resources (drainage and flood risk)

### Introduction

- 8.1. As described in earlier sections of the Scoping Report, the Site is brownfield and was formally occupied by uses including a fuel depot and greyhound racing stadium, although both have since been demolished and ground remediation undertaken on the fuel depot site
- 8.2. The Site is adjacent to Tipner Lake (Portsmouth Harbour) which presents the greatest flood risk to the development (tidal), it should be noted that there are on-going sea defence works being delivered around Tipner lake, there are no watercourse on the Site.
- 8.3. There is limited existing drainage on the Site therefore disposal of surface water runoff from the eastern part of development will be made either direct to Tipner Lake or to an existing public surface water sewer in Twyford Avenue that also drains into Tipner lake, runoff from the western part of the development will be drained through the neighbouring park and ride site and discharged into an existing sewer in the north western corner of the park and park, which also discharges into Tipner Lake.

### Baseline conditions

- 8.4. The following baseline conditions will be considered in determining the likely environmental effects upon the environment arising from the Proposed Development:
  - Existing flood risk to development, as determined from existing and predicted sea levels;
  - Flood risk to the development from other sources, i.e. sewers and groundwater;
  - Existing topography and prevailing ground levels, as determined from surveys.;
  - Remediated land and existing contamination, as assessed from Geoenvironmental studies; and,
  - Existing infrastructure, as assessed by survey and mapping records.
- 8.5. It has been established from previous studies that the existing site could be at risk of future tidal flooding due to the existing levels, no other existing sources of flooding have been identified.
- 8.6. The area of previous fuel depot is underlain by stabilised remediated ground, excavation within this ground is to be avoided where possible, which has implications for building and drainage levels.
- 8.7. The western area of the Site, adjacent to the park and ride, is underlain by a Japanese Knotweed protective barrier, again the has implications for building and drainage levels.

### Policy and guidance

- 8.8. The overarching policy and guidance to be employed when assessing flood risk and drainage is:
  - The NPPF and its relevant Technical Guidance
  - PUSH SFRA 2016
  - Ciria C753 SuDs Manual

- Building Regulations

8.9. Due regard will also be given to relevant planning policy in how it relates to flood risk and drainage issues.

### Approach and method

8.10. Flood risk to development will be assessed using the latest on-line mapping data and predicted flood levels provided by the Environment Agency as part of previous studies for the Site. This data, when compared to existing survey information has identified that the Site could be at risk of future tidal flooding, discounting any benefits afforded by future flood defence schemes.

8.11. New development is therefore to be protected against future flooding, with an appropriate margin of safety as determined from the latest guidance, to ensure that it remains protected and sustainable throughout its lifetime.

8.12. Surface water runoff from the development is to be discharged to Tipner Lake, therefore the effects of tide locking on the system are to be assessed to ensure that it will not increase flood risk, either to the new development, or off site receptors, this has been undertaken using computer modelling methods.

8.13. A flood risk assessment and drainage strategy will be provided as part of the planning application and ES.

### Potential Impacts

8.14. Given the potential for flood risk and drainage issues identified above, consideration will be given throughout the design process to appropriate measures to ensure that there is suitable protection and no additional on or offsite flood risk arises as a result of the Proposed Development. The likelihood of the effects and the appropriateness of the mitigation measures proposed will be assessed to determine whether likely significant effects are predicted. The approach taken will be in line with the standard methodology outlined earlier in the Scoping Report and with regard to best practice.

8.15. At this stage the likely approach to addressing flood risk and drainage issues at the Site, is considered to be as follows:

- Flood protection is to be achieved by the raising of ground levels however this will have an immeasurable impact on sea levels;
- Similarly, discharge of surface water to Tipner Lake will also have an immeasurable impact on sea levels and will not increase flood risk in this regard; and,
- Discharge of surface water to existing sewers could increase flood risk associated with those sewers if left unmitigated, therefore detailed design is to be undertaken to ensure there is no negative impact before this option is pursued.

### Summary of Scoping

8.16. The Proposed Development has the potential to increase flood risk through the raising of ground levels and discharge of surface water runoff to Tipner Lake, however it anticipated that the impact of both will have an immeasurable effect on sea levels and will not result in any adverse environmental impact.



- 8.17. The ES will include an assessment of the likely significant effects in relation to flood risk and drainage to ensure comprehensive consideration of the issue.

## 9. Biodiversity

### Introduction

- 9.1. The Chapter assesses the potential effects of the development with respect to ecology during the construction and operational phases
- 9.2. A Preliminary Ecological Appraisal has been undertaken at the Site, which recommended a number of Phase II surveys to be undertaken in relation to protected species, these have been undertaken at the Site and include:
- Bat activity surveys;
  - Bat emergence / return surveys;
  - A botanical survey; and
  - Reptile surveys.

### Baseline conditions

- 9.3. The Site comprises a single building and areas of scrub, ephemeral and short perennial vegetation on disturbed land, rough grassland, and crushed concrete hard standing. A mixture of early-succession plant communities have developed across the Site which fulfil all five criteria for open mosaic habitat on previously developed land.

### Statutory Sites

- 9.4. There are no Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPAs) or Special Areas of Conservation (SAC) within the immediate Site area.
- 9.5. Ecological designations located within 2km of the Site are as follows.
- Portsmouth Harbour SPA – located approximately 35m to the north east of the Site;
  - Portsmouth Harbour Ramsar – located approximately 35m to the north east of the Site;
  - Portsmouth Harbour SSSI – located approximately 35m to the north east of the Site; and
  - Solent and Dorset Coast pSPA – located approximately 35m to the north east of the Site.

### Non-statutory Sites

- 9.6. There are two locally designated Sites of Importance for Nature Conservation (SINCs) within 1km of the Site. Both are designated due to the habitats present on each specific site and are located more than 600m from the Proposed Development which is considered sufficient distance from the Site to avoid any adverse impacts from the Proposed Development.

### Ecological Surveys Undertaken

9.7. Surveys were undertaken in 2019 to determine the presence or likely absence of protected and notable species. The series of surveys / assessments undertaken for the Site include: A bat emergence survey, bat activity survey and reptile presence / likely absence survey. A botanical survey was also undertaken as the Preliminary Ecological Appraisal (2017) identified a mixture of early-succession plant communities across the Site which fulfilled the five criteria for Open Mosaic Habitat (OMH) on previously developed land.

**Table 9.1: List of species identified and potential constraints**

Species	Constraint	Further survey
Bats (foraging and commuting)	Minor constraint	Bat activity surveys undertaken. Mitigation and enhancement measures include: Habitat retention and native species planting; A sensitive lighting strategy; Avoidance of Modern Roofing Membranes (MRMs); and Provision of bat boxes attached to suitable retained trees and within new buildings on site.
Bats (Roosting)	No constraint	Bat emergence surveys undertaken on building present. No bat roosts recorded.
Reptiles	Minor constraint	Reptile surveys undertaken. A good population of common lizard recoded on site. Mitigation and enhancement measures include: Habitat creation to compensate for habitats lost; Enhancement of retained habitats; Trapping and translocating reptiles from within the Site into areas of retained and enhanced or created habitats; and Completing a supervised destructive clearance on completion of the trapping and translocation exercise.
Open Mosaic Habitat	Minor constraint	Botanical survey undertaken. The Site qualifies as the Priority Habitat 'Open Mosaic Habitat on Previously Developed Land'. The Site is not a notably botanically diverse site and would at most be only of Local Importance. It recommended that sufficient space is provided that can support an area of this habitat type and retain its contribution to the biodiversity of the Site overall.

### Policy and guidance

9.8. The key policy and guidance that will be taken into account as part of the ecological assessment work for the Site, will include:

- Key delivery policy PCS13 (The Portsmouth Plan: Portsmouth Core Strategy).
- The National Planning and Policy Framework.
- Conservation of Habitats and Species Regulations 2017 (as amended).
- Wildlife and Countryside Act 1981 (as amended).

### Approach and method

- 9.9. The ecological appraisal concluded that there is the potential for impacts on Natura 2000 sites (particularly on the Portsmouth Harbour SPA and Ramsar) from the construction phase of the Proposed Development due to the close proximity of the Site and during the operational phase of the Proposed Development due to a likely increase in nutrients.
- 9.10. A report to inform Habitats Regulations Assessment: Stage 1 Screening and Stage 2 Appropriate Assessment (AA) will be required to assess whether there will be an adverse effect on the integrity of the site(s), taking into account their conservation objectives. The AA can take into account avoidance or mitigation measures proposed as part of the scheme. This will be submitted as part of a planning application submission for the Proposed Development.
- 9.11. For the Proposed Development, both stages are considered necessary as increased nutrient output resulting from all new residential developments in the catchment has been identified as a potential LSE that could affect Solent European sites. This is following recent consultation with Natural England on residential projects in the vicinity of the Solent following the findings of the Integrated Water Management Study for South Hampshire, published by the Partnership for Urban South Hampshire (PUSH).
- 9.12. Therefore, as a minimum, the impacts of increased nutrient output would require Stage 2: Appropriate Assessment, but all potential pathways to LSE would be established as part of the HRA process (including deposition of atmospheric pollutants from traffic emissions and recreational impacts on Solent Special Protection Areas (SPA) for example).
- 9.13. The mitigation for nutrient balancing for the Proposed Development has already been agreed with Homes England and will comprise a change in land use at Knowle, Hampshire from cereal cropping to open space. Tetra Tech (the project's ecological consultant) developed that strategy with Homes England and significant consultation with Natural England and is still employed by Homes England for its delivery. This mitigation will be assessed as part of the HRA process.

### Potential Impacts

- 9.14. Based on the current understanding of the Site and survey work undertaken, it is considered that the likely effects in relation to ecology are as follows:

#### *Construction Phase*

- Statutory sites
  - Disturbance (visual and acoustic);
  - Pollution from construction activities; and,
  - Construction Lighting.
- Reptiles
  - Potential for reptiles being killed or injured during construction works.
- Bats
  - Constriction lighting.

- Open mosaic habitat
  - Loss of habitat

### *Operational Phase*

- Statutory sites
  - Increase in nutrient output;
  - Recreational pressure;
  - Pollution from residents and traffic; and,
  - Permanent Lighting.
- Bats
  - Permanent Lighting.

### **Summary of Scoping**

- 9.15. In the absence of impact avoidance and/ or mitigation measures, in an EIA context the Proposed Development has the potential to have significant impacts on ecological features including off-site statutory designated sites. Impacts on other ecological features requiring consideration under nature conservation legislation and planning policy such as reptiles, bats and other habitats may also arise as a result of the Proposed Development.
- 9.16. This assessment will be undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (EclA) in the UK. This will involve the identification of the valuable ecological features on site and an assessment of their nature conservation value. We will then determine the likely significant effects of the Proposed Development upon those receptors. Firstly, the likely impacts of the scheme taking into account any designed-in mitigation will be assessed. This will then allow determination of what mitigation and/or enhancement measures are considered to be necessary to off-set any predicted significant impacts. The remaining residual impacts will then be presented (i.e. those arising after the implementation of mitigation) and it is these against which the scheme should be determined.

## 10. Landscape and visual impact

### Introduction

10.1. The purpose of this section is to outline the methodology of the Landscape and Visual Impact Assessment (LVIA) and to agree, prior to undertaking site visits, the scope of the study. This includes the study area and potential viewpoint locations. The study area has been proposed, by a qualified landscape architect at a radius of approximately 2.5km from the centre of the Site on the basis that, at this distance, this form of development, when seen by the human eye, would not be legible when set within the context of the receiving landscape. A viewpoint on Portsdown Hill at a distance of 3.85km, which commands extensive views over Portsmouth has also been included.

### Baseline conditions

- 10.2. The north coast of Portsea Island has been subject to a landscape character assessment which describes the key characteristics as:
- An adapted / engineered shoreline with extensive areas of public open space and walking routes
  - Influenced by busy transport routes including the M275 motorway
  - Historic land defences creating unusual landform and moats
  - Adjacent housing and industrial areas
- 10.3. Tipner Lake, a narrow stretch of sea between Horsea and Portsea Islands is a defining feature in the landscape and has several public open recreational spaces along its eastern shore. A well-used walking and cycling route along the edge of the southern half of Tipner Lake is protected from the sea by a continuous pale grey concrete flood defence wall which extends south to the Mountbatten Centre car park.
- 10.4. Alexandra Park has been in existence as a recreation ground since 1907. The part closest to the Proposed Development is level and grassed with formal avenues of mature deciduous trees. A number of car parks and buildings for health and fitness purposes form a belt of development around the circular track which forms a distinctive feature on the aerial photographs of the Site.
- 10.5. The residential district of Stamshaw to the south of the Site is comprised mainly of blocks of closely grained Victorian and Edwardian terraced housing on parallel streets. The playing fields of Stamshaw Junior School and a large allotment site at Osier Close provide additional green space in the area, although these sites are not open to the general public.
- 10.6. The Site itself and the area immediately north were until recently occupied by a greyhound racing track and associated buildings and hardstandings, a plant hire business and a scrap yard. These have been demolished and the area is awaiting redevelopment, therefore it is not currently considered to make a positive contribution to the character of the area.
- 10.7. Although the Site itself contains no statutory designations, the wider study area contains both statutory and non- statutory designations.

- 10.8. There are two Scheduled Monuments within the study area:
- The western part of the Hilsea Lines lies 1.5km to the north-east of the Site; and,
  - Portchester Castle is situated 2.4km to the west across Portsmouth Harbour.
- 10.9. There are listed buildings and structures associated with the Powder Magazines approximately 500m to the north of the Site.
- 10.10. Portsmouth Harbour is a Ramsar site and Special Protection Area (SPA), and is a Site of Special Scientific Interest (SSSI).
- 10.11. There are no Registered Parks and Gardens or Country Parks, within the study area.
- 10.12. Part of the long-distance trail known as the Pilgrim's Trail, which also forms part of the National Cycle Network (NCN Route 22) passes between the southern boundary of the Site and the playing fields of Stamshaw Junior School.

### Policy and guidance

- 10.13. A data trawl exercise has been undertaken using a combination of sources, including:

#### *Published Landscape Character Assessments*

- National Character Area Assessment 126 South Coast Plain, Natural England (2014); and,
- Portsmouth City Council Portsea Island Coastal Defence Flood Risk Areas Landscape Character Assessment (2012).

#### *Published Background Landscape Information*

- The Portsmouth Plan, adopted January 2012, including policies relating to the Tipner Major Development Area;
- Portsmouth City Council Green Infrastructure Background Paper February 2019;
- Portsmouth City Council Parks and Open Spaces Strategy 2012 – 2022; and,
- Open Space Appendices and Maps.

#### *Online landscape databases*

- Grid Reference Finder; and,
- MAGIC database.

### Approach and method

- 10.14. As a matter of best practice the assessment will be undertaken in accordance with 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition), published by the Landscape Institute and the IEMA (2013) (GLVIA). Reference will also be made to 'An Approach to Landscape Character Assessment' (Second Edition), published by Natural England (2018).

- 10.15. In accordance with the GLVIA and other best practice guidance noted above, both the landscape and visual assessments will include baseline studies that describe, classify and evaluate the existing landscape and visual resources, focusing on their sensitivity and ability to accommodate change.
- 10.16. Initially a desk-based review of mapping, aerial photography, relevant published guidance including legislation, policy and baseline information production will be undertaken along with an initial site visit. The desk-based mapping and aerial photography is shown in the figures contained within Appendix 1 of this scoping report.
- 10.17. Once a site visit has taken place, the locations of viewpoints may change due to the location of landscape features such as trees or buildings creating visual barriers but indicative locations are shown on Figure 4 in Appendix 1.
- 10.18. An assessment will be made of cumulative effects arising from other development in the area. Since the site falls within the Tipner major development area there are a number of approved development schemes awaiting construction, or under consideration, details of which are listed in Table 4.6 above.
- 10.19. A planning application has been submitted for an 8-storey transport interchange on the Site immediately west of the Proposed Development. If granted permission this would restrict views of the Site from the west and across Portsmouth Harbour, including from Portchester Castle. It would also provide a large backdrop to views of the Site from residential districts to the east.
- 10.20. Proposed Viewpoint Details:

No	Location	Distance (km) and direction of view	Northing	Westing	Rationale for selection
1	James Callaghan Drive, Portsdown Hill	3.85km, SW	50°51'14"	01°03'47"	High viewpoint, car park and picnic area with views across the Portsmouth peninsula
2	Portchester Castle	2.3km, NW	50°50'13"	01°06'47"	Scheduled Ancient Monument with views across Portsmouth Harbour
3	M275 Southbound carriageway	0.75km, S	50°49'49"	01°05'16"	Major approach to city
4	Horsea Island	1.80km, SE	50°50'21"	01°05'47"	Ex- MOD site proposed for future public open space
5	Pilgrim's Trail, section alongside north part of Tipner Lake	1.33km, SW	50°50'02"	01°04'44"	Well-used cycling and walking route
6	Pilgrim's Trail, section alongside south part of Tipner Lake	0.48km, SW	50°49'37"	01°05'01"	Well-used cycling and walking route

No	Location	Distance (km) and direction of view	Northing	Westing	Rationale for selection
7	Tipner Park and Ride Facility	0.20km, SSE	50°49'31"	01°05'21"	Public surface level car park proposed for expansion to multi-storey
8	Normandy Road	0.86km, SW	50°49'42"	01°04'43"	Residential area
9	Car park of Mountbatten Sports Centre	0.25km, W	50°49'29"	01°05'07"	Close viewpoint from public car park
10	Alexandra Park	0.25km, W	50°49'26"	01°05'05"	Edge of public park
11	North of Stamshaw Junior School field	0.08km, N	50°49'25"	01°05'14"	To assess views from the school
12	Target Road	0.1km, N	50°49'24"	01°05'19"	Residential road

### Potential Impacts

10.21. The main groups of receptors are anticipated to be:

- Drivers using the south-bound carriageway of the M275;
- Users of the Pilgrim's Trail coastal cycle path along the east side of Tipner Lake;
- Residents within the surrounding districts of Tipner, Stamshaw and Hilsea;
- Users of Alexandra Park and the surrounding sports facilities; and,
- Pupils and staff of the Stamshaw Junior School.

10.22. During the construction phase the potential visual impacts will include temporary roads and compounds, stockpiles and spoil heaps, and housing under construction with associated scaffolding, cranes and plant. As each section of the Site is completed the Site will become greener as turf is laid or seeded and trees and shrubs are planted.

10.23. As the housing development becomes progressively occupied the roads will be resurfaced and residents' cars will be visible. Shrub planting will mature over a period of 3 to 6 years, with residents personalising their gardens with their own structures and plant selections. Trees will continue to grow over a longer period, becoming well-established after 15 years.

10.24. The Site will have an impact on views looking south from Tipner Lake and the recreational areas around Alexandra Park. It may be visible from distant viewpoints on Portsdown Hill which due to its elevation has views across the entire Portsmouth peninsula, however the impact on these views is likely to be minimal due to the distance and the backdrop of existing development.

### Summary of Scoping

- 10.25. A number of viewpoints are proposed within a study area of 4km radius, as indicated on Figure 4 in Appendix 1 and described in the table above. Photographs will be taken from these viewpoints, or nearby, to assess the impact of the Proposed Development on views. The impact of the development on the landscape character will be discussed. Proposals will be put forward to mitigate any adverse impacts on the landscape arising from the Proposed Development.

## 11. Ground Conditions

### Introduction

- 11.1. This chapter of the ES Scoping Report explains the rationale for the Ground Conditions being scoped out from the EIA.
- 11.2. The Site has been split into five parcels, as set out below:
- The southern section of the Greyhound Racing Arena. This is part of a former dog racing track; historical site investigations indicate that this section of the Site is not subject to significant land contamination.
  - Parcel I: a triangular parcel of land to the north east of Tipner Lane and part of a former MoD landfill. Previously Parcel I was sub-divided as a result of the land transactions between the HCA and Portsmouth City Council. Consequently, Parcel I (South) also known as the Fleet Regional Photographic Unit (FRPU) came into PCC ownership along with most of Parcel I (North), also known as Landfill East. The remaining parts of Landfill east came under HCA ownership and would be remediated as part of this Contract. This area is now known as Parcel Ia;
  - Parcel II: a raised platform occupying 0.22 hectares to the east of Tipner Lane and west of the Greyhound Racing Arena,
  - Parcel III: an area of scrub land occupying 0.11 hectares to the south west of the Greyhound Racing Arena; and
  - Parcel IV: a larger northern part known as the former PD Fuels and two smaller southern sections known as the Pavilion Site and the Access Road, which together occupy 1.7 hectares. Historically the PD Fuels site has been used for a range of industrial activities, including a former brick pit, chemical (tar) works, and more recently a timber yard and the PD Fuels coal depot. Historical maps show the chemical works was present by 1909 and subsequently grew to extend across a wider area than the current site boundary of PD Fuels. By 1938, the chemical works was occupied by South Western Tar Distilleries, which is understood to have produced 'pitch'.
- 11.3. Homes England (HE), formerly the Homes and Communities Agency (HCA), have undertaken significant phases of site investigation and remediation to provide a development platform. The information from the phases of site investigation, remediation and subsequent validation have been set out in a series of reports, which are listed in the table below.

**Table 11.1: Existing ground condition reports**

Author	Date	Document Title	Parcel
BACTEC	2005	Explosive Ordnance Threat Assessment	I-IV
CampbellReith	September 2011	Tipner East Parcels I, II, III and IV Updated Remediation Strategy	I-IV

# Tipner East, Portsmouth

## EIA Scoping Report



Author	Date	Document Title	Parcel
CampbellReith (by Harrison Group Environmental).	September 2011	Ground Investigation Report, Tipner, Portsmouth	I-IV and GRA
CampbellReith	November 2011	Remediation Contract, Land Parcels I-IV, Tipner, Portsmouth	I-IV
CampbellReith	December 2011	Tipner East, Parcels I – IV, Tipner Peninsular, Portsmouth, Groundwater Detailed Quantitative Risk Assessment (DQRA) & Derivation of Remedial Performance Requirements (Draft).	I-IV
CampbellReith	December 2011	Tipner East, Parcels (I) – (IV), Tipner Peninsular, Portsmouth, Human Health Risk Assessment	I-IV
Cognition	January 2012	Remediation Trial Technical Evaluation Report (CLW004305)	IV
IKM	October 1996	Tipner Redevelopment Area Portsmouth Volume 2 Figures and Appendices (by CL Associates)	I-IV and GRA
IKM	September 2005	Tipner Site Desk Study report	I-IV and GRA
IKM	October 2006	Tipner Site Factual and Interpretive Report	I-IV and GRA
Merebrook	May 2012	Detailed remediation strategy and method statement Parcels I-IV, Tipner, Portsmouth (DRS-MER00388-12-58)	I-IV
Merebrook	May 2012	Detailed human health risk assessment Parcels I-IV, Tipner, Portsmouth (HHDQRA-MER00388-12-52s).	I-IV
Merebrook	May 2012	Construction environmental management plan Parcels I-IV, Tipner, Portsmouth (CEMP-MER00388-12-58).	I-IV
Merebrook	July 2012	Materials Management Plan, Parcels I-IV, Tipner, Portsmouth (MMP-MER00388-12-71).	I-IV

Author	Date	Document Title	Parcel
Merebrook	August 2012	Access Road site investigation, Tipner, Portsmouth, (L-MER00388-2.4.2-12-S307-NTD Rev B).	IV Access Road
Merebrook	November 2012	Site Waste Management Plan, Parcels I-IV, Tipner, Portsmouth.	I-IV
Merebrook	January 2013	Assessment of in-situ soils for suitability as capping layer, Parcel III, Tipner, Portsmouth, (L-MER00388-2.4.2-13-S22-MJL)	III
Merebrook	March 2013	Site Investigation Beneath Existing Building, Parcel IV, Tipner, Portsmouth, (L-MER00388-2.4.2-13-S119-SMJ).	IV
Merebrook	October 2013	Verification Report, Parcels I-OV, Tipner, Portsmouth (VR-MER00388-12-94 RevA).	
Planit EOD	2006	Unexploded Ordnance Investigation	I-IV
Savills	April 2010	Environmental Statement and Addendum ES, Tipner East	I-IV
SM&MS Consulting	July 2011	Demolition Survey Tipner Wharf, Twyford Avenue	I-IV

15.1.1 The key information from these reports is set out as the current baseline conditions.

### Baseline conditions

- 11.4. British Geological Survey mapping indicates the Site to be underlain by the Reading Formation Beds, which are, in turn, underlain by the Upper Chalk. The Upper Chalk outcrops to the north of the Site boundary, with Reading Formation resting unconformably to the south of the geological boundary. The structural geology of the Upper Chalk Formation is dominated in the context of the Portsdown anticline to the north of the Site, resulting in a southward dip of Chalk beneath the Site.
- 11.5. The Reading Formation is documented as comprising clays with lenticular fine-grained sands, with clays commonly being strongly mottled reds and greys.
- 11.6. Superficial Deposits are shown to be present across the whole of the Site. In the lower lying, northern area of the Site the Superficial Deposits are recorded as Estuarine Alluvium; whilst in the relatively elevated southern and western parts of the Site the Superficial Deposits are recorded as Brickearth.

- 11.7. Site investigations across the Site identified potentially significant contamination, with the most significant within Parcel IV and as a result, remediation was required. The remediation works were proposed for the protection of both human health in most parcels, as well as groundwater in Parcel IV, in which the greatest contamination was identified.
- 11.8. In respect of human health risk assessment, site investigation data indicated a potential risk from dermal contact, exposure to contaminated dusts, and a potential vapour pathway. The placement of a capping layer to break some of the identified pollutant linkages was proposed to mitigate potential risks to human health.
- 11.9. Other than the introduction of clean capping, to be introduced through the land raising exercise to mitigate flood risk, no significant remedial requirement was identified within the southern section of the Greyhound Racing Arena. This is yet to be undertaken.
- 11.10. Contamination in Parcels I, II and III, was in the form of metals and polyaromatic hydrocarbons (PAH). In Parcel IV contamination included hydrocarbons and volatile organic compounds. Contamination by asbestos and the presence of Japanese knotweed was also identified.
- 11.11. The remediation works undertaken in each parcel are summarised in the following sections:
- 11.12. Parcels I-III: Remediation comprised the excavation and screening of made ground for asbestos and hydrocarbon contaminants. A 250 mm thickness of compacted crushed concrete was installed to form a capping layer, which was placed upon a high-visibility geotextile marker layer.
- 11.13. Parcel IV: Remediation consisted of the removal and treatment of contaminated soils. This included the installation of an impermeable in-ground barrier and the treatment of soils through the processes of screening, bioremediation and stabilisation to meet the required remedial criteria. Once completed, a one metre thick capping layer of clean imported and clean site won material was placed over a geotextile marker layer.
- 11.14. Requirements for the Pavilion comprised the excavation of the top metre made ground and placement of a marker layer and one metre of clean soil. The depth of clean soil was reduced in places due to the constraints associated with the root protection zones of a series of large poplar trees on the adjacent land.
- 11.15. Japanese Knotweed stands of high maturity had been observed prior to the commencement of works. Additional remediation measures were therefore considered necessary within the period of the remediation contract to sufficiently reduce the likelihood of regrowth of existing stands for a period of not less than five years.
- 11.16. Prior to the commencement of remedial works in the summer of 2012, the Japanese Knotweed stands associated with Parcel I north and Parcel III were noted to have been sprayed with herbicide. Subsequently, no growth was observed at the time remedial excavations commenced in Parcel I north and Parcel III in January 2013.
- 11.17. Manual raking/picking of rhizomes, stems and shoots was carried out in the quarantined knotweed-impacted areas. Excavated soils were processed through a picking station with rhizomes and stems manually removed where practicable thereafter.

- 11.18. Pre-treated soils were stored in the quarantine area in Parcel II for an observation period to check for potential re-growth (none was observed). Formation levels were also left open (this was not applicable at Parcel I north due to the potential for asbestos fibre release) for an observation period prior to back filling.
- 11.19. A woven copper root-barrier geotextile was used on the sides and upper surface to prevent future re-growth. Processed subsoils were used to make good site levels. Backfilling was completed with orange high-visibility marker layer and 250 mm of crushed concrete.
- 11.20. No remediation works have been undertaken on the Greyhound Racing Arena, however a Remediation Strategy, which includes this area has been approved by the Environment Agency and Portsmouth City Council (reference: Detailed Remediation Strategy and Method Statement, Tipner, Portsmouth. For TRC LTD. DRS-18384-13-259 REV D. Merebrook Consulting Ltd. dated 27 JUNE 2014). Remedial works in this area will comprise the addition of capping material, to be incorporated as part of the land raise to lift the Site out of the flood plain.
- 11.21. All of the remediation works undertaken to date have been approved and signed off by both the Environment Agency and Portsmouth City Council.
- 11.22. To facilitate development and mitigate the potential risks to future site users, some further remedial measures will be required. This will include the provision of clean cover in areas of soft landscaping, as well as gas protection measures and upgraded services. The greatest impact upon the development will be managing any arisings and works beneath the installed marker layers.

### Policy and guidance

- 11.23. This section provides an overview of the relevant legislation and policy with respect to soil and groundwater contamination issues. The standards and guidance that have been adopted for this assessment are set out in the following sections.
- 11.24. Legislation relevant to contaminative issues is summarised below:
- 11.25. Part IIA of the Environmental Protection Act, 1990 (EPA) – This introduced a new regime for the regulation of contaminated land in England. The principal purpose was to provide an improved system for the identification of land that is posing unacceptable risks to health or the environment, and for securing remediation where such risks cannot be controlled by other means.

*“Contaminated land” is defined in section 78A(2) of the EPA “as any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that – (a) significant harm is being caused or there is a significant possibility of such harm being caused; or (b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.”*

#### National Policy

- 11.26. The main policy document relevant to this chapter is the National Planning Policy Framework (NPPF), revised in February 2019, which sets out the Government’s planning policies for England and how these are expected to be applied.

- 11.27. Paragraph 120 of the NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:

*“preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

- 11.28. Paragraph 178 also states that planning policies and decisions should also ensure that:

*“a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation); after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and adequate site investigation information, prepared by a competent person, is available to inform these assessments.”*

### Local Policy

- 11.29. Policy DC21 of The Portsmouth Plan (The Portsmouth Core Strategy) adopted in January 2012 sets out the provisions for contaminated land. It states that:

*“Permission will only be granted for development on or near contaminated land where appropriate and sufficient measures can be taken to deal with the contamination. Such measures must address the long-term safety of the development, including the future management of the site.”*

### **Approach and method**

- 11.30. Potentially significant aspects associated with the movement of contained soils and the mobilisation of contamination through development have been considered in the context of the extensive remediation that has been undertaken to date. The aim of these measures was to mitigate the potential risks to human health and controlled waters during construction and operation of the Proposed Development.
- 11.31. Significant remediation has been undertaken at the Site. These works have been approved by the Local Authority and Environment Agency and have mitigated potential risks to controlled waters. The residual risks are to human health through the generation of contaminated dusts, dermal contact, inhalation of vapours or accidental ingestion. The installation of an initial capping layer, which will be raised to provide a further thickness of clean cover, combined with the requirement for the provision of vapour protection measures in Parcel IV will mitigate these residual risks. These measures could be incorporated into the development works without the requirement for additional assessment.
- 11.32. The residual risks relate to works required beneath the existing capping layers, such as the provision of service corridors and the construction of foundations. For such tasks, measures must be put in place to ensure the protection of groundworkers and that the capping systems are suitably reinstated. Care must also be taken to ensure that the works do not result in the propagation of Japanese knotweed.

11.33. The residual risks identified are not uncommon to brownfield sites and it is believed that they can be managed through the provision of suitably worded Planning Conditions, requiring a Remedial Method Statement and Validation Report without the requirement for a Chapter to the Environmental Statement. During works it will be necessary to employ suitable measures to prevent fugitive dust or asbestos fibre emissions, and workers must be provided with appropriate Personal Protective Equipment. These risks will be managed through the Provision of a Construction Environmental Management Plan and will include environmental monitoring as appropriate.

11.34. It will be necessary to reuse site won material to reprofile the existing site levels. Any such reuse will be under a Materials Management Plan produced in accordance with *The Definition of Waste: Development Industry Code of Practice*. Importantly, this stipulates that the reuse of material cannot represent a potential risk of harm to workers, future site users or the surrounding environment.

11.35. These mechanisms will be used to prevent a potential environmental risk and to mitigate the requirement for an ES Chapter. However, should an ES Chapter be required, it will follow the approach set out below:

### *Geographical Scope*

11.36. The following information will be assessed:

- Previous Remediation of the Site.
- Remedial works on the adjacent land.
- Water discharge or pollution incidents within 250 m
- Waste management sites within 250 m. In addition, the likely landfill/treatment facilities and their distance from site will be considered.
- Statutory authorisations within 50 m
- Trade directory entries of possible contaminative use within 50 m

### *Overview of Baseline Conditions*

11.37. The assessment of baseline conditions will be based upon current ground conditions, as identified by the site investigation data and post remediation Verification Report. This will consider the likely prevalence of contamination and the potential for on-site and off-site impact, potential risks to human health and controlled waters.

### *Construction Methodology*

11.38. This section of the ES will set out potential adverse impacts from remediation and construction and provide measures for mitigation. Impacts will include dust generation, fugitive releases to soil or groundwater, soil treatment and re-use and piling.

11.39. The assessment of construction methodology would also assess the potential requirements for ground gas protection measures and upgraded water pipes.

### *Operational Methodology*

- 11.40. Once remedial measures have been implemented, there should be no adverse implications from ground contamination during the operational phase. However, the requirement for ongoing maintenance and monitoring will be assessed.

### *Assessment criteria*

- 11.41. Assessment criteria will include the use of the site-specific remediation standards derived for the Site as well as the significant volume of site investigation and validation data.

### **Potential Impacts**

- 11.42. Given that remediation has already been undertaken, the most significant impacts relate to disturbance of the capping layers and working with the material beneath them. This will require suitable controls to be put in place to mitigate potential risks to site workers and the surrounding environment, with the reinstatement of any capping layers.
- 11.43. Potential risks through dust generation or asbestos fibre release during the construction phase can be managed by a Construction Environmental Management Plan. This will require mitigation measures to be in place and set out the requisite environmental monitoring and suitable Personal Protective Equipment. The Construction Environment Management Plan will set out measures to prevent fugitive emissions and to reinstate the capping layers. The reuse of site won soils will be subject to strict controls and reused under a Materials Management Plan, the use of site won soils will only be permitted beneath capping layers.
- 11.44. In addition, vapour protection measures, to include a sub-floor void and vapour resistant membrane will be required for new buildings within Parcel IV. Measures must also be put in place to prevent the propagation of Japanese knotweed.

### **Summary of Scoping**

- 11.45. The Site is divided into five areas, Parcels I to IV and the Greyhound Racing Arena. With the exception of the Greyhound Racing Arena, remedial works have been completed across the Site. These were in accordance with a strategy that was approved by the Environment Agency and Local Planning Authority. The Strategy itself focused upon the mitigation of potential risks to controlled waters in Parcel IV. This was achieved through a combination of screening, bioremediation and stabilisation to achieve the required remedial targets.
- 11.46. The potential risks to current and future site users has been managed through the provision of capping layers. These have been installed over marker layers and will form part of the final development. The remediation works completed to date have been approved by the Environment Agency and Portsmouth City Council.
- 11.47. Residual risks relate to the reuse of site won material and working beneath the capping layers, which can be managed through the provision of a Construction Environmental Management Plan and Materials Management plan. In addition, vapour protection measures, will be required for new buildings within Parcel IV. Measures must also be put in place to prevent the propagation of Japanese knotweed.



- 11.48. Remediation of the Greyhound Racing Arena requires the provision of clean capping, which can be achieved as part of the land raising exercise necessary to mitigate the potential flood risk.
- 11.49. These risks are not uncommon to brownfield sites and it is believed that they can be managed through the provision of suitably worded Planning Conditions, requiring a Remedial Method Statement and Validation Report without the requirement for a Chapter to the Environmental Statement.

## 12. Socio-economics

### Introduction

- 12.1. The assessment will determine the likely significant effects as a result of the Proposed Development on the existing and future local population within the overarching study area of Portsmouth City Council. The assessment will include consideration of the likely effects associated with both the construction phase and the 'operational' development, when it is completed and occupied.
- 12.2. The assessment will determine the likely significant effects as a result of the Proposed Development on the existing and future local population within the overarching study area of Portsmouth City Council. The assessment will include consideration of the likely effects associated with both the construction phase and the 'operational' development, when it is completed and occupied.

### Study Area

- 12.3. The assessment will consider two catchment areas around the Site:
- a 'walkable' area catchment defined by a 2km radius of the Proposed Development to identify primary school education, healthcare facilities, and open space. (Institution of Highways and Transportation 'Guidelines for Providing for Journeys on Foot' states that a desirable travel distance for commuting, walking to school and recreational journeys is 500m, with 1,00m being acceptable, and distances of up to 2,000m as a preferred maximum.)
  - the administrative area of Portsmouth City will be used to consider secondary school education, and economic effects. (According to the National Travel Survey (2018/19), the average distance travelled to secondary school (age 11-16) in the South East was 3.7 miles (5.95 km).

### Baseline conditions

- 12.4. The baseline assessment will include information about the population that could be affected by the Proposed Development (the receptors). This section of the report will set out the current profile of the population living and working in the Portsmouth City study area:
- Population profile, age structure, growth rates;
  - Levels of employment activity;
  - Average income;
  - Qualifications and skills; and
  - Relative levels of deprivation.
- 12.5. The baseline analysis will include a review of health care infrastructure (e.g. GP surgeries), education infrastructure (schools), access and availability of open space.

### Policy and guidance

- 12.6. The application site falls within the eastern part of the PCS1 Site Allocation in The Portsmouth Plan where the Tipner East redevelopment will provide new dwellings, local retail facilities, open space, walking and cycle links.

### Approach and method

- 12.7. There is no principal guidance that sets out a methodology for assessing the likely population and economic effects of development proposals. However, published sources of information will inform key elements of the assessment: those of particular relevance are the evidence base used to inform the Local Plan and for the new Local Plan. Baseline information on the underlying conditions will be taken from a variety of sources, which include: Portsmouth City Council and the supporting documentation for the Local Plan, NHS services, National Census and other ONS-produced sources; NOMIS labour market statistics.

- 12.8. The stages of the assessment include:

- Review of policy and guidance –to establish the baseline of expectations for the Proposed Development;
- Define baseline conditions – including a review of the existing demographic and economic profile of the local population, and identify relevant social infrastructure (education, health, open space, community facilities);
- Impact assessment – consider the nature and scale of the potential impacts and effects during both the construction and operational phase, identify mitigation measures where necessary;
- Residual effects; and any cumulative effects.

- 12.9. The assessment of effects will focus on the following indicators:

#### *Construction Phase*

- Construction related employment including the number of construction jobs directly and indirectly supported through the construction supply chain;
- Number of “induced” jobs supported by onward spending of wages in the economy.

#### *Operational Phase*

- Change in the local population and labour force;
- Uplift in local expenditure from the new households;
- Indirect employment impacts;
- Implications for the capacity of education and health care facilities;
- Availability and access to open space.

### Significance of effects

- 12.10. The level of significance of an effect will be determined through professional judgement of factors including sensitivity of the receptor, the magnitude of the impact (amount of change) and its duration. The sensitivity of affected receptors will be considered on a scale of high, moderate, low or negligible. A description indicative of each level of sensitivity is shown below.

**Table 12.1: Scale/value/sensitivity of socio-economic receptor**

Receptor scale / value / sensitivity	Description
High	Receptors with a low ability to absorb change without fundamentally altering present character / receptors of social/economic importance or a policy priority.
Medium	Receptors with a moderate capacity to absorb change without significantly altering present character / receptor has some social/economic value / may be referenced in policy.
Low	Receptors able to absorb change without significantly altering present character / demonstrates an above average social/economic performance relative to comparator areas / may be referenced in policy.
Negligible	Receptors resilient and adaptable to change / has a strong performance relative to comparators / may not appear in policy or be considered a priority.

### Determining the Magnitude of Change

- 12.11. The magnitude of change will be considered as the change experienced from the baseline conditions at the sensitive receptor, considered on a scale of high, moderate, low or negligible. The table below defines the levels of magnitude in more detail.

**Table 12.2: Magnitude of socio-economic impact**

Magnitude	Description
High	Effect likely to affect large numbers of people and/or businesses over the long term. Likely to be material in the decision-making process.
Medium	Effect likely to affect a moderate number of people and/or businesses over a medium duration. Important, but not likely to be a key influence in decision-making.
Low	Effect likely to affect to a small number of people and/or businesses over a short duration. Maybe a local factor, but unlikely to be key in decision-making.
Negligible	Effect does not result in variation beyond baseline conditions, and is unlikely to measurably affect people and/or businesses.

### Duration of Effect

- 12.12. The duration of effects will be taken into consideration when determining the overall significance of the effects using the following timescales: Short term: 0 to 5 years; Medium term: 5 to 15 years; and, Long term: 15 years or more. Consideration of demographic changes and economic effects are generally considered to be medium to long term.

### Significance of Effect

- 12.13. The following table provides the framework by which the overall level of effect can be assessed.

**Table 12.2: Overall socio-economic effect**

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Negligible
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible
Very low	Negligible	Negligible	Negligible	Negligible

- 12.14. The level of effect predicted through this process is then reviewed using professional judgement and modified where considered necessary. For the purposes of this assessment, any effect that is of moderate or major significance is considered to be significant in EIA terms.

### Potential Impacts

- 12.15. It is considered likely that socio-economic effects arising from the Proposed Development will be experienced at both the construction and operational phases.
- 12.16. At the construction phase, there will be potential beneficial effects arising through the provision of construction jobs directly within the Site and indirectly through the supply chain. In addition, there will be 'induced' jobs supported through the onward spending of wages in the economy.
- 12.17. Operationally, there will be uplifts in the expenditure in the local economy from the new households and a change in local population and labour force. The increase in local population will also have implications for capacity of health and education services.

### Summary of Scoping

- 12.18. It is considered that disruption during construction would be controlled and managed through implementation of the Construction and Environment Management Plan (CEMP).
- 12.19. The appropriate provision of affordable housing will be addressed in the planning statement with the application documents and therefore effects associated with affordable housing provision are scoped out.
- 12.20. All other identified issues will be addressed through the ES chapter.

## 13. Conclusion

### Topics scoped in/out

13.1. Based upon the information presented in the above sections it is considered that the following topics will be scoped out from further assessment as individual chapters within the ES, but will still be addressed through the EIA either within the introductory chapters or within other topic assessments:

- Heritage;
- Greenhouse gas emissions and climate change;
- Human health;
- Major accidents and disasters;
- Waste; and,
- Ground conditions.

13.2. The remaining topics as presented in the sections above are scoped into the ES and will form individual topic assessment chapters within the ES.

### ES Structure

13.3. The EIA will be compiled into an ES document which will be produced in accordance with the EIA Regulations. The ES will comprise three main components.

- **Volume 1: Main Text**

- Chapter 1 Introduction
- Chapter 2 Site Description
- Chapter 3 Description of the Proposed Development
- Chapter 4 Approach to assessment
- Chapter 5 Transport, Access and Movement
- Chapter 6 Air Quality
- Chapter 7 Noise and Vibration
- Chapter 8 Water Resources, Drainage and Flood Risk
- Chapter 9 Biodiversity
- Chapter 10 Landscape and Visual Impact
- Chapter 11 Socio-Economics
- Chapter 12 Summary of Mitigation, Residual and Interaction Effects

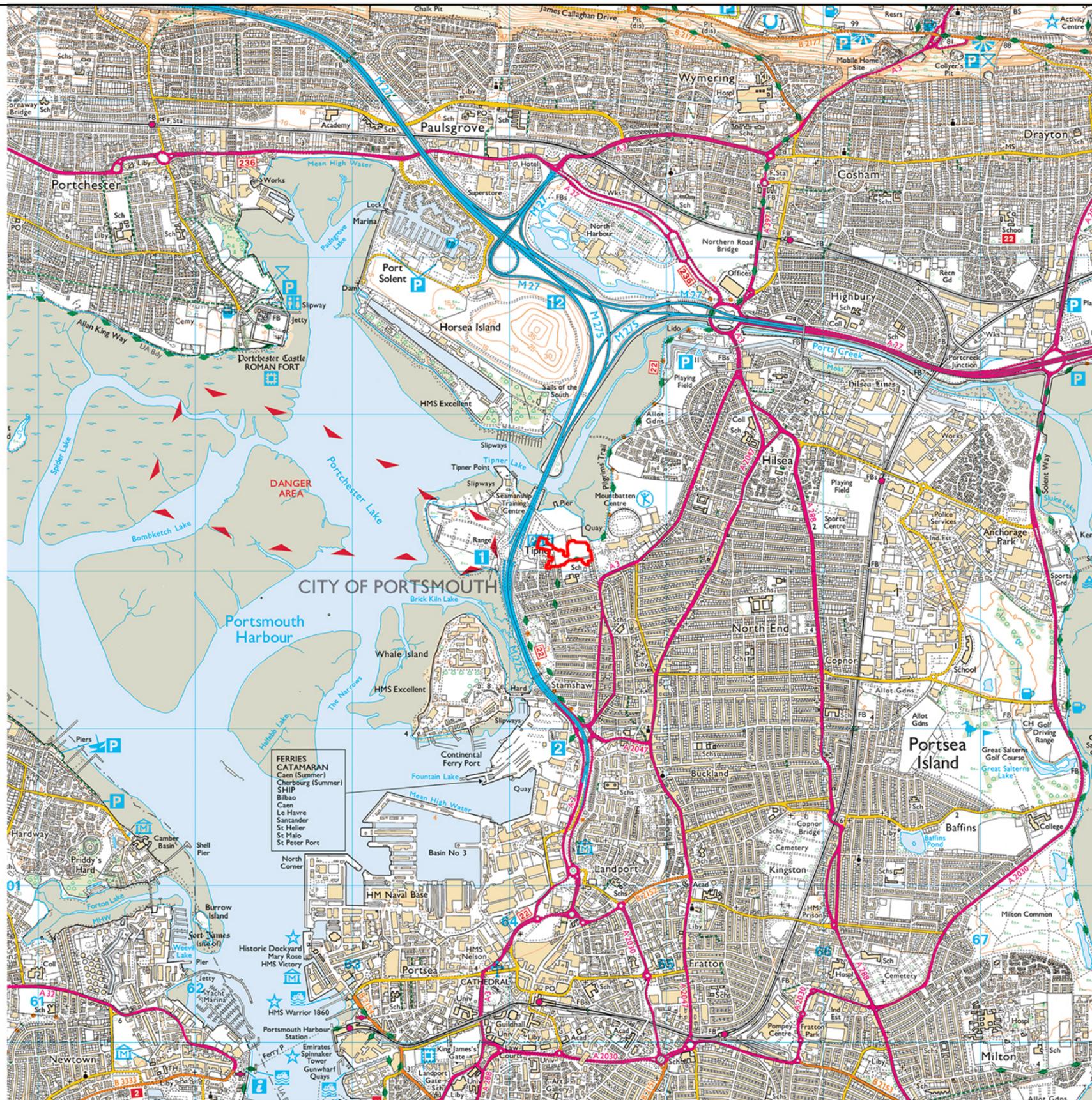
- **Volume 2: Technical Appendices**

- All supporting technical information for the main text.

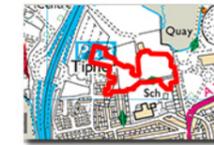
- **Non-technical Summary**



## **Appendix 1: LVIA Figures**



LEGEND



Site boundary

- FERRIES
- CATAMARAN
- Caen (Summer)
- Cherbourg (Summer)
- SHIP
- Bilbao
- Caen
- Le Havre
- Santander
- St Helier
- St Malo
- St Peter Port



For ordnance survey map legend, refer to:  
<https://www.ordnancesurvey.co.uk/docs/legends/25k-raster-legend.pdf>

Client: Bellway Homes		
Scheme: Tipner, Portsmouth		
Drawing: Ordnance Survey Plan	Figure No: 1	
ACD Ref: BELL23146		
Scale: NTS@A3	Drawn: IN	Checked: PD





LEGEND



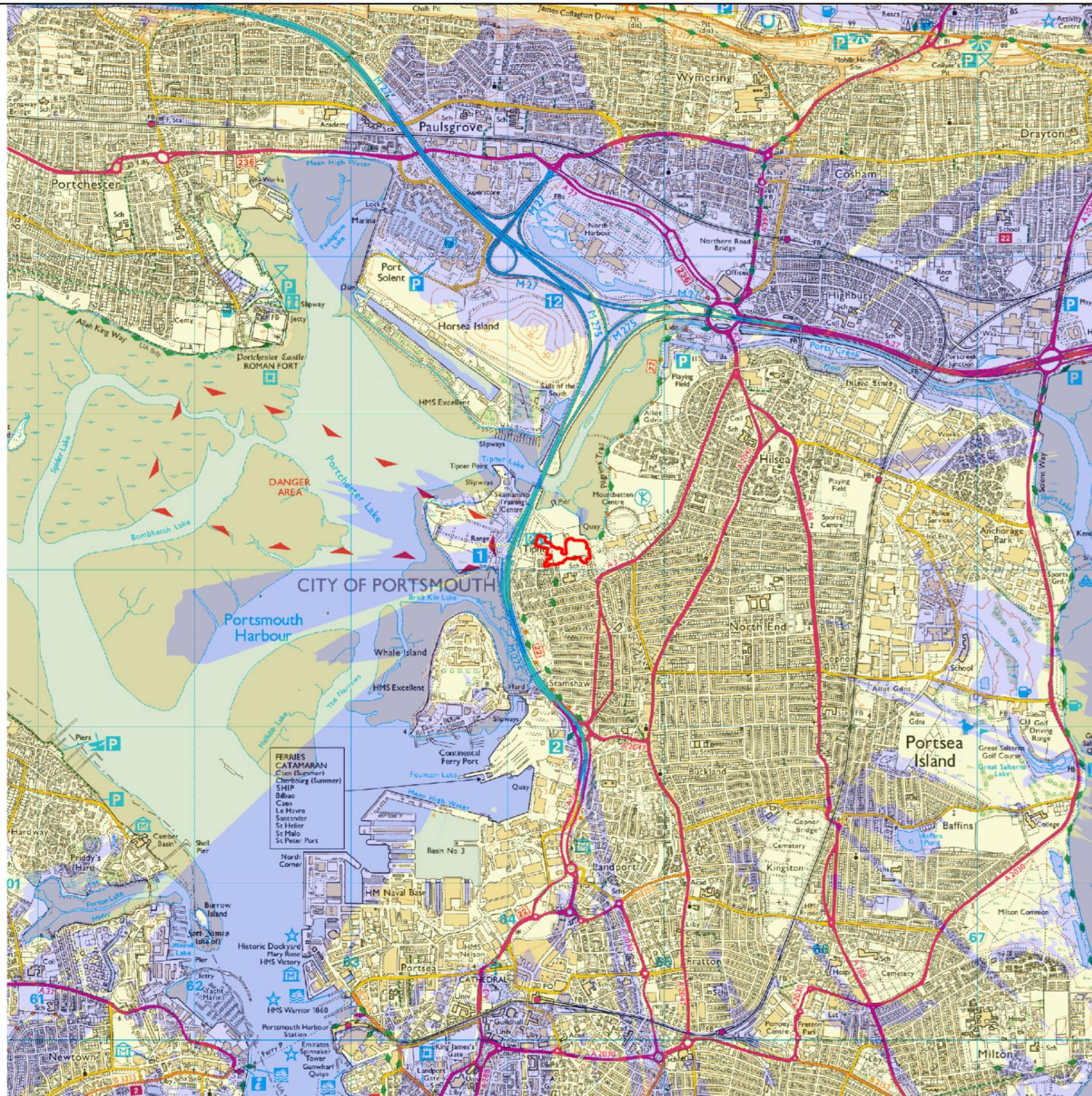
Site boundary



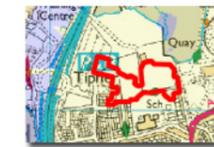
Image supplied by Google Maps  
<https://maps.google.co.uk/>  
Accessed 18 January 2021

Client: Bellway Homes		
Scheme: Tipner, Portsmouth		
Drawing: Aerial Photograph	Figure No: 2	
ACD Ref: BELL23146		
Scale: NTS@A3	Drawn: IN	Checked: PD



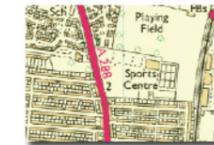


**LEGEND**



Site boundary

Zone of theoretical visibility



Yellow wash - Potential view



Blue wash - No potential view



NB: Generated using Ordnance Surveys Terrain 5 Dataset which is based on 5m resolution Digital Terrain Model (DTM), incorporating the proposed development modelled across the site to a maximum anticipated height of 9m. Proposed scheme is derived from the proposed Red Line Boundary (RLB) areas dated 20/11/20 with reference points included across the full extent of the RLB site. The ZTVs do not include the layout of buildings which are not known at this stage. ZTV calculated using MapInfo Pro 19.0 with observer eye height 1.6m above ground. Viewshed analysis represents surface topography, without taking into account potential visual barriers in the form of trees, hedgerows, woodland, buildings and other manmade elements.

Client: Bellway Homes

Scheme: Tipner, Portsmouth

Drawing: Zone of Theoretical Visibility

Figure No: 3

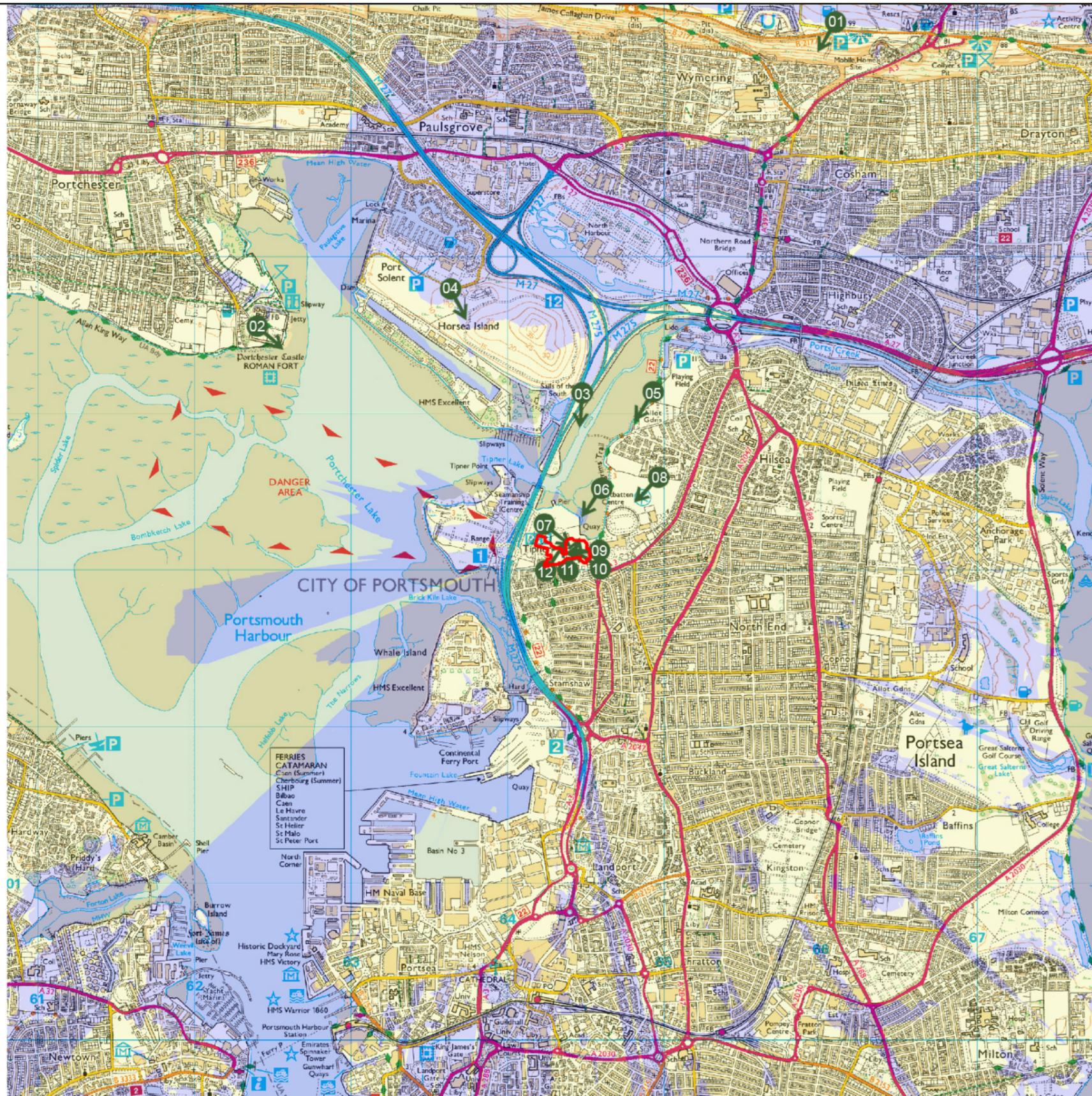
ACD Ref: BELL23146

Scale: NTS@A3

Drawn: IN

Checked: JS





**LEGEND**

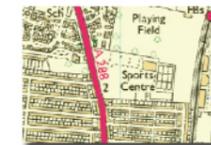


Site boundary



Viewpoint location

Zone of theoretical visibility



Yellow wash - Potential view



Blue wash - No potential view



NB: Generated using Ordnance Surveys Terrain 5 Dataset which is based on 5m resolution Digital Terrain Model (DTM), incorporating the proposed development modelled across the site to a maximum anticipated height of 9m. Proposed scheme is derived from the proposed Red Line Boundary (RLB) areas dated 20/11/20 with reference points included across the full extent of the RLB site. The ZTVs do not include the layout of buildings which are not known at this stage. ZTV calculated using MapInfo Pro 19.0 with observer eye height 1.6m above ground. Viewshed analysis represents surface topography, without taking into account potential visual barriers in the form of trees, hedgerows, woodland, buildings and other manmade elements.

Client: Bellway Homes

Scheme: Tipner, Portsmouth

Drawing: Viewpoint Location Plan

Figure No: 4

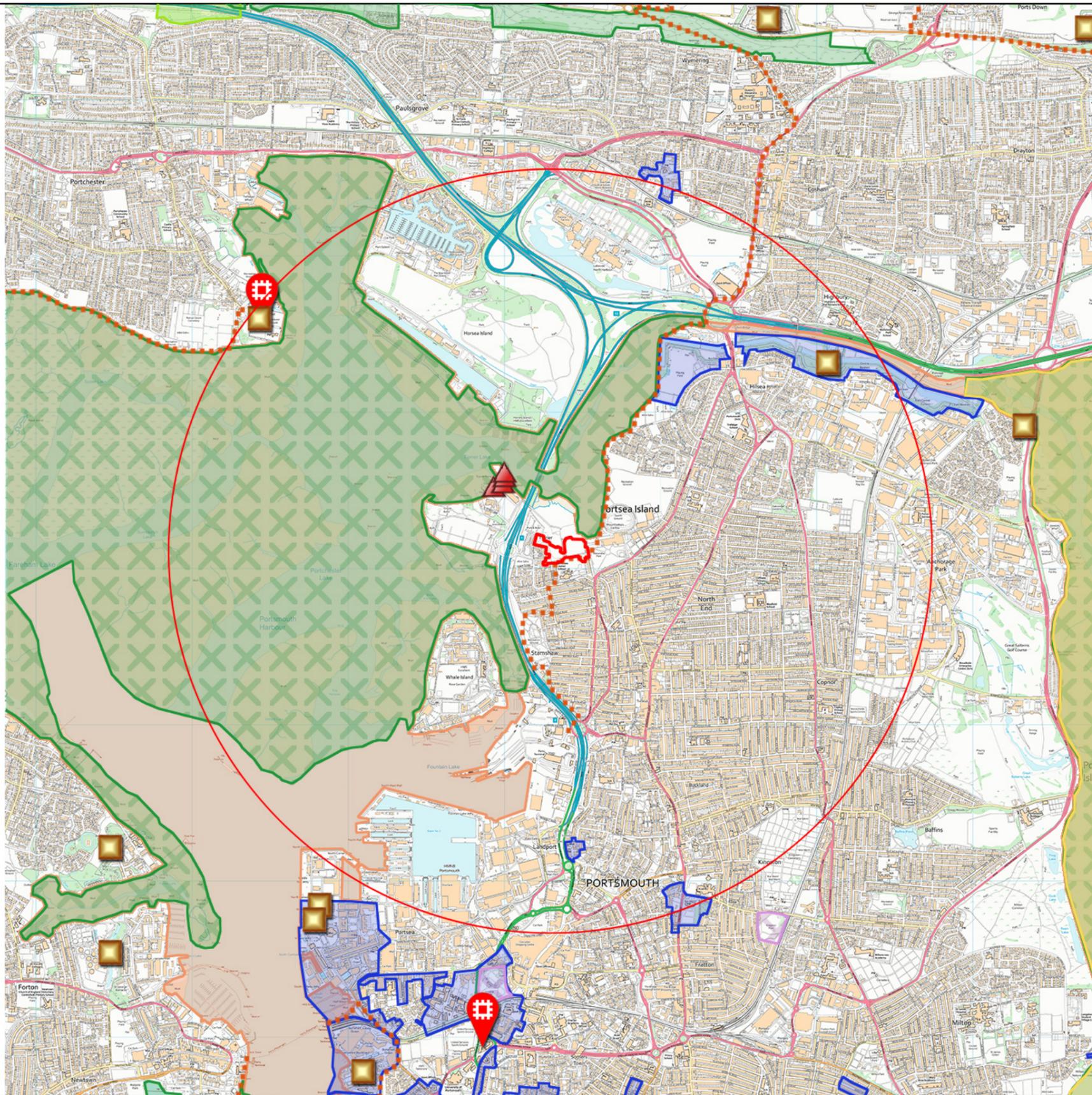
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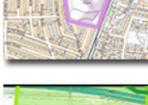
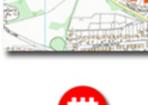
Drawn: IN

Checked: PD





**LEGEND**

-  Site Boundary
-  2.5km Radius
-  Sites of Special Scientific Interest (SSSI)
-  RAMSAR and Special Protection Areas (SPA)
-  Special Areas of Conservation (SAC)
-  Marine Special Protection Areas (SPA)
-  Conservation Areas
-  Registered Parks and Gardens
-  Registered Commonland
-  Long Distance Walking Paths
-  English Heritage
-  Scheduled Monuments
-  Listed Buildings within approx. 500m of Site



Client: Bellway Homes		
Scheme: Tipner, Portsmouth		
Drawing: Designations Plan	Figure No: 5	
ACD Ref: BELL23146		
Scale: NTS@A3	Drawn: IN	Checked: PD

